European Commission

The 2015 Ageing Report

Economic and budgetary projections for the 28 EU Member States (2013-2060)

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Directorate-General for Economic and Financial Affairs

The 2015 Ageing Report

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Member States (2013-2060)

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MANDATE AND BROAD PRINCIPLES

The 2015 long-term budgetary projection exercise: mandate and broad principles

The ECOFIN Council gave a mandate to the Economic Policy Committee (EPC) to produce a new set of long-term budgetary projections by 2015, on the basis of a new population projection by Eurostat (EUROPOP2013).

In light of this mandate, the EPC and the Commission services (Directorate-General for Economic and Financial Affairs - DG ECFIN) agreed on a work programme with broad arrangements to organise the budgetary projections and reach agreement on its assumptions and methodologies.

With this release, the long-run economic and budgetary projections aimed at assessing the impact of ageing population have been published five times; the first report being released in 2001. This projection exercise updates and improves methodologically further the previous exercises so as to enhance overall accuracy, comparability across countries, consistency across expenditure items and the economic basis for the underlying assumptions. On the basis of these underlying demographic and macro-economic assumptions and projections, age-related expenditures covering pensions, health care, long-term care, education and unemployment benefits are projected and analysed.

The projections feed into a variety of policy debates at EU level, [1] including the overarching Europe 2020 strategy for smart, sustainable and inclusive growth. In particular, they are used in the context of the European Semester so as to identify policy challenges, in the annual assessment of the sustainability of public finances carried out as part of the Stability and Growth Pact and in the analysis on the impact of ageing populations on the labour market and potential economic growth.

This report is structured in two parts. The first one describes the underlying assumptions: the population projection, the labour force projection and the macroeconomic assumptions used. The second part presents the long-term budgetary projections on pensions, health care, long-term care, education and unemployment benefits. Statistical annexes give an overview of the projection results by area and by country.

Coverage and overview of the 2015 long-term projection exercise

The economic and budgetary projections have been made by applying commonly agreed assumptions and methodologies uniformly to all Member States, as agreed by the EPC.

The starting point is the EUROPOP2013 population projection for the period 2013 to 2060 (see the Chart below). The EPC agreed upon a common set of assumptions and methodologies in order to make projections on a set of exogenous macroeconomic variables on the basis of proposals prepared by DG ECFIN, covering the labour force (participation, employment and unemployment rates), labour productivity and the real interest rate. These combined set of projections enabled the calculation of GDP for all Member States up to 2060. The macroeconomic assumptions on which this report is based were agreed in the first half of 2014 and published in November 2014; [2] the latest macroeconomic developments may thus not be fully captured.

On the basis of these assumptions, separate budgetary projections were carried out for five government expenditure items. The projections for pensions were run by the Member States using their own national

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[1] Ireland has reservations around the population projections driving these figures. Whilst an exception for the basis of population projections was endorsed by EPC on April 1st for future t+10 projection exercises, the impact of this agreement is not reflected in AR15 spending projections.

[2] See European Commission and Economic Policy Committee (2014) "2015 Ageing Report: Underlying assumptions and projection methodologies", European Commission, European Economy, No 8.

model(s), reflecting current pension legislation. (^{3}) In this way, the projections benefit from capturing the country-specific circumstances prevailing in the different Member States as a result of different pension legislation, while at the same time consistency is ensured by basing the projections on commonly agreed underlying assumptions. The projections for health care, long-term care, education and unemployment were run by the European Commission (DG ECFIN), on the basis of a common projection model for each expenditure item, taking into account country-specific settings, where appropriate. The results of this set of projections are aggregated to provide an overall projection of age-related public expenditures.
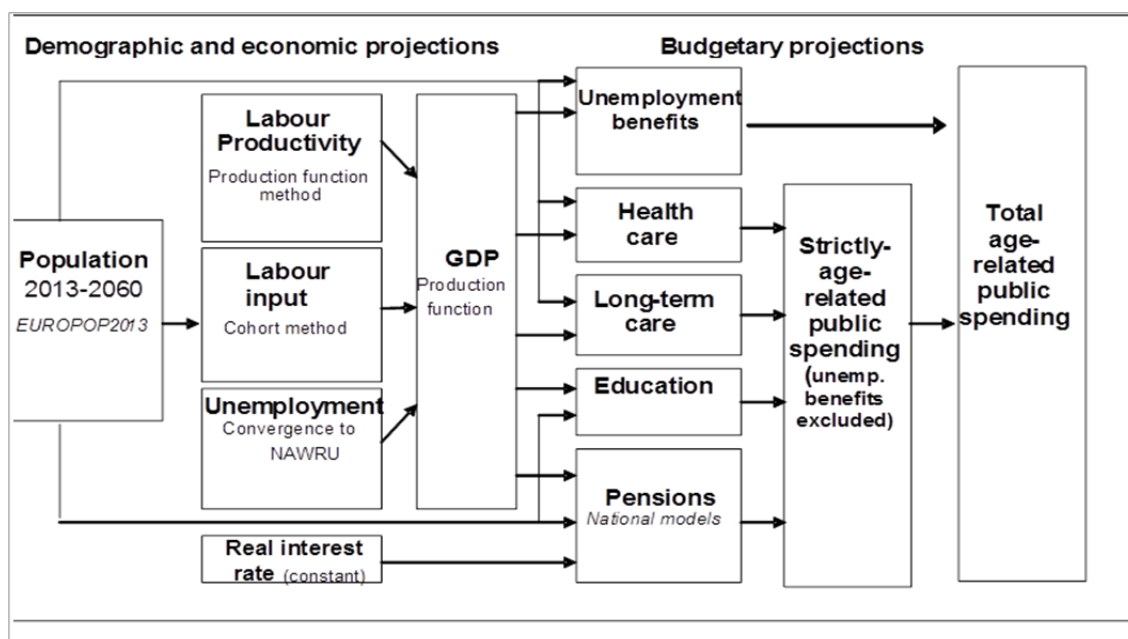
(^{3}) In order to ensure high quality and comparability of the pension projection results, an in-depth peer review was carried out by the AWG and the Commission at four meetings during September-December 2014. The projections incorporate pension legislation in place at that time. No further reform measures has been legislated in EU Member States by 1 April 2015 (except Portugal, see the Note to Table II.1.4).

EXECUTIVE SUMMARY

Demographic projections: Dramatic changes in the age structure in the EU projected

The demographic trends projected over the long term reveal that Europe is 'turning increasingly grey' in the coming decades. The Commission, as well as the European Council, have already recognised the need to tackle resolutely the impact of ageing populations on the European Social Models.

Having reliable and comparable information on the challenges of the future demographic changes in Europe entails considering the age-structure of the population today, and how it could look like in coming decades. This sheds light on the economic, budgetary and societal challenges that policy makers will have to face in the future. The long-term projections provide an indication of the timing and scale of challenges that would result from an ageing population. They show where, when, and to what extent, ageing pressures will accelerate as the baby-boom generation retires and the average life-span continues to increase. Hence, the projections are helpful in highlighting the immediate and future policy challenges posed for EU countries by demographic trends.

Due to the dynamics in fertility, life expectancy and migration, the age structure of the EU population will change strongly in the coming decades. The overall size of the population is projected to be slightly larger by 2060 but much older than it is now. (^{4}) The EU population is projected to increase (from 507 million in 2013) up to 2050 by almost 5%, when it will peak (at 526 million) and will thereafter decline slowly (to 523 million in 2060). This increase would however not be the case without the projected inward migration flows to the EU. There are wide differences in population trends until 2060 across Member States. While the EU population as a whole would be larger in 2060 compared to 2013, decreases of the total population are projected for about half of the EU Member States (BG, DE, EE, EL, ES, HR, LV, LT, HU, PL, PT, RO, SI and SK). For the other Member States (BE, CZ, DK, IE, FR, IT, CY, LU, MT, NL, AT, FI, SE and UK) an increase is projected.

In terms of drivers of the population changes, total fertility rates are projected to rise for the EU as a whole, though remaining below the natural replacement rate. At the same time, the projections show large and sustained increases in life expectancy at birth. In the EU, life expectancy at birth for males is expected to increase by 7.1 years over the projection period, reaching 84.8 in 2060. For females, it is projected to increase by 6.0 years, reaching 89.1 in 2060. Net migration inflows to the EU are projected to continue; first increasing to 1,364,000 by 2040, and thereafter declining to 1,037,000 people by 2060.

The demographic old-age dependency ratio set to nearly double over the long-term

As a result of these different trends among age-groups, the demographic old-age dependency ratio (people aged 65 or above relative to those aged 15-64) is projected to increase from 27.8% to 50.1% in the EU as a whole over the projection period. This implies that the EU would move from having four working-age people for every person aged over 65 years to about two working-age persons.

Labour force projections: Projected increases in overall participation rates, and in particular for older workers on account of implemented pension reforms...

Based on a cohort simulation model, labour force projections show a rise in overall participation rates, particularly visible for ages 50+, reflecting the combined effect of the rising attachment of younger generations of women to the labour market, together with the expected impact of pension reforms. By large, the biggest increases in participation rates are projected for older workers (around 21 pp. for women and 10 pp. for men) in the EU for the age group 55-64, influenced by enacted pension reforms. (^{5}) Consequently, the gender gap is projected to narrow substantially in the period up to 2060. The total

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(^{4}) Eurostat's population projection (EUROPOP2013) was published on 28 March 2014.
(^{5}) See footnote 3.

participation rate (for the age group 20-64) in the EU is projected to increase by 3.5 pp. (from 76.5% in 2013 to 80.1% in 2060). In the same period, women's participation rate is projected to increase by about 6 pp. compared with 1 pp. for men.

… but labour supply will decline because of the projected population trends

Total labour supply in the EU (and in the euro area) is projected to nearly stabilise between 2013 and 2023 (age group 20-64), while it is projected to decline by 8.2% between 2023 and 2060, representing roughly minus 19 million people. In the euro area, the projected fall in labour supply between 2023 and 2060 is 9.2%, equivalent to about 14 million people.

Further rises in employment rates projected…

Given the population projection, the labour force projection and the unemployment rate assumptions, ([6]) the total employment rate (for persons aged 20 to 64) in the EU is projected to increase from 68.4% in 2013 to 72.2% in 2023 and 75% in 2060. In the euro area, a similar development is expected, with the employment rate attaining 74.7% in 2060.

… but the number of employed would diminish

The projections show that employment (aged 20-64) will peak at 215 million in 2022, and after that fall to 202 million in 2060. This implies a decline of about 9 million workers over the period 2013 to 2060. The negative prospects stemming from the rapid ageing of the population, will only be partly offset by the increase in (female and older workers) participation rates migration inflows and the assumed decline in structural unemployment, leading to a reduction in the number of people employed during the period 2023 to 2060 (13 million).

Demographic developments have a major impact on labour market developments. Three distinct periods can be observed for the EU as a whole (see Graph 1):

- *2007-2011 – demographic developments still supportive of growth:* the working-age population is growing, but employment is sluggish as the financial and economic crisis weighs on labour prospects during this period.

- *2012-2022– rising employment rates offset the decline in the working-age population:* the working-age population starts to decline as the baby-boom generation enters retirement. However, the assumed reduction in unemployment rates, the projected increase in the employment rates of women and older workers cushion the impact of demographic change, and the overall number of persons employed would start to increase during this period.

- *From 2023 – the population ageing effect dominates:* the projected increase in employment rates is slower, as trend increases in female employment and the impact of pension reforms will be less pronounced. Hence, both the working-age population and the number of persons employed start falling over the remainder of the period.

([6])   Starting from current historically high levels, a reduction in the EU unemployment rate of around 4 ¼ percentage points is projected over the long-term (to 6 ½% in 2060). A slightly larger fall of 5 ¼ pp. is projected for the euro area of (to 6 ¾% in 2060).

Graph 1:   **Population and employment developments, EU (million)**
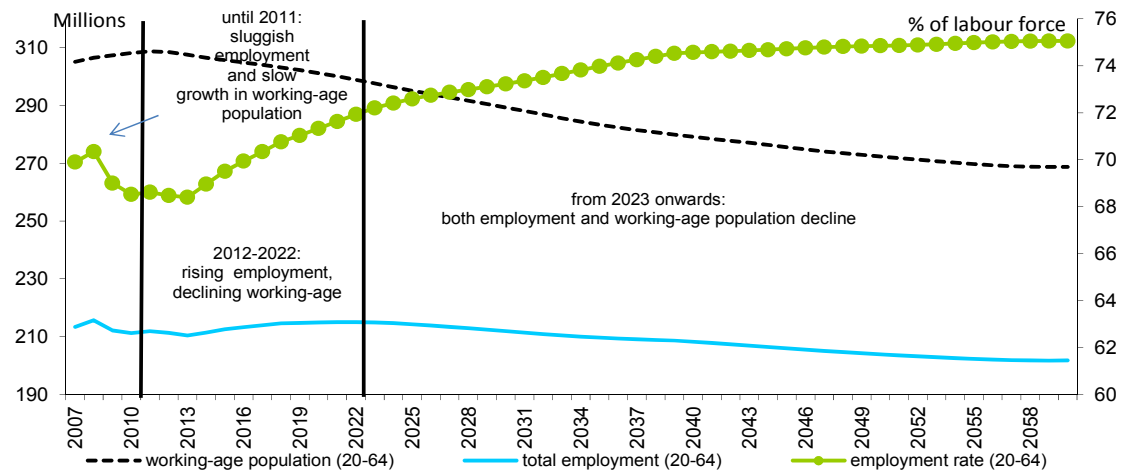
Source: Commission services, EUROPOP 2013, EPC.

Macro-economic assumptions: Potential GDP growth projected to remain quite stable over the long-term

In the EU as a whole, the annual average potential GDP growth rate in the baseline scenario is projected to remain quite stable over the long-term, albeit much lower than in previous decades. The assumption of convergence to a TFP growth rate of 1% entails for most countries that it would rise over the coming decades from the current historically low levels, and this will more than compensate for the declining labour growth from 2023 onwards. As a result, after an average potential growth of 1.1% up to 2020, a slight increase to 1.4-1.5% is projected for the remainder of the projection horizon. Over the whole period 2013-2060, average potential GDP growth rates in the EU is projected to be 1.4%. Developments in the euro area are very close to that of the EU as a whole and the potential growth rate in the euro area (averaging 1.3%) is projected to be slightly lower than for the EU throughout the projection period.

The sources of GDP growth will alter dramatically over the projection horizon. Labour will make a positive contribution to growth in both the EU and the euro area up to the 2020s, but turn negative thereafter. For the EU and for the euro area, a slight increase in the size of the total population over the entire projection period and an assumed increase of employment rates make a positive contribution to average potential GDP growth. However, this is more than offset by a decline in the share of the working-age population, which is a negative influence on growth (by an annual average of -0.2 percentage points). As a result, labour input contributes negatively to output growth on average over the projection period (by 0.1 pp. in the EU and in the euro area). Hence, labour productivity growth, driven by TFP growth, is projected to be the sole source of potential output growth in both the EU and the euro area over the entire projection period.

Budgetary projections: population ageing put upward pressure on public spending

The long-term budgetary projections show that population ageing poses a challenge for the public finances in the EU. The fiscal impact of ageing is projected to be high in most Member States, with effects becoming apparent already during the next decade.

The projected change in strictly public age-related expenditure (pensions, [7] health care, long-term care and education) is almost 2 pp. of GDP in the period to 2060 (EU: +1.8 pp., EA: +1.9 pp.) between 2013 and 2060 in the baseline scenario (see Graph 2 and Table 1). [8] Looking at the components of strictly age-related expenditure, the increase between 2013 and 2060 is mostly driven by health care and long-term care spending, which combined is projected to rise by about 2 pp. of GDP (Health care: +0.9 pp., Long-term care: +1.1 pp.). After a projected increase up to 2040 (EU: +0.4 pp., EA: +0.8 pp.), public pension expenditure is projected to return close to its 2013 level (EU: -0.2 pp., EA 0 pp. over the period 2013-2060). However, the projected decline in pension spending is mostly visible in the latter part of the projection horizon. Education expenditure is projected to remain unchanged up to 2060.

The projected change in total age-related expenditure is lower, since unemployment benefit expenditure is projected to fall in the period to 2060 (by 0.4 pp. of GDP in the EU). For the EU as a whole, the projected increase in total age-related expenditure is 1.4 pp. of GDP in the baseline scenario (EA: +1.5 pp. of GDP) (see Graph 3 and Table 1).

Graph 2:   **Strictly and total age-related expenditure in the EU Member States, 2013-60, pp. of GDP**
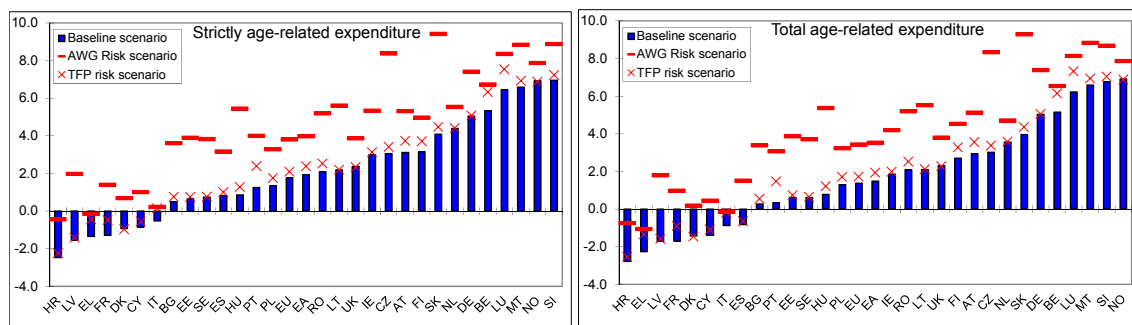
Source: Commission services, EPC.

There is however considerable variety across EU Member States and also in the profile over time in the long-term spending trends (see Graph 3 and Table 1). According to the projections:

- A fall in total age-related expenditure relative to GDP is projected in eight Member States (HR, EL, LV, FR, DK, CY, IT and ES). In all of these countries, a decline in the pension-to-GDP ratio is projected in the long-term (exceeding 3 pp. of GDP in HR, DK and LV).

- For another set of countries (BG, PT, EE, SE, HU, PL, IE, RO, LT and UK), age-related expenditure ratio is expected to rise moderately (by up to 2.5 pp. of GDP).

- The age-related expenditure ratio increase is projected to be the largest in the remaining ten Member States (FI, AT, CZ, NL, SK, DE, BE, LU, MT and SI), rising by between 2.5 pp. and 6.8 pp. of GDP

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[7] Public pension expenditure include all public expenditure on pension and equivalent cash benefits granted for a long period, including disability benefits and social assistance benefits for older people, see Annex 2 for details on the coverage of the projections of public pension expenditure.

[8] As in previous long-term projection exercises, the baseline scenario focuses on the budgetary impact mostly due to demographic developments.

and with pension expenditure increasing in all of these countries (exceeding 3 pp. of GDP in BE, LU, MT and SI).

Graph 3: **Components of total age-related expenditure, 2013 and 2060, % of GDP**
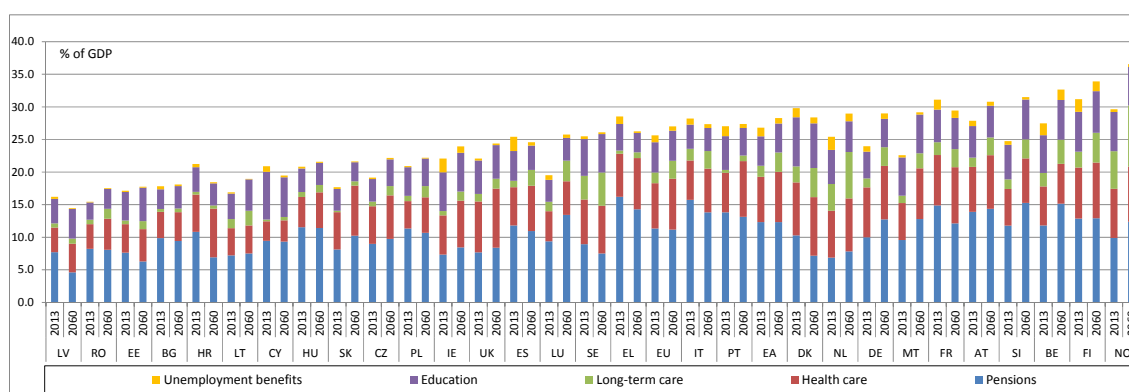
Source: Commission services, EPC.

The large differences between Member States reflect primarily the diversity in public pension arrangements, their degree of maturity and the effects of pension reforms enacted so far. (^{9}) In fact, a reduction of public pension spending as a share of GDP over the long-term is projected in the majority (15) of Member States (HR, DK, LV, FR, IT, EL, SE, EE, ES, PT, PL, BG, RO, CY and HU), mostly as a result of implemented pension reforms. These reform measures, including changes to the retirement age and the pension benefit, have primarily been adopted to address fiscal sustainability concerns of pension systems.

The pension projections rely on unchanged pension legislation, and risks exist. If pensions are being perceived as being 'too low' or the retirement age 'too high', this could eventually result in changes in pension policies, leading to upward pressure on pension spending, and the projections could thus underestimate future government expenditure. For example, the public pension benefit ratio (i.e. average pensions in relation to average wages) is projected to fall in all Member States (except Luxembourg) in the period to 2060, on average by 9 pp. in the EU and in some countries (CY, PT and ES) by up to 20 pp. (see Graph 4). Consequently, the benefit ratio at the end of the forecasting period is generally low. Even including private pensions, the benefit ratio in 2060 settle above 50 percent in only five countries (DK, EL, IT, LU, NL) while it falls below 30 percent in some other cases (BG, EE, HR, LV, PL, RO). Another upward risk is related to the projected decrease of the coverage ratio (i.e. the number of pensioners as percent of population aged 65 or more) in some countries, where a large increase of the legal retirement age is legislated. On the other hand, if countries enact additional expenditure-reducing pension reforms (currently being discussed in some countries), the projected expenditures could be overestimated.

(^{9}) See footnote 3.

Graph 4:   **Public pension benefit ratio, change 2013-2060, pp. change**
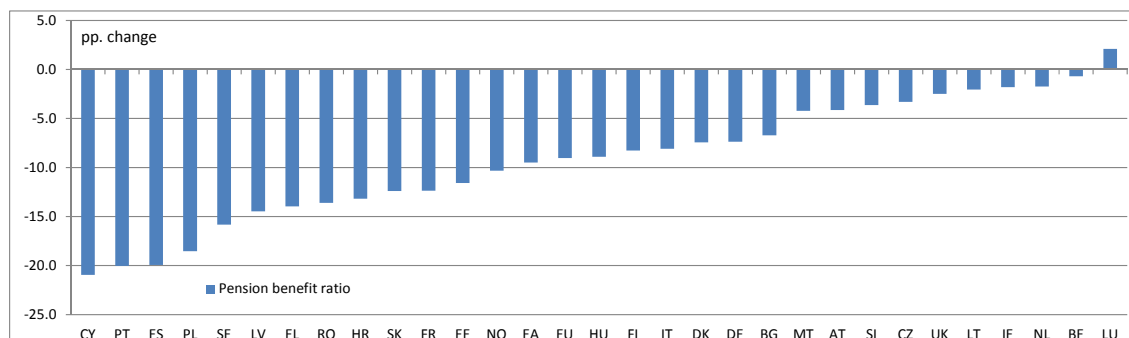
Source: Commission services, EPC.

Risk scenarios

As noted above, there is considerable uncertainty as to future developments of age-related public expenditure. In order to provide a comprehensive assessment of the impact on government expenditure of changing the assumptions, the budgetary projections were also run with alternative scenarios, e.g. the risk scenarios. Two risk scenarios were therefore carried out, defined as follows:

- **TFP risk scenario**: In light of the trend decline in TFP growth performance over the last decades in the EU, due visibility and prominence should also be given to the risk of lower TFP growth in the future. Thus, a TFP risk scenario is included, with a lower TFP growth rate (0.8%). The TFP risk scenario essentially shows that GDP growth could be much lower in the event that future TFP growth rates developed less dynamically than in the baseline scenario, i.e. more in line with the growth rate (0.8%) observed over the last 20 years. In overall potential GDP terms, it would grow by 1.2% on average up to 2060, as opposed to 1.4% in the baseline scenario. In the euro area, it would be even lower, growing by 1.1% on average. In terms of GDP per capita levels, it would be 10% lower in the TFP risk scenario compared with the baseline by 2060 in the EU.

- **AWG risk scenario**: Non-demographic driver may exercise an upward push on costs in the health care and long-term care areas. In order to gain further insights into the possible importance of such developments, another set of projections were run which assumes the partial continuation of recently observed trends in health care expenditure due to, e.g. technological progress. Moreover, an upward convergence of coverage and costs to the EU average is assumed to take place in long-term care.

Graph 5:   **Total age-related expenditure under different scenarios, 2013-2060, pp. of GDP**
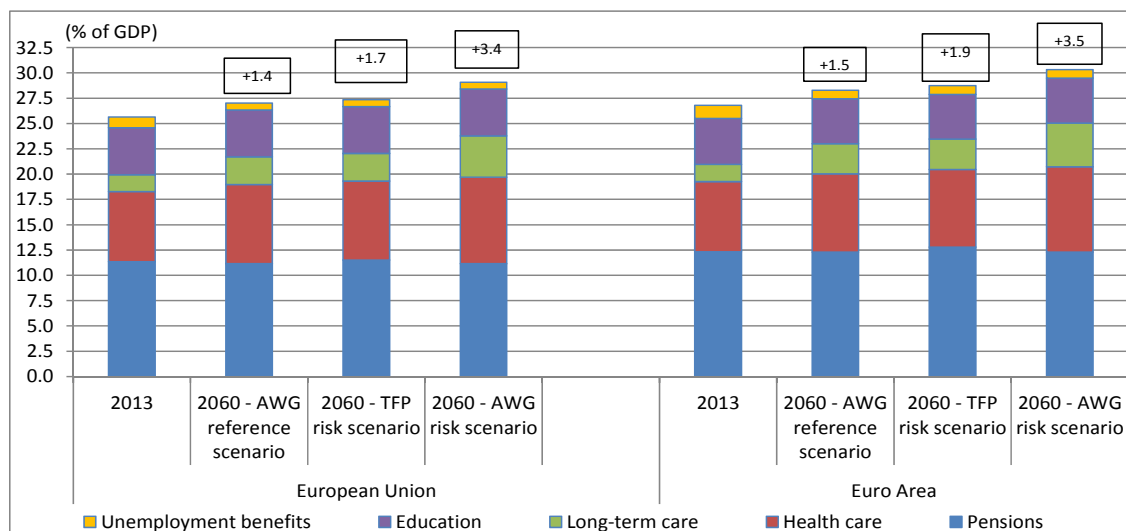
Source: Commission services, EPC.

The TFP risk scenario primarily affects pension expenditure, projected to rise by ½ pp. of GDP more on average (EU and EA) up to 2060 compared with the baseline scenario. This is because pensions in payments are on average projected to rise in line with inflation, i.e. slower than wages (which evolve in line with labour productivity growth, which in turn depends on TFP growth). By contrast, it only has a small impact on health care and long-term care, as unit costs in these areas are closely linked to labour productivity growth and hence with wage growth. The projected increase in total age-related expenditure would be about 1/3 pp. of GDP higher than the baseline scenario up to 2060 in the EU and EA (see Graph 5 and Table 2).

The AWG risk scenario has strong impact on health care and long-term care expenditure. The projected increase in total age-related expenditure would be 2.1 pp. of GDP higher than the baseline scenario up to 2060 for both the EU as a whole and the EA. It would entail an increase over the entire projection horizon of 3.4 pp. in the EU and of 3.5 pp. in the EA. However, in both risk scenarios, the EU aggregates mask conservable variety and the expenditure projections are very different across Member States (see Graph 5 and Table 3).

A lower projected increase in age-related spending in the current projections than in the 2012 Ageing Report

Compared with the projections in the 2012 Ageing Report, ([10]) total age-related public expenditure according to the baseline scenario is now projected to rise less in all countries except Spain, Latvia and Portugal over the entire projection horizon. This is mostly due to less pronounced increases in pension expenditure over the long-term (see Graph 6). This reflects not only the impact of pension reforms, but also a less pronounced population ageing effect in the EU, according to the EUROPOP2013 demographic projection. ([11])

Over the period 2013-2060, the increase in the EU is 1 ½ pp. of GDP and in the EU and EA, compared with a projected increase of 3 ½ pp. of GDP in the 2012 Ageing Report (see Graph 6). The largest

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([10]) Pension reforms implemented and having been subject to a peer review by the EPC since the 2012 Ageing Report was published are included in the 2012 AR projections in Graph 6.

([11]) A lower increase in the old age dependency ratio (aged 65 or more/aged 20-64) over the period 2013-2060 in the EU as a whole and in all countries except EL, PT, SK, UK projected in EUROPOP2013 compared with EUROPOP2010.

downward revisions have occurred in Luxembourg, France, Greece, Romania, Denmark, Lithuania and Finland (more than 3 ½ pp. of GDP).

Graph 6: **Projected change in total age-related and pension expenditure (baseline) compared, 2012 and 2015 AR, 2013-60, pp. of GDP**
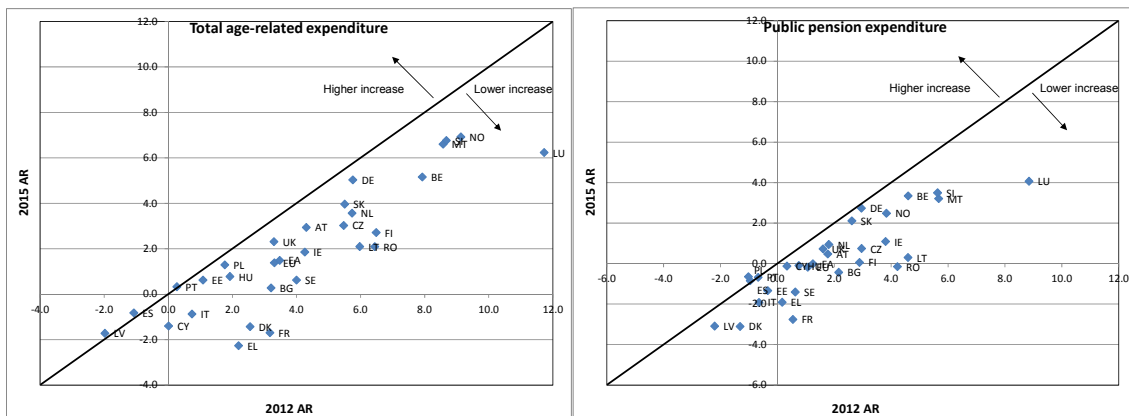
Source: Commission services, EPC.

Table 1:   **Overview of the 2015 long-term budgetary projections — Baseline scenario**

Age-related spending, percentage points of GDP, 2013-2060

Ageing Report 2015 - AWG reference scenario

	Pensions			Health-care			Long-term care			Education			Strictly age-related items			Unemployment benefits			Total age related items		
	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60
BE	11.8	3.4	3.3	6.0	0.1	0.1	2.1	0.9	1.6	5.8	0.2	0.3	25.7	4.6	5.3	1.8	-0.2	-0.2	27.5	4.4	5.2
BG	9.9	-1.5	-0.4	4.0	0.4	0.4	0.4	0.1	0.2	3.0	-0.1	0.4	17.3	-1.0	0.5	0.5	-0.2	-0.2	17.8	-1.3	0.3
CZ	9.0	0.0	0.7	5.7	0.7	1.0	0.7	0.4	0.7	3.4	0.3	0.7	18.9	1.4	3.1	0.2	0.0	0.0	19.1	1.4	3.0
DK	10.3	-2.3	-3.1	8.1	0.8	0.9	2.4	1.4	2.0	7.6	-0.4	-0.7	28.4	-0.5	-0.9	1.4	-0.5	-0.5	29.8	-1.0	-1.4
DE	10.0	2.2	2.7	7.6	0.7	0.6	1.4	0.9	1.5	4.1	0.1	0.3	23.1	3.9	5.1	0.8	0.0	0.0	23.9	3.9	5.0
EE	7.6	-0.7	-1.3	4.4	0.6	0.6	0.6	0.4	0.7	4.4	0.1	0.8	17.0	0.3	0.6	0.2	0.0	0.0	17.1	0.3	0.6
IE	7.4	2.7	1.1	6.0	1.3	1.2	0.7	0.4	0.7	6.0	-0.7	0.0	20.0	3.6	3.0	2.1	-1.1	-1.1	22.1	2.5	1.9
EL	16.2	-2.1	-1.9	6.6	0.9	1.3	0.5	0.2	0.4	4.1	-1.4	-1.1	27.4	-2.4	-1.4	1.2	-0.9	-0.9	28.5	-3.3	-2.3
ES	11.8	0.1	-0.8	5.9	1.1	1.1	1.0	0.6	1.4	4.6	-1.4	-0.8	23.2	0.4	0.8	2.2	-1.7	-1.7	25.4	-1.2	-0.8
FR	14.9	-1.1	-2.8	7.7	0.9	0.9	2.0	0.6	0.8	5.0	-0.1	-0.2	29.6	0.3	-1.3	1.5	-0.4	-0.4	31.1	-0.2	-1.7
HR	10.8	-3.0	-3.9	5.7	1.6	1.7	0.4	0.0	0.1	3.7	-0.5	-0.4	20.7	-1.9	-2.5	0.5	-0.3	-0.3	21.2	-2.2	-2.8
IT	15.7	0.1	-1.9	6.1	0.6	0.7	1.8	0.4	0.9	3.7	-0.3	-0.2	27.3	0.8	-0.5	0.9	-0.3	-0.3	28.2	0.4	-0.9
CY	9.5	-0.1	-0.1	3.0	0.3	0.3	0.3	0.2	0.2	7.3	-1.9	-1.2	20.0	-1.5	-0.8	0.8	-0.6	-0.6	20.9	-2.1	-1.4
LV	7.7	-2.3	-3.1	3.8	0.6	0.6	0.6	0.1	0.1	3.8	0.0	0.8	15.9	-1.5	-1.6	0.3	-0.2	-0.2	16.2	-1.7	-1.7
LT	7.2	2.2	0.3	4.2	0.5	0.1	1.4	0.8	0.9	3.9	0.3	0.9	16.7	3.8	2.2	0.2	-0.1	-0.1	16.9	3.7	2.1
LU	9.4	3.3	4.1	4.6	0.2	0.5	1.5	0.7	1.7	3.3	0.1	0.2	18.8	4.3	6.4	0.7	-0.2	-0.2	19.5	4.1	6.2
HU	11.5	-1.9	-0.1	4.7	0.6	0.8	0.8	0.2	0.4	3.6	-0.5	-0.2	20.5	-1.6	0.9	0.3	-0.1	-0.1	20.8	-1.7	0.8
MT	9.6	0.2	3.2	5.7	1.8	2.1	1.1	0.9	1.2	5.9	-0.4	0.1	22.2	2.5	6.6	0.3	0.0	0.0	22.6	2.5	6.6
NL	6.9	1.5	0.9	7.2	1.0	1.0	4.1	1.7	3.0	5.2	-0.4	-0.5	23.4	3.8	4.4	2.0	-0.8	-0.8	25.4	3.0	3.6
AT	13.9	0.8	0.5	6.9	1.0	1.3	1.4	0.6	1.3	4.9	-0.1	0.0	27.1	2.4	3.1	0.8	-0.2	-0.2	27.9	2.2	2.9
PL	11.3	-1.4	-0.7	4.2	0.8	1.2	0.8	0.5	0.9	4.4	-0.6	-0.1	20.7	-0.6	1.3	0.2	-0.1	-0.1	20.9	-0.7	1.3
PT	13.8	1.0	-0.7	6.0	1.7	2.5	0.5	0.2	0.4	5.2	-1.2	-1.0	25.5	1.8	1.3	1.5	-0.9	-0.9	27.0	0.8	0.3
RO	8.2	0.2	-0.1	3.8	0.8	1.0	0.7	0.5	0.9	2.6	0.2	0.4	15.3	1.7	2.1	0.1	0.0	0.0	15.5	1.7	2.1
SI	11.8	2.6	3.5	5.7	1.1	1.2	1.4	1.0	1.5	5.3	0.1	0.8	24.2	4.7	7.0	0.6	-0.2	-0.2	24.7	4.5	6.8
SK	8.1	0.0	2.1	5.7	1.4	2.0	0.2	0.2	0.4	3.4	-0.6	-0.4	17.4	1.0	4.1	0.2	-0.1	-0.1	17.7	0.9	4.0
FI	12.9	0.7	0.1	7.8	0.7	0.7	2.4	1.8	2.1	6.1	0.2	0.3	29.2	3.4	3.2	1.9	-0.4	-0.4	31.2	3.0	2.7
SE	8.9	-1.4	-1.4	6.9	0.4	0.4	3.6	1.0	1.5	5.7	0.2	0.2	25.1	0.2	0.7	0.4	-0.1	-0.1	25.5	0.0	0.6
UK	7.7	0.8	0.7	7.8	1.0	1.3	1.2	0.3	0.4	5.1	0.0	0.0	21.8	2.0	2.4	0.3	-0.1	-0.1	22.1	1.9	2.3
NO	9.9	1.5	2.5	7.5	0.6	0.9	5.8	2.0	3.6	6.0	0.0	-0.1	29.2	4.1	6.9	0.4	0.0	0.0	29.6	4.1	6.9
EU	11.3	0.4	-0.2	6.9	0.8	0.9	1.6	0.7	1.1	4.7	-0.2	0.0	24.6	1.6	1.8	1.1	-0.4	-0.4	25.6	1.2	1.4
EA	12.3	0.8	0.0	7.0	0.8	0.8	1.7	0.7	1.3	4.5	-0.3	-0.1	25.5	2.0	1.9	1.3	-0.5	-0.4	26.8	1.6	1.5

(1) SK: the figures in this table do not include public expenditure on armed forces pension. They represented 0.4% of GDP in 2013, and are projected to remain roughly stable until 2060.
(2) The health care and long-term care EU averages are weighted according to GDP. The level of health care and long-term care expenditures in 2013 is the first year of projected expenditures based on the latest available data. Health care expenditure excludes long-term nursing care.
(3) An in-depth peer review was carried out by the AWG and the Commission at four meetings during September-December 2014. The projections incorporate pension legislation in place at that time. No further reform measures has been legislated in EU Member States by 1 April 2015 (except Portugal, see the Note to Table II.1.4).

Source: Commission services, EPC.

Table 2: **Overview of the 2015 long-term budgetary projections – TFP risk scenario**

Age-related spending, percentage points of GDP, 2013-2060

Ageing Report 2015 - TFP risk scenario

	Pensions			Health-care			Long-term care			Education			Strictly age-related items			Unemployment benefits			Total age related items		
	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60
BE	11.8	3.9	4.3	6.0	0.1	0.1	2.1	0.9	1.6	5.8	0.2	0.3	25.7	5.1	6.3	1.8	-0.2	-0.2	27.5	4.9	6.1
BG	9.9	-1.3	-0.1	4.0	0.4	0.3	0.4	0.1	0.2	3.0	-0.1	0.4	17.3	-0.9	0.8	0.5	-0.2	-0.2	17.8	-1.1	0.5
CZ	9.0	0.2	1.1	5.7	0.7	0.9	0.7	0.4	0.7	3.4	0.3	0.7	18.9	1.6	3.4	0.2	0.0	0.0	19.1	1.6	3.4
DK	10.3	-2.3	-3.1	8.1	0.8	0.8	2.4	1.4	2.0	7.6	-0.4	-0.7	28.4	-0.5	-1.0	1.4	-0.5	-0.5	29.8	-1.0	-1.5
DE	10.0	2.3	2.8	7.6	0.7	0.5	1.4	0.9	1.5	4.1	0.1	0.3	23.1	4.0	5.1	0.8	0.0	0.0	23.9	3.9	5.0
EE	7.6	-0.7	-1.2	4.4	0.6	0.6	0.6	0.4	0.7	4.4	0.1	0.8	17.0	0.4	0.7	0.2	0.0	0.0	17.1	0.3	0.7
IE	7.4	2.8	1.2	6.0	1.3	1.2	0.7	0.4	0.7	6.0	-0.7	0.0	20.0	3.7	3.1	2.1	-1.1	-1.1	22.1	2.6	2.0
EL	16.2	-1.6	-1.0	6.6	0.9	1.2	0.5	0.2	0.4	4.1	-1.4	-1.1	27.4	-1.9	-0.4	1.2	-0.9	-0.9	28.5	-2.8	-1.4
ES	11.8	0.4	-0.7	5.9	1.1	1.0	1.0	0.6	1.4	4.6	-1.4	-0.8	23.2	0.7	1.0	2.2	-1.7	-1.7	25.4	-1.0	-0.7
FR	14.9	-0.6	-1.9	7.7	0.9	0.8	2.0	0.6	0.8	5.0	-0.1	-0.2	29.6	0.7	-0.5	1.5	-0.4	-0.4	31.1	0.3	-0.9
HR	10.8	-2.9	-3.7	5.7	1.6	1.7	0.4	0.0	0.1	3.7	-0.5	-0.4	20.7	-1.8	-2.3	0.5	-0.3	-0.3	21.2	-2.1	-2.6
IT	15.7	0.7	-1.2	6.1	0.6	0.6	1.8	0.4	0.9	3.7	-0.3	-0.2	27.3	1.3	0.1	0.9	-0.3	-0.3	28.2	1.0	-0.2
CY	9.5	0.1	0.2	3.0	0.2	0.3	0.3	0.2	0.2	7.3	-1.9	-1.2	20.0	-1.4	-0.6	0.8	-0.6	-0.6	20.9	-1.9	-1.1
LV	7.7	-2.2	-2.9	3.8	0.6	0.6	0.6	0.1	0.1	3.8	0.0	0.8	15.9	-1.5	-1.4	0.3	-0.2	-0.2	16.2	-1.6	-1.6
LT	7.2	2.2	0.3	4.2	0.5	0.1	1.4	0.8	0.9	3.9	0.3	0.9	16.7	3.8	2.2	0.2	-0.1	-0.1	16.9	3.7	2.1
LU	9.4	3.6	5.2	4.6	0.2	0.5	1.5	0.7	1.7	3.3	0.1	0.2	18.8	4.7	7.5	0.7	-0.2	-0.2	19.5	4.4	7.3
HU	11.5	-1.7	0.3	4.7	0.6	0.8	0.8	0.2	0.4	3.6	-0.5	-0.2	20.5	-1.4	1.3	0.3	-0.1	-0.1	20.8	-1.5	1.2
MT	9.6	0.4	3.6	5.7	1.8	2.1	1.1	0.9	1.2	5.9	-0.4	0.1	22.2	2.7	6.9	0.3	0.0	0.0	22.6	2.7	6.9
NL	6.9	1.4	1.1	7.2	1.0	1.3	4.1	1.7	3.0	5.2	-0.4	-0.5	23.4	3.7	4.4	2.0	-0.8	-0.8	25.4	2.9	3.6
AT	13.9	1.0	-0.2	6.9	1.0	1.3	1.4	0.6	1.3	4.9	-0.1	0.0	27.1	2.6	3.7	0.8	-0.2	-0.2	27.9	2.4	3.6
PL	11.3	-1.2	0.5	4.2	0.8	1.2	0.8	0.5	0.9	4.4	-0.6	-0.1	20.7	-0.5	1.8	0.2	-0.1	-0.1	20.9	-0.5	1.7
PT	13.8	1.5	0.3	6.0	1.7	2.5	0.5	0.2	0.4	5.2	-1.2	-1.0	25.5	2.2	2.4	1.5	-0.9	-0.9	27.0	1.3	1.5
RO	8.2	0.5	3.8	3.8	0.8	0.9	0.7	0.5	0.9	2.6	0.2	0.4	15.3	1.9	2.5	0.1	0.0	0.0	15.5	1.9	2.5
SI	11.8	2.7	3.8	5.7	1.1	1.2	1.4	1.0	1.5	5.3	0.1	0.8	24.2	4.9	7.2	0.6	-0.2	-0.2	24.7	4.7	7.0
SK	8.1	0.1	2.5	5.7	1.4	2.0	0.2	0.2	0.4	3.4	-0.6	-0.4	17.4	1.1	4.5	0.2	-0.1	-0.1	17.7	1.0	4.3
FI	12.8	1.1	0.6	7.8	0.7	0.7	2.4	1.8	2.1	6.1	0.2	0.3	29.2	3.8	3.7	1.9	-0.4	-0.4	31.1	3.3	3.3
SE	8.9	-1.3	-1.4	6.9	0.3	0.4	3.6	1.0	1.5	5.7	0.2	0.2	25.1	0.2	0.8	0.4	-0.1	-0.1	25.5	0.1	0.6
UK	7.7	0.8	0.7	7.8	1.0	1.2	1.2	0.3	0.4	5.1	0.0	0.0	21.8	1.9	2.3	0.3	-0.1	-0.1	22.1	1.9	2.3
NO	9.9	1.5	2.5	7.5	0.6	0.9	5.8	2.0	3.6	6.0	0.0	-0.1	29.2	4.0	6.9	0.4	0.0	0.0	29.6	4.1	6.9
EU	11.3	0.6	0.2	6.9	0.8	0.8	1.6	0.7	1.1	4.7	-0.2	0.0	24.6	1.8	2.1	1.1	-0.4	-0.4	25.6	1.4	1.7
EA	12.3	1.1	0.5	7.0	0.8	0.7	1.7	0.7	1.3	4.5	-0.3	-0.1	25.5	2.3	2.4	1.3	-0.5	-0.4	26.8	1.8	1.9

(1) SK: the figures in this table do not include public expenditure on armed forces pension. They represented 0.4% of GDP in 2013, and are projected to remain roughly stable until 2060.
(2) The health care and long-term care EU averages are weighted according to GDP. The level of health care and long-term care expenditures in 2013 is the first year of projected expenditures based on the latest available data. Health care expenditure excludes long-term nursing care.

Source: Commission services, EPC.

Table 3: **Overview of the 2015 long-term budgetary projections — AWG risk scenario**

Age-related spending, percentage points of GDP, 2013-2060
Ageing Report 2015 - AWG risk scenario

	Pensions			Health-care			Long-term care			Education			Strictly age-related items			Unemployment benefits			Total age related items		
	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60	2013 level	CH 2013-40	CH 2013-60
BE	11.8	3.4	3.3	6.0	0.4	0.5	2.1	1.4	2.6	5.8	0.2	0.3	25.7	5.3	6.7	1.8	-0.2	-0.2	27.5	5.2	6.5
BG	9.9	-1.5	-0.4	4.0	1.1	1.1	0.4	0.6	2.5	3.0	-0.1	0.4	17.3	0.2	3.6	0.5	-0.2	-0.2	17.8	0.0	3.4
CZ	9.0	0.0	0.7	5.7	1.3	1.7	0.7	1.7	5.2	3.4	0.3	0.7	18.9	3.3	8.4	0.2	0.0	0.0	19.1	3.3	8.3
DK	10.3	-2.3	-3.1	8.1	1.6	1.9	2.4	1.6	2.6	7.6	-0.4	-0.7	28.4	0.6	0.7	1.4	-0.5	-0.5	29.8	0.1	0.2
DE	10.0	2.2	2.7	7.6	1.3	1.3	1.4	1.6	3.1	4.1	0.1	0.3	23.1	5.2	7.4	0.8	0.0	0.0	23.9	5.1	7.4
EE	7.6	-0.7	-1.3	4.4	1.2	1.3	0.6	1.1	3.2	4.4	0.1	0.8	17.0	1.7	3.9	0.2	0.0	0.0	17.1	1.6	3.9
IE	7.4	2.7	1.1	6.0	2.0	1.9	0.7	1.0	2.3	6.0	-0.7	0.0	20.0	4.9	5.3	2.1	-1.1	-1.1	22.1	3.8	4.2
EL	16.2	-2.1	-1.9	6.6	1.6	2.1	0.5	0.3	0.8	4.1	-1.4	-1.1	27.4	-1.6	-0.1	1.2	-0.9	-0.9	28.5	-2.5	-1.1
ES	11.8	0.1	-0.8	5.9	1.9	1.6	1.0	1.1	2.9	4.6	-1.4	-0.8	23.2	1.7	3.2	2.2	-1.7	-1.7	25.4	0.1	1.5
FR	14.9	-1.1	-2.8	7.7	1.5	1.6	2.0	1.5	2.7	5.0	-0.1	-0.2	29.6	1.7	1.4	1.5	-0.4	-0.4	31.1	1.3	1.0
HR	10.8	-3.0	-3.9	5.7	2.4	2.7	0.4	0.4	1.1	3.7	-0.5	-0.4	20.7	-0.8	-0.4	0.5	-0.3	-0.3	21.2	-1.1	-0.7
IT	15.7	0.1	-1.9	6.1	0.9	1.2	1.8	0.5	1.1	3.7	-0.3	-0.2	27.3	1.3	0.2	0.9	-0.3	-0.3	28.2	0.9	-0.1
CY	9.5	-0.1	-0.1	3.0	0.5	0.6	0.3	0.4	1.8	7.3	-1.9	-1.2	20.0	-1.0	1.0	0.8	-0.6	-0.6	20.9	-1.6	0.4
LV	7.7	-2.3	-3.1	3.8	1.4	1.5	0.6	0.9	2.7	3.8	0.0	0.8	15.9	0.1	2.0	0.3	-0.2	-0.2	16.2	-0.1	1.8
LT	7.2	2.2	0.3	4.2	1.3	0.9	1.4	2.0	3.5	3.9	0.3	0.9	16.7	5.7	5.6	0.2	-0.1	-0.1	16.9	5.6	5.5
LU	9.4	3.3	4.1	4.6	0.4	0.8	1.5	1.2	3.3	3.3	0.1	0.2	18.8	5.1	8.4	0.7	-0.2	-0.2	19.5	4.9	8.1
HU	11.5	-1.9	-0.1	4.7	1.2	1.5	0.8	1.3	4.2	3.6	-0.5	-0.2	20.5	0.2	5.4	0.3	-0.1	-0.1	20.8	0.1	5.4
MT	9.6	0.2	3.2	5.7	2.5	3.0	1.1	1.5	2.6	5.9	-0.4	0.1	22.2	3.7	8.8	0.3	0.0	0.0	22.6	3.8	8.8
NL	6.9	1.5	0.9	7.2	1.4	1.6	4.1	2.0	3.5	5.2	-0.4	-0.5	23.4	4.5	5.5	2.0	-0.8	-0.8	25.4	3.7	4.7
AT	13.9	0.8	0.5	6.9	1.6	2.0	1.4	1.2	2.8	4.9	-0.1	0.0	27.1	3.5	5.3	0.8	-0.2	-0.2	27.9	3.4	5.1
PL	11.3	-1.4	-0.7	4.2	1.6	2.2	0.8	0.9	1.9	4.4	-0.6	-0.1	20.7	0.5	3.3	0.2	-0.1	-0.1	20.9	0.5	3.2
PT	13.8	1.0	-0.7	6.0	2.5	3.5	0.5	0.5	2.1	5.2	-1.2	-1.0	25.5	2.9	4.0	1.5	-0.9	-0.9	27.0	2.0	3.1
RO	8.2	0.2	-0.1	3.8	1.4	1.7	0.7	1.0	3.2	2.6	0.2	0.4	15.3	2.7	5.2	0.1	0.0	0.0	15.5	2.7	5.2
SI	11.8	2.6	3.5	5.7	1.7	1.9	1.4	1.4	2.7	5.3	0.1	0.8	24.2	5.8	8.9	0.6	-0.2	-0.2	24.7	5.6	8.7
SK	8.1	0.0	2.1	5.7	2.5	3.3	0.2	1.2	4.4	3.4	-0.6	-0.4	17.4	3.1	9.4	0.2	-0.1	-0.1	17.7	3.0	9.3
FI	12.9	0.7	0.1	7.8	1.1	1.3	2.4	2.3	3.3	6.1	0.2	0.3	29.2	4.4	5.0	1.9	-0.4	-0.4	31.2	3.9	4.5
SE	8.9	-1.4	-1.4	6.9	1.0	1.2	3.6	2.1	3.8	5.7	0.2	0.2	25.1	1.8	3.8	0.4	-0.1	-0.1	25.5	1.7	3.7
UK	7.7	0.8	0.7	7.8	1.5	2.0	1.2	0.5	1.1	5.1	0.0	0.0	21.8	2.8	3.9	0.3	-0.1	-0.1	22.1	2.7	3.8
NO	9.9	1.5	2.5	7.5	1.2	1.7	5.8	2.0	3.8	6.0	0.0	-0.1	29.2	4.7	7.9	0.4	0.0	0.0	29.6	4.7	7.9
EU	11.3	0.4	-0.2	6.9	1.4	1.6	1.6	1.2	2.4	4.7	-0.2	0.0	24.6	2.7	3.8	1.1	-0.4	-0.4	25.6	2.3	3.4
EA	12.3	0.8	0.0	7.0	1.3	1.5	1.7	1.3	2.6	4.5	-0.3	-0.1	25.5	3.1	4.0	1.3	-0.5	-0.4	26.8	2.6	3.5

(1) SK: the figures in this table do not include public expenditure on armed forces pension. They represented 0.4% of GDP in 2013, and are projected to remain roughly stable until 2060.
(2) The health care and long-term care EU averages are weighted according to GDP. The level of health care and long-term care expenditures in 2013 is the first year of projected expenditures based on the latest available data. Health care expenditure excludes long-term nursing care.

Source: Commission services, EPC.

Part I

Underlying demographic and macroeconomic assumptions

1. DEMOGRAPHIC ASSUMPTIONS

1.1. POPULATION PROJECTIONS

The 2015 long term budgetary projections are based on EUROSTAT's population projections (EUROPOP2013). [12]

However, projecting demographic and economic developments over the long run is surrounded by a high degree of uncertainty. [13]

As was the case with the previous EUROPOP2010 and EUROPOP2008 demographic projections, the EUROPOP2013 was made using a 'convergence' approach. [14] This means that the key demographic determinants are assumed to converge over the very long-term. Setting the year of convergence very far into the future has the advantage of taking due account of recent trends and developments in the beginning of the period, while at the same time assuming a degree of convergence over the very long-term in terms of demographic drivers. [15]

These demographic determinants are: (i) the fertility rate; (ii) the mortality rate and (iii) the level of net migration. As far as fertility and mortality are concerned, it is assumed that they converge to that of the 'forerunners'. [16]

1.1.1. Fertility rates

Past trends

In the preceding decades fertility rates declined sharply in the EU Member States after the post-war "baby boom" peak above 2.5 in the second half of the 1960s, to below the natural replacement level of 2.1 (see Graph I.1.2).

Total fertility rates (TFR [17]) have increased since 2000 on average in the EU as a whole, although this trend increase has reversed into a decline since 2010. Fertility rates have nevertheless increased between 2000 and 2012 in almost all Member States, with total fertility rates reaching above 1.8 in Ireland, France, Finland, Sweden and the UK. By contrast, fertility rates have decreased in Cyprus, Luxembourg, Malta Poland and Portugal.

The EUROPOP2013 projection

The EUROPOP2013 projection assumes a process of convergence in the fertility rates across Member States to that of the forerunners over the very long-term. The total fertility rate (TFR) is projected to rise from 1.59 in 2013 to 1.68 by 2030 and further to 1.76 by 2060 for the EU as a whole. In the euro area, a similar increase is projected, from 1.56 in 2013 to 1.72 in 2060.

The fertility rate is projected to increase over the projection period in nearly all Member States, with the exception of Ireland, France and Sweden (the forerunners, with values above 1.9)) where it is expected to decrease, whereas in the UK it is projected to remain stable. Consequently, fertility rates in all countries are expected to remain below the natural replacement rate of 2.1 in the period to 2060 (see Graph I.1.1).

(^{12}) Eurostat's population projection (EUROPOP2013) was published on 28 March 2014.
(^{13}) Ireland has reservations around the population projections used in this exercise, where a net negative outward migration out to 2037 is estimated by the Eurostat model for migration flows. Based on assumptions about future cyclicality of net migration, Ireland expects that net migration will close (and change sign) significantly more rapidly than is envisaged under the EUROPOP2013 projections. Eurostat has adopted for Ireland the same methodology used for other countries. Whilst an exception for the basis of population projections for Ireland was endorsed by the EPC on April 1st 2015 for future t+10 projection exercises (up to 2025), the impact of this agreement is not reflected in AR15 projections.
(^{14}) A description of the EUROPOP2013 projections is forthcoming in 2015. The dataset can be found on http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database.
(^{15}) The assumptions do not necessarily fully reflect the views of the AWG neither as a group nor of individual Member States or national statistical offices. The underlying data are official data produced by national statistical institutions.
(^{16}) For further detail on demographic assumptions, see the Economic Policy Committee and the European Commission (2005): "The 2005 projections of age-related

expenditure (2004–50) for the EU-25 Member States: underlying assumptions and projection methodologies", European Economy, Special Reports 4/2005.
(^{17}) Fertility rates are reflected by the average number of children a woman would have, should she at each bearing age have the fertility rates of the year under review (this number is obtained by summing the fertility rates by age and is called the Total Fertility Rate, or TFR.

Graph I.1.1: **Projection of total fertility rates in EUROPOP2013 (number of births per woman)**
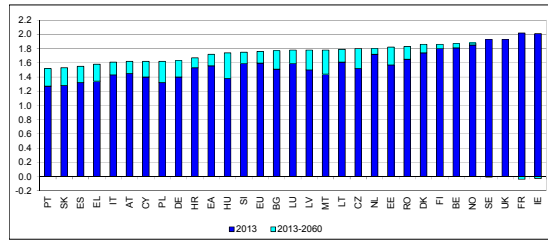
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.2: **Total fertility rates**
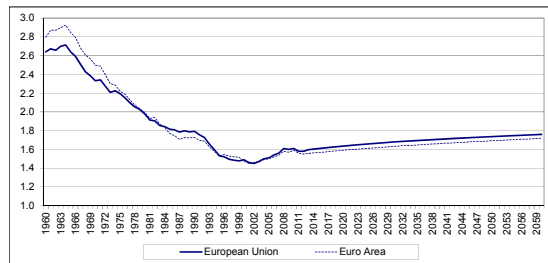
Source: Commission services, Eurostat, EUROPOP2013.

1.1.2. Life expectancy

Past trends

Life expectancy has been increasing in most developed countries worldwide over very long time periods. Since 1960, there have been significant increases in life expectancy at birth in all Member States, (see Graph I.1.3 and Graph I.1.4), especially for women. In euro-area Member States, the increase is even more pronounced where the life expectancy at birth increased with up to three months each year.

The difference between female and male life expectancies has diminished since 1990 in the EU due to faster improvements in life expectancy for males relative to females.

Official projections generally assume that gains in life expectancy at birth will slow down compared with historical trends. This is because mortality rates at younger ages are already very low and future gains in life expectancy would require improvements in mortality rates at older ages (which statistically have a smaller impact on life expectancy at birth). On the other hand, the wide range of life expectancies across EU Member

States, and also compared with other countries, points to considerable scope for future gains. In 2012, life expectancy at birth for females ranged from 77.9 in Bulgaria to 85.5 years in Spain, and for males ranging from 68.4 in Lithuania to 79.9 in Sweden.

However, regarding trends over the very long term, there is no consensus among demographers, e.g. whether there is a natural biological limit to longevity, the impact of future medical breakthroughs, long-term impact of public health programmes and societal behaviour such as reduction of smoking rates or increased prevalence of obesity. Past population projections from official sources have, however, generally underestimated the gains in life expectancy at birth as it was difficult to imagine that the reduction of mortality would continue at the same pace in the long run. Some commentators have argued that as a consequence, governments may have underestimated the potential budgetary impact of ageing populations.

The EUROPOP2013 projection

The EUROPOP2013 projection shows large increases in life expectancy at birth being sustained during the projection period, albeit with a considerable degree of diversity across Member States reflecting the convergence assumption.

In the EU, life expectancy at birth for males is expected to increase by 7.1 years over the projection period, from 77.6 in 2013 to 84. in 2060. For females, life expectancy at birth is projected to increase by 6.0 years for females, from 83.1 in 2013 to 89.1 in 2060, implying a convergence of life expectancy between males and females. The largest increases in life expectancies at birth, for both males and females, are projected to take place in the Member States with the lowest life expectancies in 2013. Life expectancies for males in 2013 are the lowest in Bulgaria, Estonia, Latvia, Lithuania, Hungary and Romania, ranging between 69 and 72 years. Life expectancies increase more than 10 years up to 2060 for these countries, indicating that some catching-up takes place over the projection period. For females, the largest gains in life expectancies at birth of 8 years or more are projected in Bulgaria, Latvia, Lithuania, Hungary, Romania and Slovakia. In all of these countries, female life expectancies in 2013

are below 80 years (see Graph I.1.5 and Graph I.1.6).

In the EU as a whole, life expectancy at age 65 is projected to increase by 4.8 years for males and by 4.6 years for females over the projection period 2013-2060. In 2060, life expectancy at age 65 will reach 22.4 years for males and 25.6 for females and the projected difference (3.2 years) is smaller than the 4.3 year difference in life expectancy at birth. In 2060, the highest life expectancy at age 65 is expected in France for both males (23 years) and females (26.6 years), while the lowest is expected in Bulgaria for both males (20.3 years) and females (23.4 years) (see Graph I.1.7 and Graph I.1.8).

Graph I.1.3:   **Life expectancy at birth, men (in years)**
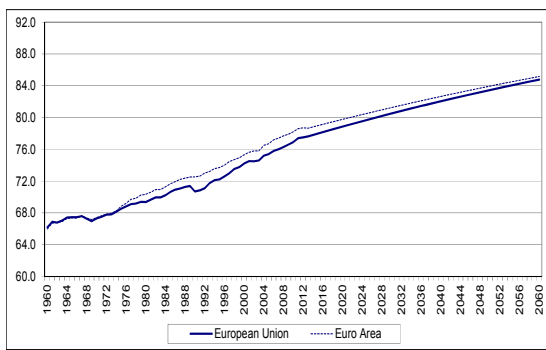
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.4:   **Life expectancy at birth, women (in years)**
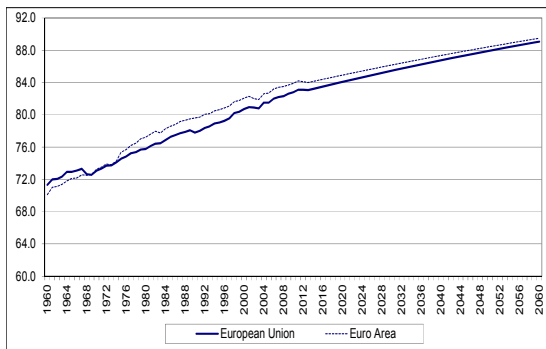
Source: Commission services, Eurostat, EUROPOP2013

Graph I.1.5:   **Projection of life expectancy at birth in EUROPOP2013, men (in years)**
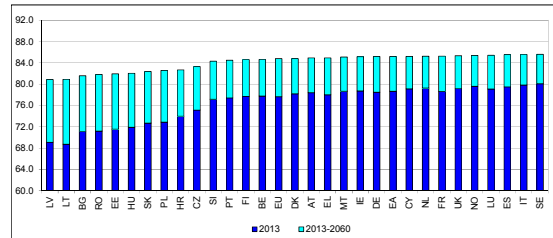
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.6:   **Projection of life expectancy at birth in EUROPOP2013, women (in years)**
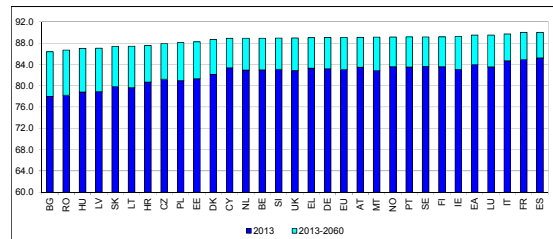
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.7:   **Projection of life expectancy at 65 in EUROPOP2013, men (in years)**
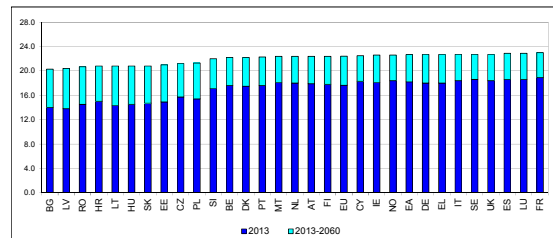
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.8:   **Projection of life expectancy at 65 in EUROPOP2013, women (in years)**
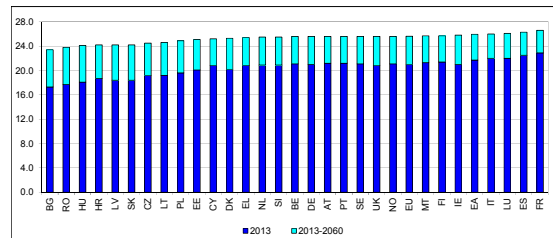
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.9:   **Net migration flows 1961-2060**
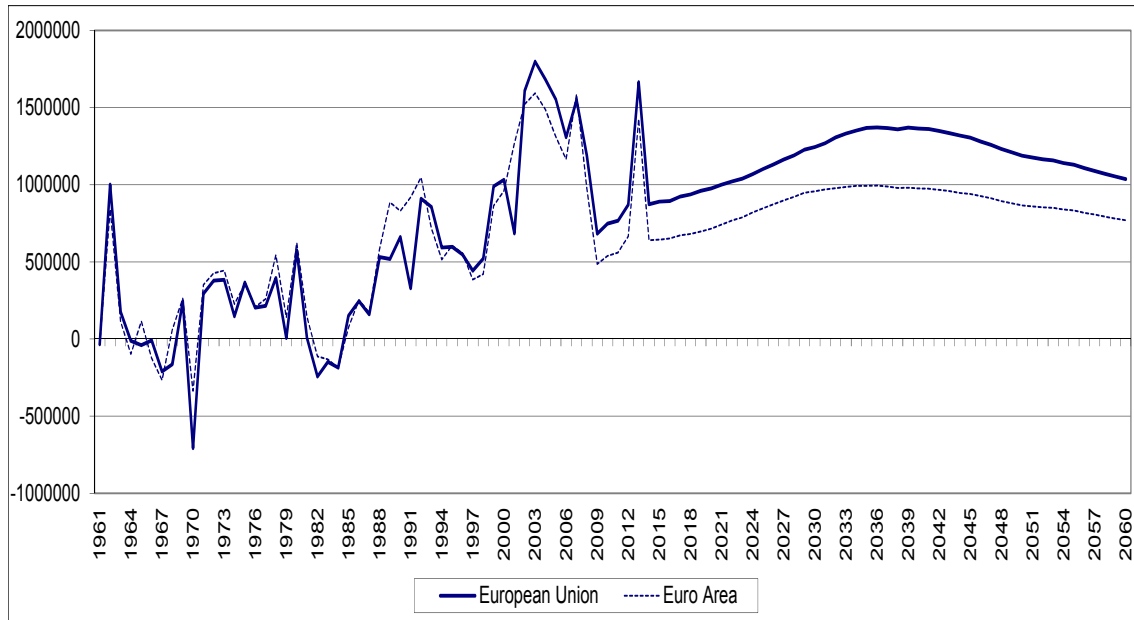
Source: Commission services, Eurostat, EUROPOP2013.

1.1.3. Net migration flows

Past trends and driving forces

European countries have gradually become a destination for migrants, starting in the 1950s in countries with post-war labour recruitment needs and with colonial past (see Graph I.1.9). Overall, the average annual net entries for the EU more than tripled from around 198,000 people per year during the 1980s to around 750,000 people per year during the 1990s. High clandestine migration also marks the decade of the 1990s.

In the beginning of the 2000's the net migration flows to the EU countries increased markedly reaching 1.8 million in 2003 and staying at levels above or close to 1.5 million until the onset of the financial and economic crisis, when net migration in the EU dropped sharply to around 700,000 in the years 2009-2011. In the last two years net migration flows have again increased, reaching pre-crisis levels (1.7 million) in 2013.

Net migration flows ([18]) per country are characterised by high variability. Traditionally,

Germany, France and the UK record the largest number of arrivals in the EU, but in the last decade there was first a rise of migration flows to Italy, Spain and Ireland that switched from countries of origin to destination countries. Since 2009 the situation has changed again, with significant outflows from Spain and Ireland.

The EUROPOP 2013 projection

Net inflows for the EU as a whole are projected to increase from about 874,000 people in 2014 to 1,364,000 by 2040 and thereafter declining to 1,037,000 people by 2060 (an annual inflow of 0.2% of the EU population).

([18]) Due to difficulties in having for each Member State good statistics of the migration flows, net migration is measured as the difference between the total population on 31

December and 1 January for a given calendar year, minus the difference between births and deaths (or natural increase). The approach is different from that of subtracting recorded emigration flows from immigration flows. Notably, when operating like that, the "net migration" not only records errors due to the difficulty of registering the migration moves, it also includes all possible errors and adjustments in other demographic variables.

Box I.1.1: **Net migration assumptions in the EUROPOP2013 projections**

Like the assumptions on fertility and mortality, the (net) migration assumptions are the combination of three components: short-term (nowcasting), medium-term (trends) and long-term assumptions (convergence hypothesis).

The nowcasting method has been applied to produce estimates for the year 2013 only and – whenever possible – it has made direct use of inputs from the Member States. It has also been used to introduce ad-hoc corrections for countries where the impact of the latest population census had not yet been fully incorporated in the demographic figures. Twelve countries (Belgium, the Czech Republic, Denmark, Germany, Spain, Italy, Lithuania, Malta, Portugal, Finland, Sweden and the United Kingdom) have provided Eurostat with migration estimates for the entire year 2013: these values have been directly included in the projections. Some of those countries (namely Denmark, Spain, Finland and Sweden) had provided also the population broken down by single age and sex on 1 January 2014. In these countries the net migration figure for 2013 was used only for the sake of demographic balance in 2013.

For other five countries (France, Hungary, the Netherlands, Austria and Norway), the total net migration was derivable indirectly, as a residual from the difference between the base population in 2014 and the (nowcasted) natural change in 2013. Therefore, data on total net migration for 2013 were available - directly or indirectly – for 17 countries.

Of the remaining 12 countries, only Slovenia and Slovakia had provided some migration data referring to 2013. For these two countries, the total immigration and total emigration for 2013 have been estimated with a proportional rule. For the remaining 10 countries for which no information on migration was available for 2013 (Bulgaria, Estonia, Ireland, Greece, Croatia, Cyprus, Latvia, Luxembourg, Poland and Romania), migration assumptions for 2013 have been taken from the trend component.

The trend component has been derived from statistical modelling, with demanding data requirements ([1]). Migration flows were measured in terms of *net* migration ([2]), computed as a residual from the annual demographic balance; by doing so, time series were usually available starting from the year 1960.

Due to the high variability over time of net migration and its dependency from national economic and political circumstances, there has been no attempt to identify a common data generator process for migration. By using an optimal automatic selection method, an ARIMA model has been specified for each country and used for the extrapolation.

The total net migration flows based on the convergence assumption are computed following the same logic applied in the previous EUROPOP2010 exercise. The convergence model assumes net migration to converge to zero in the very far future (the convergence year) ([3]). Intermediate values for total net migration are obtained by means of a double linear interpolation between net migration levels in the last observed year and zero in the convergence year, the intermediate point being obtained as an average of the last 10 years. In case a country has a negative intermediate point, the convergence is brought forward to 2035, in order to avoid negative net migration for a very long period. Such double linear interpolation, firstly between the last observed year and the intermediate point and then between that same intermediate point and the convergence year, is implemented to reduce the impact of the high variability of recent migration levels on the projected values.

The preliminary time series of projected total net migration is then computed by a weighted average

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([1]) Unfortunately, migration is well known to be the demographic component which is most affected by lacks in data availability and quality.

([2]) Although Eurostat is regularly collecting immigration and emigration data from the EU Member States, such a dataset is still at an early stage and it does not allow an analysis of long-term trends.

([3]) It should be noted that zero net migration does not imply zero migration but only equality of total immigration and emigration levels, and differences in the age and sex patterns of immigrants and emigrants may still affect the population structure.

Box (continued)

of the three components: nowcasting, trends and convergence. In summary, the total net migration is taken from nowcasting for the very first year of projections, from the trend component for the following five years, and from the convergence for the long term. For the medium term, the assumptions are a mix of trend and convergence components.

This set of assumptions is further modified to take into account the demographic changes going on in the countries. It is assumed that part of the decline in the (natural) working-age population size will be offset by immigration. An (additional) immigration flow is then computed in a proportional fashion to the shrinkage of the population in working ages. By doing so, immigration assumptions are – to some extent – explicitly driven by a demographic factor. This additional quantity of immigration is finally added to the net migration previously obtained to complete the migration assumptions.

The cumulated net migration to the EU over the entire projection period is 55 million (about 11% of the EU population in 2013, see Graph I.1.10), of which the bulk is concentrated in the euro area (40 million). Net migration flows are projected to be concentrated to a few destination countries: Italy (15.5 million cumulated up to 2060), the UK (9.2 million), Germany (7.0 million) and Spain (6.5 million). According to the assumptions, the change of Spain and Italy from origin in the past to destination countries would be confirmed in the coming decades. For countries that currently experience a net outflow (BG, CZ, EE, IE, EL, ES, HR, CY, LV, LT, PL, PT and RO), this is projected to taper off or reverse in the coming decades.

Graph I.1.10: **Projection of net migration flows in EUROPOP2013 over the period 2013-2060 cumulated as a percentage of the population in 2013**

Source: Commission services, Eurostat, EUROPOP2013

1.1.4. Overall results of the EUROPOP2013 population projection

Due to the dynamics in fertility, life expectancy and migration the age structure of the EU population will change strongly in the coming decades. The overall size of the population is projected to be slightly larger by 2060 but much older than it is now. The EU population is projected to increase (from 507 million in 2013) up to 2050 by almost 5%, when it will peak (at 526 million) and will thereafter decline slowly (to 523 million in 2060).

There are wide differences in population trends until 2060 across Member States. While the EU population as a whole would be larger in 2060 compared to 2013, decreases of the total population are projected for about half of the EU Member States (BG, DE, EE, EL, ES, HR, LV, LT, HU, PL, PT, RO, SI and SK). For the other Member States (BE, CZ, DK, IE, FR, IT, CY, LU, MT, NL, AT, FI, SE and UK) an increase is projected. The strongest population growth is expected by EUROSTAT to be in Luxembourg (+111%) due to the projected very high net-migration, Belgium (+38%), Sweden (+36%), Cyprus (30%) the United Kingdom (+25%). The sharpest decline is expected in Lithuania (-38%), Latvia (-31%), Bulgaria (-25%), Greece (-23%) and Portugal (-22%) (see Graph I.1.12).

In 2013, the Member States with the largest population were: Germany (81 million), France (66 million), the United Kingdom (64 million), Italy (60 million) and Spain (47 million). According to Eurostat, in 2060, the UK would become the most populous EU country (80 million), followed by France (76 million), Germany (71 million), Italy (66 million) and Spain (46 million).

The population pyramids presented in Graph I.1.11 show that the age structure of the EU population is projected to change dramatically. In 2013 the median age for males and females is 40 and 43 years old respectively. In 2060, it is projected to rise to 45 and 47, respectively, as the number of elderly people is projected to account for an increasing share of the population, due to the combination of the numerous cohorts born in the 1950's and 1960's and the continuing projected gains in life expectancy. At the same time, the base of the age pyramid becomes smaller due to below replacement fertility rates in the last decades. As a consequence, the shape of the age-pyramids gradually changes towards more evenly sized pillars. A similar development is projected for the euro area.

The proportion of young people (aged 0-19) is projected to remain fairly constant by 2060 in the EU28 and the euro area (around 20%), while those aged 20-64 will become a substantially smaller share, declining from 61% to 51%. Those aged 65 and over will become a much larger share (rising from 18% to 28% of the population), and those aged 80 and over (rising from 5% to 12%) will almost become as numerous as the young population in 2060 (see Graph I.1.13 and Graph I.1.15).

Graph I.1.11: **Population pyramids (in thousands), EU and EA, in 2013 and 2060**
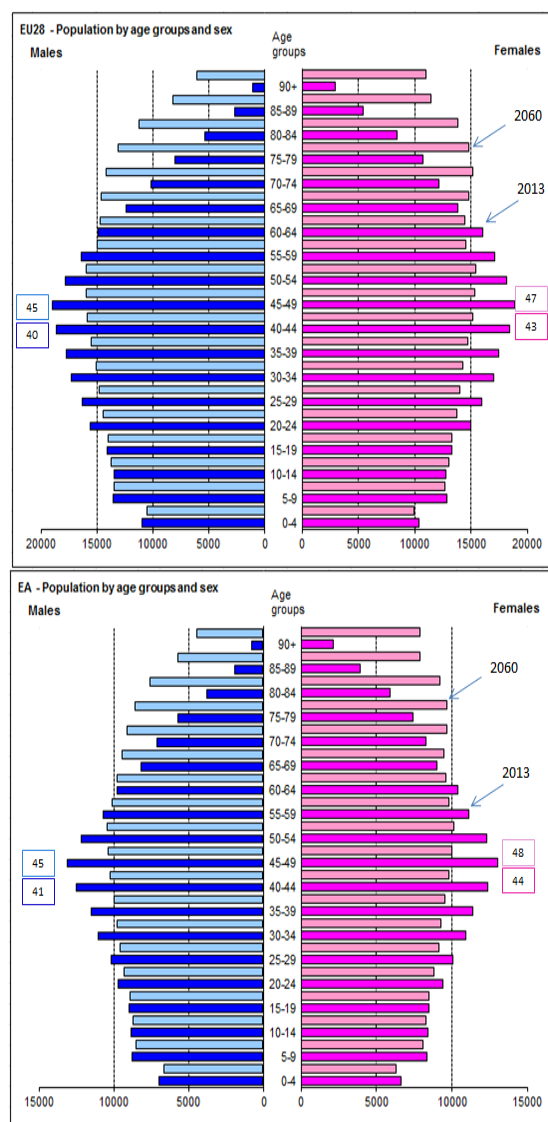
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.12:   **Projection of the total population (percentage and absolute change for the period 2013-2060)**
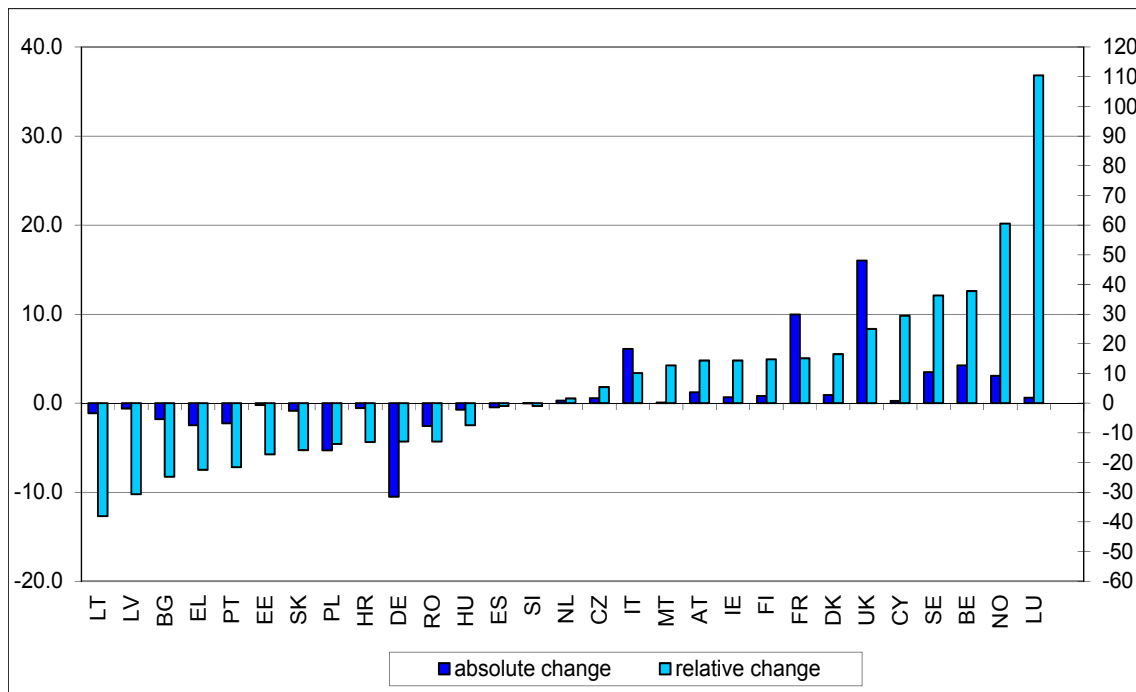
Source: Commission services, Eurostat, EUROPOP2013.

Table I.1.1: **Peaks and troughs for the size of the total population and the working-age population**

	Total population (in millions)							Working-age population 20-64 (in millions)						
	2013 - value	Peak value	Peak year	% change 2013 - peak	Trough value	Trough year	% change peak - trough	2013 - value	Peak value	Peak year	% change 2013 - peak	Trough value	Trough year	% change peak - trough
BE	11.2	15.4	2060	37.7%	11.2	2013	-27.4%	6.7	8.3	2060	23.9%	6.7	2013	-19.3%
BG	7.3	7.3	2013	0.0%	5.5	2060	-24.8%	4.5	4.5	2013	0.0%	2.7	2060	-40.8%
CZ	10.5	11.1	2055	5.5%	10.5	2013	-5.2%	6.7	6.7	2013	0.0%	5.6	2058	-15.6%
DK	5.6	6.5	2060	16.5%	5.6	2013	-14.2%	3.3	3.5	2055	7.3%	3.3	2013	-6.8%
DE	81.3	81.3	2013	0.0%	70.8	2060	-12.9%	49.7	49.7	2013	0.0%	35.4	2060	-28.8%
EE	1.3	1.3	2013	0.0%	1.1	2060	-17.2%	0.8	0.8	2013	0.0%	0.5	2058	-33.6%
IE	4.6	5.3	2060	14.3%	4.6	2029	-13.2%	2.7	2.8	2060	2.6%	2.5	2047	-12.1%
EL	11.0	11.0	2013	0.0%	8.6	2060	-22.5%	6.6	6.6	2013	0.0%	4.2	2060	-36.4%
ES	46.6	46.6	2013	0.0%	44.4	2034	-4.7%	29.0	29.0	2013	0.0%	22.4	2049	-22.9%
FR	65.7	75.7	2060	15.1%	65.7	2013	-13.1%	37.9	39.4	2060	4.2%	37.4	2038	-5.2%
HR	4.3	4.3	2013	0.0%	3.7	2060	-13.1%	2.6	2.6	2013	0.0%	1.9	2060	-26.6%
IT	60.2	67.1	2049	11.4%	60.2	2013	-10.2%	36.1	36.7	2024	1.5%	34.3	2060	-6.5%
CY	0.9	1.1	2060	29.5%	0.9	2013	-22.8%	0.6	0.6	2060	6.9%	0.5	2029	-8.7%
LV	2.0	2.0	2013	0.0%	1.4	2060	-30.7%	1.2	1.2	2013	0.0%	0.7	2058	-44.5%
LT	3.0	3.0	2013	0.0%	1.8	2060	-38.1%	1.8	1.8	2013	0.0%	0.9	2058	-49.0%
LU	0.5	1.1	2060	110.5%	0.5	2013	-52.5%	0.3	0.6	2060	85.8%	0.3	2013	-46.2%
HU	9.9	9.9	2013	0.0%	9.2	2060	-7.5%	6.2	6.2	2013	0.0%	4.7	2060	-24.5%
MT	0.4	0.5	2060	12.7%	0.4	2013	-11.3%	0.3	0.3	2013	0.0%	0.2	2060	-7.5%
NL	16.8	17.7	2037	5.2%	16.8	2013	-4.9%	10.1	10.1	2013	0.0%	8.9	2060	-11.7%
AT	8.5	9.7	2050	15.0%	8.5	2013	-13.0%	5.2	5.4	2021	2.9%	5.1	2060	-6.2%
PL	38.5	38.5	2013	0.0%	33.2	2060	-13.8%	25.0	25.0	2013	0.0%	16.4	2060	-34.5%
PT	10.5	10.5	2013	0.0%	8.2	2060	-21.6%	6.3	6.3	2013	0.0%	4.1	2060	-35.4%
RO	20.0	20.0	2013	0.0%	17.4	2060	-12.9%	12.5	12.5	2013	0.0%	8.8	2060	-29.6%
SI	2.1	2.1	2024	1.6%	2.0	2060	-2.5%	1.3	1.3	2013	0.0%	1.0	2056	-21.4%
SK	5.4	5.4	2017	0.1%	4.6	2060	-15.9%	3.6	3.6	2013	0.0%	2.2	2060	-37.2%
FI	5.4	6.2	2060	14.8%	5.4	2013	-12.9%	3.2	3.3	2047	3.3%	3.1	2023	-4.8%
SE	9.6	13.1	2060	36.3%	9.6	2013	-26.6%	5.6	6.9	2060	23.5%	5.6	2013	-19.0%
UK	64.1	80.1	2060	25.0%	64.1	2013	-20.0%	37.8	41.8	2060	10.7%	37.8	2013	-9.6%
NO	5.1	8.2	2060	60.5%	5.1	2013	-37.7%	3.0	4.4	2060	45.6%	3.0	2013	-31.3%
EU	507.2	525.6	2048	3.6%	507.2	2013	-3.5%	307.6	307.6	2013	0.0%	268.7	2060	-12.6%
EA	334.5	345.2	2045	3.2%	334.5	2013	-3.1%	201.7	201.7	2013	0.0%	175.5	2058	-13.0%

Source: Commission services, Eurostat, EUROPOP2013.

As a result of these different trends among age-groups, the demographic old-age dependency ratio (people aged 65 or above relative to those aged 15-64) is projected to increase from 27.8% to 50.1% in the EU as a whole over the projection period. This implies that the EU would move from having four working-age people for every person aged over 65 years to only two working-age persons. For the EU and the EA the working-age population is projected to shrink starting from the beginning of the projection period (2013) by around 13% during the projection period (see Table I.1.1).

The increase in the total age-dependency ratio (people aged below 20 and aged 65 and above over the population aged 20-64) is projected to be even larger, rising from 64.9% to 94.5%. ([19]) The

difference is noticeable among individual EU Member States. A relatively small increase in the total age-dependency ratio (less than 20 p.p.) is projected in Belgium, Denmark, Ireland, France, and Sweden, while in Bulgaria, Poland, Slovenia and Slovakia an increase of 40 percentage points or more is expected by 2060 (see Graph I.1.14).

([19]) The increase in the total age-dependency ratio defined as people aged 14 and below and people aged 65 and above over the population aged 15-64 is projected to rise from 51.4% to 76.6%.

Graph I.1.13:   **Projected change of main population groups (in % change over the period 2013-2060)**
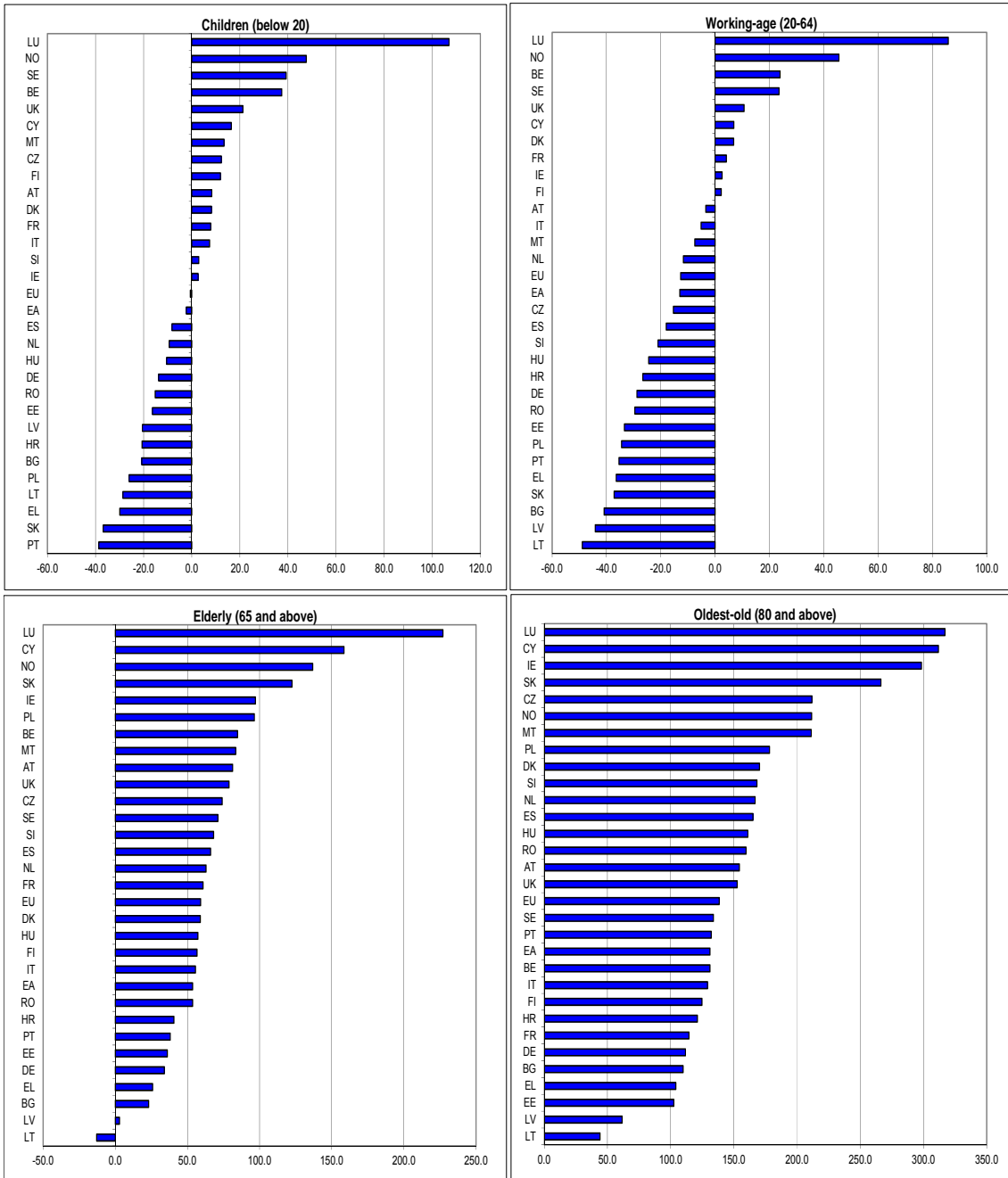
Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.14:   **Dependency ratios (in percentage)**

Old-age dependency ratio (ratio of people aged 65 or above relative to the working-age population)

Legend: ■ 2013 ■ 2013-2030 □ 2030-2060

Dependency ratio of the oldest-old (ratio of people aged 80 or above relative to the working-age population)

Legend: ■ 2013 ■ 2013-2030 □ 2030-2060

Total dependency ratio (ratio of dependent people, both young aged below 20 and elderly aged 65 or above, relative to the working-age population (20-64))

Legend: ■ 2013 ■ 2013-2030 □ 2030-2060

Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.15: **Projection of changes in the structure of the EU population by main age groups (in %)**
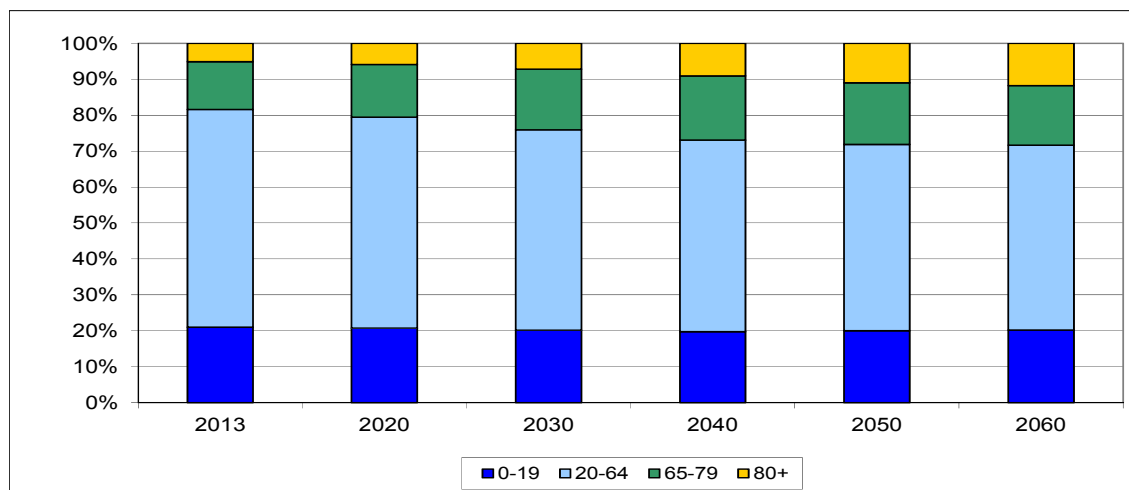
Source: Commission services, Eurostat, EUROPOP2013.

1.1.5. Comparison with the 2012 Ageing Report

Total fertility rates in the EU are marginally higher in the EUROPOP2013 projection compared with the EUROPOP2010 projection, particularly at the end of the projection period (up by 0.06 in 2060). This pattern is especially the case in CZ, DE, EE, LV, LT, LU, HU, MT, RO and SI (higher by about 0.1 or more in 2060). Conversely, the total fertility rate is projected to decline by 2060 compared with EUROPOP2010 in IE, EL, ES, NL and SK (Table I.1.2).

In the EU, life expectancy at birth is expected to be higher in EUROP2013 than in the previous projection, particularly for men and at the beginning of the projection period (2013). The largest increases in 2013 (of 0.5 years or more) for males occurred in DK, EE, IE, IT, LU, HU, MT, SI and FI. The increase in life expectancy at birth for men is expected to wind down at the end of the projection period, with rises of only 0.1 for men (and unchanged for women).

With the notable exception of Italy, net migration inflows into the EU as a whole, particularly in some MSs (DE and ES), are lower in the EUROPOP2013 projection compared with EUROP2010 in 2013 by about 1.1 million people. [20]

Based on the set of all demographic assumptions, in the EU the population in 2013 is estimated to be 3.2 million people smaller compared with the EUROP2010 projection. By 2030, the population is projected to be about 7.9 million people smaller and by 2060 about 2.6 million people larger (+0.5%). The higher population in 2060 mostly reflects positive developments in the working-age population.

The increase in the old-age dependency ratio (persons aged over 64 in relation to persons aged 15-64) is lower in the EUROP2013 projection compared with EUROPOP2010 (Table I.1.3). [21] The increase in the total dependency ratio (population under 15 and over 64 in relation to the population aged 15-64) is also lower in the current projection exercise compared with the previous one.

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[20] For DE the reduction in net migration in 2013 is of technical nature. It is caused by the negative impact of the most recent census on the 2013 population. This impact is attributed to net migration according to the Eurostat methodology (see Box I.1.1 above).

[21] The increase in the old age dependency ratio is projected to be higher in 4 countries (EL, PT, SK and UK). However, due to changes in the projected population structure over time, the average old age dependency ratio in 2013-2060 is projected to be higher in 12 countries (EE, IE, EL, ES, CY, LV, LT, NL, PT, SI, SK and UK).

Table I.1.2: **Comparison of EUROPOP2013 and EUROPOP2010 projections (fertility rate, life expectancy and net migration)**

Projection exercise 2015 (EUROPOP2013)

	Fertility rate			Life expectancy at birth Males			Life expectancy at birth Females			Net migration (1000's)		cumulated 2013-2060 as % of total pop. in 2013
	2013	2060	change	2013	2060	change	2013	2060	change	2013	2060	
BE	1.81	1.87	0.06	77.8	84.6	6.9	82.9	88.9	6.0	61	42	28.5%
BG	1.51	1.77	0.26	71.1	81.6	10.4	78.0	86.4	8.4	-3	1	-0.3%
CZ	1.52	1.80	0.28	75.1	83.3	8.2	81.2	87.9	6.7	-1	21	13.7%
DK	1.74	1.86	0.12	78.2	84.8	6.6	82.1	88.7	6.5	21	10	13.4%
DE	1.40	1.63	0.23	78.5	85.2	6.7	83.2	89.1	5.9	-1127	98	8.7%
EE	1.57	1.82	0.25	71.6	81.9	10.4	81.3	88.3	7.0	-3	0	-3.7%
IE	2.01	1.98	-0.03	78.7	85.2	6.4	83.0	89.2	6.2	-32	15	-4.5%
EL	1.34	1.58	0.24	78.0	84.9	6.9	83.3	89.0	5.7	-16	5	-2.3%
ES	1.32	1.55	0.23	79.5	85.5	6.0	85.2	90.0	4.8	-311	275	14.0%
FR	2.02	1.98	-0.04	78.6	85.2	6.6	85.0	90.0	5.1	53	67	6.0%
HR	1.53	1.67	0.14	74.0	82.7	8.7	80.7	87.6	6.9	2	5	4.5%
IT	1.43	1.61	0.18	79.8	85.5	5.7	84.7	89.7	5.1	1136	196	25.8%
CY	1.40	1.62	0.22	79.1	85.2	6.1	83.3	88.9	5.6	-1	8	24.6%
LV	1.50	1.78	0.28	69.1	80.9	11.8	78.9	87.0	8.2	-10	0	-11.7%
LT	1.61	1.79	0.18	68.7	80.9	12.2	79.6	87.4	7.8	-17	0	-20.5%
LU	1.59	1.78	0.19	79.1	85.4	6.3	83.5	89.5	6.0	11	5	78.9%
HU	1.38	1.74	0.36	71.9	82.0	10.1	78.8	87.0	8.2	8	14	9.5%
MT	1.44	1.78	0.34	78.7	85.1	6.4	82.8	89.1	6.3	2	1	16.3%
NL	1.72	1.80	0.08	79.3	85.2	6.0	82.9	88.9	6.0	22	9	4.8%
AT	1.45	1.62	0.17	78.4	84.9	6.5	83.5	89.1	5.6	56	25	23.5%
PL	1.32	1.62	0.30	72.8	82.6	9.7	80.9	88.1	7.1	-16	12	1.6%
PT	1.27	1.52	0.25	77.4	84.5	7.1	83.5	89.2	5.7	-40	8	2.1%
RO	1.65	1.83	0.18	71.2	81.8	10.6	78.2	86.7	8.5	-9	2	-0.2%
SI	1.59	1.75	0.16	77.2	84.3	7.1	83.1	88.9	5.9	1	4	10.9%
SK	1.28	1.53	0.25	72.7	82.3	9.7	79.9	87.4	7.5	2	2	3.0%
FI	1.80	1.86	0.06	77.7	84.6	6.9	83.5	89.2	5.6	17	9	14.9%
SE	1.93	1.92	-0.01	80.1	85.6	5.5	83.6	89.2	5.5	66	31	23.7%
UK	1.93	1.93	0.00	79.1	85.3	6.2	82.8	89.0	6.1	165	171	14.3%
NO	1.85	1.88	0.03	79.6	85.4	5.8	83.5	89.1	5.6	39	22	38.7%
EU	1.60	1.76	0.16	77.6	84.8	7.1	83.1	89.1	6.0	36	1037	10.9%
EA	1.56	1.72	0.16	78.7	85.2	6.5	84.0	89.5	5.5	-181	770	12.1%

Projection exercise 2015 - Projection exercise 2012

	Fertility rate			Life expectancy at birth Males			Life expectancy at birth Females			Net migration (1000's)		cumulated 2013-2060 as % of total pop. in 2013	
	2013	2060	change	2013	2060	change	2013	2060	change	2013	2060		
BE	-0.03	0.03	0.06	0.0	0.0	0.0	-0.1	-0.1	0.0	4	10	10.0%	BE
BG	-0.06	0.10	0.16	0.0	-0.1	-0.2	-0.1	-0.2	-0.1	7	0	1.3%	BG
CZ	0.02	0.18	0.16	0.2	0.1	-0.1	0.3	0.1	-0.2	-34	3	1.2%	CZ
DK	-0.10	0.02	0.12	0.7	0.4	-0.3	0.5	0.3	-0.2	9	1	4.2%	DK
DE	0.03	0.09	0.07	0.3	0.3	0.0	0.1	0.2	0.1	-1199	26	2.4%	DE
EE	-0.06	0.12	0.17	0.9	0.3	-0.6	0.6	0.3	-0.4	-2	0	-3.9%	EE
IE	-0.05	-0.01	0.04	1.2	0.6	-0.6	0.6	0.4	-0.2	-23	-1	-20.2%	IE
EL	-0.19	-0.06	0.13	-0.3	0.0	0.3	0.2	0.7	0.6	-45	-21	-16.8%	EL
ES	-0.09	-0.01	0.08	0.4	0.1	-0.3	0.2	0.1	-0.1	-444	90	-9.4%	ES
FR	0.02	0.03	0.01	0.2	0.1	-0.1	0.0	0.0	0.0	-31	4	0.1%	FR
HR	..	..	..	..	..	..	..	..	..	..	..	..	HR
IT	0.00	0.04	0.04	0.5	0.1	-0.4	0.1	0.0	-0.1	779	-48	0.5%	IT
CY	-0.11	0.00	0.10	0.3	0.1	-0.2	0.1	-0.1	-0.2	-4	4	-3.2%	CY
LV	0.17	0.27	0.10	-0.1	-0.2	-0.1	0.2	-0.1	-0.4	-8	-1	-12.9%	LV
LT	0.05	0.13	0.08	0.1	0.2	0.2	0.4	0.4	0.0	-6	-1	-17.8%	LT
LU	-0.01	0.10	0.10	0.8	0.5	-0.3	0.2	0.0	-0.1	5	2	47.6%	LU
HU	0.04	0.23	0.18	0.7	0.1	-0.6	-0.3	-0.4	-0.1	-18	-5	-2.5%	HU
MT	-0.01	0.19	0.20	0.5	0.2	-0.3	0.1	0.2	0.1	2	1	12.8%	MT
NL	-0.07	-0.01	0.06	0.2	0.1	-0.1	-0.3	-0.2	0.1	-6	3	1.5%	NL
AT	0.05	0.06	0.02	0.3	0.1	-0.2	0.1	0.0	-0.1	31	-1	5.6%	AT
PL	-0.09	0.06	0.15	0.4	0.2	-0.2	0.3	0.2	-0.1	-37	-3	-0.9%	PL
PT	-0.06	0.01	0.07	0.3	0.2	-0.1	0.6	0.6	0.0	-65	-20	-13.5%	PT
RO	0.26	0.28	0.02	0.3	0.0	-0.3	0.1	0.0	-0.1	-13	-5	-2.9%	RO
SI	0.05	0.10	0.05	0.8	0.3	-0.4	0.4	0.2	-0.2	-9	1	-3.3%	SI
SK	-0.14	-0.04	0.10	0.4	0.2	-0.2	0.2	0.0	-0.2	-9	-4	-5.6%	SK
FI	-0.06	0.00	0.06	0.6	0.2	-0.3	-0.1	-0.1	0.0	2	2	5.9%	FI
SE	0.00	0.02	0.02	0.2	0.1	-0.1	-0.2	-0.2	0.1	15	12	9.4%	SE
UK	-0.01	0.02	0.03	0.4	0.1	-0.3	-0.1	-0.1	-0.1	-31	38	1.3%	UK
NO	-0.05	0.00	0.05	0.4	0.2	-0.3	0.0	0.0	0.0	8	10	22.4%	NO
EU	0.00	0.05	0.06	0.4	0.1	-0.2	0.1	0.0	-0.1	-1125	92	-0.9%	EU
EA	-0.02	0.04	0.05	0.3	0.1	-0.1	0.1	0.1	0.0	-1022	47	-1.4%	EA

Source: Commission services, Eurostat, EUROPOP2013.

Table I.1.3: **Comparison of EUROPOP2013 and EUROPOP2010 projections (total population, demographic dependency ratio and total dependency ratio)**

	Projection exercise 2015 (EUROPOP2013)									Projection exercise 2015 - Projection exercise 2012								
	Total population (millions)			Demographic dependency ratio (65+/(15-64))			Total dependency ratio			Total population (millions)			Demographic dependency ratio (65+/(15-64))			Total dependency ratio		
	2013	2060	% change	2013	2060	p.p change	2013	2060	p.p change	2013	2060	% change	2013	2060	p.p change	2013	2060	p.p change
BE	11.2	15.4	37.7	27.1	39.9	12.9	53.1	68.4	15.2	0.1	2.0	17.0	-0.3	-3.9	-3.6	-0.3	-3.5	-3.2
BG	7.3	5.5	-24.8	28.9	58.4	29.6	49.3	84.4	35.1	-0.2	-0.1	1.5	1.2	-1.5	-2.8	0.3	0.3	0.0
CZ	10.5	11.1	5.4	25.1	50.1	24.9	47.1	77.3	30.3	-0.1	0.6	7.1	0.5	-4.8	-5.3	0.5	-1.8	-2.4
DK	5.6	6.5	16.5	27.9	41.8	13.9	54.7	69.8	15.0	0.0	0.5	8.0	0.0	-1.9	-2.0	-0.4	-1.5	-1.1
DE	81.3	70.8	-12.9	31.8	59.2	27.4	51.4	83.2	31.8	0.2	4.7	5.6	0.0	-0.7	-0.7	-0.1	0.6	0.7
EE	1.3	1.1	-17.2	27.5	54.5	26.9	51.4	82.2	30.8	0.0	-0.1	-4.5	1.3	-0.8	-2.1	1.1	0.7	-0.5
IE	4.6	5.3	14.3	18.9	35.6	16.7	52.2	66.4	14.2	0.0	-1.3	-29.5	-0.2	-0.9	-0.8	-1.1	-0.1	1.0
EL	11.0	8.6	-22.5	31.2	60.8	29.7	53.6	84.5	30.9	-0.4	-2.7	-20.6	0.9	4.3	3.4	1.1	3.5	2.5
ES	46.6	46.1	-1.0	26.8	53.2	26.4	49.5	77.0	27.4	0.0	-6.1	-13.0	0.4	-3.1	-3.5	0.2	-2.1	-2.3
FR	65.7	75.7	15.1	27.9	42.9	14.9	57.1	72.6	15.6	-0.2	1.9	3.2	0.2	-3.7	-3.7	0.2	-2.7	-2.8
HR	4.3	3.7	-13.1	27.3	52.3	25.0	49.5	77.0	27.4	:	:	:	:	:	:	:	:	:
IT	60.2	66.3	10.1	32.8	53.0	20.3	54.4	76.9	22.5	-1.2	1.4	4.2	0.4	-3.6	-4.0	0.5	-2.1	-2.5
CY	0.9	1.1	29.5	19.1	46.5	27.4	42.4	73.3	30.9	0.0	0.0	-6.4	-1.4	-1.3	0.1	-2.2	-0.3	1.9
LV	2.0	1.4	-30.7	28.3	50.3	22.0	50.2	79.5	29.3	-0.2	-0.3	-3.3	2.5	-17.6	-20.0	3.4	-11.0	-14.3
LT	3.0	1.8	-38.1	27.4	45.7	18.3	49.3	77.1	27.8	-0.3	-0.8	-16.1	3.5	-11.0	-14.5	3.4	-4.6	-8.0
LU	0.5	1.1	110.5	20.3	35.6	15.2	44.9	63.1	18.1	0.0	0.4	75.7	-0.6	-9.6	-9.0	-1.1	-8.0	-6.9
HU	9.9	9.2	-7.5	25.4	52.6	27.1	46.6	78.3	31.7	-0.1	0.3	3.9	0.1	-5.5	-5.6	-0.1	-2.1	-1.9
MT	0.4	0.5	12.7	25.8	50.9	25.1	47.1	78.4	31.3	0.0	0.1	19.3	0.5	-5.0	-5.5	-0.4	-0.9	-0.5
NL	16.8	17.1	1.6	25.9	47.8	21.9	51.8	74.4	22.6	0.0	0.0	0.4	0.1	0.3	0.2	-0.1	-0.2	-0.1
AT	8.5	9.7	14.3	27.0	50.5	23.5	48.3	75.1	26.8	0.0	0.8	9.4	-0.1	-0.3	-0.2	0.0	0.7	0.7
PL	38.5	33.2	-13.8	20.5	61.0	40.5	41.9	85.0	43.1	0.2	0.6	1.0	0.0	-3.8	-3.8	0.0	-2.3	-2.3
PT	10.5	8.2	-21.6	29.8	63.9	34.0	52.1	84.8	32.7	-0.2	-2.1	-17.1	1.6	6.6	5.0	1.6	6.1	4.5
RO	20.0	17.4	-12.9	24.1	51.8	27.7	47.1	79.1	32.0	-1.3	0.2	7.0	2.3	-13.0	-15.3	3.6	-7.2	-10.9
SI	2.1	2.0	-1.0	25.4	52.5	27.2	46.7	78.8	32.1	0.0	0.0	0.8	0.5	-4.9	-5.5	0.7	-3.6	-4.3
SK	5.4	4.6	-15.8	18.7	66.1	47.4	40.1	87.6	47.5	-0.1	-0.5	-8.6	0.4	4.1	3.7	0.6	2.9	2.3
FI	5.4	6.2	14.8	29.6	45.1	15.5	55.0	73.1	18.0	0.0	0.5	9.2	0.0	-2.5	-2.4	-0.2	-2.6	-2.4
SE	9.6	13.1	36.3	30.2	41.5	11.2	56.8	71.3	14.5	0.0	1.5	16.3	-0.1	-4.8	-4.7	-0.1	-4.4	-4.3
UK	64.1	80.1	25.0	26.6	42.8	16.1	53.7	72.4	18.6	0.6	1.0	0.7	-0.3	0.6	0.9	-0.2	0.9	1.0
NO	5.1	8.2	60.5	23.9	39.0	15.1	51.7	67.6	15.9	0.0	1.6	30.3	-0.3	-4.1	-3.7	-0.9	-5.0	-4.1
EU	507.2	522.8	3.1	27.8	50.1	22.3	51.4	76.6	25.2	-3.2	2.6	1.1	0.3	-2.4	-2.7	0.3	-1.3	-1.6
EA	337.5	343.0	1.6	29.3	51.1	21.8	52.6	76.9	24.2	-2.3	-2.1	0.0	0.2	-2.2	-2.4	0.2	-1.2	-1.4

Source: Commission services, Eurostat, EUROPOP2013.

Graph I.1.16:   **Population of main geographic areas and selected countries as percentage of the world population, 1950, 2010, 2060, 2100**
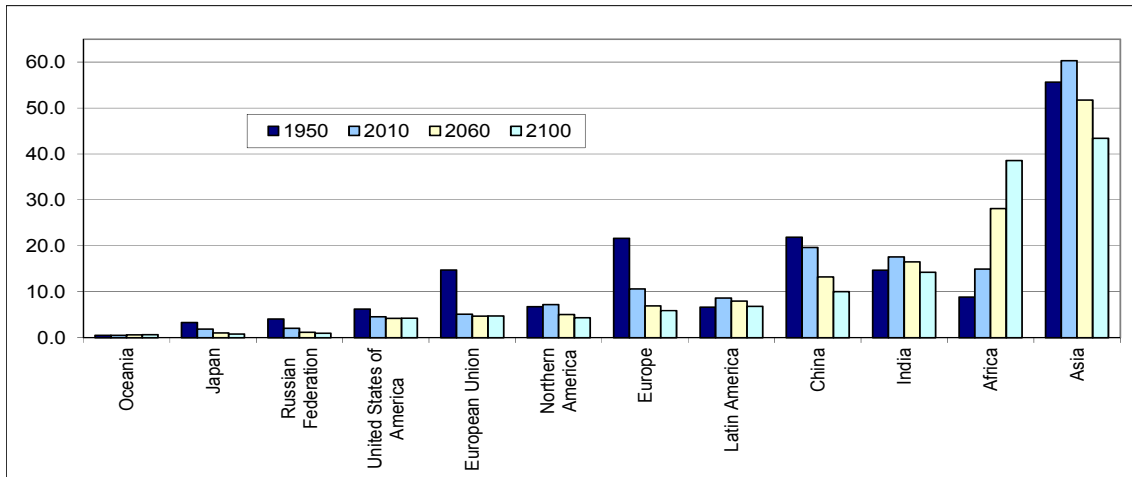
Source: UN World Population Prospects: The 2012 Revision.

1.1.1. Population ageing is a global phenomenon

Population ageing is a well-known phenomenon and challenge not only in the EU. Similar trends are present also in other parts of the world, but to varying degrees (see Graph I.1.16). The UN population statistics and projections provide a source for demographic trends in a global perspective. ([22]) The world population share of the current EU Member States declined from 14.7% in 1950 to 5.1% in 2010, and it is expected to drop to 4.7% in 2060, despite the projected net migration flows. The world population shares of Japan, China and the US were also declining over the last six decades. These declining trends over the period 1950 to 2000 are in contrast with increasing world population shares in Africa, Asia and Latin America. Going to 2100, continuous declines are projected for the EU, Japan and China, while the US population share is expected to stabilise.

Africa's world population share is projected to increase at the fastest rate of all continents to over 28% in 2060. In Asia, a slight decline is expected though it is projected to still account to well over 50% of the world population in 2050. The decline is particularly evident for China, where the world population share is projected to fall from 19.6% to 13.2% between 2010 and 2060. The population of

the European continent will become relatively smaller by 2060 with its share shrinking by 3.7 p.p. (from 10.6% to 6.9%). The world population shares of Northern America and the US (5.1% and 4.6%, respectively in 2010) will decline only marginally. The other regions of the world will roughly keep their share in the sharply growing world population (an increase of over 3 billion persons or 44%, from 6.9 billion in 2010 to 10.0 billion in 2060). Going to 2100, another 0.9 billion persons would be added to the world population.

Looking at the age structure in the UN projections, it can be seen that Europe is currently the oldest continent with the highest old age dependency ratio, and will remain so until 2060 (see Graph I.1.17). By 2100, Latin America is projected to overtake Europe. Other parts of the world are however also experiencing a dramatic ageing of their populations, with old-age dependency ratios climbing to levels clearly above the ones now in Europe on all continents except Africa. The demographic change is pronounced in particular in China, where the old age dependency ratio is projected to be at similar levels to the European one at around 50% in 2100. While the old-age dependency ratios are projected to reach 35% to 50% for Asia as a whole as well as Oceania, Northern America and Latin America, Africa remains the only continent with a relatively low old-age dependency ratio at the end of the projection period (at 11% in 2060 and 22% in 2100).

([22]) The United Nations Population Division produces global population projections revised every two years. The latest projections are the 2012 Revision.

Graph I.1.17:   **Old age dependency ratio (people aged 65 or above relative to the working-age population) by main geographic areas and selected countries (in percentage), 1950, 2010, 2060, 2100**
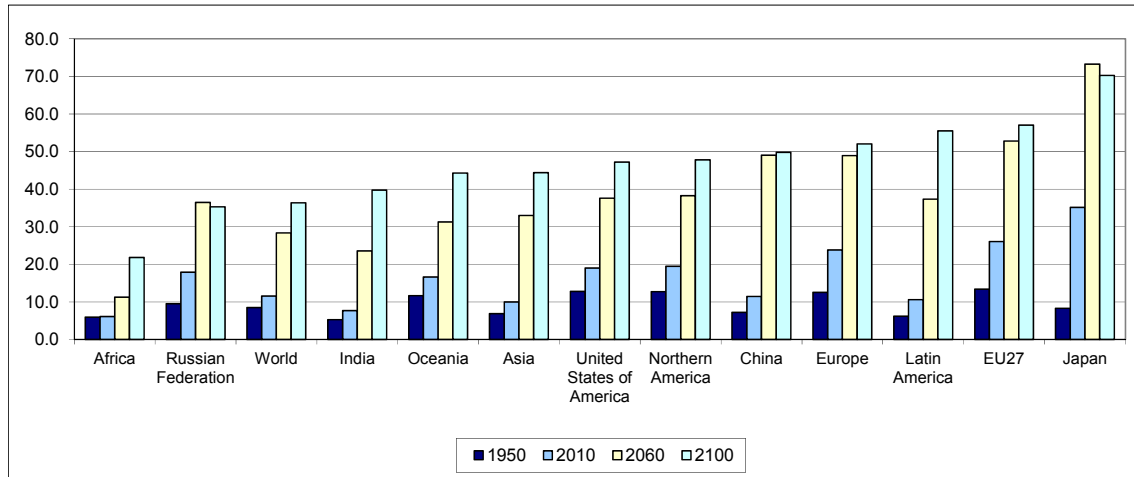
Source: UN World Population Prospects: The 2012 Revision.

2. MACROECONOMIC ASSUMPTIONS

2.1. LABOUR FORCE PROJECTIONS

2.1.1. Introduction

Despite large cross-country labour force variability in the EU, some stylised facts need to be taken into account in any projection exercise. They can be summarised as follows:

- participation rates of prime-age male workers (aged 25 to 54), at around 90%, remain the highest of all groups, although showing signs of marginal decline. The participation rates of men aged 55 to 64 years, which had recorded a steady decline in the past twenty five years, are showing clear signs of a reversal in most countries since the turn of the century, mostly due to pension reforms, raising the statutory retirement age or the state pension age;

- women participation rates have steadily increased over the past twenty five years, largely reflecting societal trends and pension reforms;

- participation rates of young people (aged 15 to 24 years) have declined, mostly due to a longer stay in education, but also to unfavourable cyclical developments.

Given these trends, the main drivers of the projected change in the total participation rate will be changes in the labour force attachment of prime age women, older workers (especially women) and, to a lesser extent, young people.

2.1.2. The impact of legislated pension reforms

The cohort simulation model (CSM) is used to project participation rates. A strong point of the CSM is its ability to take into account the expected effects on the participation rate of older workers of legislated pension reforms, [23] including measures to be phased in gradually. A description of past legislated pension reforms that have an impact on future participation rates, covering a total of 27 EU Member States, is provided in Box I.2.1 of "The 2015 Ageing Report, Underlying Assumptions and

Projection Methodologies", European Economy No 8/2014.

Estimation of the effects of pension reforms highlights the following stylised fact. Although the age profiles of the probability of retirement vary across countries, reflecting the heterogeneity of pension systems, a common feature is that the distribution of retirement decisions is markedly skewed towards the earliest possible retirement age. In fact, a typical distribution of the retirement age tends to have spikes/modes at both the minimum age for early retirement and the normal (statutory) retirement ages (or the state pension age). [24]

A comprehensive assessment of how to shift the distribution of retirement ages ultimately depends on the considered judgement of all the relevant factors underlying retirement decisions. This assessment is carried out by Commission Services (DG ECFIN) in close cooperation with EPC-AWG delegates.

The average exit ages for 2060 presented in Graph I.2.1 are calculations based on participation rates before and after the impact of pension reforms. It gives us a summary measure of the long term impact of enacted pension reforms in 27 Member States. [25]

Projections show an average increase of approximately 2½ years in the effective retirement age for men. [26] In Greece, Italy, Slovakia, Hungary, Spain, Denmark, Cyprus, the Netherlands, and the Czech Republic the expected increase exceeds 3 years. The expected increase in the retirement age of women is slightly higher (about 3 years on average), reflecting in a number of countries the progressive convergence of retirement ages across genders.

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[23] Enacted until 1 April 2015 (see footnote 3).

[24] For example, let us assume that in a given country the (historical) retirement probability is concentrated at age 58, while a reform ends with early retirement schemes or increases the minimum years of contribution. In order to calculate the impact of this reform, the peak of the retirement probability distribution is shifted away from the historical peak of 58 years and moved closer to the statutory retirement age.

[25] All EU Member States except Luxembourg and Sweden, and Norway.

[26] Non-weighted average of the 26 Member States considered.

Graph I.2.1:   **Impact of pension reforms (1) on the average effective retirement age from the labour force (2)**

Average exit age from the labour force in 2060, men

Average exit age from the labour force in 2060, women
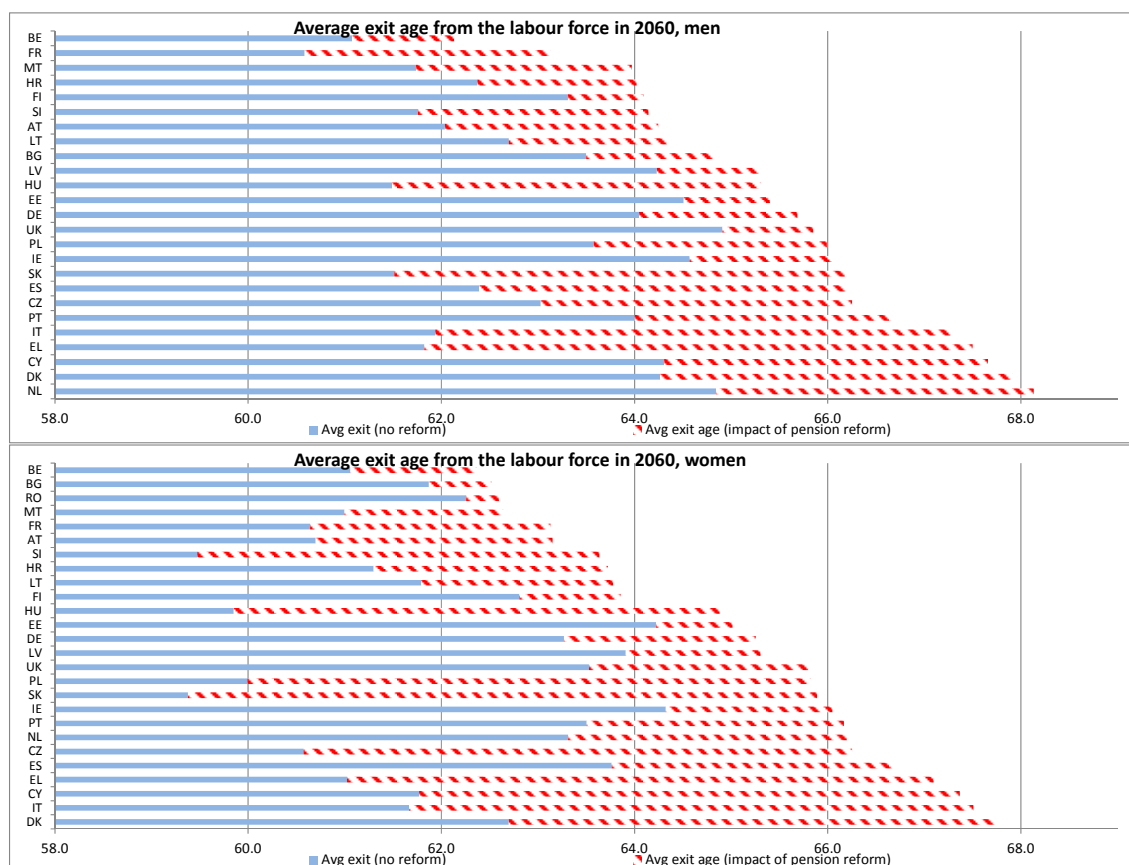
(1) Enacted until January 2015 at the latest (see footnote 1 page 1)
(2) Based on the age group 50-70
Source: Commission services, EPC

Graph I.2.2 shows the estimated impact of pension reforms on participation rates. In most of the 26 EU Member States that have recently legislated pension reforms, they are projected to have a sizeable impact on the labour market participation of older workers (aged 55 to 74), which depends on their magnitude and phasing in.

Overall in the EU, the participation rate of older people (55-74) is estimated to increase by about 4 pp in 2020, 10 pp in 2040, and 11 pp in 2060 due to the projected impact of pension reforms. In the euro area, the impact is estimated to be even larger about: 5 pp, 11½ pp, and 12½ pp, respectively, in 2020, 2040, and 2060. In Denmark, Greece, Italy, Cyprus, Hungary, and Slovenia the impact is estimated to be close or above 7 pp already by 2020, but in a large number of countries it is projected to be more than about 9 pp by 2040.

It should be recalled that total participation rates are mainly driven by changes in the participation rate of prime-age workers (25-54), as this group accounts for about 60% (50%) of the total population, for the age groups 15-64 and 15-74, respectively. Therefore, even these significant projected rises in participation rates for older workers will only have a rather limited impact on the total participation rate. For example, the 11 pp increase in the participation rate of workers aged 55 to 74 years in the EU will lead to an increase in the total participation rate (15-74) of only about 3½ pp by 2060.

Graph I.2.2:   **Projected impact of pension reforms on participation rates (2020, 2040, 2060) in percentage points - comparison of projections with and without pension reforms**
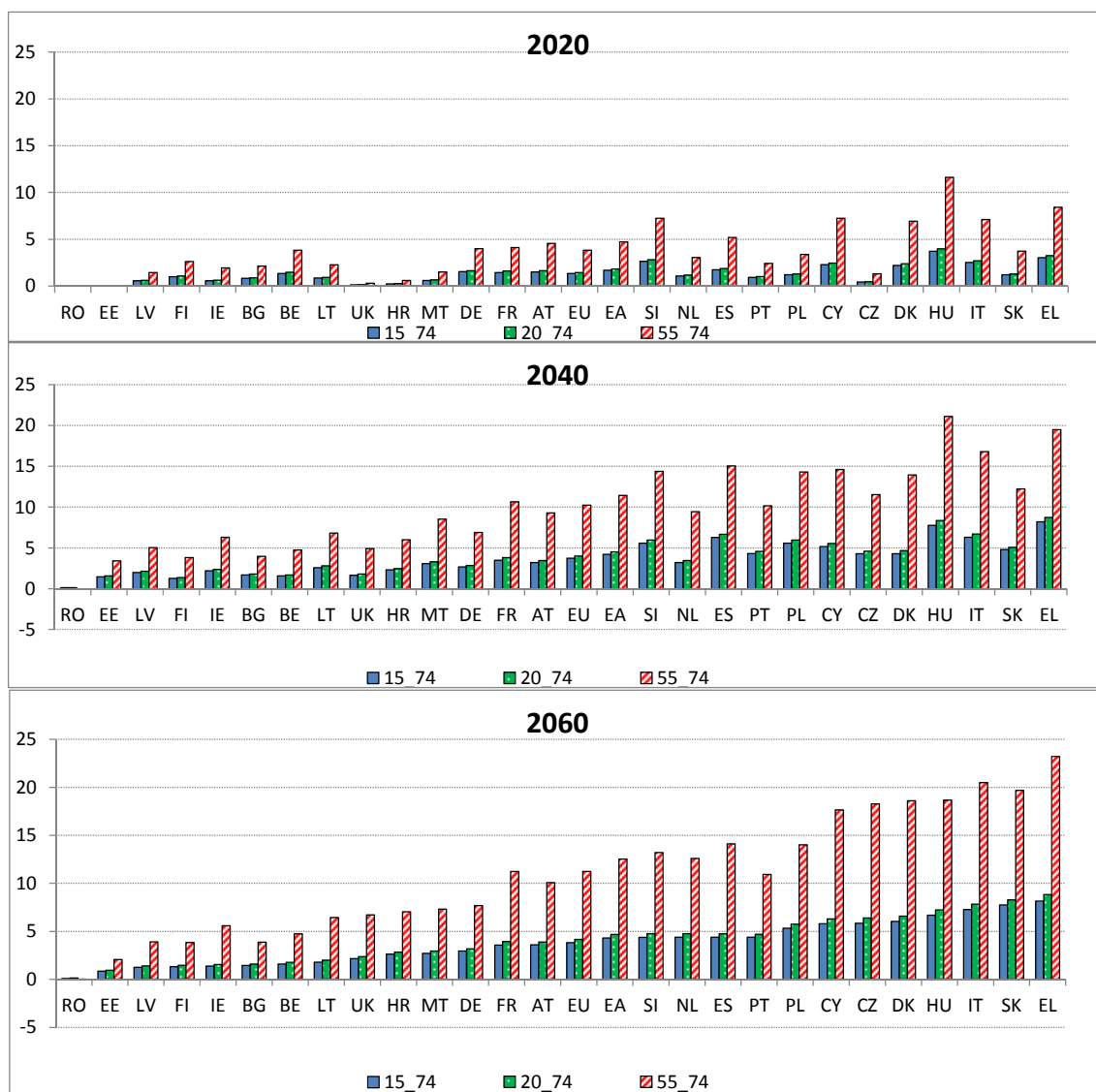
Note: Ranked by increasing order of differences in 2060 for the age group 15 to 74.
Source: Commission services, EPC

1.1.2. Projection of participation rates

The outcome of the CSM yields a rightward shift in the age profiles of participation rates, particularly visible for ages 50+, reflecting the combined effect of the rising attachment of younger generations of women to the labour market, together with the expected impact of pension reforms.

Graph I.2.3 presents an overview of participation rate projections between 2013 and 2060 broken down by age groups and gender. By large, the biggest increases in participation rates are projected for older workers (around 21 pp for women and 10 pp for men) in the EU for the age group 55-64, ([27]) influenced by pension reforms and societal trends affecting women participation rates. Consequently, the gender gap is projected to narrow substantially in the period up to 2060.

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([27]) Comparing with more 13 pp and 6 pp, respectively, for the age group 55-74.

Graph I.2.3:   **Participation rates**

Total, ages 20-64

■ 2013 ▫ 2060

Projected changes by gender over 2013-2060, ages 20-64

■ Males ▫ Women

Projected changes by age group over 2013-2060

■ 20_24 ▫ 25_54 ▨ 55_64

Projected changes by gender over 2013-2060, ages 55-64

■ Males ▫ Women

Projected changes by gender over 2013-2060, ages 55-74

■ Males ▫ Women
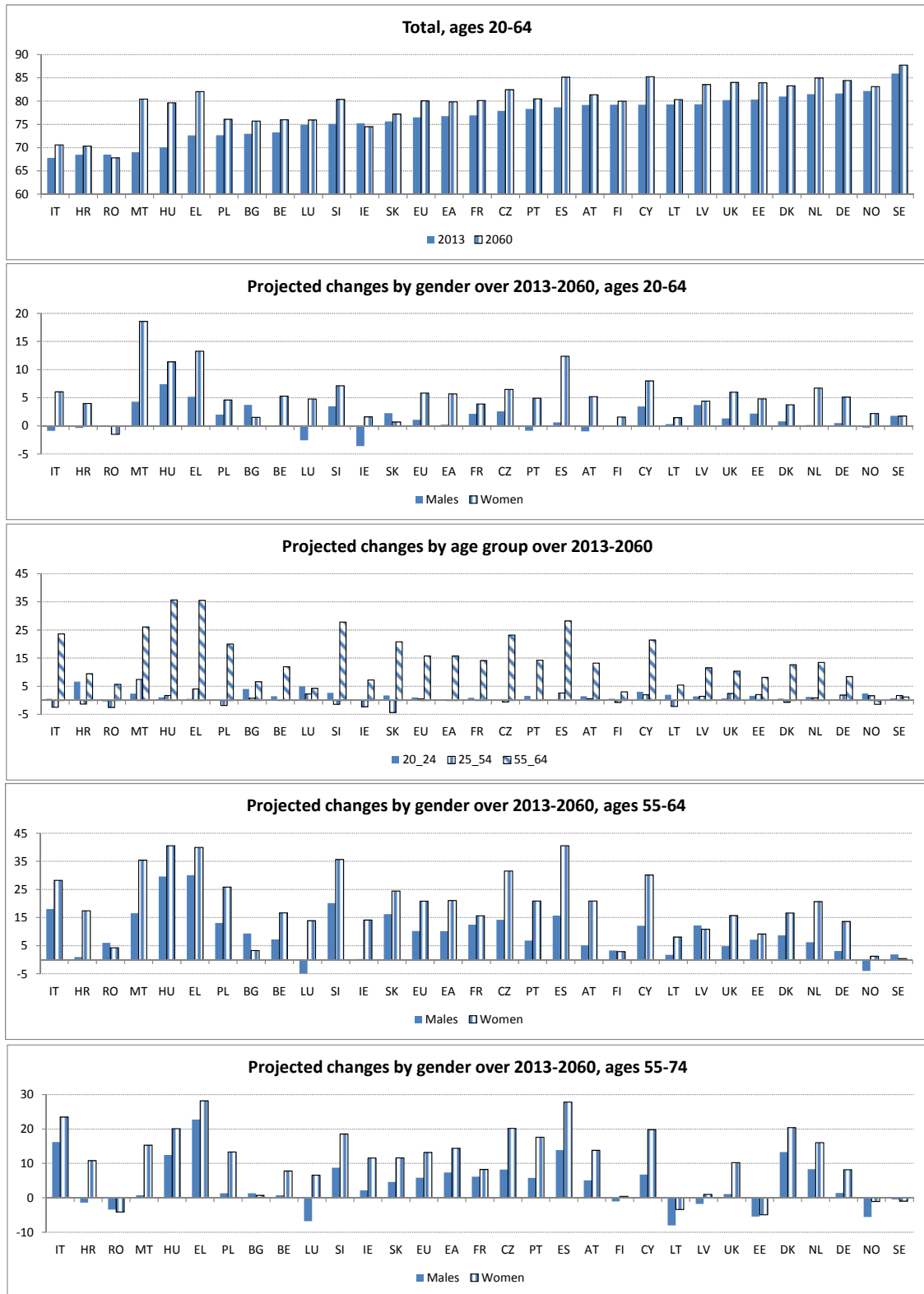
Source: Commission services, EPC.

Graph I.2.4:   **Percentage changes in total labour supply of the population aged 20 to 64 (2013-2023, 2023-2060) (1)**
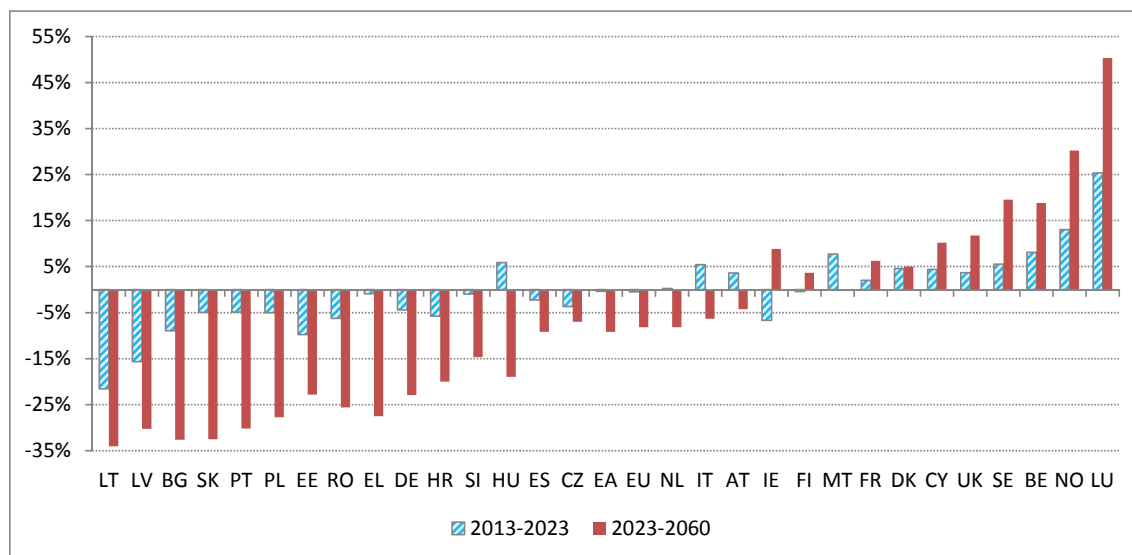
(1) Countries ranked in ascending order of total changes over the period 2013-2060.
Source: Commission services

The total participation rate (for the age group 20-64) in the EU is projected to increase by 3.5 pp (from 76.5% in 2013 to 80.1% in 2060). In the same period, women's participation rate is projected to increase by about 6 pp compared with 1 pp for men.

Although the participation rate of total prime age workers (25-54) in the EU is projected to remain almost unchanged between 2013 and 2060, at about 85½%, this is the outcome of opposite trends by gender. In fact, women's participation rate is projected to rise by about 2 pp, reaching 81.3% in 2060, while men's participation rate is projected to decline by about 1 pp, attaining 90.3% in 2060.

1.1.3. Projection of labour supply

Labour supply projections are calculated by single age and gender (by multiplying participation rates by population values). Total labour supply in the EU (and in the euro area) is projected to nearly stabilise between 2013 and 2023 (age group 20-64), while it is projected to decline by 8.2% between 2023 and 2060, representing roughly minus 19 million people. In the euro area, the projected fall in labour supply between 2023 and 2060 is 9.2%, equivalent to about 14 million people.

Graph I.2.4 highlights the wide diversity across Member States of labour supply projections, ranging from an increase of 50.3% in Luxembourg to a decrease of 34.0% in Lithuania (2023-2060). The initial largely neutral trend across most countries in the first ten years of the projections (2013-2023) is projected to deteriorate after 2023, when a large majority of countries are expected to record a decline (20 EU Member States in total).

In the eight largest (in terms of labour force) EU Member States, representing about ¾ of the total EU labour force in 2013, their prospective evolution in the period 2013-2060 is strikingly dissimilar (see Table I.2.1), reflecting differences in demographic prospects. Expected differences in the annual growth rate of total labour force are very significant, because they are "compounded" over a long period. DE, PL and RO are projected to register average annual declines of between ½ and ¾ of a pp, ES and NL are expected to register a decline of about ¼ pp, which are equivalent to the EU average. Conversely, the UK, FR (and IT) are expected to register expansions (stabilisation) in the total labour force.

Graph I.2.5:   **Unemployment rate assumptions (age 15-64, in percentage) (1)**
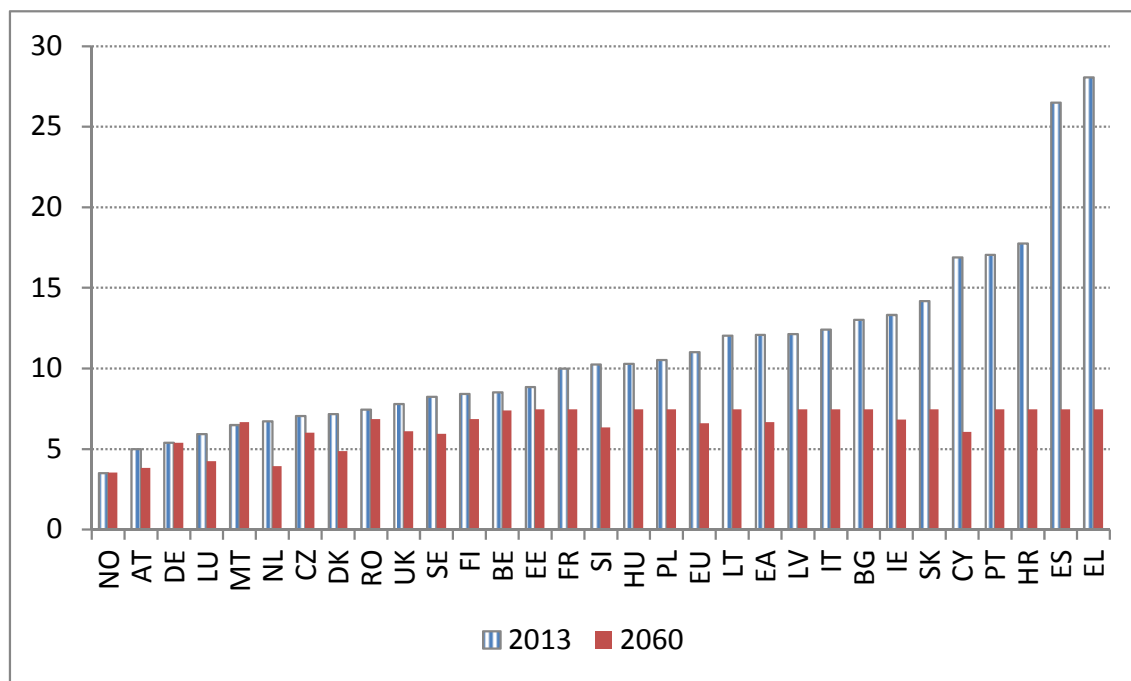
(1) Countries ranked in ascending order of the unemployment rate in 2013
Source: Commission services, EPC

Table I.2.1:   **Labour supply projections in the "largest" eight EU Member States (1)**

	Total LF (20-64) (thousands persons)		Avg. annual growth rate of the LF	Impact on potential output growth (1)
	2013	2060	2060-2013	
DE	40594	29910	-0.6%	-0.3%
ES	22825	20261	-0.3%	0.0%
FR	29137	31592	0.2%	0.2%
IT	24493	24189	0.0%	0.1%
NL	8210	7559	-0.2%	0.0%
PL	18149	12456	-0.8%	-0.4%
RO	8560	5970	-0.8%	-0.4%
UK	30317	35132	0.3%	0.3%
EA	154853	140147	-0.2%	0.0%
EU	235358	215135	-0.2%	0.0%

(1) Impact of LF growth differentials relative to the EU average
Source: Commission services, EPC

Overall, the projected negative labour force growth in the EU is mainly due to negative demographic developments, given that participation rates over the period – especially for older workers and women - are projected to continue to increase.

2.1.5. Assumptions on structural unemployment

As a general rule, actual unemployment rates are assumed to converge to NAWRU rates by 2018, corresponding to the closure of the output gap. On their turn, NAWRU rates are assumed to gradually ([28]) converge to the minimum of country specific *Anchors* ([29]) or the weighted median of national *Anchors*, whichever is the lowest. Furthermore, for those countries where current NAWRU anchors exceed unemployment rates for 2060, as projected in the 2012 Ageing Report, only half of that increase is retained. ([30])

([28]) The gradual convergence is assumed to be completed by 2040.
([29]) Under the guidance of the EPC-OGWG and with the twin objectives of improving the medium term framework for fiscal surveillance up to T+10 (currently 2023), and correcting for the counter cyclicality of the NAWRU, DG ECFIN carried out some econometric work leading to the estimation of *Anchor* values for the NAWRU.
([30]) For the methodology see: "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies", European Economy, No. 8/2014, European Commission.

Graph I.2.6:   **Employment rates for the age group 20 to 64 (in percentage) (1)**
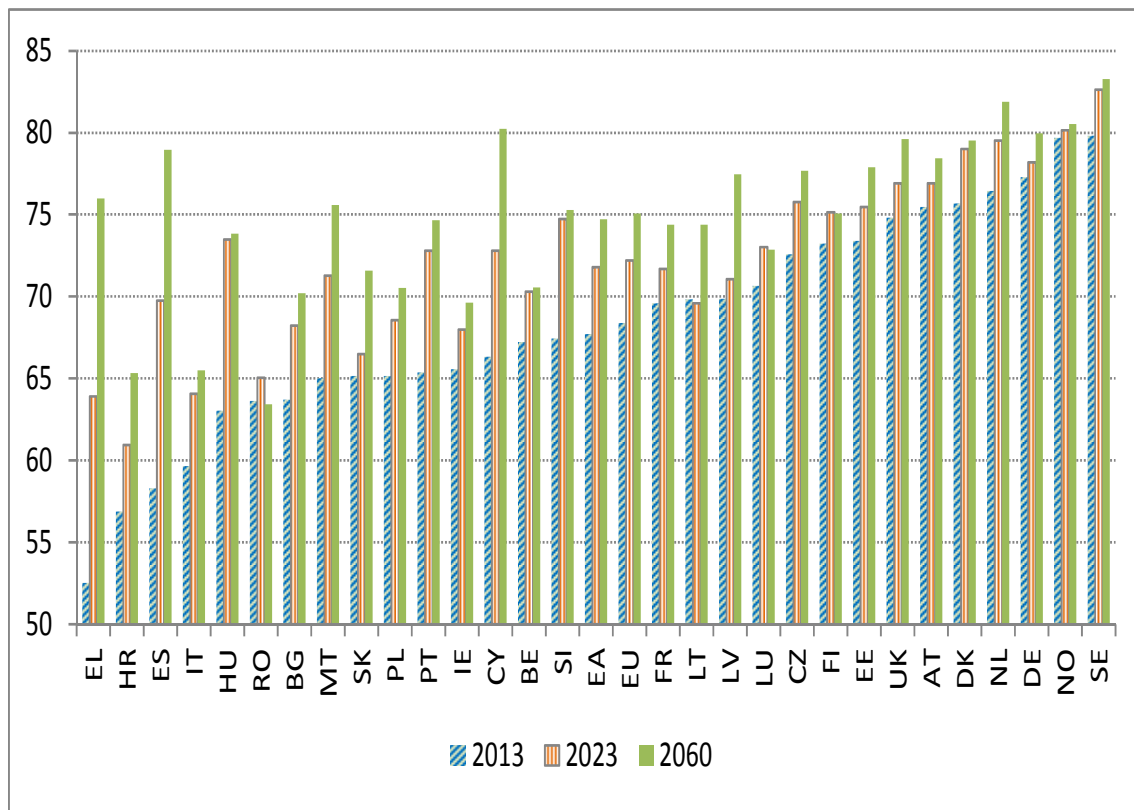
(1) Countries ranked in ascending order of the employment rate in 2013
Source: Commission services, EPC

Graph I.2.5 presents the unemployment rate assumptions. In the EU, the unemployment rate is assumed to decline from 11.0% in 2013 to 6.6% in 2060. In the euro area, the unemployment rate is expected to fall from 12.1% in 2013 to 6.7% in 2060.

2.1.6. Employment projections

The total employment rate (for persons aged 20 to 64) in the EU is projected to increase from 68.4% in 2013 to 72.2% in 2023 and 75.1% in 2060. In the euro area, a similar development is expected, with the employment rate attaining 74.7% in 2060 (Graph I.2.6).

The number of persons employed (using the LFS definition) is projected to record an annual growth rate of only 0.2% over the period 2013 to 2023 (a deceleration from 0.4% over the period 2003 2013), which is expected to revert to -0.2% over the period 2023 to 2060 (Graph I.2.7). The

outcome of these opposite trends is a cumulated overall decline of about 8.7 million workers over the entire 2013-2060 period in the EU. The negative prospects for population developments, including the rapid ageing of the population, will only be partly offset by the increase in (female and older workers) participation rates and migration inflows, leading to an overall reduction in employment levels after the middle of the next decade.

Mainly as a result of the ageing process, the age structure of employment is projected to undergo a number of significant changes. The share of older workers (aged 55 to 64) in total employment (aged 20 to 64) is projected to rise by around one third, rising from 15.4% in 2013 to 19.5% in 2060 in the EU (Graph I.2.8). In the euro area, it is projected to rise by slightly more, reaching about 20% in 2060. The projected increase is about 50% or more in Greece, Spain, Slovakia, Italy, Portugal, Hungary and Slovenia.

Graph I.2.7: **Employment growth rates for the age group 20 to 64 (average annual values) (1)**
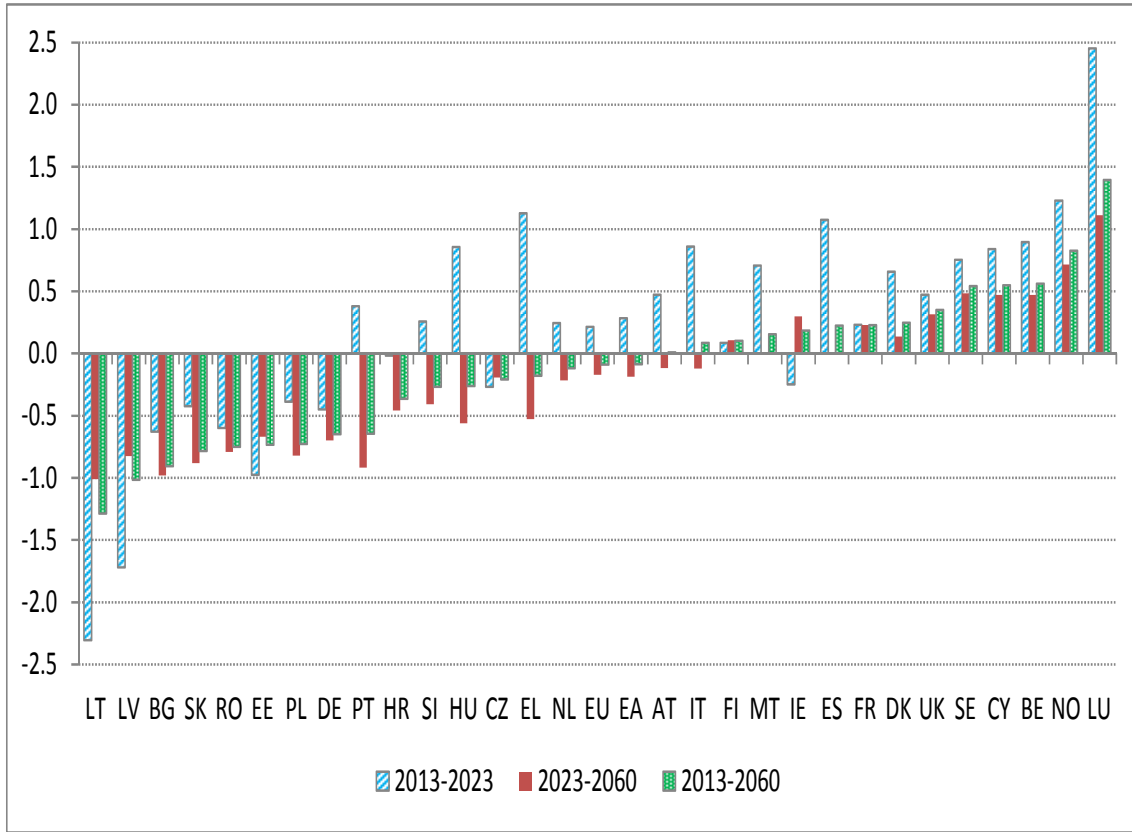
(1) Countries ranked in ascending order of average employment growth rates in the 2013-2060 period
Source: Commission services, EPC

Graph I.2.8:   **Employment projections, breakdown by age groups**

EU - 2013

15.4%   7.0%

77.7%

- Young (20_24)
- Prime age (25_54)
- Older (55_64)

EU - 2060

19.5%   7.5%

73.0%

- Young (20_24)
- Prime age (25_54)
- Older (55_64)

EA - 2013

15.4%   6.5%

78.0%

- Young (20_24)
- Prime age (25_54)
- Older (55_64)

EA - 2060

20.2%   7.3%

72.6%

- Young (20_24)
- Prime age (25_54)
- Older (55_64)
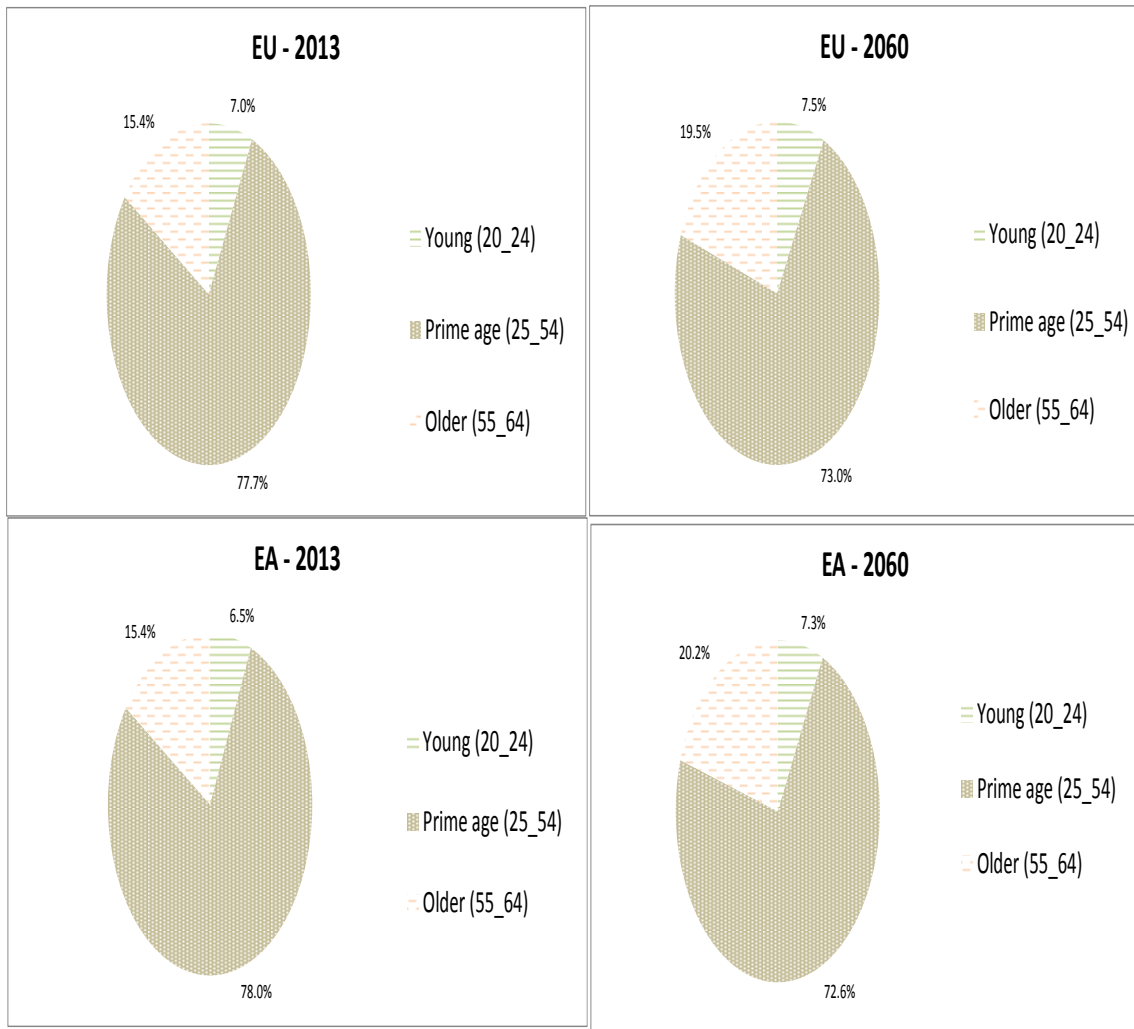
Source: Commission services, EPC

Graph I.2.9:   **Effective economic old age dependency ratio - inactive population aged 65 and more over employment (20-74) – (1)**
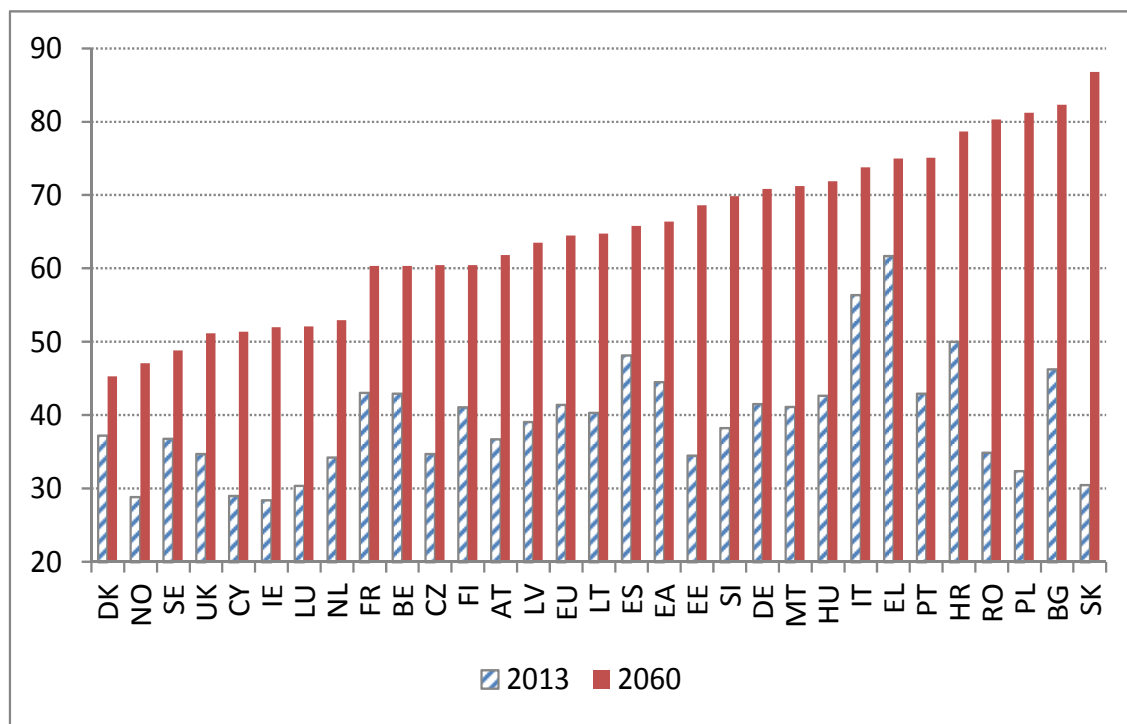
(1) Countries ranked in ascending order of the old age dependency ratio in 2060
Source: Commission services, EPC

2.1.7. The balance of non-workers to workers: economic dependency ratios

The effective economic old age dependency ratio is an important indicator to assess the potential impact of ageing on social expenditure, particularly relevant for pay-as-you-go pension systems. This indicator is calculated as the ratio between the inactive elderly (65+) and total employment (either 20-64 or 20-74). The effective economic old age dependency ratio is projected to rise significantly from 41.5% in 2013 to 64.5% in 2060 in the EU (employed aged 20-74). In the euro area, a similar deterioration is projected from 44.6% in 2013 to 66.4% in 2060 (Graph I.2.9).

In 2060 across EU Member States, the effective economic old-age dependency ratio is projected to range from less than 55% in Denmark, Sweden, the United Kingdom, Cyprus, Ireland, Luxembourg and the Netherlands, to more than 75% in Portugal, Croatia, Romania, Poland, Bulgaria and Slovakia (employed 20-74).

The total economic dependency ratio is a more comprehensive indicator, which is calculated as the ratio between the total inactive population and employment (either 20-64 or 20-74). It gives a measure of the average number of individuals that each employed "supports". It is expected to stabilise in the period up to the middle of the next decade around 120% in the EU, and then to rise to close to 135% by 2060 (employed 20-74). A similar evolution is projected in the euro area. The projected development of this indicator reflects the strong impact of the ageing process, after the middle of the next decade, in most EU Member States (Graph I.2.10).

However, there are large cross-country differences. In Romania, Slovakia, Poland, Bulgaria, Estonia and Lithuania it is projected to increase by 30 pp or more between 2013 and 2060, while in others (France, Cyprus, Denmark, Spain, Greece, the Netherlands, Hungary and Italy) it is projected to rise by 10 pp or less.

Graph I.2.10:   **Total economic dependency ratio - total inactive population over employment (20-74) – (1)**
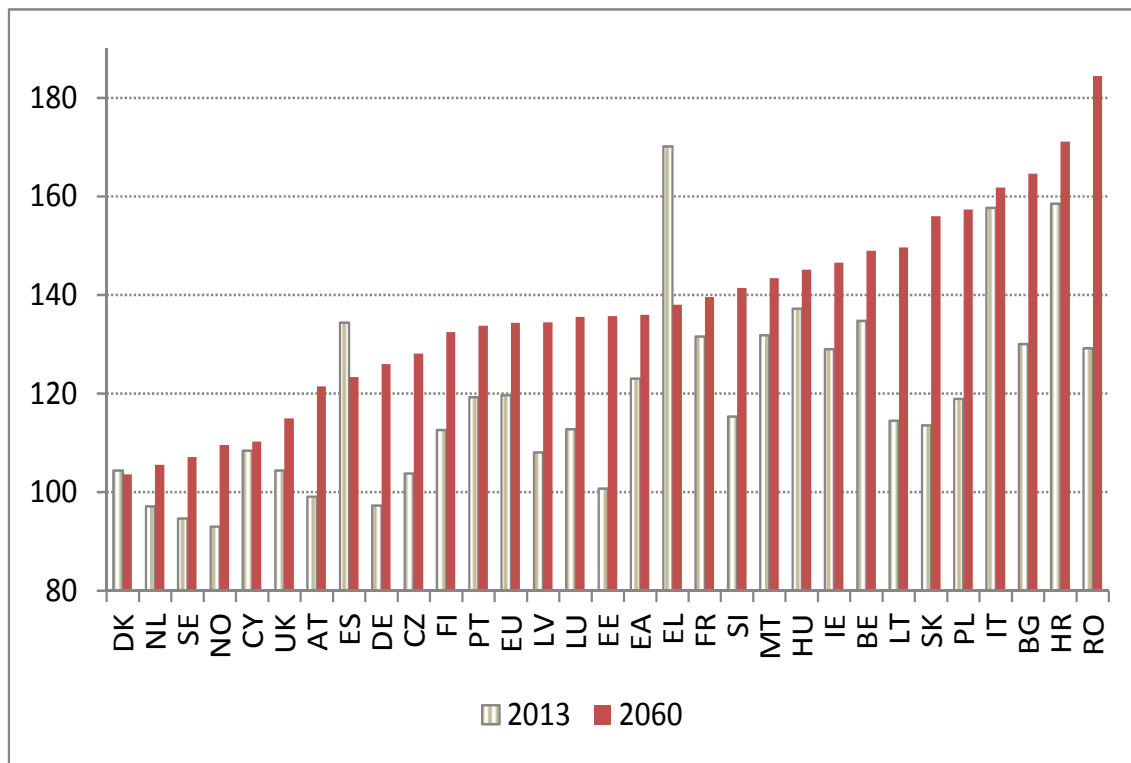
(1) Countries ranked in ascending order of the total economic dependency ratio in 2060
Source: Commission services, EPC

2.2.   LABOUR PRODUCTIVITY AND GDP

2.2.1. Main results of the projections – baseline scenario

Graph I.2.11:   **Potential growth rates (annual average growth rates), EU aggregates**
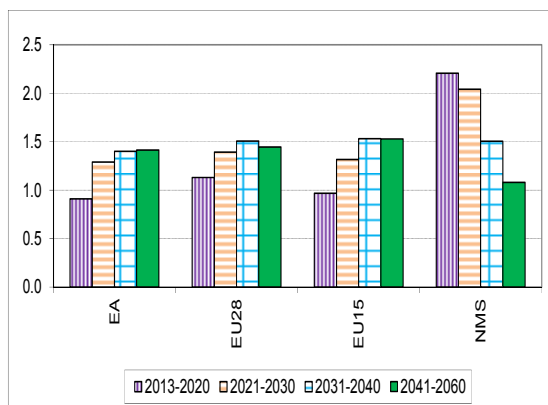
Source: Commission services, EPC

In the EU as a whole, the annual average potential GDP growth rate is projected to remain quite stable over the long-term (Graph I.2.11). After an average potential growth of 1.1% up to 2020, an increase to 1.4-1.5% is projected over the remainder of the projection horizon. Over the whole period 2013-2060, the average annual output growth rate in the EU is projected to be 1.4%. Developments in the euro area are very close to those in the EU as a whole, about 0.1 pp lower.

For four periods, Graph I.2.12 plots average per capita potential GDP growth rates. Eventually, (potential) growth rates stabilise at around 1½%, although in the short- to medium-term they can be affected by country specificities, such as cyclical developments, periods of (protracted) economic adjustment, and catching-up effects.

Graph I.2.12:   **Potential GDP per capita growth rates (period averages) (1)**
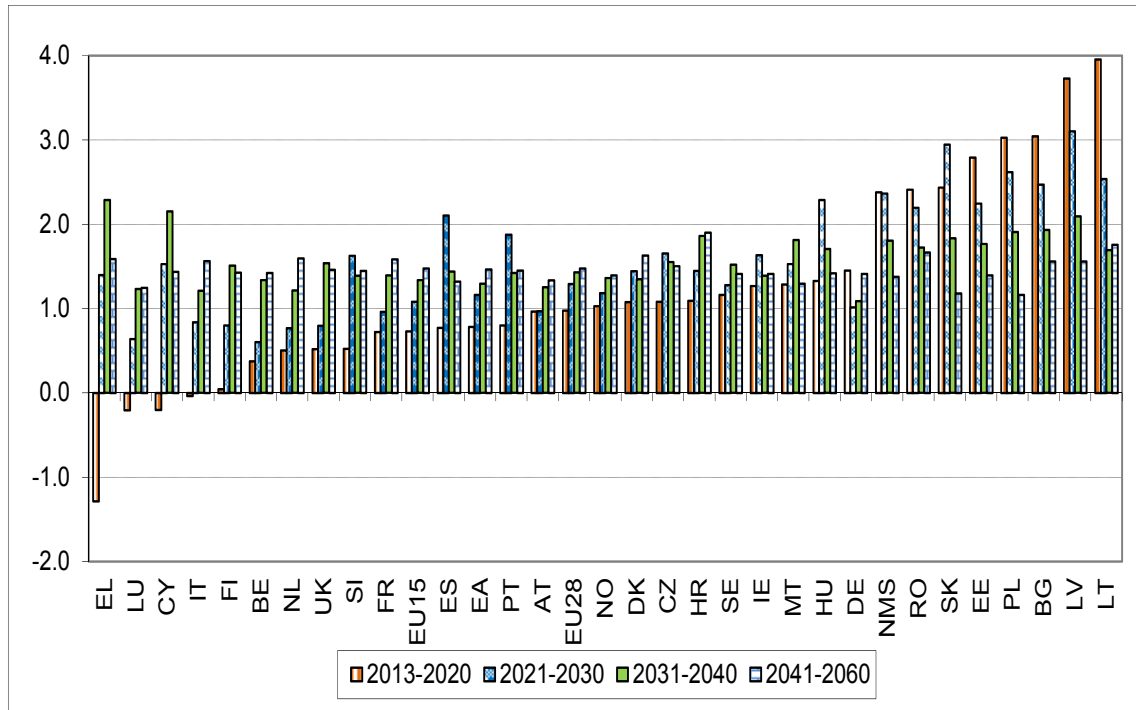
(1) Countries ranked in ascending order of the 2013-2020 period average
Source: Commission services, EPC

In the period 2013-2023, GDP growth is assumed to be higher than potential growth rates, reflecting the gradual closure of negative output gaps. ([31]) For the EU as a whole, GDP growth is assumed to be 0.2 pp higher than potential growth rates. However, there are significant differences across Member States (Graph I.2.14).

Potential growth is explained by labour productivity and labour input, whereas the former turns out to be the key driving factor. In the EU, labour productivity is projected to growth slightly below 1% between 2013 and 2020, and then marginally increases and remain fairly stable thereafter at around 1½% until 2060 (Graph I.2.13). The projected increase in the period up to 2030 is due to the assumption of higher productivity growth (through TFP) in the MSs assumed to have a catching-up potential.

Eventually, in 2060 all MSs are assumed to reach the same productivity growth of 1.5%.

Graph I.2.13:   **Labour productivity per hour, annual average growth rates**
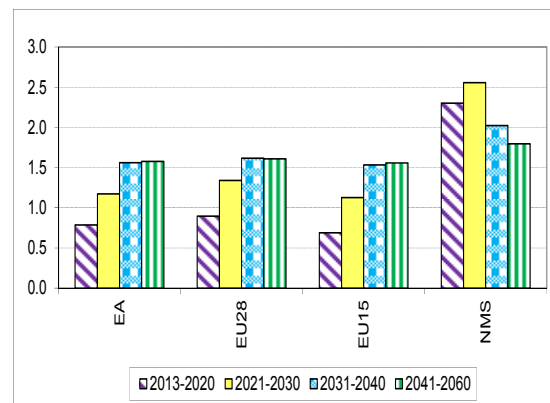
Source: Commission services, EPC

([31]) For the medium-term (until 2018), GDP estimates are based on the Commission services economic forecast of spring 2014 and subsequent data revisions are not included in the projections (for more details see "The 2015 Ageing Report, Underlying Assumptions and Projection Methodologies", European Economy No. 8/2014).

Graph I.2.14:   **Actual and potential GDP growth, annual average growth rates 2013-2023 (1)**
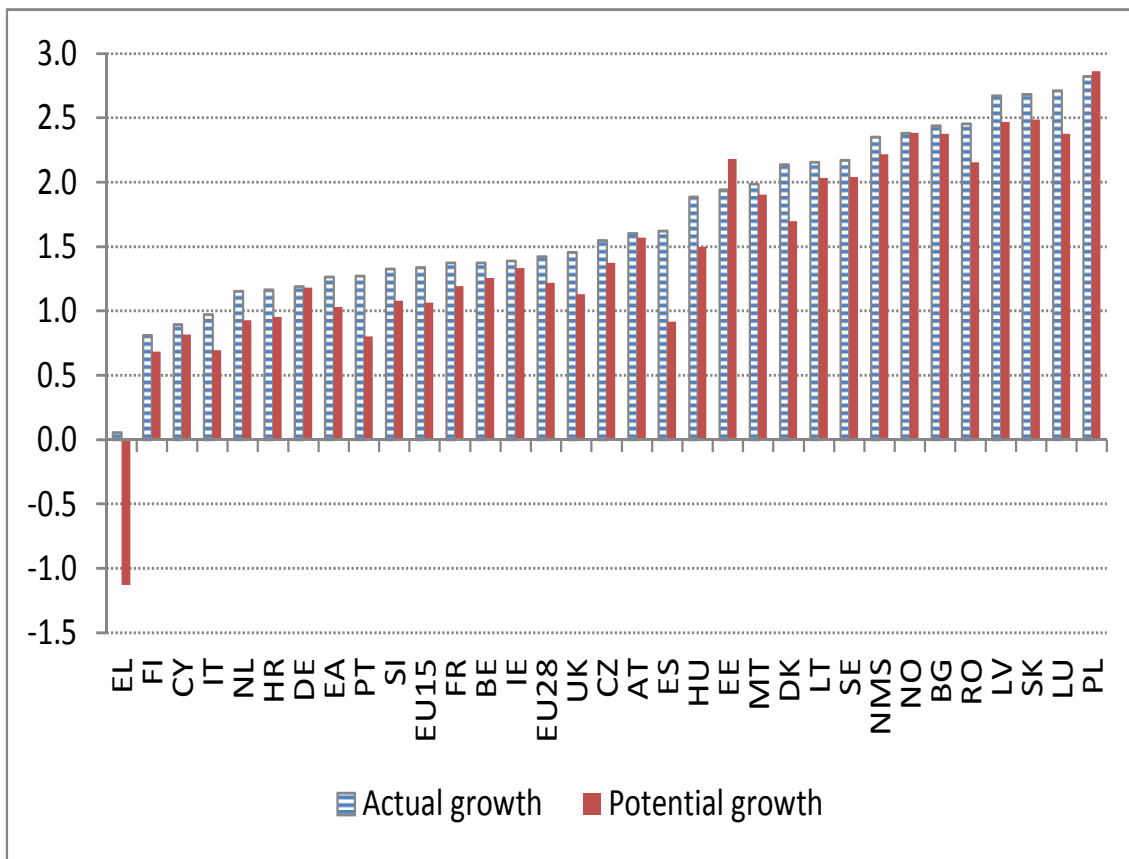
(1) Countries ranked in ascending order of actual growth
Source: Commission services, EPC

Graph I.2.15: **Hours worked (average annual growth rate) 15-74 (1)**
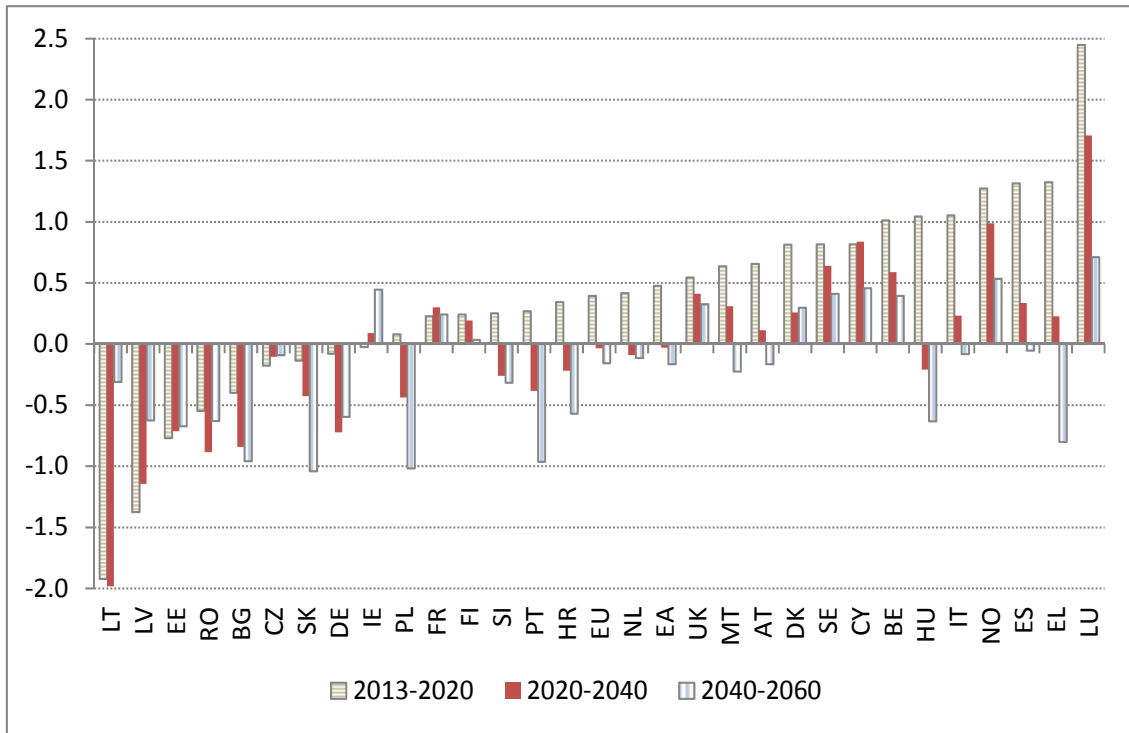
(1) Countries ranked in ascending order of the 2013-2020 average
Source: Commission services, EPC

Total hours worked are projected to rise by 0.4% (annual average growth rate) in the period 2013 to 2020. (^{32}) However, from 2020 onwards, this upward trend is expected to be reversed and total hours worked are expected to nearly stabilise between 2020 and 2040 and then to decline by 0.2% between 2040 and 2060 (Graph I.2.15).

There are major differences across Member States, reflecting different demographic outlooks. In terms of the annual average growth rate, a fall of 0.8% or more is projected for Bulgaria, Latvia and Lithuania. By contrast, an increase of 0.7% or more on average is expected in Cyprus, Luxembourg and Norway.

Graph I.2.16: **Labour input (total hours worked), annual average growth rates**

Source: Commission services, EPC

The projected demographic changes after 2020, with a reduction in the size of the labour force due to a decline in the working-age population, are projected to yield negative labour input growth for the remainder of the period up to 2060 (Graph I.2.16). Therefore, labour dynamics will drag down GDP growth in the EU, the euro area, and in most

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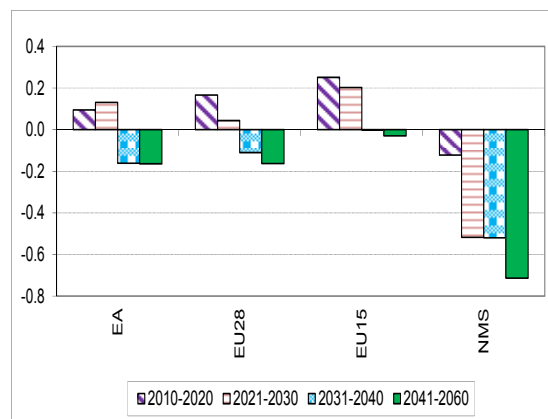
(^{32}) The total number of hours worked is the product between employment and hours worked per person. Regarding hours worked, the following assumptions are made: i) total amount of hours worked per person (in 2013) are kept constant by gender and type of work (part-time versus full time); and ii) the part-time share of total work by gender and age groups (15-24, 25-54 and 55-74) are kept constant over the entire projection period.

MSs, especially in the NMS from 2030 onwards. The only significant exceptions (to a decline in labour input) are Belgium, Denmark, Ireland, France, Cyprus, Luxembourg, Malta, Sweden, the United Kingdom, and Norway.

Graph I.2.17 breaks down labour productivity growth between TFP growth and capital deepening. Trends in TFP growth explain most of productivity per hour growth. By assumption, TFP growth converges to 1% by 2060 in all Member States, which given a labour income share of 0.65 implies a labour productivity growth of 1½% for all MSs in 2060.

Graph I.2.17: **Determinants of labour productivity: total factor productivity and capital deepening (pp contributions for the annual growth rate in the period 2013-2060)**
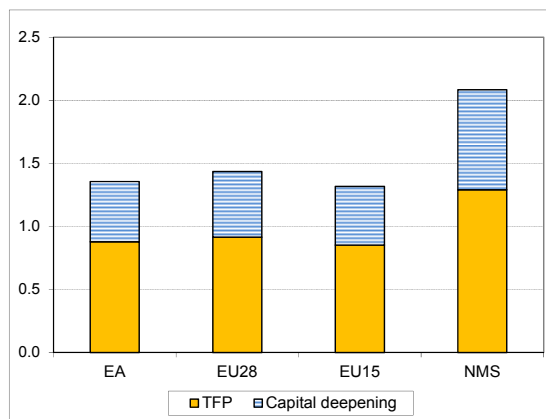
Source: Commission services, EPC

For countries with a relatively low per capita GDP, the capital deepening contribution is very high in the first part of the projection period, reflecting the assumed catching-up process of converging economies. Then, the contribution gradually declines to the steady state value of 0.5%.

Table I.2.2 presents the usual growth accounting breakdown. For the EU and the euro area, the contribution of total population to the average growth of potential GDP is only marginally positive. However, this is more than offset by a decline in the share of the working-age population, pulling down growth by an annual average of -0.2 pp. As a result, labour input contributes negatively to output growth by about an annual average of -0.1. Therefore, labour productivity growth is the

only source for potential output growth in the EU and the euro area.

Sources of growth will change during the projection period. The positive contribution of labour input during the period 2013-2020 will turn negative afterwards, although being more than offset by the rise in the contribution of labour productivity.

Table I.2.2: **Breakdown of potential GDP growth in percentage (average annual values, 2013-2060)**

		EU28	EA
1	**GDP growth in 2013-2060**	1.4	1.3
	Due to % change in:		
2=3+4	**Productivity**	1.4	1.4
	(GDP per hour worked)		
	of which:		
3	TFP	0.9	0.9
4	Capital deepening	0.5	0.5
5=6+7+8+9	**Labour input**	-0.1	-0.1
	of which:		
6	Total population	0.1	0.0
7	Employment rate	0.1	0.1
8	Share of working age population	-0.2	-0.2
9	change in average hours worked	0.0	0.0
10=1-6	**GDP per capita growth in 2013-2060**	1.3	1.3

Source: Commission services, EPC

2.2.2. Main results of the projections – risk scenario

Graph I.2.18: **Potential growth rates in the European Union (average annual values, 2013-2060)**
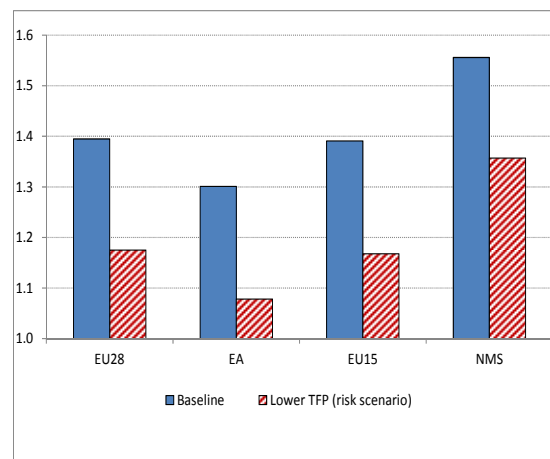
Source: Commission services, EPC

In the risk scenario, TFP is assumed to converge to 0.8%, instead of 1.0% in the baseline. The risk scenario provides a measure of the potential effects on potential GDP growth of a less dynamic rise in TFP as assumed in the baseline scenario. Potential

Graph I.2.19:   **Breakdown of Potential GDP growth (average annual growth rate)**
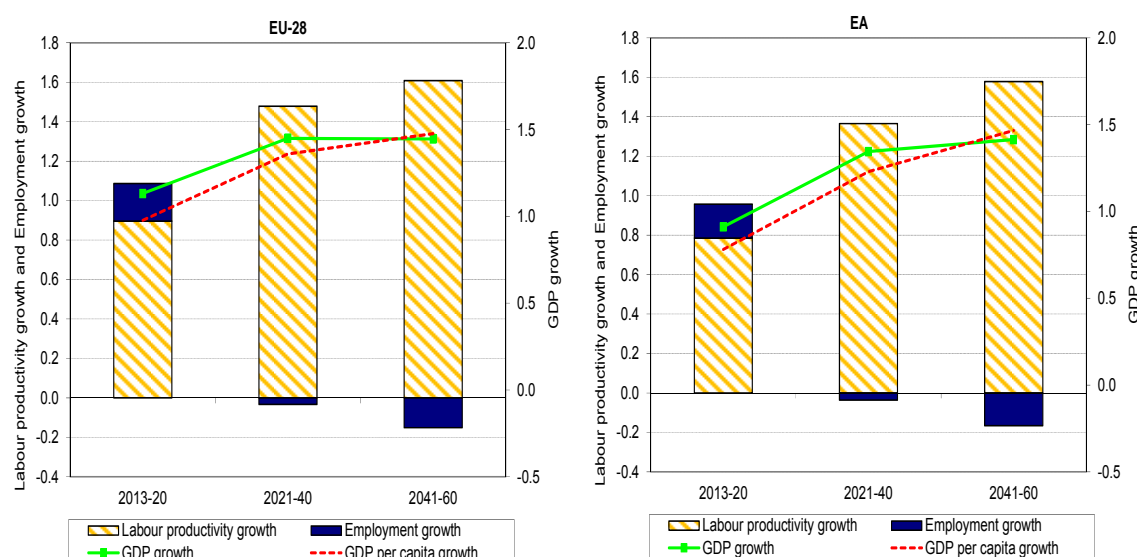
Source: Commission services, EPC

GDP would grow by 1.2% on average up to 2060, compared to 1.4% in the baseline scenario (Graph I.2.18). ([33])

2.3.   COMPARISON WITH THE 2012 AGEING REPORT

2.3.1.   Labour force developments

For the EU as a whole, the impact of the great recession on employment rates in 2013 is still visible in the downward revision (-1.3 pp, Table I.2.3) from the 2012 to the 2015 Ageing Reports. By contrast, the employment rate is revised upwards by 0.2 pp for the EU in 2060, reflecting the closure of the output gap and the impact of planned pension reforms, which together with cohort effects, are expected to raise the employment rate of older workers by 1.2 pp in 2060.

Unemployment rates in 2013 have been revised upwards by 1.9 pp in the EU as a whole, reflecting worsening labour markets in a number of MSs, such as BG, EL, ES, IT, CY and PT. Given the use of a similar unemployment rate threshold of around 7½% in both the 2012 and 2015 ARs, capping unemployment rates in underperforming

labour markets, results in a relatively unchanged unemployment rate for the EU as a whole in 2060.

2.3.2.   Productivity and GDP developments

Overall, the 2015 AR brings about marginal changes regarding the potential GDP growth and its drivers in the EU as a whole (Table I.2.4 and Graph I.2.19). In the 2015 AR, potential GDP is projected to rise on an annual average growth rate of 1.4% in the EU in the period 2013-2060, unchanged from the 2012 AR. The potential GDP growth rate in the euro area is expected to be 1.3% (-0.1 pp compared with the 2012 AR). In the EU, this stabilisation results from an increase of labour input (+0.1 pp) which is exactly offset by a decline in productivity per hour worked (-0.1 pp). Across the EU, the following MSs registered a decline in potential GDP growth rate of 0.2 pp or more on an annual average in the period 2013-2060: IE, EL, ES, NL, PT, SK and the UK. Conversely, the following countries registered an improvement in potential GDP growth rate of 0.2 pp or more on an annual average in the period 2013-2060: DK, LV, LU, HU, MT, RO, SE and NO.

([33]) For a detailed presentation of all sensitivity tests and policy scenarios see Part I, Chapter 3, of this report.

Table I.2.3:   Long-term projections compared (2015 and 2012 projections): labour force developments

| | Projection exercise 2015 | | | | | | | | | | | | | | | Projection exercise 2015 - Projection exercise 2012 | | | | | | | | | | | | | | | |
| | Employment rate (15-64) | | | Employment rate (55-64) | | | Participation rate (15-64) | | | Participation rate (55-64) | | | Unemployment rate (15-64) | | | Employment rate (15-64) | | | Employment rate (55-64) | | | Participation rate (15-64) | | | Participation rate (55-64) | | | Unemployment rate (15-64) | | |
	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change
BE	61.8	64.2	2.4	41.6	53.5	11.9	67.6	69.3	1.8	44.0	56.0	12.0	8.5	7.4	-1.1	-1.7	-0.2	1.5	-1.3	1.4	2.7	-1.4	-0.2	1.2	-1.0	1.8	2.7	0.7	0.1	-0.6
BG	59.6	64.1	4.4	47.6	56.7	9.1	68.6	69.2	0.7	54.4	61.0	6.6	13.0	7.5	-5.6	-3.1	-0.3	2.8	0.1	0.8	0.7	-0.2	-0.2	-0.1	2.9	1.2	-1.6	4.3	0.2	-4.1
CZ	67.8	70.4	2.6	51.9	74.8	22.9	72.9	74.9	2.0	55.1	78.3	23.3	7.0	6.0	-1.0	1.0	1.8	0.8	3.4	5.7	2.3	1.4	1.8	0.4	3.7	5.7	2.0	0.5	-0.1	-0.6
DK	72.6	76.5	3.9	62.0	75.4	13.4	78.2	80.4	2.2	65.3	78.0	12.7	7.2	4.9	-2.3	-2.3	-0.9	1.4	1.8	1.7	-0.1	-1.5	-0.8	0.7	2.2	1.8	-0.4	1.1	0.1	-1.0
DE	73.5	75.5	2.0	63.7	71.8	8.0	77.7	79.8	2.1	67.6	76.1	8.5	5.4	5.4	0.0	2.0	1.5	0.6	2.0	1.8	-0.2	0.4	0.9	0.6	1.6	1.3	-0.3	-0.6	-0.7	-0.1
EE	68.6	70.7	2.1	62.6	71.0	8.4	75.3	76.4	1.2	66.6	74.8	8.2	8.8	7.5	-1.4	2.6	0.6	-2.0	5.8	2.3	-3.5	-0.2	0.8	1.1	2.2	1.2	-1.0	-3.7	0.2	3.9
IE	60.4	63.5	3.1	51.2	61.3	10.1	69.7	68.2	-1.6	57.3	64.6	7.3	13.3	6.8	-6.5	0.6	0.3	-0.3	-2.4	-0.4	2.0	-0.1	0.9	1.0	-1.7	0.7	2.3	-0.9	0.8	1.7
EL	48.7	69.8	21.1	35.5	74.6	39.1	67.7	75.4	7.7	42.4	78.0	35.5	28.0	7.5	-20.6	-10.7	2.5	13.2	-9.1	7.5	16.5	-1.9	2.9	4.8	-5.7	8.4	14.1	13.4	0.2	-13.2
ES	54.5	73.0	18.5	43.4	77.9	34.5	74.2	78.9	4.7	54.2	82.5	28.2	26.5	7.5	-19.0	-5.3	0.5	5.8	-4.1	2.2	6.3	-0.6	0.7	1.4	-1.3	2.7	4.0	6.4	0.2	-6.2
FR	63.9	68.1	4.1	45.8	60.2	14.4	71.0	73.6	2.5	49.2	63.4	14.2	10.0	7.5	-2.5	-0.4	-1.1	-0.7	5.5	0.1	-5.4	0.3	-1.1	-1.3	6.2	0.1	-6.1	0.9	0.2	-0.7
HR	52.3	60.4	8.1	37.1	48.8	11.7	63.5	65.2	1.7	41.4	50.9	9.5	17.8	7.5	-10.3	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
IT	55.5	60.3	4.8	42.8	66.7	23.9	63.4	65.2	1.8	45.4	69.0	23.6	12.4	7.5	-4.9	-2.6	-1.4	1.2	1.8	0.6	-1.2	0.2	-1.4	-1.7	2.9	0.7	-2.2	4.5	0.2	-4.3
CY	60.6	73.8	13.2	49.8	74.8	25.0	72.9	78.6	5.7	57.0	78.4	21.4	16.9	6.1	-10.8	-10.4	-3.0	7.4	-10.3	-3.4	6.9	-2.4	-1.9	0.5	-5.8	-2.6	3.2	11.1	1.6	-9.6
LV	65.3	69.9	4.7	55.0	68.5	13.5	74.3	75.6	1.3	61.5	73.1	11.6	12.1	7.5	-4.7	1.8	-3.3	-5.1	2.3	-1.5	-3.8	-2.2	-3.4	-1.2	0.2	-1.4	-1.6	-4.9	0.2	5.1
LT	63.8	66.6	2.8	53.4	61.4	8.1	72.5	72.0	-0.5	60.2	65.6	5.5	12.0	7.5	-4.6	1.8	-1.1	-2.9	1.5	-1.3	-2.8	0.2	-1.0	-1.2	1.7	-0.5	-2.2	-2.3	0.2	2.5
LU	65.3	67.0	1.7	40.2	44.9	4.7	69.4	70.0	0.5	42.2	46.5	4.3	5.9	4.2	-1.7	0.0	2.4	2.4	0.8	4.2	3.4	1.1	2.5	1.4	2.0	5.0	3.0	1.5	0.0	-1.5
HU	58.0	67.5	9.5	38.6	73.6	35.0	64.7	73.0	8.3	41.8	77.5	35.7	10.3	7.5	-2.8	0.3	4.0	3.7	-1.7	10.5	12.1	0.5	4.4	4.0	-1.3	11.6	13.0	0.2	0.2	0.0
MT	61.0	70.3	9.3	36.5	60.8	24.4	65.3	75.4	10.1	38.7	64.8	26.2	6.5	6.7	0.2	2.8	4.7	1.9	3.1	4.5	1.3	2.9	5.1	2.2	3.8	6.3	2.5	-0.3	0.0	0.3
NL	74.3	79.6	5.3	60.1	74.8	14.8	79.7	82.9	3.2	64.1	77.6	13.5	6.7	3.9	-2.8	-2.0	-1.0	1.0	2.9	-2.0	-4.9	0.3	-0.6	-0.9	4.9	-1.6	-6.5	2.9	0.5	-2.4
AT	72.3	75.0	2.7	44.8	58.3	13.5	76.1	78.0	1.8	46.4	59.7	13.3	5.0	3.8	-1.2	-0.1	0.6	0.8	0.2	3.2	3.0	0.5	0.4	-0.1	0.9	3.6	2.8	0.8	-0.3	-1.1
PL	60.3	64.7	4.4	40.8	60.9	20.1	67.4	70.0	2.6	44.2	64.3	20.1	10.5	7.5	-3.1	-0.4	-0.6	-0.2	4.3	1.3	-3.0	1.0	-0.5	-1.5	5.3	1.5	-3.8	2.0	0.2	-1.8
PT	60.6	69.6	8.9	46.8	64.5	17.7	73.1	75.2	2.1	54.3	68.6	14.3	17.0	7.5	-9.6	-4.6	-1.5	3.1	-4.4	-1.0	3.4	-1.9	-1.5	0.4	-2.7	-0.8	1.8	4.1	0.2	-3.9
RO	59.1	58.2	-1.0	41.4	47.2	5.8	63.9	62.5	-1.4	43.0	48.7	5.7	7.4	6.9	-0.6	-0.5	1.4	1.9	0.3	2.2	1.9	-0.2	1.6	1.8	0.7	2.5	1.8	0.6	0.2	-0.3
SI	63.4	69.1	5.7	33.1	61.0	27.9	70.7	73.8	3.1	35.6	63.4	27.9	10.2	6.4	-3.9	-3.0	-1.6	1.4	-5.2	0.2	5.3	-1.7	-1.1	0.6	-4.4	0.9	5.3	2.0	0.7	-1.4
SK	60.1	66.1	6.0	44.1	67.1	22.9	70.1	71.4	1.4	49.6	70.4	20.8	14.2	7.5	-6.7	0.3	-0.8	-1.1	2.6	-1.4	-4.0	0.9	-0.7	-1.5	4.1	-0.9	-4.9	0.6	0.2	-0.4
FI	68.8	70.3	1.5	58.4	62.1	3.7	75.1	75.5	0.4	62.7	65.7	3.0	8.4	6.9	-1.6	-1.1	-0.9	0.2	-0.4	-0.5	-0.1	-0.1	-0.7	-0.6	0.6	-0.1	-0.7	1.3	0.3	-1.0
SE	74.6	77.4	2.8	73.7	76.0	2.3	81.3	82.3	1.0	77.7	78.9	1.3	8.2	5.9	-2.3	-0.2	0.9	1.1	2.6	1.3	-1.2	0.9	0.5	-0.4	3.3	1.1	-2.2	1.2	-0.6	-1.8
UK	70.4	74.6	4.2	59.9	70.6	10.7	76.3	79.4	3.1	62.9	73.3	10.4	7.8	6.1	-1.7	0.4	2.2	1.8	0.7	2.8	2.1	0.3	2.7	2.4	0.8	3.2	2.4	-0.1	0.5	0.6
NO	75.5	76.3	0.8	71.2	69.9	-1.4	78.2	79.1	0.9	72.1	70.8	-1.4	3.5	3.6	0.0	-0.2	0.9	1.1	1.5	2.5	1.1	-0.1	1.2	1.3	1.5	2.6	1.1	0.1	0.3	0.3
EU	64.0	69.7	5.7	50.3	67.1	16.8	72.0	74.6	2.7	54.4	70.2	15.8	11.0	6.6	-4.4	1.2	0.2	1.5	1.2	1.2	0.1	0.1	0.3	0.2	2.0	1.4	-0.6	1.9	0.1	-1.8
EA	63.5	69.4	5.9	50.1	67.3	17.2	72.2	74.3	2.1	54.8	70.7	15.9	12.1	6.7	-5.4	1.1	-0.3	1.5	1.1	0.6	-0.5	0.0	-0.3	-0.3	2.1	0.7	-1.4	2.4	0.0	-2.4

Source: Commission services, EPC

Table I.2.4: Long-term projections compared (2015 and 2012): potential GDP growth and its determinants

Projection exercise 2015

	GDP growth in 2013-2060	Productivity (GDP per hour worked)	TFP	Capital deepening	Labour input	Total pop.	Empl. rate	Share of Working age pop.	change in average hours worked	GDP per capita growth in 2010-2060
	1=2+5	2=3+4	3	4	5=6+7+8+9	6	7	8	9	10=1-6
BE	1.7	1.2	0.8	0.4	0.5	0.7	0.0	-0.1	0.0	1.1
BG	1.5	2.2	1.3	0.9	-0.8	-0.6	0.1	-0.3	0.0	2.1
CZ	1.6	1.7	1.1	0.6	-0.1	0.1	0.1	-0.3	0.0	1.5
DK	1.8	1.5	1.0	0.5	0.3	0.3	0.1	-0.2	0.0	1.4
DE	1.0	1.5	1.0	0.5	-0.6	-0.3	0.1	-0.3	0.0	1.3
EE	1.5	2.0	1.2	0.8	-0.6	-0.4	0.1	-0.3	0.0	1.9
IE	1.7	1.4	0.9	0.5	0.3	0.3	0.2	-0.2	0.1	1.4
EL	0.7	1.0	0.7	0.3	-0.3	-0.5	0.5	-0.3	0.0	1.2
ES	1.4	1.4	0.9	0.5	0.0	0.0	0.3	-0.3	0.0	1.4
FR	1.6	1.3	0.8	0.5	0.3	0.3	0.1	-0.1	0.0	1.3
HR	1.4	1.7	1.1	0.7	-0.4	-0.3	0.2	-0.2	0.0	1.7
IT	1.3	1.2	0.8	0.4	0.1	0.2	0.1	-0.2	0.0	1.1
CY	1.9	1.4	0.8	0.6	0.5	0.5	0.2	-0.2	0.0	1.3
LV	1.6	2.4	1.4	1.0	-0.9	-0.8	0.2	-0.3	0.0	2.3
LT	1.2	2.3	1.4	1.0	-1.1	-1.0	0.2	-0.3	0.0	2.3
LU	2.5	1.2	0.7	0.4	1.4	1.6	-0.1	-0.1	-0.1	0.9
HU	1.5	1.8	1.2	0.6	-0.3	-0.2	0.1	-0.3	0.0	1.6
MT	1.7	1.4	0.9	0.5	0.3	0.3	0.3	-0.3	0.0	1.5
NL	1.2	1.2	0.8	0.4	0.0	0.0	0.1	-0.2	0.0	1.2
AT	1.5	1.4	0.9	0.5	0.1	0.3	0.1	-0.2	0.0	1.2
PL	1.6	2.2	1.4	0.9	-0.6	-0.3	0.0	-0.3	0.0	1.9
PT	0.9	1.5	1.0	0.5	-0.6	-0.5	0.2	-0.3	0.0	1.4
RO	1.6	2.3	1.4	0.9	-0.7	-0.3	-0.1	-0.3	0.0	1.9
SI	1.3	1.6	1.0	0.6	-0.3	0.0	0.0	-0.3	0.0	1.3
SK	1.5	2.2	1.6	0.6	-0.7	-0.4	0.0	-0.3	0.0	1.9
FI	1.4	1.3	0.8	0.5	0.1	0.3	0.0	-0.2	0.0	1.1
SE	2.0	1.5	1.0	0.5	0.6	0.7	0.0	-0.2	0.0	1.4
UK	1.7	1.2	0.8	0.5	0.4	0.5	0.1	-0.2	0.0	1.2
NO	2.3	1.5	1.0	0.5	0.8	1.0	-0.1	-0.1	0.0	1.3
EA	1.3	1.4	0.9	0.5	-0.1	0.0	0.1	-0.2	0.0	1.3
EU28	1.4	1.4	0.9	0.5	-0.1	0.1	0.1	-0.2	0.0	1.3

Projection exercise 2015 - Projection exercise 2012

	GDP growth in 2013-2060	Productivity (GDP per hour worked)	TFP	Capital deepening	Labour input	Total pop.	Empl. rate	Share of Working age pop.	change in average hours worked	GDP per capita growth in 2010-2060
	1=2+5	2=3+4	3	4	5=6+7+8+9	6	7	8	9	10=1-6
BE	0.1	-0.2	-0.1	-0.1	0.3	0.3	0.0	0.0	0.0	-0.2
BG	0.1	-0.1	-0.1	0.0	0.2	0.3	0.2	-0.1	0.0	0.1
CZ	0.0	-0.2	-0.1	-0.1	0.2	0.1	0.1	0.0	0.0	-0.1
DK	0.3	0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.2
DE	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
EE	0.0	0.0	0.0	0.0	0.0	-0.1	0.2	0.0	0.0	0.1
IE	-0.4	-0.2	-0.1	-0.1	-0.1	-0.5	0.3	-0.1	0.1	0.1
EL	-0.3	-0.1	-0.1	0.0	-0.2	-0.5	0.4	0.0	0.0	0.3
ES	-0.2	0.0	0.1	-0.1	-0.2	-0.3	0.1	0.0	0.0	0.1
FR	-0.1	-0.2	-0.1	-0.1	0.1	0.1	0.1	0.0	0.0	-0.1
HR	..	..	..	..	..	..	..	..	..	..
IT	0.0	-0.1	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	-0.1
CY	-0.1	0.0	-0.1	0.0	0.0	-0.1	0.3	0.0	0.0	0.2
LV	0.4	0.3	0.1	0.2	0.1	-0.2	0.2	0.0	0.1	0.5
LT	0.0	0.4	0.2	0.2	-0.4	-0.6	0.3	-0.1	-0.1	0.5
LU	0.6	-0.3	-0.2	-0.1	0.9	0.9	0.1	0.0	0.0	-0.3
HU	0.3	0.1	0.2	-0.1	0.2	0.1	0.1	0.0	0.1	0.2
MT	0.3	-0.2	-0.2	-0.1	0.5	0.4	0.1	0.0	0.0	-0.1
NL	-0.2	-0.3	-0.2	-0.1	0.1	0.0	0.1	0.0	0.0	-0.2
AT	0.1	-0.1	-0.1	0.0	0.2	0.2	0.1	0.0	0.0	-0.1
PL	0.0	0.1	0.0	0.1	-0.1	0.0	0.1	0.0	0.0	0.0
PT	-0.3	0.1	0.1	0.0	-0.4	-0.4	0.2	0.0	0.0	0.1
RO	0.5	0.2	0.1	0.0	0.3	0.2	0.2	0.0	0.0	0.4
SI	0.0	0.0	0.1	-0.1	0.0	0.0	0.1	0.0	0.0	0.0
SK	-0.3	-0.1	0.1	-0.2	-0.2	-0.2	0.0	0.0	-0.1	-0.1
FI	-0.1	-0.3	-0.3	-0.1	0.2	0.2	0.0	0.0	0.0	-0.3
SE	0.3	-0.1	0.0	0.0	0.3	0.3	0.1	0.0	0.0	0.1
UK	-0.2	-0.4	-0.3	-0.1	0.2	0.0	0.1	0.0	0.1	-0.2
NO	0.4	-0.1	-0.1	0.0	0.4	0.4	0.0	0.0	0.0	0.0
EA	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0	0.0	0.0
EU28	0.0	-0.1	-0.1	-0.1	0.1	0.0	0.0	0.0	0.1	0.0

Source: Commission services, EPC

3. SENSITIVITY TESTS

Table I.3.1: **Overview of sensitivity tests**

Unchanged policy scenarios						Changed policy scenario
Population		Labour force		Productivity		
High life expectancy	**Lower migration**	**Higher employment rate**	**Higher employment rate older workers**	**Higher/lower labour productivity**	**Lower TFP (risk scenario)**	**Linking retirement ages with increases in life expectancy**
A scenario with an increase of life expectancy at birth of two years by 2060 compared with the baseline projection.	A scenario with 20% less migration compared with the baseline projection.	A scenario with the employment rate being 2 p.p. higher compared with the baseline projection for the age-group 20-64. The increase is introduced linearly over the period 2016-2025 and remains 2 p.p. higher thereafter. The higher employment rate is assumed to be achieved by lowering the rate of structural unemployment (the NAWRU).	A scenario with the employment rate of older workers (55-74) being 10 p.p. higher compared with the baseline projection. The increase is introduced linearly over the period 2016-2025 and remains 10 p.p. higher thereafter. The higher employment rate of this group of workers is assumed to be achieved through a reduction of the inactive population.	A scenario with labour productivity growth being assumed to converge to a productivity growth rate which is 0.25 percentage points higher/lower than in the baseline scenario. The increase is introduced linearly during the period 2016-2025, and remains 0.25 p.p. above/below the baseline thereafter.	TFP growth would converge to 0.8%, with convergence to the target rate in 2035 from the latest outturn year, i.e. 2013, and the period of fast convergence limited to 5 years, i.e. until 2040.	Exit probabilities from the labour market are shifted to older ages in line with gains in life expectancy and legislated pension reforms. Potential increase in labour supply due to linking is reduced by 25% to account for older workers leaving prematurely the the labour market.

Source: Commission services, EPC

3.1. OVERVIEW OF ALTERNATIVE SCENARIOS

Besides making projections based on the baseline scenario agreed in the AWG, an additional set of seven (unchanged policy) scenarios and one policy scenario are considered to assess the possible impact of various elements on the macroeconomic and budgetary variables. (^{34}) Sensitivity tests are an indispensable element of (long-term) budgetary projections, in order to quantify the responsiveness of results to changes in key drivers, such as macroeconomic and population variables, together with policy assumptions, thereby providing "confidence intervals" in order to gauge uncertainty.

In addition to seven sensitivity scenarios a policy change scenario has also been considered, namely linking retirement ages with increases in life expectancy (Table I.3.1). (^{35})

(^{34}) Note the existence in Table I.3.1 of both a higher and a lower labour productivity scenarios.
(^{35}) For more details see Part I, Chapter 5, ("Sensitivity tests") of "The 2015 Ageing Report – Underlying assumptions and projection methodologies", European Economy No. 8/2014.

3.2. PROJECTION RESULTS

Developments in GDP growth can be broken down into labour productivity per hour worked and labour input (Table I.3.2). The former turns out to be the key determining factor of (potential) long-term growth (Graph I.3.1 and Table I.3.2). In the EU as a whole, average per capita GDP growth is projected to fall from 1.3% in the baseline scenario to 1.1% in the risk scenario, while being expected to rise to 1.4% in the policy scenario, and to 1.5% in the high labour productivity scenario.

In the EU, annual average potential GDP growth rates over the period 2013-2060 range from 1.16% in the lower TFP scenario (risk scenario) to 1.59% in the higher labour productivity one, i.e. a 43 basis points difference. This basically reflects changes in labour productivity per hour worked, as changes in labour input growth are smaller, ranging from a minimum of -0.14% in the lower migration scenario to a maximum of 0.06% in the higher employment rate of older workers one, i.e. a 20 basis points difference (Table I.3.2).

Although overall in the EU, the contribution of labour input is projected to be relatively marginal over the period 2013-2060 (-0.05% in the baseline scenario), in NMS its contribution is projected to

Graph I.3.1:   **Potential GDP growth rates (five years centred moving average) - European Union**
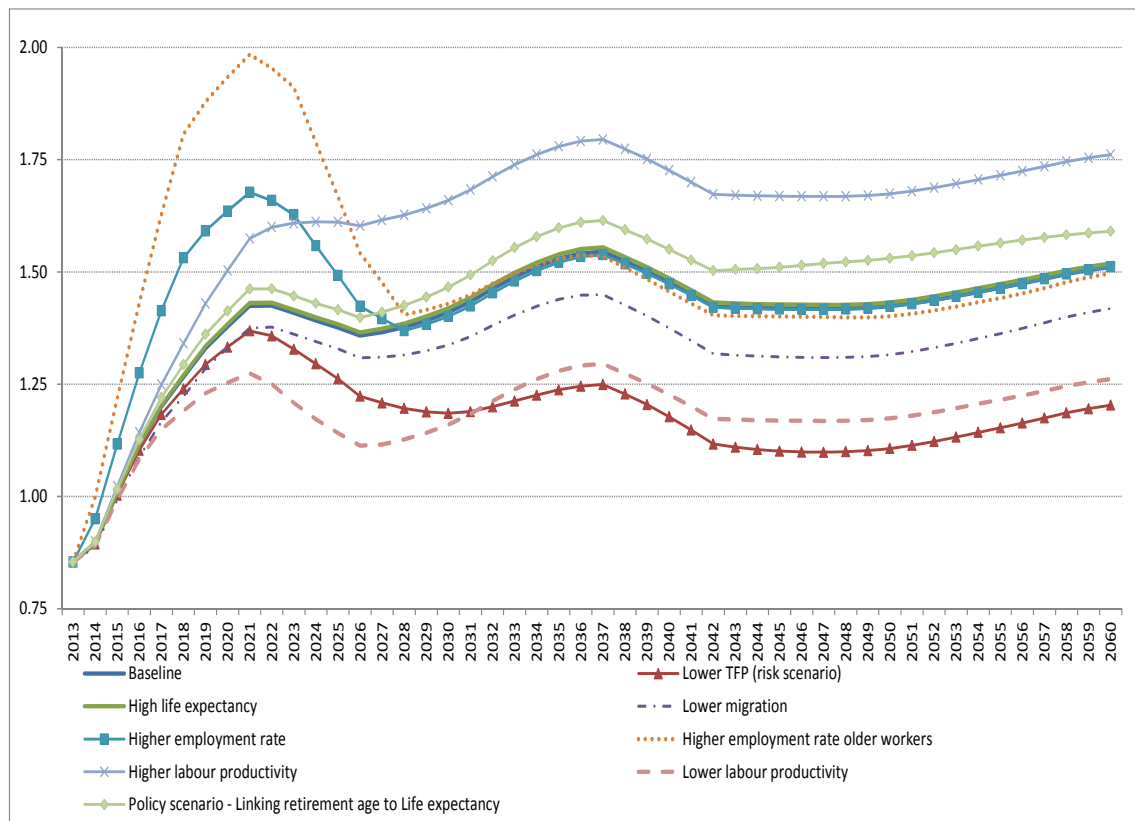
Source: Commission services, EPC

be more negative (-0.53% in the baseline scenario), reflecting less favourable demographic developments (Graph I.3.3). However, due to expected positive catching up effects, stronger growth in labour productivity per hour is expected to more than offset labour input developments (Graph I.3.4).

As regards the policy scenario, linking retirement ages with increases in life expectancy partially insures against the risk of a negative productivity shock (i.e. the risk scenario). In fact, in the EU as a whole, in the risk scenario (lower TFP) potential GDP growth is expected to increase only by 1.16% per year (on average over the period 2013-2060) down from 1.38% in the baseline scenario, whereas in the policy scenario, GDP growth is expected to be 1.45%. Conversely, in the high labour productivity scenario, potential GDP growth is project to be at 1.59% (Graph I.3.2).

Graph I.3.2:   **Potential growth rates in the European Union (average annual values, 2013-2060)**

Source: Commission services, EPC

Table I.3.2:   **Breakdown of potential GDP growth in % by scenario (average annual values, 2013-2060)**

Scenario	GDP growth in 2013-2060	Labour productivity (GDP per hour worked)	TFP	Capital deepening	Labour input	Total population	Employment rate	Share of working age population	Change in average hours worked	GDP per capita growth in 2013-2060
	1=2+5	2=3+4	3	4	5=6+7+8+9	6	7	8	9	10=1-6
Baseline	1.4	1.4	0.9	0.5	-0.1	0.1	0.1	-0.2	-0.01	1.3
Lower TFP (risk scenario)	1.2	1.2	0.8	0.4	-0.1	0.1	0.1	-0.2	-0.01	1.1
High life expectancy	1.4	1.4	0.9	0.5	0.0	0.1	0.1	-0.2	-0.01	1.3
Lower migration	1.3	1.4	0.9	0.5	-0.1	0.1	0.1	-0.3	-0.02	1.2
Higher employment rate	1.4	1.4	0.9	0.5	0.0	0.1	0.1	-0.2	0.03	1.4
Higher employment rate older workers	1.5	1.4	0.9	0.5	0.1	0.1	0.1	-0.2	0.08	1.4
Higher labour productivity	1.6	1.6	1.1	0.5	-0.1	0.1	0.1	-0.2	-0.01	1.5
Lower labour productivity	1.2	1.2	0.7	0.5	-0.1	0.1	0.1	-0.2	-0.01	1.1
Policy scenario - Linking retirement age to Life expectancy	1.4	1.4	0.9	0.5	0.0	0.1	0.2	-0.2	0.00	1.4

Source: Commission services, EPC

Graph I.3.3:   **Labour input by country grouping (average annual rates, 2013-2060)**
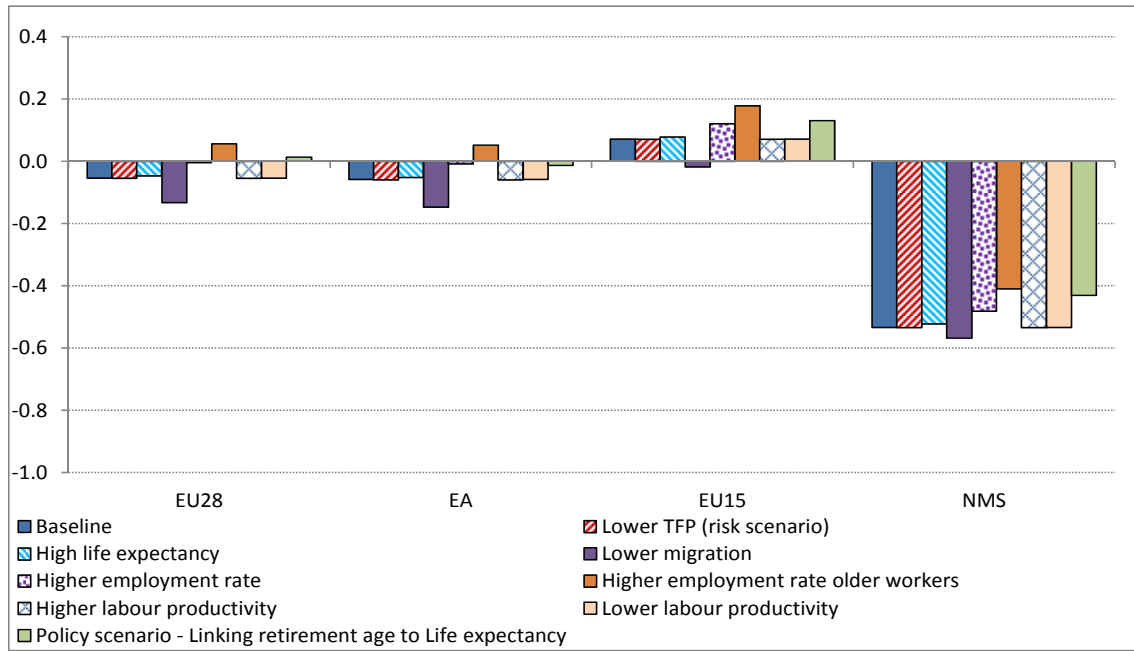
Source: Commission services, EPC

Graph I.3.4:   **Labour productivity per hour (annual average growth rates, 2013-2060)**
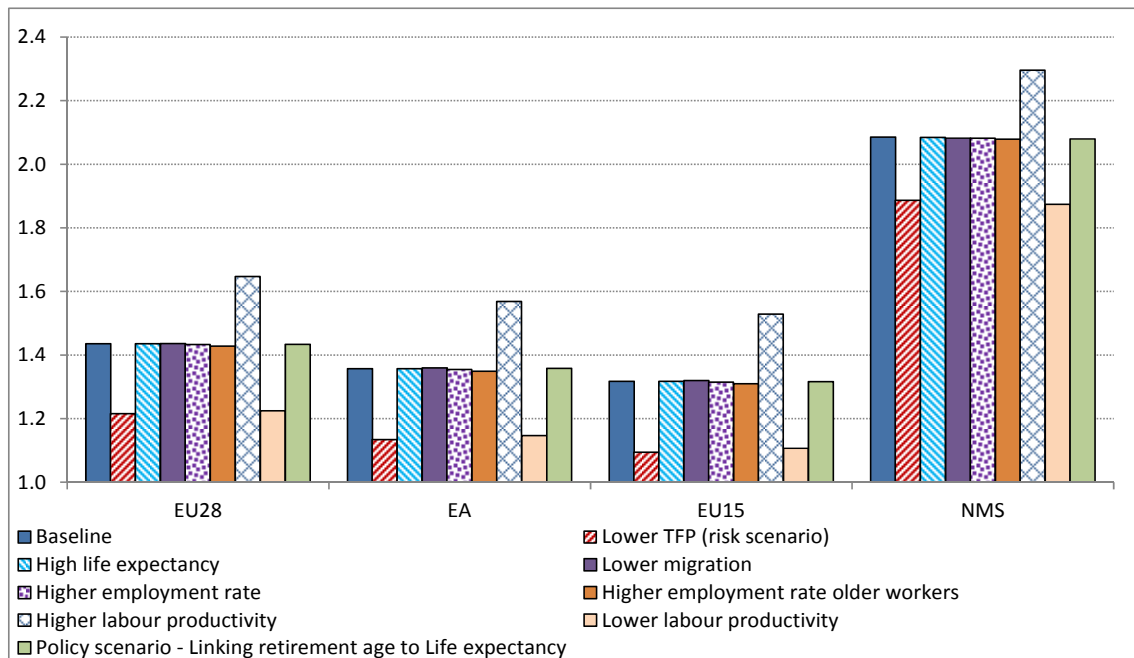
Source: Commission services, EPC

Part II

Long-term projections of age-related
expenditure and unemployment benefits

1. PENSIONS

1.1. INTRODUCTION

Given the prominent role of the State in pension provision in the EU countries, the main emphasis of the projections is on public pensions. [36] A broad definition of public schemes and other public pensions includes those schemes that are statutory and that the general government sector administers. Public pension schemes affect public finances as they are considered to belong to the general government sector in the national account system. Ultimately, the government bears the costs and risks attached to the scheme.

One of the most crucial parts of the EC-EPC budgetary projection exercise is the assessment of the impact of ageing populations on pension expenditure.

The way public pensions are arranged in the EU varies significantly across Member States. This is due to both different traditions on how to provide retirement income and different phases of the reform process of pension systems. However, a strong public sector involvement in the pension system is a common feature for all EU Member States.

1.2. TAXONOMY OF MAIN PENSION SCHEMES IN EU MEMBER STATES

Publicly provided earnings-related pension systems across Member States accumulate entitlements following three broad schemes: defined-benefit (DB), notional defined contribution (NDC) as well as point systems (PS) (see Table II.1.1). In a few Member States, notably in Denmark, the Netherlands, Ireland and the United Kingdom, the public pension system provides in the first instance a flat-rate pension, which can be supplemented by earnings-related private occupational pension schemes (in the UK, also by a public earnings-related pension scheme – State Second Pension – and in Ireland by an earnings-related pension scheme for public service employees).

The public pension system is based in most countries on statutory earnings-related old-age pension schemes. This can take the form of a common scheme for all employees or several parallel schemes in different sectors or occupational groups. The type of benefits provided by the public pension systems diverges across countries. Most pension schemes provide not only old-age pensions but also early retirement, disability and survivors' pensions. Some countries, however, have specific schemes for some of these benefit types; in particular, disability benefits in some countries (e.g. Ireland, United Kingdom and Hungary) are not considered as pensions (despite the fact that they are granted for long periods), and in some cases they are covered by the sickness insurance scheme.

In addition, public pension systems usually provide also a (quasi-) minimum guaranteed pension to those who do not qualify for the earnings-related scheme or have accrued only a small earnings-related pension. Minimum guaranteed pensions are either provided through earnings-related schemes or are means-tested and provided by a specific minimum pension scheme or through a general social assistance scheme.

Table II.1.1:   **Taxonomy of main public pension schemes across Member States**

Country	Type	Country	Type
BE	DB	LU	DB
BG	DB	HU	DB
CZ	DB	MT	Flat rate + DB
DK	Flat rate + DB	NL	Flat rate + DB
DE	PS	AT	DB
EE	DB	PL	NDC
IE	Flat rate + DB	PT	DB
EL[1]	Flat rate + DB + NDC	RO	PS
ES	DB	SI	DB
FR[2]	DB + PS	SK	PS
HR	PS	FI	DB
IT	NDC	SE	NDC
CY	PS	UK	Flat rate + DB
LV	NDC	NO	NDC
LT	DB		

(1) The public supplementary pension funds are NDC since 2015.
(2) Point system refers to the ARRCO and AGIRC pension schemes
DB: Defined benefit system.
NDC: Notional defined contribution scheme.
PS: Point system.
Source: Commission services, EPC.

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[36] Public pension expenditure include all public expenditure on pension and equivalent cash benefits granted for a long period, see Annex 2 for details on the coverage of the projections of public pension expenditure.

Pensions provided by occupational schemes are those that, rather than being statutory by law, are linked to an employment relationship with the scheme provider. However, in some countries, the occupational pension provision is broadly equivalent to earnings-related public pension schemes. A number of Member States, including Sweden and some new Member States such as Bulgaria, Estonia, Croatia Latvia, Lithuania, Hungary, Poland and Slovakia, have switched part of their public pension schemes into (quasi-) mandatory private funded schemes. Typically, this provision is statutory but the insurance policy is made between the individual and the pension fund. As a consequence, the insured persons have the ownership of pension assets. This means that the owner enjoys the rewards and bears the risks regarding the value of the assets. Participation in a funded scheme is conditional on participation in the public pension scheme and is mandatory for new entrants to the labour market (in Sweden for all non-retired taxpayers), while it is voluntary for older workers (in Lithuania it is voluntary for all). However some of these countries (Hungary, Slovakia and Poland) have recently decided to shift back a part of the private schemes again to public schemes.

The financing arrangements of pension systems also differ across countries. Employment related systems are financed entirely or largely from contributions (usually a percentage of earnings) made by employers, workers or both and are in most instances compulsory for defined categories of workers and their employers. Most public pension schemes work on a pay-as-you-go (PAYG) basis, whereby current contribution revenues are used for the payments of current pensions.

The government is "pro forma" the ultimate guarantor of many benefits. There is a considerable variation between countries regarding the extent to which contribution revenues cover all pension expenditures or just a certain part of it. In many countries, the national government participates in the financing of employment-related as well as other social security programs. In most countries, guaranteed minimum pensions are covered by general taxes and earnings-related schemes are often subsidised to varying degrees from general government funds. The government may indeed contribute through an appropriation from general

revenues based on a percentage of total wages paid to insured workers, finance part or all of the cost of a program, or pay a subsidy to make up any deficit of an insurance fund. In some cases, the government pays the contributions for low-paid workers. [37] Social security contributions and other earmarked income are kept in a dedicated fund and are shown as a separate item in government accounts.

Some specific schemes, notably public sector employees' pensions sometime do not constitute a well identified pension scheme but, instead, disbursements for pensions appear directly as expenditure in the government budget. On the other hand, some predominantly PAYG pension schemes have statutory requirements for partial pre-funding and, in view of the increasing pension expenditure, many governments have started to collect reserve funds for their public pension schemes.

While occupational and private pension schemes are usually funded, the degree of their funding relative to the pension promises may differ, due to the fact that future pension benefits can be related either to the salary and career length (defined-benefit system) or to paid contributions.

1.3. COVERAGE OF PENSION PROJECTIONS

Pension systems and arrangements are very diverse in the EU Member States, making it difficult to reliably project pension expenditure on the basis of one common model, to be used for all the 28 EU Member States. As for the past exercises, National models were used reflecting in more detail the institutional features of the pension systems in individual countries, highlighting those that should have relevant bearing on the future budgetary outcomes.

Using different, country-specific, projection models may nevertheless introduce an element of heterogeneity of the projection results. Therefore, in order to ensure high quality and comparability of the pension projection results, an in-depth peer review has been carried out by the AWG and the

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[37] These arrangements are separate from obligations the government may have as an employer under systems that cover government employees.

Commission. The projected figures have been discussed and validated with regard to adherence to the agreed methodology and macroeconomic assumptions, described in Chapter I of this report, and interpretation of the legislation in force in each Member States. [38] Annex II provides details on the coverage of the projections.

In order to ensure high quality and comparability of the pension projection results, an in-depth peer review was carried out by the AWG and the Commission at four meetings during September-December 2014. The projection results were discussed and revised where deemed necessary. The projections incorporate pension legislation in place at that time. No further reform measures had been legislated in EU Member States by 1 April 2015 (except PT, see note to the Table II.1.5).

It was found that in some cases, the huge burden of data requested and/or the common macroeconomic assumptions, poses some challenges for the Member States projection models. The table in the Section 1.10 provides an overview of those Member States with scope for improvement in view of the next projection round.

1.4. CHARACTERISTICS OF PENSION SYSTEMS IN EUROPE

1.4.1. Pension system expenditures

The main part of pension entitlements is accrued in the (first) public pension pillar in most Member States. Consequently, the projection exercise has a major focus on public pension expenditure in the first pillar with its main components (minimum, old-age, early retirement, disability and survivors' pensions). On top of that, several Member States have introduced occupational pension schemes and/or private mandatory and voluntary schemes in the 2nd and/or 3rd pillar of their pension systems.

An overview of the main characteristics of the existing pension schemes in Member States is given in Table II.1.2. It shows whether pensions

are provided on a flat-rate (probably means-tested) or on an earnings-related basis, whether the enrolment in the scheme is mandatory or voluntary, etc. It also informs about the coverage of Member States' current pension projections.

The coverage of public pensions is complete, with the exception of Slovenia that does not project expenditure on minimum pension and/or social allowance. In some countries (e.g. Ireland, the United Kingdom and Hungary), disability benefits are not considered as pensions.

The size and development of public pension expenditure in the future is not only driven by demographic factors, but also by the generosity of the system. Three important drivers of future spending are: i) the definition of pensionable earnings, ii) the valorisation rule as well as iii) the indexation rule (see Table II.1.3). [39]

Following reforms over the last decade, a large number of Member States applies pension benefit formulas in which full career earnings are taken as a reference to calculate pension entitlements, hence realising a close relationship between contribution career and pension benefit. In terms of financial sustainability, this leads – *ceteris paribus* – to lower pension expenditures in comparison to countries that calculate pension benefits with a pensionable earnings reference that is restricted to a specific amount of best earnings years or only years at a rather mature stage of the career. One can presume as a rule that a selection of best years or late career years leads to higher pension entitlements as wages are generally higher at the end of the career in comparison to the starting wage. In countries with flat-rate pensions, the pensionable earnings reference is irrelevant (Denmark, the Netherlands, Ireland and United Kingdom).

Valorisation rules define how pension contributions paid during the working life are indexed before retirement. Several countries valorise pension contributions in relation to wage developments (Bulgaria, the Czech Republic, Germany, Spain, Cyprus, Luxemburg, Hungary, Austria, Slovenia, Slovakia, Sweden and Norway).

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[38] For further details on the legislation in place see the EC-EPC, The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies, European Economy No. 8/2014,
http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf

[39] Two further decisive drivers are retirement ages and accrual rates. Both aspects will be discussed separately at a later stage in this chapter.

Other countries apply a mix of wages and prices (Greece, Croatia, Romania, Finland and UK) or a mix of wages (or comparable variables) and GDP growth (Italy) or a pure price valorisation (Belgium, France and Portugal).

One additional way of looking at pensionable earnings reference and valorisation rule is from the angle of the replacement rate and the personal income distribution. Different mixes of the two will result into a higher or lower pension benefit compared to the wage received when working (replacement rate). [40] This will determine whether pensioners will be, at retirement, on a higher or lower percentile of the income distribution compared to the pre-retirement position. Under the wage evolution assumptions described above, Member States who target to preserve the average relative position of the new pensioners in the personal income distribution, tend to consider as reference for the pensionable earning a full career wage and to apply a wage valorisation rule. Using the best wages during a career or an average based on recent years as reference for the pensionable earnings tend to preserve the relative income of the pensioners compared to the distribution of wages at retirement. Valorisation rules that do not consider (or do it just partially) the increase in labour productivity, result in lower pension benefits and hence a lower position in the income distribution when retired.

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[40] The accrual rate and the contributory period are the other determinants of the pension benefit into an earnings-related system.

Table II.1.2:   **Pension schemes in EU Member States and projection coverage**

Country	Public pensions [1]					Private pension scheme		
	Minimum Pension[2]	Old-age pensions	Early retirement pensions	Disability pensions	Survivors' pensions	Occupational pension scheme	Mandatory private individual	Voluntary private individual
BE	MT - SA	ER	ER	ER priv FR self-emp	ER	M* priv V* self-emp	X	Yes*
BG	MT - SA	ER	ER	ER	ER	V*	Yes*	Yes*
CZ	FR	ER	ER	ER	ER	X	X	Yes*
DK	FR & MT suppl.	FR & MT suppl.	V	FR	FR	Quasi M	X	Yes*
DE	MT - SA	ER	ER	ER	ER	V*	X	Yes*
EE	MT - SA	ER	ER	ER	ER	M*	Yes*	Yes*
IE	MT - FR & SA	FR - ER	FR - ER/MT	FR - ER/MT	FR - ER/MT	M pub V* priv	X	Yes*
EL	MT - FR	FR & ER	FR & ER	FR & ER	FR & ER	X	X	Yes*
ES	MT	ER	ER	ER	ER	V	X	Yes
FR	MT - SA	ER	ER	ER	ER - MT	V*	X	Yes*
HR	ER	ER	ER	ER	ER	V*	M*	Yes*
IT	MT - SA	ER	ER	ER	ER	V*	X	Yes*
CY	MT & ER	ER	ER	ER	ER	M* - pub V* - priv	X	X
LV	FR - SA	ER	ER	ER	ER	X	Yes*	Yes*
LT	SA	ER	ER	ER	ER	X	quasi M	Yes*
LU	MT - SA	ER	ER	ER	ER	V*	X	Yes*
HU	MT - SA	ER	ER	ER	ER	V*	X	Yes*
MT	MT - SA	FR & ER	X	FR & ER	FR & ER	M*	X	Yes*
NL	SA	FR	X	ER	FR	M	X	Yes*
AT	MT - SA	ER	ER	ER	ER	M*	X	Yes*
PL	ER	ER	ER	ER	ER	V*	Yes*	Yes*
PT	MT - SA	ER	ER	ER	ER	M & V	X	Yes*
RO	SA	ER	ER	ER	ER	X	Yes	Yes
SI	X	ER	ER	ER	ER	V*	X	Yes*
SK	MT - SA	ER	ER	ER	ER	X	Yes*	Yes*
FI	MT	ER	ER	ER	ER	V*	X	Yes*
SE	MT	ER	ER	ER	ER	quasi-M	Yes	Yes
UK	FR & MT - SA	FR -ER, V	X	ER	ER	V*	X	Yes*
NO	FR	ER	X	ER	ER	M*	X	Yes*

(1) Public pension expenditure include all public expenditure on pension and equivalent cash benefits granted for a long period, see Annex 2 for details on the coverage of the projections of public pension expenditure.
(2) Minimum pension corresponds to Minimum pension and other social allowances for older people not included elsewhere.
MT - Mean-tested
FR - Flat rate
ER - Earnings related
SA - Social allowance/assistance
V - Voluntary
M - Mandatory
X - Does not exist
* Not covered in the projection
Source: Commission services

Table II.1.3:   **Key parameters of pension system in Europe (old-age pensions)**

Country	Pensionable earnings reference	General valorisation variable(s)	General indexation variable(s)
BE	Full career	Prices	Prices and living standard
BG	Full career	Wages	Prices and wages
CZ	Full career	Wages	Prices and wages
DK	Years of residence	Not applicable	Wages
DE	Full career	Wages	Wages plus sustainability factor
EE	Full career	Social taxes	Prices and social taxes
IE	Flat rate	Not applicable	No fixed rule
EL	Full career	Price and wages	Prices and GDP (max 100% prices)
ES	Last 25 years	Wages	Index for pension revaluation
FR	25 best years (CNAVTS)	Prices	Prices
HR	Full career	Price and wages	Price and wages
IT	Full career	GDP	Prices
CY	Full career	Wages	Prices and wages
LV	Full career	Contribution wage sum index	Prices and wages
LT	25 best years	Yearly discretionary decision	Yearly discretionary decision
LU	Full career	Wages	Prices and wages
HU	Full career	Wages	Prices
MT	10 best of last 40 years	Cost of living	Prices and wages
NL	Years of residence	Not applicable	Wages
AT	40 best years	Wages	Prices
PL	Full career	NDC 1st: Wages, NDC 2nd: GDP	Prices and wages
PT	Full career up to a limit of 40 years	Prices	Prices and GDP
RO	Full career	Prices and wages until 2030	Prices and wages until 2030
SI	Best consecutive 24 years	Wages	Prices and wages
SK	Full career	Wages	Prices and wages
FI	Full career	Prices and wages	Prices and wages
SE	Full career	Wages	Wages
UK	Years of insurance contributions	Wages	Wages
NO	Full career	Wages	Wages

(1) A more detailed and comprehensive description of the EU Member States pension systems is in The 2015 Ageing Report – Underlying assumptions and projections methodologies, European Economy 8 – 2014.
BG Pensionable earnings reference is full career starting from 1997. 3 Best years before 1997
CZ Pensionable earnings reference is full career back to 1986. Currently 30 years to be considered.
IE A price and wage indexation rule has been assumed in the projections.
EL Pensionable earnings reference is full career starting from 2011. Before 2011: best 5 of last10 years/ last 5 years.
ES Pensionable earnings reference is last 25 years as of 2022. The maximum value of the valorisation rule is close to prices. The IPR is established annually at a level consistent with a balanced budget of the Social Security system over the medium run. Depending on the balance of the system the indexation will be less than price (budget deficit) or price + 0.5% (budget balance).
FR The pensionable earnings reference is full career in AGIRC and ARRCO. Valorisation rule and indexation rules are price - 1% in both AGIRC and ARRCO in 2014 and 2015. AGIRC: Association générale des institutions de retraite des cadres; ARRCO: Association pour le régime de retraite complémentaire des salariés; CNAVTS: Caisse nationale de l'assurance vieillesse des travailleurs salariés.
LT Pensionable earnings reference is 25 best years after 1994 and 5 best years for the period 1984-1993. A wage indexation rule has been assumed in the projections.
LU Indexation rule is wages if sufficient financial resources available, otherwise only cost of living indexation.
HU Pensionable earnings reference is full career back to 1988.
MT Pensionable earnings reference rule applies to people born as of 1962
AT Pensionable earnings reference is converging towards the best 40 years in 2028. Currently 25 best years
PT Pensionable earnings reference is full career as of 2002. 10 best years out of last 15 before 2002. Price and wage valorisation rule applies to earnings registered between 2002 and 2011
RO Price valorisation and indexation after 2030.
SK Pensionable earnings reference is full career back to 1984.
NO Indexation rule is wage growth minus 0.75 p.p.
UK Triple-lock indexation (highest of average earnings, CPI or 2.5%) is a commitment of the current government, but is not enshrined in law.
Source: Commission services.

Once the average replacement rate at retirement is determined, the additional issue is the indexation of pensions in payment, i.e. how the pension preserves its value over time. Hence, it will state whether the pensioner can expect to maintain its relative position over the personal income distribution over time. In the projections, wages are assumed to evolve in line with price and labour productivity. A nominal wage indexation rule will enable the pensioners to maintain their relative position in the income distribution. On the contrary, partial nominal wage indexation or price indexation will make the pensioners slide over time towards lower percentiles of the income

distribution. Hence, in the aggregate, the generosity of a pension system is affected by:

1. the average replacement rate at retirement and

2. the evolution of the benefit ratio (influenced by indexation rules). [41]

Indexation rules applied in the Member States are on average slightly lower than valorisation rules. A majority of countries (21) in the EU applies indexation rules for pensions in payment that do not fully reflect a 1:1 relationship with nominal wage increases: some apply a price indexation rule (France, Italy, Hungary and Austria), others an indexation mix of wages (or comparable variables) and prices (Belgium, Bulgaria, the Czech Republic, Estonia, Croatia, Cyprus, Latvia, Luxembourg, Malta, Poland, Romania, [42] Slovenia, Slovakia and Finland) or a mix of GDP growth and prices (Greece, Portugal). Since 2011, the United Kingdom had applied annually a "triple guarantee" (the so called "triple-lock" system), with pensions being increased by the highest of wage growth, inflation or 2.5%; however, indexation to wages, which is the minimum required by law, has been assumed in the projections.

In addition, some countries (Germany, Finland, Spain, Italy, Latvia, Poland, Portugal, Sweden and Norway) have introduced a "sustainability factor" and/or other "reduction coefficients" into the calculation mechanism that determines the amount of pension entitlements. These factors change the size of the pension benefit, depending on expected demographic changes such as the life expectancy at the time of retirement or the ratio between contributions and pensions (see also Box II.1.1).

Moreover, in a few countries there is no explicitly legislated rule guiding the indexation of (minimum) pension benefits (such as Germany, Ireland and Lithuania). In these cases, an approximation of the expected indexation has been

made for the purpose of the long-term projection so as to reflect effective constant policy. [43]

The legislated indexation rule is of strategic relevance when dealing with the provision of minimum pensions. A more detailed analysis of the evolution of projected minimum pension is presented in section 1.7.3 of this chapter.

Large differences in pension legislation can be observed not only with respect to indexation rules but also concerning official retirement ages and incentives to postpone retirement. Table II.1.4 shows the statutory retirement age, the early retirement age (in brackets) and reports whether the pension system has penalties for early retirement and bonuses to provide incentives for postponing retirement.

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[41] See par. 1.7.2 of this chapter for a more detailed analysis of the indicators.
[42] Till 2030, than price indexation.

[43] Annex III provides an overview of those cases where the legal indexation rule either does not exist or differs from the rules applied in the projection.

Box II.1.1: Automatic balancing mechanisms, sustainability factors and links to life expectancy in pension systems

A few Member States that reformed their pension systems in the recent past have formally introduced an "automatic balancing mechanism" and/or other "sustainability factor (benefit linked to life expectancy)" into the specification that determines the amount of pension benefits (Portugal and most recently Spain). The first one copes with the fact that the pension liability, as a main rule, is not indexed with the internal rate of return of the pension system and thus potentially financially unstable. The mechanism ensures that the system will be able to finance its obligations by reducing the indexation or by increasing the contribution until the financial stability is restored. The second instrument consists of introducing a component that changes the size of the pension benefit depending on expected demographic changes such as the life expectancy at the time of retirement. In most of the cases, this leads to a reduction in pension entitlements, having a positive impact on the sustainability of the public pension system as well as on public finances.

In addition, several countries have introduced a link between retirement ages and life expectancy (or age) in their pension system legislation (most recently the Slovak Republic). This approach presents an effective tool for increasing sustainability in public pension systems. Moreover, by increasing retirement ages, people are assumed to accrue more pension rights and thus a higher pension provided that the labour market allows for working longer. Thus, there is also a positive effect on pension adequacy.

Country	Automatic balancing mechanism	Sustainability factor (benefit link to life expectancy)	Retirement age linked to life expectancy
Germany	X		
Finland		X	
Spain	X	X	
Italy		X	X
France*		X	
Latvia		X	
Poland		X	
Portugal		X	X
Sweden	X	X	
Norway		X	
Cyprus			X
Denmark**			X
Greece			X
Netherlands			X
Slovak Republic			X

Note: In addition to the reported countries above, in CZ and UK the legislated increase in retirement age to cater for expected life expectancy increases but no automatic rule is legislated. In the UK, the State Pension age has been legislated to rise up to 68 by 2046. Moreover, the *Pensions Act 2014* provides for a regular review of the State Pension age, at least once every six years, taking into account life expectancy. The first review must be completed by May 2017.

*Pension benefits evolve in line with life expectancy, through the coefficient of 'proratisation'; it has been legislated until 2035 and not thereafter.
**Subject to parliamentarian decision.

Box (continued)

Germany: The pension point value, which is generally adjusted annually in relation to the gross wage growth can be altered further on (mainly lowered) by two additional factors: the contribution factor and the sustainability factor:

- The *contribution factor* accounts for changes in the contribution rate to the statutory pension scheme and to the subsidised (voluntary) private pension schemes. An increase of contribution rates will reduce the adjustment of the pension point value.

- The *sustainability factor* that measures the change of the number of (standardized) contributors in relation to the number of (standardized) pensioners, links the adjustment of the pension point value to the changes in the statutory pension scheme's dependency ratio, the ratio of pensioners to contributors.

Additionally, Germany introduced a specific *"pension assurance law"*. The pension point value will not decrease in case of decreasing wages. Theoretical decreases of the pension point value are temporarily frozen and will be counterbalanced with future lower increases of the pension point value starting from the year 2011.

Finland: The *life-expectancy coefficient* adjusts the pensions upon retirement to the changes in longevity as of 2010. The life expectancy coefficient is the difference of the remaining expected lifetime at age 62 in a particular year compared to the base year 2009, based on population statistics. It cuts the initial pension benefit accordingly. It is possible to counteract the effect of the life expectancy coefficient by postponing retirement.

Spain: The *sustainability factor* is an automatic link between the amount of retirement pension benefits and developments in life expectancy of pensioners. It will be applied only once on each pensioner when determining the initial amount of a new pension. It will come into effect in 2019. *New index for pension revaluation (IPR)*: All contributory pensions, including minimum pensions and civil servants' pensions, will increase annually according to the Index for Pension Revaluation, instead of the CPI indexation traditionally used. Starting from 2014 the index will be established annually in the National Budget Law at a level consistent with a balanced budget of the Social Security system over the medium run.

Italy: Under the NDC regime the amount of pension is calculated as a product of two factors: the total lifelong contributions, capitalised with the nominal GDP growth rate (five-year geometric average) and the *transformation coefficient*, the calculation of which is mainly based on the probability of death, the probability of leaving a widow or widower, and the average number of years for which a survivor's benefit will be drawn. As a consequence, pension amount is proportional to the contribution rate and inversely related to retirement age - the lower the age, the lower the pension and vice-versa. The transformation coefficients are currently available for the age bracket 57-70. For retirement ages falling below (i.e. disability pensions) or above the range, the lowest and the highest transformation coefficients are respectively applied. Transformation coefficients are updated every three years (every two years as of 2021).

Contribution and age requirements for early and old age pensions, and old age allowances are *indexed to changes in life expectancy at 65*, as measured by the National Statistical Institute over the preceding three years. Indexation to life expectancy was first applied in 2013 by a purely administrative procedure. Subsequent retirement age indexations are envisaged every 3 years in line with the timing for the revision of the transformation coefficients (every two years as of 2021).

France: The amount of pensions in the basic private sector (CNAVTS) is partly depending on the *coefficient of proratisation* "Min (1,D/T)" with D being the contributory period and T the reference length. The pension is reduced in due proportion whenever D < T. For people born in 1953 (who will be 63 in 2015), T equals 41.25 years, but *this value will increase in line with life expectancy* after the 2003 and 2014 reforms. This value will increase up to 43 years for people born in 1973.

Box (continued)

Latvia, Poland, Sweden and Norway: The NDC pension systems in Latvia, Poland, Sweden and Norway work on an actuarial basis. At the time of retirement an annuity is calculated by dividing the individual's account value by a *divisor reflecting life expectancy* at the specific date of retirement. An *increase in life expectancy reduces the annual benefit* so that the present value of total expected pension benefits is nearly invariant to changes in the cohort's remaining life expectancy and the individual's retirement age. In general, the individual can counteract the negative effect on the annuity caused by increasing life expectancy by postponing the date of retirement, thus giving strong incentives to prolong the working career.

Moreover, regardless of the demographic or economic development, the Swedish pension system ensures that it will be able to finance its obligations with a fixed contribution rate and fixed rules for calculation of benefits. This is done via an *automatic balancing mechanism* that is activated if the current liabilities of the system are greater than the calculated assets. In this case the indexation is reduced until the financial stability of the system is restored.

Portugal: As from 2015, the legal age for the entitlement to the old-age pensions shall vary according to the evolution of life expectancy at the age of 65. The statutory retirement age of 66 has been set by the Government for 2015. Every year the retirement age is increased by 2/3 of the increase in life expectancy at 65 registered 2 years before.

The sustainability factor adjusts pensions upon retirement to changes in life expectancy. The sustainability factor is given by the ratio between the average life expectancy at the age of 65 in 2000 (previously 2006) and the one that will occur in the year before the pension claim. The ratio is updated on an annual basis by the National Statistics Institute. According to the recent reform it is applied to individuals for whom the old age pension is attributed before the legal retirement age.

Cyprus: The statutory retirement age will be automatically adjusted every 5 years in line with changes in life expectancy at the statutory retirement age. The reform is to be applied for the first time in 2018 and the first revision will cover the period 2018-2023.

Denmark: *Changes in the statutory retirement age for old-age pension due to increases in life expectancy* have to be confirmed by Parliament 15 years before they take effect (12 years for changes in the VERP age). In the projection, it is assumed that Parliament confirms these increases in the retirement age.[1] A specific formula for calculating the pension age on the basis of future observed mean life expectancy for 60 year olds is enshrined in the legislation. Changes in the pension age shall be calculated every 5 years – based on the latest observed life expectancy – but confirmed by Parliament 15 years before they take effect for old-age pension (12 years for changes in the VERP age).

Greece: As from 2021, the minimum and statutory *retirement ages* will be *adjusted in line with changes in life expectancy* every three years. Upon its first implementation the change within the 2010-2020 ten-year period shall be taken into account. The (public) supplementary pension scheme became an NDC system on 1.1.2015.

Netherlands The eligibility age for the public pension state pension AOW will increase to 67 in 2023. After that year it will be linked to the remaining life expectancy at 65, as projected by Statistics Netherlands. Moreover, the increase in the eligibility age for occupational pensions will also be linked to life expectancy, using the same formula as used for the first pillar pensions.

Slovak Republic: Based on the 2012 pension reform, as from 2017, the retirement age will be automatically annually increased by the y-o-y difference of 5-year moving average of the unisex life expectancy.

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[1] In case the parliament will not confirm the change in retirement age based on an increase in life expectancy, this would imply an underestimation of public pension expenditure in the Danish projections.

Box (continued)

United Kingdom. The Government has legislated for a review of the State Pension age (SPa) to take place at least once every six years. This review would be based on a technical assessment by the "Government Actuary's Department" and an additional report considering other relevant factors. Details of the core principle to guide that review were set out in Autumn Statement 2013: that people should expect to spend on average a third of their adult life (beginning from age 20) in receipt of the state pension, with at least ten years' notice provided and changes being phased in over two years. As legislated in the Pensions Act 2014, SPa is expected to rise up to 68 by 2046. Further increases in line with life expectancy gains would require primary legislation, which has not occurred so far.

Source: Commission services, EPC and information provided by the Member States.

Table II.1.4:   **Statutory retirement ages, early retirement (in brackets) and incentives to postpone retirement**

	MALE				FEMALE				Incentives	
	2013	**2020**	**2040**	**2060**	**2013**	**2020**	**2040**	**2060**	**Penalty**	**Bonus**
BE	65 (60.5)	65 (62)	65 (62)	65 (62)	65 (60.5)	65 (62)	65 (62)	65 (62)		X
BG	63.7 (63.7)	65 (65)	65 (65)	65 (65)	60.7 (60.7)	62.7 (62.7)	63 (63)	63 (63)		X
CZ*	62.7 (59.7)	63.7 (60)	66.5 (61.5)	69.3 (64.3)	59.7 (56.7)	61.7 (58.7)	66.5 (61.5)	69.3 (64.3)	X	X
DK*	65 (60)	66 (63)	70 (67)	72.5 (69.5)	65 (60)	66 (63)	70 (67)	72.5 (69.5)		
DE	65.3 (63)	65.8 (63)	67 (63)	67 (63)	65.3 (63)	65.8 (63)	67 (63)	67 (63)	X	X
EE	63 (60)	63.8 (60.8)	65 (62)	65 (62)	62 (59)	63.8 (60.8)	65 (62)	65 (62)	X	X
IE	65 (65)	66 (66)	68 (68)	68 (68)	65 (65)	66 (66)	68 (68)	68 (68)		
EL*	67 (62)	67 (62)	69.9 (64.9)	71.9 (66.9)	67 (62)	67 (62)	69.9 (64.9)	71.9 (66.9)	X	
ES	65 (63)	65.8 (63)	67 (63)	67 (63)	65 (63)	65.8 (63)	67 (63)	67 (63)	X	X
FR	65.8 (60.8)	67 (62)	67 (62)	67 (62)	65.8 (60.8)	67 (62)	67 (62)	67 (62)	X	X
HR	65 (60)	65 (60)	67 (62)	67 (62)	60.8 (55.8)	62.5 (57.5)	67 (62)	67 (62)	X	X
IT*	66.3	66.8	68.4 (65.4)	70 (67)	62.3	66.8	68.4 (65.4)	70 (67)		
CY*	65 (63)	65 (63)	67 (65)	69 (67)	65 (63)	65 (63)	67 (65)	69 (67)	X	
LV	62 (60)	63.8 (61.8)	65 (63)	65 (63)	62 (60)	63.8 (61.8)	65 (63)	65 (63)		
LT	62.8 (57.8)	64 (59)	65 (60)	65 (60)	60.7 (55.7)	63 (58)	65 (60)	65 (60)	X	X
LU	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)	65 (57)		
HU	62 (62)	64.5 (64.5)	65 (65)	65 (65)	62 (62)	64.5 (64.5)	65 (65)	65 (65)		X
MT	62 (61)	63 (61)	65 (61)	65 (61)	62 (61)	63 (61)	65 (61)	65 (61)		
NL*	65.1 (65.1)	66.3 (66.3)	69.3 (69.3)	71.5 (71.5)	65.1 (65.1)	66.3 (66.3)	69.3 (69.3)	71.5 (71.5)		
AT	65 (62)	65 (62)	65 (62)	65 (62)	60 (58.8)	60 (60)	65 (62)	65 (62)	X	X
PL	65.3 (65.3)	67 (67)	67 (67)	67 (67)	60.3 (60.3)	62 (62)	67 (67)	67 (67)		
PT*	65 (55)	66.4 (55)	67.7 (55)	68.8 (55)	65 (55)	66.4 (55)	67.7 (55)	68.8 (55)	X	X
RO	64.7 (59.7)	65 (60)	65 (60)	65 (60)	59.7 (54.7)	61.4 (56.4)	63 (58)	63 (58)		
SI	65 (58.3)	65 (60)	65 (60)	65 (60)	63.5 (58)	65 (60)	65 (60)	65 (60)	X	X
SK*	62 (60)	62.8 (60.8)	65.4 (63.4)	67.8 (65.8)	58.3 (56.3)	62.8 (60.8)	65.4 (63.4)	67.8 (65.8)	X	X
FI	66 (62)	66 (63)	66 (63)	66 (63)	66 (62)	66 (63)	66 (63)	66 (63)	X	X
SE	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)	67 (61)		
UK	65 (65)	66 (66)	66.7 (66.7)	68 (68)	61 (61)	66 (66)	66.7 (66.7)	68 (68)		X
NO	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)	67 (62)		

(1) An in-depth peer review was carried out by the AWG and the Commission at four meetings during September-December 2014. The projections incorporate pension legislation in place at that time. No further reform measures has been legislated in EU Member States by 1 April 2015 (except Portugal).Statutory retirement ages and early retirement ages as reported in the country fiche. Age requirement for early retirement is not necessarily the only eligibility criteria and it is often associated to contribution requirement (or other equivalent parameters) significantly higher than those foreseen for the statutory retirement age.
CZ - Statutory retirement age depending on the number of children. Values for women with 2 children are reported.
 IT - In 2013, female SRA refers to private sector employees (the self-employed 63.8, public employees 66.3). In bracket the minimum age for early retirement under the NDC system (a minimum amount of pension of 2.8 times the old age allowance is also required). Early retirement is also allowed regardless of age, with a contribution requirement of 42.5 years (41.5 for female) in 2014, indexed to changes in life expectancy.
PT - Early retirement suspended for employees in the social security scheme in 2013. Since January 2015 retirement age is reduced by 4 months a year exceeding the 40th for workers with insurance careers longer than 40 years (applied to worker aged more than 60 in 2015). Reform not considered in the pension projections.
SE - Retirement age flexible from age of 61 without an upper limit. Under the Employment Protection Act, an employee is entitled to stay in employment until his / her 67th birthday.
*Countries where statutory retirement age is legislated to increase in line with increase in life expectancy. Reported retirement ages calculated according to life expectancy increases as from EUROPOP 2013 demographic projections.
Actuarial equivalence is not considered as a penalty/bonus.
Source: Commission services, EPC.

These 3 parameters of the pension system, the statutory retirement age, the early retirement schemes and the presence of incentives, influence the retirement behaviour of individuals. [44] Early retirement schemes and/or other government measures that provide pension income before reaching the official retirement age threshold create an opportunity to exit the labour market in advance. One way to increase the effective exit age from the labour market (and also the effective retirement age) in line with an increase in the statutory retirement would hence be to extend the required years of contributions or to improve incentives to stay longer on the labour market, e.g. by restricting early retirement as well increasing employment opportunities for older workers or applying penalties and bonuses in the pension calculation for those who exit the market earlier/later (e.g. France). Another way is to introduce financial incentives to stay longer in the labour market to be entitled to a higher amount of pensions after retirement.

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[44] Needless to say the exit from the labour market is influenced also by other policies and institutional factors like the adoption of active labour market policy, active ageing, etc..

Table II.1.5:   **Average effective exit age from the labour market by gender**

	MALE					FEMALE				
	2014	2020	2040	2060	Change 2014 -2060	2014	2020	2040	2060	Change 2014 -2060
BE	61.9	62.1	62.1	62.1	0.2	62.1	62.3	62.4	62.4	0.3
BG	63.8	64.8	64.8	64.8	1.0	62.0	62.5	62.5	62.5	0.5
CZ*	63.1	63.4	64.9	66.3	3.2	60.7	61.4	64.4	66.3	5.6
DK*	65.6	66.2	67.3	67.9	2.3	63.4	65.3	66.1	67.7	4.4
DE	65.1	65.4	65.7	65.7	0.6	64.2	64.6	65.3	65.3	1.0
EE	64.4	64.7	65.4	65.4	1.0	64.2	64.6	65.0	65.0	0.8
IE	64.9	65.3	66.0	66.0	1.2	64.8	65.4	66.1	66.1	1.2
EL*	64.4	64.9	66.9	67.5	3.1	64.5	64.8	66.3	67.1	2.6
ES	62.8	64.8	66.1	66.2	3.4	64.1	65.8	66.6	66.7	2.6
FR	60.8	62.3	63.1	63.1	2.3	60.9	62.3	63.1	63.1	2.2
HR	62.4	62.6	64.0	64.0	1.6	61.4	61.9	63.7	63.7	2.3
IT*	62.4	65.9	66.4	67.3	4.9	62.1	65.5	66.4	67.5	5.4
CY*	64.9	66.4	67.0	67.7	2.7	62.8	65.6	66.4	67.4	4.5
LV	64.6	65.0	65.3	65.3	0.7	64.0	64.7	65.3	65.3	1.3
LT	62.8	63.6	64.3	64.3	1.5	61.9	62.8	63.8	63.8	1.9
LU	60.2	60.2	60.2	60.2	0.0	60.9	60.9	60.9	60.9	0.0
HU	63.0	64.7	65.3	65.3	2.3	63.0	64.4	64.9	64.9	1.9
MT	62.0	63.1	64.0	64.0	2.0	61.0	62.0	62.6	62.6	1.6
NL*	65.5	66.6	67.5	68.1	2.7	63.7	64.6	65.5	66.2	2.5
AT	62.5	64.0	64.2	64.2	1.8	61.0	62.2	63.2	63.2	2.1
PL	63.9	66.0	66.0	66.0	2.1	60.2	62.0	65.8	65.8	5.6
PT*	64.3	65.3	66.5	66.7	2.4	63.9	65.1	66.0	66.2	2.3
RO	64.0	64.0	64.0	64.0	0.0	62.3	62.4	62.6	62.6	0.3
SI	62.5	64.1	64.1	64.1	1.6	60.0	63.6	63.6	63.6	3.7
SK*	61.6	61.9	63.6	66.2	4.6	59.7	61.7	63.3	65.9	6.2
FI	63.6	64.1	64.1	64.1	0.5	63.1	63.9	63.9	63.9	0.7
SE	65.8	65.6	65.6	65.6	-0.2	64.5	64.4	64.4	64.4	0.0
UK	64.9	64.9	65.6	65.8	0.9	63.6	64.2	65.8	65.8	2.2
NO	65.6	65.6	65.6	65.6	0.0	64.7	64.7	64.7	64.7	0.0
EU	63.6	64.4	65.0	65.3	1.7	62.6	63.6	64.5	64.8	2.3
EA	63.2	64.2	64.9	65.2	2.0	62.6	63.8	64.5	64.8	2.3

(1) In order to ensure high quality and comparability of the pension projection results, an in-depth peer review was carried out by the AWG and the Commission at four meetings during September-December 2014. The projections incorporate pension legislation in place at that time. No further reform measures has been legislated in EU Member States by 1 April 2015 (except Portugal, see the Note to Table II.1.4). The average effective exit age from the labour market calculation is based on the Cohort Simulation Model cumulated exit probabilities for the reference age group 51-74.
*Countries where the statutory retirement age is legislated to increase in line with increase in life expectancy.
Source: Commission services, EPC.

Average effective exit ages from the labour market as the result of the factor mentioned above, are shown in Table II.1.5. In most of the countries, latter figures are lower than the statutory retirement age.

The statutory retirement age under current legislation (as from Table II.1.4) and the effective exit age from the labour market (as from Table II.1.5) have been reported by gender. ([45]) As a result of recent reforms in many Member States, retirement ages for males and females will gradually converge for all Member States except for Bulgaria and Romania. In almost every Member State, statutory retirement ages and

effective exit ages from the labour market will rise substantially until 2060, with major steps often taking place within this decade. When looking at EU and EA aggregates the average effective exit age for both men and women is estimated to increase by almost 1 year by 2020 and another additional year in the following 40 years. This is either due to already legislated pension reforms setting a specific retirement age in the future or to the fact that Member States have introduced a connection between retirement ages and life expectancy in their legislations (Czech Republic, Denmark, Greece, Italy, Cyprus, Netherland, Portugal and the Slovak Republic). ([46]) Yet, in most of the Member States, the rise in the statutory retirement ages does not fully reflect the total expected change in life expectancy.

([45]) The statutory retirement ages are applied as such in the projections. Figures concerning the average effective exit age from the labour market for 2014 - 2060 are projected figures based on the commonly agreed macroeconomic assumptions for this projection round and the Cohort Simulation Model.

([46]) See also Box II.1.1 on sustainability factors in pension systems.

Table II.1.6:   **Duration of retirement by gender**

	MALE					FEMALE				
	2014	2020	2040	2060	Change 2014 -2060	2014	2020	2040	2060	Change 2014 -2060
BE	20	20.7	22.9	24.9	4.9	23.7	24.4	26.4	28.3	4.6
BG	14.8	15	17.7	20.3	5.5	19.9	19.9	22.6	25.2	5.3
CZ*	17.2	18	19	20.4	3.2	22.7	23.5	23.2	23.6	0.9
DK*	16.9	17.5	18.7	19.7	2.8	22	21.1	22.4	22.6	0.6
DE	18.1	18.7	20	21.8	3.7	21.9	21.7	23.7	25.6	3.7
EE	15.6	15.9	18.5	21	5.4	21	20.9	23.1	25.1	4.1
IE	18.2	18.8	19.9	21.7	3.5	21.1	21.8	23	24.9	3.8
EL*	18.9	18.8	19.2	20.1	1.2	21.8	21.5	22.6	23.6	1.8
ES	20.2	19.3	20.3	22	1.8	23.5	22.2	22.9	24.5	1
FR	22.1	21.9	23	24.8	2.7	26.5	26.1	26.9	28.4	1.9
HR	17.2	17.3	19.2	21.7	4.5	22.3	22.2	22.8	25.1	2.8
IT*	21	18.3	20.1	20.9	-0.1	24.7	22.6	23.5	23.3	-1.4
CY*	18.4	18.1	19.1	19.9	1.5	22.7	20.5	22.4	23.3	0.6
LV	13.9	14.8	17.7	20.4	6.5	19.3	19.4	21.9	24.2	4.9
LT	15.5	15.9	18.8	21.5	6	21.7	21.7	23.3	25.5	3.8
LU	22.6	23.3	25.4	27.3	4.7	25.6	26.2	28.1	29.8	4.2
HU	15.8	15.5	18.2	20.8	5	19.8	19.9	21.7	24.1	4.3
MT	20.7	20.4	21.5	23.3	2.6	24.9	24.7	25.8	27.6	2.7
NL*	18.1	17.1	18.1	19.8	1.7	21.9	21.7	22.8	24.6	2.7
AT	20.3	19.4	21.4	23.3	3	24.7	24.5	25.6	27.4	2.7
PL	16.2	15.7	18.2	20.5	4.3	23.8	22.9	21.9	24	0.2
PT*	18.5	18.3	19.5	20.6	2.1	22.2	21.9	22.9	24.7	2.5
RO	15.3	16.2	18.9	21.5	6.2	20.2	21.1	23	25.6	5.4
SI	18.7	18.7	20.9	22.9	4.2	25.3	22.5	24.5	26.4	1.1
SK*	16.8	17.7	19.1	20	3.2	22.7	21.9	23.6	23.3	0.6
FI	18.6	19.3	21.3	23.2	4.6	23.3	23	24.9	26.6	3.3
SE	17.9	18.4	20.2	21.8	3.9	22.1	22.7	24.7	26.5	4.4
UK	18.5	19.1	20.1	21.8	3.3	21.8	22.5	22.8	24.6	2.8
NO	17.7	18.2	20	21.7	4	21.2	21.8	23.8	25.6	4.4
EU	18.1	18.1	19.9	21.7	3.7	22.6	22.3	23.7	25.3	2.7
EA	18.7	18.7	20.4	22.1	3.3	23.1	22.6	24.1	25.6	2.6

(1)Duration of retirement is calculated on the basis of life expectancy at average effective exit age from the labour market as from the EUROPOP 2013.
*Countries where statutory retirement age is legislated to increase in line with increase in life expectancy.
Source: Commission services, EPC.

Indeed, when looking at Table II.1.6, where data on estimated duration of retirement are reported, it is evident that at both EU and EA level, current pension legislation entails 3 additional years of retirement for men and around 2 for women by 2060. (⁴⁷) Not surprisingly in those Member States that have legislated an automatic, or other kind of link to life expectancy (Italy, Cyprus, Czech Republic, Denmark, Greece, Netherland, Portugal and Slovak Republic) the duration of retirement is estimated to increase less or even to decline (Italy). On average, in these countries, the duration of retirement is projected to be almost 2 year lower (1.9 for men and 0.9 years for women) compared to the EU average, reflecting generally higher increases in the statutory retirement age than life expectancy in the coming decade (i.e. the

legislated increase for women in the Czech Republic).

Graph II.1.2 and Graph II.1.1 show, by gender, the inverse relationship that exists between the increase in the effective retirement age and the shift in duration of retirement.

(⁴⁷) Duration of retirement is measured as remaining years of life at average effective exit age from the labour market as from life expectancy data calculated in the EUROPOP 2013.

Graph II.1.1:   **Increase in the average effective exit age from the labour market versus shift in duration of retirement over the period 2013 – 2060 - MEN**
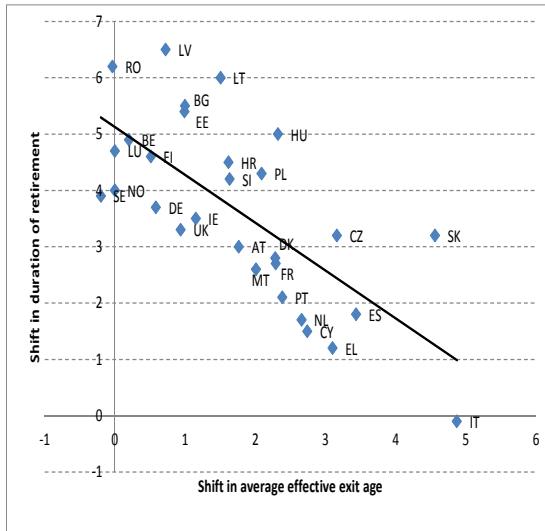
Source: Commission services, EPC.

Graph II.1.2:   **Increase in the average effective exit age from the labour market versus shift in duration of retirement over the period 2013 – 2060 - WOMEN**
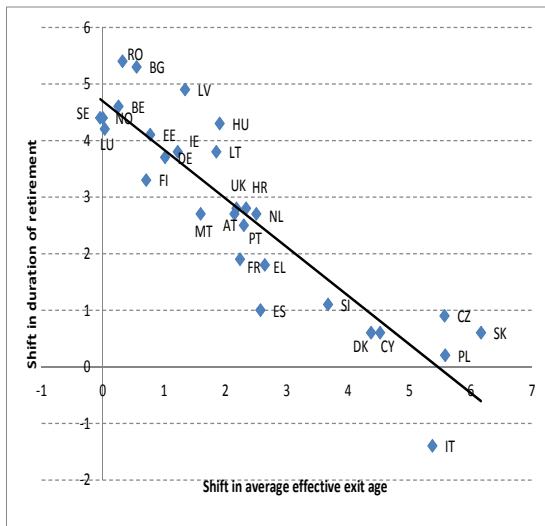
Source: Commission services, EPC.

Similar evidence on the potential pressures on the sustainability of the pension system are reported in Table II.1.7 and Table II.1.8, where indicators on the duration of retirement over the length of working career and over adult life have been

calculated. (^{48}) The share of retirement compared to working career is estimated to increase by around 7 percentage points (from 43.5% to 50.4% at EU level and from 45.5% to 51.4% in the EA) for men. The estimated increase for women is around 3 percentage points (from 58.0% to 61.8% at EU level and from 59.1% to 62.3% in the EA) but starting from a share close to 60%. Values higher than 70% in 2060 are registered for Luxemburg (men and women) and Belgium, France, and Romania (women).

Men are estimated to spend 28.3% of their adult life at retirement in 2014 and 31.5% in 2060 when looking at EU level (EA: 29.3 in 2014, 31.9% in 2060) (see Table II.1.8). (^{49}) Women are already spending more than 30% of their adult life at retirement (33.6% for EU and 34.1% for EA). The share for women is projected increase by the half compared to men (1.5% at EU level and 1.3% at EA level) in 2060, after a gradual decrease till 2020. The highest values in 2060 are registered for Luxemburg (39.3% for men and 41.0% for women) while values higher than 38% are calculated for Belgium, France and Malta (women).

(^{48}) The average length of the working career is calculated as the difference between the average exit age and the average entry age.

(^{49}) Adult life spent at retirement is defined as the ratio between life expectancy at the average effective exit age from the labour market and the estimated age of death (coherent with life expectancy at effective retirement age) minus 18.

Table II.1.7: **Duration of retirement over average length of working career by gender**

	MALE					FEMALE				
	2014	**2020**	**2040**	**2060**	**Change 2014 -2060**	**2014**	**2020**	**2040**	**2060**	**Change 2014 -2060**
BE	51.1	52.8	58.3	63.4	12.3	61.8	63.7	68.9	73.9	12.1
BG	36.1	36.0	42.4	48.7	12.6	54.0	53.8	61.2	68.2	14.2
CZ*	42.1	43.8	44.6	46.4	4.4	64.6	65.9	59.9	58.2	-6.3
DK*	39.3	40.4	42.1	43.7	4.4	54.6	50.2	52.2	50.8	-3.8
DE	41.0	42.2	44.9	48.9	7.8	52.2	51.5	55.4	59.8	7.6
EE	36.3	36.9	42.3	48.0	11.7	50.7	50.3	55.1	59.8	9.2
IE	42.5	43.6	45.3	49.4	6.9	51.0	52.0	54.0	58.5	7.5
EL*	45.2	44.4	43.4	44.8	-0.5	53.9	52.8	53.6	54.9	1.0
ES	49.7	45.2	46.2	49.9	0.2	57.1	51.9	52.6	56.2	-0.9
FR	56.3	53.8	55.4	59.8	3.5	70.7	67.2	67.9	71.7	1.0
HR	43.1	43.1	46.2	52.2	9.2	60.3	59.7	58.5	64.4	4.1
IT*	54.7	43.7	47.4	48.3	-6.4	68.7	57.8	58.8	56.7	-12.1
CY*	41.9	40.1	41.8	42.9	1.0	56.5	47.9	51.4	52.3	-4.2
LV	32.3	34.2	40.6	46.8	14.5	47.4	47.1	52.4	57.9	10.6
LT	38.1	38.5	44.8	51.2	13.1	57.0	55.7	58.4	63.9	6.9
LU	59.8	62.2	67.8	72.9	13.0	69.8	71.9	77.1	81.7	12.0
HU	39.5	37.2	43.0	49.2	9.7	52.8	51.3	55.2	61.3	8.5
MT	49.1	47.3	48.9	53.0	3.9	62.3	60.9	62.6	66.9	4.7
NL*	40.8	37.8	39.2	42.3	1.6	52.4	51.5	52.8	56.1	3.7
AT	48.0	44.3	48.7	53.0	5.0	63.3	60.9	62.2	66.6	3.4
PL	38.9	35.9	41.6	46.9	8.0	67.2	61.7	53.4	58.6	-8.6
PT*	44.1	42.6	44.2	46.5	2.4	54.1	52.0	53.3	57.2	3.1
RO	37.8	40.1	46.8	53.2	15.4	55.4	58.0	62.9	70.0	14.6
SI	46.9	45.4	50.7	55.6	8.7	69.1	56.1	61.1	65.8	-3.3
SK*	42.0	44.3	45.9	45.2	3.2	67.0	61.7	63.5	58.7	-8.4
FI	44.7	45.9	50.7	55.2	10.4	57.8	56.2	60.8	65.0	7.1
SE	39.9	41.3	45.4	49.0	9.1	51.8	53.4	58.1	62.4	10.6
UK	40.9	42.3	43.8	47.3	6.4	51.3	52.5	51.2	55.3	4.0
NO	39.4	40.9	44.9	48.8	9.4	48.7	50.5	55.1	59.3	10.6
EU	43.5	43.0	46.5	50.4	6.9	58.0	56.1	58.3	61.8	3.7
EA	45.5	44.5	47.7	51.4	5.9	59.1	56.3	59.1	62.3	3.2

(1) Duration of retirement calculated on the basis of life expectancy at average effective exit age from the labour market as from EUROPOP 2013.
*Countries where statutory retirement age is legislated to increase in line with increase in life expectancy.
Source: Commission services, EPC.

Table II.1.8:   **Percentage of adult life spent at retirement by gender**

	MALE					FEMALE				
	2014	**2020**	**2040**	**2060**	**Change 2014 -2060**	**2014**	**2020**	**2040**	**2060**	**Change 2014 -2060**
BE	31.3	31.9	34.2	36.1	4.8	34.9	35.5	37.3	38.9	4.0
BG	24.4	24.3	27.4	30.2	5.8	31.2	30.9	33.7	36.1	5.0
CZ*	27.6	28.4	28.8	29.7	2.1	34.7	35.1	33.3	32.8	-1.9
DK*	26.2	26.6	27.5	28.3	2.1	32.7	30.8	31.8	31.2	-1.4
DE	27.8	28.3	29.5	31.4	3.6	32.1	31.8	33.4	35.1	3.0
EE	25.2	25.4	28.1	30.7	5.5	31.2	31.0	32.9	34.8	3.6
IE	28.0	28.4	29.3	31.1	3.2	31.1	31.5	32.4	34.1	3.1
EL*	28.9	28.6	28.2	28.9	-0.1	31.9	31.5	31.9	32.5	0.5
ES	31.1	29.2	29.7	31.3	0.2	33.8	31.7	32.0	33.5	-0.3
FR	34.0	33.1	33.8	35.5	1.4	38.2	37.1	37.3	38.6	0.4
HR	27.9	28.0	29.4	32.0	4.1	33.9	33.6	33.3	35.4	1.5
IT*	32.1	27.7	29.3	29.8	-2.3	35.9	32.2	32.7	32.0	-3.9
CY*	28.2	27.2	28.0	28.6	0.4	33.6	30.1	31.7	32.1	-1.5
LV	23.0	24.0	27.2	30.1	7.1	29.6	29.3	31.6	33.8	4.3
LT	25.7	25.8	28.9	31.7	6.0	33.1	32.6	33.7	35.8	2.7
LU	34.9	35.6	37.6	39.3	4.4	37.4	37.9	39.6	41.0	3.6
HU	26.0	24.9	27.8	30.5	4.5	30.6	30.0	31.6	34.0	3.4
MT	32.0	31.1	31.9	33.6	1.6	36.6	36.0	36.6	38.2	1.6
NL*	27.6	26.0	26.8	28.3	0.7	32.4	31.8	32.4	33.8	1.4
AT	31.3	29.6	31.6	33.5	2.2	36.5	35.6	36.2	37.8	1.3
PL	26.1	24.7	27.5	29.9	3.8	36.0	34.2	31.4	33.4	-2.6
PT*	28.6	27.9	28.7	29.7	1.2	32.6	31.7	32.3	33.9	1.3
RO	24.9	26.0	29.1	31.9	6.9	31.3	32.2	34.0	36.5	5.1
SI	29.6	28.8	31.2	33.2	3.6	37.6	33.0	34.9	36.6	-1.0
SK*	27.8	28.7	29.5	29.3	1.5	35.2	33.4	34.2	32.7	-2.5
FI	29.0	29.5	31.6	33.5	4.5	34.0	33.4	35.2	36.7	2.7
SE	27.2	27.9	29.8	31.4	4.2	32.2	32.8	34.7	36.3	4.1
UK	28.3	28.9	29.7	31.3	3.0	32.3	32.8	32.3	34.0	1.6
NO	27.1	27.7	29.6	31.3	4.2	31.2	31.8	33.8	35.4	4.2
EU	28.3	28.1	29.7	31.5	3.1	33.6	32.8	33.7	35.1	1.5
EA	29.3	28.8	30.3	31.9	2.6	34.1	33.0	34.1	35.4	1.3

(1) Adult life spent at retirement is defined as the ratio between the life expectancy at average effective exit age and the estimated age of death (coherent with life expectancy at effective retirement age) minus 18.
* Countries where the statutory retirement age is legislated to increase in line with increase in life expectancy.
Source: Commission services, EPC.

1.4.2. Pension system financing

Contributions to pension schemes, paid by employers and employees, as well as self-employed persons, provide information on whether or not there is a potential future deficit in the pension system. The share of tax revenues allocated to financing the pension system is also taken into account, when relevant, as State contributions. In 2013, contributions to public pension schemes represented 9.6% of GDP at the EU aggregate level (see Table II.1.9). They are projected to slightly increase over the period 2013-2060 by +0.3 p.p. of GDP. However, there are wide differences across Member States. Indeed, substantial increases are projected in several countries, in particular in Germany (+2.6 p.p. of GDP), Cyprus (+2.5 p.p. of GDP), Norway (+2.5

p.p. of GDP) and Ireland (+1.5 p.p. of GDP), in line with legislated contribution rate increases or automatic in-built pension system stabilisers. [50] Contributions to the public pension system are projected to decrease in several Member States, in particular in Malta (-1.2 p.p. of GDP), Portugal (-1.0 p.p. of GDP), Estonia (-0.9 p.p. of GDP) and Latvia (-0.8 p.p. of wages). [51] Contributions to

[50] For example, in Germany, contributions evolve in line with expenditures developments (see section 1.5). Indeed, the contribution rate is automatically adjusted to ensure the financial sustainability of the public pension system (see table II.1.11). In Cyprus, several future increases of contribution rates by 2060 have been legislated. In Ireland, State contributions are projected to rise as a share of GDP, due to the obligation of the State to cover any remaining financial gap.

[51] In the case of Portugal, this reduction partially captures a base year effect due to extraordinary solidarity contributions at the beginning of the projection period.

the public pension system represented 23% of the gross wage bill in 2013 at the EU aggregate level, and are expected to rise by +1.7 p.p. of the gross wage bill by 2060. ([52])

Table II.1.9: **Contributions to the public pension system in 2013 and 2060 (% of GDP)**

Country	2013	2060	Change 2013-2060
BE	:	:	:
BG	7.3	7.2	-0.1
CZ	7.9	7.9	0.0
DK	0.2	0.1	-0.1
DE	10.5	13.0	2.6
EE	5.9	5.0	-0.9
IE	5.5	7.0	1.5
EL	10.2	11.2	1.0
ES	12.1	11.4	-0.7
FR	10.6	9.9	-0.7
HR	5.8	5.6	-0.3
IT	10.5	10.6	0.2
CY	6.4	8.9	2.5
LV	7.0	6.2	-0.8
LT	6.3	5.6	-0.7
LU	10.2	10.1	-0.1
HU	10.5	10.2	-0.3
MT	8.6	7.4	-1.2
NL	6.5	7.5	1.0
AT	8.3	8.1	-0.2
PL	6.8	7.6	0.8
PT	10.5	9.6	-1.0
RO	5.5	6.5	1.0
SI	9.0	9.1	0.0
SK	6.2	6.3	0.1
FI	12.3	11.9	-0.4
SE	6.0	6.1	0.0
UK	:	:	:
NO	9.9	12.4	2.5
EU	**9.6**	**9.9**	**0.3**
EA	**10.2**	**10.7**	**0.5**

(1) BE: not reported as there is no specific contribution for public pensions. These expenditures are financed through a global contribution for all social security schemes.
IE: contributions reported are also used to finance other social benefits in addition to pensions.
UK: not reported.
Source: Commission services, EPC

In the majority of countries that provides a decomposition of contributions to the public pension system, employers' contributions tend to represent the greatest share (see Graph II.1.3). Employees' contributions share reaches high levels in some countries (in particular, in Croatia, the

Netherlands and Slovenia), whilst State contributions are substantial in other Member States, notably Bulgaria, Germany and Finland. In most countries, the structure of contributions provided by employers, employees and the State to the pension system is projected to remain fairly unchanged over the period 2013-2060. Some exceptions exist however: the Netherlands should see a significant progression of State contributions share, whilst Finland projects a decrease of this share. In Norway, State contributions should turn positive towards the end of the projection period. ([53])

([52]) Contributions as a percentage of the gross wage bill are presented in Table II.A2.2. in Annex 2.

([53]) The negative State contributions in 2013 and during most of the projection period correspond to the contributions provided by the State pension fund (SPF) to financing government (pension and other) expenditures.

Graph II.1.3:   **Contributions to the public pension system decomposition between 2013 and 2060 (% of GDP)**
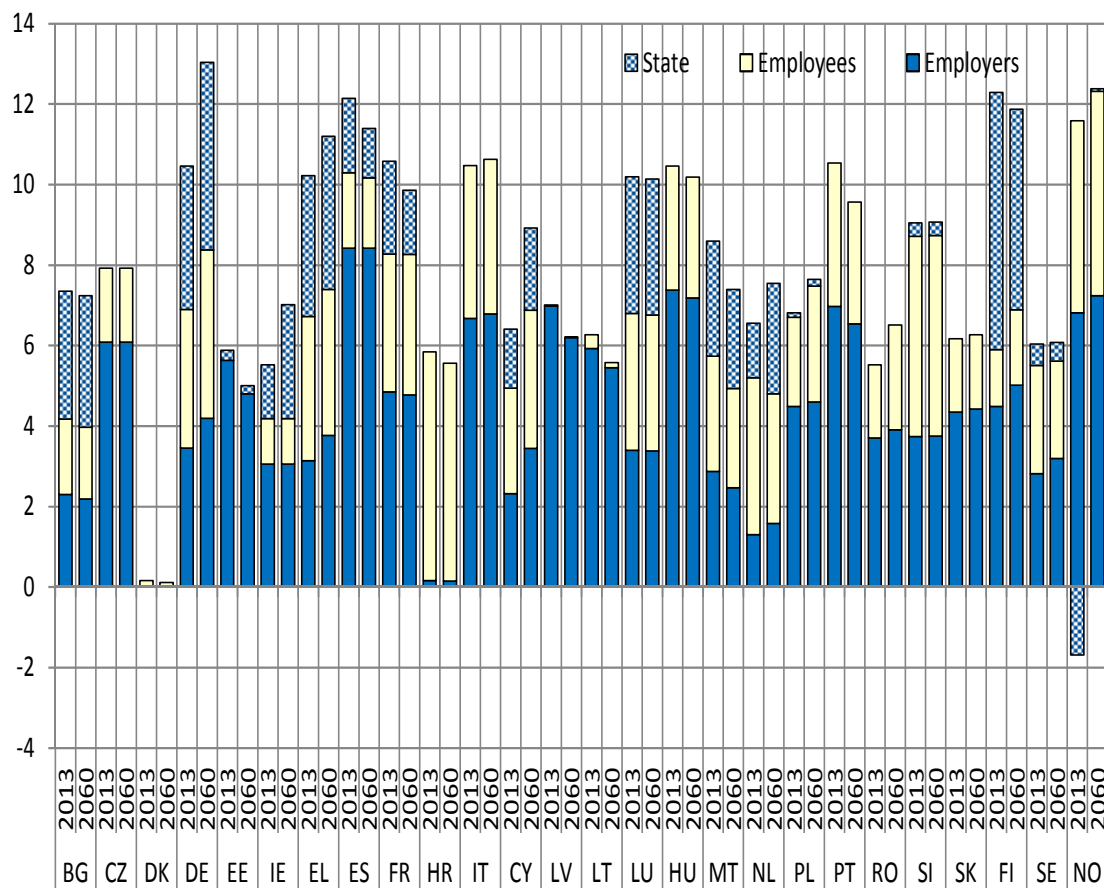
(1) BE: no data provided as there are no specific contributions to finance the public pension system.
IE: contributions are also used to finance other social benefits in addition to pensions.
UK: no data provided.
Source: Commission services, EPC

Table II.1.10:   **Contribution rates to public pension system**

Country	Contribution rate: employers	Contribution rate: employees	State contributions	
			Contribution rate	Other provisions
BE	24.77% (for all Social security schemes)	13.07% (for all Social security schemes)	-	In the wage earners' scheme, social spending is also funded by State subsidies (16.3% of total in 2013) and alternative funding (16.5%) - mainly share of VAT revenues.
BG	7.1% (born after December 1959) / 9.9% (born before January 1960)	5.7% (born after December 1959) / 7.9% (born before January 1960)	12%	State commitment for covering the deficit on an annual basis.
CZ	21.5%	6.5%	-	Balance of pension system is part of general governement budget.
DK	-	-	-	
DE	9.45%	9.45%	-	State subsidies with annual indexation. "Sustainability fund" fluctuating between 0.2 and 1.5 of monthly pension expenditures. Contribution rate is set to meet this requirement.
EE	20% (if not participant to the 2nd pillar); 16% (if participant to the second pillar)	-	-	-
IE	Varies	Varies	-	Social Insurance Fund and Social Assistance Fund (used to finance other social benefits in addition to pensions). Shortfalls met by Exchequer.
EL	Main pensions majority: 13.33%; Auxiliary pensions: 3%	Main pensions majority: 6.67%; Auxiliary pensions: 3%	Varies	National budget / other sources
ES	Private sector: 23.6%	Private sector: 4.7%	-	Central governement transfers amount to 12.16% of total expenditure.
FR	Private sector (CNAV): 10.20% up to the Social Security Ceiling (SSC), plus 1.75% above the SSC in 2014	Private sector (CNAV): 7.05% up to the SSC, plus 0.25% above the SSC in 2014		Pensions Reserve Fund and Old-age solidarity fund.
HR	-	20% (public PAYG scheme participants only); 15% (participants in both public PAYG scheme and mandatory fully-funded DC scheme)	-	Government committed to cover deficits.
IT	about 2/3 of 33%	about 1/3 of 33%	-	Residual fuding (pension expenditure exceeding contributions) funding by the State.
CY	7.8%	7.8%	4.6%	Reserve fund.
LV	20% (if no participant of 2nd tier) or 16% (if participant of 2nd tier)	-	-	-
LT	23.3%	3% (1% for participant in the private 2nd pillar)	-	-
LU	8%	8%	8%	Buffer fund of at least 1.5 times the amount of annual benefits.
HU	27%	10%	-	-
MT	10%	10%	10%	-
NL	-	17.9%	-	Government supplements shortfall between expenditure and funds raised by the 17.9% tax levy.
AT	Between 12.55% and 20% (according to status)	10.25% and 11.75% (according to status)	Between 5.30% and 12.55% (according to status)	Federal budget covers the deficits in public pension schemes.
PL	9.76%	9.76%	-	Demographic Reserve Fund.
PT	23.75%	11%	-	Social Security Trust Fund.
RO	Between 15.8% and 25.8% (according to working conditions)	10.50%	-	State provides funds from the national budget to cover the public pension system deficit.
SI	8.85%	15.50%	-	State provides funds from the national budget and other sources to cover the difference between the Institute's revenues from contributions and other sources, and the Institute's expenditures.
SK	Varies according to status and participation to the 2nd pillar	Varies according to status and participation to the 2nd pillar	Varies according to status and participation to the 2nd pillar	-
FI	National pensions: abolished in 2010. Earnings related pensions: from 17.75% to 23.7% (according to sector)	Earnings-related pensions: 5.55% (18-52 years old) / 7.05% (53-68 years old)	20.4% for State pensions	Nations pensions: funding from the State at 100%. Earnings-related pensions: 25% of private sector pension are prefunded.
SE	9.04%	6%	"Employer contribution" for social insurances	Buffer funds.
UK	13.80%	Varies according to status and earnings	-	Occasional top-ups to the National Insurance Fund if reserves fall below a threshold recommended by the Government Actuary Department.
NO	PAYG system without earmarked tax going to pensions	PAYG system without earmarked tax going to pensions	PAYG system without earmarked tax going to pensions	State Pension Fund contributes to financing governement (pension and other) expenditures.

(1)
When several schemes prevail, the information reported refers to the main (general regime) pension scheme.
Source: Commission services, EPC

1.5.   PENSION EXPENDITURE PROJECTIONS

1.5.1. Public pensions

Public pension expenditure change between 2013 and 2060

Public pension expenditure in the EU is projected to increase by +0.4 p.p. of GDP over the period 2013—2040, to 11.7% of GDP, before levelling down to around 11% of GDP by 2060 (see Table II.1.11). In the euro area, an increase of +0.7 p.p. of GDP is projected over the 2013-2040 horizon. In 2060, public pension expenditure ratio should reach 12.3% of GDP, a level similar to 2013.

Yet, the range of projected changes in public pension spending is relatively large across Member States (see Graph II.1.4). Croatia should record the highest decrease (-3.9 p.p. of GDP between 2013 and 2060), along with Denmark, Latvia (-3.1 p.p. of GDP) and France (-2.8 p.p. of GDP). In seven other Member States, a smaller decrease of public pension expenditure ratio - ranging from -2 p.p. of GDP to -0.7 p.p. of GDP - is projected (Italy, Greece, Sweden, Estonia, Spain, Portugal and Poland).

On the other hand, Luxembourg should experience the strongest increase of public pension spending ratio (+4.1 p.p. of GDP over 2013-2060), followed by Slovenia (+3.5 p.p. of GDP), Belgium (+3.3

p.p. of GDP) and Malta (+3.2 p.p. of GDP). Two Member States (Germany and Slovakia) and Norway should see their public pension expenditure ratio grow between 2 to 3 p.p. of GDP, whilst this ratio is projected to rise by a more moderate pace (between +0.7 and 1.1 p.p. of GDP) in the UK, Czech Republic, Netherlands and Ireland.

Finally, the ratio should be broadly stable (at the most +/- 0.5 p.p. of GDP) in seven countries (Austria, Lithuania, Finland, Hungary, Cyprus, Romania and Bulgaria).

Table II.1.11: **Level and change in gross public pension expenditure over 2013-2060, baseline scenario (in % and p.p. of GDP)**

Country	2013	2040	2060	Change 2013-40	Change 2013-60
BE	11.8	15.2	15.1	3.4	3.3
BG	9.9	8.4	9.4	-1.5	-0.4
CZ	9.0	9.0	9.7	0.0	0.7
DK	10.3	8.0	7.2	-2.3	-3.1
DE	10.0	12.2	12.7	2.2	2.7
EE	7.6	6.9	6.3	-0.7	-1.3
IE	7.4	10.0	8.4	2.7	1.1
EL	16.2	14.1	14.3	-2.1	-1.9
ES	11.8	11.9	11.0	0.1	-0.8
FR	14.9	13.8	12.1	-1.1	-2.8
HR	10.8	7.8	6.9	-3.0	-3.9
IT	15.7	15.8	13.8	0.1	-1.9
CY	9.5	9.4	9.3	-0.1	-0.1
LV	7.7	5.4	4.6	-2.3	-3.1
LT	7.2	9.4	7.5	2.2	0.3
LU	9.4	12.7	13.4	3.3	4.1
HU	11.5	9.6	11.4	-1.9	-0.1
MT	9.6	9.7	12.8	0.2	3.2
NL	6.9	8.3	7.8	1.5	0.9
AT	13.9	14.7	14.4	0.8	0.5
PL	11.3	10.0	10.7	-1.4	-0.7
PT	13.8	14.8	13.1	1.0	-0.7
RO	8.2	8.4	8.1	0.2	-0.1
SI	11.8	14.3	15.3	2.6	3.5
SK	8.1	8.1	10.2	0.0	2.1
FI	12.9	13.6	12.9	0.7	0.1
SE	8.9	7.5	7.5	-1.4	-1.4
UK	7.7	8.4	8.4	0.8	0.7
NO	9.9	11.4	12.4	1.5	2.5
EU	**11.3**	**11.7**	**11.1**	**0.4**	**-0.2**
EA	**12.3**	**13.0**	**12.3**	**0.7**	**0.0**

(1) These figures have been updated with ESA 2010 by the Commission services.
SK: the figures reported in this table do not include public expenditure on armed forces pension. They represented 0.4% of GDP in 2013, and are projected to remain roughly stable over the 2013-2060 horizon. Subsequent tables and graphs do not include either these expenditures.
Source: Commission services, EPC

Graph II.1.4: **Change in gross public pension expenditure between 2013 and 2060 in the baseline scenario (in p.p. of GDP)**
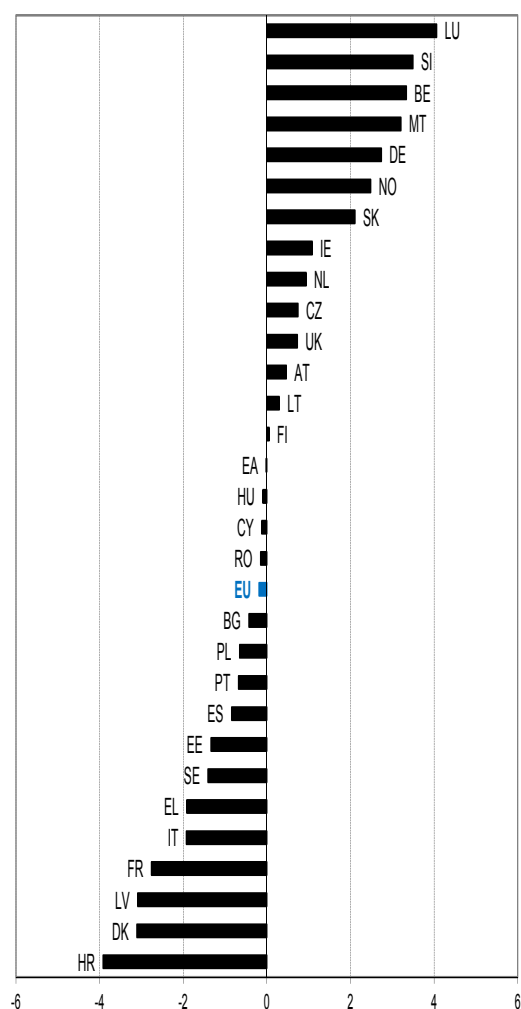
Source: Commission services, EPC

When looking at the contributions of the different general schemes to the projected change in public pension expenditure ratio (see Graph II.1.5), old-age and early pension schemes tend to contribute more often positively to the aggregate ratio dynamics. Overall, a moderate increase of +0.4 p.p. of GDP is projected over the period 2013-2060 at the EU level, and of +0.6 p.p. of GDP at the euro area level. Disability pensions and other pensions (including survivors' schemes) would, on the other hand, slightly decline over the projection horizon (respectively by -0.1 p.p. of GDP and by -0.5 p.p. of GDP at the EU and the euro area

levels). This downward trend, for both types of pensions, would be the result of restricted eligibility criteria, as well as the assumed demographic and health trends (i.e. ageing population in good health).

Old-age and early pension spending should record an increase in 16 countries over the projection period, with the highest upward trend projected in Malta, Belgium and Luxembourg (+5.0 p.p. of GDP, +4.4 p.p. of GDP and +4.3 p.p. of GDP respectively). Denmark, Latvia and France, on the opposite, project significant decreases of old-age and early pension expenditures by 2060 (-3.1 p.p. of GDP, -2.8 p.p. of GDP and -1.9 p.p. of GDP respectively).

Disability pension spending is expected to decrease in most of Member States. It would only slightly increase or stabilise in 6 countries (Bulgaria, Norway, Netherlands, Cyprus, Denmark and Ireland).

Other pensions (including survivors' pensions) are also projected to decline in the majority of countries (21) over the period 2013-2060. This decrease, often mainly explained by survivors' schemes, results from converging life expectancies between men and women, changes in family structures (decrease of the number of marriages) and in some cases, recent reforms, including the impact of improving female participation rates over time. Only 6 Member States would see a limited progression or a stabilisation of spending in these schemes (Slovenia, Slovakia, Cyprus, the Netherlands, the Czech Republic and Romania).

Pension expenditure time-profile

At the EU and euro area aggregate level, public pension expenditures are expected to continue increasing over the next decades and to peak only in 2037 (at 11.7% of GDP and 13.1% of GDP respectively), before decreasing through the rest of the projection period. Implemented reforms will contribute to counteract the impact on pension expenditures of an ageing population. However, as these reforms are usually phased-in gradually, over several decades, the downward impact will become apparent only late in the projection period.

Graph II.1.5:   **Change in gross public pension expenditure over the period 2013-2060 by main general schemes (in p.p. of GDP)**
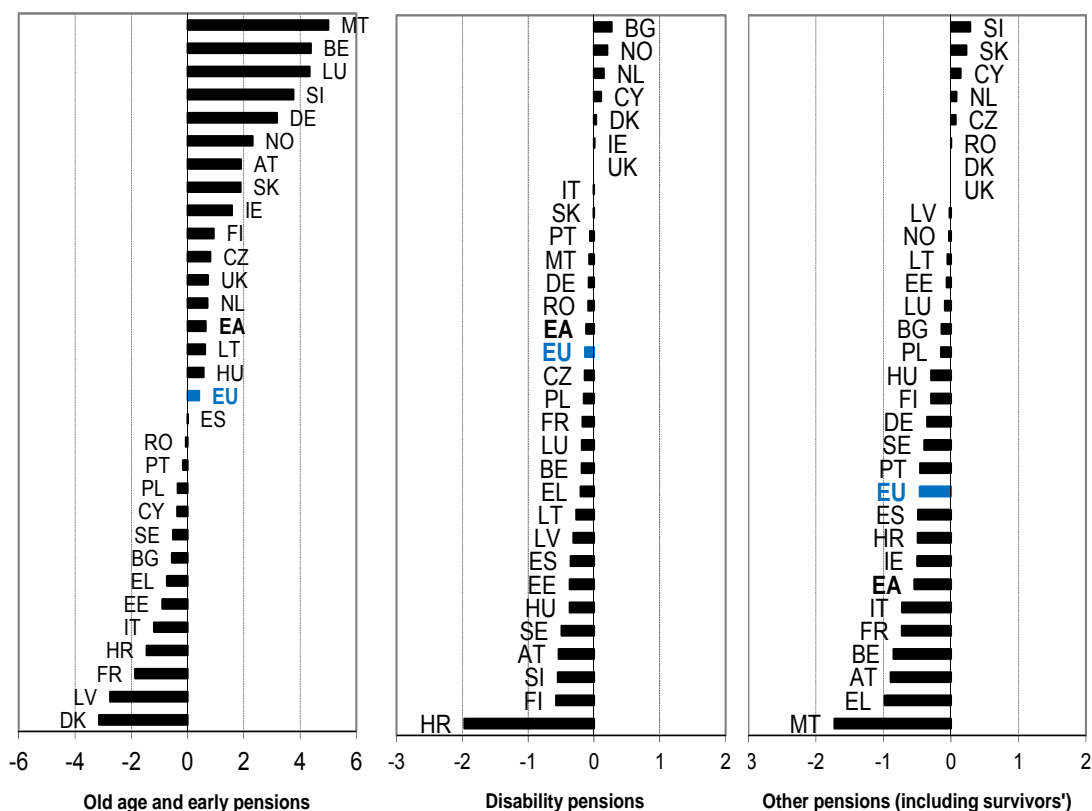
(1) DK: no separate survivors' pensions exist in Denmark.
DE: disability pensions are part of old-age and early pension expenditures.
IE: old-age and early pensions include pension expenditure of public service occupational schemes.
HR: from 2015, total disability pensions will be converted to old-age pensions upon reaching standard retirement age.
EL: figures without small supplementary funds.
MT: other pensions include treasury pensions.
UK: there is no separate disability pension in the UK – state benefits are provided to those unable to work due to disability, and this is classified separately from the State pension system. Old-age and early pensions include public service pensions.
Source: Commission services, EPC

The pattern of pension expenditure over time is very different across countries. In Slovenia, Malta, Slovakia, the Czech Republic and Austria, the projected increase of public pension expenditure ratio in the long run would only materialize in the second half of the projection period. Indeed, between 2013 and the mid 2020's (Slovenia, Malta and Austria) or 2030's (Slovakia and the Czech Republic), public pension spending would either slightly decrease or remain stable in these countries (see Table II.1.12). Luxembourg, Germany and Norway would on the other hand experience a more regular increase through the whole projection period (in these countries, the through more or less coincides with the starting year, and the peak with the end year). In Belgium, the Netherlands and the UK, the bulk of the

projected increase would be observed until the end of the 2030's (Belgium and the UK) – beginning of the 2040's (the Netherlands), date after which public pension expenditures would be roughly stable. In Ireland and Lithuania, the relatively strong upward trend of public pension spending between the beginning of the projection period and the peak reached respectively in 2045 and 2037 would be partially reversed by a decline up until 2060. Finally, in Cyprus and Romania, the public pension expenditures ratio would be relatively stable over the whole projection period (low standard deviation of 0.2 p.p. of GDP; see Annex 2, Table II.A2.3).

Table II.1.12:   **Projected through and peak years and values for gross public pension expenditure (% and p.p. of GDP) - for countries projecting to experience a through in public pension expenditures ratio during the first part of the projection period**

	Start year 2013	Through year (before peak)	Through value	Decrease from 2013 to through	Peak year (after through)	Peak value	Increase from through to peak	Decrease from peak to 2060	End year 2060	Change 2013-2060
LU	9.4								13.4	4.1
SI	11.8	2022	11.0	-0.8	2053	15.7	4.6	-0.4	15.3	3.5
BE	11.8				2037	15.3	3.5	-0.1	15.1	3.3
MT	9.6	2026	9.6	-0.002			3.2		12.8	3.2
DE	10.0	2014	10.0	-0.02			2.8		12.7	2.7
NO	9.9								12.4	2.5
SK	8.1	2033	7.6	-0.5			2.6		10.2	2.1
IE	7.4	2014	7.2	-0.1	2045	10.2	3.0	-1.8	8.4	1.1
NL	6.9				2041	8.4	1.5	-0.5	7.8	0.9
CZ	9.0	2034	8.8	-0.2	2057	9.8	1.0	-0.1	9.7	0.7
UK	7.7	2015	7.3	-0.4	2039	8.4	1.1	-0.03	8.4	0.7
AT	13.9	2021	13.9	-0.03	2037	14.7	0.9	-0.4	14.4	0.5
LT	7.2	2016	6.7	-0.5	2037	9.5	2.8	-2.0	7.5	0.3
EA	**12.3**	**2018**	**12.3**	**-0.05**	**2037**	**13.1**	**0.8**	**-0.8**	**12.3**	**0.0**
CY	9.5	2021	8.9	-0.5	2032	9.7	0.8	-0.4	9.3	-0.1
RO	8.2	2025	8.0	-0.2	2042	8.5	0.4	-0.4	8.1	-0.1

(1) Values are not reported when the through coincides with the start year (2013) and the peak with the end year (2060).
Countries reported in this table are the ones projected to experience a through in public pension expenditure before a peak over the projection period.
Source: Commission services, EPC

Table II.1.13:   **Projected peak and through years and values for gross public pension expenditure (% and p.p. of GDP) - for countries projecting to experience a peak in public pension expenditures ratio during the first part of the projection period**

	Start year 2013	Peak year (before through)	Peak value	Increase from 2013 to peak	Through year (after peak)	Through value	Decrease from peak to through	Increase from through to 2060	End year 2060	Change 2013-2060
FI	12.9	2028	15.0	2.2	2052	12.7	-2.3	0.2	12.9	0.1
HU	11.5				2031	8.9	-2.6	2.5	11.4	-0.1
BG	9.9	2014	9.9	0.03	2028	8.1	-1.8	1.3	9.4	-0.4
PL	11.3				2040	10.0	-1.4	0.7	10.7	-0.7
PT	13.8	2033	15.0	1.2			-1.9		13.1	-0.7
ES	11.8	2047	12.6	0.8			-1.6		11.0	-0.8
EE	7.6	2018	7.8	0.2			-1.5		6.3	-1.3
SE	8.9				2049	7.2	-1.7	0.3	7.5	-1.4
EL	16.2	2014	16.2	0.05	2042	13.9	-2.3	0.4	14.3	-1.9
IT	15.7	2036	15.9	0.1			-2.1		13.8	-1.9
FR	14.9	2014	14.9	0.03			-2.8		12.1	-2.8
LV	7.7								4.6	-3.1
DK	10.3								7.2	-3.1
HR	10.8	2014	10.9	0.01			-3.9		6.9	-3.9
EU	**11.3**	**2037**	**11.7**	**0.4**			**-0.6**		**11.2**	**-0.2**

(1) Values are not reported when the peak coincides with the start year (2013) and the through with the end year (2060).
Countries reported in this table are the ones projected to experience a peak in public pension expenditure before a through over the projection period.
Source: Commission services, EPC

In 6 countries projecting an overall decrease (or stabilisation) of public pension expenditures over the period 2013 – 2060, an initial increase or stable level of public pension spending would be observed in the first part of the projection period (see Table II.1.13). This is the case of Finland (+2.2 p.p. of GDP until 2028), Portugal (+1.2 p.p. of GDP until 2033), Spain (+0.8 p.p. of GDP until 2047) and Italy (+0.1 p.p. of GDP until 2036). Estonia and France also project a roughly stable ratio during the first years of the projection period (until 2018 in Estonia and 2025 in France ([54])). In Hungary, Bulgaria and Poland, on the other hand, public pension expenditures, decreasing as a share of GDP until respectively 2031, 2028 and 2040, would pick up during the second part of the projection period. In Sweden and Greece, a similar, but milder, pattern would be observed. Finally, Latvia, Denmark and Croatia project a regular decrease of their public pension spending ratio over the whole projection period, thus registering the biggest decrease out of the 29 countries considered.

Looking at public pension spending dynamics by sub-periods, one can see that at the EU and euro area aggregate level, the ratio will be relatively stable until 2020, whilst it would increase over the next two decades (cumulated increase of +0.5 p.p. of GDP and +0.7 p.p. of GDP respectively; see Graph II.1.6). Public pension spending is finally projected to decrease over the last two decades of the projection period (cumulated decrease of -0.6 p.p. of GDP and -0.8 p.p. of GDP respectively). Between 2020 and 2030, the highest increase would be observed in Belgium (+2 p.p. of GDP), Lithuania (+1.9 p.p. of GDP) and Luxembourg (+1.4 p.p. of GDP; see Table II.1.14). Between 2030 and 2040, Slovenia projects to see the largest increase (+2 p.p. of GDP). During this period, the EU average increase would be limited (+0.1 p.p. of GDP), but more widespread than during the previous decade (with 18 countries seeing an increase of their public pension expenditures ratio). Finally, during the period 2050-2060, public pension spending would substantially decrease in Ireland, Spain and Portugal (-1.6 p.p. of GDP, -1.4 p.p. of GDP and -1.3 p.p. of GDP, respectively).

Table II.1.14: **Change in gross public pension expenditure over the period 2013-2060 (in p.p. of GDP)**

	2013-20	2020-30	2030-40	2040-50	2050-60	2013-60
BE	0.9	2.0	0.5	-0.2	0.2	3.3
BG	-1.4	-0.3	0.3	0.8	0.3	-0.4
CZ	0.0	-0.1	0.0	0.7	0.1	0.7
DK	-1.5	-0.4	-0.3	-0.5	-0.3	-3.1
DE	0.3	1.2	0.6	0.2	0.3	2.7
EE	0.0	-0.5	-0.2	-0.2	-0.4	-1.3
IE	0.6	1.1	0.9	0.0	-1.6	1.1
EL	-0.7	-1.1	-0.3	0.3	-0.1	-1.9
ES	0.0	-0.5	0.7	0.4	-1.4	-0.8
FR	-0.3	0.0	-0.9	-1.0	-0.7	-2.8
HR	-0.6	-0.8	-1.7	-0.6	-0.3	-3.9
IT	-0.4	0.4	0.1	-1.0	-1.0	-1.9
CY	-0.5	0.7	-0.3	-0.2	0.2	-0.1
LV	-1.8	-0.4	-0.1	-0.3	-0.6	-3.1
LT	-0.4	1.9	0.7	-0.8	-1.1	0.3
LU	1.2	1.4	0.7	-0.2	1.0	4.1
HU	-1.7	-0.9	0.7	1.0	0.8	-0.1
MT	0.2	-0.2	0.1	1.3	1.8	3.2
NL	0.3	0.6	0.6	-0.3	-0.3	0.9
AT	0.0	0.6	0.3	-0.1	-0.3	0.5
PL	-0.7	-0.3	-0.4	0.5	0.3	-0.7
PT	0.7	0.4	-0.1	-0.4	-1.3	-0.7
RO	-0.1	0.0	0.4	-0.1	-0.3	-0.1
SI	-0.6	1.1	2.0	1.3	-0.3	3.5
SK	-0.1	-0.4	0.5	1.0	1.1	2.1
FI	1.4	0.7	-1.4	-0.8	0.2	0.1
SE	-0.7	-0.4	-0.4	-0.3	0.3	-1.4
UK	-0.3	0.6	0.5	-0.3	0.3	0.7
NO	0.8	0.6	0.1	0.2	0.8	2.5
EU	**-0.2**	**0.4**	**0.1**	**-0.3**	**-0.3**	**-0.2**
EA	**0.0**	**0.5**	**0.2**	**-0.3**	**-0.5**	**0.0**

Source: Commission services, EPC

Graph II.1.6: **Change in gross public pension expenditure over the period 2013-2060 (in p.p. of GDP)**
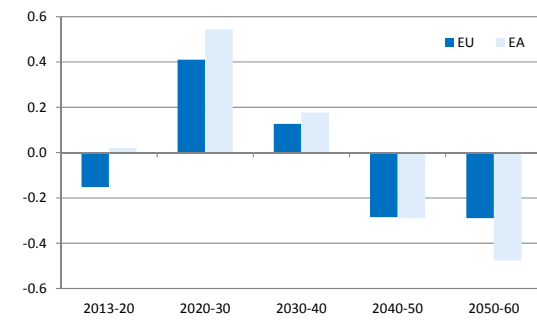
Source: Commission services, EPC

Nonetheless, the interpretation of these time patterns should be, to some extent, made with caution. Indeed, the projected change of the public pension expenditures ratio over the period 2013-2060 is affected by a significant base year effect, due to the financial and economic crisis. Indeed, for the countries projecting a decrease of their public pension spending as a share of GDP between 2013 and 2060, which reported historical data back to before the crisis, one can see that the level reached by 2060 would often be higher or similar to the pre-crisis level (except for Sweden and Denmark; see Graph II.1.7). This base year effect seems particularly strong in Spain, Portugal, Latvia, Italy and Bulgaria. Projected decreases are of course also the result of legislated pension reforms (as seen from the age group

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([54]) The ratio should remain stable until 2025 close to the "peak" value reached in 2014.

decomposition that will be explained in section 1.6).

Graph II.1.7: **Gross public pension expenditure over the period 2007-2060 in selected countries (% of GDP)**
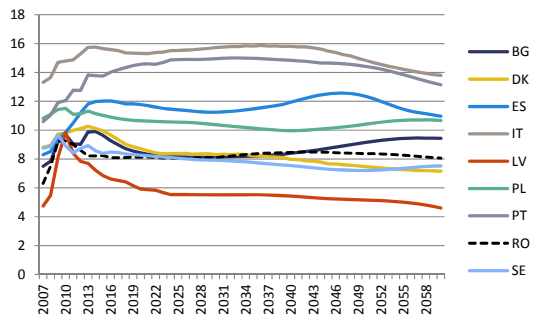
Source: Commission services, EPC

Expenditure developments by age group

In the vast majority of Member States, the share of public *pensioners* in age groups below 70 is projected to decrease over the period 2013-2060 (see Graphs II.1.13 to II.1.13). ([55]) On the other hand, this share should increase in age group 75+. These results reflect pension reforms introduced by many countries, including increasing retirement ages and required contribution period for full pensions, restrictions on early and disability pensions, as well as demographic factors.

Consequently, at the EU aggregate level, the share of public pensioners is supposed to go down over the period 2013-2060 for all age groups considered below 70 years old. (see Table II.1.15). The steepest decrease would be observed for the age group 60-64 during the first half of the projection period (around -9 p.p. over 2013-2060, of which close to -6 p.p. over 2013-2030). This trend is in line with the increase in statutory (including early) retirement ages, along with more restricted early pension and disability schemes in many Member States. A strong decline is also projected for the age group 65-69 during the second half of the projection period (around -7 p.p. over 2013-2060, of which -5.4 p.p. over 2030-2060), also as a result of increasing retirement ages and required

contribution period for full pension. On the other hand, the share of public pensioners in the age group 70-74 would remain broadly constant over the projection period in the EU (+0.1 p.p.), whilst it would strongly increase for the age group above 74 years old (+21.5 p.p.), in line with demographic trends. By 2060, more than half of public pensioners would be older than 74 (against around one third in 2013).

Table II.1.15: **Share of public pensioners in the EU by age groups (as % of total public pensioners)**

	Share of public pensioners in the EU (%)						
Age group	2013	2020	2030	2040	2050	2060	Change 2013-2060
-54	7.8	7.1	6.0	5.1	4.7	4.7	-3.1
55-59	5.4	4.3	3.7	3.2	2.7	2.6	-2.8
60-64	13.8	10.4	7.9	6.2	5.4	4.9	-8.9
65-69	19.7	20.1	18.2	15.6	14.0	12.8	-6.9
70-74	17.3	19.6	20.0	19.9	18.4	17.4	0.1
75+	36.0	38.6	44.3	50.0	54.8	57.6	21.5

Source: Commission services, EPC

Public pension *expenditures* would also decrease for all age groups below 70 years old at the EU aggregate level (at the most by around -1 p.p. of GDP for the age groups 60-64 and 65-69; see Table II.1.16). In some countries however, public pension spending ratio would still rise for some of these age groups (for instance, in Luxembourg for the age groups 60-64 and, to a lesser extent, 65-69; in Belgium and Germany for the age group 65-69; see Table II.1.16). The public pension expenditure ratio would be roughly stable for the age group 70-74 at the EU aggregate level, although contrasting trends are projected for the different Member States (with increasing ratios for 14 countries). Pensions to GDP should substantially increase for the age group 75+ (+2.3 p.p. of GDP) at the EU aggregate level. By 2060, public pension expenditures for the age group 75+ would represent 6.7% of GDP (against 4.4% of GDP in 2013). Only three countries project a ratio broadly stable for the age group 75+ (Croatia, Latvia and Sweden). These trends in public pension expenditures by age groups reflect largely the evolution of pensioners' weight by age groups, but also pension formula revisions, which will be less favourable for future pensioners' generations.

([55]) These graphs depict the evolution of the share of public pensioners in different age groups between 2013 and 2060. Countries that lie above (respectively under) the 45 degree line are projected to experience an increasing (respectively decreasing) share of public pensioners in the respective age group over the projection horizon.

Graph II.1.8:   **Evolution of the share of public pensioners for age group -54 between 2013 and 2060 (% of total public pensioners)**
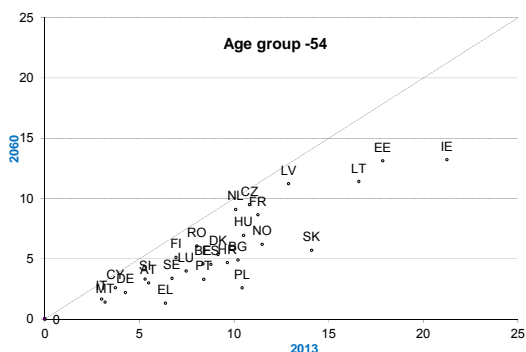
Source: Commission services, EPC

Graph II.1.11:   **Evolution of the share of public pensioners for age group 55-59 between 2013 and 2060 (% of total public pensioners)**
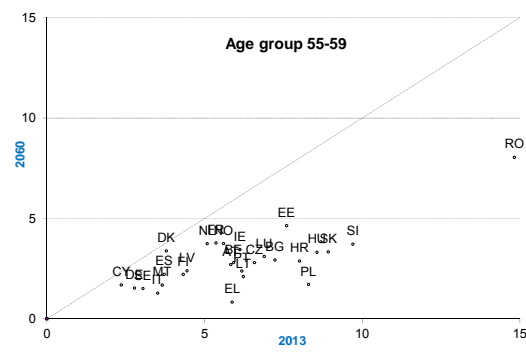
Source: Commission services, EPC

Graph II.1.9:   **Evolution of the share of public pensioners for age group 60-64 between 2013 and 2060 (% of total public pensioners)**
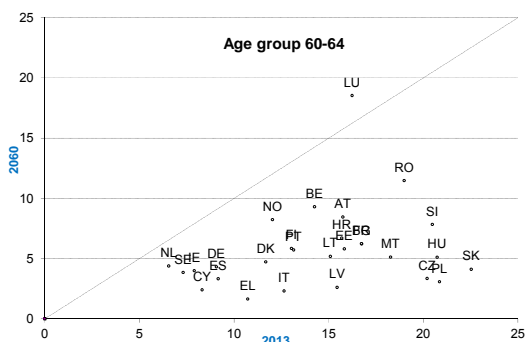
Source: Commission services, EPC

Graph II.1.12:   **Evolution of the share of public pensioners for age group 65-69 between 2013 and 2060 (% of total public pensioners)**
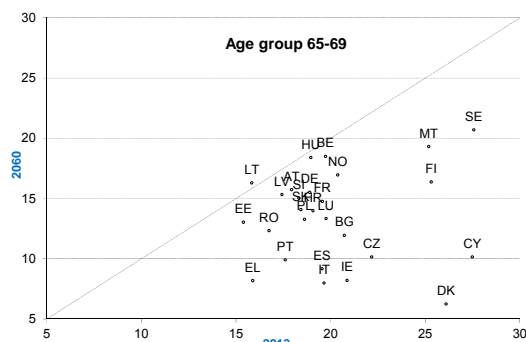
Source: Commission services, EPC

Graph II.1.10:   **Evolution of the share of public pensioners for age group 70-74 between 2013 and 2060 (% of total public pensioners)**
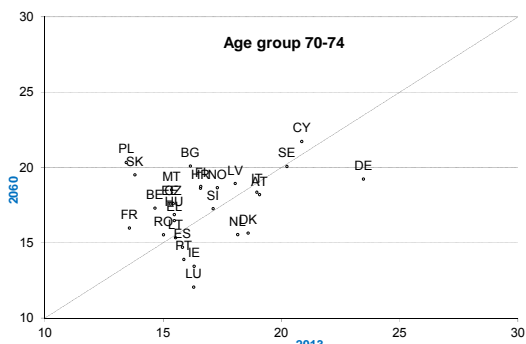
Source: Commission services, EPC

Graph II.1.13:   **Evolution of the share of public pensioners for age group 75+ between 2013 and 2060 (% of total public pensioners)**
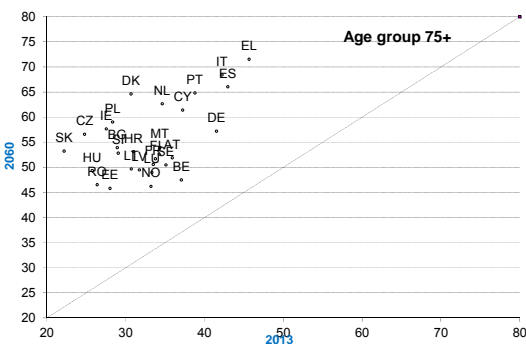
Source: Commission services, EPC

Table II.1.16:   **Gross public pension expenditure by age groups in 2013 and in 2060 (% of GDP)**

Country	Year	Age group					
		-54	55-59	60-64	65-69	70-74	75+
BE	2013	0.8	0.7	1.8	2.5	1.8	4.1
	2060	0.6	0.4	1.5	2.9	2.7	7.0
BG	2013	0.8	0.7	1.7	2.1	1.7	2.9
	2060	0.3	0.3	0.6	1.2	2.1	5.0
CZ	2013	0.7	0.5	1.9	2.1	1.5	2.4
	2060	0.6	0.2	0.2	0.9	1.9	6.0
DK	2013	1.2	0.5	1.6	2.4	1.7	2.8
	2060	0.5	0.3	0.5	0.6	1.1	4.0
DE	2013	0.4	0.3	1.0	1.8	2.3	4.2
	2060	0.2	0.2	0.6	1.9	2.4	7.4
EE	2013	0.8	0.4	1.1	1.3	1.4	2.7
	2060	0.5	0.2	0.3	0.8	1.2	3.3
IE	2013	1.1	0.3	0.4	1.2	0.9	1.6
	2060	0.9	0.2	0.3	0.6	1.0	4.1
EL	2013	0.9	1.2	2.2	2.8	2.3	5.3
	2060	0.1	0.1	0.2	1.2	2.7	8.7
ES	2013	0.8	0.5	1.4	2.7	2.0	4.5
	2060	0.4	0.3	0.4	1.2	1.9	6.7
FR	2013	0.7	0.4	2.4	3.5	2.4	5.5
	2060	0.4	0.3	0.6	1.9	2.3	6.7
HR	2013	1.3	0.8	1.7	2.0	1.8	3.2
	2060	0.3	0.2	0.5	1.0	1.3	3.7
IT	2013	0.2	0.6	2.5	3.4	3.0	5.9
	2060	0.1	0.1	0.2	1.5	2.9	9.1
CY	2013	0.2	0.4	1.5	2.7	1.8	2.7
	2060	0.2	0.2	0.2	1.1	2.1	5.5
LV	2013	0.5	0.2	1.0	1.6	1.3	2.6
	2060	0.3	0.1	0.1	0.7	0.9	2.5
LT	2013	0.8	0.4	1.0	1.2	1.2	2.4
	2060	0.6	0.1	0.3	1.2	1.2	4.0
LU	2013	0.4	0.7	1.8	1.9	1.5	3.0
	2060	0.2	0.4	2.9	2.0	1.7	6.2
HU	2013	0.5	0.8	2.6	2.5	1.9	3.2
	2060	0.4	0.3	0.6	2.5	2.3	5.4
MT	2013	:	:	:	:	:	:
	2060	:	:	:	:	:	:
NL	2013	0.8	0.4	0.5	1.6	1.2	2.4
	2060	0.8	0.3	0.4	0.4	1.1	4.8
AT	2013	0.6	1.4	2.4	2.6	2.6	4.1
	2060	0.5	0.5	1.5	2.4	2.7	6.4
PL	2013	1.0	1.0	2.5	2.2	1.6	3.1
	2060	0.3	0.3	0.5	1.5	2.1	6.0
PT	2013	0.5	0.8	2.2	3.5	2.7	4.2
	2060	0.3	0.3	0.7	1.3	2.1	8.5
RO	2013	1.1	1.8	1.1	1.1	1.2	1.9
	2060	0.9	1.2	0.7	0.8	1.2	3.3
SI	2013	0.2	1.0	2.4	2.3	2.0	3.8
	2060	0.2	0.4	1.1	2.0	2.6	9.0
SK	2013	0.7	0.5	1.9	1.6	1.3	2.2
	2060	0.4	0.2	0.3	1.5	2.1	5.7
FI	2013	0.6	0.5	1.7	3.6	2.4	4.0
	2060	0.5	0.2	0.8	2.4	2.5	6.5
SE	2013	0.5	0.3	0.6	2.3	1.8	3.3
	2060	0.4	0.2	0.3	1.5	1.5	3.6
UK	2013	:	:	:	:	:	:
	2060	:	:	:	:	:	:
NO	2013	1.0	0.6	1.3	2.2	1.8	3.0
	2060	1.0	0.6	1.3	2.1	2.1	5.2
EU	**2013**	**0.6**	**0.5**	**1.7**	**2.6**	**2.2**	**4.4**
	2060	**0.4**	**0.2**	**0.6**	**1.6**	**2.2**	**6.7**
EA	**2013**	**0.5**	**0.5**	**1.7**	**2.6**	**2.3**	**4.6**
	2060	**0.4**	**0.2**	**0.6**	**1.7**	**2.3**	**7.1**

(1) MT and the UK: public pension expenditure decomposition by age groups is not available.
LV and LT: 2014 data is used as a starting value.
AT: only earnings-related expenditure is covered.
EL: without small supplementary funds.
IE: without public service occupational schemes.
Source: Commission services, EPC

Gross versus net pension expenditure

The average level of taxes on pensions, over the panel of 15 countries for which projections are available (Sweden, the Netherlands, Denmark, Romania, Croatia, Norway, Poland, Germany, Spain, Belgium, France, Italy, Portugal, Slovenia and Finland), is estimated at 1.4% of GDP in 2013, and should remain roughly stable over the projection horizon (see Graph II.1.14). However, three countries should experience an increase of these taxes as a share of GDP (Germany, Norway and Belgium), whilst Denmark projects a decrease. These trends mainly capture the underlying dynamics of gross pension expenditures over GDP, as tax revenues as a share of gross public pension expenditures are generally assumed to remain constant over time. In some cases however, legislated changes to pension taxation can explain these dynamics. ([56])

Graph II.1.14:   **Gross versus net public pension expenditure in 2013 and 2060 (% of GDP)**
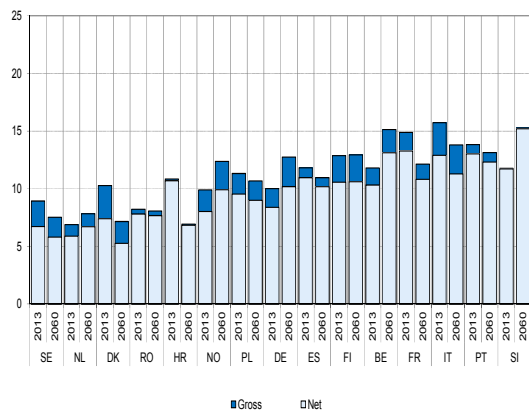
(1) The graph only presents the countries for which (non-zero) data are available. Gross and net public pension expenditures overlap in the graph, so that the difference (dark blue bar) represents taxes on pensions.
Source: Commission services, EPC

1.5.2. Private occupational and individual pensions

The relevance of private occupational and individual schemes in total pension provision has increased in several Member States in recent years.

Participation in second and third pillar schemes has been encouraged or even made mandatory in several countries to decrease the financial burden of ageing populations on public finances. However, in 2013, privately managed pension schemes were still rather young in the majority of these countries: out of the countries reporting such expenditures, ([57]) their contribution to pensions in payment was only significant in Denmark, the Netherlands and Sweden (see Table II.1.17). Over the projection period, private pension schemes are projected to expand in most of the countries considered, in particular in Latvia, Estonia and Croatia. By 2060, these schemes are expected to represent more than 40% of total pension expenditures in the Netherlands and Denmark, around a third in Sweden and Latvia, and more than a quarter in Estonia. ([58]) Private pension schemes should remain limited in Spain and Portugal over the projection period. Their weight in total pension spending, whilst increasing, should remain below 7% in Spain by 2060, and is even projected to decline in Portugal, representing less than 2% by 2060.

Table II.1.17:   **Private (occupational and individual) pension schemes expenditure in 2013 and 2060**

Country	% GDP		% total pension expenditure	
	2013	2060	2013	2060
DK	4.6	5.8	30.8	44.7
EE	0.0	2.2	0.2	25.9
ES	0.7	0.8	5.3	6.9
HR	0.0	1.6	0.0	19.0
LV	0.0	2.2	0.0	32.2
LT	0.0	1.1	0.0	12.8
NL	5.2	6.5	43.2	45.5
PT	0.3	0.2	2.0	1.5
RO	0.0	0.8	0.0	9.3
SE	2.5	3.9	21.7	34.2

(1) The table only presents the countries which provided (non-zero) data for private (occupational and individual) pension schemes.
Source: Commission services, EPC

In Sweden, Denmark and the Netherlands, private pension expenditure mainly comes from *occupational* schemes (see Graph II.1.15). Indeed, in these countries, occupational schemes with high coverage rates (in 2013, close to 70% of total pensioners on average) and substantial additional

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([56]) In Germany, the increase of public pension taxes to GDP is in line with the undergoing change in the tax regime related to contributions and pensions. Indeed, pension contributions will be completely exempted from tax by the year 2025, whilst pension benefits will be completely taxed by the year 2040.

([57]) Private pension expenditures are reported on a voluntary basis by Member States.
([58]) In other countries, on the other hand, private pension schemes have been shifted back to the public sector (Hungary, Poland).

pension provisions, on top of public pensions, have existed for quite a long time. In 2013, they represented 1.8% of GDP in Sweden, 4.6% of GDP in Denmark and up to 5.2% of GDP in the Netherlands, and are projected to expand further over the long-run (the highest value being reached by the Netherlands at 6.5% of GDP in 2060). In Sweden, private *individual mandatory* pension schemes are also expected to mature over the projection period (*premium pension*), whilst private *individual voluntary* pension schemes (representing 0.6% of GDP in 2013) would gradually fade out as a result of the suppression of tax incentives. In other countries, the bulk of the expansion of private pension schemes is projected to come from *individual mandatory* schemes (Romania, Lithuania, Croatia, Estonia and Latvia). In Spain, private pension spending, limited as a share of GDP, would still rely by 2060 on a balanced mix of occupational and individual voluntary schemes.

Graph II.1.15: **Expenditure for private occupational and individual pension schemes in 2013 and 2060 (% of GDP)**
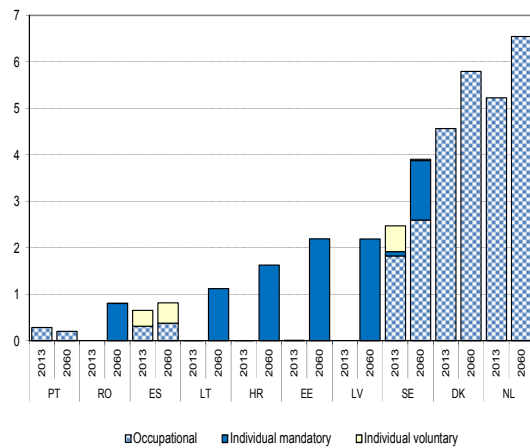
(1)
The graph only presents the countries which provided (non-zero) data for private (occupational and individual) pension schemes.
Source: Commission services, EPC

Contributions to private pension schemes, as a percentage of GDP, will increase over the projection period in 5 countries (Romania, Lithuania, Croatia, Estonia and Latvia; see Graph II.1.16), whilst they will slightly decrease in 4 countries (Portugal, Spain, Sweden and Denmark). In the Netherlands, private contributions to occupational schemes are projected to significantly

decrease over the period 2013-2060 (-2.3 p.p. of GDP), as a result of the decline of future pension contribution rates. This projected decline is the consequence of the reduced need to accumulate assets, resulting from the increase in the eligibility rate (the 2012 reform applying both to the public and private pension system).

Graph II.1.16: **Contributions to private occupational and individual pension schemes in 2013 and 2060 (% of GDP)**
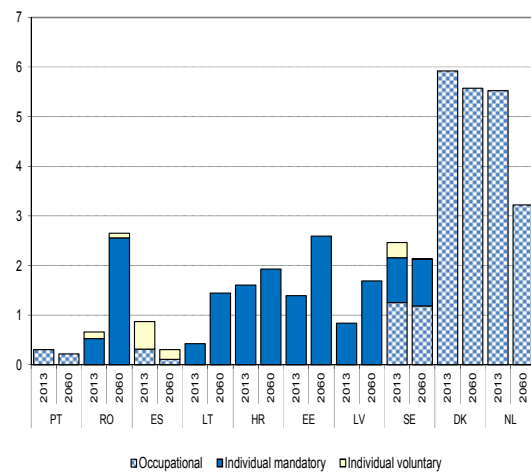
(1)
The graph only presents the countries for which (non-zero) data are available.
Source: Commission services, EPC

1.6. DRIVERS OF PENSION EXPENDITURE

1.6.1. Decomposition of projected pension expenditure

A decomposition of the main underlying drivers of the evolution of the pension expenditure to GDP ratio is outlined in Box II.1.2 below. The overall change in gross public pension expenditure over the projection horizon 2013-2060 is decomposed into 4 drivers (dependency ratio, coverage ratio, benefit ratio and the labour market effects). The labour market effect is further decomposed into three drivers: employment, labour intensity and career shift effects (see Table II.1.18).

Confirming the results of the population projections (see Chapter 1), the demographic factor contributes the most to the increase in public pension expenditure over the period 2013-2060

(+7.6 p.p. of GDP at EU level), ranging from +2.6 p.p. in Sweden to as much as +12.4 p.p. in Poland.([59]) Moreover, for nearly all Member States the dependency ratio is the only factor contributing to increasing the pension expenditure to GDP ratio, while the coverage ratio, the employment effect as well as the benefit ratio contribute to limit the upward trend in pension expenditure for nearly all countries.

Although the upwards contribution of the ageing population is the largest single factor, the negative budgetary effect of demographic factors is fully offset by the other sub-components. As a consequence, gross public pension expenditure in 2060 stays at its 2013 level in the EA, while a slight decline in public pension expenditure as a share of GDP is projected for the EU as a whole by 2060 (-0.2 p.p.)

Among the factors contributing to a lowering of the expenditure trend, the labour market effect is the least pronounced. Increasing employment and labour intensity together with the effect of career shifts only leads to a reduction in the public pension expenditure over GDP ratio by more than 2 p.p. over the projection period for Greece, Spain, Italy, Cyprus and Portugal. Overall, the labour market effect is projected to reduce the upward pressure on pension expenditure by 1.4 p.p. on average for the EU. ([60]) Projected figures range from 0.0 p.p. of GDP in Romania to -6.2 p.p. of GDP in Greece.

The employment effect is by far the largest subcomponent of the labour market effect, totalling -1.0 p.p., in the EU as a whole. It also explains the large total decline in the labour market effect for Greece, Spain, Italy, Cyprus and Portugal, all countries with assumed strong declines in unemployment rates from very high initial values. The employment effect shows no significant impact for Romania and Finland.

The career shift effect is limited (on average -0.4 p.p. of GDP in the EU). The largest impact can be seen in Italy, Greece and Portugal (-1.0 p.p., -0.8 p.p. and -0.7 p.p. respectively), whereas it has no significant impact in Ireland, Lithuania, Luxembourg and Malta (0.0 p.p.).

As a result of the macroeconomic assumptions used in the projections, the labour intensity contribution has more or less no impact on the change in the pension expenditure to GDP ratio (EU average: +0.1 p.p.). Only Italy, Luxembourg and Malta project an increasing effect of +0.1 p.p. of GDP. In all other Member States, the labour intensity effect is negligible.

Both the effects of the coverage rate as well as of the benefit ratio are more pronounced than the labour market effect in leading to downward pressure on the expenditure ratio.

([59]) Please note that due to a lack of necessary data IE public service occupational pensions are not included in the analysis of the decomposed pension expenditure drivers throughout the whole chapter. This also affects the decomposed EU28 and EA figures. All respective residual values are corrected accordingly in order to be consistent with the overall expenditure figures as a share of GDP which include these two components.

([60]) As cross-border workers in Luxembourg are not covered in the labour force projections for the pension projection exercise, a deeper analysis of the employment effect contribution as well as the coverage ratio contribution is not meaningful.

Box II.1.2: Decomposition of pension expenditure to GDP

In order to analyse the dynamics and the underlying drivers of the pension spending to GDP ratio over time, the following decomposition formula is proposed:

$$\frac{\text{Pension Exp}}{\text{GDP}} = \overbrace{\frac{\text{Population 65+}}{\text{Population 20} - 64}}^{\text{Dependency Ratio}} \times \overbrace{\frac{\text{Number of Pensioners(Pensions)}}{\text{Population 65+}}}^{\text{Coverage Ratio}}$$

$$\times \overbrace{\frac{\text{Average income from pensions(Average Pension)}}{\dfrac{\text{GDP}}{\text{Hours Worked 20} - 74}}}^{\text{Benefit Ratio}} \times \overbrace{\frac{\text{Population 20} - 64}{\text{Hours Worked 20} - 74}}^{\text{Labour Market /Labour Intensity}}$$

The Equation highlights the forces that affect the dynamics of pension expenditure. Indeed the overall changes in public pension expenditure to GDP ratio can be expressed as the sum of the contribution of the following four main factors:

The dependency ratio effect, which quantifies the impact of demography, (the change in the composition of the population, old age versus working age) on the pension-to-GDP ratio. An increase in this ratio indicates a higher proportion of older individuals with respect to working age population, i.e. an ageing population. As the dependency ratio increases, the pension-to GDP ratio moves in the same direction.

The coverage ratio effect is defined as the number of pensioners of all ages to the population over 65 years. The analysis of the coverage ratio provides information about how the developments of the effective exit ages and the share of the population covered by the pension system influence pension spending. As the coverage ratio increases, the pension expenditure-to-GDP ratio increases as well.

The benefit ratio effect indicates the development of the relative value of the average pension (public pension spending / number of pensioners) with respect to the average wage. It reflects the features of the legal framework of pension systems as far as the calculation and indexation rules are concerned.

The labour market/ labour intensity effect describes the effects of labour market behaviour on pension expenditure. In order to split this labour market behaviour policies into different drivers, a further decomposition is used:

$$\overbrace{\frac{\text{Population } 20 - 64}{\text{Hours Worked } 20 - 74}}^{\text{Labour Market / Labour Intensity}} =$$

$$\overbrace{\frac{\text{Population } 20 - 64}{\text{Working People } 20 - 64}}^{1/\text{Employment Rate}} \times \overbrace{\frac{\text{Working People } 20 - 64}{\text{Hours Worked } 20 - 64}}^{1/\text{Labour intensity}} \times \overbrace{\frac{\text{Hours Worked } 20 - 64}{\text{Hours Worked } 20 - 74}}^{1/\text{Career shift}}$$

[3]

More in detail, the 3 different labour market behaviour components can be interpreted as follows:

The employment rate effect is defined as the ratio of population aged 20-64 to the number of working people aged 20-64 (i.e. 1/employment rate). In Pay-as-You-Go systems, a higher employment rate helps increasing the sustainability of pension systems by allowing for a larger contribution base (at least in the short term), hence as the employment rate increases, the ratio of pension expenditure to GDP falls.

Box (continued)

The labour intensity effect is defined as the ratio of the working population 20-64 to the hours worked of the population 20-64 (i.e. 1/labour intensity). As labour intensity increases, the ratio of pension expenditure to GDP falls.

The career prolongation effect is defined as the ratio of hours worked by the population 20-64 to the hours worked by the population 20-74 (i.e. 1/career shift). Changes in this ratio (i.e. a decrease) capture the effect of a working life prolongation above the age of 65 (e.g. because of reforms that postpone the statutory retirement age or because of active ageing policies). An increase in the hours worked by people aged more than 65 helps to reduce the ratio of pension expenditure to GDP.

Table II.1.18:   Decomposition of gross public pension expenditure change over 2013-2060

Country	2013 level	Dependency ratio contribution	Coverage ratio contribution	Benefit ratio contribution	Labour market effect contribution				Interaction effect	2060 level
					Total (a+b+c)	Employment rate (a)	Labour intensity (b)	Career shift (c)		
BE	11.8	5.6	-1.3	-0.3	-0.6	-0.6	0.0	-0.1	-0.1	15.1
BG	9.9	6.7	-3.1	-2.5	-1.2	-0.9	0.0	-0.3	-0.3	9.4
CZ	9.0	6.8	-3.6	-1.0	-1.0	-0.6	0.0	-0.4	-0.5	9.7
DK	10.3	3.6	-3.6	-2.0	-0.9	-0.5	0.0	-0.5	-0.2	7.2
DE	10.0	7.3	-1.3	-2.2	-0.7	-0.4	0.0	-0.4	-0.4	12.7
EE	7.6	5.4	-2.0	-3.8	-0.5	-0.4	0.0	-0.1	-0.4	6.3
IE*	7.4	6.0	-1.7	-2.1	-0.6	-0.5	0.0	0.0	-0.5	8.4
EL	16.2	10.6	-3.2	-2.1	-6.2	-5.5	0.0	-0.8	-1.0	14.3
ES	11.8	8.9	-0.6	-4.4	-3.8	-3.5	0.0	-0.4	-0.9	11.0
FR	14.9	6.7	-3.2	-4.7	-1.2	-1.0	0.0	-0.2	-0.4	12.1
HR	10.8	6.4	-3.3	-5.0	-1.7	-1.4	0.0	-0.3	-0.4	6.9
IT	15.7	8.0	-5.0	-2.1	-2.3	-1.4	0.1	-1.0	-0.5	13.8
CY	9.5	8.7	-2.1	-3.8	-2.2	-1.7	0.0	-0.5	-0.6	9.3
LV	7.7	3.8	-1.4	-4.5	-0.8	-0.6	0.0	-0.1	-0.3	4.6
LT	7.2	4.3	-2.2	-0.9	-0.6	-0.5	0.0	0.0	-0.4	7.5
LU	9.4	6.8	-2.4	0.1	-0.3	-0.3	0.1	0.0	-0.2	13.4
HU	11.5	7.8	-3.5	-1.9	-1.9	-1.7	0.0	-0.2	-0.5	11.4
MT	9.6	7.2	-0.9	-1.4	-1.4	-1.4	0.1	0.0	-0.3	12.8
NL	6.9	4.8	-2.2	-0.5	-0.8	-0.5	0.0	-0.3	-0.3	7.8
AT	13.9	9.4	-3.3	-4.1	-1.0	-0.5	0.0	-0.5	-0.6	14.4
PL	11.3	12.4	-5.2	-5.2	-1.4	-0.8	0.0	-0.6	-1.2	10.7
PT	13.8	11.7	-3.1	-5.9	-2.6	-1.9	0.0	-0.7	-0.9	13.1
RO	8.2	6.8	-2.3	-4.0	0.0	0.0	0.0	-0.1	-0.6	8.1
SI	11.8	9.7	-2.7	-1.4	-1.5	-1.3	0.0	-0.3	-0.6	15.3
SK	8.1	11.3	-4.2	-2.6	-1.3	-0.8	0.0	-0.5	-1.0	10.2
FI	12.9	6.0	-2.5	-2.7	-0.5	-0.3	0.0	-0.2	-0.2	12.9
SE	8.9	2.6	0.2	-3.7	-0.4	-0.4	0.0	-0.1	-0.1	7.5
UK	7.7	3.9	-1.6	-0.7	-0.6	-0.5	0.0	-0.2	-0.2	8.4
NO	9.9	5.6	-0.5	-2.2	-0.2	-0.1	0.0	-0.1	-0.2	12.4
EU	11.3	7.2	-2.6	-3.0	-1.4	-1.0	0.1	-0.4	-0.4	11.1
EA	12.3	7.6	-2.4	-3.1	-1.6	-1.2	0.0	-0.4	-0.4	12.3

(1) IE: The decomposition excludes occupational public pensions, therefore the interaction effect is adjusted to match with the overall expenditure changes.

The decomposition is based on the number of pensioners.

Source: Commission services, EPC.

For the EU as a whole, the coverage ratio effect (-2.6 p.p.) is slightly smaller compared to the benefit ratio effect (-3.0 p.p.). However, large variations can be observed among Member States. Only Sweden (+0.2 p.p.) projects a small increase in the coverage ratio contribution to the pension expenditure to GDP ratio. On the contrary, strong downward effects of the coverage ratio on public pension expenditure are projected in Poland (-5.2 p.p.), Italy (-5.0 p.p.) and Slovakia (-4.2 p.p.).

A similar picture can be observed for the benefit ratio effect. Only one country projects upward pressures on expenditure due to an increasing benefit ratio effect (Luxembourg with +0.1 p.p.) while in countries like Portugal (-5.9 p.p.), Poland (-5.2 p.p.) and Croatia (-5.0 p.p.) a strong downward trend has been projected. The differences between countries – both for the coverage ratio as well as the benefit ratio effect – are in most of the cases due to different kinds of reforms affecting both the access to pensions (e.g. set up or shift to secondary pillars not classified in the public sector or increases in the statutory retirement age) and the generosity of future pension benefits (e.g. sustainability factors, less generous indexation rules).

Graph II.1.17:   **Decomposition of public pension expenditure to GDP**
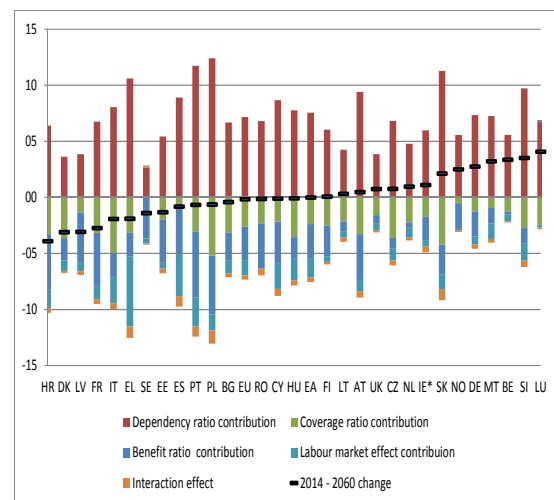
Source: Commission services, EPC.

Old-age dependency effect

The overall picture of the old-age dependency ratio effect on public pension expenditure is shown in Table II.1.19. Without any exception, the contribution of the old-age dependency ratio is bigger than the total change in the public pension to GDP in all Member States. Due to ageing populations, demographic factors are projected to be the main (and usually the only) increasing driver of public pension expenditure in the upcoming decades. Recent pension reforms leading to increased retirement ages, higher employment rates (of older workers) and less generous pension entitlements have strengthened the counterbalancing impact on pension expenditure.

Table II.1.19:	**Contribution of the dependency ratio effect to the change in public pension expenditure (in p.p. of GDP)**					
Country	2013-20	2020-30	2030-40	2040-50	2050-60	2013-60
BE	1.1	2.3	1.1	0.3	0.8	5.6
BG	1.6	1.3	1.3	1.6	0.8	6.7
CZ	2.2	1.2	1.3	1.7	0.4	6.8
DK	1.2	1.3	0.9	-0.2	0.4	3.6
DE	1.3	3.2	2.0	0.4	0.4	7.3
EE	1.5	1.7	0.9	0.9	0.5	5.4
IE	1.9	2.5	2.1	1.6	-2.0	6.0
EL	1.7	3.0	3.8	2.6	-0.6	10.6
ES	1.8	3.4	3.6	1.9	-1.7	8.9
FR	2.7	2.7	1.7	-0.1	-0.3	6.7
HR	1.7	2.3	1.0	0.9	0.5	6.4
IT	1.2	2.7	3.3	0.9	0.1	8.0
CY	2.2	2.8	1.3	1.4	0.9	8.7
LV	1.0	1.7	0.7	0.3	0.1	3.8
LT	1.0	3.4	1.4	-0.8	-0.8	4.3
LU	0.6	2.0	1.6	1.1	1.5	6.8
HU	2.3	1.1	1.6	1.7	1.2	7.8
MT	2.4	2.2	0.1	1.0	1.5	7.2
NL	1.4	2.0	1.3	-0.1	0.2	4.8
AT	1.1	3.9	2.5	0.7	1.2	9.4
PL	3.5	3.0	1.3	2.9	1.7	12.4
PT	2.2	3.5	3.9	2.4	-0.1	11.7
RO	1.6	1.0	2.2	1.4	0.6	6.8
SI	3.0	3.2	1.9	1.9	-0.3	9.7
SK	2.5	2.5	1.6	2.7	1.9	11.3
FI	2.7	2.2	-0.1	0.3	0.9	6.0
SE	0.8	0.7	0.4	0.0	0.8	2.6
UK	0.8	1.5	0.9	0.3	0.4	3.9
NO	1.0	1.5	1.4	0.4	1.3	5.6
EU	1.7	2.5	1.9	0.9	0.2	7.2
EA	1.7	3.0	2.4	0.7	-0.2	7.6

Source: Commission services, EPC.

Table II.1.19 shows the contribution of the demographic factors to the change in public pension spending per decade over the projection horizon. The demographic effect is at its strongest in the first two decades of the projections (2013-2030), when the post-war baby-boom generation

reaches the retirement age. The smallest impact is projected for Luxembourg least over the 2013-2020 period (+0.6 p.p.) while the demographic impact is the largest in Poland (+3.5 p.p.). The impact for the EU as a whole is 1.7 p.p. over the same period. Between 2020 and 2030, the demographic effect is at its strongest level (+2.5 p.p.). In that period, the minimum value is projected for Sweden (+0.7 p.p.) while the maximum impact is recorded for Austria (+3.9 p.p.).

The demographic effect is still significant in 2030-2040, when for the EU as a whole the dependency effect contribution is projected to be +1.9 p.p. of GDP. Thereafter the impact of demographics factors starts to decline, first to +0.9 p.p. between 2040 and 2050, falling to +0.2 p.p. in the final decade of the projection period (2050-2060). In four Member States (Denmark, France, Lithuania and the Netherlands) the contribution of the demographic change will become negative over the period 2040 to 2050. Between 2050 and 2060 the number increases to seven countries (Ireland, Greece, Spain, France, Lithuania, Portugal and Slovenia).

Coverage effect

Several reform steps have been taken in recent years by a number of Member States in order to limit the increasing effect of an ageing society on public pension expenditure. In many cases, these reforms were related to the abolishment or restriction of early retirement schemes, the increase in statutory retirement ages or the incentive to stay longer in the labour market on a voluntary basis, i.e. exiting labour markets beyond the legal retirement age. All these measures are reflected in a lower level of the coverage ratio (the number of pension benefit recipients as percent of the pensionable population, here measured as persons aged 65 or more, see Table II.1.20.

Table II.1.20: **Coverage ratio development in 2013-2060 (as % of population aged 65 and over)**

Country	2013	2020	2030	2040	2050	2060	Change 2013 - 2060 in p.p.
BE	134.1	133.3	128.6	126.4	124.5	122.6	-11.5
BG	156.2	138.6	126.9	116.7	110.7	108.6	-47.6
CZ	160.4	133.6	125.8	116.9	108.9	106.0	-54.4
DK	130.1	115.0	100.9	92.9	91.9	84.5	-45.6
DE	118.3	114.8	108.4	105.9	105.8	105.2	-13.1
EE	172.3	156.2	143.0	138.9	134.0	130.3	-41.9
IE	148.5	135.5	123.4	118.5	112.5	119.4	-29.1
EL	117.5	107.6	94.2	91.4	89.7	95.1	-22.4
ES	107.7	106.8	101.6	99.6	99.7	102.2	-5.5
FR	157.3	143.7	134.2	126.4	126.0	126.4	-30.9
HR	156.7	143.0	128.0	115.8	111.9	110.9	-45.7
IT	120.9	108.2	98.5	92.5	90.2	87.2	-33.7
CY	122.0	112.6	108.2	108.5	101.8	96.3	-25.7
LV	154.0	140.0	128.3	125.7	124.5	123.5	-30.5
LT	170.9	156.9	136.1	127.3	127.3	127.2	-43.7
LU	225.6	217.1	207.8	199.6	188.4	182.8	-42.8
HU	163.5	130.6	126.6	122.8	117.8	115.4	-48.0
MT	120.0	111.0	102.6	106.4	107.5	108.4	-11.5
NL	134.7	122.5	109.7	106.7	104.0	99.3	-35.5
AT	148.1	141.5	124.5	117.4	118.8	116.6	-31.5
PL	165.3	133.0	114.7	107.9	101.7	99.6	-65.7
PT	124.5	116.8	107.1	101.1	99.1	100.5	-24.0
RO	164.5	155.8	158.6	144.6	132.4	123.2	-41.4
SI	170.1	159.3	143.6	141.1	136.2	135.0	-35.2
SK	183.3	159.6	138.8	130.6	116.3	108.2	-75.1
FI	132.6	121.5	116.7	115.1	112.7	109.9	-22.7
SE	128.4	127.7	129.3	128.9	131.5	131.5	3.2
UK	118.2	103.1	96.0	98.6	94.1	95.1	-23.1
NO	140.3	137.8	132.5	128.2	132.1	133.5	-6.8
EU	133.1	122.1	113.2	108.8	106.3	105.4	-27.6
EA	128.7	121.0	112.5	107.8	106.6	106.3	-22.5

(1) The coverage ratio is calculated as the total number of public pensioners as a share of the population 65 and over. In case the number of pensioners was not provided, the number of pensions was used as a proxy.
Source: Commission services, EPC

Table II.1.21: **Contribution of the coverage ratio effect to the change in public pension expenditure (in p.p. of GDP)**

Country	2013-20	2020-30	2030-40	2040-50	2050-60	2013-60
BE	-0.1	-0.5	-0.3	-0.2	-0.2	-1.3
BG	-1.1	-0.7	-0.7	-0.4	-0.2	-3.1
CZ	-1.6	-0.5	-0.6	-0.6	-0.3	-3.6
DK	-1.2	-1.1	-0.7	-0.1	-0.6	-3.6
DE	-0.3	-0.6	-0.3	0.0	-0.1	-1.3
EE	-0.7	-0.6	-0.2	-0.2	-0.2	-2.0
IE	-0.7	-0.8	-0.4	-0.5	0.6	-1.7
EL	-1.4	-2.0	-0.4	-0.3	0.9	-3.2
ES	-0.1	-0.6	-0.2	0.0	0.3	-0.6
FR	-1.3	-1.0	-0.9	0.0	0.0	-3.2
HR	-1.0	-1.1	-0.9	-0.3	-0.1	-3.3
IT	-1.7	-1.4	-1.0	-0.4	-0.5	-5.0
CY	-0.7	-0.4	0.0	-0.6	-0.5	-2.1
LV	-0.7	-0.5	-0.1	0.0	0.0	-1.4
LT	-0.6	-1.0	-0.6	0.0	0.0	-2.2
LU	-0.4	-0.5	-0.5	-0.7	-0.4	-2.4
HU	-2.3	-0.3	-0.3	-0.4	-0.2	-3.5
MT	-0.7	-0.8	0.4	0.1	0.1	-0.9
NL	-0.7	-0.8	-0.2	-0.2	-0.4	-2.2
AT	-0.6	-1.7	-0.8	0.2	-0.3	-3.3
PL	-2.3	-1.5	-0.6	-0.6	-0.2	-5.2
PT	-0.9	-1.2	-0.9	-0.3	0.2	-3.1
RO	-0.4	0.2	-0.7	-0.7	-0.6	-2.3
SI	-0.7	-1.1	-0.2	-0.5	-0.1	-2.7
SK	-1.1	-1.1	-0.5	-0.9	-0.7	-4.2
FI	-1.1	-0.6	-0.2	-0.3	-0.3	-2.5
SE	0.0	0.1	0.0	0.2	0.0	0.2
UK	-1.0	-0.5	0.2	-0.4	0.1	-1.6
NO	-0.2	-0.4	-0.4	0.3	0.1	-0.5
EU	-1.0	-0.8	-0.5	-0.3	-0.1	-2.6
EA	-0.8	-0.9	-0.5	-0.2	0.0	-2.4

Source: Commission services, EPC

Table II.1.21 depicts the contribution of the coverage ratio effect on public pension expenditure change in the period between 2013 and 2060.

The coverage ratio at age 65 is projected to be reduced over the projection period in all countries except for Sweden. ([61]) This is firstly the effect of increasing statutory and as a consequence also effective retirement ages, in some countries even after age 65. Secondly, this is also due to stricter conditions for pension eligibility below the official retirement age (e.g. getting disability or early retirement pensions). In the EU, the coverage ratio is projected to fall by 28 p.p. from an initial level of 133% to 105%.

Labour market effect

Measures aimed at the labour market improve the sustainability of pension systems through higher labour supply and thus faster potential GDP growth. Higher employment rates also increase the amount of pension contributions and in case the increase occurs also in older age groups, it leads to higher effective retirement ages and thus shortens the time spend on retirement.

The labour market effect is at its largest between 2013 and 2030 (see Table II.1.22), resulting in an overall effect of -1 p.p. for the EU. The labour market effect is projected to reduce public pension expenditure by -0.5 p.p. of GDP both between 2013 and 2020 and between 2020 and 2030. The effect is slightly smaller in the following decade (-0.3 p.p. in 2030-2040). Thereafter, the labour market effect has no significant impact on the overall EU pension expenditure to GDP.

([61]) The case of Luxembourg is special, due to the country-specific situation concerning the development of the number of foreign pensioners receiving a pension from the Luxembourg pension scheme.

| Table II.1.22: | **Contribution of the labour market effect to the change in public pension expenditure (in p.p. of GDP)** | | | | | |

Country	2013-20	2020-30	2030-40	2040-50	2050-60	2013-60
BE	-0.4	-0.2	-0.1	0.0	0.0	-0.6
BG	-0.6	-0.3	-0.1	0.0	-0.1	-1.2
CZ	-0.4	0.0	-0.1	-0.3	-0.2	-1.0
DK	-0.4	-0.2	-0.1	0.0	-0.2	-0.9
DE	-0.3	-0.3	-0.1	0.0	0.0	-0.7
EE	-0.2	-0.1	-0.1	0.0	0.0	-0.5
IE	-0.3	-0.3	-0.2	-0.1	0.3	-0.6
EL	-2.3	-2.2	-1.6	-0.4	0.2	-6.2
ES	-1.6	-1.6	-0.9	0.0	0.2	-3.8
FR	-0.3	-0.6	-0.3	0.0	0.0	-1.2
HR	-0.7	-0.5	-0.4	-0.1	0.0	-1.7
IT	-0.9	-0.9	-0.4	0.1	-0.2	-2.3
CY	-0.5	-0.9	-0.5	-0.2	-0.1	-2.2
LV	-0.2	-0.3	-0.2	0.0	-0.1	-0.8
LT	0.0	-0.2	-0.2	0.0	-0.1	-0.6
LU	-0.2	-0.2	-0.1	0.1	0.1	-0.3
HU	-1.3	-0.5	-0.1	0.0	0.0	-1.9
MT	-0.6	-0.7	-0.1	0.0	-0.1	-1.4
NL	-0.3	-0.3	-0.2	0.0	-0.1	-0.8
AT	-0.3	-0.4	-0.2	0.1	-0.1	-1.0
PL	-0.7	-0.3	-0.1	-0.3	0.0	-1.4
PT	-0.9	-1.2	-0.6	-0.1	0.2	-2.6
RO	-0.1	0.2	-0.1	0.0	-0.1	0.0
SI	-0.8	-0.6	0.0	-0.2	0.0	-1.5
SK	-0.2	-0.2	-0.2	-0.3	-0.4	-1.3
FI	-0.4	-0.1	0.1	0.0	0.0	-0.5
SE	-0.3	-0.1	0.0	0.0	-0.1	-0.4
UK	-0.2	-0.2	-0.2	-0.1	-0.1	-0.6
NO	-0.1	0.0	-0.1	0.0	0.0	-0.2
EU	-0.5	-0.5	-0.3	0.0	0.0	-1.4
EA	-0.6	-0.7	-0.3	0.0	0.0	-1.6

Source: Commission services, EPC

The largest contribution of the labour market effect is projected for Greece and Spain in the three first decades (2013 - 2040). As of 2040, the contribution becomes less pronounced, reflecting mostly the assumption of a constant structural unemployment rate in the Member States from that point onwards and only moderate increases in participation rates.

Benefit ratio effect

The current design of the pension system can impact the future generosity of the system in many ways. For example; indexation of pensions in payment and valorisation of past pensionable earnings / contributions paid, the way accrual rates are determined and increased age limits to receive a full pension are design features that impact the generosity of current and future pensions. Many countries have implemented measures that reduce the generosity of pension benefits to improve the sustainability of their pension systems. The impact of the reduced relative generosity of pensions is captured by the benefit ratio effect.

In the EU as a whole, the benefit ratio effect would contribute to reduce the pension expenditure to GDP ratio over the projection horizon by 3.0 p.p. of GDP (see Table II.1.23). In 7 Member States (Spain, France, Croatia, Latvia, Austria, Poland and Portugal) the contribution of a decreasing benefit ratio is significant in absolute terms (i.e. above 4 p.p.). Only in Luxembourg the contribution of the change in the benefit ratio is projected to slightly increase the pension expenditure level (+0.1 p.p.).

In the first part of the projection period (2013-2020), the contribution of a change in the benefit ratio to the change in the overall pension expenditure to GDP ratio is modest (-0.2 p.p. in the EU), however with large divergences between individual Member States. In the first period (2013-2020), the highest upward pressure from the benefit ratio is projected for Greece (+1.3 p.p.) followed by Italy (+1.2 p.p.), while the largest negative contribution are expected for Latvia and Slovenia (-1.8 p.p. for both). In the subsequent period (2020-2030) the largest positive contribution is projected for Belgium at +0.4 p.p. The largest negative benefit ratio contribution would be projected in Spain (-1.5 p.p.). The largest fall in the contribution of benefit ratios is projected to show up over the period 2030-2040 (-1.0 p.p. in the EU). Here, the largest positive contribution is recorded in Slovenia (+0.3 p.p.), the largest negative one in Portugal (with -2.2 p.p.). The overall contribution of the benefit ratio in the EU stays significant in the period 2040-2050 (-0.8 p.p. of GDP for the EU on average).The impact of the benefit ratio becomes less pronounced during the last decade of the projection horizon (-0.4 p.p. in 2050-2060). The largest positive contribution is projected for Slovakia (+0.3 p.p.) and the strongest negative contribution again for Portugal (-1.5 p.p.).

Table II.1.23:	Contribution of the benefit ratio effect to the change in public pension expenditure (in p.p. of GDP)					
Country	2013-20	2020-30	2030-40	2040-50	2050-60	2013-60
BE	0.3	0.4	-0.3	-0.3	-0.4	-0.3
BG	-1.2	-0.5	-0.3	-0.3	-0.2	-2.5
CZ	-0.1	-0.6	-0.5	0.0	0.1	-1.0
DK	-1.1	-0.3	-0.4	-0.2	0.1	-2.0
DE	-0.3	-0.9	-0.9	-0.1	0.0	-2.2
EE	-0.4	-1.3	-0.7	-0.8	-0.6	-3.8
IE	-0.2	-0.2	-0.5	-0.9	-0.4	-2.1
EL	1.3	0.3	-1.7	-1.4	-0.6	-2.1
ES	0.0	-1.5	-1.4	-1.3	-0.2	-4.4
FR	-1.1	-1.0	-1.3	-0.8	-0.5	-4.7
HR	-0.5	-1.3	-1.4	-1.1	-0.6	-5.0
IT	1.2	0.3	-1.6	-1.5	-0.5	-2.1
CY	-1.2	-0.6	-1.1	-0.7	-0.1	-3.8
LV	-1.8	-1.2	-0.4	-0.5	-0.5	-4.5
LT	-0.8	0.0	0.1	0.0	-0.2	-0.9
LU	1.1	0.1	-0.3	-0.6	-0.2	0.1
HU	0.0	-1.1	-0.5	-0.2	-0.1	-1.9
MT	-0.7	-0.8	-0.3	0.2	0.2	-1.4
NL	-0.1	-0.2	-0.3	0.0	0.0	-0.5
AT	-0.2	-0.8	-1.0	-1.1	-1.0	-4.1
PL	-0.8	-1.2	-0.9	-1.2	-1.2	-5.2
PT	0.5	-0.4	-2.2	-2.2	-1.5	-5.9
RO	-1.0	-1.3	-0.9	-0.6	-0.2	-4.0
SI	-1.8	-0.1	0.3	0.1	0.0	-1.4
SK	-0.9	-1.4	-0.4	-0.3	0.3	-2.6
FI	0.3	-0.7	-1.2	-0.8	-0.4	-2.7
SE	-1.1	-1.0	-0.7	-0.5	-0.4	-3.7
UK	0.1	-0.2	-0.4	-0.1	-0.2	-0.7
NO	0.1	-0.4	-0.7	-0.7	-0.5	-2.2
EU	-0.2	-0.6	-1.0	-0.8	-0.4	-3.0
EA	-0.2	-0.7	-1.2	-0.8	-0.3	-3.1

Source: Commission services, EPC

1.6.2. Benefit ratio and replacement rates

Many countries have in recent years implemented pension reforms to strengthen the financial sustainability of pension systems by tightening eligibility and decreasing benefits. This has led to sizable decreases in the projected pension generosity over the coming decades (see Table II.1.24 and Table II.1.25). Although reform measures might have addressed the fiscal sustainability concerns of pension systems, social or political sustainability challenges could still arise in countries with a steep reduction in the generosity of pensions. While it is very difficult to gauge to what extent pension benefits will be "adequate" in the future, it is still relevant to assess the effect these reforms will have in terms of pension adequacy. [62]

The projections of the evolution of two indicators, the benefit ratio (the ratio between the average pension benefit and the economy-wide average wage) and the replacement rate at retirement (the average first pension as a share of the economy-wide average wage at retirement), as projected by the Member States, are depicted in Table II.1.24 and in Table II.1.25.

A rather substantial decline is projected in the public pension benefit ratio for most of the Member States over the period 2013 to 2060, amounting to around -20 pp or more in 3 Member States (Spain, Portugal and Cyprus). [63] Only Luxembourg projects a slightly increasing public benefit ratio over the projection horizon (+2.1 pp). A benefit ratio decrease of around -9 pp is projected at the aggregated EU level (both GDP weighted and simple average). The decline in the total pension benefit ratio becomes smaller in 5 Member States (Estonia, Latvia, Portugal, Romania and Sweden), when the influence of occupational and private individual schemes on pension entitlements is also taken into consideration. The total benefit ratio still declines by -10 pp or more in Poland, Portugal, Romania and Sweden. Only Denmark and Lithuania report a slight increase in the total benefit ratio (by +2.1 p.p. and +2.8 p.p. respectively). [64]

By 2060, the EU aggregate benefit ratio (for public pensions) would reach close to 38% (against 47% in 2013 – weighted average). The highest levels would be recorded in Luxembourg (53.4%), Greece (51.7%) and Italy (50.7%), whilst the lowest levels would be observed in Latvia (13.2%), Croatia (17.6%) and Estonia (18.8%). In Latvia and Estonia, which also report data on occupational and private individual pensions, the total benefit ratio would however be slightly higher (at 19.5% and 25.4% respectively).

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[62] A more in-depth examination of this aspect can be found in the "Pension Adequacy Report", which will be published by the Social Protection Committee (SPC) in the course of 2015, dealing with the issue of adequacy of pensions.

[63] In the case of Cyprus, the main driver of the decrease in benefit ratio is the closure of GEPS to new members effective 2011, as well as the reduced indexation on GEPS pensions in payment for existing beneficiaries.

[64] Unfortunately, not all countries have reported projections on benefit ratios and replacement rates in occupational and private individual schemes. As a consequence, only a partial analysis of pension adequacy is possible as second and third pillar schemes can provide a substantial premium on public pension entitlements.

Table II.1.24:   **Benefit ratio in 2013 and 2060 (in %)**

	Benefit Ratio (%)								
	Public pensions - earnings related			Public pensions			All pensions		
	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change
BE	45.1	43.4	-1.7	42.5	41.8	-0.7			
BG	36.8	31.6	-5.3	34.2	27.5	-6.7			
CZ	42.6	40.7	-1.9	42.8	39.5	-3.3			
DK	57.5	64.9	7.5	42.5	35.1	-7.4	61.5	63.5	2.1
DE	40.8	35.6	-5.2	44.6	37.3	-7.4			
EE	34.6	20.2	-14.4	30.4	18.8	-11.6	30.5	25.4	-5.1
IE	29.6	26.5	-3.1	27.9	26.1	-1.8			
EL	57.8	43.7	-14.1	65.6	51.7	-14.0			
ES	65.4	40.2	-25.3	59.7	39.8	-19.9			
FR	52.5	38.7	-13.9	51.3	38.9	-12.4			
HR	34.9	20.5	-14.4	30.8	17.6	-13.2			
IT	59.2	52.8	-6.4	58.8	50.7	-8.1			
CY	74.9	42.4	-32.5	64.4	43.5	-20.9			
LV	30.3	14.0	-16.2	27.7	13.2	-14.5	27.7	19.5	-8.2
LT	36.9	35.9	-1.1	35.1	33.0	-2.1	35.1	37.9	2.8
LU	57.3	57.8	0.5	51.3	53.4	2.1			
HU	41.4	32.6	-8.8	40.8	31.9	-8.9			
MT	46.5	45.5	-1.0	48.3	44.1	-4.2			
NL	34.2	33.1	-1.1	35.9	34.2	-1.7	63.2	62.8	-0.4
AT				41.2	37.0	-4.1			
PL				47.9	29.4	-18.5	47.9	29.4	-18.5
PT	59.3	43.4	-15.8	61.8	41.7	-20.0	62.1	42.4	-19.6
RO	40.9	26.4	-14.5	37.0	23.4	-13.6	37.0	25.8	-11.2
SI	37.8	32.9	-5.0	33.8	30.2	-3.6			
SK	46.0	30.4	-15.6	45.7	33.3	-12.4			
FI	48.9	42.2	-6.7	52.1	43.8	-8.3			
SE	37.8	20.9	-16.9	42.1	26.3	-15.8	53.8	39.9	-13.8
UK	33.5	32.8	-0.7	36.4	33.9	-2.5			
NO				47.0	36.7	-10.3			
EU*	46.5	38.4	-8.1	46.9	37.8	-9.0			
EA*	49.6	40.3	-9.3	49.7	40.4	-9.3			
EU**	45.5	36.5	-9.0	44.0	34.9	-9.1			
EA**	47.6	37.7	-9.9	46.2	37.5	-8.7			

(1) Public pension earnings-related refers to old age earnings related pension. Public pensions aggregate includes disability, survivor and non-earnings-related benefits. All pension aggregate includes private occupational and private individual benefit and it is only reported when private pensions have been provided.
The 'Benefit ratio' is the average benefit of public pensions and public and private pensions, respectively, as a share of the economy-wide average wage (gross wages and salaries in relation to employees), as calculated by the Commission services.
* Weighted average.
** Simple average.
Source: Commission services, EPC

Replacement rates at retirement can provide information on whether a projected reduction in average pension benefit over time (i.e. a decreasing benefit ratio) is influenced by declining newly awarded pensions (as reflected in the replacement rate at retirement), or due to a decline in previously awarded pensions, mostly due to stricter indexation rules. The projected decline in the public pension replacement rate at the EU aggregate level, between 2013 and 2060, is larger than the one projected for the benefit ratio (around -12 p.p.), when looking at a weighted average, but similar when looking at a simple average (in line with sustainability factors in relatively large economies like Spain and Italy). In this case again, the projected decline would be quite widespread amongst Member States. Considering public pensions, only 2 reporting countries project an increase of replacement ratios over the projection period (Bulgaria and the Czech Republic). On the other hand, the largest decreases are projected in Spain (-30.4 pp), Poland (-24.4 pp), Greece (-16.4

pp) and Estonia (-14.9 pp). [65] These large drops can reflect the calculation of the first average pension being based on wages over the whole career (or increased from 15 to 25 years in Spain), and / or the valorisation being lower than the average wage growth. For Spain and Poland, the projected decline of the replacement rate is also the consequence of the impact of sustainability factors applied in pension benefit formulas. However, in most of the countries that provided data on the total replacement ratio, the decline in the replacement rate for public pensions would be offset to some extent by entitlements from 2nd and 3rd pillar schemes. This is the case in particular in Estonia, Denmark and Slovakia, where the total replacement rate is projected to increase between 2013 and 2060.

[65] The substantial drop in the Polish benefit ratio and replacement rate can partially be explained by the connection of pension benefit calculation to life expectancy.

Table II.1.25:   **Replacement rate in 2013 and 2060 (in %)**

| | Gross Average Replacement Rate (%) | | | | | | | | |
| | Public pensions - earnings related | | | Public pensions | | | All pensions | | |
	2013	2060	p.p. change	2013	2060	p.p. change	2013	2060	p.p. change
BE	39.5	38.8	-0.7						
BG	35.8	36.7	0.9	29.5	31.9	2.4			
CZ	43.3	49.3	6.1	32.2	33.7	1.5			
DK	53.7	60.6	7.0	39.7	32.8	-6.9	57.4	59.4	1.9
DE	38.9	33.9	-5.0	42.5	35.5	-7.0			
EE	40.1	25.2	-14.9	40.1	25.2	-14.9	40.4	44.1	3.7
IE	33.9	30.4	-3.5	31.2	28.7	-2.4			
EL	45.0	26.7	-18.3	38.7	22.3	-16.4	40.7	27.5	-13.2
ES	81.9	49.7	-32.2	79.0	48.6	-30.4			
FR	58.3	48.9	-9.4	50.6	39.2	-11.4			
HR	35.3	18.7	-16.7	27.9	16.5	-11.4	27.9	20.7	-7.1
IT	59.9	51.8	-8.0						
CY	44.2	49.2	5.0						
LV	38.1	19.1	-18.9	33.4	18.1	-15.3			
LT	34.9	34.8	-0.1				35.0	48.6	13.6
LU	77.7	64.6	-13.1						
HU	45.5	45.2	-0.3	33.0	29.1	-3.9			
MT	53.6	47.4	-6.1	49.4	45.6	-3.9			
NL	28.3	27.4	-0.9	29.8	28.3	-1.4	52.4	52.0	-0.3
AT	42.9	41.0	-1.9	51.0	44.7	-6.3			
PL				53.0	28.7	-24.4			
PT	57.5	30.7	-26.7				55.8	36.6	-19.2
RO	35.6	33.7	-1.9						
SI	36.1	34.1	-2.1						
SK	51.7	49.4	-2.4	51.7	49.4	-2.4	51.7	53.1	1.3
FI	42.6	42.0	-0.6				46.0	44.1	-1.9
SE	35.0	23.7	-11.3	35.6	29.0	-6.7	40.9	35.2	-5.7
UK									
NO				43.7	36.2	-7.5			
EU*	43.8	36.0	-7.8	47.5	35.3	-12.3			
EA*	53.0	44.2	-8.9	47.9	35.3	-12.6			
EU**	45.7	39.0	-6.8	68.0	53.4	-9.0			
EA**	47.6	39.2	-8.4	72.0	56.7	-9.4			

(1) Public pension earnings-related refers to old age earnings related pension. Public pensions aggregate includes disability, survivor and non-earnings-related benefits. All pension aggregate includes private occupational and private individual benefit and it is only reported when private pensions have been provided.
The 'Gross Average Replacement Rate' is calculated as the average first pension as a share of the average wage at retirement, as reported by the Member States in the pension questionnaire.
FR: disability schemes and non-earning-related schemes are not taken into account in the "public pensions" replacement rate calculation.
LV: 2015 values taken as starting point for the gross average replacement rates.
UK: new pensions (and therefore replacement ratios) have not been provided.
* Weighted average.
** Simple average.
Source: Commission services, EPC.

Yet, next to the change in replacement rates over time, it is also necessary to observe the level of replacement rates at the beginning and the end of the projection horizon. At the EU aggregated level, the public pension replacement ratio would reach around 35% by 2060 (against close to 48% in 2013 – weighted average). For earnings-related pensions, it is projected at 39% by 2060, with wide differences across the EU, ranging from 18.7% in Croatia to 64.6% in Luxembourg. When the replacement rate is very high in general or in comparison to other Member States (e.g. in Spain, Italy or Luxembourg) at the beginning of the projection period, countries might even have the political goal of reducing public pension

replacement rates over time for reducing pressure on the financial sustainability of the pension systems. However, this could also have a possible negative effect on pension adequacy, if the long term levels of replacement rates fall below a minimum threshold and no other sources of pension entitlements are created by the governments.

The latter argument holds in general for all Member States with relatively low projected replacement rates in the future. There are several ways to increase pension entitlements: (1) it has become common practice in several Member States to either shift pension accumulation from

public first pillar schemes to second and third pillar schemes or to build up additional entitlement in these schemes (Denmark, Estonia, Spain, Croatia, Latvia, Lithuania, the Netherlands, Portugal, Romania and Sweden have provided data on expenditures for second and third pillar schemes, see 1.4.2). ([66]) (2) People are encouraged to start saving privately for their retirement income so that a part of future pension income is created by drawing down on accumulated assets and savings. (3) Being aware of declining public replacement rates over time, people might take the deliberate decision to expand working lives and thus, by increasing the contributory period, they might increase their pensionable incomes as well. The latter aspect is especially supported in those Member States with flexible retirement ages (e.g. Finland and Sweden). The magnitude of these factors is uncertain though.

1.6.3. Pension indexation

An indexation rule that is lower than wage indexation (i.e. price indexation rule), reduces the pension benefit of an individual relative to the average earning, as the latter increases, and thus may pose a risk of pension inadequacy over time. This especially holds in countries with low levels of replacement rates at retirement and for those people that are depending on the social safety net after retirement (i.e. minimum pensions and/or social assistance).

By definition minimum pensions or social allowance benefits are meant to cover from the potential risk of poverty, specific figures characterised by the absence of contribution or largely incomplete and insufficient working careers (hence the social welfare/ pension system cannot base their amount on any pensionable earning reference or valorisation rule). Those treatments, sometimes means-tested, are often quantified in the welfare legislation and their amount is lower compared to the average old-age earnings-related pension. In order to be effective in assuring the beneficiaries against the risk of poverty, it is hence key to assess how their value is updated over time. As shown in Table II.1.26,

almost all countries but France, Ireland, Italy, Hungary Austria and Finland have legislated minimum pension and social assistance indexation rules above prices.

It is occasionally the case that a different, more generous, indexation rule is legislated or specific *ad-hoc* interventions are expected: minimum pensions have been discretionarily uprated in the past. ([67])

Despite existing legal indexation rules, several Member States decided to diverge from them in their projections and used an indexation rule that is more in line with current and past political practices i.e. that reflect constant effective policy (Spain, Italy, Hungary, Malta, Austria, Romania, Slovakia, Ireland, Lithuania and Finland). Other, strictly interpreting the no-policy change approach, projected minimum pension expenditure allowing for the legal indexation rule, i.e. Belgium, Bulgaria, Denmark, Estonia, France, Greece, Latvia, Netherland, Poland, Portugal and Norway.

When the legal indexation rule describes an indexation close to prices it would virtually lead to a gradual disappearance of minimum pensions in the very long run. This cast some doubts not only on whether these instruments will stay effective in covering against the risk of poverty (see the data on minimum pension level and poverty thresholds in Table II.1.26), but also on an underestimation bias in the projected expenditure. However, in almost all Member States, the proportion of public minimum pensions in relation to total public pension expenditure is currently small, and then the size of this possible underestimation may not be very important.

([66]) Possible transaction costs due to the re-allocation of one part of the former pension contributions to the PAYG scheme towards funded schemes need to be taken into account.

([67]) For instance, in France, in order to re-align the minimum income to the increased living standards, it has been decided in 2008 to raise exceptionally the minimum pension for single persons.

Table II.1.26:   **Minimum pension and indexation**

Country	Minimum pension expenditure over GDP (%)		Minimum pension benefit ratio (2013 - 2060 % change)	Indexation rule	
	2013	2060	2013	Used in the projections	Legal
BE	0.1	0.1	-14.6	Prices and living standard	Prices and living standard
BG	0.0	0.1	-40.2	Prices and wages	Prices and wages
CZ					Prices and wages
DK	6.8	4.7	-11.7	Wages	Wages
DE					Prices and wages & re-examination of pension value
EE				Prices and social taxes	Prices and social taxes
IE	0.6	0.3	-5.1	Wages	No fixed rule
EL	1.7	2.2	-32.4	Prices and GDP (max 100% prices)	Prices and GDP (max 100% prices)
ES	0.1	0.1	-0.5	Wages	Index for pension revaluation
FR	0.1	0.2	-22.4	Prices	Prices
HR					Prices and wages
IT	0.3	0.4	-3.1	GDP per capita as of 2019	Prices
CY	0.2	0.2	-19.8	Wages	Wages
LV	0.0	0.0	-69.0	Prices and wages	Prices and wages
LT	0.2	0.1	32.2	Wages	Yearly discretionary decision
LU	0.0	0.0			Wages
HU	0.0	0.0	-60.4	Wages	No fixed rule
MT	0.0	0.0		Wages	Prices and wages
NL	5.1	5.8	-3.1	Wages	Wages
AT	0.0	0.0		Wages	Prices
PL	0.7	0.2	-54.5	Prices and wages	Prices and wages
PT	1.3	1.8	-31.6	Prices and GDP	Prices and GDP
RO	0.1	0.1	-27.6	Wages	Prices and wages until 2030
SI					Prices and wages
SK	0.0	0.2	-14.6	wages	Prices and wages
FI	0.8	0.4	-48.4	Prices and wages	Price
SE	0.7	1.3	-32.7	Wages	Price
UK	0.6	0.3		Wages	Wages
NO	2.7	0.7		Wages	Wages

(1) The minimum pension benefit ratio is the average minimum pension divided by the economy-wide average wage. Minimum pension expenditure is approximated using "non-earnings-related old-age minimum pension" – line 24 of the reporting sheet (see Annex 1). Average pension is calculated dividing by the number of minimum pensions (line 74 of the reporting sheet).
DK, NL AWG data refers to old-age pensions (universal systems based on residency).
IE basic part of the non-earnings-related old-age pension system.
FI number of pensioners (line 106 of the reporting sheet) is used instead of pensions.
LT Data refer to non-earnings related old-age pensions where part of expenditure for minimum pensions is only 20% in 2013 and 70% in 2060; minimum pension benefit ratio % change is 7.2.
Source: Commission services, EPC.

1.7.   DECOMPOSITION OF NEW PENSIONS

A disaggregation of annual flows of new earnings-related pension expenditure into its main drivers was first introduced in the pension projection questionnaire for the 2012 Ageing Report.

The disaggregation adds to the understanding of the underlying drivers of public pension expenditure und thus increases the transparency of the projection exercise. Indeed, together with the indexation rule applied to the stock of "old

pensions", the assessment of the evolution of new pension expenditure completes the analysis of public pension expenditure over time. The reporting framework was further developed in this projection round to better take into account country specific pension design features, in particular in the case of pension point systems. [68]

In general, new pension expenditures can be decomposed as follows:

[68] See Annex 1 on the reporting sheet.

$$P_{new} = \overline{C}_{new}\overline{A}_{new}\overline{PE}_{new}N_{new}$$

where P_{new} is the overall spending on new pensions, $\overline{C}_{new}$ is the average contributory period or the average years of service of the new pensions, $\overline{A}_{new}$ is the average accrual rate of the new pensions, $\overline{PE}_{new}$ is the average pensionable earnings over the contributory period related to the new pensions and N_{new} is the number of new pensions (pensioners).

Contributory period

Projections on contributory years and average accrual rates help providing a clearer picture of the future drivers of (new) pension expenditure and the viability of the pension system as accrual rates might change over time and across different types of pensions. Contributory periods can increase for several reasons, such as rising statutory retirement ages that force employees to extent their working lives to receive full pensions. The increase in employment rates due to the abolishment of early retirement schemes or the tightening of eligibility criteria for certain pension benefits (e.g. disability pensions or additional contributory years for military service periods or number of children) can be other reasons for longer contributory periods.

Table II.1.27 shows the development of the average contributory period (or average years of service) for new pensions over time. Almost all countries show an increase of the contributory period over the projection horizon. ([69]) At aggregate EU level, where the average contributory period is increasing by 4.0 years (GDP weighted average; +3.6 years if simple average is applied). Only Estonia and Norway (-6.7 years and -3.0 years, respectively) show a clear downward trend. In Estonia, this is due to the fact that the possibility to "earn" additional contributory years e.g. via the number of children expires over time. In France, Hungary, Slovenia and Slovakia, the contributory period increases

slightly. The highest increases in the average contributory periods can be observed in Greece (+7.1 years) and Portugal (+6.8 years) due to the rather low starting point and the recently legislated reforms. In Luxemburg the increase (+6.1 years) is due to the impact of resident female and cross border contributors on the total contributory period. In the case of FI the contributory period refers pension rights acquired since 2009.

([69]) No data provided by DK and NL as their systems are based on years of residence and by UK. In the case of DE and CY, point systems, the new pension decomposition does not allow for contributory period.

Table II.1.27:   **Contributory period**

	2014	2020	2030	2040	2050	2060	2014-60
BE	37.1	38.2	38.4	38.8	38.8	38.9	1.8
BG	35.2	36.6	38.3	38.0	37.8	37.6	2.4
CZ	44.0	44.5	45.5	46.4	47.4	48.4	4.4
DK							
DE							
EE	39.4	37.9	35.1	33.8	32.5	32.7	-6.7
IE	38.7	39.8	41.3	42.3	43.0	43.6	4.8
EL	30.5	30.6	33.8	35.1	36.3	37.6	7.1
ES	36.7	37.7	38.9	39.1	39.4	39.7	3.0
FR	33.2	34.6	32.9	33.7	33.3	34.1	0.8
HR	35.3	35.8	36.7	38.2	38.8	39.1	3.8
IT	33.4	35.5	35.4	35.4	35.5	37.3	3.9
CY							
LV	35.3	36.3	37.4	38.1	38.1	38.1	2.8
LT	36.8	37.8	41.0	41.0	40.9	41.1	4.3
LU	30.5	30.8	32.4	34.7	35.4	36.6	6.1
HU	39.7	40.6	40.7	40.6	40.5	40.5	0.8
MT	35.7	36.0	37.0	37.2	37.5	37.9	2.2
NL							
AT	36.4	37.7	38.1	38.0	38.1	38.1	1.8
PL	33.5	34.8	36.5	37.5	37.4	37.6	4.1
PT	29.5	31.0	32.4	33.1	34.6	36.4	6.8
RO	31.1	32.4	33.1	33.3	34.0	34.3	3.2
SI	37.3	38.4	38.2	38.2	38.0	38.1	0.8
SK	41.6	41.1	40.4	40.2	40.7	42.1	0.4
FI	3.0	7.7	15.7	23.8	30.4	32.3	29.2
SE	39.9	40.8	40.7	38.9	41.5	41.5	1.6
UK							
NO	36.1	37.0	35.9	34.2	32.2	33.0	-3.0
EU*	34.2	36.5	36.6	37.1	37.4	38.2	4.0
EA*	33.6	36.1	36.2	36.7	36.9	37.7	4.1
EU**	34.6	35.6	36.5	37.1	37.6	38.2	3.6
EA**	33.3	34.0	34.5	34.9	35.1	35.8	2.5

(1)DK, NL flats systems based on years of residence.
DE, CY points systems with new pensions not depending on the contributory period.
FI contributory period refers to pension rights accrued since 2009.
UK no data provided.
* Weighted average (GDP)
**Simple average
Source: Commission services, EPC.

Several countries show an increasing trend for the average contributory period over (practically) the whole projection horizon 2013-2060, where the major part of the increasing effect is often obtained already at the beginning of the projection horizon due to legislated increases in retirement ages. In other countries, the development is rather volatile (e.g. Sweden or Bulgaria), reflecting e.g. cohort effect or counterbalancing effects of different pension reforms.

In general, an increasing trend in the average contributory period can have a decreasing effect on public pension expenditure as a longer working life translates into a shorter period of time during which a person receives pension benefits and on higher GDP growth due to higher employment rates. At the same time, one can however also accumulate a higher amount of pension entitlements during a longer career span, which has an increasing effect on pension expenditure. This can be counterbalanced if average yearly accrual rates are decreased at the same time.

Table II.1.28:   **Average effective accrual rates**

	2014	2020	2030	2040	2050	2060	2014-60 (change in %)
BE	1.5	1.5	1.4	1.4	1.4	1.4	-6.7
BG	1.1	1.2	1.2	1.2	1.2	1.2	9.1
CZ	2.2	2.0	1.8	1.7	1.9	1.9	-15.2
DK							
DE							
EE	0.6	0.6	0.5	0.4	0.4	0.3	-38.8
IE							
EL	2.2	2.0	1.8	1.4	1.4	1.4	-36.3
ES	2.3	2.1	1.7	1.7	1.6	1.6	-32.5
ES SF	2.3	2.0	1.6	1.5	1.4	1.3	-42.0
FR	1.8	1.7	1.7	1.7	1.7	1.7	-4.8
HR							
IT	1.9	1.8	1.7	1.7	1.7	1.7	-11.3
CY	1.4	1.3	1.3	1.3	1.3	1.3	-7.1
LV	1.1	1.0	1.0	0.8	0.7	0.6	-41.3
LT	0.5	0.5	0.4	0.4	0.4	0.4	-29.7
LU	1.8	1.8	1.7	1.7	1.6	1.6	-13.2
HU	2.1	2.0	2.0	2.0	2.0	2.0	-4.8
MT	1.9	1.9	1.7	1.7	1.7	1.7	-14.4
NL	2.0	2.0	2.0	2.0	2.0	2.0	0.0
AT	1.2	1.1	1.2	1.2	1.1	1.1	-7.3
PL	1.0	1.0	1.0	1.0	1.0	0.9	-4.4
PT	2.1	2.1	2.2	2.2	2.2	2.2	7.7
PT SF	2.0	1.8	1.8	1.8	1.8	1.7	-14.2
RO							
SI	1.5	1.5	1.5	1.5	1.5	1.5	-3.5
SK	1.2	1.2	1.1	1.1	1.1	1.2	-5.3
FI	2.9	2.3	1.9	1.9	1.9	1.9	-35.4
FI SF	2.9	2.2	1.8	1.7	1.6	1.6	-44.6
SE	1.0	1.0	0.9	0.9	0.9	0.8	-12.6
UK							
NO	0.9	0.9	1.1	1.0	1.0	1.0	4.2
EU*	1.7	1.6	1.5	1.5	1.5	1.5	-13.7
EA*	1.8	1.7	1.6	1.6	1.6	1.6	-13.4
EU**	1.6	1.5	1.4	1.4	1.4	1.4	-9.0
EA**	1.6	1.6	1.5	1.4	1.4	1.5	-10.0

(1) ES, PT and FI: Accrual rates are ex-post downsized via the sustainability factor (see the "SF" lines). The effective accrual rates have been reported for the remaining countries mentioned in the box on sustainability (see Box II.1.2)
DK, NL and IE flats systems with new pensions not depending on accrual rates.
DE, HR, RO points systems with new pensions not depending on accrual rates.
FR Accrual rates are computed ex-post, for both DB and PS systems as they coexist in France (see the country fiche for further details regarding the calculation of the accrual rates).
SE figures for the NDC system.
UK no data provided.
*Weighted average (GDP)
**Simple average
Source: Commission services, EPC

1.7.1. Accrual rates

In the vast majority of Member States, accrual rates are going down over the period 2014-2060 (see Table II.1.28). ([70]) Only Bulgaria (+9.1%) and Portugal (+7.7%) show an increase in the average accrual rate over the projection horizon. In the latter country, the increasing effect on expenditure is however (more than) counterbalanced by the sustainability factor. At the EU level, accrual rates are decreasing by around 14%. The sharpest decreases have been projected in Latvia, (-41.3%), Estonia (-38.8), Greece (-36.3), Finland (-35.4%) and Spain (-32.5%). In all these countries, except Latvia, the accrual rate is well above the EU average. For most countries, accrual rates are adjusted downwards, since contributory periods and retirement ages have been increased. There are other reasons for these sharp declines: stricter eligibility criteria for pension entitlements or shifting parts of the accrual to the second and third pillar (e.g. Estonia, Latvia, Lithuania and Slovakia). The latter two aspects are, as shown above, also coherently reflected in a downward trend in public benefit ratios (see Table II.1.23 and Table II.1.24).

([70]) No data provided by DK and IE, as new pensions in their flat-rate systems are not depending on the contributory period. DE, HR and RO point systems are not depending on accrual rates but on point value and average pension point development. Alternative decompositions were provided during the peer review process.

Table II.1.29:   **Overview of sensitivity tests (including policy-change scenario): difference in assumptions compared with the baseline scenario**

Population		Labour force		Productivity		Policy-change scenario
High life expectancy	Lower migration	Higher employment rate	Higher employment rate older workers	Higher/lower labour productivity	Lower TFP (risk scenario)	Linking retirement age (policy scenario)
Increase of life expectancy at birth of **two years** by 2060 compared with the baseline projection.	**20% less** migration compared with the baseline projection.	Employment rate **2 p.p. higher** compared with the baseline projection for the age-group 20-64.	Employment rate of older workers (55-74) **10 p.p. higher** compared with the baseline projection.	Labour productivity growth assumed to converge to a productivity growth rate which is **0.25 p.p. higher/lower** than in the baseline scenario.	TFP growth assumed to converge to **0.8%** in 2060 (instead of 1%).	Early and statutory retirement age shifted year-over-year in line with change in life expectancy at current statutory retirement ages (in the Cohort Simulation Model).
		The increase is introduced linearly over the period 2016-2025 and remains 2 p.p. higher thereafter.	*The increase is introduced linearly over the period 2016-2025 and remains 10 p.p. higher thereafter.*	*The increase is introduced linearly during the period 2016-2025, and remains 0.25 p.p. above/below the baseline thereafter.*	*Convergence to the target rate in 2035 from the latest outturn year, i.e. 2013, and the period of fast convergence limited to 5 years, i.e. until 2040.*	
		The higher employment rate is assumed to be achieved by lowering the rate of structural unemployment (the NAWRU).	*The higher employment rate of this group of workers is assumed to be achieved through a reduction of the inactive population.*			

Source: Commission services, EPC

1.8.   SENSITIVITY TESTS ([71])

The 2015 pension projection exercise is carried out on the basis of commonly agreed demographic and macroeconomic assumptions, as well as a "no-policy change" scenario (see Chapter 1 for a detailed description). Obviously, the assumptions used for such long run projections are surrounded with uncertainties. Therefore, a number of sensitivity tests have been carried out, in order to quantify the responsiveness of pension expenditures to changes in key underlying assumptions. In practice, changes to two types of variables were applied (see Table II.1.29 for a detailed description): demographic variables (life expectancy, migration flows) and macroeconomic variables (employment rate, productivity). Moreover, following the mandate of the EPC, a policy-change scenario has been introduced in this exercise, in order to assess the impact of automatic rules adapting the legal retirement age to changes in life expectancy over time. Moreover, as compared to the previous 2012 *Ageing Report*, a new productivity risk scenario has been applied, assuming lower Total Factor Productivity (TFP) growth (see Volume 1 of the 2015 *Ageing Report*

for more details on all these alternative scenarios). In this section, the results will be presented as deviations from the "baseline". This relative impact can also be read as an "elasticity" parameter.

1.8.1. Sensitivity tests on demographic variables

An increase of life expectancy at birth (of 2 years by 2060 compared to the baseline) would generally result in a higher level of public pension expenditures (see Graph II.1.18). As people live longer, they are expected to receive pension benefits for a longer time span, weighting on pension spending. However, this effect is partially counter-acted by positive effects on the labour force and GDP, containing the increase of the public pension expenditure ratio (denominator effect). ([72]) In some countries, specific features of the pension system (linkage of retirement age or pension benefits to life expectancy; sustainability factors) also play as automatic pension spending stabilizers. At the EU aggregate level, in such a scenario, the public pension spending ratio would be increased by close to +0.4 p.p. of GDP by 2060, as compared to its baseline level. The strongest estimated impacts are recorded in Portugal (+1 p.p. of GDP), Slovenia (+0.9 p.p. of GDP) and

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([71]) For the UK, sensitivity tests have only been performed for State pensions (and not public service pensions), for Ireland, they have been performed only for Public Social Security schemes (and not non-funded Private Occupational Public Service schemes).

([72]) An increase of life expectancy is also associated with additional public pension contributions.

Belgium (+0.7 p.p. of GDP). On the other hand, the impact would be limited (lower than +0.2 p.p. of GDP) in 8 countries (Cyprus, Slovakia, Latvia, the Netherlands, Spain, Greece, Norway and Denmark), all having introduced sustainability factors and / or linkages to life expectancy.

Graph II.1.18:   **Impact of an increase of life expectancy on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
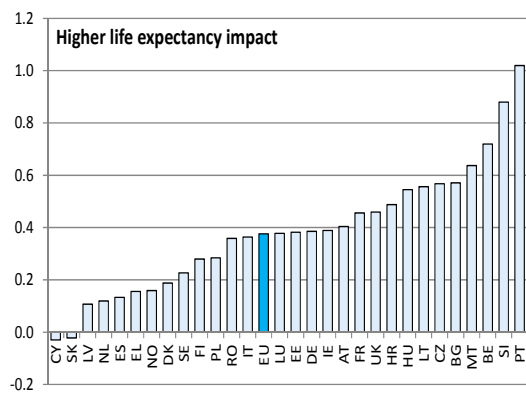
Source: Commission services, EPC

In the lower migration scenario (with 20% less net migration compared to the baseline), public pension spending ratio is expected to be higher than in the baseline scenario in all the countries considered (see Graph II.1.19). Indeed, for countries assumed to experience lower migration in-flows, this results in a smaller labour force and hence GDP over the projection period, as migrants are supposed to be (for a large part) active in the labour market. The opposite applies for countries assumed to experience net migration outflows. At the same time, the number of pensioners is generally less affected by a lower migration over the projection period. At the EU aggregate level, the estimated impact would reach around +0.2 p.p. of GDP by 2060. The highest impact would be recorded in Austria (+0.8 p.p. of GDP), Luxembourg (+0.8 p.p. of GDP) and Cyprus (+0.6 p.p. of GDP), given the relatively important weight of migration flows in the population in these countries (as compared to the EU average). ([73])

([73]) Annex 2 provides an additional graph with the impact over the period 2013-2037, which may be initially negative for countries projected in the baseline to experience net migration outflows over the first half of the projection period.

Graph II.1.19:   **Impact of lower migration on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
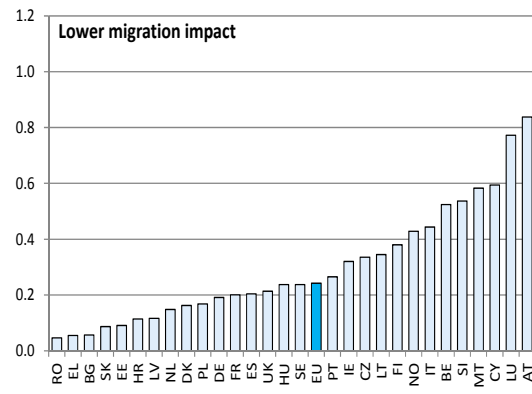
Source: Commission services, EPC

1.8.2.   Sensitivity tests on macroeconomic variables

Higher employment rates

A higher employment rate of older workers (for age group 55-74), of 10 p.p. compared with the baseline projection (increase introduced up until 2025), would have a limited impact (near 0 p.p.) on the change in the gross public pension expenditure at the EU aggregate level over the entire projection period (see Graph II.1.20). Indeed, in this scenario, two counter-acting effects are at play: on one hand, higher employment of older workers, achieved through a reduction of inactive population, leads to a higher GDP growth, a lower number of pensioners and a reduction in the average number of pension drawings years, weighting on gross public pension expenditure. However, on the other hand, employees will also be able to accrue additional pension rights, which will have an upward impact on gross public pension expenditure. In most of countries, the former effect dominates: indeed, 22 countries would experience a decrease of their public pension expenditure ratio, ranging from a maximum of -1.0 p.p. of GDP in Belgium to a minimum of -0.1 p.p. of GDP in Spain and Greece. On the opposite, in a few countries, the impact would be positive. It would be particularly large in France (+0.7 p.p. of GDP). ([74])

([74]) However, it should be noted that other (positive) effects, here not accounted for, would be observed such as a

Graph II.1.20: **Impact of a higher employment rate of older workers on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
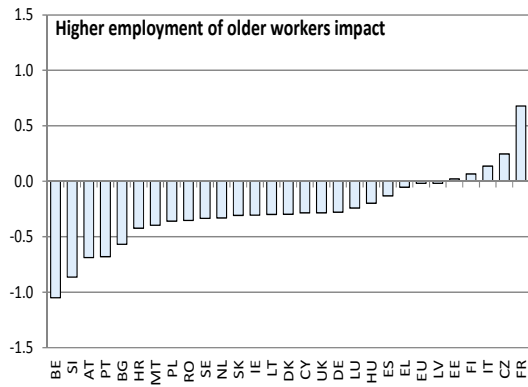
Source: Commission services, EPC

A higher employment rate (for age group 20-64), of 2 p.p. compared with the baseline projection (increase introduced up until 2025), would slightly lower public pension expenditure at the EU aggregate level by -0.1 p.p. of GDP by 2060 (see Graph II.1.21). The strongest impacts are projected for Slovenia and Belgium (-0.4 p.p. of GDP in both cases). On the other hand, in Estonia and Hungary, the estimated impact is close to 0 p.p.. Compared to the higher employment rate of older workers scenario, the (often negative) impact is generally more limited.

Graph II.1.21: **Impact of a higher employment rate on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
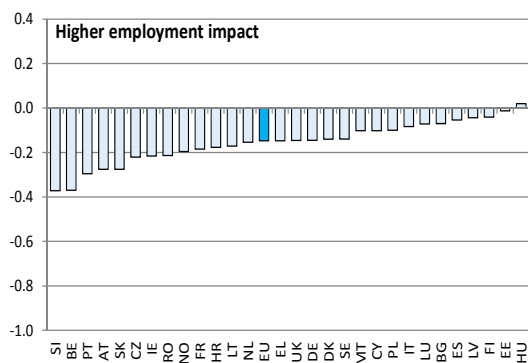
Source: Commission services, EPC

Higher / lower productivity

If *a permanent increase of +0.25 p.p. in the labour productivity growth rate* was introduced, gross public pension expenditure would be reduced by -0.3 p.p. of GDP by 2060 at the EU aggregate level (see Graph II.1.22). The reduction would be particularly high in Austria (-1.0 p.p. of GDP in both countries), Portugal (-1.0 p.p. of GDP) and Belgium (-0.9 p.p. of GDP), where pensions are not fully indexed to wages after retirement. In these cases, higher labour productivity growth leads to a faster GDP and labour income growth than pension growth (and thus to a fall in the benefit ratio). The increased gap between average pensions and average wages results in a decrease of public pension expenditure as a share of GDP. On the other hand, the impact of such an increased labour productivity would be negligible in countries applying indexation rules connected to nominal wage growth. This is the case in particular of the Netherlands, the UK, Ireland, Denmark and Norway.

A *permanent decrease of -0.25 p.p. in the labour productivity growth rate* would result in overall symmetrical results (see Graph II.1.22). At the EU aggregate level, the estimated impact, compared with the baseline, would reach +0.3 p.p. of GDP. Interestingly, the effects would not be fully symmetrical in 3 countries. In Spain and Austria, the change in public pension expenditure ratio would be more limited (+0.2 p.p. of GDP and +0.6 p.p. of GDP respectively, against -0.7 p.p. of GDP and -1.0 p.p. of GDP respectively, in case of an *increased* labour productivity growth compared to the baseline). In France, on the other hand, the upward impact, in this negative scenario, would reach +0.8 p.p. of GDP, against a more moderate decrease of -0.5 p.p. of GDP in case of an increased labour productivity growth.

decrease of unemployment benefits and an increase of social contributions.

Graph II.1.22:   **Impact of higher / lower labour productivity growth on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
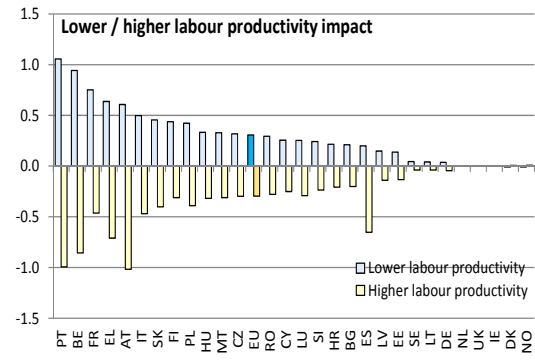
Source: Commission services, EPC

A *lower Total Factor Productivity (TFP) growth* (convergence to 0.8% in 2060 compared to 1% in the baseline scenario) would have a significant upward impact on gross public pension expenditure at the EU aggregate level (+0.5 p.p. of GDP by 2060; see Graph II.1.23), as compared with the baseline scenario. In this scenario, a greater proportion of Member States (more than half) would register public pension expenditure increases over the 2013-2060 period. The highest estimated effect is projected for Portugal (+1.2 p.p. of GDP), Luxembourg (+1.1 p.p. of GDP), Belgium (+1.0 p.p. of GDP), Greece (+0.9 p.p. of GDP) and France (+0.8 p.p. of GDP). The upward impact would be in most cases similar in magnitude to the one estimated in the lower labour productivity growth scenario.

Graph II.1.23:   **Impact of lower TFP growth on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**
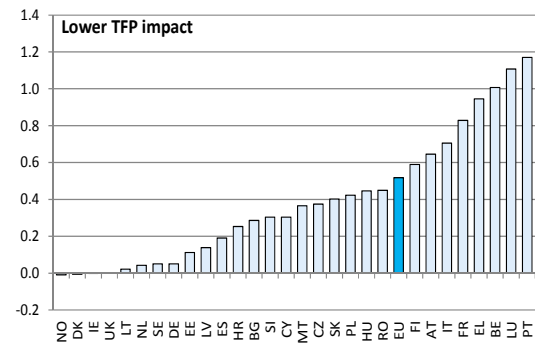
Source: Commission services, EPC

1.8.3. Policy-change scenario: linking retirement ages to increases in life expectancy

Introducing an *automatic* link between early and statutory retirement ages and life expectancy, starting from the base year, ([75]) would yield a substantial downward impact in most of countries (see Graph II.1.24). Indeed, such a link, by lowering the number of pensioners (and thus the coverage ratio), reduces gross public pension expenditure. This impact can be partially mitigated by an increase of average pensions, since longer careers are often associated with higher pension entitlements. By increasing labour supply, this linking policy also boosts GDP growth. ([76]) The strongest effect is projected for Luxembourg (-1.9 p.p. of GDP by 2060) and Belgium (-1.7 p.p. of GDP), countries which do not foresee any increase of retirement ages in the baseline scenario. The impact would also be substantial (around -1 p.p. of GDP) in France, Malta, Austria, Estonia and Norway. On the other hand, in Denmark, where a linkage of retirement age to life expectancy already exists (subject to parliamentary decisions), the projected impact is marginal. ([77])

([75]) This increase translates into a rise of the effective retirement age compared to the baseline. To take into account the already legislated changes in retirement age reflected in the baseline scenario, the highest effective retirement age outcome between the one reported in the baseline and the one in the policy-change scenario is assumed at every point in time over the projection horizon. Therefore differences may occur also in case of countries where legislated statutory retirement age develops in line with life expectancy.

([76]) For more details of activity and expenditure impacts, see Schwan, A. and Sail. E, 2013, "Assessing the economic and budgetary impact of linking retirement ages and pension benefits to increases in longevity", *European Economy, Economic Papers*, no. 512, December.

([77]) In other countries where an *automatic* linkage already exists, this alternative policy-change scenario has not been run (since coinciding with the baseline). This is the case of Italy, Greece, Cyprus and the Netherlands.

Policy-change scenario impact
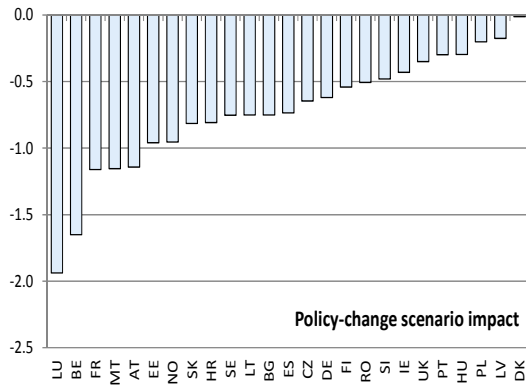
Source: Commission services, EPC

Increasing retirement ages in line with gains in life expectancy not only allows for a substantial reduction in pension expenditures, but also allows for accruing higher pension entitlements due to a longer working life in most cases. Indeed, in this scenario, average EU pension level would be around 2.7% higher in comparison to the baseline scenario (see Graph II.1.25). Consequently, the projected decrease of the benefit ratio over the projection period would be somehow reduced, since it would stabilise around 34½% (against around 33% in the baseline).

Graph II.1.25: **Benefit ratio and average pensions in the policy scenario compared to the baseline at the EU aggregate level**
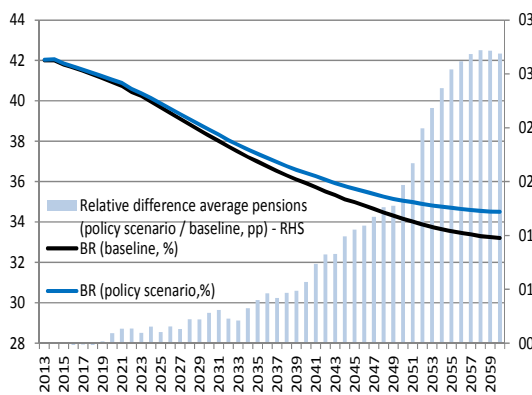
(1) EU simple average (excluding countries in which a link to life expectancy already exists i.e. Italy, Greece, Cyprus and the Netherlands).
Source: Commission services, EPC

Across EU countries, the strongest impact would be observed in Sweden (with a benefit ratio increased by 7 p.p. by 2060), in line with the annuity formula used ([78]) (see Graph II.1.26). On the other hand, in France and Denmark, there would be no impact on the benefit ratio in this policy scenario compared to the baseline. In France, this result reflects projected behaviour of older people in the baseline (mainly retiring when they fulfil the conditions, in particular in terms of contributory period, to be able to benefit from a full pension). In Denmark, the presence of a link of the retirement age to life expectancy (even if not fully automatic) and the nature of public pensions (mainly flat-rate pensions) explain the neutral effect of this scenario on the benefit ratio.

Graph II.1.26: **Benefit ratio in the policy scenario compared to the baseline in 2060 (%)**
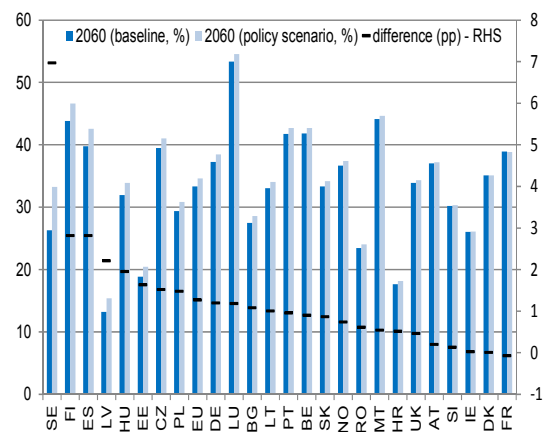
(1) IT, EL, CY and NL: no policy scenario projections, as a link to life expectancy already exists.
Source: Commission services, EPC.

In order to summarize the potential negative risks in terms of public pension spending associated to the different (unfavourable) sensitivity tests, ([79]) Table II.1.30 put together the estimated results. Some countries, projecting a significant increase of public pension expenditures over the period 2013-2060, are also particularly sensitive to the different unfavourable alternative scenarios (Belgium, Luxembourg, Slovenia and Malta). Other

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([78]) In the NDC PAYG system, the annuity is calculated by dividing the individual account value by a factor reflecting life expectancy at the date of retirement. Hence, postponing the date of retirement has a strong impact on the annuity.

([79]) The sensitivity tests reported in the table below are the ones expected to increase public pension expenditures as compared to the baseline scenario.

countries, also projecting a substantial rise of their public pension spending ratio in the long run, pension projections seem, on the other hand, less sensitive to these alternative scenarios (Germany, Norway and Slovakia). It is worth noting that, in some other Member States, where public pension expenditures should experience only a small increase or even a decrease by 2060 (in the baseline scenario), unfavourable demographic or macroeconomic developments could significantly alter these results (in particular, in Portugal, Austria, France and Italy).

Table II.1.30: **Summary table: impact of all (unfavourable) sensitivity tests on gross public pension expenditure change over 2013-2060 (deviation from baseline change, p.p. of GDP)**

Countries	Change 2013-60 baseline	Higher life expectancy	Lower migration	Lower labour productivity	Lower TPF (risk scenario)
LU	4.1	0.4	0.8	0.3	1.1
SI	3.5	0.9	0.5	0.2	0.3
BE	3.3	0.7	0.5	0.9	1.0
MT	3.2	0.6	0.6	0.3	0.4
DE	2.7	0.4	0.2	0.0	0.1
NO	2.5	0.2	0.4	0.0	0.0
SK	2.1	0.0	0.1	0.5	0.4
IE	1.1	0.4	0.3	0.0	0.0
NL	0.9	0.1	0.1	0.0	0.0
CZ	0.7	0.6	0.3	0.3	0.4
UK	0.7	0.5	0.2	0.0	0.0
AT	0.5	0.4	0.8	0.6	0.6
LT	0.3	0.6	0.3	0.0	0.0
FI	0.1	0.3	0.4	0.4	0.6
HU	-0.1	0.5	0.2	0.3	0.4
CY	-0.1	0.0	0.6	0.3	0.3
RO	-0.1	0.4	0.0	0.3	0.4
EU	**-0.2**	**0.4**	**0.2**	**0.3**	**0.5**
BG	-0.4	0.6	0.1	0.2	0.3
PL	-0.7	0.3	0.2	0.4	0.4
PT	-0.7	1.0	0.3	1.1	1.2
ES	-0.8	0.1	0.2	0.2	0.2
EE	-1.3	0.4	0.1	0.1	0.1
SE	-1.4	0.2	0.2	0.0	0.1
EL	-1.9	0.2	0.1	0.6	0.9
IT	-1.9	0.4	0.4	0.5	0.7
FR	-2.8	0.5	0.2	0.8	0.8
LV	-3.1	0.1	0.1	0.1	0.1
DK	-3.1	0.2	0.2	0.0	0.0
HR	-3.9	0.5	0.1	0.2	0.3

(1) The following thresholds are used for the colour-coding:
GREEN: < 0.2 p.p. of GDP (lower impact)
DARK GREEN: 0.2 - 0.5 p.p. of GDP
ORANGE: 0.5 - 0.8 p.p. of GDP
RED: 0.8 - 1.1 p.p. of GDP
DARK RED: > 1.1 p.p. of GDP (stronger impact)
In the higher life expectancy sensitivity test, legislation is assumed to remain unchanged as compared to the baseline (no link assumed between retirement age or benefits to life expectancy in countries where such as link does not exist).
Source: Commission services, EPC

Graph II.1.27: **Change in gross public pension expenditure (2013-2060) compared: 2012 Ageing Report[1] and current projection round (in p.p. of GDP)**
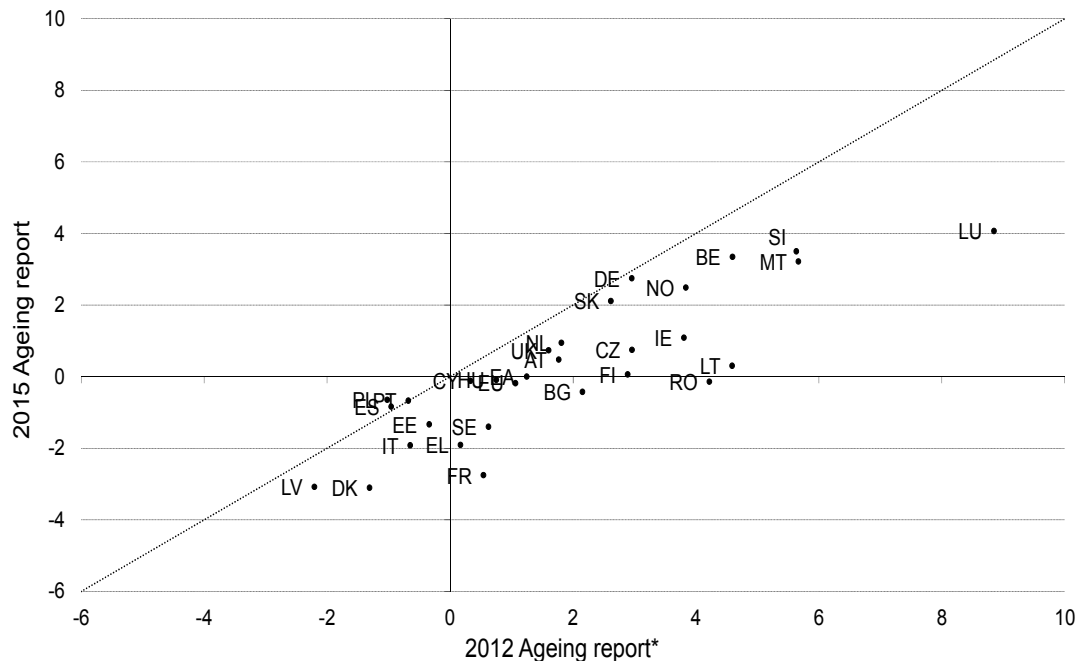
(1) New projections have been rebased with ESA 2010. For some countries, the 2012 AR* projections refer to updated figures (cf. box below).
Source: Commission services, EPC

1.9. COMPARISON WITH THE 2012 AGEING REPORT

Public pension expenditure projections have been significantly revised in this exercise, as compared to the 2012 *Ageing Report* (see Graph II.1.27 as reflected by the distance from the 45 degree line). In the vast majority of countries, projections have been revised downward. At the EU aggregate level, public pension expenditures are now expected to slightly decrease by 2060 (-0.2 p.p. of GDP) against a projected increase (+1.1 p.p. of GDP) in the previous *2012 Ageing Report*. The biggest revisions can be observed in Luxembourg, Romania, Lithuania, France, Finland, Ireland, Bulgaria and Malta (with revisions ranging from –4.8 p.p. of GDP to -2.5 p.p. of GDP). 14 additional countries (Czech Republic, Slovenia, Greece, Sweden, Denmark, Norway, Austria, Italy, Belgium, Estonia, Latvia, the UK, the Netherlands and Hungary) have revised their projections significantly, although to a lesser extent (between -2.2 p.p. of GDP and – 0.9 p.p. of GDP). In Slovakia, Cyprus, Germany and

Portugal, public pension expenditures are projected to follow a similar trend, as compared to the 2012 AR (with revisions of at the most -0.5 p.p. of GDP). Finally, only 2 countries (Spain and Poland) have revised upward their projections (by a limited +0.1 p.p. of GDP and +0.4 p.p. of GDP respectively).

In some countries, the presence of a substantial "base year effect", linked to the enduring effects of the financial and economic crisis, accounts for a large share of the revision. This is the case in particular in Bulgaria, Greece, Spain, Italy, Poland and Portugal. Indeed, in these countries, the level of public pension expenditures as a share of GDP has been substantially revised upward for the starting year 2013, implying a bigger decrease – or reduced increase – over the projection period (see Table II.1.32). This "base year effect" is nevertheless less important than in the 2012 *Ageing Report*, when comparing the two previous rounds of projections (with reference year being 2010). At the EU aggregate level, this effect is indeed limited.

Table II.1.31: **Comparison of gross public pension expenditure levels (2013 and 2060) in the 2012[1] and 2015 projections rounds (% and p.p. of GDP)**

Country	2013		2060		Change 2013-2060		Difference AR 2015 - AR 2012*		
	AR 2012*	AR 2015	AR 2012*	AR 2015	AR 2012*	AR 2015	Difference 2013	Difference 2060	Total difference
BE	11.6	11.8	16.2	15.1	4.6	3.3	0.2	-1.1	-1.3
BG	8.9	9.9	11.1	9.4	2.2	-0.4	1.0	-1.6	-2.6
CZ	8.7	9.0	11.7	9.7	3.0	0.7	0.2	-2.0	-2.2
DK	10.2	10.3	8.9	7.2	-1.3	-3.1	0.0	-1.8	-1.8
DE	10.4	10.0	13.4	12.7	3.0	2.7	-0.4	-0.6	-0.2
EE	8.1	7.6	7.7	6.3	-0.3	-1.3	-0.5	-1.5	-1.0
IE	7.9	7.4	11.7	8.4	3.8	1.1	-0.5	-3.2	-2.7
EL	14.4	16.2	14.6	14.3	0.2	-1.9	1.8	-0.3	-2.1
ES	10.6	11.8	9.6	11.0	-1.0	-0.8	1.2	1.3	0.1
FR	14.6	14.9	15.1	12.1	0.5	-2.8	0.3	-3.0	-3.3
HR	:	10.8	:	6.9	:	-3.9	:	:	:
IT	15.0	15.7	14.4	13.8	-0.6	-1.9	0.7	-0.6	-1.3
CY	10.1	9.5	10.4	9.3	0.3	-0.1	-0.7	-1.1	-0.5
LV	8.2	7.7	6.0	4.6	-2.2	-3.1	-0.5	-1.4	-0.9
LT	7.5	7.2	12.1	7.5	4.6	0.3	-0.3	-4.6	-4.3
LU	9.7	9.4	18.6	13.4	8.8	4.1	-0.4	-5.2	-4.8
HU	11.7	11.5	12.4	11.4	0.8	-0.1	-0.2	-1.0	-0.9
MT	10.3	9.6	15.9	12.8	5.7	3.2	-0.7	-3.2	-2.5
NL	6.8	6.9	8.6	7.8	1.8	0.9	0.1	-0.8	-0.9
AT	14.3	13.9	16.1	14.4	1.8	0.5	-0.4	-1.7	-1.3
PL	10.9	11.3	9.8	10.7	-1.0	-0.7	0.5	0.8	0.4
PT	13.4	13.8	12.7	13.1	-0.7	-0.7	0.4	0.4	0.0
RO	9.3	8.2	13.5	8.1	4.2	-0.1	-1.1	-5.5	-4.4
SI	11.4	11.8	17.0	15.3	5.6	3.5	0.4	-1.8	-2.1
SK	8.0	8.1	10.6	10.2	2.6	2.1	0.1	-0.4	-0.5
FI	12.3	12.9	15.2	12.9	2.9	0.1	0.5	-2.3	-2.8
SE	9.6	8.9	10.2	7.5	0.6	-1.4	-0.7	-2.7	-2.0
UK	7.6	7.7	9.2	8.4	1.6	0.7	0.1	-0.8	-0.9
NO	10.4	9.9	14.2	12.4	3.8	2.5	-0.5	-1.8	-1.4
EU	11.2	11.3	12.3	11.2	1.1	-0.2	0.1	-1.2	-1.3
EA	12.1	12.3	13.4	12.3	1.2	0.0	0.2	-1.1	-1.2

(1) New projections have been rebased with ESA 2010. For some countries, the AR 2012* projections refer to updated figures (cf. box below).
Source: Commission services, EPC

A comparison of the decomposition of the change in public pension expenditure between the 2012 *Ageing Report* and the current projection exercise into four variables (dependency ratio effect, coverage ratio effect, benefit ratio effect and labour market effect) is conducted (see Table II.1.32). At the EU aggregate level, the downward revision between the two projection exercise (-1.3 p.p. of GDP) is mainly explained by the dependency ratio effect (contribution of -0.8 p.p. of GDP), in line with more favourable demographic assumptions in this report (based on EUROPOP2013), ([80]) and the labour market effect (-0.6 p.p. of GDP).

([80]) In particular, the old-age dependency ratio is projected by Eurostat to increase less in this projection exercise (based on EUROPOP2013) than what was expected in the 2012 AR (based on EUROPOP2010).

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Box II.1.3: Comparing 2012 AR and 2015 AR projections

When reading and interpreting the data provided in this section, the following elements have to be kept in mind:

- For some countries (namely BE, DK, ES, CY, LV, HU, NL, PL, SI and SK), projections have been updated, after the 2012 *Ageing Report*, following the adoption of pension reforms. In this case, the 2012 AR figures refer to these updated (and peer-reviewed) projections (and <u>not</u> to the original 2012 data AR);

- To facilitate comparisons between projections prepared for the 2015 *Ageing Report* and for the 2012 *Ageing Report*, pension expenditure change reported under 2012 AR has been recalculated by reference to the base year 2013;

- In most tables and graphs presented in this section (and the rest of the report), when pension variables are reported as a share of GDP, *new* projections have been rebased with ESA 2010 by the Commission services (but not 2012 AR data);

- In table II. 1. 34, presenting a decomposition – provided by the Member States - of the revision of pension expenditure change (over 2013-2060) between 2012 AR and 2015 AR, all data are, on the other hand, based on ESA 1995, and refer – unless specified – to original 2012 AR projections. As data are expressed in p.p. of GDP change between 2013 and 2060, the difference with ESA 2010 rebased figures is however very small.

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In most of countries, a lower projected increase of the old-age dependency ratio contributes greatly to the downward revision (see Graph II.1.28). As compared to the previous projection exercise, the largest downward revisions of the dependency ratio contribution are recorded in Romania, Lithuania, Latvia, Malta and Slovenia. ([81]) In some cases however, the downward revision of the public pension spending ratio is larger than the revision of the dependency ratio, in particular in Greece, Ireland, France, Finland and Portugal. This larger revision can be explained in some countries (France, Finland and Ireland) by substantial downward revisions of the benefit ratio; in others (Greece and Portugal), an important downward factor is the labour market component. By contrast, for Latvia, Romania, Hungary and Poland, the opposite holds: the downward revision of the change in public pension expenditure (in fact an upward revision in the case of Poland) is lower than the revision of the dependency ratio.

Lower average pensions relative to average wages explain only part of the reduction in projected pension spending. For a large majority of countries, the benefit ratio has been revised down, following in several cases the adoption of pension reforms, but less than the projected change in pension to GDP ratio (see Graph II.1.29). There

are however a few exceptions (Ireland, Germany and Slovakia).

In some countries (notably Greece, Spain, Portugal and Italy), the labour market ratio pushes down the pension to GDP ratio over the projection period more heavily than previously projected, in line with more unfavourable initial conditions. Indeed, in these countries, a higher initial employment rate, than previously projected, translates into subsequent relatively larger reductions of this unemployment rate.

Finally, in 13 countries, the coverage ratio effect contributes to the downward revision of public pension expenditure ratio over the projection period, reflecting legislated increases of retirement ages and / or increases in the career requirements for full pension and / or tightening access to early and disability pension schemes. In other countries, the coverage ratio provides a less negative contribution than previously projected (notably in Romania, Norway and Malta).

([81]) The large revision in Luxembourg is difficult to comment on due to very large cross-border population effects.

Graph II.1.28:   **Revision of the dependency ratio and of the change in gross public pension expenditure ratio (over 2013-2060), between AR 2012 and AR 2015 (in p.p. of GDP)**
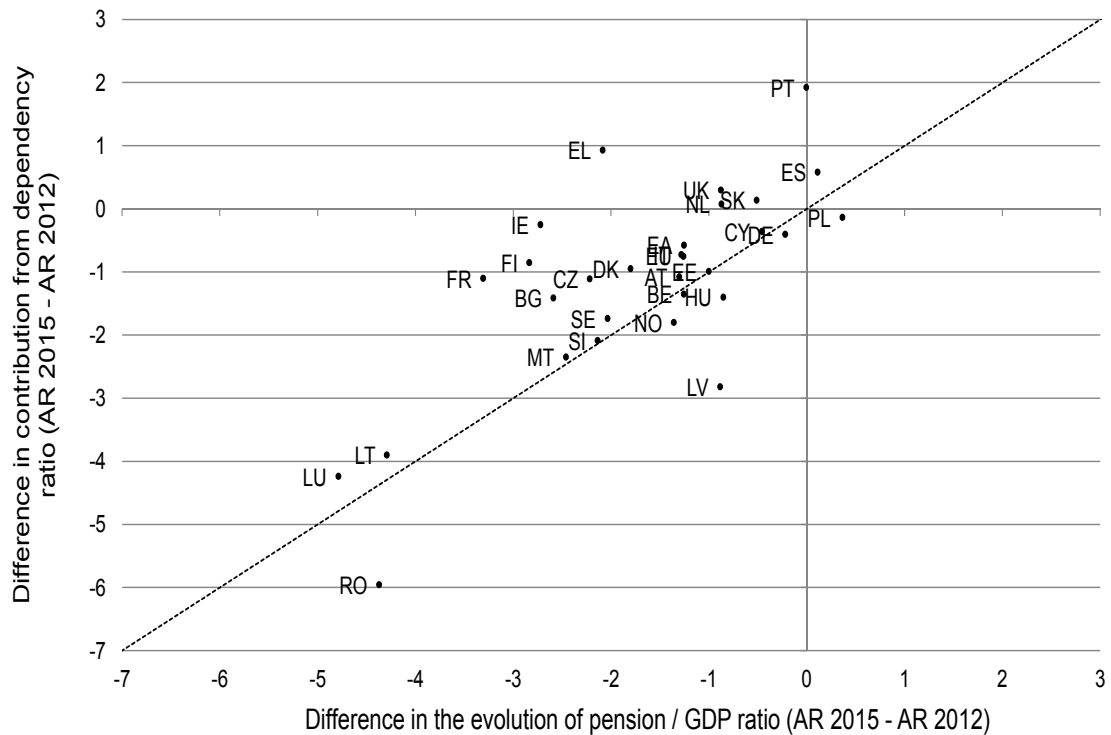
Source: Commission services, EPC

An alternative decomposition of the change of the public pension to GDP ratio in this current round of projections, compared to the 2012 AR (see Table II.1.33), confirms that in most of countries, the first source of the revision comes from changes in demographic and macroeconomic assumptions. Indeed, for the countries that provided this alternative decomposition, on average 2/3rd of the revision of gross public pension expenditure ratio change, over the period 2013-2060, can be explained by this change in assumptions. In all countries, but two (Slovakia and Portugal), these new assumptions have contributed to revise downward the projected change of public pension expenditures.

In 14 Member States, pension reforms, adopted over the last 3 years, have also contributed greatly to lowering pressures on public pension expenditures. The estimated impact is particularly large in Cyprus (-5.3 p.p. of GDP), Spain (-2.6 p.p. of GDP), Ireland (-0.9 p.p. of GDP), the Netherlands (-0.6 p.p. of GDP), Austria (-0.6 p.p. of GDP), Bulgaria (-0.5 p.p. of GDP) and

Denmark (-0.5 p.p. of GDP). On the other hand, the shift of pension schemes from the second to the first pillar in some countries (notably Poland) has contributed to increase public pension expenditures over the long-run (+1.4 p.p. of GDP).

Since the 2012 *Ageing Report*, several countries have improved their modelling techniques and / or extended the coverage of their pension projections. In 10 Member States, these improvements resulted in a reduction of public pension expenditure projections. The estimated impact of modelling revision on the projected pension to GDP ratio appears particularly important in Romania (-2.2 p.p. of GDP), Cyprus (-1.3 p.p. of GDP), France (-1.1 p.p. of GDP) and Sweden (-1.1 p.p. of GDP). In Hungary and Norway, on the contrary, these modelling / coverage improvements had a positive impact on pension to GDP ratio projections (+1 p.p. of GDP and +0.3 p.p. of GDP respectively).

Graph II.1.29:   **Revision of the benefit ratio and of the change on gross public pension expenditure ratio (over 20163-2060), between AR 2012 and AR 2015 (in p.p. of GDP)**
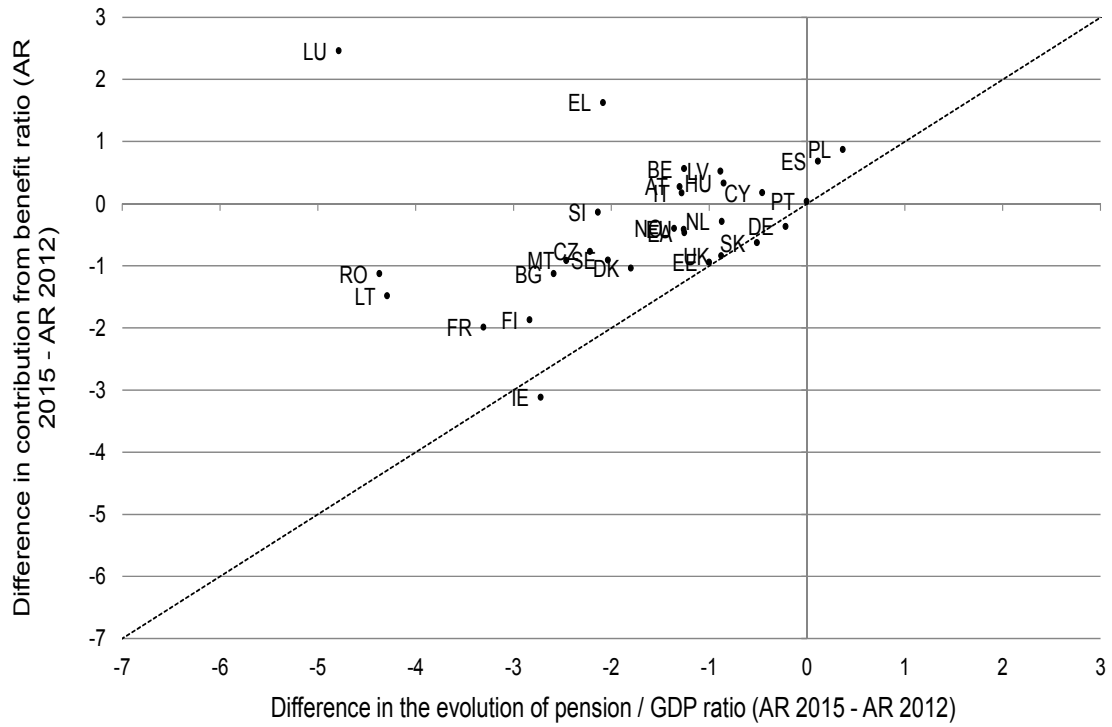
Source: Commission services, EPC

Table II.1.32: **Decomposition of the difference in the gross public pension expenditure change over period 2013-2060 between the 2015 and 2012[1] projection rounds (in p.p. of GDP)**

Country	Change 2013 - 2060 (1+2+3+4+5)	Dependency ratio (1)	Coverage ratio (2)	Benefit ratio (3)	Labour market ratio (4)	Residual (5)
BE	-1.3	-1.4	-0.2	0.6	-0.3	0.1
BG	-2.6	-1.4	0.3	-1.1	-0.7	0.3
CZ	-2.2	-1.1	-0.1	-0.8	-0.6	0.3
DK	-1.8	-1.0	0.4	-1.0	-0.6	0.5
DE	-0.2	-0.4	0.6	-0.4	-0.5	0.5
EE	-1.0	-1.0	0.6	-0.9	0.1	0.2
IE	-2.7	-0.3	0.8	-3.1	0.0	-0.1
EL	-2.1	0.9	0.1	1.6	-4.4	-0.4
ES	0.1	0.6	0.5	0.7	-1.9	0.2
FR	-3.3	-1.1	-0.3	-2.0	-0.1	0.1
HR	:	:	:	:	:	:
IT	-1.3	-0.7	-0.3	0.2	-1.3	0.9
CY	-0.5	-0.4	-0.1	0.2	-0.8	0.7
LV	-0.9	-2.8	0.6	0.5	0.2	0.6
LT	-4.3	-3.9	0.7	-1.5	0.2	0.2
LU	-4.8	-4.2	-2.6	2.5	-0.4	0.0
HU	-0.9	-1.4	0.7	0.3	-0.9	0.3
MT	-2.5	-2.4	0.9	-0.9	-0.2	0.1
NL	-0.9	0.1	-0.5	-0.3	-0.4	0.3
AT	-1.3	-1.1	-0.3	0.3	-0.6	0.5
PL	0.4	-0.1	-0.4	0.9	-0.6	0.7
PT	0.0	1.9	-0.7	0.0	-1.4	0.2
RO	-4.4	-6.0	2.5	-1.1	-0.5	0.7
SI	-2.1	-2.1	0.4	-0.1	-0.6	0.3
SK	-0.5	0.1	-0.1	-0.6	-0.4	0.5
FI	-2.8	-0.9	-0.1	-1.9	-0.2	0.2
SE	-2.0	-1.7	0.6	-0.9	-0.1	0.2
UK	-0.9	0.3	-0.1	-0.8	-0.4	0.1
NO	-1.4	-1.8	0.9	-0.4	-0.2	0.1
EU	-1.3	-0.8	0.2	-0.4	-0.6	0.4
EA	-1.2	-0.6	0.1	-0.5	-0.7	0.4

(1) For some countries, the AR 2015 projections are compared to projections updated after AR 2012 (cf. box above).
Source: Commission services, EPC

Table II.1.33: **Alternative decomposition of the difference in the gross public expenditure change over 2013-2060 between the 2015 and 2012* projection rounds (in p.p. of GDP)**

Country	AR 2012*	Change in assumptions	Improvement coverage / modelling	Constant policy interpretation	Policy-related changes	AR 2015	AR 2015 - AR 2012
BE	4.6	-0.9			-0.2	3.5	-1.1
BG	2.2	-1.7		-0.4	-0.5	-0.4	-2.6
CZ	3.1	-1.7	-0.2		-0.4	0.8	-2.3
DK	-1.3	-1.4			-0.5	-3.2	-1.9
DE	3.0	-0.4			0.2	2.8	-0.2
EE	-0.3	-1.1				-1.4	-1.1
IE	2.6	-0.1	0.0		-0.9	1.6	-1.0
EL	0.2	:	:	:	:	-1.9	-2.1
ES	3.3	-1.6			-2.6	-0.9	-4.2
FR	0.5	-2.0	-1.1		-0.2	-2.8	-3.3
HR	:	:	:	:	:	-3.9	:
IT	-0.6	-1.4			0.0	-1.9	-1.3
CY	8.1	-1.7	-1.3		-5.3	-0.1	-8.2
LV	-2.2	-1.1	-0.1		0.3	-3.1	-0.9
LT	4.6	-3.4	-0.7		-0.2	0.3	-4.3
LU	8.9	-4.2	-0.5		-0.1	4.0	-4.9
HU	0.8	-1.5	1.0	-0.2	-0.2	-0.1	-0.9
MT	5.6	-2.2				3.4	-2.2
NL	1.8	-0.2			-0.6	1.0	-0.8
AT	1.8	-0.7			-0.6	0.5	-1.3
PL	-1.3	-0.9	0.0	0.0	1.4	-0.7	0.6
PT	-0.7	0.3			-0.4	-0.7	0.0
RO	4.2	-2.2	-2.2			-0.2	-4.4
SI	5.6	-2.4			0.3	3.6	-2.0
SK	2.6	0.3	-0.8			2.2	-0.4
FI	2.9	-2.9	-0.1		0.1	0.1	-2.8
SE	0.6	-1.1	-1.0			-1.5	-2.1
UK	1.6	:	:	:	:	0.8	-0.8
NO	3.8	-1.6	0.3			2.5	-1.3
EU**	**1.6**	**-1.2**	**-0.3**	**0.0**	**-0.3**	**-0.1**	**-1.7**
EA***	**1.8**	**-1.1**	**-0.3**	**0.0**	**-0.4**	**0.1**	**-1.7**

(1) EL, UK: decomposition not provided.

HR: no projections made for the 2012 AR.

IE: decomposition only provided for Public Social Security Schemes.

HU: decomposition provided for net public pension expenditures.

Reported figures are based on ESA 1995.

*For some countries, the AR 2012 column refers to updated (and peer-reviewed) figures, following the adoption of reforms. This is the case of BE, DK, LV, HU, NL, SI and SK.

** (GDP) weighted average of EU countries for which data are available.

*** (GDP) weighted average of EA countries for which data are available.

Source: Commission services, EPC

1.10. ANNEX - SCOPE FOR IMPROVEMENTS IN THE MEMBER STATES PROJECTIONS

Scope for improvement regarding Member States projections	
France	The baseline scenario relies on a retirement behaviour assumption (people retire only when they reach the full rate pension) consistent with current observed retirement behaviour. This assumption translates into decreasing coverage ratios for age group 60-64 and a gap between the effective Cohort Simulation Model exit age from the labour market and the projected effective retirement age.
Germany	It is conceptually not possible at this point to derive a measure for the "contributory period" due to the country specific modelling set-up of the German points system.
UK	The UK was unable to provide some of the data requested by the Ageing Working Group, namely including pension expenditure by age groups, number of pensioners by age groups, blocks on replacement rate, contributions/contributors and new pensions.

2. HEALTH CARE

2.1. INTRODUCTION

Projections of public expenditure on health care from 2013 to 2060 were run using Commission services' (DG ECFIN) models on the basis of the methodology and data agreed with the Member States delegates to the AWG-EPC. It should be noted that the projections focus on "core" health care and exclude long-term nursing care. ([82])

Demand for health care provision is sizeable and its potential benefits are high. However, those benefits come at a substantial cost: in the EU28 total expenditure on health care equalled 10.1% of GDP in 2012.

A substantial part of this expenditure – 7.8% of GDP on average ([83]) in the EU28 in 2012 – is public spending. Overall, public expenditure on health care has risen in most EU Member States over time. Table II.2.1 and Box II.2.1 present the evolution of public spending on health care, its share in total expenditure and total government outlays over the last decades.

Although in the aftermath of the economic crisis this rise has slowed down or reversed in some cases, this deviation from the trend is expected to be temporary. The size and growing importance of public expenditure on health care in government expenditure and the need for budgetary consolidation all across Europe makes health care expenditure an important topic in the policy debate on how to ensure the long-term sustainability of public finances.

The complexity of health care markets makes expenditure projections a challenging task. ([84]) The projections presented in this report follow a "what if" approach and results are bound with uncertainty. ([85])

Nevertheless, these projections can be very helpful for allowing policy makers to figure out the possible evolution of their public expenditure and the impact of the main underlying drivers of health care costs.

([82]) Public expenditure on health in this publication (with the exception of table II.2.1, which includes SHA category HC.3) is basically defined as the "core" health care categories (SHA categories (HC.1 to HC.9), excluding long-term nursing care category (HC.3), but including capital investment in health (HC.R.1). The data and methodology for running the long-term expenditure projections is explained in detail in the 2015 Ageing Report "Underlying assumptions and projection methodologies": http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf.

([83]) The averages presented in this Chapter are weighted according to GDP, as explained in the 2015 Ageing Report "Underlying assumptions and projection methodologies":

([84]) Health care markets may suffer from adverse selection (higher health risks have difficulty in obtaining affordable coverage), moral hazard (insured people have an incentive to over consume health care services as they do not bear the full cost) and asymmetric information (physicians have more information than patients, which could lead to supply-induced demand and economic rents, depending on the type of remuneration of physicians: capitation, fee-for-service, pay-for-performance). These market failures are the economic rationale for public sector involvement (financing and regulations) in health care markets based on efficiency and equity considerations.

([85]) Uncertainty relates to three factors. First, public expenditure on health care are determined by an interrelated play of numerous demand and supply-related factors, often not fully observed or quantifiable. Second, ad hoc policy reforms may change their relevance and impact upon future health care spending. Third, the long-term horizon of the projections increases the uncertainty of the results.

Box II.2.1: **Public health care expenditure through the last decades**

Public health care spending is a major and growing source of fiscal pressure, representing a significant and growing share of GDP in EU Member States. The governments of all EU Member States are heavily involved in the financing and often in the provision of health care services.

During the 1960s and 1970s, public (and private) health care expenditures rose rapidly, triggered by an increase in population coverage and improvements in the provision of the health services associated with higher populations' expectations and their willingness to pay more for better health care services. In the 1980s and 1990s, the growth of public expenditure on health slowed down, and even reversed in a few countries. This was largely due to budgetary consolidation efforts, as growth in health care expenditures was perceived as too strong. In the late 1990s and especially in the first decade of the 21st century, health expenditure growth picked up again, peaking around 2009, before the fiscal tightening brought on by the economic crisis led to a reversal of the trend with slower growth and falls in spending in some countries. This reversal may however be temporary. Health expenditure has reached an average level of 7.8% of GDP in 2012 in the EU, though ranging from less than 3% of GDP in Cyprus to 9.4% of GDP in Denmark.

As far as the share of public in total health expenditures is concerned, there seem to be two divergent movements: in general, the share of public spending in EU15 Member States has increased in the last decade, whilst in New Member States (NMS) private financing has increased as a source of total health care funding. Moreover, health care has gained prominence relative to other government expenditures. Although overall the share of health care in total government expenditures has increased, it has fallen for many member states, reflecting reforms in the health care system. Public spending on health care now accounts on average for 14.9% of total government spending in the EU, ranging from 7.2 to 20.1%.

Table II.2.1:   **Public health care expenditures (including long-term nursing care) in EU Member States, 1970-2012**

| | Public health care expenditure as % of | | | | | | | | | | | | |
| | GDP | | | | | total health expenditure | | | | | total government expenditure | | |
	1970	1980	1990	2003	2012	1970	1980	1990	2003	2012	1990	2003	2012
BE	:	:	:	7	8.2	:	:	:	73.1	75.2	10	13.7	14.7
BG	:	:	5.2	4.7	4.1	:	:	100	62.1	58.5	:	13.6	12.9
CZ	:	:	4.6	6.4	6.3	:	:	98	89.8	84	:	14.8	17.5
DK	:	7.9	6.9	8	9.4	:	89	83.2	84.5	85.8	11.9	12.9	14.5
DE	4.4	6.6	6.3	8.6	8.6	73.3	78.9	76.1	78.5	76.7	:	14.4	15.7
EE	:	:	:	3.8	4.6	:	:	:	76.7	78.7	:	11.8	12.9
IE	4.1	6.8	4.4	5.6	6	80.4	82	72	76.7	67.6	:	19.3	16.7
EL	2.3	3.3	3.5	5.4	6.2	42.6	55.9	53	59.8	67.1	:	11.6	10.8
ES	2.3	4.2	5.1	5.7	6.7	65.7	79	79.1	70.2	71.7	:	13.5	13
FR	4.1	5.6	6.4	8.4	9	75.9	80.4	78	77.9	77.4	:	14.2	14.7
HR		:	:	5.3	5.7	:	:	:	:	73.1	:	:	20.1
IT	:	:	6.1	6.2	7.1	:	:	79.2	76.2	77.3	11.7	13.3	14.4
CY	0.9	1.5	1.8	3.1	2.5	33.3	53.6	40	45.2	42.2	:	7.6	7.2
LV	:	:	2.5	3.2	4.1	:	:	100	52.5	59.5	:	9.7	10.7
LT	:	:	3	4.8	4.7	:	:	90.9	73.8	69.2	:	14.8	16.3
LU	2.8	4.8	5	6.5	6	90.3	92	93	84.2	84	11.1	11.5	11.5
HU	:	:	:	6.1	5	:	:	:	71.1	62.6	:	11.5	10.9
MT	:	:	:	6	5.5	:	:	:	75	64.6	:	12.5	13.5
NL	:	5.1	5.4	5.8	7.4	:	69	68	59.3	67.3	:	12.1	17.7
AT	3.3	5.1	6.1	7.7	8.4	63.5	69.2	73	74.5	75.9	:	14.8	15.3
PL	:	:	4.4	4.4	4.7	:	:	92.1	69.9	69.2	:	9.6	10.9
PT	1.5	3.4	3.8	6.7	6.7	60	64	64	68.7	65	:	15	12.9
RO	:	:	2.9	4.5	4.4	:	:	100	84.8	79.3	:	10.4	8.4
SI	4.2	4.4	5.6	6.3	6.7	100	100	100	72	71.5	:	14.1	14.6
SK	:	:	:	5.1	5.7	:	:	:	88.3	69.7	:	16.2	16.4
FI	4.1	5	6.2	5.9	6.8	74.5	79	81.3	72.8	75	12.1	12.9	14.5
SE	5.8	8.2	7.4	7.6	7.8	85.3	92.7	90.4	82	81.3	:	12.6	13.7
UK	3.9	5	4.9	6.2	7.8	86.7	89.1	83.3	79.3	84	12.1	15.1	16.6
NO	4	5.9	6.3	6.9	7.9	:	:	83	83	84.1	12.6	16.3	16.9
EU28	:	:	:	7	7.8	:	:	:	76	77.4	:	13.9	14.9
EU15	:	:	:	7.1	8	:	:	:	76	77.2	:	14.1	15.1
NMS	:	:	:	5.1	5.2	:	:	:	75.2	73.1	:	11.7	12.3
EA	:	:	:	7.3	7.9	:	:	:	75	82.1	:	13.9	14.8

(1)The EU and EA averages are weighted according to GDP.
Source: Eurostat; United Nations Statistics Division; Commission services; 2012 or latest data used.

2.2.   DETERMINANTS OF HEALTH CARE EXPENDITURE

Public expenditure on health care is driven by a series of factors that affect both demand for and supply of health care goods and services. Population size and structure, its health status, the individual and national income and provisions regulating access to health care goods and services are seen as key determinants of demand. Supply side determinants include the availability and distance to health care services, technological progress and the framework regulating the provision of those goods and services (institutional settings). The next sections briefly describe the relation between these factors and public spending on health care.

2.3.   DEMOGRAPHIC STRUCTURE OF THE POPULATION

The demand for health care goods and services depends on the number of people in need of care. This depends not only on the size but also on the health status of the population, which is linked to the age and gender structure of the population and notably with the share of elderly people in the overall population. This is because older people often develop multi-morbidity conditions, which require costly medical care.

The relationship between the age of an individual and his/her use of health care is well displayed by the so-called "age-related expenditure profiles" shown in Graph II.2.1. The graph plots average public per capita spending on health care (as % of

GDP per capita) against the age of individuals in each country of the EU. Spending generally increases with the age of a person, notably from the ages of 55 and more for men and 60 and more for women, coinciding naturally with higher morbidity at older age. The demand for health care is also high at very young ages and during maternity years for women. Consequently, population structure, and ageing in particular, is one of the drivers of increasing health care expenditures.

Population ageing may pose a risk for the sustainability of health care financing in two ways. Firstly, increased longevity, without an improvement in health status, leads to increased demand for services over a longer period of lifetime, increasing total lifetime health care expenditures and overall health care spending (Breyer et al. 2010, Zweifel et al. 2005). It is often argued that new medical technologies have been successful in saving life from a growing number of fatal diseases, but have been less successful in keeping people in good health. Secondly, in many EU Member States, public health care is largely financed by social security contributions of the working population. Ageing leads to an increase in the old age dependency ratio i.e. fewer contributors to the recipients of services. The old age dependency ratio is projected to increase from 27.8% in 2014 to 50.1% in 2060 (EUROPOP2013). Consequently, in the future far fewer people will contribute to finance public health care, while a growing share of older people may require additional health care goods and services.

Longer working lives accompanied by a healthier working population can mitigate the impact of ageing. ([86]) In addition, many researchers have shown that ageing has contributed much less than widely thought to the observed growth in expenditure and in many Member States an actual reduction in per capita spending at very old age (85+) can be observed. This is because alongside real needs, social, economic and cultural considerations determine the allocation of resources to the sector and use of resources across

different age groups. Therefore, ageing should be analysed in conjunction with other determinants of expenditure, such as health status, income and non-demographic factors as explained next.

([86]) See e.g. Christine de la Maisonneuve & Joaquim Oliveira Martins, 2013. "Public Spending on Health and Long-term Care: A new set of projections," OECD Economic Policy Papers 6, OECD Publishing.

Box II.2.2: **Income elasticity of health care demand, a short literature survey**

There is no consensus on a precise estimate of the income elasticity on health care expenditure. Time-series and cross-country evidence usually suggest income elasticities above one. Older, purely cross-sectional studies find higher income elasticities, such as Newhouse (1977) with a point estimate of around 1.35 for 30 OECD countries or Leu (1986) for 19 OECD countries with an estimate of 1.2.

Studies based on panel data find in general lower income elasticities around or below one, e.g. Gerdtham et al. (1991) and (1995); Mahieu (2000), Bac et al. 2002; Azizi et al. (2005), or, more recently, Medeiros and Schwierz (2013). For an overview, see Clements et al., (2012).

A general critique is that the estimated elasticities are likely to be biased when other relevant factors are not included in the model, i.e. that the increase in health care spending is not determined by income alone but by other factors that happen to be correlated with income.

Moreover, the estimates are probably affected by misspecification and endogeneity problems: health – and therefore also health care spending – is likely to affect economic growth. Acemoglu et al. (2009) attempt to overcome these problems and estimate the causal effect of income on health care expenditures. They find an income elasticity of 0.72 with an upper value of 1.13.

Cross-sectional studies on individual income show small or even negative elasticities (Newhouse et al. 1993). For an overview see also Getzen (2000).

Graph II.2.1:   **Age-related expenditure profiles of health care provision (spending per capita as % of GDP per capita)**
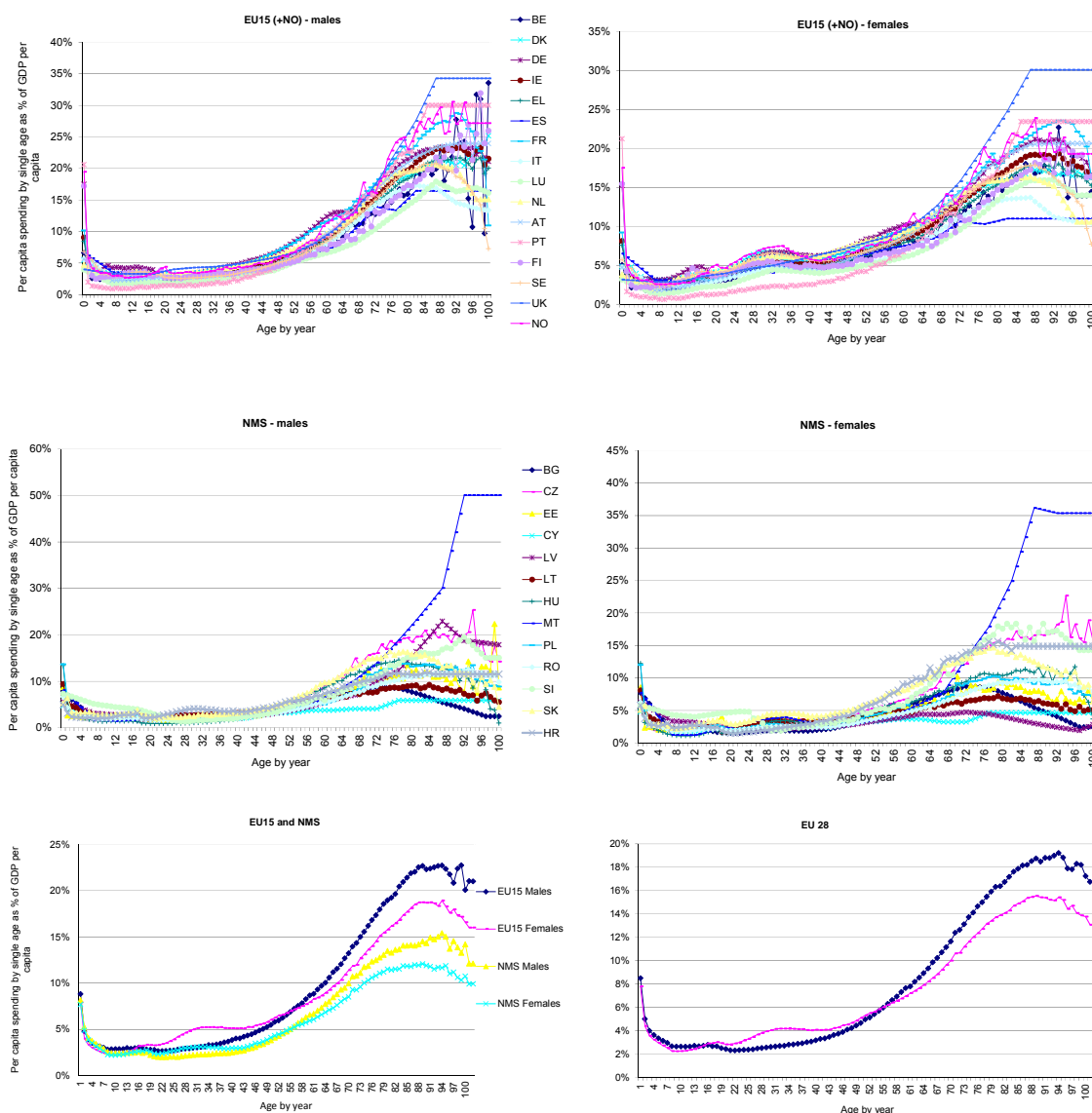
(1) Greece, Ireland and Romania did not provide age-cost profiles and so the profile was imputed as the average cost profile of the EU15 (for Ireland and Greece) and NMS (for Romania).
Source: Commission services, EPC

2.4.   HEALTH STATUS

Falling mortality rates at all ages, including for older people, is contributing to increasing life expectancy. However, in some cases mortality has decreased at the expense of increased morbidity, meaning that more years are spent with chronic illnesses. If increasing longevity goes in line with an increasing number of healthy life years, then ageing may not necessarily translate into rising

health care costs. Better health goes along with lower health care needs and may drive down health services use and health expenditure (Rechel et al. 2009). Therefore, it is crucial to understand if longevity is accompanied by more or less good health.

Projecting the future evolution in the health status of the population is challenging due to the difficulties associated with predicting the changes in morbidity and measuring ill-health. While the

evolution in mortality rates and life expectancy can be estimated on the basis of administrative information (censuses, surveys, etc.), epidemiological data is subject to much higher uncertainty. Three different hypotheses have been put forward to predict a possible future interaction between evolution in life expectancy and changes in the prevalence of disability and ill-health:

- The "expansion of morbidity" hypothesis (Gruenberg, 1977; Verbrugge, 1984; Olshansky et al., 1991) claims that the decline in mortality is largely due to a decreasing fatality rate of diseases, rather than due to a reduction in their prevalence/incidence. Consequently, falling mortality is accompanied by an increase in morbidity and disability.

- The "compression of morbidity" hypothesis (Fries, 1980, 1989) suggests that disability and ill-health is compressed towards the later period of life at a faster pace than mortality. Therefore, people are expected to live not only longer, but also in better health.

- The "dynamic equilibrium" hypothesis (Manton, 1982) suggests counterbalancing effects of two phenomena: decreasing prevalence/incidence of chronic diseases on the one hand, and decreasing fatality rates of diseases leading to longer prevalence of disability, on the other.

Recent empirical evidence has not come to a clear conclusion regarding these hypotheses. International evidence is mixed [87] and, while health may continue to improve, some causes of disability may at the same time become more prominent. For example, higher levels of some disabling conditions (dementia, musculoskeletal diseases) go along with decreasing rates of prevalence of others (cardiovascular and chronic respiratory diseases). Consequently, it remains very difficult to predict the levels of morbidity and therefore potential demand for health services, even in the near future.

It has been argued by other authors that better health throughout a lifetime can induce savings overall because proximity to death is a more important determinant of health expenditure than ageing per se: a large share of lifelong expenditures on health occurs at the last year before death and even in the last few weeks before dying. It is shown in Graph II.2.1 that the per capita cost of health care can be lower at very old ages than in childhood, youth or working ages. [88] Living longer, dying at an older age and being healthy for much of a lifetime would therefore lead to savings.

2.4.1. Individual and national income

Another important factor affecting health care expenditure is income. A significant relationship between income and health care spending is observable at both individual and national level. At the individual level, spending on health care depends in particular on whether a health care intervention is covered by public or private insurance and to what extent. If an individual is fully covered by health insurance, health care demand is independent of individual income, i.e. the income elasticity on health care spending is zero. However, if a health care intervention is not or only partially covered by insurance, demand will depend on the individual income. All other things equal, increasing health insurance coverage reduces the sensitivity of changes of income on changes on demand.

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[87] See Cutler et al (2013) "Evidence for Significant Compression of Morbidity In the Elderly U.S. Population" and Salomon et al (2012) "Healthy life expectancy for 187 countries, 1990—2010: a systematic analysis for the Global Burden Disease Study 2010".

[88] The reduction in per capita spending at the very old age can be explained by three different phenomena: health care rationing for utilitarian (devoting limited resources to the treatment of younger age cohorts) or professional reasons (less knowledge about the treatment of the elderly); voluntary restraining from receiving health care by older people who find the investment in health will not pay back any more; generation effect which reflects differences in perceived needs, mentality and habits between older and younger generations.

At the national level, spending is driven by different considerations. On the one hand, spending must be covered by revenues at an aggregate level. This is why the correlation between health care spending and income is stronger at the national than at the individual level (in the presence of insurance). On the other hand, policy measures to control spending and political priorities to devote less or more resources to different areas of public spending may reduce the link between public expenditure on health care and national income. Therefore, while it is generally agreed that the growth in per capita income brings about an increase in health spending, the strength of this relationship, i.e. the value of the income elasticity of health services demand, remains uncertain.

A number of empirical studies attempted to estimate the correlation between income and health expenditure. Most of the earlier studies led to the conclusion that health care is an individual necessity and a national luxury good. In other words, health spending is highly inelastic at an individual level, but at the national level its elasticity with respect to income exceeds unity. However, the earlier empirical literature is subject to methodological problems and more recent estimates attempt to overcome these problems by estimating the real causal effect of income on demand of health services (Box II.2.2). The general implication, however, remains that as national income or wealth increases, expectations will rise and health spending will rise too, regardless of changes in needs.

2.4.2. Health technology

Growth in health care expenditure has been much faster than what is suggested by changes in demographic structure, morbidity and income (see above discussion on income elasticity). Empirical research suggests that health technology has been a major driver of health-care expenditures. Different authors attribute from 27% up to 75% of health expenditure growth in the industrialised countries to technological change (Box II.2.3).

Whether a particular technological development increases or decreases costs depends on its impact on unit cost, its level of use and whether the treatment complements or replaces the existing methods. If technological development leads to a more cost-efficient treatment of previously treated medical conditions, the new technology is likely to replace the old one reducing the unit cost of treatment. This effect is called the substitution effect: replacing less by more efficient treatments.

If this is also accompanied by no changes in the number of individuals treated, the overall cost is reduced. However, if treatment with the new technology becomes more frequent, expenditure may increase.

If medical innovations allow for treating conditions which were not treated previously, then expenditures may rise. This is called the expansion or extension mechanism: extending health care procedures to previously untreated medical conditions for scientific reasons (the methods of treatment were simply unknown) or economic reasons (previous methods of treatment were known, but not affordable). In other words, the supply of new products matches with previously unmet demand. As such, the health sector is similar to other expanding sectors of the economy, e.g. such as those producing ICT-related products.

The currently prevalent view is that technological change is an important driver of health care expenditures (Box II.2.3). This is despite the measurement problems of technological change on expenditures and health restoring or life-saving effects. It is to be kept in mind that new inventions have been used in areas judged necessary from the societal point of view such as in palliative care, where ethical consideration are of considerable importance.

2.4.3. Legal and institutional setting

In addition to the above factors, public expenditure on health care is strongly influenced by the legal setting and institutional arrangements according to which health care is provided and financed. These factors play an important role in delineating provision and use of health care services and therefore health care costs. Institutional settings may or not limit the introduction, coverage and use of services and new technology, through the set of incentives patients and providers face. Legal provisions, such as strict spending constraints defined by public authorities may curb the provision and use of health care services.

A number of such variables have been tested in the literature for assessing their impact on health expenditure. These include the role of general practitioners (GPs) as an independent entity and gatekeeper, the type of remuneration of physicians or type of system financing. Despite such studies it is not feasible to draw unequivocal conclusions.

2.4.4. Human and physical capital

The provision of health care is highly labour-intensive, more than many other sectors of society. Health professionals are vital to the provision of health services and goods. As a result, changes associated with the health workforce have an impact on provision and therefore expenditure. For example, the ageing of the workforce could have an impact on expenditure through reducing staff numbers and increasing wages for example. On the other hand, an over-supply of physicians may induce an over-supply of health care services.

In addition, human and physical capital resources devoted to the health care sector are determined by policy decisions (e.g. qualitative limits and qualitative requirements on the access to medical schools or professional certificates, decisions on the location of facilities, legal regulations on the density of health care staff per number of population, etc.). A number of studies have attempted to find statistical correlation between the size of medical staff and health expenditure, but the results are not conclusive.

2.5. SHORT OVERVIEW OF THE PROJECTION METHODOLOGY

2.5.1. The model

On the basis of the description just presented, a series of so-called scenarios test the potential impact of the different determinants of public spending on health care. The impact of each determinant is calculated separately on the basis of hypothetical assumptions (a "what if" situation). This can indicate how each determinant may contribute to the evolution of public health care over the next 50 years. This analysis may help inform future policy decisions, which aim at improving the sustainability of health care spending.

It is important to stress that future levels of public health care spending are modelled to a large extent exogenously. Future health policy reforms and behavioural changes by individuals are not taken into account. In many scenarios, the adjustments

observed relate solely to health care provision adjusting automatically to the needs that result from changes in population structure, health status and changes in income. As such, most scenarios should be considered as "no-policy change" scenarios.

The basic setup of the model used to project future expenditure on health care is a traditional simulation model whereby the overall population is disaggregated into a number of groups having a common set of features, such as age and sex. As the number of individuals in each group changes over time, so do the aggregate values of the endogenous variables. The schematic methodology to project health care expenditure is presented in Graph II.2.2 above. The common elements of all scenarios are the labour force and macroeconomic assumptions agreed by the Commission services (DG ECFIN) and the Economic Policy Committee (AWG) and the population projections provided by Eurostat (EUROPOP2013). The age and gender-specific per capita public expenditure (on health care) profiles are provided by Member States. They are combined with the demographic projections provided by Eurostat in order to calculate nominal spending on health care.

The adjustments reflecting the effects of different factors on health care spending are applied by correspondingly changing one of three main inputs: 1) the demographic/population projections, 2) the age-related expenditure profiles (capturing unit costs) and 3) assumptions regarding the development of unit costs over time, as driven by the macroeconomic variables or assumptions on the evolution of the population's health status.

2.5.2. Scenarios

Different scenarios simulate changes in the demographic structure, life expectancy and health status of the population, the importance of health care costs in the last years of life (*death-related costs*), an income elasticity of demand for health care higher than one but converging to 1 at the end of the projection period, different patterns of unit cost evolution and the cost-convergence of age profiles across the EU28 Member States. The ideas

behind the different scenarios are presented in Table II.2.3. ([89])

All scenarios are described in more detail in the following. ([90])

1. The *"demographic scenario"* attempts to isolate the 'pure' effect of an ageing population on health care spending. It assumes that age-specific morbidity rates do not change over time. This implies that age-related public health care spending per capita (considered as the proxy for morbidity rate ([91]) remains constant in real terms over the projection period.

As constant health status is accompanied by a gradual increase in life expectancy (EUROPOP 2013), all gains in life expectancy are assumed to be spent in bad health. As such, this scenario reflects the *expansion of morbidity* hypothesis explained above. It is further assumed that the costs, and therefore expenditure per capita, evolve in line with GDP per capita. This implies that without a change in the age structure of the population and in life expectancy, the share of health care spending in GDP would remain constant over the projection period.

([89]) A detailed account of the projection methods is given in European Commission –Economic Policy Committee (2014), "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies": http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf.

([90]) Most of the scenarios were already included in the 2012 Ageing Report. However, three scenarios have been updated methodologically and one new scenario has been added. First, the parameters used in the "non-demographic determinants scenario" have been refined using a more sophisticated econometric estimation method. Second, the "death-related costs scenario" now allows cost profiles to vary over time.

([91]) Strictly speaking, age-expenditure profiles are not a measure of health status or morbidity. However, given the lack of a reliable and comparable data on the latter, it is plausible to assume that the shape of the profiles follows the evolution of health status over the lifespan.

Table II.2.2: **Graph II.2.2:** **Schematic presentation of the projection methodology**

Sources of data:	*Eurostat*		*Member States*		*AWG macroeconomic assumptions*		
	↓		↓		↓		
Input data:	**Population projections**	*	**Per capita age-specific expenditure profiles (unit costs)**	*	**"Unit cost" development**	=	**Total spending on health care**
	↑		↑		↑		
Alternative scenarios:	Scenarios on demography		Scenarios on **health status**		Scenarios on **unit costs**		
			Scenarios on **income and macro economic variables**		Scenarios on **income and macro economic variables**		

Source: Commission services, EPC

2. The *"high life expectancy scenario"* is a variant to the "*demographic scenario*". It tries to measure the impact of an alternative assumption on mortality rates. It assumes, as in the sensitivity tests used for pension projections, that life expectancy at birth in 2060 is higher, by one year, than the projected life expectancy used in the "*demographic scenario*". In comparison to the "*demographic scenario*", alternative demographic and macroeconomic data are used as a different demographic structure impacts on several variables including GDP. [92]

3. The *"constant health scenario"* is inspired by the *dynamic equilibrium* hypothesis and captures the potential impact of improvements in the health status, should this occur in parallel with projected declines in mortality rates. It assumes that the number of years spent in bad health remains constant over the whole projection period, i.e. all future gains in life expectancy are spent in good health. To generate a fall in morbidity rate in line with the decline in the mortality rate, this scenario is modelled by assuming that per capita age profiles observed in the base year are shifted outwards, in direct proportion to the projected gains in age and gender specific life expectancy. [93]

4. The *"death-related costs scenario"* employs an alternative method to project health care spending, taking into account a probable postponement in health care spending resulting from the evolution of mortality rates. There is empirical evidence that a large share of total spending on health care during a person's life is concentrated in its final years (Palangkaraya and Yong 2009). [94] Therefore, as mortality rates at relatively younger age decline and a smaller share of each age cohort is in its terminal phase of life, the health care expenditure calculated using constant expenditure profiles may be overestimated. To run this scenario, profiles of *death-related costs* by age have been supplied by some Member States, where unit costs are differentiated between decedents and survivors. [95] The 2012 methodology was based on the assumption that the ratio between the per capita cost of decedents and that of survivors was to be kept constant over the forecast period, regardless of possible changes in longevity. The methodology has now been updated to allow the cost profile to change over the projection period and take this into account, acknowledging to that

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[92] Since GDP data also captures the impact of changes in life expectancy through their impact on labour forces.

[93] The method is applied to those age/gender groups where expenditure per capita is growing. As in the previous scenarios and in practical terms, it is assumed that age/gender specific expenditure profiles proxy health status (i.e. morbidity). In other words, higher expenditure captures higher morbidity. For the young and the oldest old, the reference age/gender and therefore age/gender per

capita public expenditure profile remains the same over the whole projection period.

[94] The authors find that population ageing does not add anything to growth in health expenditure once proximity to death is accounted for. As a consequence, the effects of ageing on health expenditure growth might be estimated as too high, whilst the high costs of medical care at the end of life are probably underestimated.

[95] Data was provided by 16 Member States: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Poland, Slovenia, Slovakia, Finland, Sweden and the UK. For countries that did not provide this data, no projections for this scenario were done.

the ratio of the health costs of decedents and those of survivors is linked to life expectancy rather than to age per se.

5. The *"income elasticity scenario"* shows the effect of income elasticity of demand exceeding unity on the evolution of public spending on health care. The impact of income growth on health care expenditure may incorporate the effects of a number of factors: higher living standards, growing expectations and social pressure to catch-up with the quality and coverage of health care provided to the populations in the neighbouring countries and possibly the development of medical knowledge and technologies. In practical terms, the scenario is identical to the *"demographic scenario"* except that the income elasticity of demand is equal to 1.1 in the base year and converges to 1 by the end of projection horizon in 2060.

6. The *"EU28 cost convergence scenario"* is meant to capture the possible effect of a convergence in real living standards (which emerges from the macroeconomic assumptions) on health care spending. The "c*ost convergence scenario"* considers the convergence of all EU28 countries that are below the EU28 average of per capita public expenditure relative to GDP per capita (i.e. per capita public expenditure as a share of GDP per capita) to that EU28 relative average. This means that the country-specific age/gender per capita public expenditure profiles as a share of GDP per capita which are below the corresponding EU28 profiles in the base year (i.e. 2013) are assumed to increase to the EU28 relative average up to 2060. The convergence speeds for all the countries below the EU28 relative average differs, as they take into account the differences in the initial situation, i.e. the extent of the initial gap between country-specific and EU28 relative average profile.

7. The *"labour intensity scenario"* is an attempt to estimate the evolution in health care expenditure under the assumption that unit costs are driven by changes in labour productivity, rather than growth in the national income, as health care is a highly labour-intensive sector. This assumption implies as well that, contrary to the *"demographic scenario"*, the cost of public provision of health care is supply rather than demand driven. This scenario is similar to the "*demographic scenario"* except that costs

are assumed to evolve in line with the evolution of GDP per worker. As wages are projected to grow in line with productivity (generally faster than GDP per capita), this scenario provides an insight into the effects of unit costs in the health care sector being driven mostly by increases in wages and salaries.

8. The *"sector-specific composite indexation scenario"* aims at capturing the relative importance and different past trends of most relevant health care expenditure drivers: wages, pharmaceuticals, therapeutic appliances, capital investment, prevention related health care services, as well as a residual factor.

Given the special character of the health care sector (high level of government regulation, investment in new technologies, high labour intensity) considering health care sector-specific rather than economy-wide determinants of unit costs is particularly informative. In this scenario, the growth rate of each item is estimated separately, based on past trends, thus creating a sort of composite indexation for "unit cost development". As such, their relative contribution to future changes in health care spending can be traced over time.

9. The *"non-demographic determinants scenario"* is an attempt to estimate the impact of non-demographic drivers (NDD) on health care expenditure, i.e. income, technology, institutional settings. It is also referred to as *excess cost growth (*Smith, et al. 2009). Ignoring the effect of NDD on health care expenditure would imply making the assumption that past trends of health care expenditure related to these drivers will disappear in the future. In practice, the effect of demographic changes – captured using the above mentioned econometric analysis – is subtracted from the total increase in expenditure and the remaining part (i.e. the residual) is attributed to the impact of NDD.

10. The **"AWG reference scenario"** is used as the central scenario when calculating the overall budgetary impact of ageing. It is the point of reference for comparisons with the 2012 Ageing Report. In this scenario health care expenditures are driven by the assumption that half of the future gains in life expectancy are spent in good health and an income elasticity of health care spending converging from 1.1 in 2013 to unity in 2060.

Table II.2.3: **Overview of different scenarios used to project health care spending**

	Demographic scenario	High life expectancy scenario	Constant health scenario	Death-related costs scenario	Income elasticity scenario	EU28 cost convergence scenario	Labour intensity scenario	Sector-specific composite indexation scenario	Non-demographic determinants scenario	AWG reference scenario	AWG risk scenario	TFP risk scenario
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Population projection	EUROPOP2013	Alternative higher life expectancy scenario (+1 year)	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013
Age-related expenditure profiles	2012 profiles held constant over projection period	2012 profiles held constant over projection period	2012 profiles shift in line with changes in age-specific life expectancy	2012 profiles split into profiles of decedents and survivors and adjusted in line with changes in age-specific life expectancy	2012 profiles held constant over projection period	Individual EU28 profiles converging to the EU28 average profile over the projection period	2012 profiles held constant over projection period	2012 profiles held constant over projection period	2012 profiles held constant over projection period	Intermediate between scenarios I and III, whereby 2012 profiles shift by half the change in age-specific life expectancy	Intermediate between scenarios I and III, whereby 2012 profiles shift by half the change in age-specific life expectancy	Intermediate between scenarios I and III, whereby 2012 profiles shift by half the change in age-specific life expectancy
Unit cost development	GDP per capita	GDP per capita	GDP per capita	GDP per capita	GDP per capita	GDP per capita	GDP per hours worked	Input-specific indexation	GDP per capita	GDP per capita	GDP per capita	GDP per capita
Elasticity of demand	1	1	1	1	Income elasticity of 1.1 in 2013 converging to 1 by 2060	1	1	1	Cost sensitivity of 1.4 in 2013 converging to 1 by 2060	Cost sensitivity of 1.1 in 2013 converging to 1 by 2060	Cost sensitivity of 1.4 in 2013 converging to 1 by 2060	Cost sensitivity of 1.1 in 2013 converging to 1 by 2060

(1) In the TFP risk scenario, total factor productivity converges to 0.8%

Source: Commission services, EPC

11. The "*AWG risk scenario*", as the AWG reference scenario, keeps the assumption that half of the future gains in life expectancy are spent in good health but attempts to take into account technological changes and institutional mechanisms which have stimulated expenditure growth in recent decades. In the 2012 Ageing Report, the non-demographic and risk scenarios assumed an income elasticity of healthcare spending converging from 1.3 in 2010 converging to 1.0 in 2060. In order to incorporate relevant non-demographic drivers in the projection exercise and to avoid the risk of systematically underestimating future healthcare expenditure trends, and on the basis of recent research, [96] the Commission proposed and the Ageing Working Group endorsed the use of a proxy for the non-demographic costs (NDC). The estimated residual is translated into an EU average elasticity of 1.4 (versus 1.3 in the 2012 AR) converging to 1 until the end of the projection period. [97] This elasticity is added to the effect of ageing as modelled in the "demographic scenario".

As such, it remains bounded in a longer term perspective, as the projected excess growth of health care spending eventually approaches zero (by 2060). Together with the AWG reference scenario, this scenario is part of a range of possible outcomes.

12. *"Total factor productivity risk scenario"* explores the risk that Total Factor Productivity growth may decline in the future below the assumptions of the AWG reference scenario. This is plausible in light of the trend decline of TFP

growth performance over the last decades. This scenario assumes that TFP converges to a growth rate of 0.8% (vs 1% for the baseline scenario). In both cases, allowance for higher TFP growth for countries with below average GDP per capita is factored in for a period of time, as in the previous projection exercise, to reflect the potential that these countries have for a catching-up with the rest.

2.6. PROJECTION RESULTS

As mentioned above, projection results are not meant to be spending forecasts, but a useful analytical tool to raise awareness on the possible future trends in public health care spending, the role played by some of the major drivers and their potential impact on long-term sustainability of public finances. Therefore, the projected health care spending levels should be interpreted prudently. The projections of the demographic scenario are assessed against eight other scenarios with different features.

2.6.1. Country-Specific policy reforms

In the past years, many countries have undertaken policy reforms in HC. The fiscal impact of some of those reforms is not easy to estimate. However, as far as budgeted changes in long-term care spending are concerned, many countries have estimated potential budgetary effects on HC spending triggered by legislated HC reforms. In all cases, the impact of reforms was modelled as a percentage change of health care expenditure relative to the base year of projections, upon agreement with the respective Member States.

Where possible, reforms have been distinguished by their impact on the payroll in the health care sector, pharmaceutical expenditure, expenditure on therapeutical appliances and other durables, capital formation and prevention and public health services. Countries such as Austria and Belgium have legislated a ceiling on health expenditure and/or its future growth. Wage adjustments or freezes are legislated in Czech republic, Estonia, Italy, Romania, Slovakia and Slovenia (Table II.2.4).

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[96] Medeiros J. and Schwierz C. (2013), "Estimating the drivers and projecting long-term public health expenditure in the European Union: Baumol's 'cost disease' revisited", European Economy, Economic Papers No. 507.

[97] The reason for the convergence of the elasticity is that we expect only a partial continuation of past trends related to NDD in the future. In the past, extensions of insurance to universal coverage of the population were an important trigger of increases in public health expenditures. As universal coverage is nearly reached in the EU, this one-time shock will not occur again in the future. It should however be noted that the roll-out of "high" coverage in many Member States happened a long time ago, and are therefore not captured by the estimates of the excess growth of health care costs. Ideally, in order to identify the impact of NDD on health care expenditure one should also control for other variables, such as the health status, relative prices, and institutional variables. However, limitations on data and methodological concerns prevent the use of a broader set of regressors.

Graph II.2.2:   **Projected increase in public expenditure on health care due to demographic change over 2013-2060, as % of GDP**
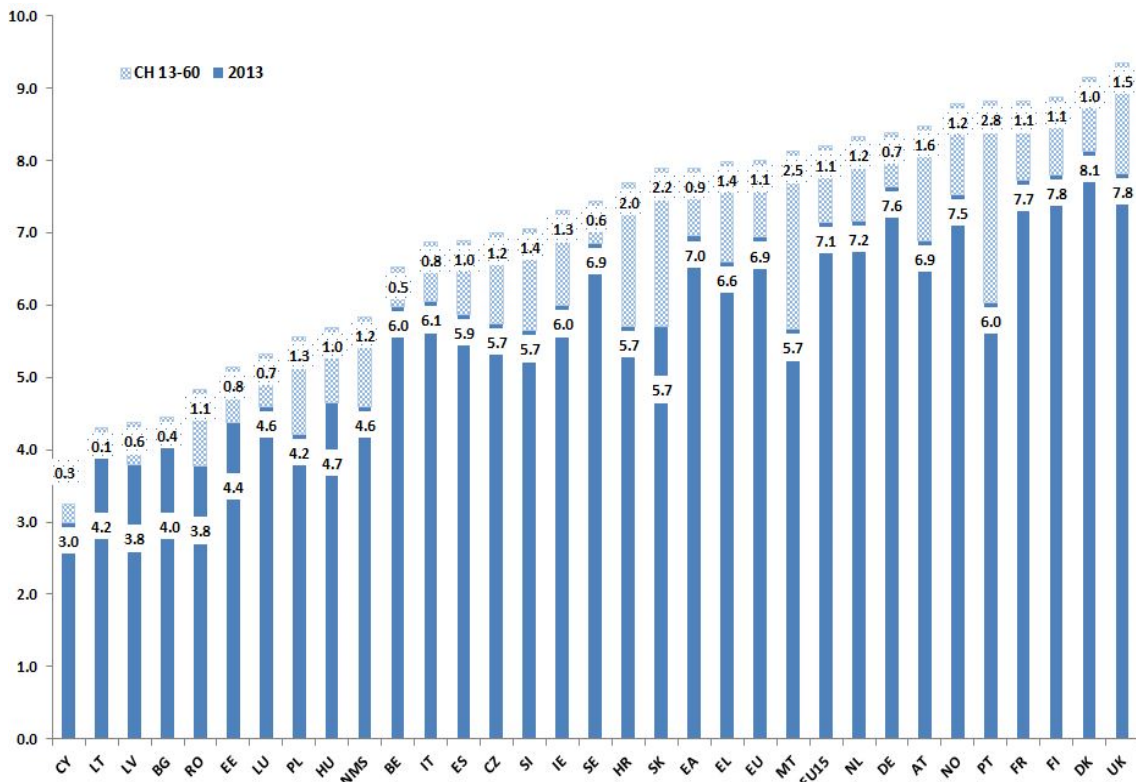
(1) The EU15 and NMS averages in all result tables are weighted according to GDP. The level of expenditures in 2013 is the first year of projected expenditures based on latest available data. Health care expenditure exclude long-term nursing care.
The aggregate of health care expenditure utilized for projections is based on OECD SHA/health data definition based on ESA 95, while GDP and other expenditure items have been revised according to ESA 2010. A revision of health expenditure data based on ESA 2010 may change the reported level of expenditure.
Source: Commission services, EPC.

2.6.2. Accounting for institutional specificities

In Germany, in 2013 only 86% of the population was insured by social health insurance (SHI), with the remainder insured by mandatory substitutional private health insurance (PHI) schemes. Previous projections did not account for this specificity and assumed that the whole financial burden of population ageing has to be covered by the SHI scheme. To account for the existence of PHI, the population projections used in our model are adjusted downwards to equal the number of people insured in SHI in the base year of projections.

In addition, it can be assumed that given the younger age structure of PHI and the current legislative set-up, which heavily restricts opting out from PHI to SHI, ageing will be more pronounced in PHI than SHI. This implies a reduced burden of ageing within the SHI scheme in future. Therefore, as the share of the privately insured among the total population will increase faster than the share of the insured under the public insurance scheme, population projections are further adjusted by the estimated reduced ageing effect of the population covered by SHI. Together, these assumptions imply a reduction of the population figures to roughly 86% ([98]) (those covered by SHI) in 2013, and a further reduction to 82% by 2060, with a more relatively pronounced decrease in older age groups.

([98]) It should be noted that the reduction of SHI coverage should also be expected in the projection of future social security contributions.

Table II.2.4:   **Health care reforms with direct budget impact taken into account in the projections**

Country	Policy reform
Austria	Legislated ceiling on health care expenditure
Belgium	Growth ceiling on health care expenditure according to growth norm of public health expenditure
Bulgaria	Additional capital investments and savings in pharmaceutical expenditure
Croatia	Additional budget allocation to public health facilities
Czech Republic	Wage adjustments of health personnel, budget rectification, shift from private co-payments to public financing
Estonia	Wage adjustments of health personnel
Italy	Wage freeze in public sector
Netherlands	Budgeted decrease in health expenditure
Poland	Pharmaceutical reforms with direct budgetary impact and budgeted health expenditure decrease
Romania	Wage adjustments of health personnel and budget rectifications
Greece	Decrease in health expenditure and budget freeze
Portugal	Budgeted decrease in health expenditure
Slovakia	Wage adjustments of health personnel and pharmaceutical reforms with direct budgetary impact
Slovenia	Reduction in wages of employees in the general government sector
United Kingdom	Specific budget adjustment by area of health care spending

Source: Commission services, EPC.

2.6.3. Changes in demography and health status

According to the "demographic scenario", public health care expenditure in the EU28 is projected to increase by 1.1 pp. of GDP i.e. from 6.9% to 8% of GDP from 2013 to 2060. For half of the countries the expenditure increase lies between 1.0 and 1.6 pp. of GDP over the whole projection period.

Expenditures are expected to increase by a slightly greater amount in the New Member States (NMS) (1.2 pp. of GDP from the initial level of 4.6% of GDP in 2013) than in the EU15 (1.1 pp. of GDP from an initial 7.1% of GDP). The impact of ageing on health care spending in each country is shown in Graph II.2.2 (where the solid colour bars show current expenditure over the GDP in 2013 and the shaded bars above them the expected increase in percentage points up to 2060) and Table II.2.5.

Projections reflecting only demographic changes may turn out to be either optimistic or pessimistic, depending on whether living longer will go along with increasing or decreasing morbidity. The "high life expectancy scenario" provides a sensitivity test

to assess the potential implication of future gains in life expectancy higher than those assumed in the population projections (EUROPOP2013). It provides an estimate of the budgetary impact of one extra years of life under the (pessimistic) view that this additional year is associated with one extra years in "bad health" (along the line of the "morbidity expansion" hypothesis). Under this assumption, an extra year of life-expectancy leads to an increase of 0.3 pp. of GDP relative to the demographic scenario (Table II.2.6).

Table II.2.5:   **Demographic scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.5	0.5	9%
BG	4.0	4.5	0.4	10%
CZ	5.7	7.0	1.2	22%
DK	8.1	9.2	1.0	12%
DE	7.6	8.4	0.7	10%
EE	4.4	5.1	0.8	17%
IE	6.0	7.3	1.3	22%
EL	6.6	8.0	1.4	21%
ES	5.9	6.9	1.0	17%
FR	7.7	8.8	1.1	14%
HR	5.7	7.7	2.0	35%
IT	6.1	6.9	0.8	14%
CY	3.0	3.3	0.3	9%
LV	3.8	4.4	0.6	15%
LT	4.2	4.3	0.1	3%
LU	4.6	5.3	0.7	16%
HU	4.7	5.7	1.0	22%
MT	5.7	8.1	2.5	43%
NL	7.2	8.3	1.2	16%
AT	6.9	8.5	1.6	23%
PL	4.2	5.6	1.3	32%
PT	6.0	8.8	2.8	46%
RO	3.8	4.8	1.1	28%
SI	5.7	7.1	1.4	25%
SK	5.7	7.9	2.2	38%
FI	7.8	8.9	1.1	14%
SE	6.9	7.4	0.6	9%
UK	7.8	9.4	1.5	20%
NO	7.5	8.8	1.2	17%
EA	7.0	7.9	0.9	14%
EU	6.9	8.0	1.1	15%
EU15	7.1	8.2	1.1	15%
NMS	4.6	5.8	1.2	26%

(1) The EU, EA and NMS averages in all result tables are weighted according to GDP. The level of expenditures in 2013 is the first year of projected expenditures based on latest available data. Health care expenditure excludes long-term nursing care.
Source: Commission services, EPC.

| Table II.2.6: | High life expectancy scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP. |

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.8	0.8	14%
BG	4.0	4.6	0.6	14%
CZ	5.7	7.3	1.6	28%
DK	8.1	9.5	1.4	17%
DE	7.6	8.8	1.2	15%
EE	4.4	5.3	1.0	22%
IE	6.0	7.6	1.6	27%
EL	6.6	8.4	1.8	27%
ES	5.9	7.2	1.3	22%
FR	7.7	9.2	1.5	19%
HR	5.7	8.0	2.3	41%
IT	6.1	7.2	1.1	18%
CY	3.0	3.3	0.3	11%
LV	3.8	4.6	0.8	21%
LT	4.2	4.5	0.3	7%
LU	4.6	5.5	0.9	20%
HU	4.7	5.9	1.3	27%
MT	5.7	8.7	3.0	53%
NL	7.2	8.7	1.5	21%
AT	6.9	8.9	2.0	29%
PL	4.2	5.8	1.6	37%
PT	6.0	9.4	3.4	56%
RO	3.8	5.1	1.3	34%
SI	5.7	7.4	1.7	31%
SK	5.7	8.2	2.5	44%
FI	7.8	9.3	1.5	19%
SE	6.9	7.7	0.8	12%
UK	7.8	9.8	2.0	26%
NO	7.5	9.1	1.6	21%
EA	7.0	8.2	1.3	19%
EU	6.9	8.4	1.4	21%
EU15	7.1	8.6	1.4	20%
NMS	4.6	6.1	1.5	32%

Source: Commission services, EPC.

| Table II.2.7: | Constant health scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP |

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	5.6	-0.3	-6%
BG	4.0	3.9	-0.1	-3%
CZ	5.7	6.1	0.3	5%
DK	8.1	8.3	0.1	1%
DE	7.6	7.6	0.0	0%
EE	4.4	4.4	0.1	1%
IE	6.0	6.6	0.6	10%
EL	6.6	7.2	0.6	10%
ES	5.9	6.4	0.6	10%
FR	7.7	8.0	0.3	3%
HR	5.7	6.7	1.0	18%
IT	6.1	6.3	0.2	4%
CY	3.0	3.1	0.1	3%
LV	3.8	3.9	0.1	4%
LT	4.2	3.9	-0.3	-8%
LU	4.6	4.8	0.2	4%
HU	4.7	4.8	0.1	3%
MT	5.7	7.0	1.4	24%
NL	7.2	7.6	0.4	5%
AT	6.9	7.6	0.7	10%
PL	4.2	4.9	0.7	16%
PT	6.0	7.7	1.6	27%
RO	3.8	4.3	0.5	13%
SI	5.7	6.3	0.6	11%
SK	5.7	6.7	1.0	18%
FI	7.8	7.9	0.1	2%
SE	6.9	6.7	-0.1	-2%
UK	7.8	8.4	0.6	7%
NO	7.5	7.8	0.2	3%
EA	7.0	7.2	0.2	3%
EU	6.9	7.2	0.3	4%
EU15	7.1	7.4	0.3	4%
NMS	4.6	5.1	0.5	10%

Source: Commission services, EPC

In line with the (optimistic) assumptions of the "dynamic equilibrium hypothesis", assuming a constant number of years in bad health, whatever the future longevity gains, the "constant health scenario" assumes that all future gains in life expectancy are spent in good health. Comparison of the demographic (or high life expectancy scenario) with the "constant health scenario" illustrates how shifts in the health status of the population can impact on health expenditure.

As expected, in the "constant health scenario" increases in public expenditure on health care are significantly lower than those obtained in the "demographic scenario".

Table II.2.8: **Death-related costs scenario - projected increase in public expenditure on health care over 2010-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.4	0.4	7%
BG	4.0	4.5	0.4	10%
CZ	5.7	6.6	0.8	14%
DK	8.1	8.8	0.7	9%
DE	7.6	8.2	0.5	7%
ES	5.9	6.8	0.9	16%
FR	7.7	8.6	0.8	11%
IT	6.1	6.7	0.7	11%
NL	7.2	8.1	0.9	12%
AT	6.9	8.2	1.3	19%
PL	4.2	5.3	1.1	26%
SI	5.7	6.9	1.3	22%
SK	5.7	7.6	1.9	33%
FI	7.8	8.7	0.8	11%
SE	6.9	7.2	0.3	5%
UK	7.8	9.1	1.2	16%

Source: Commission services, EPC.

The ageing effect on expenditure growth is reduced to only a third compared to the "demographic scenario". For the EU28 a 0.3 pp. of GDP increase is expected over the overall projection period (Table II.2.7). Most of the Member States can expect an expenditure growth of below 1 pp. of GDP and four countries even experience a decrease. Therefore improvements in health status may be crucial for keeping expenditure on health care under control in future.

The *"death-related costs scenario"* follows a similar logic to the constant health scenario: the years spent with ill health are compressed towards the later period of life. However, a different methodological approach and different features of the data used lead to results varying considerably between the two scenarios. Note that data on death-related costs was provided only by 16 Member States. ([99])

Incorporating the concept of death-related costs in the projection methodology leads to a reduction in the projected health care expenditure relative to the "*demographic scenario*" for most of the countries (Table II.2.8). ([100]) The projected increase in public expenditure ranges from 0.3 pp. of GDP for Sweden to 1.9 pp. of GDP for Slovakia.

Graph II.2.3 shows a comparison of the results of the three scenarios related to the future evolution of health status. The comparison between the shapes of the curves for EU15 and NMS highlights the more pronounced growing path of the "*demographic scenario*" in the NMS. This is likely driven by faster demographic developments i.e. faster ageing, but also faster national income growth.

2.6.4. Changes in income and macroeconomic variables

The "demographic scenario" assumes that per capita spending grows in line with national income per capita. The effect is that without population ageing, the share of health spending in % of national income would stay constant.

However, empirical research shows that growth in both public and total health care spending may exceed the growth rate of national income, be it because of rising expectations towards more and better health care and a higher willingness to pay for health care services.

Consequently, the "demographic scenario" may substantially underestimate health spending growth. One way to address this concern is to assume that trends in health spending exceed the growth rate of national income.

([99]) Note that in the current projections exercise the methodology behind the death-related costs scenario does not perfectly illustrate the underlying theoretical concept. In particular, the period of time defined as 'close to death' is limited to one year, while several studies argue that the health care costs of decedents are higher than those of survivors up to six years before death. This is due to the fact that, with the exception of one Member State, all Member States reported expenditure for the last year of life only.

([100]) In fact, using this methodological approach does not reduce the overall amount of expenditure devoted to health care. Instead, it spreads the costs of health care over time by assuming that with a decline in mortality rate the share of decedents in each age cohort is decreasing.

Graph II.2.3:   **Impact of demography and health status - Comparison between scenarios in EU15 and NMS**
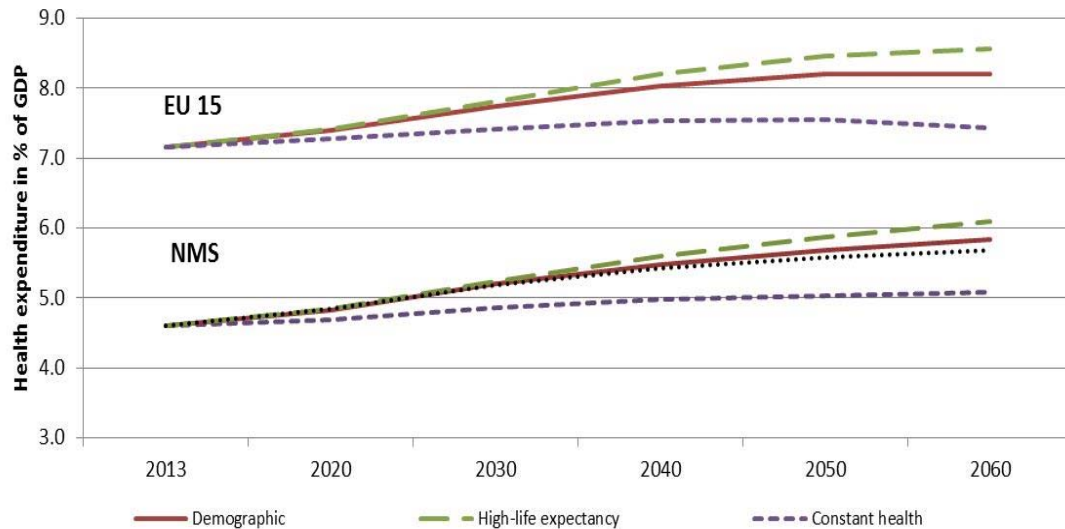
Source: Commission services, EPC

Assuming a slightly higher growth in spending relative to national income (i.e. an income elasticity of 1.1) adds an extra 0.2 pp. of GDP to health expenditure (Table II.2.9). The additional impact is similar for EU15 and NMS.

The cost convergence scenario, performed solely for those Member States with shares of GDP per capita spending below the EU28 average, captures the possible effect of a convergence in real living standards across EU countries on public expenditure on health care. ([101])

Table II.2.9:   **Income elasticity scenario (public spending on health care, as % of GDP)**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.7	0.7	11%
BG	4.0	4.7	0.7	16%
CZ	5.7	7.3	1.5	26%
DK	8.1	9.5	1.3	17%
DE	7.6	8.6	1.0	13%
EE	4.4	5.4	1.0	23%
IE	6.0	7.6	1.6	26%
EL	6.6	8.3	1.7	25%
ES	5.9	7.2	1.3	22%
FR	7.7	9.1	1.3	17%
HR	5.7	8.0	2.3	40%
IT	6.1	7.0	1.0	16%
CY	3.0	3.4	0.4	12%
LV	3.8	4.7	0.9	23%
LT	4.2	4.6	0.4	9%
LU	4.6	5.4	0.8	18%
HU	4.7	5.9	1.3	28%
MT	5.7	8.4	2.7	48%
NL	7.2	8.5	1.4	19%
AT	6.9	8.7	1.8	26%
PL	4.2	5.9	1.6	39%
PT	6.0	9.2	3.1	52%
RO	3.8	5.1	1.3	34%
SI	5.7	7.3	1.6	29%
SK	5.7	8.3	2.6	46%
FI	7.8	9.1	1.3	16%
SE	6.9	7.7	0.8	12%
UK	7.8	9.6	1.8	23%
NO	7.5	9.0	1.5	20%
EA	7.0	8.1	1.2	17%
EU	6.9	8.2	1.3	19%
EU15	7.1	8.4	1.3	18%
NMS	4.6	6.1	1.5	33%

Source: Commission services, EPC

([101]) Please note that the "cost convergence" scenario does not assume convergence in absolute costs but in relative costs, that is in per capita public expenditure relative to GDP per capita.

Member States, the productivity (and therefore real wages) grows faster than per capita income (as explained in section 2.5.2). The effect of productivity replacing income as the driver of unit costs of health care provision in the projections leads to an additional spending of 0.3 pp. of GDP relative to the "demographic scenario" (Table II.2.11). Given the assumed catching-up in terms of labour productivity, the effect is stronger (0.8 pp.) in the new Member States.

Table II.2.10: **The EU28 cost convergence scenario (public spending on health care, as % of GDP)**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.7	0.7	11%
BG	4.0	7.1	3.1	76%
CZ	5.7	7.2	1.5	26%
DK	8.1	9.2	1.0	13%
DE	7.6	8.4	0.8	10%
EE	4.4	7.0	2.6	59%
IE	6.0	7.3	1.3	22%
EL	6.6	8.0	1.4	21%
ES	5.9	7.5	1.6	28%
FR	7.7	8.9	1.1	15%
HR	5.7	8.6	2.9	51%
IT	6.1	7.2	1.2	19%
CY	3.0	6.5	3.5	117%
LV	3.8	6.7	2.9	77%
LT	4.2	6.3	2.1	51%
LU	4.6	6.1	1.5	33%
HU	4.7	7.0	2.4	51%
MT	5.7	8.8	3.1	54%
NL	7.2	8.4	1.2	17%
AT	6.9	8.5	1.6	24%
PL	4.2	7.2	3.0	71%
PT	6.0	9.5	3.4	56%
RO	3.8	7.1	3.3	87%
SI	5.7	7.7	2.1	37%
SK	5.7	8.2	2.5	45%
FI	7.8	9.1	1.3	17%
SE	6.9	7.5	0.6	9%
UK	7.8	9.4	1.6	20%
NO	7.5	8.8	1.2	17%
EA	7.0	8.1	1.1	16%
EU	6.9	8.3	1.3	19%
EU15	7.1	8.4	1.2	17%
NMS	4.6	7.3	2.7	58%

Source: Commission services, EPC

Table II.2.11: **Labour intensity scenario (public spending on health care, as % of GDP)**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	7.0	1.0	16%
BG	4.0	4.8	0.7	18%
CZ	5.7	7.8	2.0	35%
DK	8.1	9.2	1.1	13%
DE	7.6	9.6	2.0	26%
EE	4.4	5.6	1.2	27%
IE	6.0	7.1	1.1	19%
EL	6.6	7.2	0.5	8%
ES	5.9	6.6	0.8	13%
FR	7.7	8.9	1.2	15%
HR	5.7	7.9	2.2	38%
IT	6.1	7.1	1.0	17%
CY	3.0	3.2	0.2	7%
LV	3.8	4.6	0.8	20%
LT	4.2	4.6	0.4	9%
LU	4.6	6.0	1.4	30%
HU	4.7	6.1	1.5	32%
MT	5.7	8.2	2.6	45%
NL	7.2	8.5	1.4	19%
AT	6.9	9.3	2.4	34%
PL	4.2	6.5	2.3	54%
PT	6.0	9.3	3.2	53%
RO	3.8	5.8	2.0	53%
SI	5.7	8.0	2.4	42%
SK	5.7	9.1	3.4	60%
FI	7.8	9.8	2.0	25%
SE	6.9	7.8	0.9	14%
UK	7.8	9.6	1.7	22%
NO	7.5	9.7	2.2	29%
EA	7.0	8.3	1.3	19%
EU	6.9	8.4	1.5	21%
EU15	7.1	8.6	1.4	20%
NMS	4.6	6.6	2.0	43%

Source: Commission services, EPC.

Cost convergence can be a costly process, especially for the NMS. Depending on the current expenditure profile, governments would, on average, need to spend up to 3 ½ pp. of GDP more over the next five decades (Table II.2.10). For the NMS, achieving by 2060 the level of relative health care provision per person equal to that of the EU28 would necessitate an average rise in expenditures by 2.7 pp. of GDP (EU15: 1.2 pp.). However, these results are quite sensitive to the convergence process simulated. ([102]) An alternative perspective of unit costs evolution is illustrated by the "labour intensity scenario". For most of the

The "sector-specific composite indexation scenario" in which future expenditure of each different driver evolves in line with their specific past trends (Table II.2.12), leads to an average projected increase 0.5 pp. of GDP lower than in the "demographic scenario".

([102]) See comparison of results between the Ageing Report 2012 and 2015 in Section 2.9

Table II.2.13 presents the projection results under the non-demographic drivers (NDD) scenario. Following econometric analysis, (^{103}) an average elasticity of 1.4 converging to 1 in 2060 is applied to the age-gender expenditure profiles. On average, the increase in public expenditure on health care is projected to be 2.6 pp. of GDP (compared to the 1.1 pp. projected under the demographic scenario). The results highlight the potential impact of non-demographic drivers on health care expenditure, such as innovations in medical technology, institutional settings and individual behaviour. Such upward risk on the future evolution of public expenditure on health care is not captured in the "*demographic scenario*".

The joint analysis of the five scenarios based on income and macroeconomic variables in comparison with the "*demographic scenario*" allows us to draw some important conclusions. First, supply-side factors, whose impact remains still relatively unknown and difficult to quantify, appear to push health care spending up to a considerably higher degree than relatively well specified and quantified demographic and demand-side factors. In this sense, the projected increase in public spending in a pure demographic scenario can be considered as on the low side.

It possibly underestimates the future budgetary pressure coming from the technical and economic process of producing and providing ever more sophisticated health care services. Still, methodological uncertainties with regard to estimating the impact of non-demographic drivers on health care expenditure make continuous improvements of the estimation methodology desirable.

Table II.2.12: **Sector-specific composite indexation scenario (public spending on health care, as % of GDP)**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.6	0.6	10%
BG	4.0	4.0	-0.1	-1%
CZ	5.7	6.8	1.1	19%
DK	8.1	8.7	0.6	7%
DE	7.6	7.7	0.1	1%
EE	4.4	4.9	0.6	13%
IE	6.0	6.6	0.6	10%
EL	6.6	7.5	0.9	14%
ES	5.9	6.9	1.1	18%
FR	7.7	8.3	0.6	8%
HR	5.7	7.4	1.7	30%
IT	6.1	6.2	0.1	2%
CY	3.0	3.2	0.2	8%
LV	3.8	4.3	0.5	14%
LT	4.2	3.7	-0.5	-11%
LU	4.6	5.3	0.7	16%
HU	4.7	4.9	0.3	6%
MT	5.7	7.3	1.6	28%
NL	7.2	7.8	0.7	9%
AT	6.9	7.9	1.0	14%
PL	4.2	4.7	0.5	11%
PT	6.0	7.9	1.8	30%
RO	3.8	4.3	0.5	13%
SI	5.7	6.5	0.9	16%
SK	5.7	7.1	1.4	24%
FI	7.8	9.0	1.2	15%
SE	6.9	6.8	-0.1	-1%
UK	7.8	9.3	1.5	19%
NO	7.5	8.2	0.6	8%
EA	7.0	7.4	0.5	7%
EU	6.9	7.6	0.6	9%
EU15	7.1	7.8	0.7	9%
NMS	4.6	5.2	0.6	13%

Source: Commission services, EPC.

(^{103}) For details see Medeiros and Schwierz (2014) as well as the EC-EPC (2014), "2015 Ageing Report "Underlying assumptions and projection methodologies" http://ec.europa.eu/economy_finance/publications/europea n_economy/2014/pdf/ee8_en.pdf

Table II.2.13: **Non-demographic drivers scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	7.5	1.5	25%
BG	4.0	6.0	1.9	48%
CZ	5.7	8.6	2.9	50%
DK	8.1	11.3	3.1	38%
DE	7.6	9.9	2.2	29%
EE	4.4	6.6	2.3	52%
IE	6.0	8.8	2.8	47%
EL	6.6	9.8	3.2	48%
ES	5.9	8.6	2.7	46%
FR	7.7	10.4	2.7	35%
HR	5.7	9.7	4.0	71%
IT	6.1	8.0	1.9	32%
CY	3.0	4.0	1.0	32%
LV	3.8	6.1	2.3	60%
LT	4.2	5.9	1.7	41%
LU	4.6	6.0	1.4	30%
HU	4.7	7.3	2.6	56%
MT	5.7	9.9	4.2	75%
NL	7.2	9.7	2.6	36%
AT	6.9	9.9	3.0	44%
PL	4.2	7.4	3.1	75%
PT	6.0	10.9	4.9	80%
RO	3.8	6.3	2.5	67%
SI	5.7	8.5	2.8	50%
SK	5.7	10.5	4.7	83%
FI	7.8	10.3	2.5	31%
SE	6.9	9.0	2.1	31%
UK	7.8	10.9	3.1	40%
NO	7.5	10.4	2.8	38%
EA	7.0	9.4	2.4	35%
EU	6.9	9.5	2.6	37%
EU15	7.1	9.7	2.6	36%
NMS	4.6	7.5	2.9	64%

Source: Commission services, EPC.

Table II.2.14: **AWG reference scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.1	0.1	2%
BG	4.0	4.4	0.4	9%
CZ	5.7	6.7	1.0	17%
DK	8.1	9.0	0.9	11%
DE	7.6	8.2	0.6	7%
EE	4.4	5.0	0.6	13%
IE	6.0	7.2	1.2	20%
EL	6.6	7.9	1.3	19%
ES	5.9	6.9	1.1	18%
FR	7.7	8.6	0.9	11%
HR	5.7	7.5	1.7	31%
IT	6.1	6.7	0.7	11%
CY	3.0	3.3	0.3	9%
LV	3.8	4.4	0.6	16%
LT	4.2	4.3	0.1	2%
LU	4.6	5.1	0.5	11%
HU	4.7	5.4	0.8	17%
MT	5.7	7.8	2.1	38%
NL	7.2	8.1	1.0	13%
AT	6.9	8.2	1.3	19%
PL	4.2	5.5	1.2	29%
PT	6.0	8.5	2.5	41%
RO	3.8	4.8	1.0	26%
SI	5.7	6.8	1.2	21%
SK	5.7	7.7	2.0	35%
FI	7.8	8.5	0.7	9%
SE	6.9	7.3	0.4	7%
UK	7.8	9.1	1.3	16%
NO	7.5	8.5	0.9	12%
EA	7.0	7.7	0.8	11%
EU	6.9	7.8	0.9	13%
EU15	7.1	8.0	0.9	12%
NMS	4.6	5.7	1.1	23%

Source: Commission services, EPC.

Second, in some countries future spending may be substantially driven by the possible convergence in health care provision across countries. Governments of countries where the current provision of health care is seen as less than that of other EU countries (mainly, though not only, NMS countries) may face increasing pressure from their citizens to substantively increase the level of spending in order to reach – at least over the long term – the coverage and standards guaranteed already today to the citizens of the richest EU countries.

2.7. AWG REFERENCE SCENARIO

The "AWG reference scenario", used as the baseline scenario is the point of reference for comparisons with the 2012 Ageing Report. In this scenario health care expenditures are driven by the assumption that half of the future gains in life expectancy are spent in good health and an income elasticity of health care spending converging from 1.1 in 2013 to unity in 2060.

The joint impact of those factors is a projected increase in spending of about 0.9 pp. of GDP in the EU28 by 2060 (Table II.2.14). Individual countries' results range between 0.1 (Belgium and Lithuania) and 2.5 pp. of GDP (Portugal). The estimated increases in spending are 0.2 pp. of GDP lower for the EU15 and 0.1 pp. for the NMS than in the demographic scenario.

Table II.2.15: **AWG risk scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.5	0.5	9%
BG	4.0	5.2	1.1	28%
CZ	5.7	7.5	1.7	30%
DK	8.1	10.0	1.9	23%
DE	7.6	8.9	1.3	17%
EE	4.4	5.7	1.3	30%
IE	6.0	7.9	1.9	32%
EL	6.6	8.7	2.1	32%
ES	5.9	7.8	1.9	33%
FR	7.7	9.4	1.6	21%
HR	5.7	8.4	2.7	47%
IT	6.1	7.2	1.2	19%
CY	3.0	3.6	0.6	20%
LV	3.8	5.3	1.5	40%
LT	4.2	5.1	0.9	22%
LU	4.6	5.4	0.8	18%
HU	4.7	6.2	1.5	33%
MT	5.7	8.7	3.0	53%
NL	7.2	8.8	1.6	22%
AT	6.9	8.9	2.0	29%
PL	4.2	6.4	2.2	52%
PT	6.0	9.6	3.5	58%
RO	3.8	5.5	1.7	45%
SI	5.7	7.5	1.9	33%
SK	5.7	9.0	3.3	58%
FI	7.8	9.1	1.3	17%
SE	6.9	8.0	1.2	17%
UK	7.8	9.8	2.0	25%
NO	7.5	9.2	1.7	22%
EA	7.0	8.4	1.5	21%
EU	6.9	8.5	1.6	23%
EU15	7.1	8.7	1.6	22%
NMS	4.6	6.5	1.9	42%

Source: Commission services, EPC.

Table II.2.16: **TFP risk scenario - projected increase in public expenditure on health care over 2013-2060, as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	6.0	6.1	0.1	2%
BG	4.0	4.4	0.4	10%
CZ	5.7	6.7	1.0	18%
DK	8.1	9.0	0.9	11%
DE	7.6	8.2	0.6	8%
EE	4.4	4.9	0.5	11%
IE	6.0	7.2	1.2	20%
EL	6.6	7.8	1.2	18%
ES	5.9	6.9	1.0	17%
FR	7.7	8.6	0.9	12%
HR	5.7	7.4	1.7	30%
IT	6.1	6.7	0.6	10%
CY	3.0	3.3	0.3	10%
LV	3.8	4.4	0.6	16%
LT	4.2	4.3	0.1	2%
LU	4.6	5.1	0.5	11%
HU	4.7	5.4	0.7	15%
MT	5.7	7.8	2.1	37%
NL	7.2	8.1	0.9	13%
AT	6.9	8.2	1.3	19%
PL	4.2	5.4	1.2	29%
PT	6.0	8.5	2.5	42%
RO	3.8	4.7	0.9	24%
SI	5.7	6.8	1.1	19%
SK	5.7	7.7	2.0	35%
FI	7.8	8.5	0.7	9%
SE	6.9	7.3	0.4	6%
UK	7.8	9.0	1.2	15%
NO	7.5	8.4	0.9	12%
EA	7.0	7.7	0.7	10%
EU	6.9	7.8	0.9	13%
EU15	7.1	8.0	0.9	13%
NMS	4.6	5.7	1.1	24%

Source: Commission services, EPC

2.8. COMPARISON WITH THE 2012 AGEING REPORT

It is interesting to compare the current results with the projections of the 2012 Ageing Report. Differences across the two waves of projections may arise from different demographic assumptions (faster/slower ageing of population) or changes in the age-gender expenditure profiles. However, when making these comparisons, it has to be kept in mind that there are many reasons why differences in results may not simply reflect changes in the underlying ageing process. Differences may stem from a different base-year for starting the projections, updated

macroeconomic assumptions resulting in different GDP per capita growth rates and GDP levels for the period under analysis and changes in scenario assumptions.

In what follows we concentrate on the two major sources of differences, GDP growth and expenditure profiles.

In terms of the former, the 2013 level of public expenditure on health care in the EU is 0.2 pp of GDP lower in the current Ageing Report than in the 2012 projections. The impact ranges from an increase of 1.1 pp of GDP in Greece to a decrease of 1.1 pp of the UK and Finland. In aggregate, EU countries now start from a lower level of spending. Ceteris paribus, this shift results in lower increases in projected levels of health spending.

Changes in the age cost profiles have increased by 0.1 pp of GDP overall. However, this aggregate impact masks a wide range of variation across Member States, from an increase of 0.9 for PT to a decrease of 0.3 for Spain or Cyprus.

The reason for these changes is due to the fact that in most cases age-cost profiles have been updated, resulting in different dynamics of ageing costs for many countries. In many cases this also reflects an improvement in the quality of data used and in the construction of the profiles.

It should also be noted that the new ESA 2010 accounting has implied an upward revision of GDP levels in the base year. For the EU, GDP is increased by about 3.5% in 2013.

Graph II.2.4 shows the age-gender expenditure profiles as % of GDP for all ages. There is a significant evolution here. In the EU15, the profiles for males are not too far from 2012 profiles. However, for females, the expenditure profiles in the current report are lower than those of the 2012 Ageing Report starting roughly from age of 40. In the NMS, there is a similar evolution as for the latter, although for males the new expenditure profiles are higher than those from 2012 for ages 95 and above. These changes in the profiles may explain a larger increase in public expenditure on health care as compared to the 2012 Ageing Report.

A quantitative decomposition of drivers is proposed in Table II.2.17. The decomposition aims at quantifying which factors are driving the differences in projected spending between the 2012 and the 2015 projection exercises. The considered drivers are the age-cost profiles, GDP per capita growth, population, an interaction and a base-year effect. Basically, departing from the level of expenditure in 2010 each driver's impact is estimated by replacing *ceteris paribus* its current value with the 2012 Ageing Report data. This is done subsequently for the age-cost profiles, GDP per capita growth and population data. As for the results at the level of the EU28, the new age-cost profiles have increased spending by 0.1 pp of GDP, whereas GDP per capita growth projections have driven down the results by roughly 0.2 pp. of GDP, whilst new demographic data has, in general, driven down spending projections slightly. However, there is considerable variation between countries.

Table II.2.17: **Decomposing the impact of drivers on differences in spending growth in health care expenditures between the 2015 and 2012 Ageing reports, in pp. of GDP**

	Difference in spending growth between the 2015 and 2012 Ageing Reports	Determinants of change behind 2015 AR Health care expenditure as % of GDP compared to 2012 AR projections (Demographic scenario in 2060)						
		Due to:						
		Change in age-cost profiles	Change related to GDP growth	Change in demographic projections	Interaction effect*	Change in all drivers**	Base-year effect***	
BE	-0.4	0.0	-1.0	0.6	0.1	-0.3	-0.2	BE
BG	-0.2	-0.1	-0.1	0.0	0.0	-0.2	0.0	BG
CZ	-0.6	0.3	-0.5	0.1	0.1	0.0	-0.5	CZ
DK	-0.1	0.0	-0.7	0.5	0.1	-0.2	0.1	DK
DE	-0.8	0.0	-0.7	0.5	0.1	-0.1	-0.6	DE
EE	-0.4	-0.2	0.2	-0.4	0.0	-0.4	0.0	EE
IE	-0.2	0.1	1.5	-2.0	0.3	-0.1	-0.1	IE
EL	0.0	0.0	1.7	-2.0	0.8	0.4	-0.4	EL
ES	-0.6	-0.3	0.8	-1.1	0.2	-0.4	-0.2	ES
FR	-0.3	0.0	-0.3	0.0	0.0	-0.3	-0.1	FR
HR	:	0.0	0.0	0.0	:	0.0	:	HR
IT	-0.1	0.2	-0.3	0.1	0.0	0.0	0.0	IT
CY	-0.2	-0.3	0.2	-0.2	0.0	-0.3	0.1	CY
LV	0.0	0.4	0.3	-0.9	0.2	-0.1	0.1	LV
LT	-0.6	0.0	1.2	-2.0	0.2	-0.6	0.0	LT
LU	-0.5	-0.2	-2.8	1.6	0.7	-0.8	0.3	LU
HU	-0.4	0.0	-0.2	-0.1	0.0	-0.3	-0.2	HU
MT	-0.5	0.0	-2.2	0.9	0.3	-0.9	0.4	MT
NL	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	NL
AT	-0.1	0.1	-0.9	0.6	0.1	-0.1	0.0	AT
PL	-0.6	-0.1	-0.1	0.0	0.0	-0.2	-0.4	PL
PT	0.7	0.9	1.6	-1.6	0.2	1.0	-0.3	PT
RO	-0.2	0.1	-0.5	-0.2	0.0	-0.7	0.5	RO
SI	0.2	0.5	0.0	-0.2	0.0	0.4	-0.2	SI
SK	0.1	0.1	0.7	-0.6	0.1	0.3	-0.2	SK
FI	0.1	-0.1	-0.8	0.6	0.0	-0.2	0.3	FI
SE	-0.3	0.0	-1.3	0.7	0.2	-0.3	0.1	SE
UK	0.5	0.3	-0.2	0.1	0.0	0.2	0.2	UK
NO	-0.2	-0.4	-2.4	1.5	0.5	-0.9	0.7	NO
EA	-0.3	0.0	-0.2	0.0	0.1	-0.1	-0.2	EA
EU	-0.2	0.1	-0.3	0.0	0.1	-0.1	-0.1	EU
EU15	-0.2	0.1	-0.3	0.1	0.1	-0.1	-0.1	EU15
NMS	-0.4	0.0	-0.1	-0.2	0.0	-0.2	-0.2	NMS

(1) *The interaction effect is the unexplained difference between the change in all drivers and the sum of the effects of the individual drivers.
** The change in all drivers is estimated by replacing the current data with the 2012 Ageing Report data for all drivers at once.
*** the base-year effect is the difference between column 1 and column 6.
Source: Commission services, EPC.

Graph II.2.4: **Age-gender expenditure profiles and population changes in the 2015 and 2012 Ageing Reports**
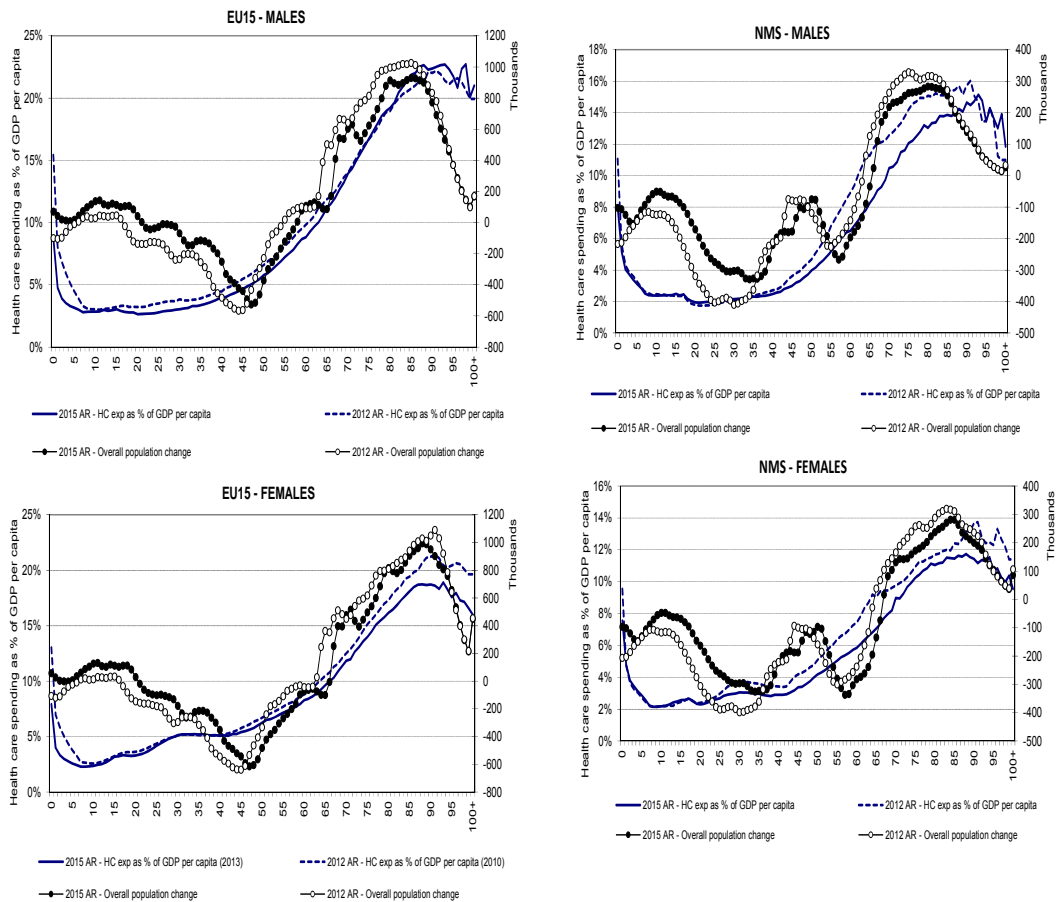
Source: Commission services, EPC.

2.9. CONCLUSIONS

Public health expenditure in EU28 was at 7.8% of GDP in 2012, the projections show that expenditure may grow to 8 % of GDP in 2060 only on accounts of demographic ageing– and to higher levels when other push up factors are accounted for as in the other scenarios presented in this report. Growing public health care expenditure raises concerns about its long-term sustainability. This report takes into account the possibility that alternative scenarios materialize in a context subject to considerable uncertainty.

The "demographic scenario" assumes that per capita spending grows in line with national income per capita. The effect is that without population ageing, the share of health spending in % of national income would stay constant. However, on

the one hand empirical research shows that growth in both public and total health care spending may exceed the growth rate of national income, be it because of rising expectations towards more and better health care and a higher willingness to pay for health care services. On the other hand, the scenario assumes that all future gains in life expectancy are spent in bad health. Consequently, the "demographic scenario" may under- or overestimate health spending growth.

Indeed, the projections show that whilst ageing per se has a non-negligible effect on expenditure growth, it is rather moderate. In effect, much depends on whether gains in life expectancy are spent in good or bad health. Optimistically, if all additional life years are healthy life years, the additional cost burden from ageing can be lowered, as exemplified in the "*constant health scenario"*.

Table II.2.18:   **Overview of scenario results - increase in public expenditure on health care over 2013-2060, as p.p. of GDP**

	Demo-graphic scenario	High life expectancy scenario	Constant health scenario	Death-related costs scenario	Income elasticity scenario	EU28 cost convergence scenario	Labour intensity scenario	Sector-specific composite indexation scenario	Non-demographic determinants scenario	AWG reference scenario	AWG risk scenario	TFP risk scenario	
BE	0.5	0.8	-0.3	0.4	0.7	0.7	1.0	0.6	1.5	0.1	0.5	0.1	BE
BG	0.4	0.6	-0.1	0.4	0.7	3.1	0.7	-0.1	1.9	0.4	1.1	0.3	BG
CZ	1.2	1.6	0.3	0.8	1.5	1.5	2.0	1.1	2.9	1.0	1.7	0.9	CZ
DK	1.0	1.4	0.1	0.7	1.3	1.0	1.1	0.6	3.1	0.9	1.9	0.8	DK
DE	0.7	1.2	0.0	0.5	1.0	0.8	2.0	0.1	2.2	0.6	1.3	0.5	DE
EE	0.8	1.0	0.1	:	1.0	2.6	1.2	0.6	2.3	0.6	1.3	0.6	EE
IE	1.3	1.6	0.6	:	1.6	1.3	1.1	0.6	2.8	1.2	1.9	1.2	IE
EL	1.4	1.8	0.6	:	1.7	1.4	0.5	0.9	3.2	1.3	2.1	1.2	EL
ES	1.0	1.3	0.6	0.9	1.3	1.6	0.8	1.1	2.7	1.1	1.9	1.0	ES
FR	1.1	1.5	0.3	0.8	1.3	1.1	1.2	0.6	2.7	0.9	1.6	0.8	FR
HR	2.0	2.3	1.0	:	2.3	2.9	2.2	1.7	4.0	1.7	2.7	1.7	HR
IT	0.8	1.1	0.2	0.7	1.0	1.2	1.0	0.1	1.9	0.7	1.2	0.6	IT
CY	0.3	0.3	0.1	:	0.4	3.5	0.2	0.2	1.0	0.3	0.6	0.3	CY
LV	0.6	0.8	0.1	:	0.9	2.9	0.8	0.5	2.3	0.6	1.5	0.6	LV
LT	0.1	0.3	-0.3	:	0.4	2.1	0.4	-0.5	1.7	0.1	0.9	0.1	LT
LU	0.7	0.9	0.2	:	0.8	1.5	1.4	0.7	1.4	0.5	0.8	0.5	LU
HU	1.0	1.3	0.1	:	1.3	2.4	1.5	0.3	2.6	0.8	1.5	0.8	HU
MT	2.5	3.0	1.4	:	2.7	3.1	2.6	1.6	4.2	2.1	3.0	2.1	MT
NL	1.2	1.5	0.4	0.9	1.4	1.2	1.4	0.7	2.6	1.0	1.6	0.9	NL
AT	1.6	2.0	0.7	1.3	1.8	1.6	2.4	1.0	3.0	1.3	2.0	1.3	AT
PL	1.3	1.6	0.7	1.1	1.6	3.0	2.3	0.5	3.1	1.2	2.2	1.2	PL
PT	2.8	3.4	1.6	:	3.1	3.4	3.2	1.8	4.9	2.5	3.5	2.5	PT
RO	1.1	1.3	0.5	:	1.3	3.3	2.0	0.5	2.5	1.0	1.7	0.9	RO
SI	1.4	1.7	0.6	1.3	1.6	2.1	2.4	0.9	2.8	1.2	1.9	1.2	SI
SK	2.2	2.5	1.0	1.9	2.6	2.5	3.4	1.4	4.7	2.0	3.3	2.0	SK
FI	1.1	1.5	0.1	0.8	1.3	1.3	2.0	1.2	2.5	0.7	1.3	0.7	FI
SE	0.6	0.8	-0.1	0.3	0.8	0.6	0.9	-0.1	2.1	0.4	1.2	0.4	SE
UK	1.5	2.0	0.6	1.2	1.8	1.6	1.7	1.5	3.1	1.3	2.0	1.2	UK
NO	1.2	1.6	0.2	:	1.5	1.2	2.2	0.6	2.8	0.9	1.7	0.9	NO
EA	0.9	1.3	0.2	:	1.2	1.1	1.3	0.5	2.4	0.8	1.5	0.7	EA
EU	1.1	1.4	0.3	:	1.3	1.3	1.5	0.6	2.6	0.9	1.6	0.8	EU
EU15	1.1	1.4	0.3	:	1.3	1.2	1.4	0.7	2.6	0.9	1.6	0.8	EU15
NMS	1.2	1.5	0.5	:	1.5	2.7	2.0	0.6	2.9	1.1	1.9	1.0	NMS

Source: Commission services, EPC.

With rising income and longevity, older people are willing to spend more on health care services. [104] Assuming a higher growth in spending relative to national income (i.e. income elasticity of 1.1) adds an extra 0.2 pp. of GDP to health expenditure. Rising income, in turn, drives technological innovations in the health sector, which have been confirmed in many studies to be crucial in explaining past increases in health expenditures. In addition, policy decisions to expand access and improve quality to health services especially for older people will inextricably mean that ageing remains at the core of public debates related to health expenditures.

Non-demographic factors will be a key driving force of health expenditures, if past trends persist. Our projections show that - on the basis of an econometric estimate - when the impact of future income growth on the demand for more and better health care is taken into consideration, projected expenditure becomes much higher. This is reasonable, as increasing economic wealth puts governments at pressure to provide more health services and to improve the quality of care. Also, growing living standards change people's attitude towards their own health and raise their expectations on living a longer, healthier life.

Innovations can produce efficiency gains and thus be cost-saving. Furthermore, in medical care they have also expanded the possibilities of life-saving treatments. However, these have added to costs, both by adding extra expenditure to previously non-curable diseases and by saving peoples' lives at the cost of longer periods of morbidity, especially at old ages. Overall, this had a strong increasing and dominant effect on public spending. The currently prevalent consensus is that this will also be the case in the future. Still, extrapolating past trends may also mean overestimating the cost-increasing impact of non-demographic drivers and underestimating the cost-saving impact of technological progress in the future.

Expenditure on health care is also influenced by the productivity of the economy. The *"total factor productivity risk"* scenario assumes that the productivity of the economy will grow slower compared with the baseline in the future.

[104] In the past decade there was an increase in the expenditure associated with old age diseases such as Alzheimer or dementia for example.

Graph II.2.5:   **Range of results from different scenarios on health care in EU28**
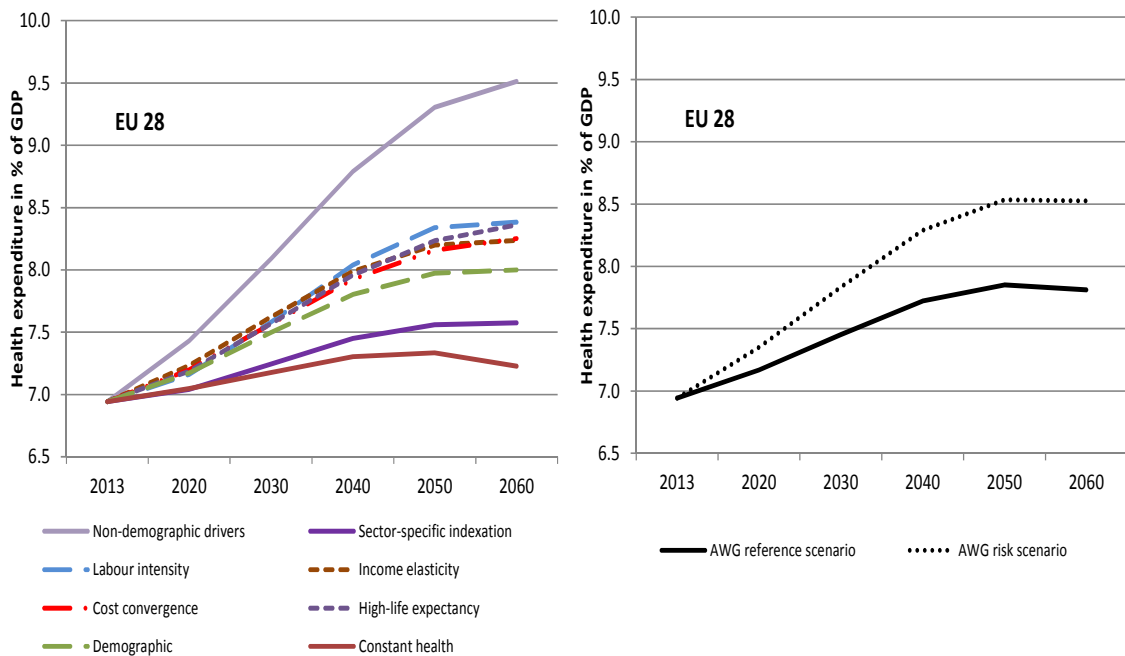
Source: Commission services, EPC.

Other supply related drivers, such as the costs of wages, are a non-negligible component of health expenditures. Health care is highly labour-intensive and requires highly skilled medical personnel who have strong bargaining power in a number of countries. Assuming that wages grow in line with labour productivity (therefore exceeding growth in GDP per capita) - such as in the *labour intensity scenario* -, leads to an additional spending of 0.4 pp. of GDP relative to the "*demographic scenario*".

In addition to wages, medical products and health care infrastructure constitute large shares of total health care expenditure. Disentangling the contribution of the individual costs components and their contribution to changes in health care spending improves the understanding of the actual expenditure drivers (*sector-specific composite indexation scenario*). The "*sector-specific composite indexation scenario*" in which future expenditure of each different driver evolves in line with their specific past trends, leads to an average projected increase 0.4 pp. of GDP lower than in the "*demographic scenario*". Two conclusions can be drawn from this scenario. First, wages and pharmaceuticals are very important drivers of

expenditure growth. Second, whether the growth contribution is positive or negative is country specific.

Finally, growing convergence in citizens' income per capita and expectations towards benefitting from a similar basket of health services and goods across countries may push expenditures up for below EU average income countries (cost convergence scenario). In the "cost convergence scenario" Member States with shares of GDP per capita spending below the EU28 average converge in real living standards to the EU28 average.

Based on a combination of different scenarios, the AWG reference and the AWG risk scenarios show that spending in the EU28 may increase between 0.9 and 1.6 pp. of GDP. Different institutional and legal settings (financing mechanisms, ownership structure, organisation of health provision, etc.), as well as policy changes, which are not well reflected in the projections, further increase this range both at the low and high ends. Despite these uncertainties, all scenarios for almost all Member States point to considerable continuous pressures on public spending from the health care sectors – even under conservative assumptions.

Graph II.2.6:   **Range of results from different scenarios on health care in EU15 and NMS**
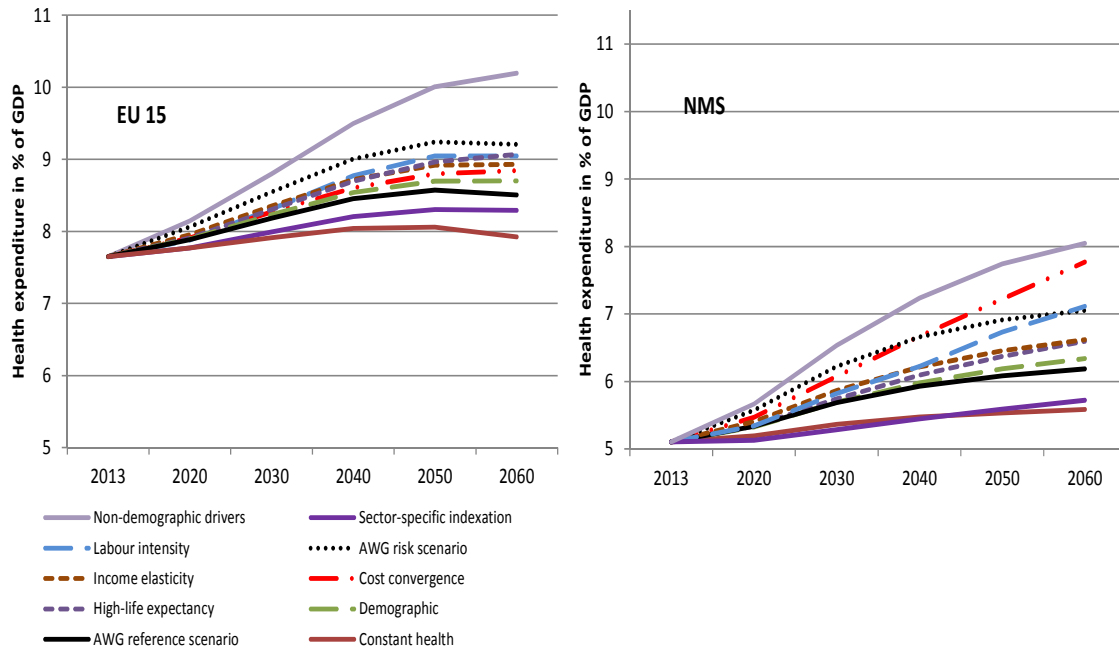
Source: Commission services, EPC.

It is unlikely that these pressures will lead to a withdrawal from public financing of health care. Due to market failures in health care markets, public financing will remain a large share of health care provision. Private spending may play a more important role but will remain of a complementary character in many Member States, closing gaps in public financing and enabling treatment in areas not considered as lifesaving.

The challenges will likely be different for the two groups of Member States (EU15 and NMS) (Graph II.2.7). The current spending on health care is significantly higher in both absolute (as % of GDP) and relative (per capita) terms in the EU15. Moreover, the shape of the expenditure profile suggests large differences in the provision of health care due not only to the gap in life expectancy, but also to normative health and social policy considerations.

First, given the more profound demographic changes expected to be experienced by the new Member States, the demographic impact, quantified in the "demographic scenario" will be slightly stronger in the NMS than in the EU15.

Second, the health care spending in the NMS countries is also expected to be affected more profoundly by the changes linked to income growth and the effect of some supply-side factors. Given the current gap in the health care provision and the on-going process of convergence in terms of national income growth, a considerably faster growth in demand for health care is expected to occur in the decades to come as compared to EU15. The same observation applies to the supply-side factors. Growth in productivity and thus wages is expected to exceed for at least a few decades the increase in wages experienced in the EU15.

All in all, ageing as well as non-demographic drivers of health care expenditures will continue putting pressure on the long-term sustainability of public finances. Balancing the health care needs of the European population with spending resources, as well as continuous efforts to increase the efficiency and quality of health service delivery, will continue to be high on the political and economic reform agenda of Member States.

3. LONG TERM CARE

3.1. INTRODUCTION

Projections for public expenditure on long-term care (LTC) from 2013 to 2060 were run using Commission services' (DG ECFIN) models on the basis of the methodology and data agreed with the Member States delegates to the AWG-EPC. [105]

LTC represents a non-negligible and growing share of GDP and of public and total, i.e. including private, health spending (Graphs II.3.1 and II.3.2). As such, public expenditure on LTC is an important item for the long-term sustainability of public finances

Long-term care is by uniform definition of international institutions (OECD, Eurostat, WHO) defined as a range of services required by persons with reduced degree of functional capacity (physical or cognitive) and who are consequently dependent for an extended period of time on help with basic and/or instrumental activities of daily

living (ADL). Basic Activities of Daily Living (ADL) or personal care services are frequently provided in combination with help with basic medical services such as nursing care, prevention, rehabilitation or services of palliative care. Instrumental Activities of Daily Living (IADL) or assistance care services are mostly linked to home help (Colombo et al., 2011).

Member States finance formal LTC services "in-kind", i.e. by paying for care provided for eligible care recipients, or via "cash benefits". Cash benefits can be used to pay for LTC services, often provided by informal carers, such as family members.

Often the same recipient may receive both in-kind and cash benefits. Graph II.3.3 shows the overlap of different benefits in the provision of care in the EU by the type of care provided, i.e. institutional care, home care or cash benefits, which leads to coverage rates of above 100% in some age-categories (See also Graph II.3.7). This complicates the estimation of the number of care recipients and the expenditure level due to potential double-counting of recipients and expenditure. These factors are thoroughly taken into account in this projection exercise. Annex 4 describes the data used and ways to deal with data limitations.

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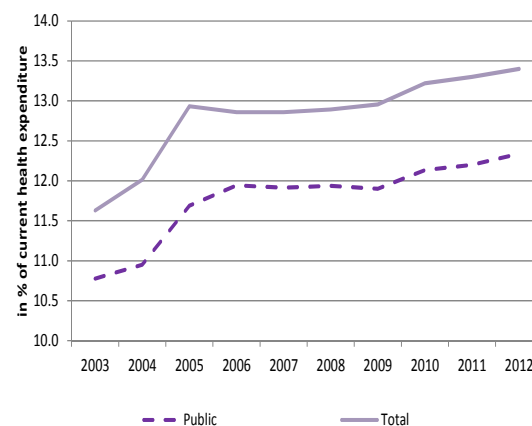
[105] Data and methodology are briefly recapulated in the Annexes to the Chapter. The detailed methodology for running the long-term expenditure projections is explained in detail in the Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG): "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies", European Economy. No 8/2014. Brussels: http://ec.europa.eu/economy_finance/publications/european_economy/2014/ee8_en.htm

There are two aspects which need to be taken into account. First, population ageing, if not accompanied by a corresponding improvement in health status, leads to an increase in the number of dependent elderly and LTC needs. Secondly, the availability of informal care may decline, increasing the need to resort to publicly financed formal care and thereby putting pressure on public expenditure on LTC.

Graph II.3.3:   **Age-related coverage of dependent population by type of care provided in the EU, as % of population.**

(1) Coverage estimated as ration between recipients and potentially dependent population; Recipient data, as provided by Member States; Population of potentially dependent based on EU-SILC data on "self-perceived longstanding limitation in activities because of health problems [for at least the last 6 months]" is used.
Source: European Commission, EPC.

The increasing need for care will have to be addressed, for instance through changing working arrangements in the formal care sector, but also arrangements for a better work/life balance to make the provision of informal care easier, including a better (public) support to informal carers, the development of respite care, ([106]) and investments in ICT solutions. In the short to medium term, these ultimately mean more public expenditure as well. Public expenditure on LTC thus depends on a number of factors affecting the demand and supply of LTC services. The main factors include the socio-demographic developments, the health status of the

([106]) Respite care is the provision of short-term accommodation in a facility outside the home for a dependent person. This is temporary relief family carers, who as an alternative might require permanent placement of the dependent person in a facility outside the home.

population, the patterns of LTC provision (organisation and financing of the system and thus essentially the extent to which Member States rely on formal, paid care and on informal care) and human resource availability, be it for formal or informal care supply. Economic growth also plays a role, as can the development and use of new technologies and medical progress.

3.2. DETERMINANTS OF LONG-TERM CARE EXPENDITURE

3.2.1. Demographic structure of the population

A key element of future public expenditure on LTC is the number of people who will need and receive LTC. The higher share and numbers of old and very old people expected in the coming decades is a key determinant. This is because the risk to live with physical or mental disability leading to a dependency situation that requires LTC tends to increase with age, especially with very old age (80+).

Graph II.3.4:   **Institutional care: Expenditure per recipient of long-term care services in institutional care, as % of GDP per capita**
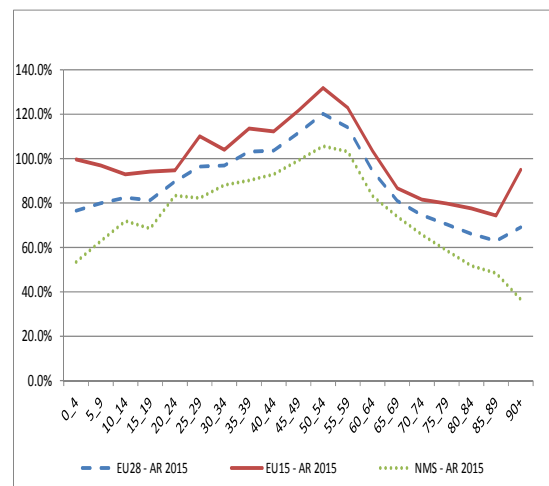
(1) EU15: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden and United Kingdom. NMS = New Member States: Bulgaria, Czech Republic, Estonia, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia.
Source: European Commission, EPC.

The age-related expenditure profiles used in the 2015 Ageing Report show that expenditure (spending per user as % of GDP per capita) is

rather flat for LTC recipients, which signals that the LTC costs related to severe disability are relatively independent of age. See graphs II.3.4, II.3.5 and II.3.6 for specific profiles related to institutional care, home care and cash benefits.

Graph II.3.5: **Home care: Expenditure per recipient of long-term care services in home care, as % of GDP per capita**
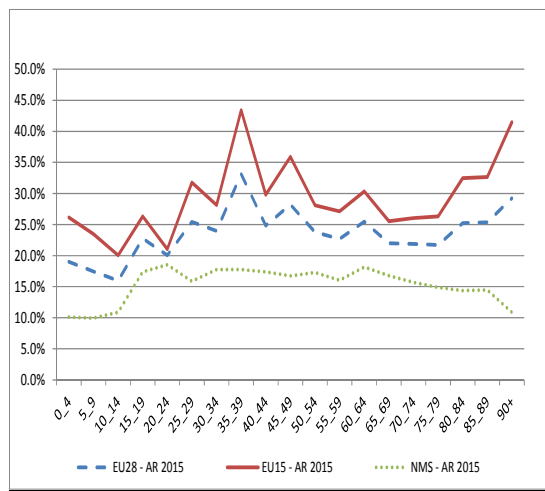
Source: European Commission, EPC.

Thus, contrary to health care, where higher spending is related to increasing age-cost profiles, increases in LTC spending are more related to the growing number of dependent people as driven by population ageing.

Graph II.3.6: **Cash benefits: Expenditure per recipient of long-term care cash benefits care, as % of GDP per capita**
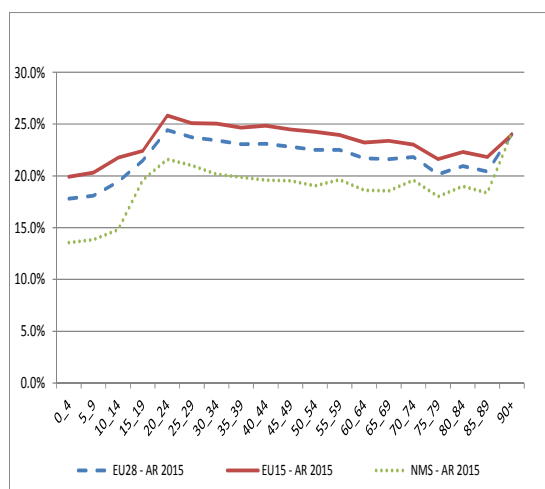
Source: European Commission, EPC.

As described in Part I, the demographic old-age dependency ratio (people aged 65 or above relative to those aged 15-64) is projected to increase from 27.8% to 50.1% in the EU as a whole over the projection period. The increase in the total age-dependency ratio (people aged 14 and below and aged 65 and above over the population aged 15-64) is projected to be even larger, rising from 51.4% to 76.6%. Thus, one can reasonably expect an increase in the need and demand for LTC (both formal and informal) in the years and decades to come. However, the rise in the number of the old and very old people varies between countries and is by no means the only factor. The need for LTC is not arising from ageing itself; it is a consequence of sickness or frailty, [107] causing dependency on others.

3.2.2. Dependency levels - developments in health status

As in health care, increased longevity (i.e. increased life expectancy) can contribute to an increase of future LTC spending. The increase in life expectancy may translate in an increase in the number of people and years during which the need for LTC increases and thus costs accumulate. This is the case when longevity is not accompanied by a corresponding improvement in the "quality" of life. As in health care, it is not necessarily age per se but the prevalence levels of dependency determining LTC expenditure.

Dependency is not disability, which refers to some functional impairment of an individual. Dependency is rather disability translated into the inability to perform daily personal care tasks (called activities of daily living –ADLs) [108] and instrumental activities of daily living (IADLs) [109] and therefore requiring some external assistance. Therefore, one could illustrate the causality on the demand side as such that disability translates into dependency establishing the need and consequently the demand for LTC.

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[107] For a discussion of the term frailty, see Clegg, Andrew et al. (2013), Frailty in elderly people, The Lancet , Volume 381 , Issue 9868 , 752 – 762.

[108] ADL are: eating, bathing, washing, dressing, getting in and out of bed, getting to and from the toilet and continence management.

[109] IADL are: shopping, laundry, vacuuming, cooking and performing housework, managing finances, using the telephone, etc.

The links between dependency levels and demand/use of LTC are not straightforward. There are many people with some form of disability who can lead completely independent lives without the need for care services. Further, disability also depends on a person's perception of his or her ability to perform activities associated with daily living. On the one hand, survey data can underestimate some forms of disability. People may not report certain socially stigmatised conditions, such as alcohol and drug related conditions, schizophrenia, and mental degeneration. On the other hand, disability data can be too inclusive and measure minor difficulties in functioning that do not require the provision of community care.

In order to clarify the relation and to follow the usual eligibility conditions of public schemes, it is commonly accepted that the relevant disability levels are those categorized as "severe". To calculate dependency rates the EU-SILC data on "self-perceived longstanding limitation in activities because of health problems [for at least the last 6 months]" is used. This is considered an adequate measure of dependency, available for all EU Member States and Norway, for people aged 15+ and by age group. [110]

The key question for the purpose of making LTC projections is of course whether, as life expectancy increases, dependency levels will increase, remain constant or decrease. Recent empirical research has not come to a clear conclusion regarding this question. Some evidence suggests that specific causes of disability may become more prominent with increasing age. These disabilities can have a direct impact on the frailty of longer-living older people. In particular, the number of people with a dementia (Alzheimer's disease) is expected to increase. [111] On the other hand, certain studies have noted that as life expectancy increases, the incidence of severe disability is postponed, leading to a reduction in the prevalence of severe disability for some age-groups.

[110] As this data is based on subjective assessment of care needs. The comparability of cross-country data is more limited, then would be the case for objective measures of care needs, which are ,however, not available on a comparable basis for all EU countries.

[111] According to OECD (2013), the economic and social impact of chronic brain disorders such as Alzheimer's disease will become the number one public-health problem worldwide, directly affecting 100 million people by 2050.

Graph II.3.7:   **Country-specific coverage rates of long-term care recipients, as % of dependent population**
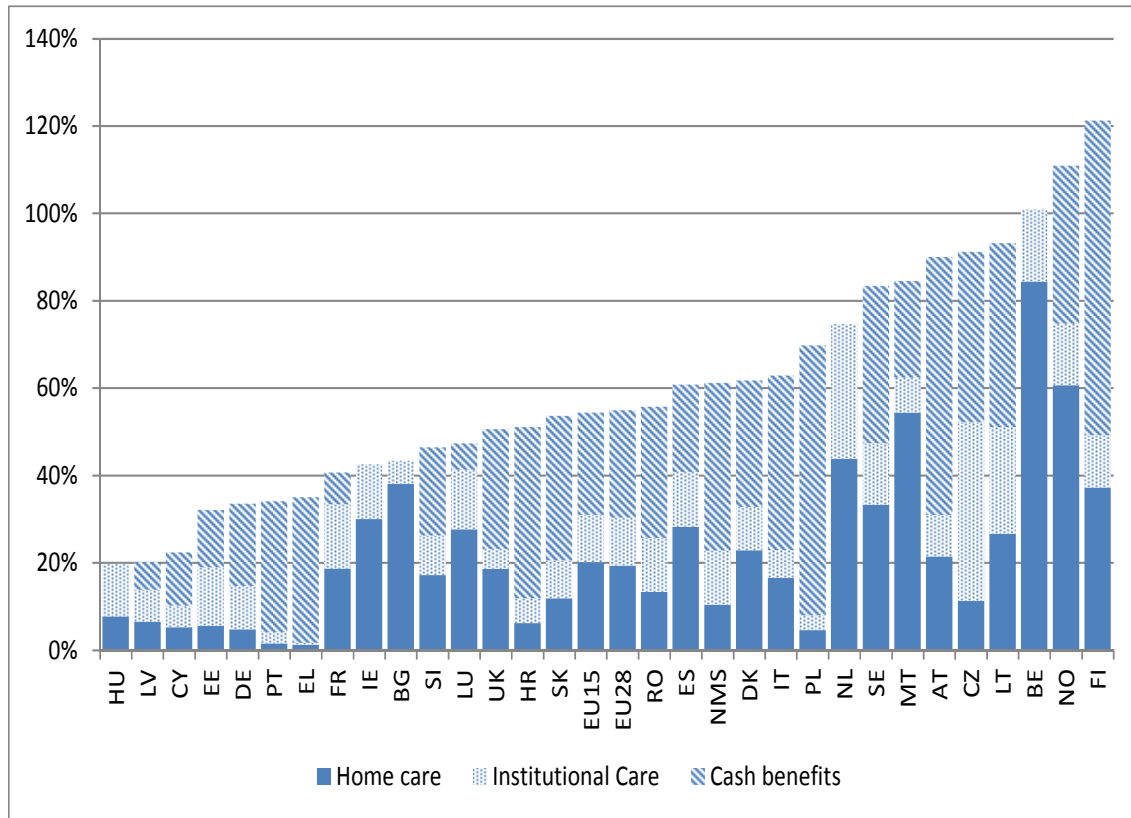
(1) Median coverage rates between 2009-2013 in the EU and Norway; Coverage estimated as ratio between recipients and potentially dependent population; Recipient data, as provided by Member States; Coverage may be above 100%, as some recipients may receive cash benefits and in-kind benefits at the same time, which is not corrected for in this graph. Population of potentially dependent based on EU-SILC data on "self-perceived longstanding limitation in activities because of health problems [for at least the last 6 months]" is used.
Source: European Commission, EPC

3.2.3. Patterns of long-term care provision

The extent to which a country relies on formal care and the extent to which this is provided in institutions or at home are important determinants of public expenditure on LTC. There is also an increasing interest for the "opportunity costs" derived from informal care: the impact on labour market and productivity, as well as on carers' health status itself.

LTC is delivered informally by families and friends – mainly spouses and children – and formally by care assistants who are paid under some form of employment contract. To be considered informal, the provision of care cannot be paid as if purchasing a service, even though an informal care giver may receive income transfers and, possibly, some payments from the person receiving care. Formal care is given at home or in

an institution (such as care centres and nursing homes). Cash benefits are payments which can be used to purchase formal care at home or in an institution or which can be paid to informal caregivers as income support.

All EU Member States are involved in either the public provision and/or financing of LTC services, although the degree of involvement differs across countries. Some Member States rely heavily on the informal provision of LTC and their expenditure on formal care is small. Other Member States provide extensive public services to the elderly and devote a significant share of GDP to LTC. Pressure for increased public provision and financing of LTC services may grow substantially in coming decades, especially in Member States where the bulk of LTC is currently provided informally.

3.2.4. Care supply – availability of human resources

In the 2015 Ageing Report, similar to the report published in 2012, it is assumed that all those receiving home care or institutional care are dependent and that all persons deemed dependent receive either home care or institutional care or informal care. However, one should be aware that the provision of LTC is not as clear cut, be it for formal or for informal care. Further, the substitution effects between formal and informal care are not as straightforward.

The provision of LTC is a demanding task for carers. Often, care is associated with low recognition and salaries, leading to high staff turnover. In some countries, staff shortages in the sector are already high. In the future, there will be fewer people of working age and a decline in the size of low-skilled workforce (which may be relevant for some home-care services), potentially increasing staff shortages. This situation combined with higher pressure on the formal provision of LTC may increase wages in the sector. As the cost of LTC is dominated by labour costs, changes in wage rates of LTC workers are likely to influence future costs of LTC.

Migrants make up an increasing proportion of formal-care workers in Member States with more extensive LTC service provision. Staff shortages have encouraged these countries to develop policies to attract migrants. Differences in pay and working conditions among Member States influence the inflow of mainly female migrant workers. However, the extent to which migrants may compensate for staff shortages is unclear, while they may generate staff shortages elsewhere.

For those depending on long-term care who do not receive (publicly financed) formal care (in kind or in cash), it is assumed that they receive informal care or privately funded care. Most informal care is provided by partners, children and children-in-law (intergenerational care), and sometimes by friends and other relatives. The provision of care increases with age, to reach a peak in the age cohorts 45-60. Two dimensions are to be taken into account: the future availability of potential informal carers and their propensity to provide care.

- *Availability of potential informal caregivers*: Key variables affecting the future availability of potential informal carers are the future numbers of elderly who will have children (around, i.e. co-residence or geographical proximity), and the future numbers of people who will be living with their spouse. The FELICIE ([112]) projections show an increase in the availability of informal caregivers. Indeed, the 85 years-old and more, both males and females, are expected to live more frequently with a partner in 2030 than in 2000.

- *Propensity to provide care*: The propensity to provide care will be affected by the participation in the labour market, as well as the ability/willingness to provide care, which is likely to decrease as spouses, children and relatives themselves become older and frailer.

One can foresee a shift from informal care towards formal care-giving as typical caregivers get more involved in the labour market and the new family structures may imply less support to the older generations. Note that caring is not without consequences to the carer in case of intensive caring: there may be a negative impact on the carer's health status, reducing their ability to care and to participate in the labour market. ([113])

The current institutional arrangements for the provision and financing of LTC by the public sector may be under strong pressure in the future, if the availability of informal carers and their propensity to provide care diminish.

The impact is nevertheless uncertain and depends on whether informal and home care are complements or substitutes. ([114]) In case of complementarity, a decreasing supply of informal carers will reduce the availability of home care, increasing the demand for residential care. This is because a lack of primary carers will force dependents to move to institutional care. If informal care is a substitute for formal home care,

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([112]) FELICIE: or "Future of Elderly Living Conditions in Europe" The goal of this project was to forecast the living arrangements of people aged 75+ in the next thirty years (2000-2030), with the aim to estimate their needs, through an evaluation of the future demand for nursing homes and for informal and formal care.
([113]) See Colombo (2010).
([114]) See for instance Van Houtven & Norton (2004) for a review on the topic, and Bonsang (2009).

a shortage of informal carers could lead to an increase in demand for formal care in both home and institutional care.

According to Bonsang (2009), 2004 SHARE data confirm that informal care decreases low-skilled home care use (paid domestic help), while it is a complement to high-skilled home care (nursing/personal care). Further, the substitution effect is shown to vanish for elderly suffering from heavy disability.

3.2.5. Accounting for country specific policies

Fiscal-structural policy reforms may change the projected path of LTC expenditure through a variety of channels. While some of the reforms may have a fiscal impact in the short term already, such as wage freezes of care personnel or budget caps, others may have a long-term impact, such as changing treatment guidelines or eligibility criteria to receive LTC benefits.

The impact of these reforms on future LTC expenditure is explicitly modelled in this projection exercise and discussed further in section 3.4.1.

In addition, institutional specificities in Germany and France are an important determinant for projecting LTC expenditure. Their implementation in the projections is described also in section 3.4.2.

3.3. OVERVIEW OF THE PROJECTION METHODOLOGY

3.3.1. The model

The macro-simulation model captures the effect of demographic and non-demographic variables on future public expenditure on long-term care. The model includes many of the described drivers of care, based on data availability considerations. ([115])

The methodology proposes sensitivity analysis for key assumptions based on a series of scenarios estimating changes in:

- the future relative numbers of <u>elderly people</u>, reflecting changes in the population projections;

- the future numbers of <u>dependent</u> elderly people, by applying changes to the prevalence rates of dependency;

- the <u>balance</u> between <u>formal and informal care</u> provision;

- the <u>balance</u> between <u>home care and institutional care</u> within the formal care system; and

- the <u>unit costs</u> of care.

These macro-simulation models assume that the whole population is divided into groups which are assigned certain characteristics (e.g. age, gender, per capita expenditure, health status, type of care/support…). Changes in the (relative) size or features of these groups lead to expenditure changes overtime. A schematic presentation of the methodology can be found in Graph II.3.8. A more detailed description can be retrieved in Annex V.

([115]) The methodology for running the long-term expenditure projections is explained in detail in the Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG): "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies", European Economy. 8. November 2014. Brussels:
http://ec.europa.eu/economy_finance/publications/europea n_economy/2014/ee8_en.htm

Graph II.3.8:   Schematic presentation of the projection methodology
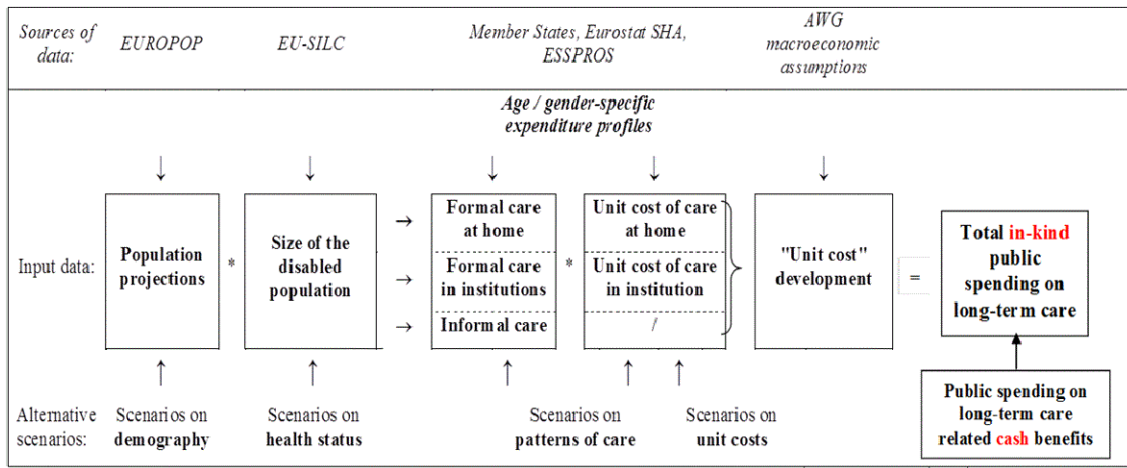
(1) The projections need to be viewed in the context of the overall projection exercise. Consequently, the common elements of all scenarios are the population projections provided by Eurostat (EUROPOP2013) and the baseline assumptions on labour force and macroeconomic variables agreed by the EC (DG ECFIN) and the AWG-EPC. The age and gender-specific per user public expenditure (on long-term care) profiles are provided by Member States, or proxied by the EU-average. They are applied to the demographic projections provided by Eurostat to calculate nominal spending on long-term care. As to cash benefits, they are assumed to grow in line with GDP per capita; their actual unit cost is seldom available, and therefore could not be used in this projection exercise. Further, the necessary age and sex distribution of cash recipients has not been provided by a number of member states.
Source: Commission services, EPC.

In past exercises, it has been decided that the base-case long-term budgetary projections should illustrate the policy-neutral situation. This is the situation where changes in government policy are not considered. ([116]) In other words, any potential future institutional or legal changes to the financing and organisation of long-term care systems are not reflected in the methodology used for projecting expenditure, except when specifically and clearly stated.

Pressure for increased public provision and financing of long-term care services may grow substantially in coming decades, especially in Member States where the bulk of long-term care is currently provided informally. Therefore, additional "policy scenarios" have been prepared to illustrate the impact of possible future policy changes on that matter, such as Member States deciding to provide more formal care services to the elderly.

3.3.2. Scenarios

One advantage of the methodology described above is that it allows for the examination of different scenarios regarding the evolution of dependency rates, unit costs and policy settings. Consequently, a series of scenarios and sensitivity tests assess the potential impact of each of the determinants of long-term care expenditure on future public expenditure on long-term care. Building on the 2012 EPC-EC projections exercise, ([117]) the present exercise maintains most of the existing scenarios and sensitivity tests while attempting to improve the specification of some of the scenarios, and runs one new scenario. Annex 5 shows an overview table with all baseline characteristics of the respective scenarios.

The analysis tries to identify the impact of each quantifiable determinant separately, on the basis of hypothetical assumptions like an estimated guess or a "what if" situation. Therefore, the results of

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([116]) It is implicitly assumed that the eligibility requirements do not change, as the proportion of persons covered is kept constant. Therefore, the supply of LTC will follow any related changes in demand.

([117]) See Economic Policy Committee and European Commission (EPC/EC) (2012), The 2012 Ageing Report: economic and budgetary projections for the EU-27 Member States (2010-2060), European Economy, No. 2/2012, Directorate General Economic and Financial Affairs, European Commission 2012. Available at: http://ec.europa.eu/economy_finance/publications/europea n_economy/2012/2012-ageing-report_en.htm

the projections should not be interpreted as forecast of expenditure as for example particular policy/institutional settings in Member States are not taken into account.

Demographic scenario

The "*demographic scenario*" assumes that the shares of the older disabled population who receive either informal care, formal care at home or institutional care are kept constant over the projection period. Those constant shares are then applied to the projected changes in the dependent population. Thus, the dependent population evolves precisely in line with the total elderly population and all gains in life expectancy are spent in bad health/with disability.

In Annex 4 the so-called "age-gender expenditure profiles", i.e. the relationship between the age of an average individual and his/her demand for long-term care, are shown. The graph plots each age-gender specific average public spending on LTC per user (and not per capita as in the case of health care) as a share of GDP per capita in the NMS and EU-15, as used in this report.

Base case scenario

The "base *case scenario*" links long-term care unit cost to GDP per worker, rather than to GDP per capita. LTC is highly labour-intensive and productivity gains can be expected to be particularly slow in this sector. Given the current deficit of formal care provision and its highly labour-intensive character, public expenditure on LTC can be expected to be rather more supply driven than demand-driven.

Similar to the 2012 exercise, the projections will link unit cost to GDP per hours worked for in-kind benefits (services), while unit cost of cash benefits will evolve in line with GDP per capita growth (as cash benefits are more related to a form of income support).

High life expectancy scenario

The *"high life expectancy scenario"* presents the budgetary effects of an alternative demographic scenario which assumes life expectancy to be higher for all ages than in the reference scenario.

The rationale is twofold. First, the marked increase in public expenditure with older age (i.e. 80 and more). In fact, the age profile for long-term care expenditure is much steeper than that for health expenditure, partly because the costs related to long-term care are very high for institutionalised individuals, and the share of institutionalised individuals increases sharply among persons aged over 80. Second, the higher age groups are also the part of the demographic projections which are likely to be the most uncertain.

Constant disability scenario

This scenario reflects an alternative assumption about trends in age-specific ADL-dependency rates. Being inspired by the so-called "*dynamic equilibrium hypothesis*", it is analogous to the "*constant health scenario*" performed in the framework of health care expenditure projections. The profile of age-specific disability rates shifts in line with changes in life expectancy (disability rate in the future is equal to that of a younger - by the same number of years as the change in age-specific life expectancy - age cohort today), resulting in a gradual decrease over time in disability prevalence for each age cohort.

Shift to formal care scenario

Ultimately, the public funding of LTC – and the policy orientation – will determine whether future needs for long-term care translate into (direct) public expenditure or not, as neither informal care provision nor private expenditure on long-term care are formally part of public expenditure on long-term care.

Pressure for increased public provision and financing of LTC services may grow substantially in coming decades, especially in Member States where the bulk of long-term care is currently provided informally.

This policy-change scenario is run to assess the impact of a given – demand-driven – increase in the (public) provision of formal care replacing care provided in informal setting. In particular, this sensitivity test examines the budgetary impact of a progressive shift into the formal sector of care of 1% per year of disabled elderly who have so far received only informal care. This extra shift takes place during the first ten years of the projection

period only, thus it sums up to about 10.5% shift from informal to formal care.

The shift from informal to formal care is considered to be in line with the current shares of home care and institutional care in total formal care. In other words, if currently 10% of the dependents receiving care, receive care at home, the shift/increase will also go for 10% to home care (and 90% to institutional care).

Coverage convergence scenario

This scenario assumes that the exchange of best practices and growing expectations of the populations will drive an expansion of publicly financed formal care provision into the groups of population that have not been covered by the public programmes so far. Note that "formal coverage" covers any of the three types of formal long-term care: institutional care, formal home care, and cash benefits. The remaining number of "dependent" people is assumed to receive informal care.

This scenario should also be considered as a policy-change scenario, as it assumes a considerable shift in the current long-term care provision policy, while aiming to take into account the high diversity of country-specific current care-mix.

It assumes a coverage convergence to the EU28 average by 2060. More specifically, the Member States where the formal coverage rate – i.e. referring to any of the three types of formal care described above – is below the EU28 average in the starting year are assumed to converge to this average by 2060.

Cost convergence scenario

For those Member States with high levels of informal care, and therefore relatively low costs for LTC, an increase in public expectations for more formal care (and therefore an increase in the average cost of long-term care) might be expected. For example, an increase in the costs of care (as percent of GDP per capita) towards the average for EU Member States could perhaps be expected.

The "*cost convergence scenario*" is meant to capture the possible effect of a convergence in real

living standards on long-term care spending. It assumes an upward convergence of the relative age-gender specific per beneficiary expenditure profiles (as percent of GDP per capita) of all countries below the corresponding EU28 average to the EU28 average. This is done for each type of formal care coverage (i.e. formal care in institutions, formal care at home, cash benefits).

Cost and coverage convergence scenario

This scenario combines the coverage convergence scenario and the cost convergence scenario, as described in the sections above.

The new "cost and coverage convergence scenario" proposes a balanced and plausible distribution of risks stemming from future needs to converge both costs and coverage matching future LTC needs. From the perspective of country-specific needs in these convergence processes, it is evident that countries are affected highly unequally by these convergence processes.

AWG reference scenario

The "AWG reference scenario" combines the assumptions of the "demographic" and the "constant disability" scenarios. This scenario is used in the multilateral budgetary surveillance at EU level. It is based on the assumptions of the reference scenario for LTC expenditure projections of the 2009 Ageing Report. Specifically, it is assumed that half of the projected gains in life expectancy are spent without disability (i.e. demanding care), taking thus an intermediate position between the "demographic" and "constant disability" scenario assumptions.

AWG risk scenario

The "AWG risk scenario" keeps the assumption that half of the future gains in life expectancy are spent with no care-demanding disability, as in the "AWG reference scenario". In addition, it combines it with the "cost and coverage convergence scenario" by assuming convergence upwards of unit costs to the EU-average as well as coverage convergence upwards to the EU-average.

In comparison to the "AWG reference scenario", this scenario thus captures the impact of additional cost drivers to demography and health status, i.e.

the possible effect of a convergence in coverage and in real living standards on LTC spending.

Total factor productivity risk scenario

Moreover, as compared to the previous 2012 *Ageing Report*, a new productivity risk scenario has been applied assuming lower Total Factor Productivity (TFP) growth (cf. volume 1 of the 2015 *Ageing Report* for more details on this alternative scenario). In the AWG reference scenario country-specific TFP growth rates converge to 1%, whereas in this TFP scenario, growth rates would converge to 0.8%.

3.4. PROJECTION RESULTS

3.4.1. Country specific policy reforms

In the past years, many countries have undertaken policy reforms in LTC, e.g.:

- In the Netherlands, with the implementation of the Social Support Act and the Youth Act, responsibilities for long-term care are partly transferred to municipalities and health insurance companies. The aim of the decentralisation is to achieve efficiency gains and to provide tailor-made support. The number of people receiving intramural care is reduced, and some new clients will receive care at home. At the same time the municipal budget for household/family support will decrease substantially, as greater reliance on informal care is expected. Overall, budgetary savings of 3.8bn over the period 2015-2018 are expected.

- Cyprus has increased the potential for a higher LTC coverage, as additional LTC benefits both for care recipients and their family members be provided on legal grounds. In addition, Cyprus is planning to increase the devolution of responsibilities to the Regions and Communities with regard to social policies, as well as strengthened in recent years the availability of home care services and other forms of community based care services.

It becomes clear that the fiscal impact of some of those reforms is not easy to estimate. However, as far as budgeted changes in long-term care spending are concerned, many countries have estimated potential budgetary effects on LTC spending triggered by legislated LTC reforms.

Table II.3.1: **Long-term care reforms with direct budget impact taken into account in the projections**

Country	Policy reform
Belgium	Growth ceiling on long-term care expenditure
Cyprus	Extension of long-term care coverage
Czech Republic	Abolition of "user fees" for day of stay in long-term care medical facilities
Estonia	Wage adjustments
Italy	Wage freeze in public sector
Netherlands	Budgeted decrease in long-term care expenditure
Poland	Increase in income thresholds below which citizens are covered
Portugal	Freeze of the amount of daily payments and increase of coverage related to institutional care
Slovakia	Increase of direct state participation in the provision of long-term care
Slovenia	Reduction in wages of employees in the general government sector

Source: European Commission, EPC.

Table II.3.1 shows that 10 countries provided information regarding the budgetary effects of policy reforms. In all cases, the impact of reforms was modelled as a percentage change of long-term care expenditure relative to the base year of projections, differentiated for the areas of institutional care, home care and cash benefits where applicable and upon agreement with the respective Member States.

As an example, the effect of the policy reform in the Netherlands is depicted in Graph II.3.10. The budgetary savings result in a downward shift of expenditure starting throughout 2015 to 2018. The effects of the measure are prolonged after 2018 and are expected to have an increasing effect as a result of the ageing population. At the end of the projection period, savings equivalent to 1.3 pp. of GDP are expected to materialize.

Graph II.3.9:   **Demographic scenario, current and projected levels of public expenditure on LTC as % of GDP; 2013-2060**
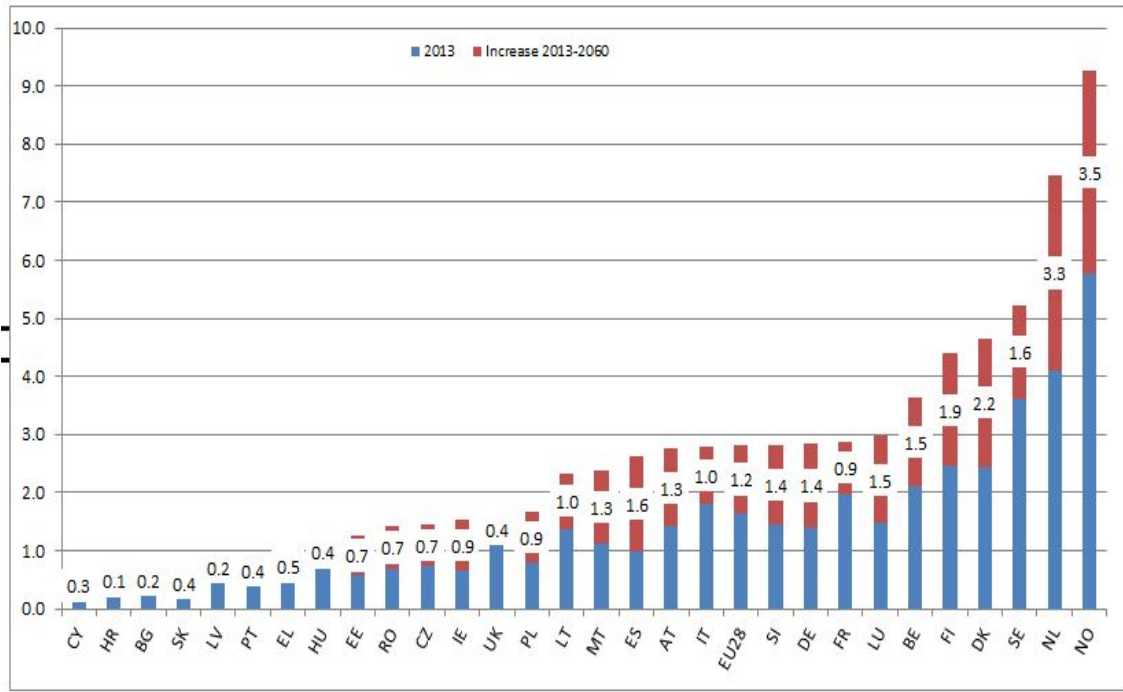
(1) Public expenditure on LTC is defined as long-term nursing care category (HC.3) and social care category (HC.R.6.1) based on the methodology of the system of health accounts and including additional cash-benefits for disability based on ESPROSS data. The level of expenditures in 2013 is the first year of projected expenditure based on latest available data.
The aggregate of long-term care expenditure utilized for projections is based on OECD SHA/health data definition based on ESA 95, while GDP and other expenditure items have been revised according to ESA 2010. A revision of long-term expenditure data based on ESA 2010 may change the reported level of expenditure.
Source: European Commission, EPC.

Graph II.3.10:   **Impact of LTC reform in the Netherlands on projected levels of LTC spending, in % of GDP**
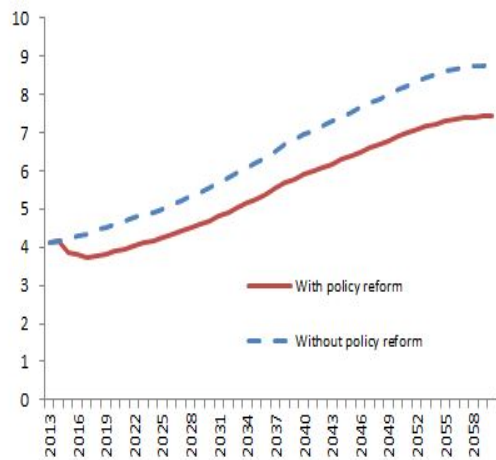
Source: European Commission, EPC.

3.4.2. Accounting for institutional specificities

As described in the health care chapter in section 2.6.1, Germany's specific set-up of insurance combining social health insurance with private health insurance implies a reduced burden of ageing within the SHI scheme in future. As for health care projections, this is taken into account in the same way for estimating LTC projections. ([118])

An additional effect is related to German and French legislations on the ceiling of LTC expenditure. In the projection, unit costs are indexed to GDP per hours worked or GDP per capita. Under current rules in Germany, all long-term care benefits are indexed to prices. ([119]) The difference between the amounts financed by the

([118]) Reducing the number of SHI insurees in working age also implies that SHI income from insurance contributions will decrease,

[119] Similarly to Germany, part of long-term care benefits are indexed to prices in France, which is relevant for budgetary surveillance purposes.

State and the costs of long term care are either recovered by private insurance or are paid by the beneficiaries themselves. To account for this legislation, an alternative projection has been run where unit costs of long-term care benefits remain constant in real terms. This would mean that the amounts financed by the State are adjusted in line with prices. The same partly holds true for France, where one part of the long-term care benefits is also indexed to prices. For people over 60 years old, the benefits are calculated according to the needs up to a ceiling which is indexed to prices; while for people under 60, the indexation is decided each year by the ministry in charge of the disability matters.

Assuming constant unit costs in real terms, the long-term care public expenditure in Germany is projected to increase not by more than 0.1 pp. of GDP, with a spending level of around 1.5% of GDP at the end of the projection period, as compared to a spending level of 3.0% % of GDP when assuming unit costs evolve in line with GDP per hours worked ("base case scenario") (Table II.3.2). For France also, taking into account price indexation would lead to a smaller increase of the LTC expenditure up to 2060. For budgetary surveillance purposes, the evolution of LTC expenditure reflecting current legislation in both countries is relevant. The German government is required by law to check every three years the need and extent of adjusting LTC benefits according to inflation.

ageing, health status and the labour intensity of LTC on expenditure.

The "demographic scenario" aims to isolate the size effect of an ageing population on public expenditure on LTC; for all types of LTC services, expenditure per user grows in line with GDP per capita.

Graph II.3.9 shows the projected increase in public expenditure in this scenario from 2013 to 2060, while Table II.3.3 shows projected expenditure levels. For the EU, public expenditure on LTC is projected to increase by 1.2 pp. of GDP i.e. from 1.6% in 2013 to 2.8 % of GDP in 2060. This is equivalent to an increase of expenditure by 71%. The projected increase ranges from 0.1 pp. of GDP in Croatia to 3.3 pp. in the Netherlands, and 3.5 pp. in Norway.

Table II.3.2:   **Indexation of LTC spending to prices in Germany**

	2013	2060	Change 2013-2060	
			pp.	In %
Base case scenario - Unit costs evolve in line with GDP per hours worked	1.4	3.0	1.6	117%
Unit costs constant in real terms	1.4	1.5	0.1	7%

Source: European Commission.

3.4.1. Changes in demography and health status

Results of four no policy change scenarios are presented and discussed here. These basically capture varying assumptions the isolated effects of

Table II.3.3: **Demographic scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	3.6	1.5	71%
BG	0.4	0.6	0.2	48%
CZ	0.7	1.5	0.7	94%
DK	2.4	4.7	2.2	90%
DE	1.4	2.8	1.4	103%
EE	0.6	1.3	0.7	122%
IE	0.7	1.5	0.9	129%
EL	0.5	1.0	0.5	100%
ES	1.0	2.6	1.6	166%
FR	2.0	2.9	0.9	46%
HR	0.4	0.5	0.1	26%
IT	1.8	2.8	1.0	56%
CY	0.3	0.5	0.3	110%
LV	0.6	0.8	0.2	30%
LT	1.4	2.3	1.0	70%
LU	1.5	3.0	1.5	103%
HU	0.8	1.2	0.4	57%
MT	1.1	2.4	1.3	113%
NL	4.1	7.5	3.3	82%
AT	1.4	2.7	1.3	94%
PL	0.8	1.7	0.9	107%
PT	0.5	0.9	0.4	88%
RO	0.7	1.4	0.7	103%
SI	1.4	2.8	1.4	96%
SK	0.2	0.6	0.4	171%
FI	2.4	4.4	1.9	79%
SE	3.6	5.2	1.6	44%
UK	1.2	1.6	0.4	34%
NO	5.8	9.3	3.5	60%
EA	1.7	3.0	1.3	78%
EU	1.6	2.8	1.2	71%
EU15	1.7	2.9	1.2	71%
NMS	0.7	1.4	0.7	94%

(1) Projections are on based expenditure for medical and social long-term care services, as approximated through the data sources described in Annex 4. Due to agreements taken with the Member States delegates in the AWG-EPC, definition of LTC expenditure may deviate from expenditure levels as reported in other publications. Specifically, cash benefits include period economic integration of handicapped from ESSPROS disability function, and are projected with age specific probability. Expenditure on this item amounts to 0.2% of GDP for France, 0.4% of GDP for Germany, Greece and Slovenia and 1.6% of GDP for Norway. The level of expenditures in 2013 is the first year of projected expenditure based on latest available data. The number of disabled persons in Germany is increasing and will continue for about the next ten years. In this projection the number of disabled persons is assumed to increase with the age specific LTC need probabilities, which is not relevant for this group, since (older) disabled persons are covered by the LTC system and not by the integration of handicapped anymore.
Source: Commission services, EPC.

The "base case scenario" focuses in addition on the highly labour-intensive characteristic of the long-term care services by letting in-kind LTC benefits profile grow in line with GDP per hours worked.

This is the common assumption to all scenarios – except in the "demographic" scenario.

Table II.3.4: **Base case scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	3.9	1.8	83%
BG	0.4	0.6	0.2	58%
CZ	0.7	1.5	0.8	101%
DK	2.4	4.7	2.2	92%
DE	1.4	3.0	1.6	117%
EE	0.6	1.3	0.7	130%
IE	0.7	1.5	0.8	124%
EL	0.5	1.0	0.5	98%
ES	1.0	2.6	1.6	159%
FR	2.0	2.9	0.9	47%
HR	0.4	0.5	0.1	28%
IT	1.8	2.8	1.0	58%
CY	0.3	0.5	0.3	109%
LV	0.6	0.8	0.2	34%
LT	1.4	2.4	1.0	75%
LU	1.5	3.3	1.9	128%
HU	0.8	1.3	0.5	70%
MT	1.1	2.4	1.3	116%
NL	4.1	7.7	3.5	86%
AT	1.4	2.8	1.4	101%
PL	0.8	1.8	1.0	127%
PT	0.5	0.9	0.4	98%
RO	0.7	1.7	1.0	143%
SI	1.4	3.0	1.6	112%
SK	0.2	0.7	0.5	205%
FI	2.4	4.8	2.3	96%
SE	3.6	5.5	1.8	51%
UK	1.2	1.6	0.4	37%
NO	5.8	10.0	4.2	72%
EA	1.7	3.1	1.4	84%
EU	1.6	2.9	1.3	76%
EU15	1.7	3.0	1.3	75%
NMS	0.7	1.5	0.8	111%

Source: Commission services, EPC.

Table II.3.4 presents the projected expenditure for the base case scenario. When LTC in-kind costs evolve in line with labour productivity, public expenditure is projected to increase on average by 1.3 pp. of GDP. This is a bit higher than in the demographic scenario.

Table II.3.5: **High life expectancy scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	4.1	2.0	94%
BG	0.4	0.6	0.2	54%
CZ	0.7	1.6	0.8	113%
DK	2.4	5.2	2.8	114%
DE	1.4	3.2	1.8	127%
EE	0.6	1.4	0.8	150%
IE	0.7	1.7	1.0	153%
EL	0.5	1.0	0.5	106%
ES	1.1	3.3	2.2	209%
FR	2.0	3.1	1.1	57%
HR	0.4	0.6	0.1	29%
IT	1.8	3.0	1.2	69%
CY	0.3	0.6	0.3	129%
LV	0.6	0.9	0.2	37%
LT	1.4	2.6	1.2	87%
LU	1.5	3.4	1.9	130%
HU	0.8	1.3	0.5	70%
MT	1.1	2.6	1.5	135%
NL	4.1	8.5	4.4	107%
AT	1.4	3.1	1.7	118%
PL	0.8	1.8	1.0	123%
PT	0.5	0.9	0.4	97%
RO	0.7	1.5	0.8	119%
SI	1.4	3.1	1.7	117%
SK	0.2	0.7	0.4	190%
FI	2.4	4.9	2.5	102%
SE	3.6	5.7	2.1	57%
UK	1.2	1.6	0.5	40%
NO	5.8	10.1	4.3	74%
EA	1.7	3.4	1.7	99%
EU	1.6	3.1	1.5	89%
EU15	1.7	3.3	1.5	89%
NMS	0.7	1.5	0.8	109%

Source: Commission services, EPC.

Table II.3.6: **Constant disability scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	3.5	1.4	66%
BG	0.4	0.5	0.1	28%
CZ	0.7	1.3	0.6	76%
DK	2.4	4.3	1.9	77%
DE	1.4	2.7	1.3	96%
EE	0.6	1.2	0.6	103%
IE	0.7	1.3	0.7	101%
EL	0.5	0.9	0.4	80%
ES	1.0	2.3	1.3	135%
FR	2.0	2.7	0.7	36%
HR	0.4	0.4	0.0	4%
IT	1.8	2.5	0.8	42%
CY	0.3	0.5	0.2	86%
LV	0.6	0.7	0.1	12%
LT	1.4	2.1	0.8	55%
LU	1.5	3.0	1.5	106%
HU	0.8	1.0	0.3	39%
MT	1.1	2.2	1.0	93%
NL	4.1	6.7	2.5	62%
AT	1.4	2.6	1.2	82%
PL	0.8	1.6	0.8	96%
PT	0.5	0.8	0.3	76%
RO	0.7	1.4	0.7	107%
SI	1.4	2.8	1.4	94%
SK	0.2	0.6	0.4	158%
FI	2.4	4.4	1.9	78%
SE	3.6	4.9	1.3	36%
UK	1.2	1.4	0.3	24%
NO	5.8	9.0	3.2	55%
EA	1.7	2.8	1.1	66%
EU	1.6	2.6	1.0	59%
EU15	1.7	2.7	1.0	59%
NMS	0.7	1.3	0.6	82%

Source: Commission services, EPC.

This is due to the fact that for most countries the growth in GDP per hours worked is higher than the growth in GDP per capita for most or all of the projection period. The smallest expenditure increases are observed for Bulgaria and Latvia (+0.2 pp.) and the largest projected increases are observed for the Netherlands (+3.5 pp.) and Norway (+4.2 pp.).

The "high life expectancy scenario" assumes that life expectancy in 2060 is higher by two years than in the "demographic scenario".

Table II.3.5 presents the projected expenditure for this scenario. As the assumed two extra years of increase in life expectancy (at birth) would imply an increased period of time within which care needs to be provided, public expenditure would increase by 0.2 p.p. above the "base case scenario". As expected, countries with a rather high coverage display the largest increases, such as Denmark and Spain.

The "constant disability scenario" aims to capture the potential impact of assumed improvements in the health (or non-disability) status of the population.

The results presented in Table II.3.6 shows that an improved disability status would lead to a considerably lower expenditure in future. Public expenditure would increase by 1.0 pp. for the EU or 0.3 pp. below the base case scenario. This lower increase is due to the fact that lower dependency rates translate in lower demand for LTC services.

Compared to the assumption of no change in health status in the high life expectancy scenario, the countries that see the highest decrease in this scenario (in pp. of GDP) are Denmark, the Netherlands and Norway. This may be expected as these are the countries with some of the highest spending levels on LTC and where a decrease in dependency may therefore make a more visible difference.

3.4.2. Changes in cost and coverage

Results of four policy-change scenarios are presented and discussed here. These capture basically varying assumptions of changing costs and coverage of LTC.

The "shift to formal care scenario" illustrates the impact of a 10-year progressive shift into the formal service sector of 1% per year of dependent population who have so far received only cash benefits or informal care. LTC is projected to increase by 1.9 pp. of GDP from 2013 up until 2060 (Table II.3.7), compared to the 1.3 pp. of GDP under the "base case" scenario.

Interestingly, even countries where expenditure level and coverage rate are already relatively high (such as Denmark or Finland) show a projected increase that is much higher than in the "base case" scenario. This is because as long as coverage of the dependent population is less than 100% in any age-group, the scenario assumes an additional increase in coverage of the dependent population in the respective age groups.

Table II.3.7: **Shift from informal to formal care scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	4.1	2.0	95%
BG	0.4	0.8	0.4	94%
CZ	0.7	1.6	0.8	112%
DK	2.4	5.5	3.0	124%
DE	1.4	4.1	2.7	190%
EE	0.6	1.5	0.9	165%
IE	0.7	1.7	1.1	159%
EL	0.5	1.3	0.8	168%
ES	1.0	2.8	1.8	186%
FR	2.0	3.6	1.6	80%
HR	0.4	1.0	0.5	125%
IT	1.8	3.4	1.6	90%
CY	0.3	0.7	0.4	172%
LV	0.6	1.4	0.8	122%
LT	1.4	2.6	1.3	92%
LU	1.5	3.8	2.3	158%
HU	0.8	1.9	1.2	153%
MT	1.1	2.7	1.6	142%
NL	4.1	8.4	4.3	104%
AT	1.4	3.1	1.7	119%
PL	0.8	2.9	2.1	264%
PT	0.5	3.0	2.5	545%
RO	0.7	2.2	1.5	219%
SI	1.4	3.6	2.1	149%
SK	0.2	0.9	0.7	306%
FI	2.4	5.3	2.9	118%
SE	3.6	6.6	3.0	82%
UK	1.2	2.2	1.0	87%
NO	5.8	10.6	4.9	84%
EA	1.7	3.8	2.1	122%
EU	1.6	3.6	1.9	117%
EU15	1.7	3.7	2.0	114%
NMS	0.7	2.2	1.4	197%

Source: Commission services, EPC.

The "coverage convergence scenario" assumes an extension of the formal/public coverage in any form (institutional, home care or cash benefits) towards the average EU rate.

| Table II.3.8: | Coverage convergence scenario, projected public expenditure on long-term care as % of GDP |

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	3.9	1.8	84%
BG	0.4	1.9	1.5	367%
CZ	0.7	1.5	0.8	101%
DK	2.4	4.7	2.3	92%
DE	1.4	4.0	2.6	186%
EE	0.6	1.5	0.9	163%
IE	0.7	2.4	1.7	258%
EL	0.5	1.0	0.5	112%
ES	1.0	3.1	2.1	218%
FR	2.0	4.8	2.9	146%
HR	0.4	0.8	0.4	92%
IT	1.8	3.1	1.3	72%
CY	0.3	0.8	0.5	213%
LV	0.6	3.1	2.4	391%
LT	1.4	2.4	1.0	75%
LU	1.5	5.0	3.6	243%
HU	0.8	3.5	2.7	358%
MT	1.1	3.2	2.0	183%
NL	4.1	7.8	3.6	89%
AT	1.4	2.8	1.4	101%
PL	0.8	1.8	1.0	128%
PT	0.5	1.5	1.1	232%
RO	0.7	1.7	1.0	148%
SI	1.4	3.4	1.9	135%
SK	0.2	0.7	0.5	208%
FI	2.4	4.8	2.3	96%
SE	3.6	7.4	3.8	105%
UK	1.2	1.8	0.6	53%
NO	5.8	10.0	4.2	72%
EA	1.7	4.0	2.3	134%
EU	1.6	3.6	2.0	121%
EU15	1.7	3.8	2.1	120%
NMS	0.7	1.9	1.1	157%

Source: Commission services, EPC.

| Table II.3.9: | Cost convergence scenario, projected public expenditure on long-term care as % of GDP |

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	4.9	2.8	131%
BG	0.4	0.9	0.5	128%
CZ	0.7	6.4	5.7	758%
DK	2.4	5.3	2.8	116%
DE	1.4	3.6	2.2	154%
EE	0.6	3.3	2.7	475%
IE	0.7	2.0	1.3	198%
EL	0.5	1.2	0.8	158%
ES	1.0	3.3	2.3	235%
FR	2.0	2.9	1.0	48%
HR	0.4	1.3	0.9	213%
IT	1.8	2.8	1.1	59%
CY	0.3	1.2	0.9	355%
LV	0.6	1.0	0.4	57%
LT	1.4	5.2	3.8	277%
LU	1.5	3.3	1.9	129%
HU	0.8	2.2	1.4	188%
MT	1.1	2.9	1.8	161%
NL	4.1	8.1	4.0	97%
AT	1.4	4.4	3.0	214%
PL	0.8	2.9	2.1	259%
PT	0.5	2.1	1.6	356%
RO	0.7	4.2	3.5	503%
SI	1.4	3.9	2.5	173%
SK	0.2	5.0	4.7	2051%
FI	2.4	6.1	3.6	149%
SE	3.6	6.0	2.4	66%
UK	1.2	2.2	1.0	90%
NO	5.8	10.2	4.4	76%
EA	1.7	3.6	1.9	111%
EU	1.6	3.5	1.9	113%
EU15	1.7	3.5	1.8	103%
NMS	0.7	3.5	2.8	384%

Source: Commission services, EPC.

Table II.3.8 shows the projection results under the coverage convergence scenario. For the EU, public expenditure on LTC is projected to increase by 2.0 pp. of GDP over the whole projection period, 0.7 pp. of GDP higher than the "base case scenario".

As in the "shift to formal scenario", this higher but expected increase vis-à-vis the "base case" scenario is the result of an increased coverage of dependents individuals, especially in countries where the coverage of the dependent population is low compared to the EU average.

Table II.3.10:   **Cost and coverage convergence scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	4.9	2.8	133%
BG	0.4	3.1	2.7	672%
CZ	0.7	6.4	5.7	758%
DK	2.4	5.3	2.9	117%
DE	1.4	4.8	3.4	241%
EE	0.6	4.0	3.4	603%
IE	0.7	3.2	2.5	376%
EL	0.5	1.3	0.9	179%
ES	1.0	4.1	3.1	316%
FR	2.0	4.9	2.9	149%
HR	0.4	1.7	1.3	302%
IT	1.8	3.1	1.3	73%
CY	0.3	2.1	1.9	740%
LV	0.6	3.6	3.0	479%
LT	1.4	5.2	3.8	277%
LU	1.5	5.1	3.6	245%
HU	0.8	5.5	4.7	626%
MT	1.1	3.9	2.8	248%
NL	4.1	8.2	4.1	99%
AT	1.4	4.5	3.0	214%
PL	0.8	2.9	2.1	260%
PT	0.5	2.7	2.3	493%
RO	0.7	4.3	3.6	512%
SI	1.4	4.3	2.9	202%
SK	0.2	5.0	4.8	2080%
FI	2.4	6.1	3.6	149%
SE	3.6	8.0	4.4	120%
UK	1.2	2.4	1.2	105%
NO	5.8	10.2	4.4	76%
EA	1.7	4.6	2.9	168%
EU	1.6	4.3	2.7	163%
EU15	1.7	4.3	2.6	152%
NMS	0.7	4.1	3.3	455%

Source: Commission services, EPC.

The "cost convergence scenario" is meant to capture the potential impact of a convergence in real living standards on LTC spending. Table II.3.9 shows the results under this scenario.

For the EU, public expenditure on LTC is projected to increase by 1.9 pp. of GDP from 2013 up until 2060, with the impact of an increased cost per user of LTC services, assumed to be the result of economic convergence and higher patient expectations. Note that some outlier results may be partly due to data issues. Indeed, as explained in the annex, non-available or partial data lead to the (full or partial) application of the EU averages for the missing parts – in terms of coverage and related cost profile – adjusted to the national expenditure level.

In general, as can be expected, a country with high coverage and therefore relatively low average costs per beneficiary in the base year 2013 will show a relatively bigger increase in the "cost convergence scenario", while the expenditure increase projected for a country with relatively low coverage, and relatively high starting average cost profile, will be relatively bigger in the "coverage convergence scenario". Table II.3.10 shows the projection results under the "cost and coverage convergence scenario". It assumes a combination of coverage and cost convergence, combining the effects of the previous two scenarios. In the EU, this scenario leads to a projected increase in spending of 2.7 pp. until 2060.

Note that for countries, which have no effect in terms of coverage convergence, such as Belgium, the results are very close to the cost convergence scenario, and vice versa. For countries with low initial levels of coverage and low unit costs per recipient, the convergence process kicks in from both sides.

3.4.3. AWG reference scenario

The "AWG reference scenario" combines the assumptions of the "demographic" and the "constant disability" scenarios. Specifically, it is assumed that half of the projected gains in life expectancy are spent without disability (i.e. demanding care), taking thus an intermediate position between the "demographic" and "constant disability" scenarios assumptions. This scenario is the point of reference for comparisons with the 2012 Ageing report and is used in the multilateral budgetary surveillance at EU level.

In this scenario public long-term expenditure is thus driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a projected increase in spending of about 1.1 pp. of GDP in the EU by 2060 (Table II.3.11).

The Total Factor Productivity (TFP) risk scenario gives the same results as the AWG reference scenario (same results at first decimal point), thus a separate table is not reported, as unit costs in this area is closely linked to labour productivity growth.

Table II.3.11: **AWG reference scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	3.7	1.6	75%
BG	0.4	0.6	0.2	42%
CZ	0.7	1.4	0.7	87%
DK	2.4	4.5	2.0	83%
DE	1.4	2.9	1.5	105%
EE	0.6	1.2	0.7	116%
IE	0.7	1.4	0.7	111%
EL	0.5	0.9	0.4	88%
ES	1.0	2.4	1.4	147%
FR	2.0	2.8	0.8	41%
HR	0.4	0.5	0.1	15%
IT	1.8	2.7	0.9	50%
CY	0.3	0.5	0.2	97%
LV	0.6	0.8	0.1	22%
LT	1.4	2.3	0.9	65%
LU	1.5	3.2	1.7	116%
HU	0.8	1.2	0.4	54%
MT	1.1	2.3	1.2	104%
NL	4.1	7.1	3.0	74%
AT	1.4	2.7	1.3	91%
PL	0.8	1.7	0.9	112%
PT	0.5	0.9	0.4	86%
RO	0.7	1.6	0.9	124%
SI	1.4	2.9	1.5	103%
SK	0.2	0.6	0.4	181%
FI	2.4	4.6	2.1	86%
SE	3.6	5.1	1.5	41%
UK	1.2	1.5	0.4	30%
NO	5.8	9.4	3.6	63%
EA	1.7	3.0	1.3	74%
EU	1.6	2.7	1.1	67%
EU15	1.7	2.9	1.1	66%
NMS	0.7	1.4	0.7	96%

Source: Commission services, EPC.

Table II.3.12: **AWG risk scenario, projected public expenditure on long-term care as % of GDP**

	2013	2060	Change 2013-2060	
			pp.	In %
BE	2.1	4.7	2.6	121%
BG	0.4	2.9	2.5	620%
CZ	0.7	6.0	5.2	695%
DK	2.4	5.1	2.6	107%
DE	1.4	4.5	3.1	222%
EE	0.6	3.7	3.2	556%
IE	0.7	3.0	2.3	349%
EL	0.5	1.3	0.8	166%
ES	1.0	3.9	2.9	294%
FR	2.0	4.7	2.7	139%
HR	0.4	1.6	1.1	268%
IT	1.8	2.9	1.1	64%
CY	0.3	2.0	1.8	695%
LV	0.6	3.4	2.7	440%
LT	1.4	4.9	3.5	253%
LU	1.5	4.8	3.3	226%
HU	0.8	5.0	4.2	562%
MT	1.1	3.7	2.6	229%
NL	4.1	7.6	3.5	86%
AT	1.4	4.2	2.8	198%
PL	0.8	2.7	1.9	235%
PT	0.5	2.6	2.1	461%
RO	0.7	3.9	3.2	464%
SI	1.4	4.2	2.7	189%
SK	0.2	4.6	4.4	1909%
FI	2.4	5.8	3.3	136%
SE	3.6	7.5	3.8	106%
UK	1.2	2.3	1.1	97%
NO	5.8	9.6	3.8	66%
EA	1.7	4.4	2.7	154%
EU	1.6	4.1	2.5	149%
EU15	1.7	4.1	2.4	139%
NMS	0.7	3.8	3.0	414%

Source: Commission services, EPC.

3.4.4. AWG risk scenario

The "AWG risk scenario" keeps the assumption that half of the future gains in life expectancy are spent with no care-demanding disability, as in the "AWG reference scenario".

In addition, it combines it with the "cost and coverage convergence scenario" by assuming convergence of both total average cost and coverage to the EU average for those below it.

In comparison to the "AWG reference scenario", this scenario thus captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence.

The joint impact of the drivers in this scenario is a projected increase in spending of 2.5 pp. of GDP in the EU by 2060 (Table II.3.12).

3.5. COMPARISON WITH THE 2012 AGEING REPORT

As in the case of health care projections, the differences observed between the 2012 Ageing Report and the current projections result from a set of factors: i) a different initial spending level; ii) a different base-year for starting the projections; iii) updated macroeconomic assumptions resulting in different GDP per capita growth rates and GDP levels for the period under analysis; iv) updated population projections; v) updated age-gender

expenditure profiles; vi) changes in scenario assumptions; and quantified policy reforms. As shown in Graph II.3.11, results are pronounced for a number of countries and are related to different reasons.

Firstly, the age-cost profiles have been updated, leading to different dynamics of ageing costs for many countries. For some countries, country-specific profiles have now replaced imputed profiles used in the previous Ageing Report. Also, due to better data availability, it was possible to project expenditure by using country specific age-cost profiles related to the type of care, i.e. institutional care, home care or cash benefits. In the previous Ageing Report, age-cost profiles were not distinguished to this degree. This implies different dynamics of projected spending changes according to the types of care (and the associated costs), which do impact the projection results.

Secondly, the 2013 level of public expenditure on long-term care in the EU is 0.2 pp. of GDP lower in the current exercise than in the 2012 projections (Table II.3.13). Most countries now start from a lower level of spending. The main reason for a lower starting level of spending is that the observed public expenditure on long-term care has been lower for many countries than that projected in the 2012 Ageing Report. This may be explainable by policy reforms which have consolidated health care budgets in recent years in most EU countries. In other cases, data availability has improved, allowing to get rid of double counting of expenditure due to usage of different data sources (e.g. AT, BE and DK). In NO, spending levels have increased considerably contrary to the general trend in the EU in the past few years.

Thirdly, the new ESA 2010 accounting has implied an upward revision of GDP levels in the base year. For the EU, the GDP level has increased by about 3.5% in 2013.

A fourth point relates to updated population projections which contribute to a less marked ageing problem of the population than in the previous report, resulting in lower expenditure projections.

A fifth effect is related to changes in LTC spending triggered by legislated policy reforms as discussed in previous sections.

A quantitative decomposition of drivers is proposed in Table II.3.14. The decomposition aims at quantifying which factors are driving the differences in projected spending between the 2012 and the 2015 projection exercises in the base case scenario. The considered drivers are the age-cost profiles, the coverage of beneficiaries by formal care service, the disability rates, GDP per hours worked, the population projections, an interaction and a base-year effect. Basically, departing from the level of expenditure in 2013 each driver's impact is estimated by replacing ceteris paribus its current value with the 2012 Ageing Report data.

Overall, changes in projected expenditure levels were driven to a higher degree by revised GDP growth rates and coverage rates of beneficiaries, and to a lower degree by changes in age-cost profiles, disability rates and demographic projections. Lower GDP growth rates per capita in the current relative to the last Ageing Report and changes in age-specific coverage rates impact favourably on lower LTC expenditure growth.

Changes in disability rates are a minor driver of changes in projected expenditure, reflecting the relative stability of disability rates between the reports. Changes in demographic projections are not that important as compared to health care, as only a part of the population is in need of LTC services. For some countries, some drivers clearly stand out in their relative impact on the change of results between the two Ageing Reports. As such Finland has a steeper age cost profile at higher ages and Spain has considerably higher coverage of LTC recipients, driving expenditure projections upwards relative to the 2012 Ageing Report. Luxembourg has significantly lower GDP growth rates reducing projected expenditure growth.

Graph II.3.11: **AWG reference scenario: Differences in the projected increase in public expenditure on long-term care over 2013-2060 between the 2015 and 2012 Ageing Report, as pp. of GDP**
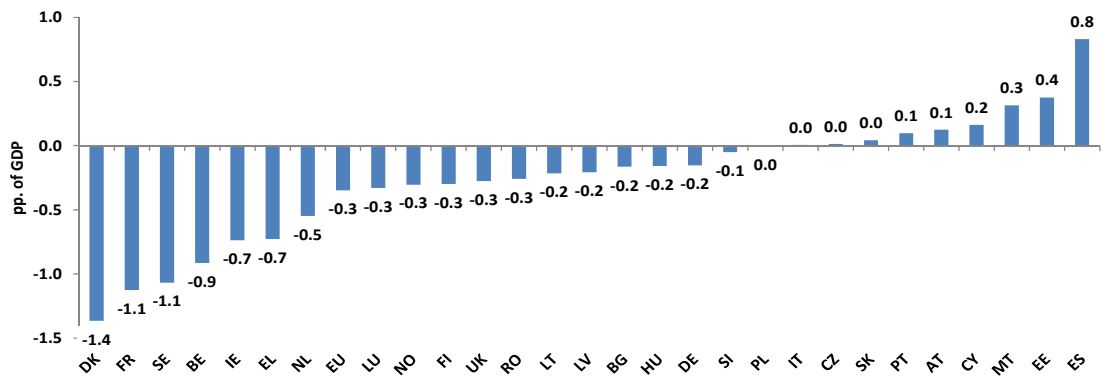
Source: European Commission, EPC.

3.6. CONCLUSIONS

The increasing need for the availability of and access to formal long-term care services implies increased financing needs. As LTC services are to a high degree financed by public payers, public expenditures on LTC are on the rise.

This report presented the expected effects of various demographic and non-demographic drivers on LTC expenditure over a range of plausible scenarios. The range of results is rather wide (Graph II.3.12 and Table II.3.15), and risks vary highly depending on the country and scenario, reflecting the implicit uncertainty surrounding the evolution of key variables in this kind of long-term projections.

In the AWG reference scenario, which assumes that one half of future gains in life-expectancy will be spent in good health and the other half in disability, public LTC expenditure in the EU is projected to increase from 1.6% of GDP to 2.7% of GDP, i.e. an increase of 67% until 2060.

If one assumes in addition, that until 2060 EU countries will have equal coverage rates of LTC dependents and equal costs per dependent, reflecting an underlying convergence process of EU economies, expenditure is expected to increase up to 4.1% of GDP in the EU (Graph II.3.13).

Table II.3.13: **Comparison between public long-term care spending as % of GDP in the 2015 and the 2012 Ageing Reports, in the base year (i.e. 2013) of current projections**

	2015 Ageing Report	2012 Ageing Report	Difference 2015 - 2012	
BE	2.1	2.5	-0.4	BE
BG	0.4	0.5	-0.1	BG
CZ	0.7	0.8	-0.1	CZ
DK	2.4	4.5	-2.1	DK
DE	1.4	1.5	-0.1	DE
EE	0.6	0.5	0.0	EE
IE	0.7	1.1	-0.5	IE
EL	0.5	1.4	-1.0	EL
ES	1.1	0.8	0.2	ES
FR	2.0	2.3	-0.3	FR
HR	0.4	:	:	HR
IT	1.8	1.9	-0.2	IT
CY	0.3	0.2	0.1	CY
LV	0.6	0.7	-0.1	LV
LT	1.4	1.2	0.2	LT
LU	1.5	1.1	0.4	LU
HU	0.8	0.9	-0.1	HU
MT	1.1	0.7	0.4	MT
NL	4.1	4.0	0.1	NL
AT	1.9	1.7	0.2	AT
PL	0.8	0.8	0.1	PL
PT	0.5	0.3	0.2	PT
RO	0.7	0.6	0.1	RO
SI	1.4	1.5	-0.1	SI
SK	0.2	0.3	0.0	SK
FI	2.5	2.7	-0.1	FI
SE	3.6	3.9	-0.2	SE
UK	1.2	2.1	-0.9	UK
NO	5.8	3.8	2.0	NO
EA	1.8	1.9	0.0	EA
EU	1.7	1.9	-0.2	EU
EU15	1.8	2.0	-0.2	EU15
NMS	0.7	0.7	0.0	NMS

(1) The 2015(2012) AR column values refers to the 2013 (projected) long-term care spending to GDP ratio in the current (previous) projection exercise.
Source: European Commission, EPC

Table II.3.14:   **Decomposing the impact of drivers on differences in spending growth between the 2015 and the 2012 Ageing Reports- based on the base case scenario, in pp. of GDP.**

|	Difference in spending growth between the 2015 and 2012 Ageing Reports	Due to:								
		Change in age-cost profiles	Change in coverage	Change in disability rate	Change related to GDP growth	Change in demographic projections	Interaction effect*	Change in all drivers**	Base-year effect***	
BE	-1.1	0.0	-0.4	0.0	-0.8	0.1	-0.1	-1.2	0.1	BE
BG	-0.2	0.0	-0.2	0.0	-0.1	0.0	-0.1	-0.4	0.3	BG
CZ	0.0	0.0	0.2	0.0	-0.1	0.0	0.0	0.1	-0.1	CZ
DK	-1.7	0.4	0.2	-0.3	-0.7	0.1	-0.1	-0.4	-1.3	DK
DE	-0.2	-0.1	0.3	0.0	-0.3	0.1	-0.1	-0.1	0.0	DE
EE	0.4	0.0	0.4	0.0	0.0	-0.1	0.0	0.3	0.1	EE
IE	-0.7	0.0	-0.1	-0.1	0.2	-0.3	0.1	-0.1	-0.6	IE
EL	-0.9	0.0	0.2	0.0	0.2	-0.2	0.0	0.3	-1.1	EL
ES	0.8	0.1	0.7	0.0	0.4	-0.3	-0.1	0.9	0.0	ES
FR	-1.2	-0.1	-0.6	0.0	-0.2	0.0	0.0	-0.9	-0.3	FR
HR	:	:	:	:	:	:	:	:	:	HR
IT	0.0	-0.2	0.5	0.0	-0.1	0.0	0.0	0.1	-0.1	IT
CY	0.2	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.1	CY
LV	-0.3	0.0	-0.1	0.0	0.0	-0.2	-0.1	-0.3	0.1	LV
LT	-0.2	-0.1	0.3	0.0	0.4	-1.3	0.1	-0.5	0.3	LT
LU	-0.3	0.1	0.1	-0.1	-1.9	0.6	0.4	-0.8	0.5	LU
HU	-0.2	-0.2	-0.1	0.0	-0.1	-0.1	0.0	-0.4	0.3	HU
MT	0.2	0.0	0.0	0.0	-1.0	0.3	0.2	-0.6	0.9	MT
NL	-0.9	-0.1	0.2	-0.1	-0.4	0.0	-0.1	-0.4	-0.5	NL
AT	0.1	0.1	0.5	0.0	-0.4	0.1	0.0	0.3	-0.3	AT
PL	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	PL
PT	0.1	0.1	-0.2	0.0	0.2	-0.3	0.2	-0.1	0.2	PT
RO	-0.3	0.0	-0.1	0.0	-0.5	-0.2	-0.4	-1.2	0.9	RO
SI	-0.1	-0.2	0.5	0.0	0.1	-0.1	-0.2	0.1	-0.2	SI
SK	0.0	0.0	-0.1	0.0	0.1	-0.1	0.0	-0.1	0.1	SK
FI	-0.4	0.4	0.1	-0.1	-0.6	0.0	-0.1	-0.1	-0.2	FI
SE	-0.9	-0.1	0.1	-0.2	-1.5	0.3	-0.1	-1.5	0.6	SE
UK	-0.4	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	-0.2	UK
NO	-0.1	-0.8	0.1	-0.6	-3.3	1.1	0.3	-3.4	3.2	NO
EA	-0.3	-0.1	0.1	0.0	-0.2	0.0	0.0	-0.2	-0.1	EA
EU	-0.4	0.0	0.1	0.0	-0.2	0.0	0.0	-0.3	-0.1	EU
EU15	-0.4	0.0	0.1	0.0	-0.3	0.0	0.0	-0.3	-0.1	EU15
NMS	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.3	0.1	NMS

(1) * The interaction effect is the unexplained difference between the change in all drivers and the sum of the effects of the individual drivers.
** The change in all drivers is estimated by replacing the current data with the 2012 Ageing Report data for all drivers at once.
*** The base-year effect is the difference between column 1 and column 8.
Source: Commission services, EPC.

While reflecting a plausible combination of developments in ageing and health status, the AWG reference scenario may underestimate expenditure, if due to higher life expectancy (High life expectancy scenario) people remain longer in disability and in addition, if the assumed improvements in health status do not materialize (demographic scenario) (Graph II.3.14). Also, supply side bottlenecks may increase fiscal pressure, if labour costs of LTC personnel increase due to insufficient availability of health personnel (Base case scenario).

On the other hand, if health status improvements match fully increases in life expectancy projected expenditure turns out to be less pronounced (Constant disability scenario).

With rising need for formalized LTC solutions, it is plausible to assume that both coverage of dependents and costs of LTC services will change.

Table II.3.15:   **Overview of results across scenarios – Change in spending as % of GDP 2013-2060**

	Demographic scenario	Base case scenario	High life expectancy scenario	Constant disability scenario	Shift to formal care scenario	Coverage convergence scenario	Cost convergence scenario	Cost and coverage convergence scenario	AWG reference scenario	AWG risk scenario	TFP risk scenario	
BE	1.5	1.8	2.0	1.4	2.0	1.8	2.8	2.8	1.6	2.6	1.6	BE
BG	0.2	0.2	0.2	0.1	0.4	1.5	0.5	2.7	0.2	2.5	0.2	BG
CZ	0.7	0.8	0.8	0.6	0.8	0.8	5.7	5.7	0.7	5.2	0.7	CZ
DK	2.2	2.2	2.8	1.9	3.0	2.3	2.8	2.9	2.0	2.6	2.0	DK
DE	1.4	1.6	1.8	1.3	2.7	2.6	2.2	3.4	1.5	3.1	1.5	DE
EE	0.7	0.7	0.8	0.6	0.9	0.9	2.7	3.4	0.7	3.2	0.7	EE
IE	0.9	0.8	1.0	0.7	1.1	1.7	1.3	2.5	0.7	2.3	0.7	IE
EL	0.5	0.5	0.5	0.4	0.8	0.5	0.8	0.9	0.4	0.8	0.4	EL
ES	1.6	1.6	2.2	1.3	1.8	2.1	2.3	3.1	1.4	2.9	1.4	ES
FR	0.9	0.9	1.1	0.7	1.6	2.9	1.0	2.9	0.8	2.7	0.8	FR
HR	0.1	0.1	0.1	0.0	0.5	0.4	0.9	1.3	0.1	1.1	0.1	HR
IT	1.0	1.0	1.2	0.8	1.6	1.3	1.1	1.3	0.9	1.1	0.9	IT
CY	0.3	0.3	0.3	0.2	0.4	0.5	0.9	1.9	0.2	1.8	0.2	CY
LV	0.2	0.2	0.2	0.1	0.8	2.4	0.4	3.0	0.1	2.7	0.1	LV
LT	1.0	1.0	1.2	0.8	1.3	1.0	3.8	3.8	0.9	3.5	0.9	LT
LU	1.5	1.9	1.9	1.5	2.3	3.6	1.9	3.6	1.7	3.3	1.7	LU
HU	0.4	0.5	0.5	0.3	1.2	2.7	1.4	4.7	0.4	4.2	0.4	HU
MT	1.3	1.3	1.5	1.0	1.6	2.0	1.8	2.8	1.2	2.6	1.2	MT
NL	3.3	3.5	4.4	2.5	4.3	3.6	4.0	4.1	3.0	3.5	3.0	NL
AT	1.3	1.4	1.7	1.2	1.7	1.4	3.0	3.0	1.3	2.8	1.3	AT
PL	0.9	1.0	1.0	0.8	2.1	1.0	2.1	2.1	0.9	1.9	0.9	PL
PT	0.4	0.4	0.4	0.3	2.5	1.1	1.6	2.3	0.4	2.1	0.4	PT
RO	0.7	1.0	0.8	0.7	1.5	1.0	3.5	3.6	0.9	3.2	0.9	RO
SI	1.4	1.6	1.7	1.4	2.1	1.9	2.5	2.9	1.5	2.7	1.5	SI
SK	0.4	0.5	0.4	0.4	0.7	0.5	4.7	4.8	0.4	4.4	0.4	SK
FI	1.9	2.3	2.5	1.9	2.9	2.3	3.6	3.6	2.1	3.3	2.1	FI
SE	1.6	1.8	2.1	1.3	3.0	3.8	2.4	4.4	1.5	3.8	1.5	SE
UK	0.4	0.4	0.5	0.3	1.0	0.6	1.0	1.2	0.4	1.1	0.4	UK
NO	3.5	4.2	4.3	3.2	4.9	4.2	4.4	4.4	3.6	3.8	3.6	NO
EA	1.3	1.4	1.7	1.1	2.1	2.3	1.9	2.9	1.3	2.7	1.3	EA
EU	1.2	1.3	1.5	1.0	1.9	2.0	1.9	2.7	1.1	2.5	1.1	EU
EU15	1.2	1.3	1.5	1.0	2.0	2.1	1.8	2.6	1.1	2.4	1.1	EU15
NMS	0.7	0.8	0.8	0.6	1.4	1.1	2.8	3.3	0.7	3.0	0.7	NMS

Source: Commission services, EPC.

Graph II.3.12:   **Projected expenditure in different LTC scenarios, for the EU in % of GDP**
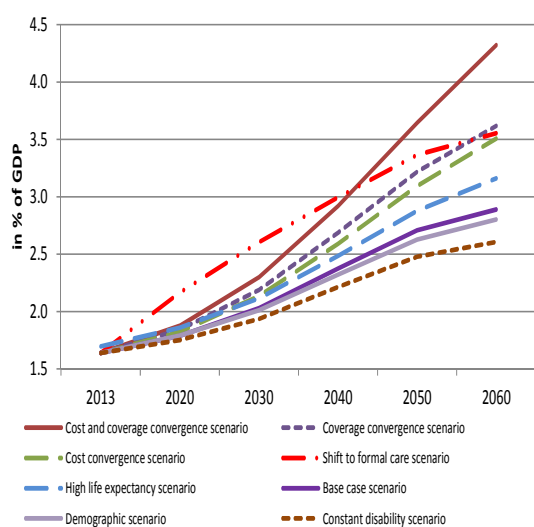
Graph II.3.13:   **Projected expenditure in LTC AWG reference and risk scenarios, for the EU in % of GDP**

Source: Commission services, EPC.
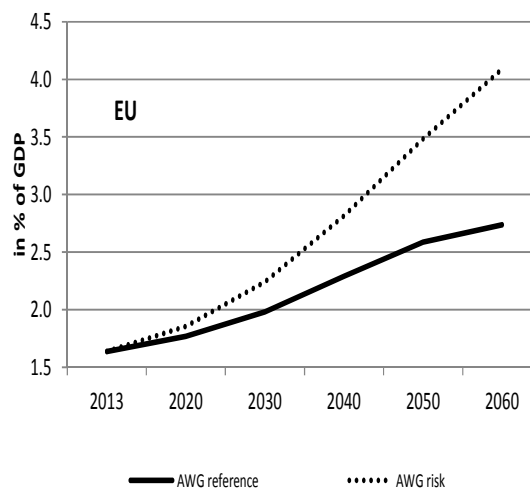
Source: Commission services, EPC.

Graph II.3.14: **Range of results for scenarios with mainly demographic sensitivity analysis (no policy change scenarios), EU in % of GDP**

Source: Commission services, EPC.
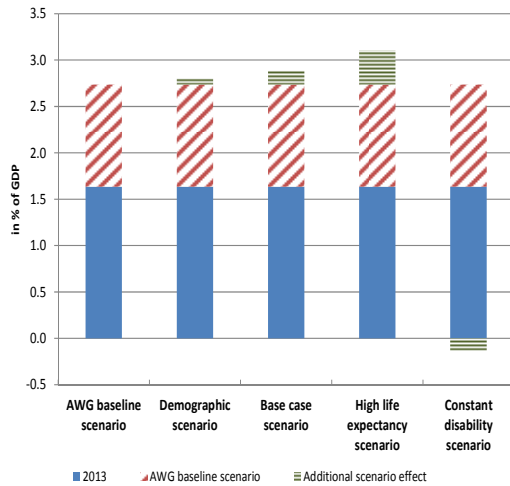
It may be safely concluded that ageing and non-demographic drivers of long-term care expenditure will exert a continuous pressure on public finances. The obvious need for a broadening of formalized coverage of the European population with long-term care services will thus have to be balanced with the need to ensure the sustainable public finances.

Cost implications for the EU may be substantial (Graph II.3.15). The shift of informal to formal care (Shift to formal care scenario) and a convergence process in terms of coverage and costs of LTC for those countries, which are below EU average levels of care in this respect, imply a substantial fiscal risk (cost and convergence related scenarios).

Graph II.3.15: **Range of results for scenarios with mainly cost and coverage sensitivity analysis (policy change scenarios), EU in % of GDP**
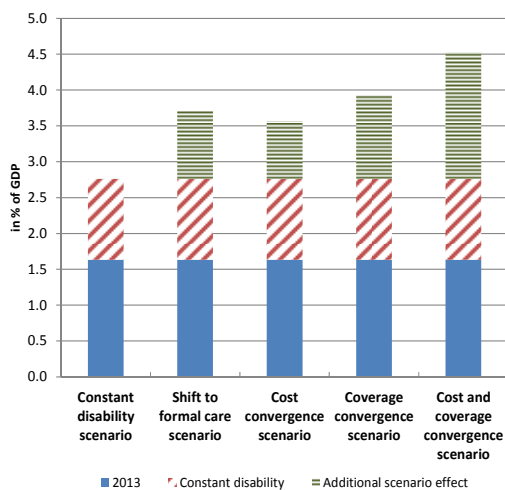
Source: Commission services, EPC.

4. EDUCATION

4.1. INTRODUCTION

Due to the pronounced age profile of enrolment rates, and consequently of expenditure levels, government expenditure on education largely reflects demographic developments. However, many other factors have also an important bearing on government education expenditure, such as the involvement of the general government in the education system, the duration of mandatory education, progress in enrolment rates in upper secondary and tertiary education, relative wages in the education sector, the average size of classes, discretionary saving measures to curb expenditure trends, etc.

The projection exercise aims at assessing the impact of demographic changes (per se) on general government education expenditure. Therefore, projections are carried out under the assumption of "no policy change". The methodology used is highly stylised and does not "capture" the full complexities of Member States' education systems. It has been set out with a view to use harmonised datasets, [120] secure equal treatment across countries, and be consistent with wide labour market developments, particularly on participation rates. [121]

The present exercise considers two scenarios. First and foremost, a baseline scenario that attempts to isolate the impact of demographic factors. The major assumption of the baseline scenario is a constant students-to-teacher ratio, implying an instantaneous adjustment in the number of teaching staff to student levels. One sensitivity scenario is also considered for illustrative purposes, namely a high enrolment rate scenario, which is easily calibrated from the baseline, assuming a linear convergence (to be completed by 2040) of enrolment rates (for Isced levels 3-4 and 5-6) towards the average of the 3 best performers in the EU28 plus Norway, namely Finland, Belgium and Sweden. [122]

4.2. GENERAL CHARACTERISTICS OF NATIONAL EDUCATION SYSTEMS

While the methodology used to project future education expenditure is based on a highly stylised framework that abstracts from country specificities, the methodology considers also major aspects of education systems, such as enrolment rates by age and education level and expenditure categories by education level and type. Detailed breakdowns of education systems (by age and education level) can potentially improve the quality of model calibrations.

4.2.1. Enrolment rates in the EU

The institutional structure of education systems varies considerably across Member States. Although the configuration between compulsory and non-compulsory education is in general similar across countries (mandatory education starting between ages 5 to 7 and ending between ages 13 to 16), education pathways of young people differ across countries. Differences in "statutory" age bands for a person attending a particular level of education are reflected in cross country differences in the distribution of "actual" enrolment ages, raising the issue of cross-country comparability. Country diversity is clearly visible in Table II.A6.1 in the statistical annex for education, which presents average enrolment rates in the period 2010-2011 by country, age and level of education.

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[120] UNESCO-UIS/OECD/EUROSTAT (UOE) data collection on education statistics, LFS data, and macroeconomic variables from "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies", European Economy, No. 8/2014, European Commission.

[121] A substantial part of the work consists in cleaning datasets and imputing missing/incomplete data points. Overall, there are no significant outstanding data availability issues, besides the fact that COFOG data (instead of UOE) has to be used for total expenditure data in Greece. The last year for which UOE education expenditure data for Greece are available is 2005. At the express request of national authorities, base financial data for Italy were updated to 2013 according to COFOG growth rates to take into consideration reform effects, including a wage freeze in the government sector.

Projections are carried out using the programme R.

[122] In the 2012 AR, the EU2020 scenario (equivalent to the high enrolment rate one in the AR 2015) was difficult to calibrate, because it involved reconciling information from different sources (UOE and LFS). The EU2020 scenario included two elements: i) the share of early leavers from education and training should be less than 10%; and ii) the share of 30 to 34 years olds with tertiary or equivalent educational attainment should be at least 40%. In the AR 2015, the high enrolment rate scenario is generated simply by inflating enrolment rates for ISCED levels 3-4 and 5-6 to the three best performers in the EU plus Norway by 2040.

Graph II.4.1:   **Students-to-teacher ratio across ISCED levels (average values 2010-2011)**
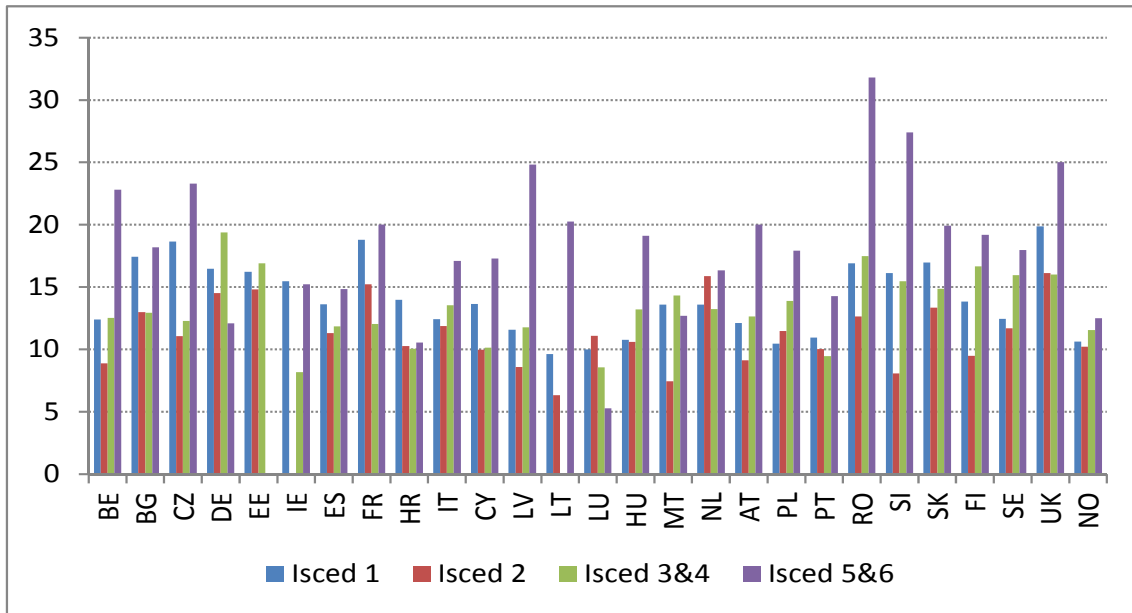
(1) Students over total staff in education by ISCED level (UOE dataset).
Source: Commission services, EPC

4.2.2. Students-to-teacher ratio (average class size)

Average class sizes vary significantly both across countries and level of education, reflecting specific organisational features of education systems.

The size of primary education classes is on average slightly larger than that of secondary education (both lower and upper). In most countries, average class size is largest in tertiary education (see Graph II.4.1), reflecting teaching methods relying more on individual research and library work.

4.2.3. Staff compensation in the education sector

There is considerable variation across Member States in the wages paid in the education sector. Graph II.4.2 plots average data for the period 2010-2011 for the compensation per public employee in the education sector to GDP per worker. (^{123}) Both the wage distribution and the

structure of employment in the education sector (i.e. the relative importance of different professional categories, such as professors, assistants and non-teaching staff) play a role in explaining these differences. As expected, on average wages are highest in the tertiary level of education, reflecting the higher qualifications required of the staff.

adjustments, namely AT, BG, CY, CZ, DE, DK, ES, FI, FR, IE, IT, LT, LV, NL, PL, RO, SI, and SK. For 9 countries there are some minor data missing problems, namely for BE, EE, HR, LU, MT, NO, PT, SE, and the UK. For 2 countries there are significant missing data problems: EL and HU.

The general procedure used to impute missing data is to use the basic expenditure equation for education:

$$A_6 + A_{13} + A_{15} = G_b + P_b$$

For 11 (9+2) countries, missing data were interpolated, breaking down total expenditure (i.e. expenditure categories $G_b + P_b$, representing public and private, respectively) into personnel compensation (A_6), other current expenditure (A_{13}), and capital expenditure (A_{15}), using the average distribution in the above listed 18 "non-problematic" countries.

Furthermore, given the latest available year for total expenditure (i.e. $G_b + P_b$) for Greece was 2005, COFOG data was used instead.

(^{123}) 2011 is the latest year for which UNESCO-UIS/OECD/EUROSTAT (UOE) education statistics are available. As a rule, the AWG decided to use the average for the years 2010 and 2011 as the base period for education projections. As regards financial data, this general rule could be applied to 18 countries without any

Graph II.4.2: **Average compensation per member of staff as ratio of GDP per worker (average values of 2010-2011)**
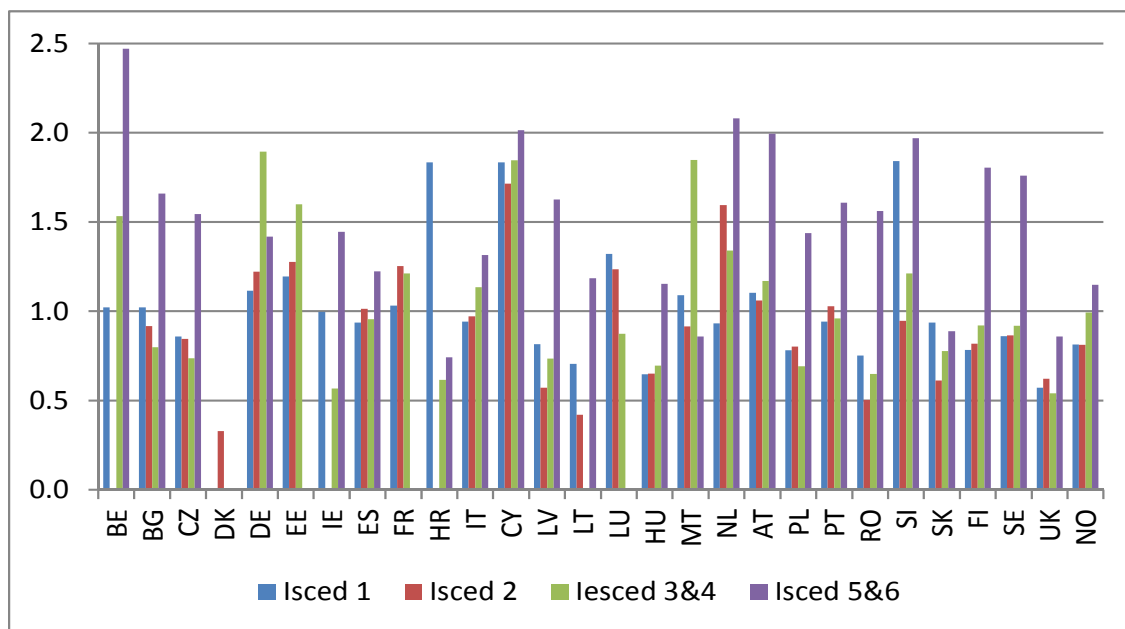
(1) Compensation per public employee in the education sector to GDP per worker by ISCED level (UOE dataset). A few observations appearing to be outliers are not reported.
Source: Commission services, EPC

Graph II.4.3 presents average total public expenditure in education in the period 2010-2011 in the four levels of education. Total public expenditure ranges from 2.7% of GDP (Romania) to 7.2% (Denmark) (for more details see Tables 2 and 3 in the statistical annex for education).

Graph II.4.3: **Structure of public expenditure on education as % of GDP (average values of 2010-2011)**
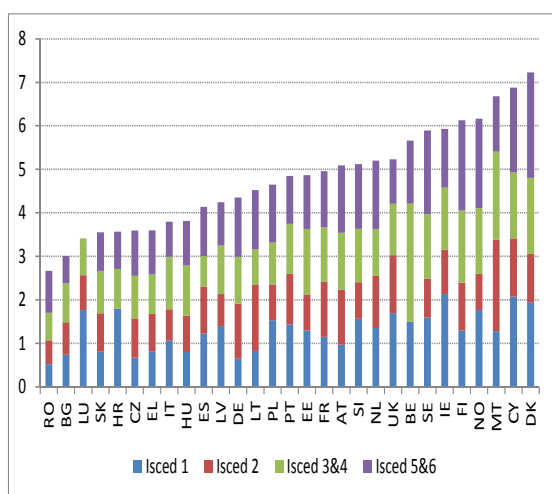
Source: Commission services, EPC

4.3. METHODOLOGY AND RESULTS

4.3.1. Projection results for the baseline scenario

A simple simulation model is used to project expenditure on education. ([124])

Assuming "unchanged policy" in the provision of education, the baseline scenario attempts to illustrate the pure impact of demographic changes on government education expenditure for the 29 countries considered in the projections. The baseline scenario assumes a fixed students to teaching staff ratio. To what extent the latter is compatible with an assumption of "unchanged policy" merits some reflexion. In fact, assuming that staff levels in the education sector adjust instantaneously to student levels might prove unrealistic, besides actually demanding discretionary action to change staff levels. Instead, it might be preferable to assume some lag or inertia in the adjustment. Conversely, any mechanism chosen to adjust staff to the number of students would essentially be arbitrary. For the

([124]) For details see the statistical annex on education.

latter reason, the AWG decided not to implement an adjustment scenario with teaching staff adjusting with a lag to the number of students. ([125])

Tables II.4.1 and II.A6.4 show the variation in the projections of education expenditure for the baseline scenario between 2013 (start year of the projections) and 2060 (end year of the projections).

In the baseline scenario, government expenditure is expected to nearly stabilise at 4.6% and 4.4% of GDP in 2060, respectively, in the EU and euro area. Government expenditure on education increases in 15 countries and falls in 14 countries. However, the impact varies across individual countries ranging from a decline of 1.2 pp of GDP in Cyprus to an increase of 0.9 pp in Lithuania.

Graph II.4.4 shows the projected changes in expenditure to GDP ratios between 2013 and 2060 by country and ISCED level in the baseline scenario.

Table II.4.1: **Results of the baseline (public expenditure on education as percentage of GDP; ESA2010 for GDP ([1]))**

	Level		Change 2060-2013
	2013	2060	
BE	5.8	6.1	0.3
BG	3.0	3.4	0.4
CZ	3.4	4.1	0.7
DK	7.6	6.8	-0.7
DE	4.1	4.4	0.3
EE	4.4	5.1	0.8
IE	6.0	5.9	0.0
EL	4.1	3.0	-1.1
ES	4.6	3.7	-0.8
FR	5.0	4.8	-0.2
HR	3.7	3.4	-0.4
IT	3.7	3.5	-0.2
CY	7.3	6.1	-1.2
LV	3.8	4.5	0.8
LT	3.9	4.8	0.9
LU	3.3	3.5	0.2
HU	3.6	3.4	-0.2
MT	5.9	6.0	0.1
NL	5.2	4.7	-0.5
AT	4.9	4.9	0.0
PL	4.4	4.3	-0.1
PT	5.2	4.2	-1.0
RO	2.6	3.0	0.4
SI	5.3	6.1	0.8
SK	3.4	2.9	-0.4
FI	6.1	6.4	0.3
SE	5.7	5.9	0.2
UK	5.1	5.2	0.0
NO	6.0	5.9	-0.1
EA19	4.5	4.4	-0.1
EU28	4.7	4.6	0.0

(1) Except Norway (ESA1995)
Source: Commission services, EPC

([125]) In the 2012 AR, this type of scenario was called the "inertia scenario", and assumed that adjustments in the number of teaching staff lagged by five years variations in the number of students.

Table II.4.2:   **Breakdown in the total variation between 2013 and 2060 (ESA2010 for GDP([1])) - baseline scenario -**

	Expenditure to GDP ratio		Change 2060-2013 in %	Students effect	Employment effect	Discrepancy
	2013	2060	(3)=(2)-(1)	Indexes % change * Exp ratio in 2013		
	(1)	(2)	(3)=(4)-(5)+(6)	(4)	(5)	(6)=(3)-(4)+(5)
BE	5.8	6.1	0.28	2.17	1.80	-0.09
BG	3.0	3.4	0.39	-0.71	-0.98	0.13
CZ	3.4	4.1	0.71	0.51	-0.17	0.03
DK	7.6	6.8	-0.71	0.53	1.37	0.13
DE	4.1	4.4	0.28	-0.74	-0.96	0.06
EE	4.4	5.1	0.75	-0.70	-1.24	0.21
IE	6.0	5.9	-0.02	0.64	0.66	0.00
EL	4.1	3.0	-1.12	-1.19	-0.10	-0.03
ES	4.6	3.7	-0.82	-0.21	0.75	0.13
FR	5.0	4.8	-0.21	0.41	0.65	0.03
HR	3.7	3.4	-0.37	-0.79	-0.47	-0.05
IT	3.7	3.5	-0.18	0.29	0.41	-0.05
CY	7.3	6.1	-1.24	1.02	2.71	0.46
LV	3.8	4.5	0.80	-0.86	-1.37	0.29
LT	3.9	4.8	0.88	-1.28	-1.76	0.40
LU	3.3	3.5	0.16	3.40	3.09	-0.15
HU	3.6	3.4	-0.23	-0.54	-0.33	-0.02
MT	5.9	6.0	0.09	0.52	0.43	-0.01
NL	5.2	4.7	-0.52	-0.56	-0.04	0.00
AT	4.9	4.9	0.03	0.22	0.19	0.00
PL	4.4	4.3	-0.14	-1.20	-1.09	-0.04
PT	5.2	4.2	-0.96	-1.89	-1.15	-0.21
RO	2.6	3.0	0.41	-0.47	-0.76	0.12
SI	5.3	6.1	0.79	0.23	-0.49	0.07
SK	3.4	2.9	-0.43	-1.20	-0.88	-0.11
FI	6.1	6.4	0.25	0.67	0.40	-0.02
SE	5.7	5.9	0.22	2.01	1.73	-0.07
UK	5.1	5.2	0.04	1.11	1.05	-0.01
NO	6.0	5.9	-0.09	2.76	2.90	0.05

(1) Except Norway (ESA1995)
Source: Source: Commission services, EPC

Graph II.4.4:   **Changes in government expenditure by ISCED level between 2013 and 2060; ESA2010 for GDP([1]) - baseline scenario -**
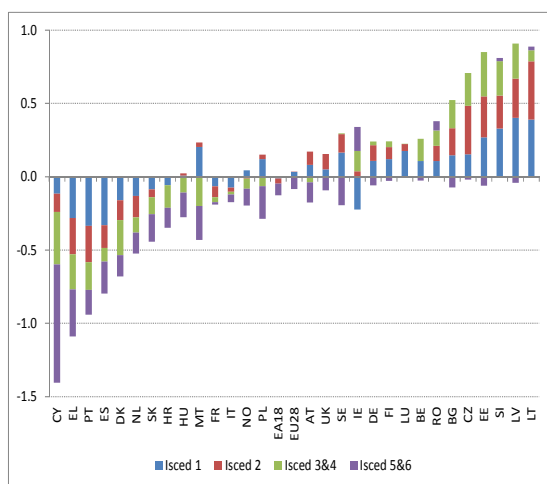
(1) Except Norway (ESA1995)
Source: Commission services, EPC

In those countries for which a reduction in total expenditure between 2013 and 2060 is projected, it is common that primary and secondary education (ISCED levels 1 to 4) contribute the most to the projected fall in total expenditure. At the same time, in Member States were total education expenditure is projected to rise between 2013 and 2060, tertiary education tends to dampen the overall increase in expenditure.

Table II.4.3: **Breakdown of revisions in expenditure-to-GDP ratio (2015 round minus 2012 round; ESA1995), values for the baseline scenario in 2060**

	Expenditure to GDP ratio		Revisions				
			Expenditure (3)=(2)-(1)	Base	Students index	Employment index	Discrepancy
	AR2012	AR2015			Indexes % change * Exp ratio in AR2012		
	(1)	(2)	(3)=(4)+(5)-(6)+(7)	(4)	(5)	(6)	(7)=(3)-(4)-(5)+(6)
BE	6.1	6.3	0.15	0.19	0.96	1.00	0.01
BG	3.7	3.5	-0.21	-0.32	0.47	0.34	-0.02
CZ	3.7	4.3	0.59	0.28	0.88	0.55	-0.02
DK	7.1	7.0	-0.07	0.52	0.59	1.24	0.06
DE	3.8	4.5	0.72	0.41	0.55	0.25	0.01
EE	5.1	5.2	0.06	0.27	0.25	0.47	0.01
IE	6.3	6.2	-0.06	1.06	-1.41	-0.54	-0.24
EL	4.0	3.0	-1.00	-0.26	-1.01	-0.27	0.00
ES	3.5	3.9	0.36	0.31	-0.33	-0.37	0.01
FR	4.6	4.9	0.33	0.12	0.35	0.13	0.00
IT	3.7	3.7	-0.07	-0.04	0.36	0.05	-0.34
CY	5.8	6.7	0.84	0.53	-0.02	-0.29	0.04
LV	3.2	4.5	1.39	-0.31	0.90	-0.62	0.19
LT	3.9	4.8	0.97	0.30	0.10	-0.45	0.12
LU	3.1	3.5	0.43	0.15	2.04	1.63	-0.13
HU	3.7	3.4	-0.31	-0.33	0.69	0.65	-0.01
MT	4.1	6.1	2.07	1.15	1.82	0.94	0.04
NL	4.8	5.1	0.28	0.50	-0.18	0.03	-0.02
AT	4.5	5.0	0.48	0.26	0.73	0.50	-0.01
PL	3.2	4.3	1.14	0.18	0.75	-0.12	0.09
PT	3.5	4.4	0.87	0.42	-0.75	-1.04	0.17
RO	3.4	3.1	-0.33	-0.85	1.61	0.77	-0.32
SI	4.9	6.2	1.35	0.45	0.59	-0.20	0.11
SK	2.7	3.0	0.32	0.38	-0.28	-0.23	-0.01
FI	6.2	6.7	0.49	0.82	0.53	0.86	0.00
SE	6.4	6.2	-0.16	0.11	0.92	1.23	0.05
UK	4.9	5.4	0.56	0.56	-0.13	-0.13	0.00
NO	8.4	5.9	-2.48	-2.02	1.49	2.25	0.31

Source: Commission services, EPC

4.3.2. Drivers of education expenditure

Table II.4.2 uses equation 4.4 in the education annex to break down changes in the GDP ratio of public expenditure on education between 2013 and 2060.

The evolution of public expenditure on education is determined by the ratio between the (average) student and employment indexes. [126]

$$\frac{\frac{EDU_t^{a\text{-}\vartheta}}{GDP_t}}{\frac{EDU_\vartheta^{a\text{-}\vartheta}}{GDP_\vartheta}} = \frac{IS_t}{IE_t}$$

4.1

Empirically, the indexes ratio $\dfrac{\overline{IS_t}}{\overline{IE_t}}$ is driven by the age structure of the population.

Graph II.4.5 plots across countries $\dfrac{\overline{IS_t}}{\overline{IE_t}}$ against the ratio of the population in schooling age (ages 6 to 24) to the "active" population (ages 25 to 70). Variations in government expenditure on education between 2013 and 2060 (y-axis) are highly correlated with changes in the age structure of the population (x-axis). This results from the methodology used where per-capita costs grow in line with labour productivity, thereby the expenditure-to-GDP ratio basically increases with the number of students and decreases with employment levels. [127]

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[126] Assuming a constant students-to-teacher ratio (i.e. $IT_t = IS_t$).

[127] EL and ES look as outliers in Graph II.4.5, largely reflecting the macroeconomic assumption of a sharp

Table II.4.4:   **Baseline and high enrolment rate scenarios (public expenditure-to-GDP ratio; ESA2010 (^{1}))**

	2013		2020		2030		2040		2050		2060			
	Base	High	Base	High	Base	High	Base	High	Base	High	Base (1)	High (2)	Difference (3)=(2)-(1)	
BE	5.8	5.8	5.7	5.9	6.0	6.3	6.0	6.5	6.0	6.5	6.1	6.5	0.4	BE
BG	3.0	3.1	2.9	3.2	3.0	3.5	2.9	3.8	3.2	4.1	3.4	4.3	0.9	BG
CZ	3.4	3.5	3.6	3.9	3.9	4.4	3.7	4.5	4.0	4.8	4.1	4.9	0.8	CZ
DK	7.6	7.6	7.1	7.4	6.9	7.3	7.2	7.8	7.0	7.6	6.8	7.4	0.6	DK
DE	4.1	4.1	3.8	4.0	4.0	4.5	4.2	4.8	4.2	4.8	4.4	5.0	0.7	DE
EE	4.4	4.4	4.6	4.8	4.8	5.2	4.4	5.1	4.8	5.5	5.1	5.8	0.7	EE
IE	6.0	6.0	6.4	6.6	5.8	6.4	5.2	6.2	6.0	6.9	5.9	6.9	0.9	IE
EL	4.1	4.1	3.5	3.8	3.0	3.3	2.7	3.2	2.9	3.4	3.0	3.5	0.6	EL
ES	4.6	4.6	4.1	4.4	3.4	4.0	3.1	3.9	3.6	4.4	3.7	4.5	0.8	ES
FR	5.0	5.1	5.0	5.2	4.9	5.4	4.9	5.6	4.9	5.6	4.8	5.5	0.7	FR
HR	3.7	3.8	3.5	3.7	3.4	3.8	3.2	3.8	3.3	3.8	3.4	4.0	0.6	HR
IT	3.7	3.8	3.5	3.7	3.3	3.8	3.4	4.2	3.6	4.4	3.5	4.3	0.8	IT
CY	7.3	7.5	6.5	7.3	6.2	7.7	5.5	7.7	5.5	7.7	6.1	8.4	2.3	CY
LV	3.8	3.8	3.8	3.9	4.0	4.2	3.8	4.2	4.1	4.5	4.5	4.9	0.4	LV
LT	3.9	3.9	3.6	3.8	4.2	4.6	4.2	4.8	4.2	4.9	4.8	5.4	0.6	LT
LU	3.3	3.4	3.2	3.6	3.4	4.2	3.5	4.8	3.5	4.8	3.5	4.9	1.4	LU
HU	3.6	3.7	3.1	3.3	3.0	3.4	3.1	3.7	3.2	3.9	3.4	4.0	0.7	HU
MT	5.9	6.0	5.3	6.0	5.6	6.9	5.5	7.3	5.5	7.4	6.0	7.9	1.9	MT
NL	5.2	5.3	4.9	5.1	4.7	5.2	4.9	5.6	4.8	5.5	4.7	5.4	0.7	NL
AT	4.9	4.9	4.5	4.8	4.7	5.3	4.8	5.7	4.7	5.7	4.9	5.9	1.0	AT
PL	4.4	4.4	4.1	4.2	4.1	4.3	3.8	4.1	3.9	4.2	4.3	4.5	0.3	PL
PT	5.2	5.3	4.7	4.9	4.0	4.5	4.0	4.7	4.3	5.0	4.2	5.0	0.8	PT
RO	2.6	2.6	2.6	2.6	2.7	2.8	2.8	3.0	2.9	3.1	3.0	3.2	0.2	RO
SI	5.3	5.4	5.4	5.6	5.6	6.1	5.5	6.3	5.8	6.7	6.1	6.9	0.8	SI
SK	3.4	3.4	3.2	3.5	3.1	3.6	2.8	3.5	2.8	3.6	2.9	3.7	0.8	SK
FI	6.1	6.1	6.1	6.2	6.3	6.4	6.3	6.4	6.3	6.4	6.4	6.5	0.1	FI
SE	5.7	5.7	5.7	5.8	5.9	6.2	5.8	6.3	5.7	6.2	5.9	6.3	0.5	SE
UK	5.1	5.2	5.1	5.5	5.3	6.1	5.1	6.2	5.1	6.2	5.2	6.3	1.1	UK
NO	6.0	6.1	5.8	6.0	5.9	6.4	6.0	6.7	5.9	6.6	5.9	6.6	0.7	NO
EA19	4.5	4.6	4.3	4.6	4.3	4.7	4.3	5.0	4.4	5.1	4.4	5.1	0.7	EA19
EU28	4.7	4.7	4.5	4.7	4.5	5.0	4.5	5.2	4.6	5.3	4.6	5.4	0.7	EU28

(1) Except Norway (ESA1995)
Source: Commission services, EPC

Graph II.4.5:   **Demographic structure as the main driver of education expenditure (2060 index values, 2013=100)**
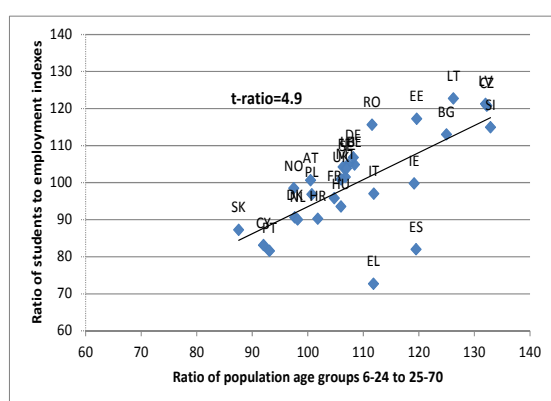
Source: Commission services

Using equation 4.4 in the education annex A6.1, results can also be broken down between the 2012 and 2015 projection exercises (Table II.4.3). Although there are considerable cross-country variations, on average the expenditure to GDP ratio for 2060 is revised upwards by about 0.31 pp between the 2012 and the 2015 projection exercises, (^{128}) largely reflecting a 0.44 pp increase in the number of students, together with an upward revision of 0.17 pp in base period values are roughly offset by an employment increase of 0.31 pp. (^{129})

4.4.   SENSITIVITY TEST: THE HIGH ENROLMENT RATE SCENARIO

A single sensitivity scenario is considered in the 2015 Ageing Report, namely a demand shock that

decline in unemployment rates, which inflates the employment index.

(^{128}) Unweighted averages.
(^{129}) ESA1995 GDP definition is used in Table II.4.3.

raises enrolment rates in ISCED levels 3&4 and 5&6 to the average of the three best performing countries. This represents a simplified approach compared to the analysis carried out in the 2012 AR, reflecting the difficulties then experienced in translating policy targets into UEO data. ([130]) Therefore, in the current edition of the AR, it was judged preferable instead to directly inflate baseline enrolment rates towards the best outcomes in the EU, thereby capturing the flavour of EU policy initiatives in the education sector. ([131])

In the base period 2010-2011, the three countries with the highest enrolment rates in ISCED levels 3&4 and 5&6 are Finland, Belgium and Sweden. By age bracket (15 years and older) and ISCED level (3&4 and 5&6), countries are assumed to converge linearly from 2012 until 2040 to the average enrolment rate in Finland, Belgium and Sweden. Higher enrolment rates are then kept constant (aside the impact of participation rates) between 2041 and 2060. A country keeps its initial enrolment rate break (by ISCED and age) if it is higher than the target average.

In 2060, the additional budgetary cost due to higher enrolment rates is projected at +0.7 pp of GDP on average both in the EU and the euro area (Tables II.4.4, II.A6.4 and II.A6.5). Across countries, the increase in education expenditure varies considerably, ranging from +0.1 in FI to +2.3 in CY. Notice that even in best performing countries expenditure increases occur, reflecting the fact that while the rank of best performing counties is determined averaging across all ISCED levels (3&4 and 5&6) and ages, convergence will occur at single combinations of ISCED and age (for every outcome below best performing outcomes/targets).

([130]) In the 2012 AR, the high enrolment scenario corresponded to the EU2020 scenario defined as: i) the share of early leavers from education and training should be less than 10%; and ii) the share of 30 to 34-year-olds with tertiary or equivalent educational attainment should be at least 40%.
([131]) http://ec.europa.eu/europe2020/targets/eu-targets/.

5. UNEMPLOYMENT BENEFITS

5.1. INTRODUCTION

Unemployment benefit (UB) expenditure projections are carried out in order to preserve the comprehensive nature of the long term budgetary exercise, although UB expenditure is largely driven by (short- and medium-term) cyclical fluctuations and influenced by structural factors relating to the functioning of the labour market, rather than by (long-term) demographic waves. In addition, and for underperforming countries, UB projections largely depend on the assumption of a decline in the (structural) unemployment rate (UR), which is rather significant in a number of Member States, converging to some EU wide ceiling/benchmark, implicitly anticipating the future implementation of structural reforms in labour markets.

A simple equation is used to project UB expenditure. Although the methodology can account for country specificities, such as changes in the coverage and replacement rates of its UB system, in practice lack of details and concern about providing equal treatment across countries would discourage fine tuning the methodology.

In order to apply the methodology described here and secure the comparability of projections across countries, data should be taken from Eurostat's Social Protection Statistics (ESSPROS). [132] Furthermore, expenditure data on unemployment benefits should cover recent years, namely 2012 and 2013. Given the delays involved in the official publication of these values by Eurostat, updated values for 2013 as provided by EPC/AWG delegates were used. Eurostat has published ESSPROS data for 2012 for all 29 countries covered in the projections (EU28 and Norway). Sixteen Member States provided provisional information for 2013. [133]

UB projections basically require three elements: i) calibration of UB expenditure for a recent base year/period; ii) assumption of an UR trajectory up to 2060; and iii) the assumptions of constant replacement and coverage rates of UB systems after a given date, usually from the start of the projection period, if no policy change has been announced. [134]

5.2. THE BASE PERIOD AND THE DATASET

The methodology basically uses the AWG's unemployment rate scenario (as the driving variable) and expenditure in periodic full and partial unemployment benefits in the base period 2011-2013 [135] to extrapolate future expenditure levels. Using multi-annual averages can limit the impact of any given year on the final results, which is desirable in periods of strong economic fluctuations and possible large statistical errors.

In the absence of alternative reasonable assumptions on the future number of UB beneficiaries (which results from entitlement rules that affect coverage, take-up rates, and so on) and the average duration of unemployment spells, the calculation assumes that all these elements remain constant. This approximation should be neutral, particularly over the long term, not leading to any systematic bias in the projections.

In order to guarantee the comparability of projections across countries, expenditure data were taken mainly from Eurostat's ESSPROS, specifically the sum of periodic full and partial unemployment benefits (Table II.5.1). [136]

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[132] The European System of integrated Social PROtection Statistics (ESSPROS).
[133] BE, DK, DE, IE, ES, IT, CY, LV, LT, MT, NL, AT, PT, RO, SI and FI.
[134] For DK the present projections consider the impact of the 2012 tax reform which lowers the indexation of UB between 2016 and 2023.
[135] The sixteen MSs mentioned in footnote 3. For the remaining countries: 2011-2012.
[136] Periodic full and partial UB were also used (at least) in the last two Ageing Reports (2009 and 2012).

Table II.5.1:   **Periodic full and partial unemployment benefits in % of GDP (ESSPROS), ESA2010 for GDP(1)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
BE	2.0	2.0	1.9	1.7	1.6	2.0	1.9	1.7	1.8	1.8	BE
BG	:	0.2	0.2	0.1	0.1	0.3	0.4	0.4	0.4	:	BG
CZ	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	:	CZ
DK	1.5	1.3	0.9	1.0	0.8	1.4	1.6	1.5	1.6	1.4	DK
DE	1.4	1.5	1.3	1.0	0.9	1.2	1.1	0.9	0.8	0.8	DE
EE	0.1	0.1	0.1	0.1	0.2	0.9	0.4	0.2	0.2	:	EE
IE	0.8	0.7	0.7	0.8	1.2	2.2	2.5	2.3	2.2	2.1	IE
EL	0.4	0.4	0.3	0.4	0.4	0.7	0.8	0.9	0.7	:	EL
ES	1.1	1.0	1.0	1.1	1.2	2.2	2.1	2.3	2.3	2.2	ES
FR	1.6	1.5	1.4	1.2	1.2	1.5	1.5	1.4	1.5	:	FR
HR	:	:	:	:	0.2	0.4	0.5	0.4	0.4	:	HR
IT	0.4	0.4	0.4	0.3	0.4	0.7	0.7	0.7	0.8	0.9	IT
CY	0.4	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.8	CY
LV	0.3	0.3	0.3	0.3	0.3	1.0	0.7	0.3	0.3	0.3	LV
LT	0.1	0.1	0.1	0.1	0.1	0.6	0.4	0.2	0.2	0.2	LT
LU	0.4	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	:	LU
HU	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2	:	HU
MT	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	MT
NL	1.6	1.5	1.3	1.1	1.0	1.3	1.5	1.4	1.7	2.0	NL
AT	0.8	0.7	0.7	0.6	0.6	0.8	0.8	0.7	0.7	0.8	AT
PL	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	:	PL
PT	1.1	1.1	1.1	0.9	0.8	1.1	1.2	1.1	1.5	1.5	PT
RO	0.3	0.2	0.2	0.1	0.1	0.3	0.5	0.2	0.1	0.1	RO
SI	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.6	0.6	0.6	SI
SK	0.3	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	:	SK
FI	1.6	1.5	1.4	1.1	1.0	1.5	1.7	1.5	1.7	1.9	FI
SE	1.2	1.1	0.9	0.6	0.4	0.6	0.5	0.4	0.4	:	SE
UK	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	:	UK
NO	0.7	0.5	0.3	0.2	0.2	0.4	0.5	0.4	0.4	:	NO

(1) Except Norway (ESA1995)
Source: Commission services

As in previous rounds of the Ageing Report, DG ECFIN's structural unemployment rate estimates (NAWRU) are used as a proxy for the structural unemployment rate.

As a general rule, actual unemployment rates are assumed to converge to NAWRU rates by 2019 corresponding to the assumed closure of the output gap. On their turn, NAWRU rates are assumed to gradually converge (by 2040) to the minimum of country specific *Anchors* ([137]) or the weighted mean across the EU Member States, which is 7.6, whichever is the lowest. Furthermore, for those countries were current NAWRU *Anchors* exceed unemployment rates for 2060 as projected in the

2012 Ageing Report, only half of that increase is retained (see Table II.5.2).

Anchor values are country-specific values for the NAWRU that are calculated assuming that non-structural variables are set at their average values over the estimated sample, thereby averaging out the impact of cyclical fluctuations, while structural variables are assumed to remain unchanged at their last observed values (i.e. applying the "no policy change" principle).

Capping country specific NAWRU values to 7½% is done in order to avoid extrapolating into the far future too high unemployment rate values, which are largely a consequence of the economic and financial crisis. It should be noted that this cap on unemployment rates is a crucial assumption for some countries which currently register high levels.

Table II.5.3 presents the base values for the unemployment rate and the unemployment

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([137]) Under the guidance of the EPC-OGWG and with the double objectives of improving the medium-term framework for fiscal surveillance up to T+10 (currently 2024), and correcting for the counter-cyclicality of the NAWRU, DG ECFIN carried out some econometric work, leading to the estimation of Anchor values for the NAWRU.

Table II.5.2:   **Unemployment rate projections**

	2013	2020	2030	2040	2050	2060	
BE	8.5	7.9	7.4	7.4	7.4	7.4	BE
BG	13.0	11.9	9.1	7.5	7.5	7.5	BG
CZ	7.0	6.3	6.0	6.0	6.0	6.0	CZ
DK	7.2	5.5	4.9	4.9	4.9	4.9	DK
DE	5.4	4.7	5.4	5.4	5.4	5.4	DE
EE	8.8	7.8	8.0	7.5	7.5	7.5	EE
IE	13.3	10.2	8.2	6.8	6.8	6.8	IE
EL	28.0	22.1	13.7	7.5	7.5	7.5	EL
ES	26.5	19.5	12.3	7.5	7.5	7.5	ES
FR	10.0	9.6	8.7	7.5	7.5	7.5	FR
HR	17.8	13.5	10.3	7.5	7.5	7.5	HR
IT	12.4	10.6	8.6	7.5	7.5	7.5	IT
CY	16.9	16.6	10.1	6.1	6.1	6.1	CY
LV	12.1	12.4	10.3	7.5	7.5	7.5	LV
LT	12.0	10.8	9.6	7.5	7.5	7.5	LT
LU	5.9	5.1	4.3	4.2	4.2	4.2	LU
HU	10.3	8.6	7.6	7.5	7.5	7.5	HU
MT	6.5	6.6	6.7	6.7	6.7	6.7	MT
NL	6.7	5.9	4.2	3.9	3.9	3.9	NL
AT	5.0	4.2	3.8	3.8	3.8	3.8	AT
PL	10.5	8.7	8.5	7.5	7.5	7.5	PL
PT	17.0	12.6	8.4	7.5	7.5	7.5	PT
RO	7.4	7.1	7.0	6.9	6.9	6.9	RO
SI	10.2	9.1	6.7	6.4	6.4	6.4	SI
SK	14.2	12.8	10.8	7.5	7.5	7.5	SK
FI	8.4	7.3	7.0	6.9	6.9	6.9	FI
SE	8.2	6.4	5.9	5.9	5.9	5.9	SE
UK	7.8	6.5	6.4	6.1	6.1	6.1	UK
NO	3.5	3.3	3.5	3.6	3.6	3.6	NO

Source: Commission services

benefits-to-GDP ratio that are used in the equation that projects future UB expenditure.

5.3.   PROJECTIONS IN PERCENTAGE OF GDP

Table II.5.4 presents UB projections for the period 2013-2060. In 27 out of a total of 29 countries, the UB-to-GDP ratio decreases due to unemployment rate assumptions. Graph II.5.1 highlights the strong cross country correlation between changes in expenditure on unemployment benefits and unemployment rate assumptions (see equation 9 in Annex 7).

In fact, the percentage change in the UB-to-GDP ratio between the final period (2060) and the base period: $ln\left(\frac{UB_t}{GDP_t}\right) - ln\left(\frac{UB_b}{GDP_b}\right)$ can be approximated by $\frac{1}{1-u_t} * \left(\frac{u_t - u_b}{u_b}\right)$. This means that reducing the unemployment rate pays a

"double dividend" in terms of reducing the UB-to-GDP ratio. For similar changes in the unemployment rate $\left(\frac{u_t - u_b}{u_b}\right)$, countries with a higher unemployment rate in the current year (u_t) will record a larger variation in the UB-to-GDP ratio.

Table II.5.3:   **Base values for the unemployment rate (UR) and the unemployment benefits-to-GDP ratio**

Average 2012-2013*		
	UR 15-64	UB as % of GDP
BE	8.1	1.8
BG*	11.9	0.4
CZ*	6.9	0.2
DK	7.4	1.5
DE	5.5	0.8
EE*	11.5	0.2
IE	14.1	2.1
EL*	21.7	0.8
ES	25.8	2.2
FR*	9.6	1.5
HR*	15.4	0.4
IT	11.6	0.9
CY	14.8	0.7
LV	13.8	0.3
LT	12.9	0.2
LU*	5.1	0.6
HU*	11.0	0.3
MT	6.4	0.3
NL	6.0	1.8
AT	4.7	0.8
PL*	10.0	0.2
PT	16.7	1.5
RO	7.3	0.1
SI	9.6	0.6
SK*	13.8	0.2
FI	8.2	1.8
SE*	8.1	0.4
UK*	8.2	0.3
NO*	3.2	0.4

(1) * 2011-2012 for countries not having 2013 figures
Source: Commission services

Overall, UB projections from the 2015 AR are relatively similar to those made in the 2012 AR (see the last two columns in Table II.5.4). Focusing on the differences between 2060 and 2013, expenditure on UB in the EU is expected to decline by 0.4 pp of GDP, which is close to the estimate made in the 2012 AR (a decline of 0.3 pp). However, there are significant differences between the two projections for a number of MS. For example, while in IE, LV and EE we are now projecting a smaller reduction in UB expenditure compared to the 2012 AR, conversely, in the NL, EL, FI, and DK a larger reduction in UB expenditure is assumed between 2013 and 2060.

Graph II.5.1:   **Changes in the UB-to-GDP ratio versus changes in the UR (2060-2013)**
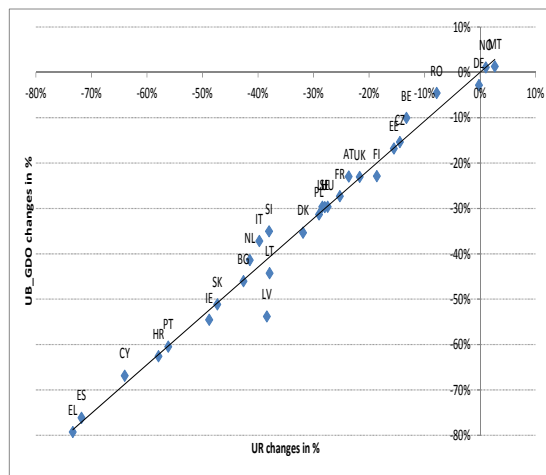
Source: Commission services

Table II.5.4:   **Expenditure projections of unemployment benefits (UB) in % of GDP (ESA2010) - base period 2013-2011, unless stated otherwise -**

| | 2013 | 2020 | 2030 | 2040 | 2050 | 2060 | Change 2060-2013 | | |
							AR2015	pm AR2012	
BE	1.8	1.7	1.6	1.6	1.6	1.6	-0.2	-0.0	BE
BG*	0.5	0.4	0.3	0.3	0.3	0.3	-0.2	-0.1	BG*
CZ*	0.2	0.2	0.2	0.2	0.2	0.2	-0.0	-0.0	CZ*
DK	1.4	1.1	0.9	0.9	0.9	0.9	-0.5	-0.1	DK
DE	0.8	0.7	0.8	0.8	0.8	0.8	-0.0	-0.1	DE
EE*	0.2	0.1	0.2	0.1	0.1	0.1	-0.0	-0.2	EE*
IE	2.1	1.5	1.2	1.0	1.0	1.0	-1.1	-2.1	IE
EL*	1.2	0.8	0.5	0.2	0.2	0.2	-0.9	-0.3	EL*
ES	2.2	1.6	0.9	0.5	0.5	0.5	-1.7	-1.7	ES
FR*	1.5	1.5	1.3	1.1	1.1	1.1	-0.4	-0.3	FR*
HR*	0.5	0.4	0.3	0.2	0.2	0.2	-0.3	:	HR*
IT	0.9	0.9	0.7	0.6	0.6	0.6	-0.3	0.0	IT
CY	0.8	0.8	0.5	0.3	0.3	0.3	-0.6	-0.2	CY
LV	0.3	0.3	0.2	0.1	0.1	0.1	-0.2	-0.5	LV
LT	0.2	0.2	0.1	0.1	0.1	0.1	-0.1	-0.3	LT
LU*	0.7	0.6	0.5	0.5	0.5	0.5	-0.2	-0.0	LU*
HU*	0.3	0.2	0.2	0.2	0.2	0.2	-0.1	-0.2	HU*
MT	0.3	0.3	0.3	0.3	0.3	0.3	0.0	-0.0	MT
NL	2.0	1.8	1.3	1.2	1.2	1.2	-0.8	-0.2	NL
AT	0.8	0.7	0.6	0.6	0.6	0.6	-0.2	-0.0	AT
PL*	0.2	0.1	0.1	0.1	0.1	0.1	-0.1	-0.0	PL*
PT	1.5	1.1	0.7	0.6	0.6	0.6	-0.9	-0.7	PT
RO	0.1	0.1	0.1	0.1	0.1	0.1	-0.0	-0.0	RO
SI	0.6	0.5	0.4	0.4	0.4	0.4	-0.2	-0.1	SI
SK*	0.2	0.2	0.2	0.1	0.1	0.1	-0.1	-0.1	SK*
FI	1.9	1.6	1.5	1.5	1.5	1.5	-0.4	0.0	FI
SE*	0.4	0.3	0.3	0.3	0.3	0.3	-0.1	-0.0	SE*
UK*	0.3	0.2	0.2	0.2	0.2	0.2	-0.1	-0.1	UK*
NO*	0.4	0.4	0.4	0.4	0.4	0.4	0.0	-0.0	NO*
EA	1.3	1.1	1.0	0.8	0.9	0.9	-0.4	-0.3	EA
EU	1.1	0.9	0.8	0.7	0.7	0.7	-0.4	-0.3	EU

(1) * 2011-2012 average has been used in the projections for countries not having UB figures for 2013
Source: Commission services

ANNEX 1

Pension projection questionnaire

Table II.A1.1: **Pension projections reporting framework: blocks common to all schemes**

European Commission
DG ECFIN Unit C2
Draft reporting framework: Pension expenditure and contributions - in billions EUROs, current prices

Country:

Scenario:
Pension scheme:
Voluntary

A. Fixed table

		2013	2020	2030	2040	2050	2060
		Base year	Projections in current prices				
	GDP (ECFIN projection, in current prices - billions EUR)						
1	**GDP (used in projections, in current prices)**						
2	**GDP deflator**						
3	**Economy-wide average gross wage (current prices - billions €)**						
4	**Average gross wage (current prices - 1000 €)**						
5	**Consumer price inflation**						
	0 - AVERAGE GROSS WAGE AT RETIREMENT						
6	**Average gross wage at retirement (current prices - 1000 €)**						
	1 - PENSION EXPENDITURES (Gross, in millions €)						
7	**Public pensions scheme, gross (14+16+18+20+22) and (8+9+10+11+12+13)**						
	Of which						
8	aged -54						
9	aged 55-59						
10	aged 60-64						
11	aged 65-69						
12	aged 70-74						
13	aged 75+						
14	Old-age and early pensions - Earnings-related						
15	*Of which new pensions (153*154*155*156*157*158 if DB) or (155*156*159*160*161 if Point) or (157*158*159*162*163*164 if NDC)*						
16	Disability - Earnings-related						
17	*Of which new pensions*						
18	Survivors - Earnings-related						
19	*Of which new pensions*						
20	Other pensions - Earnings-related						
21	*Of which new pensions*						
22	Non-earning-related pensions including minimum pensions and minimum income guarantees (24+25+26)						
23	*Of which new pensions*						
24	Of which old-age and early pensions						
25	Of which disability pensions						
26	Of which other pensions						
27	**Private occupational scheme, gross**						
28	*Of which new pensions (165*166*167*168*169*170)*						
29	**Private individual scheme gross (31 + 33)**						
30	*Of which new pensions (171*172*173*174*175*176)*						
31	*Mandatory private individual scheme*						
32	*Of which new pensions*						
33	*Non-mandatory private individual scheme*						
34	*Of which new pensions*						
35	**Total pension expenditure, gross (7+27+29) and (36+37+38+39+40+41)**						
	Of which						
36	*aged -54*						
37	*aged 55-59*						
38	*aged 60-64*						
39	*aged 65-69*						
40	*aged 70-74*						
41	*aged 75+*						
42	**Public pension scheme, tax revenues**						
43	**Private occupational scheme, tax revenues**						
44	**Private individual scheme, tax revenues**						
45	**Total pension, tax revenues (42+43+44)**						
46	**Public pensions scheme, net**						
47	*Of which non-earning-related pensions including minimum pensions and minimum income guarantees*						
48	**Private occupational scheme, net**						
49	**Private individual scheme, net**						
50	**Total pension expenditure, net (46+48+49)**						
	2 - BENEFIT RATIO						
51	**Public pensions ((7/88)/4)**						
52	Of which old-age earnings-related pensions ((14/101)/4)						
53	**Private occupational pensions ((27/109)/4)**						
54	**Mandatory private individual pensions (31/111)/4)**						
55	**Non-mandatory private individual pensions (33/112)/4)**						
56	**Total benefit ratio ((35/113)/4)**						
	3 - GROSS AVERAGE REPLACEMENT RATES (at retirement)						
57	**Public pensions**						
58	Of which old-age earnings-related pensions ((15/153)/6 if DB) or ((15/155)/6 if Point) or ((15/157)/6 if NDC)						
59	**Private occupational pensions (28/165)/6**						
60	**Private individual pensions (30/171)/6**						
61	**Total gross replacement rate**						
	4 - NUMBER OF PENSIONS (in 1000)						
62	Public pensions (63+64+65+66+67+68) and (69+70+71+72+73)						
	Of which						
63	aged -54						
64	aged 55-59						
65	aged 60-64						
66	aged 65-69						
67	aged 70-74						
68	aged 75+						
69	Old-age and early pensions - Earnings-related						
70	Disability - Earnings-related						
71	Survivors pensions - Earnings-related						
72	Other pensions - Earnings-related						
73	Non-earning-related pensions including minimum pensions and minimum income guarantees (74+75+76)						

Table (continued)

74	*Of which old-age and early pensions*							
75	*Of which disability pensions*							
76	*Of which other pensions*							
77	**Private occupational pensions**							
78	**Private individual pensions (79+80)**							
79	*Mandatory private individual*							
80	*Non-mandatory private individual*							
81	**All pensions (62+77+78) and (82+83+84+85+86+87)**							
	Of which							
82	aged -54							
83	aged 55-59							
84	aged 60-64							
85	aged 65-69							
86	aged 70-74							
87	aged 75+							
	5 - NUMBER OF PENSIONERS (in 1000)							
88	Public pensions (89+91+93+95+97+99)							
	Of which							
89	aged -54							
90	Of which female							
91	aged 55-59							
92	Of which female							
93	aged 60-64							
94	Of which female							
95	aged 65-69							
96	Of which female							
97	aged 70-74							
98	Of which female							
99	aged 75+							
100	*Of which female*							
101	Old-age and early pensions - Earnings-related							
102	Disability - Earnings-related							
103	Survivors pensions - Earnings-related							
104	Other pensions - Earnings-related							
105	Non-earning-related pensions including minimum pensions and minimum income guarantees (106+107+108)							
106	*Old-age and early pensions*							
107	*Disability pensions*							
108	*Other pensions*							
109	**Private occupational pensions**							
110	**Private individual pensions (111+112)**							
111	*Mandatory private individual*							
112	*Non-mandatory private individual*							
113	**All pensioners (114+116+118+120+122+124)**							
	Of which							
114	aged -54							
115	Of which female							
116	aged 55-59							
117	Of which female							
118	aged 60-64							
119	Of which female							
120	aged 65-69							
121	Of which female							
122	aged 70-74							
123	Of which female							
124	aged 75+							
125	Of which female							
	6 - CONTRIBUTIONS (employee+employer, in millions €)							
126	**Public pensions (127+128+129)**							
127	Employer							
128	Employee							
129	State							
130	**Private occupational pensions**							
131	**Private individual pensions (132+133)**							
132	*Mandatory private individual*							
133	*Non-mandatory private individual*							
134	**Total pension contributions (126+130+131)**							
	7 - NUMBER OF CONTRIBUTORS (employees, in 1000)							
135	**Public pensions**							
136	**Private occupational pensions**							
137	**Private individual pensions (138+139)**							
138	*Mandatory private individual*							
139	*Non-mandatory private individual*							
140	**All pensions (135+136+137)**							

(1) The green lines are provided on a voluntary base.
Source: Commission services, EPC

Table II.A1.2:   **Pension projection reporting framework: decomposition of new public pension expenditure - earnings related for points schemes**

Point schemes - CY	2013	2020	2030	2040	2050	2060
TOTAL						
141 **Number of new pensions (in 1000)**						
142 **Average number of insured points**						
143 **Average accrual rate**						
144 **Point value**						
145 **Sustainability/adjustment factors**						
146 **Average number of months paid the first year**						
Point schemes - DE	2013	2020	2030	2040	2050	2060
TOTAL						
141 **Number of new pensions (in 1000)**						
142 **Average pension**						
143 **Point value**						
144 **Average pension points accumulated at retirement (142/143)**						
145 **Sustainability/adjustment factors**						
146 **Average number of months paid the first year**						
Point schemes - HR	2013	2020	2030	2040	2050	2060
TOTAL						
141 **Number of new pensions (in 1000)**						
142 **Total pension points at retirement**						
143 Average pension points accumulated per year						
144 Actual and virtual contributory period						
145 **Point value (V)**						
146 **Sustainability/adjustment factors**						
147 **Average number of months paid the first year**						
Point schemes - RO	2013	2020	2030	2040	2050	2060
TOTAL						
141 **Number of new pensions (in 1000)**						
142 **Average annual pension**						
143 **Point value**						
144 **Average pension points at retirement (142/143)**						
145 **Contributyory period**						
146 **Average number of points accrued per year (144/145)**						
147 **Sustainability/adjustment factors**						
148 **Average number of months paid the first year**						
149 **Correction index**						
Point schemes - SK	2013	2020	2030	2040	2050	2060
TOTAL						
141 **Number of new pensions (in 1000)**						
142 **Total pension points at retirement**						
143 **Average pension points accumulated per year or average contributory period**						
144 **Average accrual rate (=V/K)**						
145 Point value (V)						
146 Point cost (K)						
147 **Sustainability/adjustment factors**						
148 **Average number of months paid the first year**						

(1) Data to be provided also by gender.
Source: Commission services, EPC

Table II.A1.3:   **Pension projection reporting framework: decomposition of new public pension expenditure - earnings related for DB schemes**

Defined Benefit schemes (BE BG CZ DK EE EL ES FR IE LT LU HU MT NL AT PT SI FI UK)	2013	2020	2030	2040	2050	2060
TOTAL						
153 **Number of new pensions (in 1000)**						
154 **Average contributory period (in years)**						
155 **Average accrual rate**						
156 **Monthly average pensionable earning**						
157 **Sustainability/adjustment factors**						
158 **Average number of months paid the first year**						

(1) Data to be provided also by gender.
Source: Commission services, EPC

Table II.A1.4:   **Pension projection reporting framework: decomposition of new public pension expenditure - earnings related for NDC schemes**

Notional defined contribution (IT LV PL SE NO)	2013	2020	2030	2040	2050	2060
TOTAL						
157 **Number of new pensions (in 1000)**						
158 **Average contributory period (in years)**						
159 **Average accrual rate (=c/A)**						
160 Notional-accounts contribution rate (c)						
161 Annuity factor (A)						
162 **Monthly average pensionable earning**						
163 **Sustainability/adjustment factors**						
164 **Average number of months of pension paid the first year**						

(1) Data to be provided also by gender.
Source: Commission services, EPC

Table II.A1.5:   **Pension projections reporting framework: decomposition of new private pension expenditure**

	Private occupational scheme	2013	2020	2030	2040	2050	2060
	TOTAL						
159	Number of new pensions (in 1000)						
160	Average contributory period (in years)						
161	Average accrual rate						
162	Monthly average pensionable earning						
163	Sustainability/adjustment factors						
164	Average number of months paid the first year						
	Private individual scheme	2013	2020	2030	2040	2050	2060
	TOTAL						
165	Number of new pensions (in 1000)						
166	Average contributory period (in years)						
167	Average accrual rate						
168	Monthly average pensionable earning						
169	Sustainability/adjustment factors						
170	Average number of months paid the first year						

(1) This block is to be provided on a voluntary basis.
Source: Commission services, EPC

ANNEX 2
Coverage of pension projections and additional information

The core of the projection exercise is *the government expenditure on pensions* for *both the private and public sectors*. Pension expenditure should cover pensions and equivalent cash benefits granted for a long period (over one year) for old-age, early retirement, disability, survivors (widows and orphans) and other specific purposes which should be considered as equivalents or substitutes for above-mentioned types of pensions, i.e. pensions due to reduced capacity to work or due to labour market reasons. In particular, social assistance should be included if it is equivalent to minimum pension (as for non-earning-related minimum pension). ([138])

Overall, Member States were asked to provide data for the following categories (see Table II.A2.1)

Table II.A2.1: **Coverage of the pension projections**

Data to be provided on a mandatory basis
Pension expenditures (Gross and net)
Benefit ratios
Gross average replacement rates (at retirement)
Number of pensions
Number of pensioners
Contributions
Number of contributors to pension schemes (employees)
Decomposition of new public pension expenditures (earnings-related)
Additional data to be provided on a mandatory basis (voluntary or absent in the previous 2012 Ageing Reports)
Decomposition of new pension expenditure projected also by gender;
Benefit ratio (in public schemes and earnings-related old-age pensions);
Contributions to public pension schemes divided into employer, employee and State;
Average wage at retirement

Source: Commission services, EPC.

Moreover, in order to tackle system specificities, the structure of the module of new pension expenditure has been made country specific in the case of pension point systems (CY, DE, HR, RO, SK and partially FR).

In addition Member States can cover on a voluntary basis the figures on taxes on pensions and the figures on net pension expenditure.

Data on occupational schemes and private individual schemes (mandatory and non-mandatory) including those on replacement rates

(at retirement), benefit ratio and net pension expenditures have been provided on a voluntary basis. Countries that provide figures for taxes on private occupational and private individual pensions, also to be taken into account in the sustainability assessment, agreed to provide the data above on a mandatory basis as well as a decomposition of new pension expenditures for private occupational and private individual pensions.

The block on "Assets of pension funds and reserves" is not projected any longer.

A complete list of items covered by the 2015 pension projection exercise, including the blocks for new pension decomposition, is presented in Annex 1.

The part of the reporting sheet that is common to all pension schemes consists of 140 variables to be projected; 56 are to be provided on a voluntary basis and 5 are input data provided by the Commission.

In general, all of the amendments reflect the need to better understand recent developments and the expected changes over the projection period as regards the main features of the pension systems in the Member States.

Two additional tables are provided below: one related to social contributions to the public pension system as a share of the gross wage bill (see Table II.A2.2); one related to the average, standard deviation and coefficient of variation of gross public pension expenditure over the period 2013 – 2060 (see Table II.A2.3). An additional graph is also included below (see Graph II.A2.1) that shows the impact of the migration scenario on the change of public pension expenditures (as compared to the baseline) over the period 2013-2037. In countries expected to experience net migration outflows in the baseline scenario, over the first half of the projection period, the projected change in public pension expenditure is reduced in this migration scenario compared to the baseline. However, this negative effect is reverted over the 2060 horizon under the convergence assumption.

([138]) Further information on the coverage and definition of variables are available in European Commission (DG ECFIN) and Economic Policy Committee (Ageing Working Group) (2014), *The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies.* European Economy, no. 8.

Table II.A2.2: **Social contributions to the public pension system in 2013 and in 2060 (% of gross wage bill)**

Country	2013	2060	Change 2013-2060
BE	:	:	:
BG	16.4	16.3	0.0
CZ	21.3	21.9	0.6
DK	0.3	0.2	-0.1
DE	22.6	28.3	5.8
EE	14.8	12.3	-2.4
IE	12.3	16.1	3.7
EL	27.8	32.7	4.9
ES	29.1	30.2	1.1
FR	24.7	24.1	-0.6
HR	11.5	11.5	0.0
IT	35.9	37.6	1.7
CY	16.9	24.8	8.0
LV	16.6	14.7	-2.0
LT	17.8	16.1	-1.7
LU	35.7	35.6	-0.1
HU	25.4	25.1	-0.3
MT	21.8	18.8	-3.0
NL	15.2	17.9	2.7
AT	18.2	18.2	0.0
PL	17.1	19.7	2.6
PT	25.2	24.4	-0.8
RO	12.8	15.4	2.6
SI	16.9	17.6	0.7
SK	17.2	18.2	1.0
FI	26.6	26.6	0.0
SE	14.3	14.5	0.2
UK	:	:	:
NO	19.7	24.0	4.3
EU	**23.0**	**24.7**	**1.7**
EA	**24.7**	**26.9**	**2.2**

(1) BE: no separate public pension contributions.
IE: contributions reported are also used to finance other social benefits in addition to pensions.
UK: data not provided.
Source: Commission services, EPC

Table II.A2.3: **Gross public pension expenditure average, standard deviation and coefficient of variation over the period 2013-2060 (% of GDP)**

	average (1)	standard deviation (2)	coefficient variation (2) / (1)
RO	8.2	0.2	2%
CY	9.4	0.2	2%
AT	14.4	0.3	2%
PL	10.5	0.3	3%
PT	14.5	0.5	4%
CZ	9.2	0.3	4%
ES	11.7	0.4	4%
IT	15.3	0.6	4%
EL	14.6	0.6	4%
UK	8.0	0.4	5%
NO	11.3	0.5	5%
NL	7.8	0.4	6%
EE	7.0	0.4	6%
SE	7.8	0.4	6%
FI	13.7	0.8	6%
BG	8.7	0.6	6%
FR	13.8	1.0	7%
BE	14.4	1.1	8%
DE	11.7	0.9	8%
HU	10.1	0.8	8%
LU	11.9	1.0	9%
DK	8.2	0.8	9%
SK	8.5	0.8	9%
MT	10.3	1.0	10%
IE	9.1	0.9	10%
LV	5.5	0.6	11%
LT	8.2	0.9	11%
SI	13.5	1.8	13%
HR	8.6	1.4	16%
EU	**11.5**	**0.2**	**2%**
EA	**12.7**	**0.3**	**2%**

Source: Commission services, EPC

Graph II.A2.1: **Impact of lower migration on gross public pension expenditure change (deviation from baseline change, pp of GDP)**
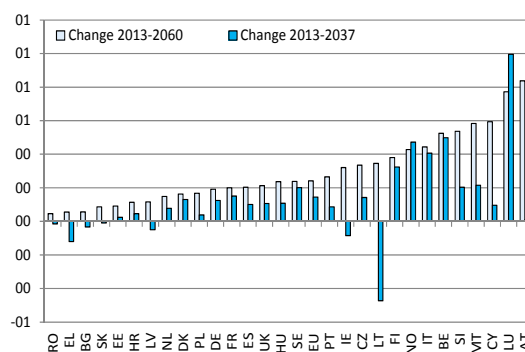
Source: Commission services, EPC

ANNEX 3

Detailed overview of indexation rules

Table II.A3.1: **Legal indexation rule in EU Member States**

	Minimum pension / social allowance	Old-age pensions	Early retirement pensions	Disability pensions	Survivors' pensions
	Public pensions				
BE	CPI + LSA	CPI + LSA	CPI + LSA	CPI + LSA	CPI + LSA
BG	50% CPI + 50% NI	50% CPI + 50% NI	50% CPI + 50% NI	50% CPI + 50% NI	50% CPI + 50% NI
CZ	NI	CPI + min 1/3 RI	CPI + min 1/3 RI	CPI + min 1/3 RI	CPI + min 1/3 RI
DK	NI	NI	NI	NI	NI
DE	70% CPI + 30% NI & reexam	NI + sust	NI + sust	NI + sust	NI + sust
EE	80% ST + 20% CPI	80% ST + 20% CPI	80% ST + 20% CPI	80% ST + 20% CPI	80% ST + 20% CPI
EL	Before 2015: YD; as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD; as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD; as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD; as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD; as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI
ES	IPR	IPR	IPR	IPR	IPR
FR	CPI	CPI	CPI	CPI	CPI
HR	Highest of: 70% NI + 30% CPI 50% CPI + 50% NI 30% CPI + 70% NI	Highest of: 70% NI + 30% CPI 50% CPI + 50% NI 30% CPI + 70% NI	Highest of: 70% NI + 30% CPI 50% CPI + 50% NI 30% CPI + 70% NI	Highest of: 70% NI + 30% CPI 50% CPI + 50% NI 30% CPI + 70% NI	Highest of: 70% NI + 30% CPI 50% CPI + 50% NI 30% CPI + 70% NI
IE	NR	NR	NR	NR	NR
IT	CPI ; lump-sums fixed in nominal terms	CPI - size	CPI - size	CPI - size	CPI - size
CY	NI	Basic: NI; Suppl.: CPI	Basic: NI; Suppl.: CPI	Basic: NI; Suppl.: CPI	Basic: NI; Suppl.: CPI
LV	CPI + 25% RI	CPI + 25% RI	CPI + 25% RI	CPI + 25% RI	CPI + 25% RI
LT	NR	NR	NR	NR	NR
LU	CPI if CPI>2.5% & RI re-exam(2)	CPI if CPI>2.5% & RI re-exam(2)	CPI if CPI>2.5% & RI re-exam(2)	CPI if CPI>2.5% & RI re-exam(2)	CPI if CPI>2.5% & RI re-exam(2)
HU	-	min 100% CPI	min 100% CPI	min 100% CPI	min 100% CPI
MT	COLA	COLA + NI (born before 1962); 70% NI + 30% CPI (born after 1962)	-	COLA	COLA + NI (born before 1962); 70% NI + 30% CPI (born after 1962)
NL	NI	NI	-	NI	NI
AT	CPI	CPI	CPI	CPI	CPI
PL	CPI + 20% RI	CPI + 20% RI	CPI + 20% RI	CPI + 20% RI	CPI + 20% RI
PT	CPI + GDP partially (GDP)	CPI + GDP partially (size and GDP)	CPI + GDP partially (size and GDP)	CPI + GDP partially (size and GDP)	CPI + GDP partially (size and GDP)
RO	Up to 2030: CPI + 50% RI; as of 2030: CPI	Up to 2030: CPI + 50% RI; as of 2030: CPI	Up to 2030: CPI + 50% RI; as of 2030: CPI	Up to 2030: CPI + 50% RI; as of 2030: CPI	Up to 2030: CPI + 50% RI; as of 2030: CPI
SI	In line with pensions	40% CPI + 60% NI	40% CPI + 60% NI	40% CPI + 60% NI	40% CPI + 60% NI
SK	CPI	50% CPI + 50% NI	50% CPI + 50% NI	50% CPI + 50% NI	50% CPI + 50% NI
FI	CPI	80% CPI + 20%NI + sust	80% CPI + 20%NI + sust	80% CPI + 20%NI + sust	80% CPI + 20%NI + sust
SE	CPI	NI + sust	NI + sust	NI + CPI	NI + CPI
UK	NI	NI	-	-	NI
NO	NI (- 0.75pp as of 2011)	NI (- 0.75 pp as of 2011)	NI (- 0.75 pp as of 2011)	NI (- 0.75 pp as of 2011)	NI (- 0.75 pp as of 2011)

(1)NR   No rule exists
RI   Real income growth
NI   Nominal income growth
ST   Social tax growth
GDP   GDP growth
CPI   CPI inflation
IPR   Index for pension revaluation. The IPR must lie between 0.25 and the year-on-year percentage change in annual CPI on December of year t plus 0.5%
LE   Adjustment to life expectancy
LSA   Living standard adjustment
COLA   Adjustment to cost of living
size   Adjusted by a pension size
sust   Additional adjustment due to other mechanisms such as a sustainability factor, balancing mechanism, life expectancy, value of a pension point, maintenance of relativity between means-tested and contributory pension, etc.
re-exam(X)   Re-examination of pension value every X years
min   At least
YD   Yearly decree
pub   Public sector
Source: Commission services, EPC.

Table II.A3.2:   **Indexation rules applied in the projections exercise (when different from the legal rule)**

	Public pensions				
	Minimum pension / social allowance	**Old-age pensions**	**Early retirement pensions**	**Disability pensions**	**Survivors' pensions**
CZ	NI	CPI + 1/3 RI	CPI + 1/3 RI	CPI + 1/3 RI	CPI + 1/3 RI
DK	NI				
ES	NI	IPR	IPR	IPR	IPR
EL	Before 2015: YD, as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD, as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD, as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD, as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI	Before 2015: YD, as of 2015: Minimum of 1) 50% CPI + 50% GDP or 2) 100% CPI
IE	NI (from 2017)	NI (from 2017)	NI (from 2017)	NI (from 2017)	NI (from 2017)
IT	GDP per capita as of 2019				
CY	NI				
LT	NI	NI	NI	NI	NI
LU	NI	CPI + Wages (50% to 100% depending on financial situation)	CPI + Wages (50% to 100% depending on financial situation)	CPI + Wages (50% to 100% depending on financial situation)	CPI + Wages (50% to 100% depending on financial situation)
HU	NI				
MT	NI				
AT	NI				
RO	NI				
SK	NI				
FI	50 % CPI + 50 % to NI				
SE	NI as of 2019	NI	NI	NI	NI

(1)NR	No rule exists
RI	Real income growth
NI	Nominal income growth
ST	Social tax growth
GDP	GDP growth
CPI	CPI inflation
LE	Adjustment to life expectancy
LSA	Living standard adjustment
COLA	Adjustment to cost of living
size	Adjusted by a pension size
sust	Additional adjustment due to other mechanisms such as a sustainability factor, balancing mechanism, life expectancy, value of a pension point, maintenance of relativity between means-tested and contributory pension, etc.
re-exam(X)	Re-examination of pension value every X years
min	At least
YD	Yearly decree
pub	Public sector

Source: Commission services, EPC.

ANNEX 4

Input data used to project long-term care expenditure

The most important data required to successfully run this projection exercise in the field of LTC include:

- public expenditure on LTC;

- per user (also called beneficiary or recipient) public expenditure on LTC by gender and single age or five-year age cohorts (so-called "age-related expenditure profiles");

- disaggregation of total public spending on LTC into spending on services in kind and spending on cash benefits for LTC, by gender and single age or five-year age cohorts;

- disaggregation of total public spending on services in kind into spending on services provided in the institutions and services provided at home, by gender and single age or five-year age cohorts;

- number of beneficiaries of LTC services provided a) at home and b) in institutions, and recipients of cash benefits for LTC, by gender and single age or five-year age cohorts;

- information on the possible overlapping between the recipients of cash benefits related to LTC and the recipients of LTC services (legal possibility and numbers);

- EU-SILC dependency rates by gender and five-year age cohorts (as a measure of demand for LTC);

- Policy reforms in the LTC area.

The EU Member States and Norway were invited to complete the data questionnaire. Outstanding issues were discussed with the Commission on a bilateral basis. Table II.A4.2 below presents an overview of the available data. It first shows the expenditure data sources for in-kind long-term care and cash benefits, as well as whether member states supplied quantified estimates of the effects of legislated reforms. It then shows whether cost-profiles by age of recipient were available, or whether, in their absence the profile of expenditure by age has been assumed to be in-line with other EU15 or NMS Member States. The table shows that where possible a disaggregation of profiles

according to institutional, home care and cash benefits was made, which became possible with better data availability. Next, it describes the availability of expenditure and recipient data for home care, institutional care and cash benefits. Finally, the availability of cost-profiles in the Ageing Report 2015 is reported.

It is useful to recall that the AWG has decided to define viable solutions for important data limitations regarding reporting of LTC expenditure. This concerns both in-kind and cash benefit expenditure. Many countries using SHA accounting do not report expenditure on social services of LTC, which may lead to underreporting of expenditure. Second, cash benefits for LTC are not accurately reported in the SHA database. The AWG agreed thus, to preserve the accounting methodology from the 2012 Ageing Report, which combines SHA and ESSPROS databases, while effectively eliminating on a bilateral basis any issues of double-counting of expenditure, which may arise in this case (Table II.A4.1)

As a result of this accounting exercise, the reported levels of spending may deviate from those reported by international data, such as EUROSTAT or OECD. The resulting spending levels are depicted by the source of expenditure in Table II.A4.3.

27 countries based their questionnaires on SHA data, while 2 countries used ESSPROS (UK, IE). 22 country-specific age-cost profiles were agreed upon for usage. This is a considerable increase compared to 2012, where also BG, CZ, EE, FR and PT did not report age-cost profiles. In addition, 10 countries provided information regarding the budgetary effects of policy reforms on public long-term care spending.

As Table II.A4.2 shows, only a few countries have provided the full data necessary to run the projection exercise. Missing data has been replaced in a number of ways. In particular:

1.   when the number of users of institutional and home care and the number of cash beneficiaries were not available by age and sex group but only in total, they have been computed by age and sex on the basis of the share of dependents (EU-SILC dependency rates) by respective age and sex group;

Table II.A4.1:   **Combinations of data sources for estimating long-term care expenditure**

Preferred solution: SHA, when data is available (CZ, DE, DK, EE, ES, FR, CY, LV, LT, LU, MT, PL, RO, SI, SK, FI, SE)

HC	LTC – "medical" component	LTC – "social" component	LTC – institutional care	LTC – home care	LTC – cash benefits
SHA: HC.1-HC.2 + HC.4-HC.9 + HC.R.1	SHA: HC.3	SHA: HC.R.6	SHA: HC.3.1 + HC.3.2 + HC.R.6 divided according to the split in benefits in kind in ESSPROS data	SHA: HC.3.3 + HC.R.6 divided according to the split in benefits in kind in ESSPROS data	ESSPROS: cash benefits from disability and old-age functions (see Table 15)

Alternative 1: When data on HC.R.6 - "social" component of LTC is not available in SHA (AT, BE, BG, EL, HR, HU, NO)

		LTC – "social" component			
		ESSPROS: benefits in kind from sickness, disability and old-age functions (see Table 14)			

Alternative 2: When SHA lacks data on institutional/home care, i.e. on sub-categories of HC.3 (for NL and PT)

			LTC – institutional care	LTC – home care	
			SHA health providers classification: HP.1, HP.2 and HP.3, except for HP.3.6	SHA health providers classification: HP.3.6 and HP.7.2.	

Alternative 3: When SHA data is not available (IE, UK)

HC	LTC – "medical" component AND "social" component	LTC – institutional care	LTC – home care	
ESSPROS: benefits in kind (in-patient + out-patient) and cash benefits in sickness function + other benefits in kind in the family function + exp. on rehabilitation in social exclusion function	Estimated on the basis of ESSPROS data: benefits in kind from sickness, disability and old-age functions + cash benefits in disability and old-age functions (see Table 14 and Table 15)	Estimated on the basis of ESSPROS data (see Table 19)	Estimated on the basis of ESSPROS data (see Table 19)	

Source: European Commission, EPC.

2.   when a country provided the total number of users of home care by age and sex but only the total number of users of institutional care, the allocation of institutional care users to each age and sex group was done on the basis of the distribution of home care users;

3.   missing LTC age-gender specific cost profiles have been replaced by the simple average of individual countries' LTC age-gender specific expenditure profiles expressed as % of GDP per capita and as calculated for either EU15 or NMS aggregates; the averages have been calculated using all available data;

Table II.A4.2: Availability of input data for long-term care expenditure projections

Country	Source in-kind expenditure data (IE, UK only ESSPROS)	Quantified reforms (Quantified reforms for 10 countries)	Detailed Expenditure by type of care — LTC services ("in-kind")	Detailed Expenditure by type of care — LTC services in institutions (HC.3.1 + HC.3.2)	Detailed Expenditure by type of care — LTC services at home (HC.3.3)	Detailed Expenditure by type of care — LTC-related cash benefits	Detailed numbers of recipients by type of care — LTC services ("in-kind")	Detailed numbers of recipients by type of care — In institutions	Detailed numbers of recipients by type of care — At home	Detailed numbers of recipients by type of care — Cash benefits	AR 2015 Age cost profiles — Ageing Report 2015 (22 country specific profiles)	AR 2012 Age cost profiles — Ageing Report 2012 (17 country specific profiles)
Austria	SHA					X				X	Imputed	Imputed
Belgium	SHA	X	X	X	X			X	X		X	X
Bulgaria	SHA			X	X	X		X	X		X	Imputed
Croatia	SHA							X	X	X	Imputed	NA
Cyprus	SHA	X									Imputed	Imputed
Czech Republic	SHA	X	X	X	X	X				X	X	X
Denmark	SHA		X					X			X	X
Estonia	SHA	X	X					X	X	X	X	Imputed
Finland	SHA		X	X	X	X			X	X	X	X
France	SHA			X	X	X			X	X	X	Imputed
Germany	SHA		X	X	X	X			X	X	X	X
Greece	SHA							X			Imputed	Imputed
Hungary	SHA		X					X	X	X	X	X
Ireland	ESSPROS		X					X			Imputed	Imputed
Italy	SHA	X	X	X	X	X			X	X	X	X
Latvia	SHA		X	X	X	X			X	X	X	X
Lithuania	SHA		X	X	X	X			X	X	X	X
Luxembourg	SHA			X	X	X			X	X	X	X
Malta	SHA	X	X	X	X	X			X	X	X	X
Netherlands	SHA	X	X						X	X		X	X
Norway	SHA		X	X	X				X	X		X	X
Poland	SHA	X	X	X	X				X	X		X	X
Portugal	SHA	X	X					X	X	X		X	Imputed
Romania	SHA										X	Imputed	Imputed
Slovak Republic	SHA	X	X	X	X				X	X	X	Imputed	Imputed
Slovenia	SHA	X	X	X	X				X	X	X	X	X
Spain	SHA		X	X	X	X			X	X	X	X	X
Sweden	SHA		X			X			X	X	X	X	X
United Kingdom	ESSPROS		X			X			X	X	X	X	X

Source: European Commission, EPC

Table II.A4.3: **Public expenditure on LTC on the basis of the SHA joint questionnaire with proxy for HC.R.6 from ESSPROS and cash benefits from ESSPROS as a % of GDP, most recent SHA data**

| | SHA joint questionnaire categories | | | ESSPROS cash benefits related to LTC as a % of GDP | | | | | | Public expenditure on LTC as a % of GDP, with cash benefits |
| | | | | Disability function | | | | Old age function | Total cash benefits related to LTC as a % of GDP = Proxy for LTC expenditure in HC.R.7 | |
	HC.3	HC.R.6, including proxies from ESSPROS	Sum = public expenditure on LTC in kind as a % of GDP	Periodic care allowance	Periodic economic integration of handicapped	Lump sum care allowance	Lump sum economic integration of handicapped	Periodic care allowance		
BE	2.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	**2.0**
BG	0.0	0.3	0.3	0.1	0.0	0.0	0.1	0.0	0.1	**0.4**
CZ	0.3	0.0	0.3	0.1	0.0	0.0	0.0	0.4	0.5	**0.8**
DK	2.4	0.0	2.4	0.0	0.1	0.0	0.0	0.0	0.1	**2.5**
DE	1.0	0.0	1.0	0.0	0.4	0.0	0.0	0.0	0.4	**1.4**
EE	0.2	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.3	**0.5**
IE	:	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	**0.7**
EL	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	**0.4**
ES	0.6	0.1	0.7	0.1	0.1	0.0	0.0	0.2	0.4	**1.1**
FR	1.2	0.5	1.8	0.0	0.2	0.0	0.0	0.0	0.2	**2.0**
HR	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	**0.4**
IT	0.8	0.2	1.0	0.8	0.0	0.0	0.0	0.0	0.8	**1.8**
CY	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.2	**0.3**
LV	0.2	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.1	**0.6**
LT	0.5	0.4	0.9	0.1	0.0	0.0	0.0	0.4	0.5	**1.4**
LU	1.3	0.1	1.4	0.0	0.1	0.0	0.0	0.0	0.1	**1.5**
HU	0.2	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	**0.7**
MT	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.2	**1.0**
NL	2.9	1.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	**4.1**
AT	0.5	0.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	**1.4**
PL	0.4	0.0	0.4	0.1	0.0	0.0	0.0	0.2	0.3	**0.7**
PT	0.2	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	**0.5**
RO	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	**0.7**
SI	0.9	0.1	1.0	0.1	0.4	0.0	0.0	0.1	0.5	**1.5**
SK	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
FI	0.6	1.5	2.1	0.3	0.1	0.0	0.0	0.0	0.3	**2.4**
SE	0.7	3.0	3.7	0.1	0.0	0.0	0.0	0.0	0.1	**3.8**
UK	:	1.1	1.1	0.1	0.0	0.0	0.0	0.0	0.1	**1.2**
NO	3.1	0.9	3.9	0.1	1.6	0.0	0.0	0.0	1.7	**5.7**

Source: European Commission, EPC.

4. missing LTC age-gender specific number of recipients of either home, institutional care or cash benefits have been replaced by corresponding simple average of individual countries' LTC age-gender specific number of recipients expressed as % of disabled for either EU15 or NMS aggregates; the averages have been calculated using all available data;

5. spending in home and institutional care has been proxied by the average share of those two items in total LTC spending.

The average LTC age-gender specific expenditure profile (as calculated in point 3 just above) was also used when a country: 1) provided aggregate expenditure but 2) no information on recipients of institutional and home care, 3) no information on age-gender expenditure profile per user and 4) only age-gender specific expenditure per capita (total public expenditure on long-term care for each age-gender cohort divided by the number of population in a given age-gender cohort). Using per capita rather than per user creates a pattern of age-gender profiles which is not coherent with the pattern of age-gender profiles of the countries providing data per user. Indeed, the per capita profiles show a strongly increasing (exponential) shape. The methodology for running these

projections required expenditure per user (also called beneficiary or recipient).

Moreover, the age-gender expenditure profiles were adjusted to the total public expenditure provided according to SHA/ESSPROS i.e upward or downward adjustment without modifying the age specific distribution. This is the same procedure as that followed in the case of health care projections.

Graphs II.A4.1 and II.A4.2 display the age-related expenditure profiles (as % of GDP per beneficiary) which have been used in the projection of long-term care expenditure, also in comparison to the 2012 Ageing Report.

Graph II.A4.1: **Expenditure profiles of long-term care services by age and gender in the EU15, spending per recipient as % of GDP per capita and comparing 2015 and 2012 Ageing Reports**
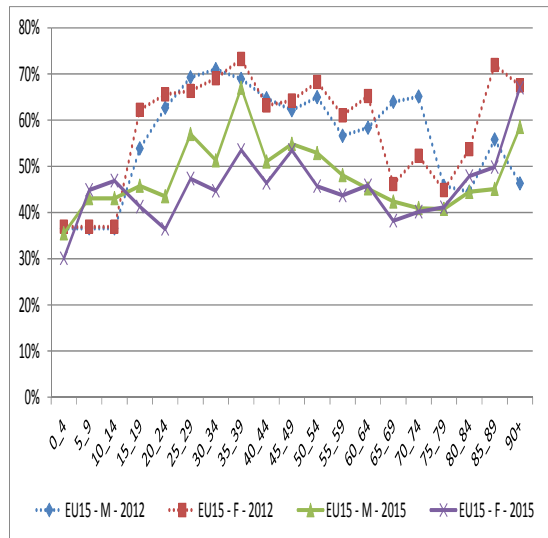
Source: European Commission, EPC.
Notes: F= Females; M=Males;
EU15: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom.

The 2015 "age-related expenditure profiles" show that expenditure (spending per user as % of GDP per capita) is rather flat for LTC recipients, which signals that the LTC costs related to severe disability are relatively independent of age.

Graph II.A4.2: **Expenditure profiles of long-term care recipients in the New Member States, spending per recipient as % of GDP per capita and comparing 2015 and 2012 Ageing Reports**
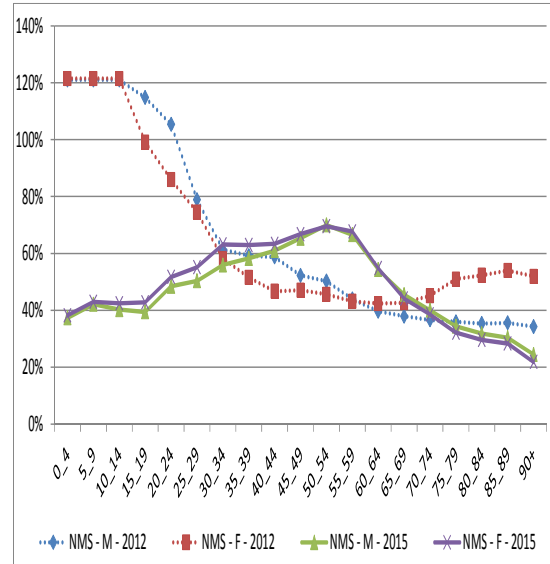
Source: European Commission, EPC.
Notes: F= Females; M=Males;
NMS = New Member States: Bulgaria, Czech Republic, Estonia, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia.

Partially due to lower initial spending levels on LTC in the current report, age cost profiles in the EU15 are below those estimated in the 2012 Ageing Report. Profiles have also changed in the remaining countries, although here also driven by availability of profiles for more countries than in the previous report. Country specific profiles are shown in graphs II.A4.3, which illustrates the variation mostly in spending levels per age category between countries.

Dependency rates

As defined in EU-SILC, dependency does increase by age (and, on average, is more prevalent among women than among men). Table II.A4.5 shows the dependency rates per age group, for each Member States and Norway.

Table II.A4.4:   **Coverage rates in the base case scenario**

	Coverage Home care		Coverage Institutional Care		Coverage Cash benefits	
	2013	2060	2013	2060	2013	2060
BE	84%	93%	17%	23%	0%	0%
BG	38%	39%	5%	7%	0%	0%
CZ	11%	18%	41%	44%	39%	57%
DK	23%	33%	10%	17%	29%	42%
DE	5%	6%	10%	16%	19%	25%
EE	6%	9%	13%	23%	13%	18%
IE	30%	41%	13%	21%	0%	0%
EL	1%	2%	1%	1%	33%	42%
ES	28%	52%	13%	19%	20%	33%
FR	19%	22%	15%	18%	7%	5%
HR	6%	6%	6%	6%	39%	39%
IT	17%	20%	6%	8%	40%	50%
CY	5%	7%	5%	6%	12%	15%
LV	6%	6%	7%	7%	6%	6%
LT	27%	45%	24%	27%	42%	59%
LU	28%	33%	14%	23%	6%	7%
HU	8%	11%	12%	17%	0%	0%
MT	54%	73%	8%	12%	22%	12%
NL	44%	56%	31%	46%	0%	0%
AT	21%	27%	10%	14%	59%	81%
PL	5%	7%	3%	5%	62%	75%
PT	2%	2%	3%	3%	30%	41%
RO	13%	18%	12%	15%	30%	36%
SI	17%	23%	9%	15%	20%	35%
SK	12%	17%	9%	11%	33%	33%
FI	37%	50%	12%	18%	72%	81%
SE	33%	41%	14%	19%	36%	45%
UK	19%	21%	4%	5%	28%	37%
NO	61%	72%	14%	22%	36%	45%
EU28	19%	26%	11%	15%	25%	32%
EU15	20%	27%	11%	15%	23%	30%
NMS	10%	14%	12%	15%	38%	48%

Source: European Commission, EPC.

The age-specific dependency rates vary markedly across EU Member states (and Norway). In some countries they are three times higher than in others. Given the limited comparability of the data concerning self-perceived disability, the dependency rates in Table II.A4.5 cannot fully represent the real country-specific health status. As already mentioned, they may diverge noticeably from other national statistics.

Coverage rates

Bearing this in mind, the calculated coverage rates, for both types of formal LTC services are presented for each country in Table II.A4.4 and in Graph II.A4.4. They result from the comparison between the number of "dependents", such as defined by EU-SILC, and the number of recipients of LTC services as provided by the Member States (or, when missing, as measured by the correspondent EU13 or EU15 average). Of course, the approximation which results from using EU-SILC survey has consequences for the construction of coverage rates as well, which may be considerably under- or overestimated.

In nearly all countries, overall coverage rates are projected to increase between 2013 and 2060, even in the "base case scenario". This reflects the fact that the ageing of the population shifts the composition of the dependent population towards higher ages, where coverage rates are higher.

Graph II.A4.3: **Country-specific long-term care expenditure profiles by type of care, age and gender, as % of GDP per capita.**
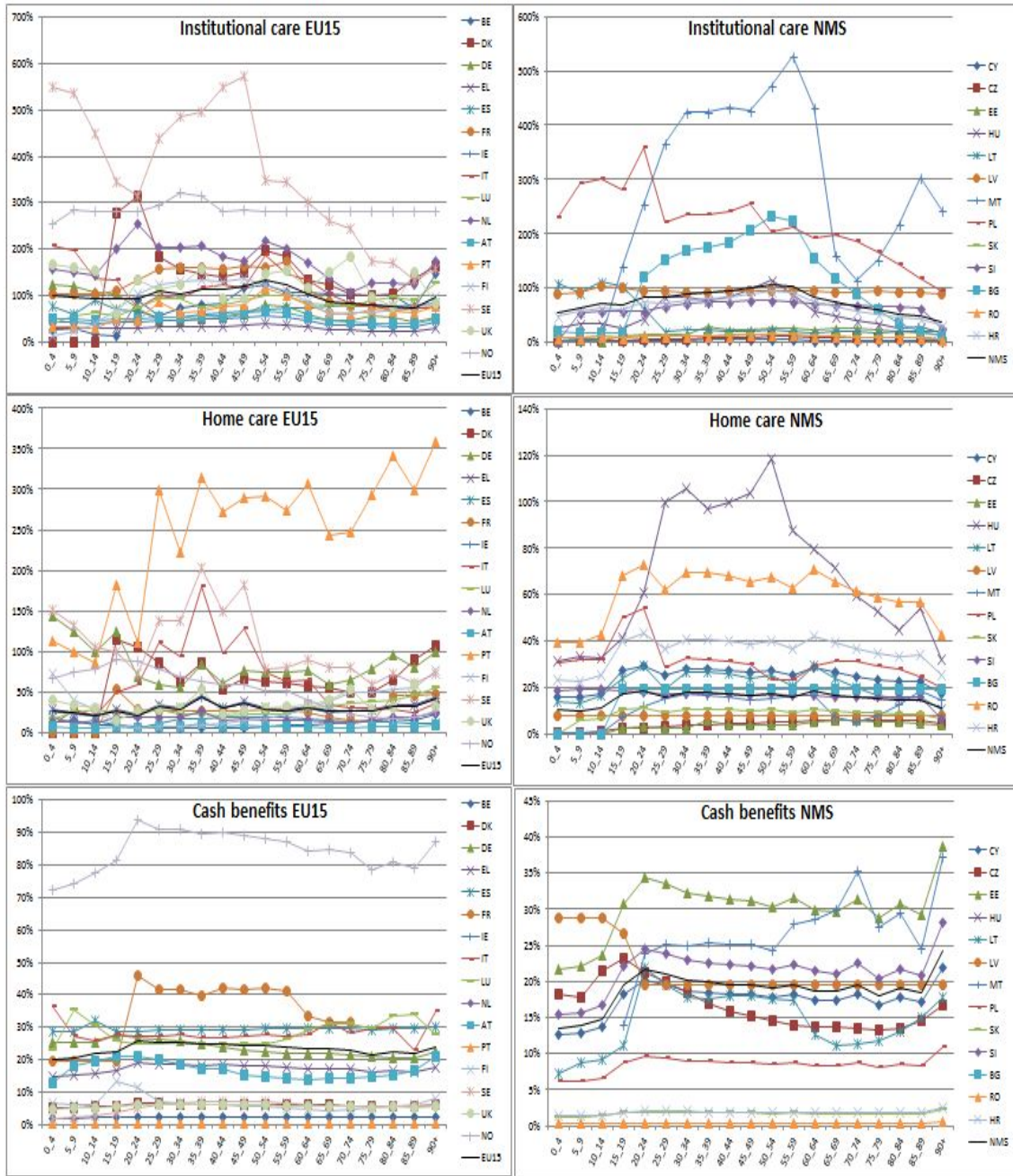
Source: European Commission, EPC.
Notes:
EU15: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom.
NMS = New Member States: Bulgaria, Czech Republic, Estonia, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia.

Graph II.A4.4: **Age-specific long-term care coverage rates (in-kind and cash benefits) by age groups in % of disabled**
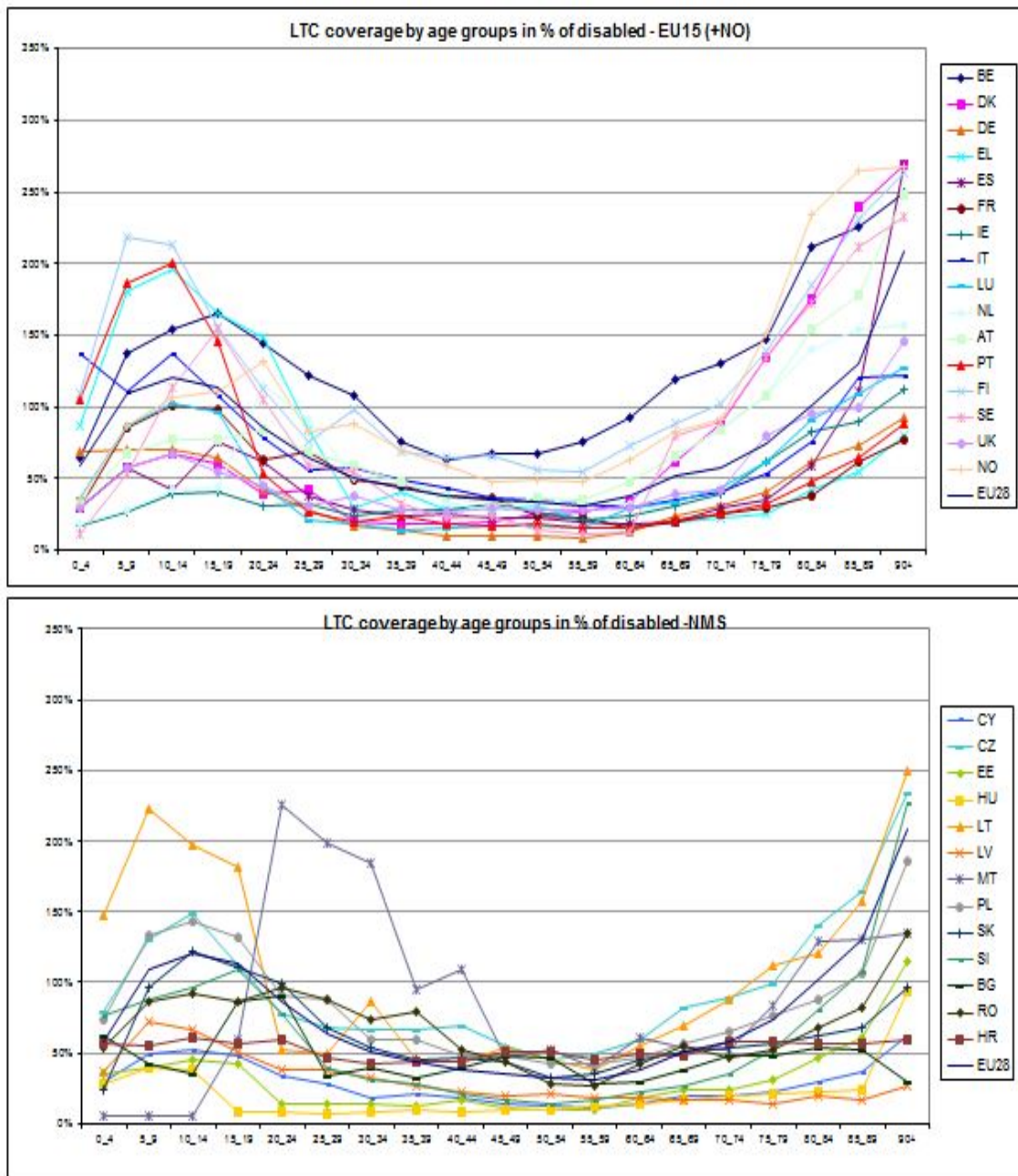
Source: European Commission, EPC.

Table II.A4.5:   **Dependency rates, based on EU-SILC**

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
BE	1.1	1.8	2.2	2.9	4.3	6.1	6.9	8.6	9.7	9.7	10.3	12.9	19.0	21.0	30.6	BE
BG	0.4	0.5	1.4	1.2	1.5	1.4	1.3	1.8	3.9	5.8	7.4	8.5	13.0	16.8	25.3	BG
CZ	1.0	1.5	1.9	2.0	2.1	2.2	3.6	6.1	7.4	7.8	7.4	10.9	17.1	22.7	34.9	CZ
DK	2.5	3.5	3.2	7.3	8.0	9.2	9.9	9.2	11.1	10.0	8.5	8.9	10.1	13.5	13.6	DK
DE	1.1	1.5	2.0	3.3	4.2	6.3	7.7	10.5	16.2	16.6	13.1	16.1	22.2	29.4	43.0	DE
EE	1.5	1.8	2.1	2.1	2.7	2.7	5.2	7.8	11.0	9.2	13.9	17.8	25.5	37.2	48.7	EE
IE	1.3	2.4	2.1	3.1	2.8	3.1	3.0	4.7	7.4	7.5	9.1	10.8	12.7	16.8	27.5	IE
GR	0.6	0.5	0.8	2.3	1.9	3.0	3.7	4.0	7.3	10.3	14.8	19.5	31.0	35.0	47.7	GR
ES	0.8	0.9	1.3	1.5	2.1	2.4	3.1	3.7	5.2	6.7	7.8	10.0	14.6	21.8	31.5	ES
FR	2.0	1.6	2.0	2.8	3.7	4.8	5.8	8.8	11.1	10.2	11.0	17.5	22.6	33.2	42.6	FR
HR	0.8	1.2	2.0	1.6	2.8	3.9	3.8	6.1	6.6	8.4	12.3	15.3	18.2	25.5	30.4	HR
IT	0.9	1.4	1.7	2.1	2.5	3.3	4.2	4.9	6.5	8.5	11.4	15.5	22.7	32.0	41.2	IT
CY	1.3	1.7	1.8	2.7	2.8	3.7	5.1	7.5	11.2	14.5	14.8	20.5	29.4	38.2	47.5	CY
LV	1.0	1.1	1.4	1.9	2.5	3.3	3.7	5.0	7.5	9.7	13.0	17.4	23.7	30.1	38.1	LV
LT	0.6	2.2	2.3	1.3	3.1	3.4	2.9	5.0	8.4	11.4	13.8	15.2	19.4	34.0	46.1	LT
LU	0.9	1.6	2.2	2.4	3.9	4.3	4.8	6.3	10.0	7.3	9.8	12.3	16.7	18.5	23.0	LU
HU	1.1	1.3	1.6	1.9	2.3	3.8	4.8	8.2	9.4	11.6	13.7	18.0	24.9	32.6	41.7	HU
MT	0.6	0.5	0.7	0.7	1.7	1.2	2.5	2.7	4.4	3.1	4.7	9.4	14.9	21.1	26.6	MT
NL	1.2	0.9	1.5	3.7	3.9	5.1	6.4	7.5	9.2	9.3	7.1	8.7	12.6	15.7	19.4	NL
AT	1.8	1.7	2.1	2.6	3.5	5.1	7.8	9.2	12.8	12.2	13.4	16.4	24.5	32.7	47.9	AT
PL	1.3	1.7	1.6	2.3	2.6	3.8	4.2	6.5	8.5	11.0	14.0	17.8	22.9	31.3	40.2	PL
PT	0.7	1.3	2.4	3.5	3.1	4.6	6.1	7.1	10.4	12.7	15.5	18.5	26.4	35.5	44.2	PT
RO	1.5	1.2	1.2	1.4	1.4	2.7	3.6	7.7	10.6	9.6	10.9	19.8	27.7	36.8	46.8	RO
SI	3.3	3.6	4.0	4.3	4.9	7.7	10.5	13.6	16.7	15.4	20.7	23.8	29.8	34.2	39.6	SI
SK	1.8	1.8	2.3	2.7	3.8	4.4	5.2	9.8	13.6	15.8	20.6	27.8	37.4	50.7	65.1	SK
FI	2.0	2.2	3.0	2.4	3.9	4.7	5.8	8.0	10.6	9.5	10.4	13.8	18.3	25.6	34.5	FI
SE	1.7	2.0	3.0	2.7	4.3	5.7	5.7	8.5	9.6	8.8	6.6	9.3	10.8	15.4	19.5	SE
UK	2.5	2.7	3.0	3.7	4.6	7.2	7.7	9.8	12.2	12.9	15.3	17.3	21.5	24.7	33.1	UK
NO	2.3	1.8	2.8	2.7	3.7	4.9	7.0	7.4	8.6	7.6	8.2	12.0	12.7	13.5	18.1	NO

Source: European Commission, EPC.

ANNEX 5

Summary of the methodology used to project LTC expenditure

Graph II.A5.1 provides an overview of the model structure. The square boxes indicate data that need to be entered into the model to make projections for each year, and the round boxes indicate calculations that are produced within the model for each year.

In step 1, based on the population projection (by age and gender) a projection is made of the dependent population, , which is assumed to need some form of LTC services, and the non-dependent population which is assumed not to be in need of LTC services. This is made by extrapolating age and gender-specific dependency ratios of a base year (estimated using existing indicators of disability from comparable sources) to the baseline population projection. More specifically, it refers to the concept of ADL-dependency which refers to difficulties in performing at least one Activity of Daily Living (ADL) (Katz et al., 1963).

Step 2 is to split, by age and gender, the dependent elderly population into three groups depending on the type of care they receive, namely (i) informal care, which is assumed to have no impact on public spending, (ii) formal care at home and (iii) formal care in institutions (both of which impact on public spending but their unit costs may differ). The model implicitly assumes that all those receiving home care or institutional care have difficulties with one or more ADLs, and that all persons deemed ADL-dependent either receive informal care, home care or institutional care. The split by type of care received is made by calculating the "probability of receiving different types of LTC by age and gender". This is calculated for a base year using data on the numbers of people with dependency (projected in step 1), and the numbers of people receiving formal care at home and in institutions (provided by Member States). It is assumed that the difference between the total number of dependent people and the total number of people receiving formal care (at home or in institutions) is the number of people who rely exclusively on informal care.

Step 3 involves the calculation of public spending for the two types of formal LTC services, by multiplying the number of people receiving formal care (at home and in institutions) by the average age-specific public expenditure (respectively at home and in institutions) per year and per user. Average expenditure is calculated for a base year using data on total public expenditure in home care and institutional care and the numbers of people receiving formal care at home and in LTC institutions (provided by Member States). It is implicitly assumed that current expenditure in services divided by the number of users equals the long-run unit costs of services.

Step 4: by adding up the expenditure on formal care at home and in institutions is summed and total public expenditure on LTC services ("in-kind benefits") is obtained. Public expenditure on cash benefits for people with ADL-dependency is then added to the expenditure on services, in order to obtain total public expenditure on LTC. Note that cash benefits are assumed to grow in line with the numbers of people with dependency.

Overall, given the availability of a numerical measure of disability, the projection methodology described above is more precise than that used for health care expenditure where there is no direct indicator of health status and the age-related expenditure profile is used as a proxy. However, an important caveat to note is that while dependency rates are an indicator of the need for care, those needs may not necessarily translate into actual public expenditure, as most LTC is still provided by unpaid informal carers. Expenditure profiles contain information about the propensity to receive paid formal care, which depends on a number of factors other than dependency that affect demand for paid care such as household type, availability of informal carers, income or housing situation. ([139]) Most of these factors, in turn, are also correlated with age.

The advantage of the methodology described above is that it allows one to examine different scenarios regarding the evolution of dependency rates, unit costs and policy settings. Table II.A5.1 provides a snap-shot of the scenarios.

([139]) Supply factors surely also play a role: a lack of adequate formal care provision will make that children and spouses provide informal care.

Graph II.A5.1: **Long-term care model structure**
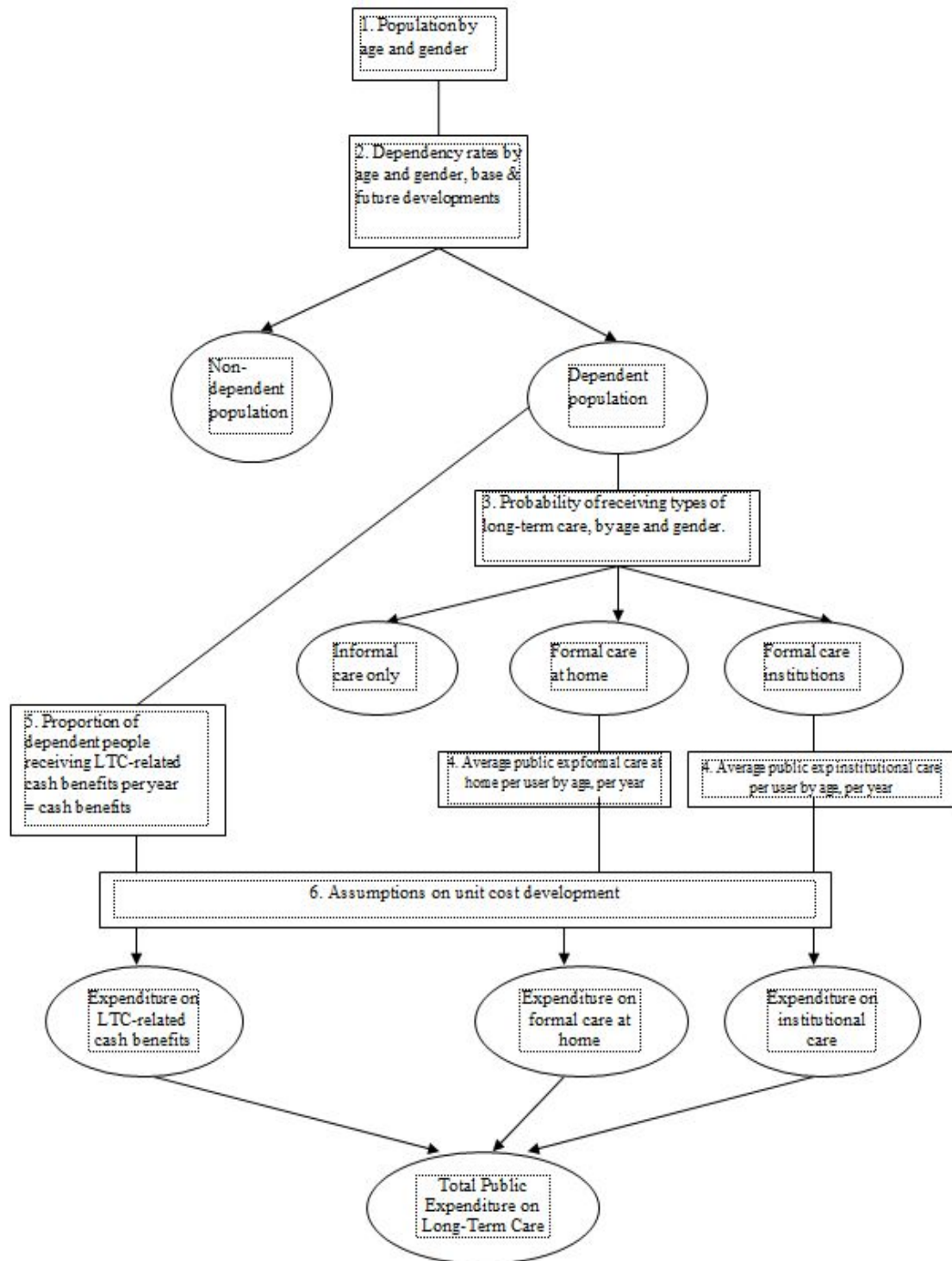
Table II.A5.1: **Overview of scenario assumptions to project long-term care expenditure**

	Demographic scenario	Base case scenario	High life expectancy scenario	Constant disability scenario	Shift to formal care scenario	Coverage convergence scenario
	I	II	III	IV	V	VI
Population projection	EUROPOP 2013	EUROPOP2013	Alternative higher life expectancy scenario	EUROPOP2013	EUROPOP2013	EUROPOP2013
Dependency status	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates change in line with changes in age-specific life expectancy	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates held constant over projection period
Age-related expenditure profiles	2012 cost profiles	2012 cost profiles	2012 cost profiles	2012 cost profiles	2012 cost profiles	2012 cost profiles
Policy setting / Care mix	Probability of receiving each type of care held constant at 2013 level	Probability of receiving each type of care held constant at 2013 level	Probability of receiving each type of care held constant at 2013 level	Probability of receiving each type of care held constant at 2013 level	Gradual increase (1% per year during 10 years) of the share of the disabled population receiving formal care (at home or in an institution).	Probability of receiving any type of formal care (in-kind or cash) converging until 2060 upwards to the EU28 average.
Unit cost development	GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita

	Cost convergence scenario	Cost and coverage convergence scenario	AWG reference scenario	AWG risk scenario	AWG TFP risk scenario*
	VII	VIII	IX	X	XI
Population projection	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013	EUROPOP2013
Dependency status	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates held constant over projection period	2009-2013 average disability rates change by 50% of increase in life expectancy	2009-2013 average disability rates change by 50% of increase in life expectancy	2009-2013 average disability rates change by 50% of increase in life expectancy
Age-related expenditure profiles	Cost profiles per Member State converge upwards to the EU28 average by 2060	Cost profiles per Member State converge upwards to the EU28 average by 2060	2012 cost profiles	Cost profiles per Member State converge upwards to the EU28 average by 2060	2012 cost profiles
Policy setting / Care mix	Probability of receiving each type of care held constant at 2013 level	Probability of receiving any type of formal care (in-kind or cash) converging until 2060 upwards to the EU28 average.	Probability of receiving each type of care held constant at 2013 level	Probability of receiving any type of formal care (in-kind or cash) converging until 2060 upwards to the EU28 average.	Probability of receiving each type of care held constant at 2013 level
Unit cost development	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita	*In-kind*: GDP per hours worked; *cash benefits*: GDP per capita;

Source: European Commission, EPC.
Note: * In the AWG reference scenario country-specific total factor productivity (TFP) growth rates converge to 1%, whereas in this TFP scenario, growth rates would converge to 0.8%.

ANNEX 6
Education statistics

A6.1. METHODOLOGY

Given the availability of data for enrolment rates and education expenditure, average data for the period 2010-2011 is used as the base period for the projections. [140] Expenditure data are presented in terms of GDP ratios, using ESA 2010 GDP data in the denominator. [141]

Besides requiring the definition of a base period, the methodology used to project education expenditure requires calculating indexes for students, education staff, and employment, together with participation rate data by single age.

Total expenditure on education is broken down into four components: i) expenditure on staff compensation (i.e. gross wages and salaries of teaching and non-teaching staff); ii) other current expenditure; iii) capital expenditure; and iv) transfers (e.g. scholarships and public subsidies to private education institutions). [142]

The objective is to project the total expenditure-to-GDP ratio. The ISCED levels considered are: ISCED 1, ISCED 2, ISCED 3&4, and ISCED 5&6. [143]

$$\frac{\sum_i EDU_t^i}{GDP_t} = \frac{EDU_t^{1\_6}}{GDP_t} = \frac{\sum_i \left[W_t^i + O_t^i + K_t^i + R_t^i\right]}{GDP_t}$$

II.A6.2

Where EDU_t^i is expenditure on education in ISCED level i and year t; W is expenditure on staff compensation; O is other current expenditure; K is capital expenditure; R is transfers; $i \in \{1, 2, 3\&4, 5\&6\}$; and 1_6 means Isced levels 1 to 6.

The main assumption of the methodology is that per-capita costs growth in line with labour productivity. Specifically, average compensation per member of the staff ($\frac{W_t^i}{T_t^i}$), and the other three expenditure variables in terms of their student ratios ($\frac{O_t^i}{S_t^i}, \frac{K_t^i}{S_t^i}, \frac{R_t^i}{S_t^i}$) grow in line with labour productivity, where T and S are the numbers of teaching workers and of students, respectively.

Assuming that per-capita variables grow in line with labour productivity is sufficient to derive the following compact general formula for the expenditure on education-to-GDP ratio:

$$\frac{\sum_i EDU_t^i}{GDP_t} = \sum_i \left[\frac{W_0^i}{GDP_0} * \overline{IT_t} + \frac{O_0^i + K_0^i + R_0^i}{GDP_0} * \overline{IS_t}\right] * \frac{IP_t}{IG_t} + CE_t$$

$$= \left[\frac{W_0^{1\_6}}{GDP_0} * \overline{IT_t} + \frac{O_0^{1\_6} + K_0^{1\_6} + R_0^{1\_6}}{GDP_0} * \overline{IS_t}\right] * \frac{IP_t}{IG_t}$$

II.A6.3

Where IT_t^i, IS_t^i, IP_t, and IG_t are indexes of respectively, teaching staff, students, labour productivity, and GDP. [144] A bar over an index represents one calculated over all ISCED levels considered (i.e. 1 to 6). [145] CE_t is the composition effect, which is usually a small number compared with the total expenditure-to-GDP ratio. [146]

Equation II.A6.3 expresses the expenditure on education-to-GDP ratio as a function of base period ratios, and indexes for teaching staff, students, labour productivity and GDP.

In the baseline scenario, which assumes a constant ratio of teaching staff to students (i.e. $\overline{IT_t} = \overline{IS_t}$), equation II.A6.3 can be further simplified to:

$$\frac{\sum_i EDU_t^i}{GDP_t} = \frac{\sum_i EDU_0^i}{GDP_0} * \frac{\overline{IS}_t * IP_t}{IG_t} + CB_t =$$

$$\frac{EDU_0^{A,B}}{GDP_0} * \frac{IS_t * IP_t}{IG_t} \qquad \text{II.A6.4}$$

Equivalently, equation II.A6.4 can also be written as:

$$\frac{\sum_i EDU_t^i}{GDP_t} = \frac{\sum_i EDU_0^i}{GDP_0} * \frac{\overline{IS}_t}{IE_t} + CB_t =$$

$$\frac{EDU_0^{A,B}}{GDP_0} * \frac{\overline{IS}_t}{IE_t} \qquad \text{II.A6.5}$$

where IE_t is the employment index.

In the baseline scenario, equation II.A6.4 allows the following straightforward interpretation: projections for the expenditure-to-GDP ratio are obtained by "inflating" base period values by a students and labour productivity indexes and by "deflating" them by a GDP index. There are two sources for the increase in expenditure (ratios): the (average) number of students and per-capita costs that are assumed to grow in line with labour productivity, conversely GDP growth "deflates" expenditure ratios.

Equations II.A6.3 to II.A6.5 provide an exact expression for decomposing variations in the expenditure-to-GDP ratio, allowing the comparison of results between different scenarios and/or exercises according to changes in the driving factors.

According to equation II.A6.3, a major driver of the expenditure-to-GDP ratio is the (average) number of students. Using UOE data, the number of students is projected for each education level. Calculations take into consideration various elements, such as enrolment rates in the base period (average values for the years 2010 and 2011), demographic assumptions, and labour market projections for participation rates. A crucial point of the methodology is the (inverse) relation between changes in participation rates and enrolment rates (only for full-time students), meaning for example that newcomers to the labour market were, to a large extent, previously engaged in education activities, and conversely reductions

in participation rates will increase the number of students depending on age specific propensities to enrol in education. The other main driving forces of the projection are the wide macroeconomic assumptions for labour productivity, and employment, and the assumption on the students-to-teaching staff ratio.

The formula used to calculate the number of students differs according to the level of education. For compulsory education levels (which by convention are defined as the primary and lower secondary education levels, respectively, ISCED 1 and ISCED 2), [147] enrolment rates are projected to remain at the average values of the base period 2010-2011. For individuals younger than 15 years old these values are close to 100%. [148]

For non-compulsory education (which by convention covers upper secondary and tertiary education levels, respectively, ISCED 3&4, and ISCED 5&6), [149] changes in enrolment rates are assumed to be inversely related to participation rate changes according to the following formula. [150]

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[147] Basic (primary plus lower secondary) education. Level 1 and 2 of ISCED classification. Level 1 is the start of compulsory education (the first stage of basic education) with a legal age of entry usually not lower than five years old and higher than seven years old. This level covers in principle six years of full-time schooling. Level 2 is lower secondary school (or a second stage of basic education). The end of this stage is usually after nine years of schooling after the beginning of primary education and often coincides with the end of the compulsory education. It includes general education as well as pre-vocational or pre-technical education and vocational and technical education (UNESCO, 1997).

[148] Enrolment rates for lower levels of education are expected to be close but below 100% due to some attrition caused, inter alia, by health problems.

[149] Upper-secondary education. Level 3 and 4 of ISCED classification. Level 3 is upper-secondary school and the entry is typically 15 or 16 years old. It also includes vocational and technical education. Level 4 is post secondary non-tertiary education and these programmes are typically designed to prepare students to the following level (university). Tertiary education. Level 5 and 6 of ISCED classification. Level 5 covers at least two years of education and the minimal access requirements is the completion of levels 3 and 4. However a Master course that implies up to 6 years of tertiary education is included in level 5. Level 6 includes tertiary programmes which lead to the award of an advanced research qualification (UNESCO, 1997).

[150] For individuals with 15 years of age or older.

$$e_{i,t} - e_{i,b} = -\frac{\overline{\kappa}_{i,b}}{1-\overline{\alpha}_{i,b}} * \left(p_{i,t} - p_{i,b}\right)$$
II.A6.6

where

$$0 \leq \kappa_{i,b}, \alpha_{i,b} \leq 1$$

Where i, t, and b refer respectively to age (15 years or older), the current period, and the base period; $e_{i,t}$ is the enrolment rate for total students in non-compulsory education; p_{it} the participation rate; $\overline{\kappa}_{i,b}$ is the ratio between full-time students and total inactive people; and $\overline{\alpha}_{i,b}$ the fraction of part-time students in the total number of students. [151]

A6.2. DATA

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[151] For a derivation of formula (II.A6.6) see: "The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies", European Economy, No. 8/2014, European Commission.

Table II.A6.1: **Base enrolment rates by country, age and ISCED level (average of years 2010 and 2011)**

Ages	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK
ISCED 1																													
0_2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
5	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	1.00	0.09	0.00	0.05	0.00	0.52	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.97
6	0.59	0.92	0.07	0.95	0.50	0.63	0.46	0.14	0.98	0.96	0.00	0.98	0.21	0.22	1.00	0.99	0.07	0.91	0.05	1.00	1.00	0.99	0.07	0.99	0.21	0.01	0.93	0.50	0.98
7	0.97	0.97	0.96	0.98	0.90	0.99	0.91	0.94	0.99	0.97	0.95	0.99	0.97	0.94	1.00	1.00	1.00	0.95	0.91	0.98	1.00	0.99	0.95	1.00	0.97	0.96	0.97	0.91	0.98
8	0.98	0.98	0.99	0.98	0.98	1.00	1.00	0.97	0.98	0.97	0.99	0.99	0.97	0.99	1.00	1.00	1.00	0.95	0.98	1.00	1.00	0.99	0.97	1.00	1.00	0.97	0.98	0.96	0.98
9	0.98	0.99	0.99	1.00	0.99	0.99	1.00	0.98	0.99	0.98	0.99	0.99	0.95	0.98	1.00	1.00	1.00	0.97	0.99	0.99	1.00	1.00	0.98	1.00	1.00	0.97	0.98	0.98	1.00
10	0.45	0.98	0.94	1.00	0.99	0.48	0.99	0.97	0.98	0.98	0.99	0.94	0.71	0.77	0.99	0.91	0.90	0.93	0.99	0.98	0.99	1.00	0.97	1.00	0.82	0.97	0.97	0.50	0.99
11	0.04	0.96	0.05	0.98	0.52	0.05	0.99	0.97	0.97	0.96	0.99	0.18	0.04	0.10	1.00	0.04	0.05	0.84	0.97	0.53	0.97	0.99	0.97	0.99	0.11	0.98	0.96	0.08	0.06
12	0.00	0.23	0.02	0.08	0.10	0.00	0.98	0.85	0.06	0.17	0.99	0.01	0.00	0.02	0.62	0.01	0.00	0.20	0.94	0.03	0.41	1.00	0.97	0.25	0.05	0.99	0.06	0.03	0.00
13	0.00	0.03	0.01	0.01	0.00	0.00	0.19	0.05	0.02	0.01	0.06	0.01	0.00	0.01	0.04	0.00	0.00	0.02	0.18	0.00	0.04	0.00	0.05	0.11	0.00	0.00	0.01	0.02	0.00
14	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.01	0.00
Ages	**AT**	**BE**	**BG**	**CY**	**CZ**	**DE**	**DK**	**EE**	**EL**	**ES**	**FI**	**FR**	**HR**	**HU**	**IE**	**IT**	**LT**	**LU**	**LV**	**MT**	**NL**	**NO**	**PL**	**PT**	**RO**	**SE**	**SI**	**SK**	**UK**
ISCED 2																													
10	0.54	0.00	0.06	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.03	0.29	0.21	0.00	0.09	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.49	0.00
11	0.95	0.02	0.91	0.02	0.48	0.94	0.00	0.00	0.00	0.00	0.00	0.80	0.96	0.89	0.00	0.96	0.95	0.11	0.00	0.47	0.01	0.00	0.00	0.01	0.89	0.00	0.00	0.90	0.93
12	1.00	0.75	0.93	0.92	0.90	0.99	0.02	0.14	0.92	0.82	0.01	0.97	1.00	0.98	0.38	0.99	1.00	0.79	0.05	0.95	0.58	0.00	0.01	0.75	0.95	0.00	0.93	0.96	0.99
13	1.00	0.94	0.95	0.98	1.00	0.97	0.81	0.95	0.98	0.97	0.94	0.97	0.99	0.99	0.96	0.96	1.00	0.93	0.82	0.97	0.95	1.00	0.93	0.89	0.98	0.99	0.98	0.97	0.98
14	0.49	0.33	0.49	0.92	1.00	0.96	0.99	0.99	0.99	0.96	0.99	0.94	0.72	0.73	0.98	0.13	1.00	0.85	0.96	0.99	0.98	1.00	0.97	0.94	0.88	1.00	0.93	0.92	0.09
15	0.08	0.11	0.10	0.07	0.52	0.87	0.98	0.87	0.13	0.96	0.99	0.33	0.05	0.14	0.63	0.04	1.00	0.42	0.94	0.99	0.73	0.99	0.97	0.40	0.15	0.97	0.05	0.43	0.02
16	0.01	0.05	0.04	0.01	0.08	0.54	0.57	0.12	0.06	0.34	0.10	0.04	0.00	0.05	0.07	0.01	0.90	0.17	0.23	0.58	0.39	0.00	0.10	0.24	0.09	0.07	0.01	0.07	0.11
17	0.00	0.04	0.02	0.00	0.01	0.21	0.11	0.04	0.03	0.14	0.01	0.00	0.00	0.03	0.03	0.01	0.15	0.05	0.09	0.15	0.13	0.00	0.05	0.10	0.00	0.03	0.00	0.02	0.06
18	0.00	0.03	0.01	0.00	0.01	0.08	0.01	0.02	0.01	0.07	0.00	0.00	0.00	0.01	0.03	0.01	0.05	0.02	0.05	0.04	0.05	0.00	0.02	0.04	0.00	0.02	0.00	0.01	0.03
Ages	**AT**	**BE**	**BG**	**CY**	**CZ**	**DE**	**DK**	**EE**	**EL**	**ES**	**FI**	**FR**	**HR**	**HU**	**IE**	**IT**	**LT**	**LU**	**LV**	**MT**	**NL**	**NO**	**PL**	**PT**	**RO**	**SE**	**SI**	**SK**	**UK**
ISCED 3 & 4																													
14	0.50	0.65	0.48	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.23	0.27	0.01	0.87	0.00	0.08	0.00	0.00	0.01	0.00	0.00	0.01	0.11	0.00	0.05	0.06	0.89
15	0.87	0.88	0.84	0.85	0.48	0.11	0.01	0.12	0.86	0.02	0.01	0.63	0.94	0.86	0.37	0.95	0.00	0.51	0.04	0.00	0.27	0.00	0.01	0.57	0.81	0.02	0.93	0.56	0.96
16	0.90	0.95	0.87	0.89	0.92	0.43	0.36	0.88	0.91	0.62	0.86	0.88	0.99	0.94	0.93	0.95	0.09	0.71	0.75	0.29	0.61	0.94	0.89	0.74	0.85	0.93	0.97	0.91	0.82
17	0.87	0.95	0.85	0.81	0.97	0.73	0.76	0.95	0.92	0.74	0.94	0.86	0.90	0.95	0.88	0.90	0.84	0.74	0.90	0.57	0.78	0.92	0.92	0.79	0.83	0.97	0.96	0.91	0.75
18	0.65	0.51	0.78	0.12	0.89	0.77	0.82	0.85	0.20	0.38	0.93	0.47	0.57	0.79	0.62	0.76	0.87	0.68	0.91	0.45	0.59	0.88	0.92	0.47	0.71	0.93	0.87	0.82	0.29
19	0.31	0.28	0.16	0.02	0.48	0.59	0.57	0.32	0.13	0.21	0.33	0.23	0.05	0.46	0.18	0.21	0.32	0.44	0.46	0.24	0.41	0.41	0.44	0.28	0.24	0.25	0.28	0.39	0.12
20	0.12	0.17	0.05	0.01	0.13	0.35	0.32	0.19	0.08	0.12	0.18	0.09	0.01	0.25	0.11	0.07	0.14	0.27	0.15	0.12	0.27	0.21	0.19	0.16	0.10	0.15	0.00	0.09	0.07
21	0.06	0.09	0.03	0.01	0.05	0.24	0.22	0.11	0.05	0.07	0.16	0.04	0.00	0.13	0.08	0.04	0.07	0.14	0.07	0.07	0.17	0.12	0.12	0.09	0.62	0.14	0.00	0.03	0.05
22	0.04	0.07	0.02	0.01	0.03	0.16	0.16	0.07	0.06	0.05	0.15	0.02	0.00	0.07	0.06	0.01	0.05	0.08	0.14	0.05	0.11	0.08	0.08	0.06	0.00	0.12	0.32	0.01	0.04
23	0.03	0.07	0.01	0.00	0.02	0.10	0.13	0.06	0.12	0.04	0.13	0.02	0.00	0.04	0.05	0.00	0.04	0.05	0.01	0.03	0.07	0.06	0.06	0.05	0.00	0.10	0.00	0.01	0.04
24	0.02	0.07	0.01	0.00	0.02	0.07	0.10	0.04	0.00	0.03	0.11	0.01	0.00	0.03	0.03	0.00	0.03	0.03	0.01	0.03	0.05	0.05	0.07	0.04	0.00	0.09	0.00	0.01	0.03
25	0.02	0.09	0.01	0.00	0.01	0.04	0.08	0.03	0.00	0.03	0.10	0.01	0.00	0.02	0.03	0.00	0.02	0.02	0.00	0.02	0.04	0.04	0.03	0.04	0.00	0.07	0.00	0.01	0.02
Ages	**AT**	**BE**	**BG**	**CY**	**CZ**	**DE**	**DK**	**EE**	**EL**	**ES**	**FI**	**FR**	**HR**	**HU**	**IE**	**IT**	**LT**	**LU**	**LV**	**MT**	**NL**	**NO**	**PL**	**PT**	**RO**	**SE**	**SI**	**SK**	**UK**
ISCED 5 & 6																													
17	0.01	0.01	0.00	0.02	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
18	0.07	0.36	0.03	0.22	0.01	0.05	0.00	0.07	0.46	0.31	0.01	0.30	0.13	0.09	0.32	0.03	0.07	0.00	0.02	0.15	0.23	0.00	0.01	0.27	0.12	0.02	0.06	0.03	0.27
19	0.19	0.48	0.40	0.25	0.25	0.15	0.06	0.40	0.46	0.39	0.18	0.41	0.50	0.30	0.50	0.34	0.53	0.02	0.36	0.27	0.34	0.17	0.39	0.35	0.42	0.18	0.54	0.25	0.36
20	0.27	0.50	0.43	0.30	0.42	0.24	0.18	0.44	0.45	0.41	0.30	0.43	0.46	0.38	0.48	0.37	0.61	0.07	0.46	0.30	0.40	0.30	0.50	0.37	0.43	0.24	0.59	0.37	0.37
21	0.30	0.44	0.42	0.28	0.41	0.28	0.30	0.42	0.38	0.37	0.39	0.38	0.42	0.37	0.39	0.36	0.63	0.09	0.46	0.27	0.40	0.34	0.49	0.36	0.37	0.28	0.56	0.38	0.28
22	0.29	0.35	0.39	0.22	0.37	0.27	0.36	0.37	0.37	0.33	0.42	0.31	0.37	0.34	0.26	0.32	0.55	0.10	0.42	0.20	0.38	0.33	0.46	0.30	0.35	0.30	0.52	0.35	0.19
23	0.28	0.24	0.31	0.19	0.33	0.26	0.37	0.30	0.32	0.27	0.40	0.23	0.30	0.29	0.15	0.29	0.40	0.10	0.32	0.12	0.33	0.30	0.43	0.22	0.29	0.30	0.45	0.32	0.14
24	0.26	0.16	0.22	0.15	0.27	0.24	0.36	0.23	0.27	0.21	0.37	0.16	0.17	0.21	0.11	0.24	0.31	0.07	0.23	0.08	0.26	0.26	0.28	0.17	0.23	0.28	0.35	0.22	0.11
25	0.23	0.12	0.14	0.12	0.18	0.21	0.31	0.18	0.23	0.17	0.32	0.10	0.10	0.15	0.00	0.18	0.21	0.06	0.16	0.06	0.18	0.21	0.16	0.13	0.18	0.24	0.25	0.12	0.09
26	0.19	0.09	0.10	0.10	0.12	0.18	0.26	0.14	0.20	0.13	0.26	0.07	0.06	0.11	0.00	0.13	0.16	0.05	0.12	0.05	0.14	0.17	0.10	0.11	0.14	0.20	0.16	0.09	0.08
27	0.16	0.07	0.07	0.08	0.08	0.15	0.21	0.12	0.18	0.11	0.21	0.05	0.05	0.08	0.00	0.10	0.13	0.04	0.10	0.04	0.10	0.14	0.06	0.09	0.13	0.17	0.11	0.07	0.07
28	0.14	0.06	0.06	0.06	0.07	0.12	0.17	0.10	0.13	0.09	0.18	0.04	0.04	0.07	0.00	0.07	0.11	0.04	0.08	0.03	0.08	0.11	0.04	0.08	0.11	0.14	0.08	0.05	0.06
29	0.11	0.05	0.05	0.05	0.05	0.10	0.13	0.09	1.00	0.07	0.16	0.03	0.04	0.06	0.00	0.05	0.10	0.02	0.08	0.03	0.06	0.09	0.04	0.07	0.09	0.12	0.06	0.05	0.06
30_34	0.07	0.03	0.03	0.03	0.04	0.05	0.08	0.07	0.03	0.05	0.11	0.05	0.02	0.04	0.04	0.03	0.06	0.01	0.06	0.03	0.03	0.07	0.06	0.05	0.03	0.08	0.04	0.04	0.05
35_39	0.03	0.02	0.02	0.01	0.02	0.02	0.04	0.04	0.00	0.03	0.06	0.00	0.02	0.02	0.02	0.03	0.04	0.01	0.04	0.01	0.02	0.05	0.00	0.03	0.05	0.06	0.03	0.03	0.04
40+	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01

Source: Commission services, EPC

Table II.A6.2: **Expenditure-to-GDP ratios in the base period (average 2010-2011) - breakdown by component (ESA2010(d))**

	(1)	(2)	(3)	(4)	(5)=(1)+(2)+(3)+(4)
	Staff Compensantion (W)	Other Current Expenditure (O)	Capital Expenditure (K)	Transfers (K)	Total
BE a)	4.5	0.7	0.2	0.3	5.7
BG	1.7	0.6	0.1	0.6	3.0
CZ	1.8	1.3	0.4	0.1	3.6
DK	4.4	1.4	0.4	1.1	7.2
DE	2.6	0.8	0.4	0.6	4.4
EE a)	3.3	1.0	0.4	0.2	4.9
IE	3.9	1.1	0.4	0.5	5.9
EL b) c)	2.3	0.7	0.3	0.3	3.6
ES	2.9	0.7	0.4	0.2	4.1
FR	3.4	0.9	0.4	0.2	5.0
HR a)	2.6	0.7	0.2	0.0	3.6
IT	2.6	0.8	0.2	0.3	3.8
CY	4.4	0.8	0.6	1.1	6.9
LV	2.6	0.9	0.5	0.3	4.2
LT	3.0	0.8	0.4	0.2	4.5
LU a)	2.5	0.4	0.4	0.1	3.4
HU b)	2.5	0.7	0.3	0.3	3.8
MT a)	3.5	1.7	0.5	1.0	6.7
NL	3.2	0.8	0.5	0.7	5.2
AT	3.3	1.2	0.2	0.4	5.1
PL	2.9	1.2	0.4	0.2	4.6
PT a)	3.9	0.5	0.1	0.3	4.9
RO	1.6	0.7	0.2	0.1	2.7
SI	3.2	1.0	0.4	0.5	5.1
SK	1.9	1.0	0.3	0.3	3.6
FI	3.4	1.9	0.4	0.4	6.1
SE a)	3.2	1.7	0.3	0.7	5.9
UK a)	1.0	2.5	0.4	1.4	5.2
NO d)	3.4	1.1	0.5	1.1	6.2

a) Some missing data problems

b) Some major missing data problems

c) Using COFOG for total expenditure

d) Except Norway (ESA1995)

Source: Commission services, EPC
Note: for the definition of the variables see Part II, Chapter 4.

Table II.A6.3: **Expenditure-to-GDP ratios in the base period (average 2010-2011) - breakdown by ISCED levels (ESA2010(d))**

	Isced 1	Isced 2	Isced 3&4	Isced 5&6	Isced 1&6
BE a)	1.5	0.0	2.7	1.4	5.7
BG	0.7	0.7	0.9	0.6	3.0
CZ	0.7	0.9	1.0	1.0	3.6
DK	1.9	1.1	1.7	2.4	7.2
DE	0.6	1.3	1.1	1.4	4.4
EE a)	1.3	0.8	1.5	1.2	4.9
IE	2.1	1.0	1.4	1.3	5.9
EL b) c)	0.8	0.9	0.9	1.0	3.6
ES	1.2	1.1	0.7	1.1	4.1
FR	1.2	1.3	1.3	1.3	5.0
HR a)	1.8	0.0	0.9	0.9	3.6
IT	1.1	0.7	1.2	0.8	3.8
CY	2.1	1.3	1.5	2.0	6.9
LV	1.4	0.7	1.1	1.0	4.2
LT	0.8	1.5	0.8	1.4	4.5
LU a)	1.8	0.8	0.8	0.0	3.4
HU b)	0.8	0.8	1.1	1.0	3.8
MT a)	1.3	2.1	2.0	1.3	6.7
NL	1.4	1.2	1.1	1.6	5.2
AT	1.0	1.3	1.3	1.5	5.1
PL	1.5	0.8	1.0	1.3	4.6
PT a)	1.4	1.2	1.1	1.1	4.9
RO	0.5	0.5	0.6	1.0	2.7
SI	1.6	0.8	1.2	1.5	5.1
SK	0.8	0.9	1.0	0.9	3.6
FI	1.3	1.1	1.7	2.1	6.1
SE a)	1.6	0.9	1.5	1.9	5.9
UK a)	1.7	1.3	1.2	1.0	5.2
NO d)	1.8	0.8	1.5	2.0	6.2

Source: Commission services, EPC
Note: for the legend see previous table

Table II.A6.4: **Results of the baseline scenario (public education expenditure as % of GDP; ESA2010(a) for GDP)**

	2013	2020	2030	2040	2050	2060
BE	5.8	5.7	6.0	6.0	6.0	6.1
BG	3.0	2.9	3.0	2.9	3.2	3.4
CZ	3.4	3.6	3.9	3.7	4.0	4.1
DK	7.6	7.1	6.9	7.2	7.0	6.8
DE	4.1	3.8	4.0	4.2	4.2	4.4
EE	4.4	4.6	4.8	4.4	4.8	5.1
IE	6.0	6.4	5.8	5.2	6.0	5.9
EL	4.1	3.5	3.0	2.7	2.9	3.0
ES	4.6	4.1	3.4	3.1	3.6	3.7
FR	5.0	5.0	4.9	4.9	4.9	4.8
HR	3.7	3.5	3.4	3.2	3.3	3.4
IT	3.7	3.5	3.3	3.4	3.6	3.5
CY	7.3	6.5	6.2	5.5	5.5	6.1
LV	3.8	3.8	4.0	3.8	4.1	4.5
LT	3.9	3.6	4.2	4.2	4.2	4.8
LU	3.3	3.2	3.4	3.5	3.5	3.5
HU	3.6	3.1	3.0	3.1	3.2	3.4
MT	5.9	5.3	5.6	5.5	5.5	6.0
NL	5.2	4.9	4.7	4.9	4.8	4.7
AT	4.9	4.5	4.7	4.8	4.7	4.9
PL	4.4	4.1	4.1	3.8	3.9	4.3
PT	5.2	4.7	4.0	4.0	4.3	4.2
RO	2.6	2.6	2.7	2.8	2.9	3.0
SI	5.3	5.4	5.6	5.5	5.8	6.1
SK	3.4	3.2	3.1	2.8	2.8	2.9
FI	6.1	6.1	6.3	6.3	6.3	6.4
SE	5.7	5.7	5.9	5.8	5.7	5.9
UK	5.1	5.1	5.3	5.1	5.1	5.2
NO	6.0	5.8	5.9	6.0	5.9	5.9
EA19	4.5	4.3	4.3	4.3	4.4	4.4
EU28	4.7	4.5	4.5	4.5	4.6	4.6

Source: Commission services, EPC
(a) Except Norway (ESA1995)

Table II.A6.5: **Results of the high enrolment rate scenario (public education expenditure as % of GDP; ESA2010(a) for GDP)**

	2013	2020	2030	2040	2050	2060
BE	5.8	5.9	6.3	6.5	6.5	6.5
BG	3.1	3.2	3.5	3.8	4.1	4.3
CZ	3.5	3.9	4.4	4.5	4.8	4.9
DK	7.6	7.4	7.3	7.8	7.6	7.4
DE	4.1	4.0	4.5	4.8	4.8	5.0
EE	4.4	4.8	5.2	5.1	5.5	5.8
IE	6.0	6.6	6.4	6.2	6.9	6.9
EL	4.1	3.8	3.3	3.2	3.4	3.5
ES	4.6	4.4	4.0	3.9	4.4	4.5
FR	5.1	5.2	5.4	5.6	5.6	5.5
HR	3.8	3.7	3.8	3.8	3.8	4.0
IT	3.8	3.7	3.8	4.2	4.4	4.3
CY	7.5	7.3	7.7	7.7	7.7	8.4
LV	3.8	3.9	4.2	4.2	4.5	4.9
LT	3.9	3.8	4.6	4.8	4.9	5.4
LU	3.4	3.6	4.2	4.8	4.8	4.9
HU	3.7	3.3	3.4	3.7	3.9	4.0
MT	6.0	6.0	6.9	7.3	7.4	7.9
NL	5.3	5.1	5.2	5.6	5.5	5.4
AT	4.9	4.8	5.3	5.7	5.7	5.9
PL	4.4	4.2	4.3	4.1	4.2	4.5
PT	5.3	4.9	4.5	4.7	5.0	5.0
RO	2.6	2.6	2.8	3.0	3.1	3.2
SI	5.4	5.6	6.1	6.3	6.7	6.9
SK	3.4	3.5	3.6	3.5	3.6	3.7
FI	6.1	6.2	6.4	6.4	6.4	6.5
SE	5.7	5.8	6.2	6.3	6.2	6.3
UK	5.2	5.5	6.1	6.2	6.2	6.3
NO	6.1	6.0	6.4	6.7	6.6	6.6
EA19	4.6	4.6	4.7	5.0	5.1	5.1
EU28	4.7	4.7	5.0	5.2	5.3	5.4

Source: Commission services, EPC
(a) Except Norway (ESA1995)

Table II.A6.6: **Total expenditure on education-to-GDP ratio - COFOG and UOE - (ESA2010)**

	COFOG a)		UOE b)	
	2010	2011	2010	2011
BE	6.0	6.1	5.7	5.6
BG	3.7	3.5	3.2	2.9
CZ	4.6	4.7	3.5	3.7
DK	7.9	7.6	7.4	7.0
DE	4.3	4.2	4.4	4.3
EE	6.5	6.3	5.1	4.7
IE	5.2	4.9	6.1	5.8
EL	3.9	4.1	3.5	3.7
ES	4.8	4.7	4.2	4.1
FR	6.0	5.9	5.0	4.9
HR	na	na	3.6	3.5
IT	4.3	4.0	3.9	3.7
CY	6.8	6.6	6.9	6.9
LV	6.1	5.7	4.3	4.2
LT	6.0	5.7	4.6	4.4
LU	5.2	5.0	3.5	3.3
HU	5.6	5.1	3.9	3.8
MT	5.5	5.5	6.0	7.4
NL	5.4	5.4	5.2	5.2
AT	5.6	5.4	5.1	5.0
PL	5.6	5.4	4.7	4.6
PT	6.8	6.4	5.0	4.7
RO	3.3	4.1	2.8	2.5
SI	6.5	6.5	5.1	5.1
SK	4.4	4.0	3.6	3.5
FI	6.3	6.1	6.2	6.1
SE	6.5	6.5	5.9	5.8
UK	6.5	5.9	5.4	5.1
NO	5.9	5.6	6.3	6.1

Source: Commission services, EPC
a) Classification of the function of the government
b) Unesco/Oecd/Eurostat education statistics

ANNEX 7

Unemployment benefit expenditure projections: methodology and sources

The methodology uses the AWG's chosen unemployment rate scenario (as the driving variable) and UB expenditure in the base period (an average of the two or three last available years) to extrapolate future expenditure levels. [152]

The methodology is derived from the following identity:

$$UB_t \equiv UB_t^{pb} * B_t \qquad \text{II.A7.1}$$

where total expenditure in unemployment benefits (UB_t) is broken down in average expenditure per beneficiary (UB_t^{pb}) and the number of beneficiaries (B_t).

Unemployment expenditure per beneficiary is a fraction of average wages in the economy:

$$UB_t^{pb} = RR_t * \frac{W_t}{E_t} \qquad \text{II.A7.2}$$

where RR_t is the replacement rate; W_t is the wage bill; and E_t is employment.

Substituting equation II.A7.1 into equation II.A7.2:

$$UB_t \equiv RR_t * \frac{W_t}{E_t} * \frac{E_t}{U_t} * U_t \qquad \text{II.A7.3}$$

where U_t is unemployment.

Dividing equation (II.A7.3) by GDP_t and rearranging:

$$\frac{UB_t}{GDP_t} \equiv RR_t * CR_t * WS_t * \frac{u_t}{1-u_t} \qquad \text{II.A7.4}$$

where $CR_t \equiv \frac{B_t}{U_t}$ is the coverage rate or the take-up rate of unemployment benefits; $WS_t \equiv \frac{W_t}{GDP_t}$ is the

wage share in income; and u_t is the unemployment rate. [153]

Equation (II.A7.4) shows that the ratio between UB expenditure and GDP is determined by four parameters/variables: i) the replacement rate of UB (*RR*); ii) the coverage/take-up rate of UB (*CR*); iii) the wage share in income (*WS*); and iv) the unemployment rate (*u*).

In order to generalise the formulation, let us assume that policies have been announced for the replacement and coverage rates:

$$RR_t = (1 + \eta_t) * RR_b \qquad \text{II.A7.5}$$

$$\lim_{t \to \infty} \eta_t = \bar{\eta}$$

$$CR_t = (1 + \lambda_t) * CR_b \qquad \text{II.A7.6}$$

$$\lim_{t \to \infty} \lambda_t = \bar{\lambda}$$

were *b* is a base year/period.

Policy changes are assumed to converge to steady state values.

The wage share is assumed to be constant throughout the projection horizon at the level observed in the base period/year (*b*).

$$WS_t = WS_b \qquad \text{II.A7.7}$$

Using equations (II.A7.4) to (II.A7.7), the UB-to-GDP ratio ($\frac{UB_t}{GDP_t}$) is calculated as:

$$\frac{UB_t}{GDP_t} = \frac{UB_b}{GDP_b} * (1 + \eta_t) * (1 + \lambda_t) * \frac{1 - u_b}{u_b} * \frac{u_t}{1 - u_t} \qquad \text{II.A7.8}$$

"Historical" values (i.e. base period) are taken from the ESSPROS database for the UB-to-GDP ratio ($\frac{UB_b}{GDP_b}$), comprising expenditure on periodic full and partial unemployment benefits. During the

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[152] For the sixteen MSs mentioned in footnote 3 of Part II,, Chapter 5. For the remaining countries: 2011-2012.

Using multi-annual averages can limit the impact of any given year on the final results, which is desirable in periods of strong economic fluctuations and possible statistical errors. Although a too long period should be avoided in order to reflect recent policy changes and limit discontinuities between actual data and projections.

[153] Given that $E = LF * (1 - u)$ and $U = LF * u$ then $\frac{U}{E} = \frac{u}{1-u}$; where uppercase variables *E*, *U*, *LF* are respectively, employment, unemployment and the labour force; and lowercase *u* the unemployment rate.

projection period, the trajectory for the unemployment rate (u_t) is derived using the methodology agreed in the AWG (convergence of underperforming Member States to an EU median), and using the latest European Commission's Economic Forecast available (spring 2014 forecast). Announced policy changes are incorporated through the variables η_t (change in the replacement rate) and λ_t (change in the coverage rate).

In the more common scenario of no policy changes, we assume $\eta_t = 0$ and $\lambda_t = 0$. This approximation should be neutral not leading to any systematic bias in the projections.

It is easy to see that changes in the UB-to-GDP ratio can be approximated by:

$$ln\left(\frac{UB_t}{GDP_t}\right) - ln\left(\frac{UB_0}{GDP_0}\right) \approx \eta_t + \lambda_t + \frac{1}{1-u_t}\frac{u_t - u_0}{u_0}$$ II.A 7.9

This means that reducing the unemployment rate pays a "double dividend" in terms of lowering the UB-to-GDP ratio. For similar changes in the unemployment rate ($\frac{u_t - u_0}{u_0}$), countries with a higher unemployment rate (u_t) will record a larger variation in the UB-to-GDP ratio.

Part III

Statistical Annex – Cross-Country Tables

Main demographic and macroeconomic assumptions

Pension expenditure projections

Health care

Long-term care

Education

Unemployment benefit

1. CROSS-COUNTRY TABLES

Table III.1.1: Fertility rate

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.1	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9
BG	0.3	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
CZ	0.3	1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
DK	0.1	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9
DE	0.2	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
EE	0.3	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
IE	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
EL	0.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.6
ES	0.2	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6
FR	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HR	0.1	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7
IT	0.2	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
CY	0.2	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6
LV	0.3	1.5	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
LT	0.2	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
LU	0.2	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
HU	0.4	1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
MT	0.3	1.4	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8
NL	0.1	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
AT	0.2	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
PL	0.3	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6
PT	0.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
RO	0.2	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
SI	0.2	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8
SK	0.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
FI	0.1	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
SE	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
UK	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
NO	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
EU28	0.2	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8
EA	0.2	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7

Table III.1.2: Life expectancy at birth - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	6.9	77.8	78.9	79.7	80.5	81.2	82.0	82.7	83.3	84.0	84.6
BG	10.4	71.1	72.9	74.1	75.3	76.5	77.6	78.6	79.6	80.6	81.6
CZ	8.2	75.1	76.5	77.4	78.3	79.2	80.1	80.9	81.7	82.5	83.3
DK	6.6	78.2	79.3	80.0	80.8	81.5	82.2	82.9	83.5	84.2	84.8
DE	6.7	78.5	79.6	80.4	81.1	81.9	82.6	83.2	83.9	84.5	85.2
EE	10.4	71.6	73.3	74.5	75.7	76.9	77.9	79.0	80.0	81.0	81.9
IE	6.4	78.7	79.8	80.5	81.3	82.0	82.6	83.3	83.9	84.6	85.2
EL	6.9	78.0	79.2	80.0	80.8	81.5	82.2	82.9	83.6	84.3	84.9
ES	6.0	79.5	80.5	81.2	81.9	82.5	83.2	83.8	84.4	85.0	85.5
FR	6.6	78.6	79.8	80.5	81.3	82.0	82.7	83.4	84.0	84.6	85.2
HR	8.7	74.0	75.4	76.4	77.4	78.3	79.3	80.2	81.0	81.9	82.7
IT	5.7	79.8	80.8	81.4	82.1	82.7	83.3	83.9	84.4	85.0	85.5
CY	6.1	79.1	80.1	80.9	81.5	82.2	82.8	83.5	84.1	84.6	85.2
LV	11.8	69.1	71.1	72.5	73.8	75.1	76.4	77.6	78.7	79.8	80.9
LT	12.2	68.7	70.8	72.2	73.6	75.0	76.3	77.5	78.7	79.8	80.9
LU	6.3	79.1	80.2	80.9	81.6	82.3	83.0	83.6	84.2	84.8	85.4
HU	10.1	71.9	73.6	74.8	75.9	77.0	78.1	79.1	80.1	81.1	82.0
MT	6.4	78.7	79.8	80.5	81.3	82.0	82.6	83.3	83.9	84.5	85.1
NL	6.0	79.3	80.3	80.9	81.6	82.3	82.9	83.5	84.1	84.7	85.2
AT	6.5	78.4	79.5	80.2	81.0	81.7	82.4	83.0	83.7	84.3	84.9
PL	9.7	72.8	74.5	75.6	76.7	77.8	78.8	79.8	80.8	81.7	82.6
PT	7.1	77.4	78.6	79.4	80.2	81.0	81.7	82.4	83.1	83.8	84.5
RO	10.6	71.2	73.0	74.3	75.5	76.7	77.8	78.8	79.9	80.9	81.8
SI	7.1	77.2	78.4	79.2	80.0	80.8	81.5	82.3	83.0	83.6	84.3
SK	9.7	72.7	74.3	75.4	76.5	77.6	78.6	79.6	80.5	81.5	82.3
FI	6.9	77.7	78.9	79.7	80.4	81.2	81.9	82.6	83.3	84.0	84.6
SE	5.5	80.1	81.0	81.6	82.2	82.8	83.4	84.0	84.5	85.1	85.6
UK	6.2	79.1	80.2	80.9	81.6	82.3	82.9	83.6	84.2	84.8	85.3
NO	5.8	79.6	80.5	81.2	81.9	82.5	83.1	83.7	84.3	84.8	85.4
EU28	7.1	77.6	78.9	79.7	80.5	81.3	82.0	82.8	83.5	84.1	84.8
EA	6.5	78.7	79.8	80.5	81.3	82.0	82.7	83.3	84.0	84.6	85.2

Table III.1.3: Life expectancy at birth - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	6.0	82.9	84.0	84.6	85.3	86.0	86.6	87.2	87.8	88.4	88.9
BG	8.4	78.0	79.4	80.4	81.3	82.2	83.1	84.0	84.8	85.6	86.4
CZ	6.7	81.2	82.3	83.1	83.8	84.5	85.3	85.9	86.6	87.3	87.9
DK	6.5	82.1	83.2	84.0	84.7	85.5	86.2	86.8	87.5	88.1	88.7
DE	5.9	83.2	84.2	84.8	85.5	86.1	86.8	87.4	87.9	88.5	89.1
EE	7.0	81.3	82.5	83.3	84.1	84.9	85.6	86.3	87.0	87.6	88.3
IE	6.2	83.0	84.1	84.8	85.5	86.2	86.8	87.5	88.1	88.7	89.2
EL	5.7	83.3	84.2	84.9	85.5	86.1	86.7	87.3	87.9	88.5	89.0
ES	4.8	85.2	86.0	86.6	87.1	87.6	88.1	88.6	89.1	89.6	90.0
FR	5.1	85.0	85.8	86.4	87.0	87.5	88.1	88.6	89.1	89.6	90.0
HR	6.9	80.7	81.8	82.6	83.4	84.1	84.8	85.6	86.2	86.9	87.6
IT	5.1	84.7	85.5	86.1	86.6	87.2	87.7	88.2	88.7	89.2	89.7
CY	5.6	83.3	84.3	84.9	85.5	86.1	86.7	87.3	87.8	88.4	88.9
LV	8.2	78.9	80.3	81.2	82.2	83.1	83.9	84.7	85.5	86.3	87.0
LT	7.8	79.6	80.9	81.9	82.7	83.6	84.4	85.2	86.0	86.7	87.4
LU	6.0	83.5	84.6	85.3	86.0	86.7	87.3	87.9	88.4	89.0	89.5
HU	8.2	78.8	80.2	81.2	82.1	83.0	83.8	84.7	85.5	86.3	87.0
MT	6.3	82.8	84.0	84.7	85.4	86.1	86.8	87.4	88.0	88.6	89.1
NL	6.0	82.9	83.9	84.6	85.3	86.0	86.6	87.2	87.8	88.4	88.9
AT	5.6	83.5	84.4	85.1	85.7	86.3	86.9	87.5	88.0	88.6	89.1
PL	7.1	80.9	82.2	83.0	83.8	84.6	85.3	86.1	86.8	87.4	88.1
PT	5.7	83.5	84.4	85.1	85.7	86.3	86.9	87.5	88.1	88.6	89.2
RO	8.5	78.2	79.7	80.7	81.6	82.6	83.5	84.3	85.1	85.9	86.7
SI	5.9	83.1	84.1	84.7	85.4	86.0	86.7	87.3	87.8	88.4	88.9
SK	7.5	79.9	81.1	82.0	82.8	83.7	84.5	85.2	86.0	86.7	87.4
FI	5.6	83.5	84.5	85.1	85.8	86.4	87.0	87.6	88.1	88.7	89.2
SE	5.5	83.6	84.5	85.2	85.8	86.4	87.0	87.6	88.1	88.6	89.2
UK	6.1	82.8	83.9	84.6	85.3	85.9	86.6	87.2	87.8	88.4	89.0
NO	5.6	83.5	84.5	85.1	85.8	86.4	87.0	87.5	88.1	88.6	89.1
EU28	6.0	83.1	84.1	84.8	85.5	86.1	86.8	87.4	88.0	88.5	89.1
EA	5.5	84.0	84.9	85.6	86.2	86.8	87.3	87.9	88.5	89.0	89.5

Table III.1.4: Life expectancy at 65 - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.6	17.6	18.4	18.9	19.4	19.9	20.4	20.9	21.3	21.8	22.2
BG	6.3	14.0	15.0	15.7	16.4	17.1	17.7	18.4	19.1	19.7	20.3
CZ	5.5	15.7	16.6	17.2	17.8	18.4	19.0	19.6	20.1	20.7	21.2
DK	4.7	17.5	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.2
DE	4.7	18.0	18.7	19.3	19.8	20.3	20.8	21.3	21.8	22.2	22.7
EE	6.1	14.9	15.9	16.5	17.2	17.9	18.5	19.2	19.8	20.4	21.0
IE	4.5	18.1	18.8	19.3	19.8	20.3	20.8	21.3	21.7	22.2	22.6
EL	4.7	18.0	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.2	22.7
ES	4.3	18.6	19.3	19.7	20.2	20.7	21.1	21.6	22.0	22.4	22.9
FR	4.1	18.9	19.6	20.0	20.5	20.9	21.4	21.8	22.2	22.6	23.0
HR	5.8	15.0	15.9	16.6	17.2	17.8	18.5	19.1	19.7	20.3	20.8
IT	4.3	18.4	19.1	19.6	20.0	20.5	21.0	21.4	21.8	22.3	22.7
CY	4.2	18.3	18.9	19.4	19.9	20.3	20.8	21.2	21.7	22.1	22.5
LV	6.6	13.8	14.8	15.5	16.3	17.0	17.7	18.4	19.1	19.7	20.4
LT	6.5	14.3	15.3	16.0	16.8	17.5	18.2	18.8	19.5	20.1	20.8
LU	4.3	18.6	19.3	19.8	20.2	20.7	21.2	21.6	22.0	22.5	22.9
HU	6.3	14.5	15.5	16.2	16.8	17.5	18.2	18.9	19.5	20.1	20.8
MT	4.3	18.1	18.8	19.3	19.7	20.2	20.7	21.1	21.6	22.0	22.4
NL	4.4	18.0	18.7	19.1	19.6	20.1	20.6	21.0	21.5	21.9	22.4
AT	4.5	17.9	18.7	19.2	19.7	20.1	20.6	21.1	21.6	22.0	22.4
PL	5.9	15.4	16.3	17.0	17.7	18.3	18.9	19.5	20.1	20.7	21.3
PT	4.7	17.6	18.3	18.8	19.4	19.9	20.4	20.9	21.3	21.8	22.3
RO	6.2	14.5	15.5	16.2	16.9	17.5	18.2	18.8	19.5	20.1	20.7
SI	4.9	17.1	17.9	18.5	19.0	19.5	20.0	20.6	21.1	21.5	22.0
SK	6.1	14.7	15.6	16.3	17.0	17.7	18.3	19.0	19.6	20.2	20.8
FI	4.6	17.8	18.5	19.0	19.5	20.0	20.5	21.0	21.5	21.9	22.4
SE	4.1	18.6	19.2	19.7	20.1	20.6	21.0	21.4	21.9	22.3	22.7
UK	4.3	18.4	19.1	19.5	20.0	20.5	21.0	21.4	21.9	22.3	22.7
NO	4.2	18.4	19.0	19.5	20.0	20.4	20.9	21.3	21.8	22.2	22.6
EU28	4.8	17.6	18.4	18.9	19.5	20.0	20.5	21.0	21.5	22.0	22.4
EA	4.5	18.2	18.9	19.4	19.9	20.4	20.9	21.4	21.8	22.2	22.7

Table III.1.5: Life expectancy at 65 - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.2	24.7	25.1	25.6
BG	6.1	17.3	18.2	18.9	19.6	20.2	20.9	21.5	22.2	22.8	23.4
CZ	5.3	19.2	20.0	20.6	21.2	21.8	22.4	22.9	23.5	24.0	24.5
DK	5.1	20.2	21.1	21.6	22.2	22.8	23.3	23.8	24.3	24.8	25.3
DE	4.6	21.0	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.1	25.6
EE	5.0	20.1	20.9	21.5	22.0	22.6	23.1	23.6	24.1	24.6	25.1
IE	4.8	21.0	21.8	22.3	22.9	23.4	23.9	24.4	24.9	25.4	25.8
EL	4.6	20.8	21.5	22.0	22.6	23.1	23.6	24.0	24.5	25.0	25.4
ES	3.8	22.5	23.1	23.5	24.0	24.4	24.8	25.2	25.6	26.0	26.3
FR	3.7	22.9	23.5	23.9	24.3	24.7	25.1	25.5	25.9	26.2	26.6
HR	5.5	18.7	19.6	20.2	20.8	21.4	22.0	22.5	23.1	23.6	24.2
IT	4.0	22.0	22.6	23.1	23.5	24.0	24.4	24.8	25.2	25.6	26.0
CY	4.4	20.8	21.4	21.9	22.4	22.9	23.4	23.8	24.3	24.7	25.2
LV	5.8	18.4	19.4	20.0	20.6	21.3	21.9	22.5	23.1	23.6	24.2
LT	5.4	19.2	20.0	20.6	21.2	21.8	22.4	23.0	23.5	24.1	24.6
LU	4.1	22.0	22.6	23.1	23.6	24.0	24.4	24.9	25.3	25.7	26.1
HU	6.0	18.1	19.1	19.8	20.4	21.1	21.7	22.3	22.9	23.5	24.1
MT	4.4	21.3	22.0	22.5	23.0	23.5	24.0	24.4	24.9	25.3	25.7
NL	4.6	20.9	21.7	22.2	22.7	23.2	23.7	24.1	24.6	25.0	25.5
AT	4.4	21.2	21.9	22.4	22.9	23.3	23.8	24.3	24.7	25.1	25.6
PL	5.3	19.6	20.5	21.1	21.7	22.2	22.8	23.4	23.9	24.4	24.9
PT	4.4	21.2	21.9	22.4	22.9	23.3	23.8	24.3	24.7	25.2	25.6
RO	6.1	17.7	18.6	19.3	20.0	20.6	21.3	21.9	22.6	23.2	23.8
SI	4.6	20.9	21.6	22.2	22.7	23.2	23.6	24.1	24.6	25.0	25.5
SK	5.8	18.4	19.3	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2
FI	4.3	21.4	22.1	22.6	23.1	23.5	24.0	24.4	24.9	25.3	25.7
SE	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.2	24.7	25.1	25.6
UK	4.8	20.8	21.6	22.1	22.7	23.2	23.7	24.2	24.6	25.1	25.6
NO	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.3	24.7	25.1	25.6
EU28	4.6	21.0	21.8	22.3	22.8	23.3	23.8	24.3	24.7	25.2	25.6
EA	4.3	21.7	22.4	22.9	23.3	23.8	24.3	24.7	25.1	25.5	26.0

Table III.1.6: Net migration (thousand)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-19.1	61.2	80.2	82.0	80.9	76.8	69.8	59.8	46.8	44.5	42.1
BG	3.5	-2.9	-5.8	-8.8	-5.8	4.6	5.3	4.2	3.7	3.1	0.6
CZ	22.5	-1.3	28.0	31.5	35.8	37.8	40.7	33.9	25.5	23.1	21.2
DK	-11.2	21.2	18.9	19.4	19.9	18.0	16.3	13.7	10.5	10.1	10.0
DE	1224.9	-1127.0	228.7	229.8	220.2	181.9	142.6	138.5	119.3	121.1	97.9
EE	2.7	-2.7	-3.7	-3.6	-2.2	0.6	0.6	0.6	0.6	0.4	0.0
IE	47.5	-32.4	-30.3	-21.7	-12.1	-3.0	4.8	11.3	16.7	15.9	15.1
EL	20.6	-15.9	-22.3	-17.1	-10.0	-3.3	1.3	6.0	7.3	5.9	4.7
ES	585.9	-310.9	-79.0	6.4	87.5	159.7	225.2	269.0	305.6	290.3	275.0
FR	14.0	52.8	90.2	91.2	91.2	89.0	84.0	79.7	74.2	70.5	66.8
HR	2.5	2.3	2.4	2.9	3.5	3.5	4.6	5.5	5.7	5.1	4.8
IT	-939.1	1135.5	348.1	368.4	382.4	367.7	335.9	277.8	214.8	206.9	196.4
CY	8.5	-0.6	-0.6	1.1	2.8	4.5	6.0	7.5	8.8	8.4	7.9
LV	10.1	-10.1	-14.3	-14.5	-9.9	0.9	0.9	0.8	0.7	0.4	0.0
LT	16.8	-16.8	-37.4	-33.5	-21.1	1.4	1.0	0.6	0.4	0.2	0.0
LU	-5.7	10.5	11.7	11.6	11.2	10.3	9.1	7.4	5.4	5.1	4.9
HU	5.9	8.1	24.3	21.7	20.9	22.2	24.2	19.1	15.3	15.3	14.0
MT	-0.5	1.6	1.6	1.6	1.5	1.4	1.4	1.4	1.3	1.3	1.1
NL	-12.8	22.1	24.2	24.0	23.5	20.8	13.0	11.0	8.9	10.6	9.3
AT	-30.8	55.5	51.3	52.5	51.9	47.4	41.9	35.1	27.2	26.5	24.8
PL	27.1	-15.6	2.9	-4.3	-0.9	13.7	25.4	30.7	29.5	20.3	11.6
PT	48.2	-40.3	0.3	6.9	9.2	10.2	11.9	10.2	8.3	8.0	7.9
RO	11.6	-9.2	0.4	-24.1	-24.7	11.6	11.6	10.0	7.1	5.3	2.4
SI	3.7	0.8	4.1	4.0	4.6	4.8	5.5	5.7	5.4	4.7	4.5
SK	0.4	2.0	3.0	2.0	2.5	2.8	4.7	4.9	4.7	3.9	2.4
FI	-8.3	17.2	22.0	22.3	21.7	20.2	17.7	14.1	9.6	9.4	8.9
SE	-34.6	65.8	55.3	56.6	56.0	53.5	49.1	42.8	34.7	32.9	31.2
UK	6.2	165.0	172.1	192.9	203.3	210.1	209.3	203.0	190.2	180.7	171.2
NO	-16.8	39.2	53.4	53.6	51.8	48.1	42.3	34.6	24.9	23.7	22.4
EU28	1000.8	35.9	976.3	1101.1	1244.1	1369.3	1363.8	1304.6	1188.3	1129.9	1036.7
EA	967.1	-197.4	677.7	813.4	936.0	994.3	977.3	941.6	866.2	834.0	769.6

Table III.1.7: Net migration as % of population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.3	0.5	0.7	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.3
BG	0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.1	0.1	0.1	0.0
CZ	0.2	0.0	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2
DK	-0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
DE	1.5	-1.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1
EE	0.2	-0.2	-0.3	-0.3	-0.2	0.1	0.1	0.1	0.1	0.0	0.0
IE	1.0	-0.7	-0.7	-0.5	-0.3	-0.1	0.1	0.2	0.3	0.3	0.3
EL	0.2	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
ES	1.3	-0.7	-0.2	0.0	0.2	0.4	0.5	0.6	0.7	0.6	0.6
FR	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
HR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IT	-1.6	1.9	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.3
CY	0.8	-0.1	-0.1	0.1	0.3	0.5	0.6	0.7	0.8	0.8	0.7
LV	0.5	-0.5	-0.8	-0.8	-0.6	0.1	0.1	0.1	0.1	0.0	0.0
LT	0.6	-0.6	-1.4	-1.4	-1.0	0.1	0.0	0.0	0.0	0.0	0.0
LU	-1.5	1.9	1.8	1.6	1.4	1.2	1.0	0.7	0.5	0.5	0.4
HU	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
MT	-0.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
NL	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
AT	-0.4	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3
PL	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
PT	0.5	-0.4	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RO	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.1	0.0	0.0	0.0
SI	0.2	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
SK	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
FI	-0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1
SE	-0.4	0.7	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2
UK	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
NO	-0.5	0.8	1.0	0.9	0.8	0.7	0.6	0.5	0.3	0.3	0.3
EU28	0.2	0.0	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2
EA	0.3	-0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2

Table III.1.8: Population (million)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.2	11.2	11.9	12.4	12.9	13.5	14.0	14.4	14.8	15.1	15.4
BG	-1.8	7.3	7.0	6.7	6.5	6.2	6.1	5.9	5.8	5.6	5.5
CZ	0.6	10.5	10.7	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.1
DK	0.9	5.6	5.8	5.9	6.1	6.2	6.3	6.4	6.4	6.5	6.5
DE	-10.5	81.3	80.6	80.3	79.7	78.8	77.7	76.2	74.5	72.7	70.8
EE	-0.2	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1
IE	0.7	4.6	4.6	4.6	4.6	4.6	4.7	4.8	5.0	5.1	5.3
EL	-2.5	11.0	10.7	10.4	10.1	9.8	9.6	9.3	9.1	8.8	8.6
ES	-0.5	46.6	45.7	45.0	44.5	44.4	44.7	45.1	45.6	45.9	46.1
FR	9.9	65.7	67.8	69.2	70.5	71.8	72.9	73.7	74.4	75.0	75.7
HR	-0.6	4.3	4.2	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7
IT	6.1	60.2	62.1	63.1	64.2	65.3	66.3	66.9	67.0	66.8	66.3
CY	0.3	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1
LV	-0.6	2.0	1.9	1.7	1.6	1.5	1.5	1.5	1.5	1.4	1.4
LT	-1.1	3.0	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.8
LU	0.6	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.1
HU	-0.7	9.9	9.8	9.7	9.7	9.6	9.5	9.4	9.3	9.3	9.2
MT	0.1	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NL	0.3	16.8	17.2	17.4	17.6	17.7	17.6	17.5	17.4	17.2	17.1
AT	1.2	8.5	8.8	9.1	9.3	9.5	9.6	9.7	9.7	9.7	9.7
PL	-5.3	38.5	38.4	38.0	37.5	36.8	36.2	35.5	34.8	34.0	33.2
PT	-2.3	10.5	10.1	9.9	9.8	9.6	9.4	9.1	8.8	8.5	8.2
RO	-2.6	20.0	19.7	19.4	19.0	18.7	18.4	18.2	17.9	17.7	17.4
SI	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
SK	-0.9	5.4	5.4	5.4	5.3	5.2	5.1	5.0	4.9	4.7	4.6
FI	0.8	5.4	5.6	5.8	5.9	6.0	6.1	6.1	6.2	6.2	6.2
SE	3.5	9.6	10.2	10.6	11.0	11.4	11.8	12.1	12.5	12.8	13.1
UK	16.0	64.1	66.9	68.8	70.6	72.3	74.0	75.7	77.3	78.8	80.1
NO	3.1	5.1	5.6	6.0	6.4	6.8	7.1	7.4	7.7	7.9	8.2
EU28	15.6	507.2	512.8	516.0	518.8	521.4	523.7	525.3	525.5	524.5	522.8
EA	6.7	334.5	337.7	339.6	341.4	343.2	344.6	345.2	344.6	343.1	341.2

Table III.1.9: Children population (0-14) as % of total population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.1	17.0	17.5	17.5	17.4	17.2	17.2	17.2	17.2	17.1	16.9
BG	0.4	13.7	14.3	13.9	13.4	13.1	13.3	13.7	14.1	14.1	14.1
CZ	0.5	14.9	16.0	15.3	14.7	14.3	14.7	15.3	15.8	15.7	15.4
DK	-0.8	17.3	16.6	16.4	16.9	17.2	17.1	16.7	16.5	16.4	16.5
DE	0.2	13.0	12.8	13.0	13.0	12.8	12.6	12.5	12.7	12.9	13.1
EE	-0.6	15.8	16.6	15.6	14.7	14.1	14.3	15.0	15.6	15.6	15.2
IE	-3.4	21.9	21.6	19.6	17.5	16.8	17.5	18.8	19.4	19.2	18.5
EL	-1.8	14.6	14.0	13.0	12.3	12.1	12.3	12.7	12.9	12.9	12.9
ES	-1.8	15.2	14.4	12.9	11.7	11.4	11.9	12.7	13.3	13.4	13.4
FR	-1.3	18.5	18.1	17.8	17.7	17.6	17.6	17.5	17.4	17.3	17.2
HR	-0.9	14.9	14.9	14.7	14.3	13.9	13.7	13.7	13.9	14.0	13.9
IT	-0.5	14.0	13.8	13.4	13.3	13.3	13.5	13.6	13.6	13.6	13.5
CY	-0.9	16.3	16.6	16.3	15.4	14.4	13.9	14.2	14.8	15.3	15.4
LV	1.7	14.6	15.5	14.9	14.1	13.5	13.9	15.0	16.0	16.4	16.3
LT	3.1	14.7	15.3	15.4	14.6	13.7	13.8	15.0	16.7	17.7	17.8
LU	-0.1	17.0	17.3	17.7	18.0	18.0	17.9	17.6	17.4	17.1	16.9
HU	0.0	14.4	14.4	14.3	14.4	14.3	14.2	14.2	14.3	14.4	14.4
MT	0.9	14.5	14.9	15.3	15.4	15.0	14.6	14.6	14.9	15.3	15.4
NL	-1.8	17.0	16.0	15.8	15.8	15.8	15.6	15.4	15.2	15.1	15.3
AT	-0.3	14.4	14.5	14.6	14.6	14.3	14.0	13.8	13.9	14.0	14.0
PL	-2.1	15.0	15.3	14.5	13.6	12.8	12.6	12.9	13.2	13.2	13.0
PT	-3.3	14.7	13.0	12.1	11.6	11.6	11.7	11.7	11.5	11.3	11.3
RO	-0.4	15.6	15.6	15.3	15.3	15.0	14.9	15.0	15.2	15.3	15.3
SI	0.2	14.5	15.4	14.9	14.0	13.4	13.6	14.3	14.9	14.9	14.7
SK	-3.8	15.3	15.0	14.0	12.8	12.1	11.7	11.8	11.8	11.7	11.5
FI	-0.2	16.4	16.6	16.6	16.6	16.4	16.3	16.3	16.4	16.3	16.2
SE	0.5	17.0	18.0	18.2	18.1	17.7	17.4	17.4	17.6	17.6	17.4
UK	-0.4	17.6	18.4	18.3	17.8	17.3	17.0	17.1	17.3	17.3	17.2
NO	-1.3	18.3	18.2	18.2	18.3	18.2	17.9	17.6	17.4	17.2	17.0
EU28	-0.6	15.6	15.6	15.2	14.9	14.6	14.6	14.8	15.0	15.0	15.0
EA	-0.7	15.3	15.0	14.6	14.3	14.2	14.2	14.4	14.5	14.6	14.6

Table III.1.10: Prime age population (25-54) as % of total population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-4.3	40.9	39.2	38.2	37.7	37.7	37.6	37.4	37.0	36.8	36.6
BG	-8.4	42.1	41.6	39.8	37.5	35.7	34.5	33.1	32.7	33.3	33.7
CZ	-8.0	43.3	42.5	40.7	38.0	36.1	35.5	35.0	34.6	35.0	35.3
DK	-3.7	39.4	38.4	37.5	36.8	36.9	37.2	36.9	36.4	36.0	35.8
DE	-9.0	42.1	38.7	36.2	35.6	35.1	34.3	33.4	33.3	33.1	33.1
EE	-7.0	41.6	40.1	38.0	36.1	35.5	34.6	33.1	33.1	34.1	34.5
IE	-6.0	43.6	39.1	36.9	35.1	34.2	34.2	35.6	36.9	37.2	37.6
EL	-9.3	42.6	40.6	38.3	36.2	34.6	33.3	32.9	32.8	33.1	33.3
ES	-9.9	45.7	41.9	38.8	36.0	33.9	33.3	33.8	34.6	35.4	35.8
FR	-3.9	39.0	36.9	35.8	35.0	35.0	34.9	35.1	35.3	35.2	35.1
HR	-6.6	41.1	39.5	38.9	37.9	36.8	35.8	35.3	34.9	34.4	34.5
IT	-7.8	42.4	40.1	38.0	36.4	35.7	35.6	35.4	35.0	34.8	34.5
CY	-7.1	44.3	43.9	42.5	40.8	39.5	37.9	36.9	36.4	36.7	37.1
LV	-5.9	41.9	40.1	37.4	35.1	34.5	32.9	32.9	33.1	35.0	36.1
LT	-4.4	41.1	38.4	35.5	32.2	31.1	32.1	33.0	33.4	34.8	36.7
LU	-7.8	45.5	43.4	42.5	41.9	41.3	40.8	40.3	39.4	38.5	37.8
HU	-7.5	41.8	42.6	41.6	39.6	37.4	36.5	35.8	34.7	34.4	34.3
MT	-6.2	40.9	40.3	40.2	39.0	37.6	36.5	35.6	34.9	34.6	34.7
NL	-6.2	40.7	38.3	36.5	35.8	35.7	35.6	35.3	35.0	34.8	34.6
AT	-8.3	43.4	41.2	39.1	38.1	37.8	37.1	36.5	35.7	35.3	35.1
PL	-10.0	43.6	43.0	42.4	40.7	38.8	36.3	34.8	33.8	33.5	33.6
PT	-10.1	42.3	39.9	38.5	36.7	34.9	34.0	33.7	33.3	32.7	32.2
RO	-8.5	42.5	42.7	40.4	38.3	36.3	35.2	34.0	34.0	34.0	34.1
SI	-8.9	43.8	40.6	38.4	36.4	34.9	34.2	33.8	34.1	34.5	35.0
SK	-12.3	45.1	44.7	43.7	41.5	39.0	37.0	35.0	33.5	33.0	32.8
FI	-3.1	38.4	37.3	36.6	36.6	36.6	36.3	36.2	35.7	35.5	35.3
SE	-2.8	39.0	39.0	37.6	36.8	37.0	37.2	36.9	36.3	36.4	36.2
UK	-4.8	40.8	39.3	37.7	36.6	36.5	36.3	36.1	35.8	35.8	36.0
NO	-4.6	41.1	40.6	39.8	39.0	39.0	38.7	38.3	37.6	36.9	36.5
EU28	-7.1	41.9	39.9	38.1	36.7	35.9	35.3	34.9	34.8	34.8	34.8
EA	-7.4	42.0	39.3	37.3	36.0	35.3	34.9	34.7	34.6	34.6	34.6

Table III.1.11: Working age population (15-64) as % of total population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-5.9	65.3	63.6	62.5	61.3	60.7	60.4	60.2	60.0	59.7	59.4
BG	-12.7	67.0	64.1	63.0	62.3	61.4	59.5	57.3	55.7	54.2	54.2
CZ	-11.6	68.0	63.8	63.3	63.0	62.7	60.6	58.0	56.7	56.2	56.4
DK	-5.7	64.6	63.4	62.5	60.7	59.4	59.0	59.3	59.9	59.8	58.9
DE	-11.5	66.1	64.0	61.9	59.0	56.7	56.2	56.0	55.5	54.7	54.6
EE	-11.1	66.0	62.8	61.8	61.0	60.4	58.9	57.3	55.6	54.2	54.9
IE	-5.6	65.7	63.4	63.3	63.1	61.9	59.3	56.7	55.7	57.4	60.1
EL	-10.9	65.1	63.9	63.2	61.9	59.6	57.0	54.6	53.2	53.4	54.2
ES	-10.4	66.9	65.4	64.7	63.0	60.3	57.1	54.2	53.4	54.6	56.5
FR	-5.7	63.7	61.6	60.4	59.1	58.0	57.2	57.3	57.4	57.8	57.9
HR	-10.4	66.9	64.4	62.7	61.4	60.6	59.9	58.9	57.7	56.9	56.5
IT	-8.2	64.8	63.8	63.0	61.4	59.4	57.6	56.7	56.5	56.5	56.5
CY	-12.5	70.2	67.0	65.2	64.0	63.7	63.0	61.7	59.7	58.2	57.7
LV	-10.9	66.6	63.8	62.0	60.4	59.5	58.3	57.1	55.7	54.7	55.7
LT	-10.5	67.0	64.0	60.6	57.7	56.2	55.4	55.0	55.0	55.4	56.5
LU	-7.7	69.0	67.9	66.7	65.2	64.1	63.5	63.2	62.7	62.2	61.3
HU	-12.1	68.2	65.3	64.1	63.7	62.7	61.1	58.9	58.1	57.2	56.1
MT	-11.9	68.0	63.9	61.4	60.2	60.6	60.7	59.9	58.7	57.2	56.1
NL	-8.5	65.9	64.0	62.1	59.9	58.0	57.3	57.6	57.9	57.8	57.3
AT	-10.3	67.4	66.0	64.2	61.9	60.2	59.6	59.4	58.7	57.9	57.1
PL	-16.4	70.5	66.3	64.3	63.7	63.5	62.2	59.8	56.9	55.0	54.1
PT	-11.6	65.7	64.6	63.5	61.5	59.3	56.7	54.6	53.8	54.1	54.1
RO	-12.1	68.0	65.5	64.1	63.8	61.8	60.0	58.0	57.0	55.7	55.8
SI	-12.2	68.2	64.0	62.2	61.0	59.9	58.5	56.6	55.3	55.0	55.9
SK	-18.0	71.4	68.1	66.5	65.6	64.8	62.8	59.7	56.9	54.6	53.3
FI	-6.7	64.5	61.2	59.9	59.0	58.7	59.3	59.3	58.9	58.5	57.8
SE	-5.4	63.8	61.6	60.9	60.4	60.2	60.2	60.2	59.9	59.1	58.4
UK	-7.0	65.1	63.0	61.9	60.8	60.0	59.6	59.4	58.8	58.2	58.0
NO	-6.3	65.9	64.7	63.8	62.7	61.8	61.4	61.4	61.1	60.5	59.7
EU28	-9.4	66.0	63.9	62.6	61.1	59.6	58.4	57.5	56.9	56.6	56.6
EA	-9.0	65.5	63.8	62.4	60.6	58.7	57.4	56.6	56.3	56.3	56.5

Table III.1.12: Elderly population (65 and over) as % of total population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	6.0	17.7	18.9	20.0	21.3	22.1	22.5	22.6	22.8	23.1	23.7
BG	12.3	19.4	21.7	23.1	24.3	25.6	27.2	29.0	30.2	31.6	31.7
CZ	11.1	17.1	20.2	21.4	22.3	23.0	24.7	26.7	27.5	28.1	28.2
DK	6.6	18.0	20.0	21.1	22.4	23.4	24.0	24.0	23.6	23.8	24.6
DE	11.3	21.0	23.2	25.2	28.1	30.6	31.2	31.5	31.8	32.4	32.3
EE	11.7	18.2	20.6	22.6	24.3	25.5	26.8	27.7	28.8	30.2	29.9
IE	9.0	12.4	15.0	17.1	19.4	21.4	23.1	24.5	24.9	23.4	21.4
EL	12.7	20.3	22.1	23.8	25.8	28.4	30.7	32.7	33.9	33.7	33.0
ES	12.1	17.9	20.1	22.4	25.3	28.2	31.0	33.1	33.3	32.0	30.0
FR	7.1	17.8	20.3	21.8	23.2	24.4	25.2	25.2	25.1	24.9	24.8
HR	11.3	18.3	20.7	22.6	24.2	25.4	26.3	27.4	28.4	29.1	29.6
IT	8.8	21.2	22.4	23.5	25.3	27.3	28.9	29.7	29.9	29.9	30.0
CY	13.4	13.4	16.3	18.5	20.5	21.9	23.1	24.1	25.5	26.4	26.8
LV	9.2	18.9	20.7	23.1	25.5	27.0	27.9	28.0	28.3	28.9	28.0
LT	7.5	18.3	20.7	24.0	27.7	30.1	30.8	30.0	28.3	26.9	25.8
LU	7.8	14.0	14.8	15.6	16.8	17.9	18.6	19.2	19.9	20.7	21.8
HU	12.1	17.4	20.3	21.6	21.9	23.0	24.7	26.9	27.6	28.4	29.5
MT	11.0	17.5	21.2	23.3	24.4	24.5	24.8	25.5	26.4	27.5	28.5
NL	10.3	17.1	20.0	22.1	24.3	26.2	27.0	27.0	26.9	27.1	27.4
AT	10.7	18.2	19.5	21.1	23.5	25.5	26.4	26.8	27.4	28.1	28.9
PL	18.5	14.5	18.4	21.2	22.7	23.7	25.1	27.3	29.9	31.8	33.0
PT	14.9	19.6	22.4	24.5	26.8	29.1	31.6	33.7	34.6	34.6	34.6
RO	12.5	16.4	18.9	20.5	20.8	23.2	25.1	27.0	27.8	29.0	28.9
SI	12.1	17.3	20.6	22.9	25.0	26.7	27.9	29.2	29.9	30.0	29.4
SK	21.9	13.3	16.9	19.5	21.6	23.2	25.5	28.5	31.3	33.6	35.2
FI	7.0	19.1	22.1	23.4	24.5	24.8	24.4	24.4	24.7	25.2	26.0
SE	4.9	19.3	20.4	20.9	21.5	22.2	22.5	22.4	22.5	23.3	24.2
UK	7.5	17.3	18.7	19.8	21.4	22.7	23.3	23.5	23.9	24.4	24.8
NO	7.5	15.8	17.1	18.1	19.0	20.0	20.7	21.0	21.5	22.3	23.3
EU28	10.0	18.4	20.5	22.2	24.1	25.8	27.0	27.7	28.2	28.4	28.4
EA	9.7	19.2	21.3	23.0	25.1	27.1	28.3	29.0	29.2	29.2	28.9

Table III.1.13: Very elderly population (80 and over) as % of total population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.6	5.3	5.4	5.4	6.1	6.8	7.5	8.3	8.7	8.8	8.9
BG	7.8	4.4	4.9	5.4	6.7	7.7	8.3	8.8	9.6	10.8	12.2
CZ	7.6	3.9	4.2	5.1	6.6	7.7	7.9	8.0	8.4	9.9	11.5
DK	5.5	4.2	4.8	5.9	7.0	7.5	7.9	8.7	9.3	9.7	9.7
DE	7.9	5.5	7.4	8.0	8.2	9.1	10.6	12.7	14.2	13.8	13.4
EE	7.0	4.8	6.1	6.3	7.2	8.2	9.3	10.0	10.4	11.1	11.8
IE	7.3	2.9	3.5	4.2	5.3	6.2	7.1	7.9	8.7	9.5	10.2
EL	9.5	5.8	7.1	7.3	8.1	8.9	10.1	11.3	12.9	14.2	15.3
ES	9.4	5.6	6.2	6.8	7.7	8.5	9.8	11.3	12.7	14.0	14.9
FR	4.9	5.7	6.0	6.1	7.5	8.6	9.4	10.0	10.4	10.8	10.6
HR	6.7	4.4	5.3	5.5	6.2	7.4	8.7	9.5	9.9	10.3	11.1
IT	6.8	6.3	7.1	7.4	8.1	8.6	9.3	10.6	11.9	12.9	13.1
CY	6.5	3.0	3.8	4.5	5.6	6.5	7.4	8.1	8.5	8.9	9.5
LV	6.3	4.7	5.9	6.5	7.1	8.0	9.2	10.2	10.6	10.9	11.0
LT	6.5	4.9	6.2	6.9	7.7	8.7	10.4	12.0	12.5	12.4	11.4
LU	3.9	3.9	4.1	4.1	4.4	4.9	5.6	6.4	7.1	7.5	7.8
HU	7.5	4.1	4.6	5.2	6.1	7.4	8.1	8.0	8.6	10.0	11.7
MT	6.7	3.8	4.9	5.8	7.8	8.8	9.6	9.8	9.4	9.6	10.5
NL	6.9	4.2	4.9	5.6	7.1	8.1	9.1	10.3	11.3	11.5	11.1
AT	6.1	5.0	5.5	6.3	6.8	7.3	8.4	9.9	11.2	11.4	11.1
PL	8.5	3.8	4.4	4.4	5.8	7.7	9.2	9.5	9.5	10.4	12.3
PT	10.7	5.4	6.6	7.2	8.1	9.3	10.5	11.9	13.3	14.8	16.1
RO	7.7	3.9	4.7	4.7	5.5	6.8	7.7	7.5	9.0	10.3	11.5
SI	7.8	4.6	5.5	6.0	6.8	8.4	9.6	10.6	11.1	11.6	12.4
SK	10.1	3.0	3.3	3.9	5.0	6.7	7.9	8.8	9.4	10.8	13.1
FI	4.8	5.0	5.6	6.2	7.9	8.9	9.4	9.7	9.7	9.5	9.8
SE	3.7	5.2	5.3	6.2	7.2	7.5	7.6	8.0	8.5	8.9	8.9
UK	4.8	4.7	5.1	5.6	6.6	7.1	7.7	8.6	9.3	9.5	9.5
NO	4.1	4.4	4.1	4.6	5.6	6.1	6.6	7.1	7.8	8.3	8.5
EU28	6.7	5.1	5.9	6.3	7.2	8.1	9.1	10.1	11.0	11.5	11.8
EA	7.0	5.5	6.4	6.8	7.6	8.5	9.6	10.8	11.9	12.4	12.5

Table III.1.14: Very elderly population (80 and over) as % of elderly population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	7.5	30.0	28.8	26.8	28.5	30.6	33.5	36.6	38.0	38.0	37.5
BG	15.9	22.5	22.4	23.2	27.6	30.0	30.6	30.4	31.6	34.3	38.4
CZ	18.0	22.8	20.7	23.8	29.7	33.4	31.8	30.1	30.7	35.3	40.8
DK	16.2	23.1	23.8	27.8	31.5	32.2	33.1	36.1	39.5	40.8	39.2
DE	15.2	26.3	32.0	31.8	29.2	29.8	33.9	40.4	44.5	42.8	41.5
EE	12.9	26.4	29.4	28.1	29.5	32.3	34.7	36.2	36.2	36.8	39.4
IE	24.2	23.7	23.6	24.7	27.2	29.1	30.6	32.5	34.9	40.6	47.8
EL	17.8	28.7	31.9	30.6	31.5	31.5	32.9	34.5	38.1	42.1	46.5
ES	18.6	31.1	30.8	30.1	30.3	30.2	31.6	34.1	38.2	43.8	49.7
FR	10.7	32.0	29.7	28.2	32.1	35.1	37.1	39.7	41.5	43.1	42.6
HR	13.7	23.9	25.8	24.2	25.5	29.3	32.9	34.5	34.8	35.4	37.5
IT	14.1	29.8	31.8	31.3	31.9	31.4	32.2	35.6	39.9	43.2	43.8
CY	13.1	22.2	23.2	24.1	27.2	29.6	32.1	33.7	33.3	33.6	35.3
LV	14.2	24.9	28.6	28.1	27.8	29.5	33.1	36.5	37.4	37.9	39.1
LT	17.4	26.7	30.2	28.9	27.6	28.8	33.8	39.9	44.1	45.9	44.2
LU	7.7	28.1	27.6	26.1	26.1	27.3	30.0	33.4	35.7	36.1	35.8
HU	15.7	23.8	22.6	24.2	27.8	32.4	32.6	29.7	31.3	35.2	39.5
MT	15.1	21.7	23.1	24.8	31.8	36.0	38.9	38.4	35.6	35.1	36.7
NL	15.8	24.7	24.3	25.4	29.3	31.0	33.8	38.2	42.0	42.5	40.5
AT	11.1	27.5	28.5	29.7	28.9	28.5	31.6	37.2	40.7	40.4	38.6
PL	10.9	26.2	23.8	21.0	25.5	32.5	36.8	34.9	31.8	32.7	37.2
PT	18.8	27.7	29.4	29.3	30.3	31.9	33.2	35.4	38.3	42.9	46.5
RO	16.3	23.6	24.6	22.9	26.3	29.1	30.6	27.7	32.5	35.4	39.9
SI	15.8	26.5	26.7	26.0	27.3	31.5	34.6	36.2	37.2	38.6	42.3
SK	14.6	22.6	19.8	20.0	23.1	28.7	31.1	30.8	30.0	32.3	37.1
FI	11.3	26.1	25.1	26.4	32.4	35.9	38.4	39.6	39.2	37.5	37.5
SE	9.9	26.9	25.8	29.6	33.5	33.9	34.0	35.7	37.8	38.1	36.8
UK	11.2	27.1	27.2	28.3	30.8	31.1	32.8	36.5	38.9	39.0	38.2
NO	8.7	27.6	24.0	25.5	29.4	30.7	31.9	33.8	36.2	37.1	36.3
EU28	13.8	27.8	28.6	28.3	29.9	31.4	33.6	36.4	39.0	40.5	41.6
EA	14.5	28.8	30.3	29.7	30.4	31.4	33.7	37.4	40.7	42.4	43.2

Table III.1.15: Very elderly population (80 and over) as % of working age population

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	6.8	8.1	8.6	8.6	9.9	11.1	12.5	13.7	14.4	14.7	15.0
BG	15.9	6.5	7.6	8.5	10.8	12.5	14.0	15.4	17.2	20.0	22.5
CZ	14.7	5.7	6.5	8.0	10.5	12.2	13.0	13.9	14.8	17.7	20.4
DK	10.0	6.4	7.5	9.4	11.6	12.7	13.4	14.6	15.6	16.3	16.4
DE	16.2	8.3	11.6	13.0	13.9	16.1	18.9	22.7	25.6	25.3	24.5
EE	14.2	7.3	9.6	10.2	11.7	13.6	15.8	17.5	18.7	20.5	21.5
IE	12.6	4.5	5.6	6.7	8.4	10.1	11.9	14.0	15.6	16.6	17.0
EL	19.3	8.9	11.0	11.5	13.1	15.0	17.7	20.7	24.3	26.6	28.3
ES	18.1	8.3	9.5	10.5	12.2	14.1	17.2	20.8	23.8	25.7	26.4
FR	9.4	8.9	9.8	10.2	12.6	14.7	16.4	17.5	18.1	18.6	18.3
HR	13.1	6.5	8.3	8.7	10.1	12.3	14.5	16.1	17.2	18.1	19.6
IT	13.5	9.8	11.2	11.7	13.2	14.4	16.2	18.7	21.1	22.9	23.3
CY	12.2	4.2	5.6	6.8	8.7	10.2	11.8	13.2	14.2	15.2	16.4
LV	12.6	7.1	9.3	10.5	11.8	13.4	15.8	17.9	18.9	20.0	19.7
LT	12.9	7.3	9.8	11.4	13.3	15.4	18.8	21.8	22.7	22.3	20.2
LU	7.0	5.7	6.0	6.1	6.7	7.6	8.8	10.1	11.3	12.0	12.7
HU	14.7	6.1	7.0	8.1	9.6	11.9	13.2	13.5	14.9	17.5	20.8
MT	13.1	5.6	7.7	9.4	12.9	14.5	15.9	16.3	16.0	16.8	18.7
NL	12.9	6.4	7.6	9.0	11.9	14.0	15.9	17.9	19.5	19.9	19.4
AT	12.1	7.4	8.4	9.8	11.0	12.1	14.0	16.7	19.0	19.6	19.5
PL	17.3	5.4	6.6	6.9	9.1	12.1	14.9	16.0	16.8	18.9	22.7
PT	21.5	8.3	10.2	11.3	13.2	15.6	18.5	21.9	24.6	27.5	29.7
RO	15.0	5.7	7.1	7.3	8.6	10.9	12.8	12.9	15.9	18.5	20.7
SI	15.5	6.7	8.6	9.6	11.2	14.0	16.5	18.7	20.1	21.1	22.2
SK	20.3	4.2	4.9	5.8	7.6	10.3	12.6	14.7	16.5	19.8	24.5
FI	9.2	7.7	9.1	10.3	13.5	15.2	15.8	16.3	16.5	16.2	16.9
SE	7.1	8.1	8.5	10.2	12.0	12.5	12.7	13.3	14.2	15.0	15.2
UK	9.1	7.2	8.1	9.0	10.9	11.8	12.8	14.4	15.8	16.3	16.3
NO	7.6	6.6	6.4	7.2	8.9	9.9	10.8	11.5	12.7	13.7	14.2
EU28	13.1	7.7	9.2	10.1	11.8	13.6	15.5	17.5	19.3	20.3	20.8
EA	13.7	8.4	10.1	11.0	12.6	14.5	16.6	19.1	21.1	22.0	22.1

Table III.1.16: Potential GDP (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.7	0.7	1.5	1.3	1.8	2.2	2.2	2.0	1.9	1.8	1.8
BG	1.5	1.4	2.7	1.6	1.3	1.4	1.1	1.1	0.9	1.0	1.1
CZ	1.6	0.5	1.6	1.7	1.9	1.6	1.6	1.6	1.5	1.6	1.7
DK	1.8	0.6	2.1	2.0	1.7	1.7	1.8	1.9	1.9	1.8	1.7
DE	1.0	1.4	1.2	1.0	0.7	0.8	1.0	1.0	0.9	0.9	0.9
EE	1.5	2.1	2.0	1.7	1.5	1.4	1.2	1.1	0.9	1.0	1.4
IE	1.7	0.5	1.4	1.4	1.8	1.7	1.4	1.4	1.9	2.5	2.7
EL	0.7	-3.5	0.1	0.6	1.5	2.0	1.1	1.0	0.9	1.1	1.1
ES	1.4	-0.4	1.7	1.7	1.7	1.6	0.8	0.9	1.5	2.0	2.2
FR	1.6	1.0	1.2	1.4	1.5	1.8	1.7	1.8	1.8	1.8	1.7
HR	1.4	-0.3	1.5	1.1	1.5	2.1	1.8	1.6	1.4	1.2	1.0
IT	1.3	-0.4	1.3	1.1	1.3	1.6	1.5	1.5	1.6	1.6	1.5
CY	1.9	-2.0	2.8	1.5	1.9	2.8	2.5	2.4	2.2	2.0	2.1
LV	1.6	1.9	2.6	1.8	1.1	1.4	1.3	1.1	0.9	1.2	1.6
LT	1.2	2.6	1.5	0.8	-0.1	0.8	1.2	1.4	1.2	1.2	1.7
LU	2.5	1.4	3.0	2.7	2.9	3.0	2.8	2.5	2.2	2.0	1.9
HU	1.5	0.4	1.9	2.1	2.0	1.5	1.2	1.3	1.4	1.2	1.0
MT	1.7	1.7	1.9	1.9	1.9	2.1	1.8	1.6	1.4	1.3	1.4
NL	1.2	0.1	1.3	0.9	1.0	1.3	1.4	1.4	1.5	1.4	1.3
AT	1.5	1.1	1.9	1.4	1.5	1.6	1.6	1.5	1.3	1.3	1.3
PL	1.6	3.2	2.6	2.5	1.9	1.5	1.3	0.9	0.6	0.5	0.7
PT	0.9	-0.7	1.7	1.3	1.2	1.0	0.8	0.7	0.7	0.8	0.8
RO	1.6	1.9	2.2	1.9	1.4	1.4	1.5	1.5	1.4	1.3	1.1
SI	1.3	-0.6	1.9	1.5	1.4	1.4	1.2	1.3	1.3	1.4	1.6
SK	1.5	2.3	2.6	3.0	2.5	1.3	0.7	0.6	0.5	0.6	0.8
FI	1.4	0.0	0.9	1.2	1.6	1.9	1.8	1.7	1.5	1.5	1.5
SE	2.0	2.2	1.9	2.1	2.1	2.2	2.2	2.1	1.9	1.8	1.8
UK	1.7	0.7	1.1	1.3	1.7	2.0	2.1	2.0	1.8	1.8	1.8
NO	2.3	2.4	2.4	2.7	2.6	2.4	2.4	2.3	2.1	1.9	1.8
EU28	1.4	0.7	1.4	1.3	1.4	1.5	1.4	1.4	1.4	1.5	1.5
EA	1.3	0.5	1.3	1.3	1.3	1.4	1.3	1.3	1.4	1.5	1.5

Table III.1.17: Employment (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.5	0.3	0.9	0.5	0.6	0.6	0.6	0.5	0.3	0.3	0.3
BG	-0.8	-0.8	0.0	-0.9	-0.9	-0.9	-1.1	-1.2	-1.1	-0.7	-0.5
CZ	-0.1	-0.1	-0.3	-0.2	0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.2
DK	0.3	-0.3	0.7	0.4	0.1	0.1	0.2	0.4	0.3	0.3	0.1
DE	-0.5	1.0	-0.3	-0.7	-0.8	-0.7	-0.5	-0.5	-0.6	-0.7	-0.6
EE	-0.6	0.4	-0.7	-0.8	-0.5	-0.5	-0.6	-0.8	-0.9	-0.6	-0.2
IE	0.3	0.2	0.0	0.0	0.3	0.2	-0.2	-0.2	0.3	0.9	1.2
EL	-0.4	-2.3	1.0	0.4	0.2	0.0	-0.9	-1.0	-0.9	-0.6	-0.5
ES	0.0	-1.9	0.9	0.5	0.3	0.0	-0.7	-0.6	-0.1	0.4	0.7
FR	0.3	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.2
HR	-0.4	-0.8	0.1	-0.3	-0.3	-0.1	-0.4	-0.6	-0.6	-0.6	-0.5
IT	0.1	-0.2	1.2	0.5	0.1	-0.1	-0.3	-0.2	0.0	0.0	0.0
CY	0.5	-2.6	2.0	0.5	0.7	0.9	0.6	0.5	0.4	0.4	0.5
LV	-0.9	-0.6	-1.3	-1.6	-1.3	-0.6	-0.7	-0.9	-0.9	-0.5	0.1
LT	-1.1	-0.4	-2.3	-2.9	-2.5	-1.0	-0.5	-0.3	-0.4	-0.4	0.2
LU	1.4	2.2	2.7	1.9	1.7	1.5	1.3	1.0	0.7	0.5	0.4
HU	-0.3	0.1	0.5	0.0	-0.2	-0.6	-0.9	-0.7	-0.5	-0.6	-0.5
MT	0.3	2.4	0.6	0.5	0.4	0.3	0.0	-0.1	-0.3	-0.3	-0.1
NL	0.0	-0.1	0.6	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2
AT	0.1	1.0	0.9	0.1	0.1	0.1	0.1	-0.1	-0.2	-0.3	-0.2
PL	-0.6	0.7	-0.4	-0.4	-0.4	-0.3	-0.6	-0.9	-1.2	-1.1	-0.9
PT	-0.6	-1.5	0.7	-0.2	-0.5	-0.8	-1.1	-1.1	-1.1	-0.8	-0.7
RO	-0.7	0.1	-0.6	-0.8	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5	-0.4
SI	-0.3	-1.4	0.7	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4	-0.2	0.1
SK	-0.6	0.5	-0.6	-0.2	-0.1	-0.4	-1.0	-1.1	-1.1	-1.0	-0.8
FI	0.1	-0.3	0.0	0.0	0.2	0.3	0.3	0.1	0.0	-0.1	0.0
SE	0.5	1.0	0.6	0.6	0.6	0.7	0.7	0.6	0.4	0.2	0.3
UK	0.4	0.7	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.2	0.3
NO	0.8	1.2	0.9	1.1	1.0	0.9	0.9	0.8	0.5	0.4	0.3
EU28	0.0	0.1	0.3	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	0.0
EA	-0.1	0.0	0.4	0.1	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	0.0

Table III.1.18: Labour input : hours worked (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.5	0.4	0.9	0.5	0.6	0.6	0.6	0.5	0.4	0.3	0.3
BG	-0.8	-0.8	0.0	-0.9	-0.9	-0.9	-1.1	-1.2	-1.1	-0.8	-0.5
CZ	-0.1	-0.4	-0.2	-0.2	0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.2
DK	0.3	-0.4	0.6	0.4	0.1	0.1	0.2	0.4	0.3	0.3	0.1
DE	-0.6	0.7	-0.4	-0.7	-0.8	-0.7	-0.5	-0.5	-0.6	-0.7	-0.6
EE	-0.6	0.3	-0.7	-0.8	-0.5	-0.5	-0.6	-0.8	-0.9	-0.6	-0.2
IE	0.3	0.6	0.0	-0.1	0.3	0.2	-0.2	-0.1	0.4	0.9	1.2
EL	-0.3	-1.7	1.0	0.4	0.2	0.0	-0.9	-1.0	-0.9	-0.6	-0.5
ES	0.0	-1.8	0.9	0.5	0.3	0.0	-0.7	-0.6	-0.1	0.4	0.7
FR	0.3	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.2
HR	-0.4	-0.8	0.1	-0.3	-0.3	-0.1	-0.4	-0.6	-0.6	-0.6	-0.5
IT	0.1	-0.4	1.2	0.5	0.1	-0.1	-0.3	-0.2	0.0	0.0	0.0
CY	0.5	-2.4	2.0	0.5	0.7	0.9	0.6	0.5	0.4	0.4	0.5
LV	-0.9	-0.4	-1.4	-1.6	-1.3	-0.6	-0.7	-0.8	-0.9	-0.5	0.1
LT	-1.1	-0.1	-2.3	-2.9	-2.5	-0.9	-0.5	-0.3	-0.4	-0.4	0.2
LU	1.3	1.7	2.6	1.8	1.7	1.5	1.3	1.0	0.7	0.5	0.4
HU	-0.3	0.1	0.5	0.0	-0.2	-0.6	-0.9	-0.7	-0.5	-0.6	-0.5
MT	0.3	2.5	0.6	0.4	0.4	0.3	0.0	-0.1	-0.3	-0.3	-0.1
NL	0.0	-0.1	0.6	-0.1	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	-0.2
AT	0.1	0.5	0.8	0.1	0.0	0.1	0.1	-0.1	-0.2	-0.3	-0.2
PL	-0.6	0.4	-0.5	-0.4	-0.4	-0.4	-0.6	-0.9	-1.2	-1.1	-0.8
PT	-0.6	-1.2	0.7	-0.3	-0.5	-0.8	-1.1	-1.1	-1.0	-0.8	-0.7
RO	-0.7	0.4	-0.6	-0.8	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5	-0.4
SI	-0.3	-1.8	0.5	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4	-0.2	0.1
SK	-0.7	0.4	-0.7	-0.2	-0.1	-0.4	-1.0	-1.1	-1.1	-1.0	-0.8
FI	0.1	-0.4	0.0	0.0	0.2	0.3	0.3	0.1	0.0	-0.1	0.0
SE	0.6	1.2	0.6	0.6	0.6	0.7	0.7	0.6	0.4	0.2	0.3
UK	0.4	1.1	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.2	0.3
NO	0.8	0.5	1.0	1.1	1.0	0.9	0.9	0.8	0.5	0.4	0.3
EU28	-0.1	0.1	0.3	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	0.0
EA	-0.1	-0.2	0.4	0.1	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	0.0

Table III.1.19: Labour productivity per hour (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.2	0.2	0.6	0.9	1.2	1.5	1.5	1.5	1.5	1.5	1.5
BG	2.2	2.2	2.6	2.5	2.2	2.3	2.3	2.3	2.0	1.8	1.5
CZ	1.7	0.9	1.8	1.9	1.9	1.8	1.8	1.8	1.7	1.6	1.5
DK	1.5	1.0	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
DE	1.5	0.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
EE	2.0	1.9	2.7	2.5	2.0	1.9	1.9	1.9	1.8	1.7	1.5
IE	1.4	-0.1	1.4	1.4	1.6	1.5	1.5	1.5	1.5	1.5	1.5
EL	1.0	-1.8	-0.9	0.2	1.3	2.0	2.0	2.0	1.9	1.7	1.5
ES	1.4	1.4	0.7	1.2	1.4	1.5	1.5	1.5	1.5	1.5	1.5
FR	1.3	0.7	0.9	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
HR	1.7	0.5	1.4	1.5	1.8	2.2	2.2	2.2	2.0	1.8	1.5
IT	1.2	0.0	0.1	0.6	1.2	1.7	1.7	1.7	1.7	1.6	1.5
CY	1.4	0.5	0.8	0.9	1.3	1.9	1.9	1.9	1.8	1.7	1.5
LV	2.4	2.4	4.0	3.4	2.4	1.9	1.9	2.0	1.8	1.7	1.5
LT	2.3	2.7	3.9	3.7	2.4	1.7	1.7	1.7	1.7	1.6	1.5
LU	1.2	-0.3	0.4	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
HU	1.8	0.3	1.4	2.1	2.2	2.1	2.1	2.1	1.9	1.7	1.5
MT	1.4	-0.7	1.3	1.5	1.5	1.7	1.7	1.8	1.7	1.6	1.5
NL	1.2	0.2	0.6	1.0	1.2	1.5	1.5	1.5	1.5	1.5	1.5
AT	1.4	0.6	1.1	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
PL	2.2	2.8	3.1	2.9	2.3	1.9	1.9	1.9	1.8	1.7	1.5
PT	1.5	0.4	1.0	1.6	1.7	1.9	1.9	1.9	1.8	1.7	1.5
RO	2.3	1.5	2.7	2.7	2.5	2.3	2.3	2.3	2.1	1.8	1.5
SI	1.6	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.5
SK	2.2	2.0	3.2	3.2	2.6	1.7	1.7	1.7	1.7	1.6	1.5
FI	1.3	0.4	0.9	1.1	1.4	1.5	1.5	1.5	1.5	1.5	1.5
SE	1.5	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
UK	1.2	-0.4	0.8	1.0	1.3	1.5	1.5	1.5	1.5	1.5	1.5
NO	1.5	1.5	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
EU28	1.4	0.6	1.1	1.3	1.5	1.6	1.6	1.6	1.6	1.6	1.6
EA	1.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.6	1.6	1.5

Table III.1.20: TFP (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.8	0.2	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
BG	1.3	0.7	1.2	1.3	1.4	1.5	1.5	1.5	1.3	1.2	1.0
CZ	1.1	0.4	1.2	1.3	1.2	1.1	1.1	1.1	1.1	1.0	1.0
DK	1.0	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
DE	1.0	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EE	1.2	0.6	1.3	1.4	1.3	1.2	1.2	1.2	1.2	1.1	1.0
IE	0.9	0.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EL	0.7	-1.4	-0.2	0.3	0.8	1.3	1.3	1.3	1.2	1.1	1.0
ES	0.9	0.6	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
FR	0.8	0.3	0.5	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
HR	1.1	-0.1	0.7	0.9	1.2	1.4	1.4	1.4	1.3	1.1	1.0
IT	0.8	-0.1	0.2	0.4	0.8	1.1	1.1	1.1	1.1	1.0	1.0
CY	0.8	-0.3	0.1	0.3	0.8	1.2	1.2	1.2	1.2	1.1	1.0
LV	1.4	0.9	1.8	1.9	1.6	1.3	1.3	1.3	1.2	1.1	1.0
LT	1.4	1.3	2.0	2.0	1.6	1.1	1.1	1.1	1.1	1.0	1.0
LU	0.7	-0.7	0.2	0.5	0.8	1.0	1.0	1.0	1.0	1.0	1.0
HU	1.2	0.1	0.9	1.4	1.4	1.3	1.3	1.3	1.2	1.1	1.0
MT	0.9	0.0	0.6	0.8	1.0	1.1	1.1	1.1	1.1	1.0	1.0
NL	0.8	0.0	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
AT	0.9	0.3	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
PL	1.4	1.4	1.8	1.8	1.5	1.2	1.2	1.2	1.1	1.1	1.0
PT	1.0	0.5	0.8	0.9	1.1	1.2	1.2	1.2	1.1	1.1	1.0
RO	1.4	0.7	1.5	1.7	1.6	1.5	1.5	1.5	1.3	1.2	1.0
SI	1.0	0.4	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
SK	1.6	2.2	2.5	2.4	1.7	1.1	1.1	1.1	1.1	1.0	1.0
FI	0.8	-0.1	0.5	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
SE	1.0	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
UK	0.8	-0.4	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
NO	1.0	0.9	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EU28	0.9	0.3	0.7	0.9	1.0	1.1	1.1	1.1	1.0	1.0	1.0
EA	0.9	0.3	0.6	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0

Table III.1.21: Capital deepening (contribution to labour productivity growth)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.4	0.0	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
BG	0.9	1.5	1.4	1.2	0.8	0.8	0.8	0.8	0.7	0.6	0.5
CZ	0.6	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5
DK	0.5	0.3	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
DE	0.5	0.0	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EE	0.8	1.3	1.4	1.1	0.7	0.7	0.7	0.7	0.6	0.6	0.5
IE	0.5	-0.1	0.6	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EL	0.3	-0.4	-0.8	-0.1	0.4	0.7	0.7	0.7	0.7	0.6	0.5
ES	0.5	0.8	0.0	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
FR	0.5	0.4	0.4	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
HR	0.7	0.6	0.8	0.6	0.6	0.8	0.8	0.8	0.7	0.6	0.5
IT	0.4	0.1	-0.1	0.2	0.4	0.6	0.6	0.6	0.6	0.6	0.5
CY	0.6	0.8	0.7	0.6	0.4	0.7	0.7	0.7	0.6	0.6	0.5
LV	1.0	1.5	2.2	1.5	0.9	0.7	0.7	0.7	0.6	0.6	0.5
LT	1.0	1.3	1.9	1.7	0.9	0.6	0.6	0.6	0.6	0.6	0.5
LU	0.4	0.4	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
HU	0.6	0.2	0.5	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.5
MT	0.5	-0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.5
NL	0.4	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
AT	0.5	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
PL	0.9	1.4	1.3	1.1	0.8	0.7	0.7	0.7	0.6	0.6	0.5
PT	0.5	-0.1	0.2	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5
RO	0.9	0.8	1.2	1.1	0.9	0.8	0.8	0.8	0.7	0.6	0.5
SI	0.6	0.8	0.4	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5
SK	0.6	-0.2	0.7	0.9	0.9	0.6	0.6	0.6	0.6	0.6	0.5
FI	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SE	0.5	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
UK	0.5	0.0	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NO	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
EU28	0.5	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
EA	0.5	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.5

Table III.1.22: Potential GDP per capita (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.1	0.0	0.6	0.5	1.0	1.4	1.5	1.4	1.4	1.4	1.4
BG	2.1	2.0	3.4	2.4	2.0	2.0	1.7	1.6	1.4	1.6	1.7
CZ	1.5	0.4	1.4	1.6	1.8	1.5	1.4	1.4	1.4	1.6	1.8
DK	1.4	0.2	1.6	1.5	1.2	1.3	1.5	1.7	1.7	1.6	1.5
DE	1.3	2.1	1.2	1.1	0.9	1.0	1.4	1.4	1.4	1.4	1.5
EE	1.9	2.5	2.5	2.3	2.1	1.7	1.5	1.4	1.2	1.4	1.8
IE	1.4	0.4	1.5	1.5	1.8	1.4	0.9	0.8	1.3	1.9	2.2
EL	1.2	-3.1	0.6	1.2	2.0	2.5	1.6	1.5	1.5	1.7	1.8
ES	1.4	-0.1	2.0	2.0	1.9	1.5	0.6	0.7	1.2	1.8	2.1
FR	1.3	0.6	0.8	1.0	1.1	1.4	1.4	1.6	1.6	1.6	1.6
HR	1.7	0.1	1.8	1.3	1.6	2.0	1.8	1.9	1.9	2.0	1.8
IT	1.1	-1.6	1.0	0.7	0.9	1.3	1.2	1.4	1.6	1.7	1.7
CY	1.3	-2.4	2.5	1.1	1.6	2.3	1.9	1.6	1.3	1.2	1.4
LV	2.4	2.9	3.9	3.3	2.4	2.0	1.7	1.5	1.3	1.6	2.0
LT	2.3	3.6	3.4	2.8	1.7	1.6	1.7	1.8	1.7	1.7	2.1
LU	0.9	-1.0	0.6	0.5	0.9	1.3	1.3	1.3	1.3	1.2	1.2
HU	1.6	0.5	2.0	2.3	2.1	1.7	1.3	1.5	1.6	1.3	1.2
MT	1.5	1.0	1.3	1.5	1.6	1.9	1.7	1.5	1.2	1.1	1.3
NL	1.2	-0.2	1.0	0.6	0.8	1.2	1.4	1.6	1.7	1.6	1.5
AT	1.2	0.6	1.3	0.9	1.0	1.3	1.3	1.3	1.3	1.3	1.4
PL	1.9	3.3	2.7	2.8	2.3	1.9	1.6	1.3	1.0	1.0	1.2
PT	1.4	-0.2	2.1	1.7	1.6	1.5	1.3	1.3	1.4	1.6	1.6
RO	1.9	2.2	2.4	2.3	1.8	1.7	1.8	1.8	1.6	1.6	1.5
SI	1.3	-0.8	1.8	1.5	1.4	1.4	1.3	1.3	1.4	1.6	1.8
SK	1.9	2.2	2.7	3.2	2.8	1.7	1.1	1.1	1.1	1.2	1.5
FI	1.1	-0.5	0.4	0.7	1.2	1.6	1.6	1.5	1.4	1.3	1.4
SE	1.4	1.3	1.0	1.2	1.4	1.5	1.6	1.5	1.4	1.3	1.4
UK	1.2	0.2	0.5	0.7	1.2	1.6	1.6	1.5	1.4	1.4	1.5
NO	1.3	1.2	0.9	1.3	1.3	1.3	1.4	1.5	1.4	1.3	1.3
EU28	1.3	0.6	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
EA	1.3	0.4	1.2	1.1	1.2	1.3	1.3	1.3	1.5	1.6	1.6

Table III.1.23: Potential GDP per worker (growth rate)

Country	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.2	0.4	0.6	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
BG	2.2	2.2	2.7	2.5	2.2	2.3	2.3	2.3	2.1	1.8	1.5
CZ	1.7	0.6	1.9	1.9	1.9	1.8	1.7	1.8	1.7	1.6	1.5
DK	1.5	0.9	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
DE	1.5	0.4	1.5	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.6
EE	2.0	1.8	2.7	2.5	2.1	1.9	1.9	1.9	1.8	1.7	1.5
IE	1.4	0.3	1.4	1.4	1.6	1.5	1.6	1.6	1.6	1.5	1.5
EL	1.1	-1.3	-0.9	0.2	1.3	2.0	2.0	2.0	1.9	1.7	1.5
ES	1.4	1.4	0.8	1.1	1.4	1.5	1.6	1.6	1.5	1.5	1.5
FR	1.3	0.7	0.8	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
HR	1.7	0.5	1.4	1.4	1.6	1.7	1.9	2.1	2.2	2.2	2.0
IT	1.2	-0.2	0.1	0.6	1.2	1.7	1.7	1.7	1.7	1.6	1.5
CY	1.4	0.6	0.8	0.9	1.3	1.9	1.9	1.9	1.8	1.6	1.5
LV	2.4	2.4	4.0	3.4	2.5	2.0	2.0	2.0	1.8	1.7	1.5
LT	2.4	3.0	4.0	3.8	2.5	1.7	1.7	1.7	1.7	1.6	1.5
LU	1.1	-0.9	0.3	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
HU	1.8	0.2	1.4	2.1	2.2	2.1	2.1	2.1	1.9	1.7	1.6
MT	1.4	-0.7	1.3	1.5	1.5	1.7	1.7	1.8	1.7	1.6	1.5
NL	1.2	0.2	0.6	0.9	1.2	1.5	1.5	1.5	1.5	1.5	1.5
AT	1.3	0.2	1.0	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
PL	2.2	2.5	3.1	2.9	2.3	1.9	1.9	1.9	1.8	1.7	1.6
PT	1.6	0.7	1.0	1.5	1.7	1.9	1.9	1.9	1.8	1.7	1.6
RO	2.3	1.8	2.8	2.8	2.5	2.3	2.3	2.3	2.1	1.8	1.5
SI	1.6	0.8	1.3	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.5
SK	2.2	1.9	3.2	3.2	2.6	1.7	1.7	1.7	1.7	1.6	1.6
FI	1.3	0.3	0.9	1.1	1.4	1.5	1.5	1.5	1.5	1.5	1.5
SE	1.5	1.1	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
UK	1.3	0.0	0.8	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
NO	1.5	1.2	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
EU28	1.5	0.6	1.1	1.4	1.5	1.7	1.7	1.7	1.6	1.6	1.6
EA	1.4	0.5	0.9	1.2	1.4	1.6	1.6	1.6	1.6	1.6	1.5

Table III.1.24: Working age population (15-64) (in thousands)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1849	7316	7556	7753	7937	8171	8432	8681	8877	9033	9165
BG	-1904	4866	4453	4225	4021	3830	3613	3389	3212	3046	2962
CZ	-902	7149	6801	6797	6797	6788	6619	6388	6285	6235	6247
DK	226	3629	3670	3704	3685	3678	3706	3771	3849	3875	3854
DE	-15068	53732	51626	49665	46999	44687	43668	42704	41353	39773	38664
EE	-272	870	805	769	735	711	684	656	629	603	599
IE	139	3017	2923	2893	2876	2844	2784	2739	2775	2943	3156
EL	-2551	7190	6818	6548	6233	5840	5460	5107	4849	4723	4639
ES	-5095	31165	29918	29075	28016	26782	25488	24444	24366	25085	26069
FR	1987	41844	41748	41775	41658	41646	41677	42197	42719	43318	43831
HR	-757	2847	2700	2596	2507	2435	2369	2288	2204	2141	2090
IT	-1512	38993	39592	39787	39442	38809	38180	37914	37858	37723	37481
CY	39	609	598	592	591	600	609	616	621	631	648
LV	-563	1341	1191	1081	980	921	879	844	809	779	778
LT	-947	1982	1694	1455	1260	1153	1103	1070	1048	1035	1035
LU	326	375	434	477	517	557	597	634	662	685	701
HU	-1615	6750	6397	6247	6161	6017	5809	5556	5426	5290	5136
MT	-20	287	281	276	275	279	281	279	275	270	267
NL	-1280	11067	10986	10807	10522	10250	10119	10108	10068	9951	9788
AT	-181	5717	5824	5822	5756	5706	5732	5768	5717	5634	5536
PL	-9200	27151	25455	24456	23864	23385	22511	21216	19779	18699	17951
PT	-2437	6872	6538	6307	6003	5676	5308	4977	4756	4605	4435
RO	-3867	13588	12882	12415	12103	11529	11056	10551	10236	9863	9721
SI	-263	1404	1336	1301	1273	1246	1215	1174	1144	1132	1141
SK	-1433	3863	3688	3575	3479	3373	3203	2978	2763	2576	2429
FI	100	3508	3449	3458	3474	3519	3596	3629	3630	3626	3608
SE	1516	6121	6273	6476	6667	6865	7083	7304	7472	7564	7637
UK	4783	41678	42111	42644	42952	43394	44139	44966	45446	45872	46461
NO	1516	3349	3615	3823	4019	4198	4383	4574	4716	4805	4865
EU28	-38902	334932	327747	322976	316783	310691	305921	301949	298829	296709	296030
EA	-26235	219172	215311	211962	206768	201617	197914	195449	193871	193090	192937

Table III.1.25: Population growth (working age:15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	0.3	0.5	0.5	0.5	0.6	0.7	0.5	0.4	0.3	0.3
BG	1.1	-1.4	-1.2	-1.0	-0.9	-1.1	-1.3	-1.2	-1.0	-1.0	-0.3
CZ	1.3	-1.1	-0.5	0.3	-0.1	-0.1	-0.8	-0.6	-0.3	-0.1	0.3
DK	-0.2	0.1	0.2	0.1	-0.2	0.2	0.2	0.4	0.3	0.0	-0.2
DE	0.4	-0.9	-0.6	-0.9	-1.1	-0.8	-0.3	-0.6	-0.7	-0.8	-0.5
EE	1.3	-1.1	-1.1	-0.9	-0.8	-0.7	-0.8	-0.8	-0.8	-0.7	0.2
IE	1.9	-0.6	-0.5	-0.1	-0.2	-0.3	-0.4	-0.3	0.7	1.4	1.3
EL	0.6	-0.9	-0.8	-0.8	-1.1	-1.4	-1.3	-1.3	-0.7	-0.5	-0.3
ES	1.8	-1.0	-0.5	-0.6	-0.9	-0.9	-1.0	-0.6	0.3	0.7	0.8
FR	0.4	-0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.2
HR	-0.1	-0.4	-0.9	-0.7	-0.6	-0.5	-0.6	-0.8	-0.7	-0.5	-0.5
IT	-0.9	0.8	0.1	0.0	-0.3	-0.3	-0.3	0.0	0.0	-0.1	-0.1
CY	0.7	0.0	-0.3	-0.1	0.2	0.3	0.4	0.1	0.2	0.4	0.7
LV	2.0	-1.6	-1.8	-2.1	-1.6	-0.9	-0.9	-0.8	-0.9	-0.6	0.4
LT	1.6	-1.1	-2.6	-3.1	-2.5	-1.2	-0.7	-0.5	-0.4	-0.2	0.4
LU	-2.0	2.4	2.0	1.8	1.6	1.5	1.4	1.1	0.8	0.6	0.4
HU	0.1	-0.7	-0.9	-0.3	-0.3	-0.6	-1.0	-0.7	-0.4	-0.6	-0.5
MT	0.0	-0.1	-0.4	-0.3	0.1	0.3	0.0	-0.2	-0.3	-0.4	-0.1
NL	0.0	-0.3	-0.2	-0.4	-0.6	-0.6	-0.1	-0.1	-0.1	-0.3	-0.3
AT	-0.7	0.4	0.2	-0.1	-0.2	-0.1	0.2	0.0	-0.2	-0.3	-0.3
PL	0.0	-0.6	-1.0	-0.6	-0.4	-0.5	-1.0	-1.3	-1.4	-1.0	-0.7
PT	0.1	-0.9	-0.6	-0.8	-1.1	-1.2	-1.4	-1.1	-0.7	-0.7	-0.8
RO	0.5	-0.8	-0.9	-0.6	-0.3	-1.0	-1.0	-0.9	-0.6	-0.6	-0.3
SI	0.8	-0.6	-0.8	-0.4	-0.5	-0.4	-0.6	-0.7	-0.4	0.0	0.2
SK	-0.6	-0.3	-0.7	-0.5	-0.7	-0.7	-1.3	-1.5	-1.5	-1.3	-0.9
FI	0.4	-0.5	-0.1	0.1	0.1	0.4	0.3	0.1	0.0	-0.1	-0.1
SE	0.2	0.1	0.5	0.7	0.5	0.7	0.6	0.5	0.4	0.1	0.3
UK	0.3	0.0	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.2	0.3
NO	-0.9	1.1	1.1	1.1	0.9	0.9	0.9	0.8	0.5	0.3	0.2
EU28	0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.2	-0.1	0.0
EA	0.4	-0.4	-0.3	-0.4	-0.5	-0.5	-0.3	-0.2	-0.1	-0.1	0.0

Table III.1.26: Population (20-64) (in thousands)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1597	6681	6904	7033	7188	7389	7627	7861	8038	8167	8278
BG	-1853	4538	4137	3883	3692	3517	3326	3119	2941	2769	2685
CZ	-1021	6656	6314	6190	6209	6208	6063	5854	5734	5641	5634
DK	223	3271	3329	3357	3362	3340	3345	3399	3478	3509	3494
DE	-14313	49738	47960	46116	43407	41014	40066	39238	38008	36505	35424
EE	-270	808	742	694	666	646	625	602	573	544	538
IE	71	2737	2616	2551	2535	2541	2522	2481	2486	2618	2808
EL	-2419	6645	6286	5988	5732	5388	5044	4703	4441	4306	4226
ES	-5220	29013	27597	26588	25741	24776	23651	22613	22393	22922	23792
FR	1572	37865	37605	37590	37510	37440	37456	37903	38356	38925	39437
HR	-692	2600	2494	2380	2296	2228	2170	2098	2021	1959	1908
IT	-1855	36135	36590	36651	36344	35764	35125	34811	34699	34520	34280
CY	38	552	553	543	539	546	557	567	572	578	590
LV	-549	1244	1100	981	890	834	802	773	737	701	695
LT	-880	1799	1568	1332	1134	1033	992	973	954	931	919
LU	294	342	399	437	472	506	542	575	601	621	636
HU	-1515	6194	5907	5740	5690	5537	5327	5083	4965	4832	4679
MT	-20	262	260	254	252	254	256	255	251	247	243
NL	-1177	10073	9973	9853	9595	9312	9165	9155	9127	9035	8896
AT	-180	5242	5390	5380	5293	5221	5242	5287	5245	5164	5062
PL	-8608	24976	23631	22380	21887	21490	20785	19631	18236	17124	16368
PT	-2236	6323	6008	5812	5559	5275	4924	4594	4375	4236	4087
RO	-3695	12496	11824	11349	11135	10512	10082	9609	9311	8939	8801
SI	-275	1307	1242	1191	1158	1137	1115	1079	1046	1027	1032
SK	-1320	3553	3424	3292	3198	3123	2975	2769	2564	2378	2233
FI	73	3191	3148	3137	3149	3183	3255	3290	3292	3286	3264
SE	1310	5567	5725	5861	6020	6175	6372	6600	6768	6835	6877
UK	4031	37796	38501	38576	38671	38986	39775	40669	41130	41411	41827
NO	1378	3024	3290	3468	3651	3800	3958	4132	4266	4349	4401
EU28	-38891	307605	301227	295141	289325	283376	279186	275589	272343	269729	268714
EA	-26190	201711	197798	194093	189230	184350	180949	178555	176805	175779	175522

Table III.1.27: Population growth (20-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.1	0.4	0.4	0.4	0.5	0.6	0.7	0.5	0.4	0.3	0.3
BG	0.8	-1.0	-1.2	-1.2	-0.8	-1.1	-1.3	-1.2	-1.2	-1.1	-0.3
CZ	0.9	-0.7	-0.7	-0.1	0.0	-0.1	-0.8	-0.6	-0.4	-0.2	0.3
DK	-0.3	0.1	0.2	0.2	-0.1	0.0	0.1	0.4	0.4	0.0	-0.1
DE	0.3	-0.8	-0.5	-1.0	-1.3	-0.9	-0.3	-0.5	-0.7	-0.8	-0.5
EE	1.0	-0.8	-1.4	-1.2	-0.6	-0.7	-0.7	-0.8	-1.0	-1.0	0.2
IE	2.2	-0.8	-0.6	-0.5	0.1	0.0	-0.2	-0.4	0.4	1.3	1.3
EL	0.6	-0.9	-0.9	-1.0	-0.8	-1.3	-1.3	-1.4	-0.8	-0.5	-0.3
ES	1.8	-1.0	-0.7	-0.7	-0.7	-0.8	-1.0	-0.7	0.1	0.6	0.8
FR	0.5	-0.3	0.0	0.0	-0.1	0.0	0.2	0.2	0.3	0.3	0.2
HR	0.0	-0.5	-0.9	-0.9	-0.6	-0.4	-0.6	-0.8	-0.7	-0.6	-0.5
IT	-0.9	0.8	0.1	0.0	-0.3	-0.3	-0.4	-0.1	-0.1	-0.1	-0.1
CY	0.0	0.6	-0.3	-0.4	0.1	0.4	0.5	0.2	0.2	0.3	0.6
LV	1.5	-1.0	-2.0	-2.3	-1.7	-0.9	-0.8	-0.7	-1.1	-0.8	0.4
LT	0.9	-0.6	-2.5	-3.6	-2.6	-1.2	-0.6	-0.3	-0.5	-0.5	0.3
LU	-2.0	2.4	2.1	1.7	1.5	1.4	1.3	1.1	0.8	0.6	0.4
HU	-0.2	-0.4	-1.0	-0.4	-0.2	-0.6	-1.1	-0.7	-0.4	-0.6	-0.6
MT	-0.4	0.2	-0.2	-0.4	0.0	0.2	0.0	-0.1	-0.3	-0.5	-0.2
NL	0.0	-0.3	-0.1	-0.4	-0.6	-0.7	-0.1	-0.1	-0.1	-0.3	-0.3
AT	-0.9	0.6	0.2	-0.2	-0.4	-0.1	0.2	0.0	-0.2	-0.4	-0.3
PL	-0.4	-0.3	-1.0	-0.9	-0.3	-0.4	-0.9	-1.3	-1.5	-1.1	-0.7
PT	0.1	-0.9	-0.5	-0.7	-0.9	-1.1	-1.5	-1.2	-0.8	-0.7	-0.7
RO	0.6	-0.9	-0.9	-0.6	-0.3	-1.0	-1.0	-0.9	-0.6	-0.7	-0.3
SI	0.7	-0.5	-0.9	-0.8	-0.4	-0.2	-0.5	-0.7	-0.5	-0.2	0.2
SK	-1.0	0.1	-0.8	-0.6	-0.5	-0.6	-1.2	-1.5	-1.6	-1.4	-1.0
FI	0.2	-0.3	-0.2	0.0	0.1	0.4	0.3	0.2	0.0	-0.1	-0.1
SE	-0.3	0.6	0.4	0.6	0.4	0.7	0.7	0.6	0.4	0.1	0.3
UK	0.2	0.1	0.2	0.0	0.1	0.3	0.5	0.3	0.2	0.1	0.3
NO	-1.0	1.2	1.2	1.1	1.0	0.8	0.9	0.8	0.5	0.3	0.2
EU28	0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	0.0
EA	0.3	-0.3	-0.3	-0.4	-0.6	-0.5	-0.3	-0.3	-0.1	-0.1	0.0

Table III.1.28: Labour force 15-64 (thousands)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1412	4943	5270	5387	5517	5692	5880	6048	6176	6265	6355
BG	-1285	3336	3142	2967	2805	2641	2481	2330	2198	2095	2051
CZ	-535	5215	5075	5002	4982	4940	4830	4748	4696	4655	4680
DK	262	2837	2927	2963	2957	2957	2978	3030	3091	3110	3099
DE	-10898	41758	40665	39168	37190	35630	34918	34114	33005	31771	30860
EE	-197	655	613	580	559	542	523	503	480	460	458
IE	47	2104	2009	1958	1943	1940	1915	1885	1908	2016	2151
EL	-1371	4871	4901	4761	4579	4355	4120	3876	3685	3574	3500
ES	-2547	23112	22898	22437	21918	21195	20284	19488	19371	19845	20564
FR	2524	29729	30026	30472	30507	30515	30700	31055	31471	31910	32253
HR	-445	1809	1744	1675	1619	1581	1543	1491	1438	1398	1363
IT	-280	24707	25841	26089	25832	25373	24941	24757	24699	24594	24427
CY	65	444	464	460	459	464	474	483	489	497	509
LV	-408	996	896	806	734	686	662	639	609	585	588
LT	-692	1437	1234	1053	897	813	786	776	763	747	745
LU	230	260	306	338	368	398	426	451	469	481	491
HU	-620	4368	4597	4611	4570	4444	4258	4072	3977	3866	3748
MT	14	188	197	202	206	210	211	210	207	204	201
NL	-702	8816	8860	8793	8609	8426	8357	8350	8319	8231	8114
AT	-36	4353	4490	4475	4444	4452	4489	4501	4454	4383	4317
PL	-5738	18296	17732	17111	16668	16273	15699	14874	13890	13099	12557
PT	-1687	5021	4842	4718	4531	4299	4022	3771	3595	3468	3334
RO	-2610	8683	8344	8008	7655	7196	6844	6557	6351	6166	6073
SI	-151	993	995	971	938	915	892	866	847	838	842
SK	-971	2706	2623	2533	2446	2355	2222	2077	1941	1824	1736
FI	89	2634	2622	2622	2633	2670	2718	2742	2744	2734	2724
SE	1310	4977	5153	5307	5460	5627	5819	6015	6155	6218	6286
UK	5082	31820	32647	33060	33450	34037	34880	35641	36075	36411	36902
NO	1229	2620	2849	3017	3173	3319	3474	3624	3736	3804	3849
EU28	-20138	241068	241114	238529	234477	230626	227874	225351	223101	221447	220930
EA	-15557	159727	159753	157825	154311	150930	148541	146593	145230	144428	144170

Table III.1.29: Labour force 20-64 (thousands)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1395	4897	5223	5336	5463	5636	5821	5989	6115	6203	6291
BG	-1280	3313	3121	2946	2783	2620	2462	2313	2180	2077	2033
CZ	-539	5186	5049	4971	4949	4908	4799	4719	4667	4623	4647
DK	260	2649	2749	2781	2787	2780	2789	2835	2896	2918	2910
DE	-10684	40594	39573	38128	36143	34552	33855	33090	32018	30810	29910
EE	-197	649	607	573	553	536	517	498	475	454	452
IE	33	2059	1957	1902	1883	1886	1869	1841	1859	1962	2092
EL	-1361	4827	4858	4718	4537	4318	4086	3844	3652	3541	3467
ES	-2564	22825	22599	22109	21604	20919	20034	19244	19111	19560	20261
FR	2455	29137	29400	29842	29885	29881	30067	30412	30816	31250	31592
HR	-438	1780	1719	1650	1594	1556	1520	1468	1417	1377	1342
IT	-304	24493	25619	25858	25599	25145	24715	24527	24466	24357	24189
CY	66	438	459	455	453	458	468	478	484	491	503
LV	-406	987	888	798	727	679	655	633	603	579	581
LT	-688	1426	1227	1047	890	806	780	770	758	742	739
LU	227	256	302	333	363	392	420	444	462	474	483
HU	-614	4341	4574	4588	4548	4422	4236	4051	3956	3845	3727
MT	14	181	192	197	201	204	205	204	201	198	195
NL	-650	8210	8228	8200	8032	7843	7764	7758	7733	7661	7559
AT	-32	4150	4308	4289	4249	4248	4282	4298	4255	4186	4118
PL	-5693	18149	17613	16985	16539	16150	15585	14770	13791	12999	12456
PT	-1663	4954	4776	4656	4473	4248	3974	3723	3548	3422	3290
RO	-2590	8560	8225	7888	7548	7081	6734	6450	6247	6063	5970
SI	-152	981	984	959	925	902	880	855	836	826	829
SK	-963	2687	2608	2517	2429	2340	2208	2064	1930	1812	1724
FI	82	2528	2523	2516	2525	2559	2605	2629	2632	2622	2610
SE	1250	4783	4972	5103	5244	5397	5580	5778	5919	5975	6033
UK	4815	30317	31280	31520	31815	32344	33198	33987	34423	34711	35132
NO	1172	2485	2714	2871	3021	3155	3298	3442	3550	3615	3657
EU28	-20222	235358	235633	232867	228742	224812	222110	219674	217451	215736	215135
EA	-15393	156279	156330	154435	150934	147554	145206	143302	141955	141148	140886

Table III.1.30: Participation rate (20-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.7	73.3	75.6	75.9	76.0	76.3	76.3	76.2	76.1	75.9	76.0
BG	2.7	73.0	75.4	75.9	75.4	74.5	74.0	74.2	74.1	75.0	75.7
CZ	4.6	77.9	80.0	80.3	79.7	79.1	79.2	80.6	81.4	82.0	82.5
DK	2.3	81.0	82.6	82.8	82.9	83.2	83.4	83.4	83.3	83.2	83.3
DE	2.8	81.6	82.5	82.7	83.3	84.2	84.5	84.3	84.2	84.4	84.4
EE	3.6	80.3	81.8	82.6	82.9	82.9	82.8	82.7	82.8	83.6	84.0
IE	-0.7	75.2	74.8	74.6	74.3	74.2	74.1	74.2	74.8	74.9	74.5
EL	9.4	72.6	77.3	78.8	79.1	80.1	81.0	81.7	82.2	82.2	82.0
ES	6.5	78.7	81.9	83.2	83.9	84.4	84.7	85.1	85.3	85.3	85.2
FR	3.2	76.9	78.2	79.4	79.7	79.8	80.3	80.2	80.3	80.3	80.1
HR	1.9	68.5	68.9	69.3	69.4	69.8	70.0	70.0	70.1	70.3	70.3
IT	2.8	67.8	70.0	70.6	70.4	70.3	70.4	70.5	70.5	70.6	70.6
CY	6.0	79.2	83.0	83.8	84.0	84.0	84.1	84.2	84.6	84.9	85.2
LV	4.2	79.3	80.8	81.3	81.6	81.4	81.7	81.8	81.8	82.6	83.6
LT	1.1	79.3	78.3	78.6	78.5	78.1	78.6	79.2	79.5	79.7	80.3
LU	1.0	74.9	75.8	76.3	76.9	77.5	77.5	77.2	76.9	76.3	76.0
HU	9.6	70.1	77.4	79.9	79.9	79.9	79.5	79.7	79.7	79.6	79.6
MT	11.4	69.0	73.8	77.4	79.6	80.2	80.1	80.1	80.0	80.0	80.4
NL	3.5	81.5	82.5	83.2	83.7	84.2	84.7	84.7	84.7	84.8	85.0
AT	2.2	79.2	79.9	79.7	80.3	81.4	81.7	81.3	81.1	81.1	81.3
PL	3.4	72.7	74.5	75.9	75.6	75.1	75.0	75.2	75.6	75.9	76.1
PT	2.2	78.3	79.5	80.1	80.5	80.5	80.7	81.0	81.1	80.8	80.5
RO	-0.7	68.5	69.6	69.5	67.8	67.4	66.8	67.1	67.1	67.8	67.8
SI	5.3	75.1	79.2	80.5	79.8	79.3	78.9	79.3	79.9	80.4	80.4
SK	1.6	75.6	76.2	76.5	75.9	74.9	74.2	74.6	75.3	76.2	77.2
FI	0.8	79.2	80.1	80.2	80.2	80.4	80.0	79.9	80.0	79.8	80.0
SE	1.8	85.9	86.8	87.1	87.1	87.4	87.6	87.5	87.5	87.4	87.7
UK	3.8	80.2	81.2	81.7	82.3	83.0	83.5	83.6	83.7	83.8	84.0
NO	0.9	82.2	82.5	82.8	82.8	83.0	83.3	83.3	83.2	83.1	83.1
EU28	3.5	76.5	78.2	78.9	79.1	79.3	79.6	79.7	79.8	80.0	80.1
EA	2.8	77.5	79.0	79.6	79.8	80.0	80.2	80.3	80.3	80.3	80.3

Table III.1.31: Participation rate (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.8	67.6	69.7	69.5	69.5	69.7	69.7	69.7	69.6	69.4	69.3
BG	0.7	68.6	70.6	70.2	69.8	69.0	68.7	68.7	68.4	68.8	69.2
CZ	2.0	72.9	74.6	73.6	73.3	72.8	73.0	74.3	74.7	74.7	74.9
DK	2.2	78.2	79.8	80.0	80.2	80.4	80.3	80.4	80.3	80.3	80.4
DE	2.1	77.7	78.8	78.9	79.1	79.7	80.0	79.9	79.8	79.9	79.8
EE	1.2	75.3	76.1	75.5	76.1	76.3	76.5	76.7	76.4	76.3	76.4
IE	-1.6	69.7	68.8	67.7	67.6	68.2	68.8	68.8	68.7	68.5	68.2
EL	7.7	67.7	71.9	72.7	73.5	74.6	75.5	75.9	76.0	75.7	75.4
ES	4.7	74.2	76.5	77.2	78.2	79.1	79.6	79.7	79.5	79.1	78.9
FR	2.5	71.0	71.9	72.9	73.2	73.3	73.7	73.6	73.7	73.7	73.6
HR	1.7	63.5	64.6	64.5	64.6	64.9	65.2	65.2	65.3	65.3	65.2
IT	1.8	63.4	65.3	65.6	65.5	65.4	65.3	65.3	65.2	65.2	65.2
CY	5.7	72.9	77.6	77.7	77.7	77.5	77.9	78.4	78.8	78.7	78.6
LV	1.3	74.3	75.2	74.6	74.9	74.5	75.3	75.7	75.3	75.1	75.6
LT	-0.5	72.5	72.9	72.3	71.2	70.5	71.2	72.5	72.9	72.2	72.0
LU	0.5	69.4	70.5	70.9	71.2	71.5	71.4	71.1	70.8	70.3	70.0
HU	8.3	64.7	71.9	73.8	74.2	73.9	73.3	73.3	73.3	73.1	73.0
MT	10.1	65.3	70.2	73.3	75.1	75.3	75.2	75.3	75.4	75.3	75.4
NL	3.2	79.7	80.7	81.4	81.8	82.2	82.6	82.6	82.6	82.7	82.9
AT	1.8	76.1	77.1	76.9	77.2	78.0	78.3	78.0	77.9	77.8	78.0
PL	2.6	67.4	69.7	70.0	69.8	69.6	69.7	70.1	70.2	70.1	70.0
PT	2.1	73.1	74.1	74.8	75.5	75.7	75.8	75.8	75.6	75.3	75.2
RO	-1.4	63.9	64.8	64.5	63.2	62.4	61.9	62.1	62.0	62.5	62.5
SI	3.1	70.7	74.5	74.6	73.7	73.4	73.4	73.8	74.1	74.1	73.8
SK	1.4	70.1	71.1	70.9	70.3	69.8	69.4	69.7	70.2	70.8	71.4
FI	0.4	75.1	76.0	75.8	75.8	75.9	75.6	75.5	75.6	75.4	75.5
SE	1.0	81.3	82.1	82.0	81.9	82.0	82.2	82.3	82.4	82.2	82.3
UK	3.1	76.3	77.5	77.5	77.9	78.4	79.0	79.3	79.4	79.4	79.4
NO	0.9	78.2	78.8	78.9	79.0	79.1	79.3	79.2	79.2	79.2	79.1
EU28	2.7	72.0	73.6	73.9	74.0	74.2	74.5	74.6	74.7	74.6	74.6
EA	2.1	72.2	73.6	74.0	74.2	74.4	74.6	74.6	74.5	74.4	74.3

Table III.1.32: Participation rate (15-24)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.3	31.2	31.7	30.7	31.2	31.2	31.3	31.3	31.1	30.9	30.9
BG	-1.2	30.2	28.8	27.7	29.1	29.7	30.3	29.9	29.2	28.8	29.0
CZ	-3.2	31.7	28.5	26.4	29.4	29.5	29.9	29.9	28.8	28.1	28.6
DK	0.4	61.9	62.4	62.2	62.7	62.0	61.9	62.1	62.2	62.3	62.3
DE	-0.9	51.0	51.1	50.5	50.0	49.9	50.3	50.5	50.5	50.3	50.1
EE	-4.0	40.4	35.4	33.4	37.3	37.7	38.5	38.2	36.7	35.8	36.4
IE	1.5	39.9	40.4	39.4	41.5	43.7	44.2	42.6	40.9	40.8	41.4
EL	-0.3	30.8	30.0	29.3	31.2	31.8	31.4	30.9	30.4	30.2	30.6
ES	-0.4	37.9	35.6	35.9	38.5	39.5	39.3	38.5	37.5	37.1	37.5
FR	0.9	37.7	38.4	38.6	38.7	38.5	38.6	38.4	38.4	38.5	38.6
HR	3.6	28.7	33.8	31.6	32.3	32.4	32.7	32.8	32.7	32.4	32.3
IT	-0.3	27.5	27.2	27.1	27.7	27.8	27.5	27.2	27.1	27.0	27.2
CY	-1.2	40.6	41.6	38.3	38.8	39.5	41.0	41.6	41.1	39.9	39.3
LV	-4.3	40.7	35.1	33.9	37.1	37.0	39.1	39.0	37.3	36.0	36.3
LT	-1.3	32.1	33.9	29.7	29.3	32.2	33.7	34.5	33.3	31.0	30.8
LU	2.6	27.0	31.2	30.6	30.1	29.9	29.8	29.6	29.6	29.7	29.6
HU	-0.6	27.3	27.7	26.4	27.6	26.5	26.8	27.0	27.1	26.8	26.7
MT	-1.1	53.2	54.9	52.4	51.7	51.8	52.5	53.3	53.3	52.7	52.1
NL	1.2	70.0	71.2	71.4	71.3	71.0	71.0	71.1	71.2	71.2	71.2
AT	-0.2	59.9	60.6	60.0	59.7	59.6	59.9	60.1	60.1	59.8	59.7
PL	-2.3	33.9	33.1	29.8	31.9	32.2	33.0	33.0	32.2	31.5	31.6
PT	1.6	35.3	36.2	36.9	37.7	37.6	36.8	36.2	36.2	36.6	36.9
RO	-1.1	29.8	28.7	28.4	29.1	28.0	29.1	29.0	28.8	28.6	28.6
SI	-0.2	33.1	33.7	31.6	32.6	34.1	34.6	34.2	33.4	32.7	32.9
SK	-1.5	31.2	30.7	28.5	29.6	31.1	30.8	30.9	30.3	29.6	29.7
FI	-0.6	52.4	52.3	51.5	52.1	51.9	52.0	52.1	52.0	51.8	51.8
SE	-2.2	55.4	53.4	52.7	53.4	53.2	53.6	54.0	53.7	53.3	53.2
UK	-0.9	58.3	58.2	56.5	57.3	57.7	58.1	58.1	57.8	57.4	57.4
NO	1.0	57.4	59.4	58.4	58.8	58.3	58.3	58.5	58.5	58.5	58.4
EU28	-0.2	42.4	42.1	41.2	42.0	42.4	42.8	42.8	42.5	42.2	42.2
EA	-1.0	41.2	40.8	40.3	40.7	41.0	41.2	40.9	40.5	40.3	40.2

Table III.1.33: Participation rate (25-54)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.3	85.4	86.0	86.0	85.9	85.7	85.6	85.6	85.6	85.7	85.6
BG	0.9	83.1	83.9	84.3	84.3	83.8	83.6	83.6	83.8	84.0	83.9
CZ	-0.5	89.0	89.3	89.4	89.1	88.5	88.0	87.8	88.1	88.4	88.5
DK	-0.6	87.5	87.1	87.1	87.0	87.0	87.0	87.0	86.9	86.9	86.9
DE	1.9	87.7	88.5	88.9	89.3	89.6	89.6	89.6	89.5	89.5	89.6
EE	2.1	87.6	88.7	89.4	89.7	89.6	89.2	89.3	89.6	89.7	89.7
IE	-2.2	80.7	80.2	80.0	79.6	78.9	78.7	78.8	78.6	78.5	78.5
EL	4.1	84.0	86.4	87.1	87.6	87.9	88.2	88.3	88.4	88.3	88.1
ES	2.7	86.9	89.0	89.7	89.8	89.6	89.5	89.6	89.7	89.7	89.6
FR	0.1	88.4	88.6	88.6	88.5	88.5	88.5	88.5	88.5	88.5	88.5
HR	-1.3	81.0	80.1	80.1	80.1	79.7	79.5	79.6	79.7	79.9	79.8
IT	-2.4	77.1	76.9	76.3	75.5	74.9	74.7	74.8	74.8	74.7	74.7
CY	2.0	87.7	89.2	89.3	89.5	89.5	89.5	89.6	89.8	89.8	89.7
LV	1.5	87.6	88.7	88.8	89.0	88.9	88.9	89.0	89.1	89.2	89.1
LT	-2.1	89.4	88.2	87.8	87.5	87.3	87.0	87.1	87.4	87.5	87.3
LU	2.3	87.5	89.1	89.6	90.0	90.0	89.9	89.9	89.8	89.8	89.8
HU	1.8	83.3	84.7	85.0	85.0	85.2	85.2	85.1	85.1	85.1	85.1
MT	7.4	78.2	82.9	84.4	85.1	85.4	85.7	85.7	85.7	85.7	85.7
NL	0.9	87.5	88.0	88.3	88.4	88.4	88.4	88.3	88.3	88.3	88.4
AT	0.6	88.8	89.0	89.1	89.3	89.3	89.3	89.3	89.4	89.4	89.4
PL	-1.8	84.6	84.3	83.8	83.2	82.7	82.6	82.8	83.0	83.1	82.8
PT	0.2	88.2	88.6	88.7	88.8	88.7	88.6	88.5	88.5	88.4	88.4
RO	-2.5	80.1	79.1	78.5	77.8	77.7	77.4	77.5	77.6	77.6	77.6
SI	-1.4	90.8	90.4	90.1	89.5	89.1	89.1	89.4	89.5	89.5	89.4
SK	-4.3	87.2	85.5	84.7	83.9	83.3	82.8	82.7	82.9	83.0	82.9
FI	-0.7	86.8	86.2	86.0	85.9	86.0	86.0	86.0	86.0	86.0	86.1
SE	1.7	90.9	91.7	92.3	92.5	92.5	92.5	92.5	92.5	92.6	92.6
UK	2.5	85.8	86.6	87.2	87.7	87.9	88.1	88.2	88.2	88.3	88.3
NO	1.7	86.6	87.0	87.5	87.9	88.0	88.2	88.3	88.3	88.3	88.3
EU28	0.6	85.3	85.8	85.9	85.9	85.8	85.7	85.8	85.9	85.9	85.9
EA	0.3	85.5	86.1	86.1	86.1	85.9	85.8	85.8	85.8	85.8	85.8

Table III.1.34: Participation rate (55-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	12.0	44.0	54.0	55.2	55.8	56.5	56.8	56.3	56.3	55.8	56.0
BG	6.6	54.4	57.4	59.6	61.3	60.9	60.0	60.5	58.8	58.8	61.0
CZ	23.3	55.1	58.0	61.4	65.9	67.1	68.0	72.8	74.8	75.5	78.3
DK	12.7	65.3	74.2	75.7	76.2	76.7	76.8	77.6	77.9	77.8	78.0
DE	8.5	67.6	71.9	72.6	72.5	74.5	76.0	76.4	75.9	76.2	76.1
EE	8.2	66.6	67.4	70.0	73.5	73.8	74.2	74.2	72.6	72.8	74.8
IE	7.3	57.3	61.8	63.2	65.3	66.9	66.0	62.7	62.7	65.0	64.6
EL	35.5	42.4	59.4	66.4	69.4	72.0	74.5	75.9	77.2	77.7	78.0
ES	28.2	54.2	67.8	74.5	79.4	81.6	81.8	81.8	81.8	82.1	82.5
FR	14.2	49.2	55.4	61.5	63.0	62.4	63.6	63.0	63.4	63.7	63.4
HR	9.5	41.4	44.5	44.6	45.8	49.4	52.5	51.7	51.0	51.4	50.9
IT	23.6	45.4	58.6	64.2	66.7	67.5	67.7	67.6	68.1	68.6	69.0
CY	21.4	57.0	68.2	71.6	73.7	74.7	76.4	76.8	77.2	77.4	78.4
LV	11.6	61.5	63.9	67.6	70.7	69.9	71.4	71.9	69.8	68.1	73.1
LT	5.5	60.2	61.1	63.7	66.9	66.2	66.6	67.4	66.6	64.5	65.6
LU	4.3	42.2	44.4	45.0	45.3	47.1	48.0	47.5	47.9	47.4	46.5
HU	35.7	41.8	64.8	76.0	77.7	77.5	76.4	77.5	77.9	77.3	77.5
MT	26.2	38.7	43.3	52.3	61.1	64.8	65.2	65.7	65.7	64.9	64.8
NL	13.5	64.1	68.5	71.6	72.6	73.4	75.3	76.0	76.5	76.8	77.6
AT	13.3	46.4	54.9	56.2	56.6	58.4	60.5	60.1	60.1	59.5	59.7
PL	20.1	44.2	50.0	55.2	59.4	61.7	63.7	64.5	64.2	63.8	64.3
PT	14.3	54.3	61.8	65.2	67.6	68.6	68.6	68.3	68.6	68.8	68.6
RO	5.7	43.0	46.3	51.3	50.0	49.7	48.4	49.4	47.8	48.6	48.7
SI	27.9	35.6	55.5	62.8	64.7	65.1	63.6	62.8	62.4	63.0	63.4
SK	20.8	49.6	53.8	57.2	60.5	61.3	61.2	62.9	64.5	66.8	70.4
FI	3.0	62.7	66.8	67.3	66.3	67.0	66.1	65.9	66.4	65.5	65.7
SE	1.3	77.7	77.1	77.3	77.3	78.1	78.7	79.2	79.2	78.0	78.9
UK	10.4	62.9	66.5	67.7	68.6	70.2	72.2	72.7	73.2	73.1	73.3
NO	-1.4	72.1	70.9	70.9	69.8	69.7	70.4	70.5	71.1	71.0	70.8
EU28	15.8	54.4	62.2	66.1	67.6	68.6	69.5	69.7	69.7	69.9	70.2
EA	15.8	54.8	63.3	67.3	69.0	70.1	70.8	70.5	70.4	70.5	70.7

Table III.1.35: Participation rate (20-64) - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	5.3	67.6	71.1	71.8	72.3	72.8	72.9	72.9	72.8	72.8	72.9
BG	1.5	68.9	70.8	71.2	70.5	69.2	68.5	68.5	68.4	69.5	70.4
CZ	6.5	69.5	72.2	72.7	72.4	71.7	71.9	73.7	74.8	75.4	76.0
DK	3.8	77.9	80.3	80.8	80.9	81.3	81.5	81.7	81.6	81.5	81.7
DE	5.1	76.2	77.8	78.4	79.5	80.9	81.3	81.2	81.2	81.3	81.3
EE	4.8	76.4	78.9	80.1	80.5	80.4	80.0	79.8	79.9	80.7	81.2
IE	1.6	67.2	68.2	68.7	68.9	69.1	68.8	68.4	68.8	69.1	68.8
EL	13.3	62.8	68.7	71.1	72.0	73.5	74.6	75.6	76.3	76.3	76.1
ES	12.4	72.4	78.6	81.2	82.8	83.9	84.4	84.7	84.9	84.9	84.8
FR	3.9	72.4	74.1	75.5	75.8	76.0	76.4	76.4	76.5	76.5	76.3
HR	4.0	63.4	65.0	66.0	66.5	67.2	67.3	67.2	67.1	67.3	67.3
IT	6.1	57.1	60.6	61.4	61.9	62.3	62.7	62.9	63.0	63.2	63.1
CY	8.0	72.7	77.3	78.4	78.8	78.8	79.1	79.3	79.9	80.3	80.7
LV	4.4	76.2	77.6	78.2	78.6	78.3	78.5	78.7	78.8	79.6	80.6
LT	1.5	76.6	75.7	76.5	76.6	75.8	76.0	76.6	76.9	77.3	78.1
LU	4.8	67.6	70.7	71.9	72.7	73.4	73.5	73.3	73.1	72.7	72.4
HU	11.4	63.3	72.3	75.1	75.2	75.0	74.6	74.8	74.8	74.6	74.7
MT	18.6	52.8	60.9	65.9	69.1	70.5	70.8	71.0	71.0	71.0	71.4
NL	6.7	75.8	78.1	79.4	80.5	81.4	82.2	82.3	82.3	82.3	82.5
AT	5.2	74.1	75.5	76.1	77.3	79.0	79.6	79.3	79.1	79.0	79.3
PL	4.6	65.2	66.7	68.2	68.3	68.1	68.4	68.9	69.3	69.6	69.8
PT	4.9	74.6	77.3	78.6	79.3	79.5	79.7	80.0	80.1	79.8	79.5
RO	-1.5	59.7	60.1	59.9	58.1	57.7	57.1	57.5	57.5	58.2	58.2
SI	7.1	71.0	75.5	78.0	77.7	77.1	76.7	77.0	77.6	78.1	78.1
SK	0.7	67.5	68.4	68.9	68.2	66.9	65.8	65.9	66.4	67.3	68.2
FI	1.6	77.0	78.0	78.1	78.3	78.7	78.5	78.5	78.6	78.5	78.6
SE	1.8	82.9	83.6	83.8	83.9	84.2	84.4	84.4	84.3	84.3	84.7
UK	6.0	74.0	75.8	76.9	78.0	78.9	79.4	79.4	79.6	79.8	80.0
NO	2.2	79.4	80.3	80.8	80.9	81.3	81.7	81.8	81.7	81.7	81.6
EU28	5.9	70.0	72.6	73.7	74.3	74.8	75.2	75.4	75.6	75.8	75.9
EA	5.7	70.4	73.1	74.2	74.9	75.6	75.9	75.9	76.0	76.1	76.1

Table III.1.36: Participation rate (15-64) - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.1	62.3	65.6	65.8	66.1	66.4	66.6	66.6	66.6	66.4	66.4
BG	-0.3	64.7	66.2	65.9	65.2	64.0	63.5	63.5	63.1	63.7	64.3
CZ	3.9	65.1	67.3	66.6	66.5	66.0	66.3	68.0	68.6	68.7	69.0
DK	3.5	75.7	77.9	78.4	78.6	78.9	78.9	79.1	79.0	79.0	79.2
DE	4.2	72.6	74.3	74.8	75.6	76.5	76.9	76.9	76.8	76.9	76.8
EE	2.2	71.8	73.6	73.4	74.1	74.2	74.1	74.1	73.8	73.8	74.0
IE	0.5	62.7	63.1	62.7	63.1	63.8	64.1	63.7	63.4	63.3	63.1
EL	11.3	58.7	64.0	65.7	66.9	68.4	69.5	70.2	70.5	70.2	69.9
ES	10.0	68.4	73.5	75.4	77.2	78.7	79.3	79.3	78.9	78.6	78.4
FR	3.1	66.9	68.2	69.3	69.6	69.7	70.0	69.9	70.0	70.0	69.9
HR	3.6	58.9	60.9	61.4	61.9	62.4	62.6	62.5	62.5	62.5	62.5
IT	4.8	53.5	56.6	57.1	57.5	57.9	58.1	58.3	58.3	58.3	58.3
CY	7.1	66.9	72.3	72.8	72.9	72.7	73.1	73.7	74.1	74.1	74.1
LV	1.3	71.6	72.6	72.1	72.5	72.0	72.5	72.9	72.5	72.4	72.9
LT	-0.5	70.3	70.8	70.8	69.9	68.8	69.1	70.1	70.4	69.9	69.8
LU	4.0	62.6	65.6	66.5	67.1	67.6	67.5	67.3	67.2	66.8	66.6
HU	9.9	58.5	67.2	69.4	69.8	69.4	68.8	68.8	68.8	68.5	68.4
MT	16.7	50.2	58.1	62.5	65.2	66.2	66.5	66.8	66.9	66.8	66.9
NL	6.2	74.6	76.8	78.0	79.0	79.8	80.5	80.6	80.6	80.6	80.8
AT	4.6	71.1	72.6	73.1	74.1	75.4	76.0	75.7	75.6	75.5	75.7
PL	3.6	60.6	62.4	63.0	63.2	63.2	63.7	64.3	64.4	64.2	64.2
PT	4.5	69.8	72.3	73.6	74.6	74.9	74.9	74.9	74.7	74.4	74.3
RO	-2.1	55.7	56.0	55.7	54.3	53.5	53.0	53.2	53.2	53.7	53.6
SI	4.9	66.8	71.0	72.3	71.6	71.3	71.2	71.6	71.9	71.9	71.6
SK	0.5	62.6	63.9	63.8	63.1	62.3	61.5	61.7	62.0	62.5	63.1
FI	1.2	73.5	74.4	74.3	74.4	74.7	74.6	74.6	74.8	74.6	74.7
SE	1.0	79.0	79.6	79.4	79.4	79.5	79.7	79.9	79.9	79.8	80.0
UK	5.0	70.9	72.7	73.3	74.1	74.9	75.5	75.6	75.7	75.8	75.9
NO	2.1	76.0	77.1	77.3	77.6	77.8	78.1	78.2	78.2	78.1	78.1
EU28	4.7	66.0	68.4	69.1	69.6	70.1	70.4	70.6	70.7	70.7	70.7
EA	4.5	66.3	68.7	69.5	70.1	70.7	71.0	70.9	70.9	70.8	70.7

Table III.1.37: Participation rate (15-24) - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	28.6	29.4	28.4	28.9	29.0	29.0	29.0	28.8	28.6	28.6
BG	-1.5	25.5	23.7	22.8	24.0	24.5	25.0	24.7	24.1	23.7	24.0
CZ	-2.7	26.3	23.6	21.8	24.3	24.4	24.8	24.8	23.9	23.3	23.7
DK	0.4	62.5	62.9	62.8	63.2	62.6	62.5	62.7	62.8	62.8	62.8
DE	-0.8	48.9	49.1	48.5	47.9	47.9	48.3	48.5	48.4	48.3	48.1
EE	-3.9	37.7	32.7	31.0	34.5	34.9	35.6	35.4	34.0	33.2	33.7
IE	1.2	38.7	38.9	38.0	40.1	42.1	42.6	41.0	39.4	39.3	39.9
EL	-0.1	27.6	27.0	26.3	28.1	28.7	28.3	27.9	27.4	27.2	27.6
ES	-0.6	36.1	33.6	33.8	36.3	37.3	37.1	36.3	35.4	35.1	35.4
FR	0.6	34.1	34.5	34.7	34.9	34.7	34.7	34.5	34.5	34.6	34.7
HR	2.2	24.0	27.4	25.7	26.3	26.3	26.6	26.6	26.6	26.3	26.2
IT	-0.1	23.5	23.4	23.3	23.9	24.0	23.8	23.5	23.4	23.3	23.5
CY	-2.0	37.3	37.4	34.1	34.4	35.2	36.7	37.4	36.9	35.8	35.3
LV	-4.3	36.6	31.1	30.0	33.0	32.7	34.7	34.6	33.1	32.0	32.3
LT	-1.4	27.5	28.8	24.9	24.4	27.1	28.5	29.3	28.3	26.3	26.1
LU	4.0	22.5	28.0	27.4	27.0	26.8	26.7	26.5	26.5	26.5	26.5
HU	-0.7	23.9	24.1	22.9	24.0	23.0	23.2	23.4	23.5	23.2	23.2
MT	-0.8	49.5	51.3	49.1	48.1	48.4	49.1	49.8	49.8	49.2	48.6
NL	1.2	70.8	71.9	72.1	72.0	71.8	71.7	71.8	71.9	72.0	71.9
AT	-0.9	55.9	55.9	55.3	55.0	54.9	55.2	55.4	55.4	55.1	55.0
PL	-2.1	28.7	27.9	25.1	26.9	27.2	27.8	27.8	27.1	26.5	26.6
PT	1.5	34.0	34.9	35.5	36.4	36.4	35.4	34.9	34.8	35.2	35.6
RO	-0.6	24.7	24.2	23.9	24.5	23.6	24.5	24.4	24.2	24.1	24.1
SI	0.0	30.3	30.9	28.9	30.0	31.4	31.8	31.5	30.7	30.0	30.2
SK	-1.5	24.1	23.4	21.7	22.5	23.8	23.5	23.5	23.1	22.6	22.6
FI	-0.2	53.7	53.8	53.1	53.7	53.5	53.6	53.7	53.6	53.4	53.4
SE	-2.0	56.0	54.1	53.6	54.2	54.1	54.4	54.7	54.5	54.1	54.0
UK	-0.8	56.5	56.4	54.9	55.7	56.0	56.4	56.4	56.2	55.8	55.7
NO	1.3	58.4	60.4	59.6	60.0	59.6	59.6	59.7	59.8	59.7	59.7
EU28	-0.1	39.5	39.2	38.4	39.2	39.6	40.0	40.0	39.7	39.4	39.4
EA	-1.1	38.5	38.1	37.5	37.9	38.2	38.3	38.1	37.7	37.5	37.4

Table III.1.38: Participation rate (25-54) - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.4	79.7	81.4	81.8	82.0	81.9	82.0	82.1	82.1	82.1	82.1
BG	0.0	80.2	80.8	81.2	81.1	80.4	79.9	79.7	79.9	80.2	80.2
CZ	-0.6	81.9	82.4	82.6	82.3	81.2	80.3	79.9	80.2	80.9	81.2
DK	0.2	84.9	84.8	85.0	85.0	85.1	85.2	85.2	85.1	85.1	85.1
DE	3.4	82.4	83.9	84.7	85.4	85.8	85.9	85.8	85.8	85.8	85.8
EE	3.6	82.9	84.8	86.0	86.7	86.5	85.8	85.4	85.7	86.3	86.5
IE	-0.6	72.5	73.1	73.7	73.7	72.8	72.0	71.8	71.7	71.8	71.9
EL	8.0	74.4	78.9	80.5	81.7	82.3	82.4	82.6	82.7	82.6	82.4
ES	7.4	81.3	86.1	88.1	88.8	88.6	88.3	88.4	88.6	88.7	88.7
FR	0.7	83.5	84.3	84.4	84.4	84.3	84.2	84.2	84.2	84.2	84.2
HR	-0.7	77.9	77.8	78.1	78.1	77.7	77.1	77.1	77.1	77.3	77.2
IT	0.6	66.0	67.4	67.6	67.3	66.7	66.4	66.6	66.6	66.7	66.6
CY	3.5	82.0	84.5	84.7	85.1	85.2	85.3	85.4	85.6	85.6	85.5
LV	1.9	84.7	85.7	86.1	86.5	86.5	86.3	86.2	86.5	86.7	86.7
LT	-2.3	88.3	87.0	86.5	86.2	86.0	85.5	85.4	85.8	86.1	86.0
LU	4.5	80.4	83.2	84.4	85.0	85.0	84.8	84.8	84.9	84.9	84.9
HU	2.1	77.2	78.9	79.2	79.3	79.5	79.6	79.4	79.2	79.2	79.3
MT	14.9	61.3	70.3	73.6	75.0	75.8	76.4	76.5	76.4	76.3	76.3
NL	3.5	82.6	84.6	85.6	86.1	86.2	86.2	86.2	86.2	86.2	86.2
AT	2.7	85.0	86.5	87.0	87.5	87.7	87.8	87.7	87.7	87.7	87.7
PL	-2.5	79.1	78.4	77.9	77.3	76.7	76.4	76.4	76.6	76.7	76.6
PT	2.1	85.6	87.3	88.0	88.2	88.1	87.8	87.8	87.7	87.7	87.7
RO	-3.8	72.0	70.3	69.4	68.6	68.4	68.0	68.1	68.2	68.2	68.1
SI	-1.5	88.7	88.3	88.1	87.3	86.9	86.9	87.2	87.3	87.3	87.2
SK	-7.3	80.5	77.6	76.3	75.1	74.2	73.3	72.7	72.9	73.1	73.2
FI	0.6	83.3	83.0	83.0	83.3	83.6	83.8	83.8	83.8	83.9	83.9
SE	1.9	88.1	88.9	89.5	89.8	89.8	89.8	89.8	89.9	90.0	90.0
UK	4.2	79.6	81.0	82.1	82.8	83.2	83.5	83.6	83.6	83.7	83.8
NO	2.7	84.0	84.9	85.5	86.0	86.3	86.6	86.7	86.7	86.7	86.7
EU28	2.1	79.2	80.5	81.0	81.2	81.2	81.1	81.1	81.2	81.3	81.3
EA	2.3	79.2	80.9	81.6	81.8	81.7	81.5	81.4	81.5	81.5	81.6

Table III.1.39: Participation rate (55-64) - Women

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	16.7	37.6	49.6	51.6	52.9	54.1	54.5	54.2	54.3	54.1	54.3
BG	3.3	49.2	50.8	52.3	53.5	52.8	51.5	52.2	50.0	50.0	52.5
CZ	31.6	44.5	48.1	52.3	58.1	60.1	62.7	69.7	72.5	73.3	76.0
DK	16.6	60.1	71.5	73.5	73.8	74.5	74.7	75.8	76.4	76.4	76.8
DE	13.6	60.8	66.1	67.8	68.9	71.9	73.9	74.5	74.2	74.5	74.4
EE	9.2	66.3	68.7	71.7	74.3	74.0	74.5	74.7	73.2	73.2	75.4
IE	14.1	47.0	54.6	56.6	59.9	62.9	63.5	60.4	59.4	61.4	61.1
EL	39.9	30.8	46.9	55.5	59.1	62.6	66.2	68.3	69.9	70.4	70.7
ES	40.5	45.0	63.2	71.9	78.4	82.7	84.4	84.7	84.7	85.1	85.5
FR	15.6	46.3	52.9	59.0	60.9	60.6	62.3	61.5	61.7	62.1	61.9
HR	17.4	32.7	39.9	41.4	44.0	48.7	52.4	51.6	50.5	50.7	50.2
IT	28.3	34.6	48.7	53.2	56.7	59.3	61.0	61.4	61.9	62.6	62.9
CY	30.1	42.8	57.8	63.6	66.7	68.0	70.0	70.8	71.5	71.8	73.0
LV	10.9	60.5	62.6	65.8	68.6	67.9	69.3	70.1	68.2	66.6	71.4
LT	8.1	56.1	58.0	62.3	66.3	65.0	65.3	66.2	65.5	63.1	64.2
LU	13.9	33.6	41.0	43.3	45.0	47.8	49.2	48.1	48.8	48.4	47.5
HU	40.5	34.8	62.9	74.6	75.9	74.9	73.6	75.4	76.0	75.1	75.4
MT	35.4	19.5	27.1	36.1	46.5	52.8	54.1	55.2	55.7	54.8	54.9
NL	20.7	52.9	59.5	63.5	65.7	67.9	70.7	71.8	72.3	72.6	73.6
AT	20.9	36.8	45.4	49.2	51.5	55.2	58.2	58.2	58.2	57.4	57.7
PL	25.9	33.4	37.5	42.3	48.7	53.0	57.3	59.5	59.4	58.9	59.3
PT	20.9	46.8	57.0	61.8	65.8	67.5	67.9	67.7	67.6	67.8	67.6
RO	4.3	33.4	35.2	39.9	39.0	39.0	37.7	38.5	36.9	37.7	37.7
SI	35.7	26.4	48.1	60.4	63.6	63.8	62.2	61.4	60.9	61.6	62.0
SK	24.4	40.5	49.6	54.8	58.1	57.8	56.8	58.5	59.7	61.4	64.9
FI	2.9	63.9	67.5	67.6	66.6	67.1	66.2	66.4	67.3	66.5	66.7
SE	0.4	73.6	72.3	72.5	72.3	73.0	73.6	74.2	74.3	72.9	74.0
UK	15.7	55.4	60.8	63.8	66.2	68.3	70.3	70.1	70.6	70.8	71.1
NO	1.3	67.9	67.9	68.2	67.8	67.5	68.2	68.8	69.4	69.4	69.2
EU28	20.9	46.5	55.5	60.1	62.6	64.6	66.2	66.6	66.7	67.0	67.4
EA	21.1	47.3	57.2	61.8	64.5	66.7	68.4	68.2	68.0	68.1	68.4

Table III.1.40: Participation rate (20-64) - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.1	79.0	80.1	79.8	79.6	79.7	79.6	79.4	79.2	79.0	79.0
BG	3.7	77.1	79.9	80.4	80.2	79.6	79.4	79.6	79.7	80.3	80.8
CZ	2.6	86.1	87.6	87.6	86.8	86.2	86.1	87.2	87.8	88.2	88.7
DK	0.8	84.0	84.8	84.9	84.9	85.1	85.1	85.0	84.8	84.7	84.8
DE	0.5	86.9	87.1	86.8	86.9	87.5	87.6	87.3	87.2	87.4	87.4
EE	2.2	84.4	84.9	85.1	85.3	85.5	85.5	85.6	85.7	86.4	86.6
IE	-3.6	83.4	81.6	80.6	79.7	79.4	79.5	79.9	80.6	80.5	79.8
EL	5.2	82.6	85.9	86.5	86.2	86.6	87.2	87.6	88.0	87.9	87.7
ES	0.6	84.8	85.2	85.1	85.0	84.9	85.0	85.5	85.8	85.7	85.5
FR	2.1	81.6	82.3	83.4	83.5	83.6	84.1	84.1	84.1	84.0	83.7
HR	-0.4	73.6	72.9	72.7	72.4	72.5	72.7	72.7	73.0	73.2	73.2
IT	-0.9	78.7	79.5	79.7	78.9	78.2	77.9	77.8	77.8	77.7	77.8
CY	3.4	86.3	89.1	89.5	89.5	89.3	89.1	89.0	89.1	89.4	89.7
LV	3.7	82.7	84.1	84.6	84.7	84.5	84.9	85.0	84.8	85.5	86.4
LT	0.3	82.2	81.1	80.8	80.6	80.5	81.2	81.8	82.0	82.1	82.5
LU	-2.6	82.0	80.8	80.6	81.0	81.4	81.4	81.0	80.4	79.7	79.4
HU	7.4	77.1	82.6	84.8	84.7	84.6	84.3	84.4	84.4	84.4	84.5
MT	4.3	84.7	86.1	88.4	89.7	89.4	88.9	88.7	88.6	88.6	89.0
NL	0.1	87.1	86.9	87.0	86.9	87.0	87.1	87.1	87.1	87.1	87.3
AT	-1.0	84.3	84.3	83.3	83.2	83.7	83.7	83.3	83.1	83.0	83.3
PL	2.0	80.2	82.4	82.8	82.8	82.1	81.5	81.5	81.8	82.1	82.2
PT	-0.9	82.3	81.8	81.7	81.7	81.6	81.8	82.0	82.1	81.7	81.4
RO	-0.1	77.3	78.9	78.9	77.3	76.8	76.3	76.5	76.5	77.2	77.2
SI	3.5	79.0	82.7	82.9	81.9	81.4	81.0	81.5	82.1	82.6	82.5
SK	2.2	83.7	83.9	84.0	83.6	82.8	82.5	83.1	83.9	84.9	85.9
FI	-0.1	81.4	82.2	82.2	82.0	82.1	81.6	81.3	81.3	81.1	81.3
SE	1.8	88.9	90.0	90.2	90.2	90.5	90.6	90.6	90.5	90.4	90.7
UK	1.3	86.5	86.7	86.5	86.5	87.0	87.4	87.6	87.7	87.7	87.8
NO	-0.3	84.9	84.6	84.7	84.5	84.7	84.9	84.8	84.7	84.6	84.5
EU28	1.1	83.0	83.8	84.1	83.8	83.8	83.9	84.0	84.1	84.1	84.2
EA	0.2	83.2	83.7	83.8	83.6	83.6	83.6	83.6	83.6	83.6	83.5

Table III.1.41: Participation rate (15-64) - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.6	72.7	73.9	73.1	72.9	72.8	72.8	72.7	72.5	72.2	72.2
BG	1.6	72.4	74.7	74.5	74.2	73.7	73.7	73.8	73.6	73.7	74.0
CZ	0.0	80.6	81.7	80.3	79.8	79.3	79.4	80.5	80.6	80.4	80.6
DK	0.9	80.7	81.6	81.6	81.9	81.9	81.7	81.6	81.5	81.5	81.6
DE	0.0	82.7	83.1	82.8	82.6	82.9	82.9	82.8	82.7	82.8	82.7
EE	-0.1	78.8	78.7	77.5	78.0	78.4	78.8	79.2	78.9	78.8	78.7
IE	-4.0	76.9	74.5	72.7	72.1	72.6	73.5	73.8	73.9	73.4	72.9
EL	3.9	76.9	79.8	79.7	79.9	80.6	81.2	81.4	81.3	81.0	80.7
ES	-0.5	79.9	79.5	78.9	79.2	79.6	79.9	80.2	80.1	79.6	79.3
FR	1.8	75.3	75.7	76.6	76.8	76.8	77.2	77.2	77.3	77.2	77.1
HR	-0.3	68.2	68.2	67.6	67.3	67.3	67.6	67.7	67.9	68.0	67.9
IT	-1.5	73.4	74.0	74.0	73.3	72.7	72.3	72.1	72.0	71.9	71.8
CY	3.8	79.3	83.2	82.9	82.7	82.4	82.7	83.1	83.3	83.2	83.0
LV	1.0	77.1	78.0	77.2	77.4	77.1	78.0	78.5	78.0	77.8	78.2
LT	-0.8	74.8	75.1	74.0	72.6	72.3	73.4	74.9	75.2	74.5	74.1
LU	-2.7	76.0	75.3	75.1	75.2	75.4	75.2	74.8	74.2	73.6	73.3
HU	6.4	71.0	76.5	78.2	78.5	78.2	77.7	77.7	77.6	77.5	77.4
MT	3.7	79.7	81.8	83.6	84.5	83.9	83.4	83.4	83.4	83.3	83.4
NL	0.2	84.7	84.4	84.6	84.6	84.5	84.6	84.6	84.6	84.7	84.9
AT	-1.0	81.2	81.5	80.6	80.3	80.6	80.6	80.3	80.2	80.1	80.2
PL	1.3	74.2	76.9	76.9	76.5	76.0	75.8	75.9	75.9	75.7	75.5
PT	-0.4	76.5	75.9	76.1	76.4	76.5	76.6	76.6	76.5	76.2	76.0
RO	-1.0	72.0	73.4	73.2	72.0	71.1	70.7	70.8	70.7	71.1	71.1
SI	1.4	74.4	77.8	76.9	75.6	75.3	75.4	75.8	76.1	76.1	75.8
SK	2.0	77.5	78.3	77.8	77.4	77.1	77.0	77.6	78.3	78.8	79.5
FI	-0.4	76.7	77.6	77.3	77.1	77.0	76.6	76.4	76.4	76.2	76.3
SE	1.0	83.5	84.6	84.4	84.4	84.4	84.5	84.7	84.7	84.5	84.6
UK	0.9	81.9	82.4	81.8	81.6	81.9	82.5	82.8	82.9	82.8	82.8
NO	-0.2	80.3	80.5	80.4	80.3	80.3	80.4	80.3	80.2	80.1	80.1
EU28	0.4	77.9	78.7	78.6	78.3	78.3	78.4	78.5	78.5	78.4	78.4
EA	-0.4	78.2	78.5	78.4	78.2	78.1	78.2	78.1	78.0	77.9	77.8

Table III.1.42: Participation rate (15-24) - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.6	33.7	33.9	32.8	33.4	33.3	33.4	33.5	33.3	33.0	33.1
BG	-0.8	34.7	33.5	32.4	34.0	34.6	35.2	34.9	34.0	33.6	33.9
CZ	-3.6	36.9	33.2	30.8	34.2	34.3	34.8	34.8	33.6	32.7	33.2
DK	0.5	61.3	61.9	61.7	62.2	61.4	61.3	61.5	61.7	61.7	61.7
DE	-0.9	53.0	53.0	52.5	51.9	51.8	52.2	52.5	52.4	52.2	52.0
EE	-4.0	42.9	37.8	35.7	40.0	40.3	41.2	40.9	39.2	38.3	38.9
IE	1.7	41.0	41.7	40.8	42.8	45.1	45.8	44.1	42.3	42.1	42.8
EL	-0.4	33.9	32.8	32.0	34.1	34.6	34.3	33.8	33.2	33.0	33.4
ES	-0.1	39.6	37.6	37.8	40.5	41.5	41.4	40.5	39.4	39.1	39.5
FR	1.1	41.2	42.2	42.3	42.4	42.1	42.3	42.1	42.1	42.2	42.3
HR	4.8	33.2	39.8	37.2	38.1	38.2	38.6	38.6	38.5	38.1	38.0
IT	-0.4	31.2	30.8	30.7	31.4	31.4	31.1	30.8	30.6	30.6	30.8
CY	-0.3	43.7	45.7	42.4	43.1	43.7	45.3	45.9	45.3	44.0	43.4
LV	-4.4	44.5	38.7	37.4	40.9	40.8	43.2	43.1	41.2	39.8	40.1
LT	-1.2	36.4	38.5	34.1	33.8	36.8	38.5	39.5	38.1	35.6	35.2
LU	1.3	31.4	34.3	33.7	33.2	32.9	32.8	32.6	32.6	32.7	32.6
HU	-0.4	30.5	31.2	29.8	31.1	29.9	30.1	30.4	30.5	30.2	30.1
MT	-1.3	56.7	58.4	55.4	55.1	55.0	55.8	56.5	56.6	55.9	55.3
NL	1.2	69.3	70.5	70.7	70.6	70.3	70.3	70.4	70.5	70.6	70.6
AT	0.4	63.7	65.0	64.5	64.1	64.2	64.4	64.6	64.5	64.3	64.2
PL	-2.6	38.9	37.9	34.2	36.7	37.0	37.9	37.9	37.0	36.2	36.3
PT	1.5	36.6	37.4	38.2	38.8	38.8	38.0	37.5	37.4	37.8	38.2
RO	-1.6	34.6	33.1	32.7	33.5	32.3	33.5	33.4	33.2	33.0	33.0
SI	-0.4	35.9	36.3	34.0	35.1	36.7	37.1	36.8	35.9	35.2	35.4
SK	-1.5	38.0	37.6	34.9	36.3	38.1	37.8	37.9	37.1	36.3	36.4
FI	-0.9	51.2	50.9	50.0	50.5	50.3	50.5	50.6	50.5	50.3	50.3
SE	-2.4	54.8	52.7	51.9	52.7	52.4	52.9	53.3	53.0	52.5	52.4
UK	-1.1	60.0	59.9	58.0	58.8	59.2	59.7	59.8	59.5	59.0	58.9
NO	0.8	56.5	58.4	57.2	57.7	57.1	57.1	57.3	57.3	57.3	57.2
EU28	-0.3	45.1	44.8	43.8	44.7	45.1	45.5	45.5	45.1	44.8	44.8
EA	-0.9	43.8	43.5	42.9	43.4	43.7	43.8	43.6	43.2	42.9	42.9

Table III.1.43: Participation rate (25-54) - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-1.9	90.9	90.6	90.1	89.6	89.3	89.0	89.0	89.1	89.1	89.0
BG	1.7	85.8	86.9	87.2	87.3	87.1	87.1	87.3	87.5	87.6	87.5
CZ	-0.3	95.8	95.9	95.9	95.6	95.4	95.4	95.4	95.5	95.6	95.5
DK	-1.5	90.2	89.4	89.2	89.0	88.8	88.8	88.7	88.6	88.6	88.7
DE	0.4	92.7	92.9	93.0	93.1	93.2	93.2	93.1	93.1	93.1	93.2
EE	0.5	92.3	92.4	92.8	92.7	92.5	92.6	93.1	93.2	93.0	92.8
IE	-4.5	89.2	87.6	86.5	85.6	85.0	85.1	85.2	85.0	84.8	84.7
EL	-0.1	93.6	93.7	93.6	93.4	93.4	93.6	93.8	93.8	93.7	93.5
ES	-2.0	92.5	91.8	91.3	90.8	90.6	90.7	90.8	90.7	90.6	90.5
FR	-0.8	93.3	93.0	92.8	92.7	92.6	92.6	92.6	92.6	92.5	92.5
HR	-1.9	84.1	82.4	82.2	82.0	81.7	81.8	82.0	82.2	82.4	82.2
IT	-5.7	88.3	86.4	84.9	83.5	82.7	82.6	82.6	82.6	82.6	82.5
CY	-0.2	94.0	94.2	94.1	94.0	93.8	93.6	93.7	93.8	93.9	93.9
LV	0.8	90.6	91.7	91.6	91.4	91.4	91.5	91.6	91.6	91.5	91.4
LT	-2.1	90.7	89.5	89.2	88.9	88.5	88.5	88.7	88.9	88.9	88.5
LU	0.3	94.3	94.7	94.7	94.7	94.8	94.7	94.7	94.7	94.6	94.6
HU	1.2	89.5	90.3	90.6	90.6	90.6	90.6	90.6	90.7	90.7	90.7
MT	0.1	94.4	94.8	94.7	94.6	94.5	94.4	94.4	94.5	94.6	94.5
NL	-1.8	92.3	91.4	91.0	90.7	90.5	90.4	90.4	90.4	90.4	90.4
AT	-1.6	92.7	91.5	91.2	91.0	90.9	90.8	90.9	91.0	91.1	91.1
PL	-1.2	90.1	90.1	89.6	89.0	88.6	88.7	89.0	89.3	89.2	88.9
PT	-1.9	91.0	89.9	89.4	89.4	89.3	89.3	89.3	89.2	89.1	89.1
RO	-1.2	87.8	87.7	87.2	86.8	86.7	86.5	86.6	86.6	86.7	86.6
SI	-1.3	92.7	92.3	92.1	91.5	91.1	91.2	91.4	91.6	91.6	91.4
SK	-1.4	93.7	93.2	92.8	92.4	92.2	92.1	92.3	92.5	92.5	92.3
FI	-1.9	90.1	89.3	88.9	88.5	88.3	88.2	88.1	88.1	88.2	88.1
SE	1.6	93.6	94.4	95.0	95.1	95.1	95.1	95.0	95.1	95.1	95.2
UK	0.6	92.0	92.1	92.4	92.6	92.5	92.5	92.6	92.6	92.6	92.6
NO	0.8	89.1	89.1	89.3	89.7	89.6	89.7	89.8	89.8	89.9	89.9
EU28	-1.1	91.4	91.0	90.7	90.5	90.3	90.3	90.3	90.3	90.3	90.3
EA	-1.9	91.8	91.1	90.7	90.3	90.0	89.9	89.9	89.9	89.9	89.9

Table III.1.44: Participation rate (55-64) - Men

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	7.2	50.4	58.5	58.8	58.7	59.0	59.2	58.4	58.2	57.4	57.6
BG	9.3	60.2	64.5	67.2	69.2	69.2	68.5	68.8	67.6	67.6	69.5
CZ	14.2	66.4	68.2	70.6	73.7	74.2	73.4	75.9	77.0	77.8	80.6
DK	8.7	70.6	77.0	78.0	78.6	79.1	79.0	79.3	79.3	79.1	79.3
DE	3.1	74.6	77.7	77.4	76.1	77.2	78.2	78.3	77.7	77.9	77.7
EE	7.1	67.0	65.8	68.0	72.5	73.6	73.9	73.8	72.1	72.2	74.2
IE	0.3	67.7	69.3	70.0	71.1	71.1	69.0	65.6	66.3	68.5	68.0
EL	30.1	55.1	73.2	78.3	80.3	81.8	83.0	83.5	84.6	85.0	85.2
ES	15.7	63.9	72.5	77.1	80.4	80.5	79.2	78.6	78.8	79.1	79.6
FR	12.5	52.4	58.2	64.1	65.3	64.3	65.1	64.6	65.2	65.4	64.9
HR	1.0	50.7	49.6	48.1	47.6	50.2	52.5	51.9	51.6	52.0	51.6
IT	18.0	56.9	69.1	75.8	77.0	75.9	74.4	73.8	74.0	74.4	75.0
CY	12.1	71.5	79.3	80.8	82.2	82.7	83.5	83.0	82.8	82.8	83.6
LV	12.2	62.7	65.5	69.9	73.2	72.4	73.9	74.0	71.5	69.7	74.9
LT	1.7	65.4	65.1	65.5	67.7	67.8	68.2	68.8	68.0	65.9	67.1
LU	-4.9	50.6	47.6	46.6	45.7	46.3	46.8	46.8	47.1	46.5	45.6
HU	29.6	50.1	67.0	77.6	79.6	80.1	79.3	79.7	79.9	79.5	79.7
MT	16.6	58.0	59.8	68.6	75.7	76.7	76.1	75.9	75.5	74.6	74.5
NL	6.3	75.3	77.5	79.7	79.5	79.1	80.0	80.2	80.6	81.0	81.6
AT	5.1	56.6	64.7	63.4	61.8	61.8	62.8	62.0	62.0	61.5	61.7
PL	13.1	56.2	63.6	69.0	70.8	70.9	70.4	69.7	69.3	69.0	69.3
PT	6.8	62.7	67.1	69.1	69.7	69.8	69.3	69.1	69.6	69.8	69.5
RO	6.0	53.9	58.4	63.3	61.5	60.9	59.5	60.5	58.8	59.8	59.9
SI	20.1	44.7	62.9	65.2	65.7	66.3	65.0	64.3	63.8	64.5	64.8
SK	16.2	59.7	58.4	59.8	63.0	64.8	65.6	67.4	69.5	72.2	75.9
FI	3.3	61.5	66.2	67.0	66.0	66.8	66.0	65.4	65.5	64.5	64.8
SE	1.9	81.7	81.8	81.9	82.3	83.1	83.7	84.1	84.0	83.0	83.6
UK	4.8	70.7	72.4	71.8	71.1	72.3	74.3	75.4	75.7	75.4	75.5
NO	-4.0	76.2	73.8	73.5	71.8	71.8	72.4	72.1	72.7	72.6	72.3
EU28	10.2	62.8	69.2	72.2	72.7	72.8	72.8	72.8	72.8	72.8	73.0
EA	10.2	62.7	69.7	73.0	73.6	73.5	73.3	72.9	72.7	72.8	72.9

Table III.1.45: Average effective exit age (TOTAL)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.2	62.0	62.2	62.2	62.3	62.3	62.3	62.3	62.3	62.3	62.3
BG	0.8	62.9	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
CZ	4.4	61.9	62.4	62.9	63.4	64.0	64.7	65.3	65.6	65.9	66.3
DK	3.3	64.5	65.7	66.1	66.3	66.5	66.7	67.0	67.2	67.5	67.8
DE	0.8	64.7	65.0	65.3	65.4	65.5	65.5	65.5	65.5	65.5	65.5
EE	0.9	64.3	64.7	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2
IE	1.2	64.9	65.3	65.8	66.0	66.0	66.0	66.0	66.0	66.0	66.0
EL	2.9	64.4	64.9	65.3	65.7	66.1	66.6	66.9	67.3	67.3	67.3
ES	3.0	63.4	65.3	66.0	66.3	66.3	66.3	66.4	66.4	66.4	66.4
FR	2.3	60.9	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
HR	2.0	61.9	62.3	62.6	62.9	63.5	63.9	63.9	63.9	63.9	63.9
IT	5.1	62.3	65.7	65.7	65.8	66.1	66.4	66.7	67.0	67.2	67.4
CY	3.7	63.9	66.0	66.1	66.3	66.5	66.7	66.9	67.1	67.3	67.5
LV	1.1	64.2	64.8	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
LT	1.7	62.3	63.2	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0
LU	0.0	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
HU	2.1	63.0	64.5	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
MT	1.8	61.5	62.6	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
NL	2.6	64.6	65.6	66.0	66.2	66.3	66.5	66.7	66.8	67.0	67.2
AT	2.0	61.7	63.1	63.3	63.5	63.7	63.7	63.7	63.7	63.7	63.7
PL	3.9	62.0	63.9	64.5	65.0	65.4	65.9	65.9	65.9	65.9	65.9
PT	2.3	64.1	65.2	65.8	66.1	66.1	66.2	66.3	66.3	66.4	66.4
RO	0.2	63.1	63.2	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3
SI	2.7	61.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
SK	5.4	60.6	61.8	62.1	62.5	63.0	63.5	64.0	64.6	65.3	66.0
FI	0.6	63.4	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
SE	-0.1	65.2	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
UK	1.6	64.3	64.5	64.8	65.1	65.3	65.7	65.8	65.8	65.8	65.8
NO	0.0	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
EU28	2.3	63.1	64.3	64.7	64.8	65.0	65.2	65.3	65.3	65.4	65.4
EA	2.4	63.0	64.4	64.8	64.9	65.0	65.1	65.2	65.3	65.3	65.4

Table III.1.46: Average effective exit age (Men)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.2	61.9	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
BG	1.0	63.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
CZ	3.2	63.1	63.4	63.8	64.1	64.5	64.9	65.3	65.6	65.9	66.3
DK	2.3	65.6	66.2	66.6	67.0	67.2	67.3	67.5	67.6	67.8	67.9
DE	0.6	65.1	65.4	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.7
EE	1.0	64.4	64.7	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4
IE	1.2	64.9	65.3	65.8	66.0	66.0	66.0	66.0	66.0	66.0	66.0
EL	3.1	64.4	64.9	65.4	65.9	66.4	66.9	67.2	67.5	67.5	67.5
ES	3.4	62.8	64.8	65.7	66.0	66.0	66.1	66.1	66.1	66.2	66.2
FR	2.3	60.8	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
HR	1.6	62.4	62.6	62.8	62.9	63.6	64.0	64.0	64.0	64.0	64.0
IT	4.9	62.4	65.9	66.0	66.1	66.3	66.4	66.5	66.8	67.0	67.3
CY	2.7	64.9	66.4	66.5	66.7	66.9	67.0	67.2	67.3	67.5	67.7
LV	0.7	64.6	65.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
LT	1.5	62.8	63.6	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3
LU	0.0	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
HU	2.3	63.0	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
MT	2.0	62.0	63.1	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
NL	2.7	65.5	66.6	67.0	67.2	67.3	67.5	67.7	67.8	68.0	68.1
AT	1.8	62.5	64.0	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2
PL	2.1	63.9	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
PT	2.4	64.3	65.3	65.9	66.3	66.4	66.5	66.5	66.6	66.6	66.7
RO	0.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
SI	1.6	62.5	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
SK	4.6	61.6	61.9	62.2	62.6	63.1	63.6	64.1	64.7	65.4	66.2
FI	0.5	63.6	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
SE	-0.2	65.8	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
UK	0.9	64.9	64.9	64.9	64.9	65.1	65.6	65.8	65.8	65.8	65.8
NO	0.0	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
EU28	2.0	63.5	64.7	65.0	65.1	65.2	65.3	65.4	65.4	65.5	65.5
EA	2.3	63.1	64.6	64.9	65.1	65.2	65.2	65.3	65.3	65.4	65.4

Table III.1.47: Average effective exit age (Women)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.3	62.1	62.3	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4
BG	0.5	62.0	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
CZ	5.6	60.7	61.4	62.0	62.7	63.5	64.4	65.3	65.6	65.9	66.3
DK	4.4	63.4	65.3	65.5	65.5	65.8	66.1	66.5	66.9	67.3	67.7
DE	1.0	64.2	64.6	64.9	65.2	65.3	65.3	65.3	65.3	65.3	65.3
EE	0.8	64.2	64.6	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
IE	1.2	64.8	65.4	65.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1
EL	2.6	64.5	64.8	65.1	65.5	65.9	66.3	66.7	67.1	67.1	67.1
ES	2.6	64.1	65.8	66.3	66.5	66.5	66.6	66.6	66.6	66.6	66.7
FR	2.2	60.9	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
HR	2.3	61.4	61.9	62.4	62.9	63.4	63.7	63.7	63.7	63.7	63.7
IT	5.4	62.1	65.5	65.4	65.4	65.9	66.4	66.8	67.1	67.4	67.5
CY	4.5	62.8	65.6	65.7	65.9	66.1	66.4	66.6	66.9	67.1	67.4
LV	1.3	64.0	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
LT	1.9	61.9	62.8	63.6	63.8	63.8	63.8	63.8	63.8	63.8	63.8
LU	0.0	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
HU	1.9	63.0	64.4	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9
MT	1.6	61.0	62.0	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
NL	2.5	63.7	64.6	65.0	65.2	65.4	65.5	65.7	65.9	66.0	66.2
AT	2.1	61.0	62.2	62.6	62.9	63.2	63.2	63.2	63.2	63.2	63.2
PL	5.6	60.2	62.0	63.2	64.0	64.9	65.8	65.8	65.8	65.8	65.8
PT	2.3	63.9	65.1	65.6	65.8	65.9	66.0	66.0	66.1	66.1	66.2
RO	0.3	62.3	62.4	62.5	62.6	62.6	62.6	62.6	62.6	62.6	62.6
SI	3.7	60.0	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
SK	6.2	59.7	61.7	62.0	62.4	62.8	63.3	63.9	64.5	65.1	65.9
FI	0.7	63.1	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
SE	0.0	64.5	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
UK	2.2	63.6	64.2	64.8	65.2	65.6	65.8	65.8	65.8	65.8	65.8
NO	0.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
EU28	2.6	62.7	63.9	64.4	64.6	64.8	65.0	65.1	65.2	65.3	65.3
EA	2.5	62.9	64.3	64.6	64.7	64.9	65.0	65.1	65.2	65.3	65.3

Table III.1.48: Employment rate (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.4	61.8	64.3	64.3	64.3	64.5	64.6	64.5	64.4	64.2	64.2
BG	4.4	59.6	62.2	63.3	63.4	63.3	63.5	63.6	63.3	63.6	64.1
CZ	2.6	67.8	69.9	69.2	68.9	68.4	68.6	69.8	70.2	70.2	70.4
DK	3.9	72.6	75.4	76.0	76.3	76.4	76.4	76.4	76.4	76.3	76.5
DE	2.0	73.5	75.1	74.6	74.9	75.4	75.7	75.6	75.5	75.6	75.5
EE	2.1	68.6	70.2	69.2	70.0	70.4	70.8	70.9	70.7	70.6	70.7
IE	3.1	60.4	61.8	61.6	62.0	63.1	64.1	64.1	64.1	63.8	63.5
EL	21.1	48.7	56.0	60.2	63.4	66.9	69.8	70.2	70.3	70.0	69.8
ES	18.5	54.5	61.6	65.6	68.6	71.5	73.6	73.8	73.6	73.2	73.0
FR	4.1	63.9	65.0	66.1	66.8	67.4	68.2	68.1	68.2	68.2	68.1
HR	8.1	52.3	55.9	56.9	57.9	59.2	60.3	60.3	60.4	60.4	60.4
IT	4.8	55.5	58.4	59.6	59.9	60.2	60.4	60.4	60.4	60.3	60.3
CY	13.2	60.6	64.7	68.2	69.9	71.4	73.2	73.6	74.0	73.9	73.8
LV	4.7	65.3	65.9	65.8	67.2	68.0	69.7	70.0	69.7	69.5	69.9
LT	2.8	63.8	65.0	64.6	64.4	64.6	65.9	67.1	67.4	66.8	66.6
LU	1.7	65.3	67.0	67.8	68.2	68.5	68.4	68.1	67.8	67.3	67.0
HU	9.5	58.0	65.7	68.2	68.6	68.3	67.8	67.8	67.8	67.6	67.5
MT	9.3	61.0	65.6	68.4	70.0	70.3	70.2	70.3	70.4	70.2	70.3
NL	5.3	74.3	75.9	77.8	78.3	78.9	79.3	79.4	79.4	79.5	79.6
AT	2.7	72.3	73.9	73.9	74.2	75.0	75.3	75.1	74.9	74.8	75.0
PL	4.4	60.3	63.6	63.6	63.9	64.1	64.5	64.9	65.0	64.8	64.7
PT	8.9	60.6	64.7	68.1	69.1	69.8	70.1	70.1	69.9	69.7	69.6
RO	-1.0	59.1	60.2	60.0	58.9	58.1	57.7	57.9	57.8	58.2	58.2
SI	5.7	63.4	67.7	69.5	68.7	68.6	68.7	69.1	69.4	69.4	69.1
SK	6.0	60.1	62.1	61.9	62.7	63.6	64.2	64.5	65.0	65.5	66.1
FI	1.5	68.8	70.4	70.5	70.5	70.6	70.4	70.4	70.4	70.2	70.3
SE	2.8	74.6	76.9	77.1	77.0	77.1	77.3	77.5	77.5	77.3	77.4
UK	4.2	70.4	72.5	72.5	72.9	73.6	74.2	74.4	74.5	74.5	74.6
NO	0.8	75.5	76.2	76.1	76.2	76.3	76.4	76.4	76.4	76.3	76.3
EU28	5.7	64.0	66.8	67.7	68.3	69.0	69.6	69.7	69.7	69.7	69.7
EA	5.9	63.5	66.2	67.4	68.2	69.0	69.7	69.6	69.6	69.4	69.4

Table III.1.49: Employment rate (20-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.3	67.2	69.9	70.4	70.5	70.8	70.9	70.7	70.6	70.5	70.6
BG	6.5	63.7	66.7	68.5	68.7	68.6	68.6	68.8	68.7	69.6	70.2
CZ	5.1	72.6	75.0	75.6	75.1	74.4	74.5	75.9	76.6	77.2	77.7
DK	3.9	75.7	78.4	79.1	79.1	79.5	79.6	79.7	79.5	79.4	79.5
DE	2.7	77.3	78.7	78.3	78.9	79.8	80.0	79.9	79.8	79.9	80.0
EE	4.5	73.4	75.7	75.9	76.5	76.7	76.8	76.7	76.8	77.6	77.9
IE	4.1	65.6	67.6	68.2	68.5	68.9	69.3	69.3	69.9	70.0	69.6
EL	23.4	52.6	60.5	65.4	68.4	72.0	75.0	75.7	76.2	76.2	76.0
ES	20.7	58.3	66.3	71.0	73.9	76.5	78.5	78.9	79.1	79.1	79.0
FR	4.8	69.6	71.0	72.3	73.0	73.7	74.5	74.5	74.6	74.6	74.4
HR	0.5	58.5	60.0	61.0	61.7	62.5	62.5	61.4	60.4	59.7	59.0
IT	5.8	59.7	62.9	64.3	64.6	64.9	65.3	65.4	65.4	65.5	65.5
CY	13.9	66.3	69.6	73.8	75.8	77.6	79.1	79.2	79.6	79.9	80.2
LV	7.6	69.9	70.9	71.9	73.4	74.4	75.7	75.9	75.8	76.6	77.5
LT	4.6	69.8	69.9	70.2	71.1	71.6	72.8	73.3	73.6	73.8	74.4
LU	2.2	70.7	72.1	73.2	73.7	74.3	74.3	74.1	73.7	73.2	72.9
HU	10.8	63.0	70.9	74.0	74.0	74.0	73.7	73.9	73.9	73.8	73.8
MT	10.6	65.0	69.4	72.7	74.8	75.3	75.3	75.2	75.2	75.2	75.6
NL	5.4	76.5	78.0	79.8	80.4	81.1	81.6	81.7	81.7	81.7	81.9
AT	3.0	75.5	76.8	76.9	77.4	78.5	78.8	78.4	78.2	78.1	78.4
PL	5.4	65.2	68.2	69.1	69.3	69.3	69.5	69.7	70.1	70.4	70.5
PT	9.3	65.4	69.8	73.2	73.9	74.4	74.8	75.2	75.2	74.9	74.7
RO	-0.2	63.6	64.9	64.9	63.3	63.0	62.5	62.8	62.7	63.4	63.4
SI	7.9	67.4	72.1	75.0	74.5	74.2	73.9	74.3	74.9	75.4	75.3
SK	6.4	65.2	66.7	67.0	67.9	68.4	68.8	69.1	69.8	70.7	71.6
FI	1.8	73.2	74.8	75.1	75.2	75.5	75.1	75.0	75.1	74.9	75.1
SE	3.5	79.8	82.0	82.6	82.7	83.0	83.1	83.1	83.0	83.0	83.3
UK	4.8	74.8	76.7	77.1	77.8	78.5	79.1	79.2	79.3	79.4	79.6
NO	0.8	79.7	80.1	80.2	80.2	80.5	80.8	80.7	80.7	80.6	80.5
EU28	6.6	68.4	71.3	72.6	73.2	74.0	74.6	74.7	74.8	74.9	75.0
EA	7.0	67.7	70.8	72.2	73.1	74.0	74.7	74.7	74.7	74.7	74.7

Table III.1.50: Employment rate (15-74)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.6	54.8	55.9	55.7	55.3	55.5	56.0	56.2	56.1	55.7	55.4
BG	2.2	52.0	53.7	55.0	55.2	55.0	54.5	53.7	53.2	53.4	54.2
CZ	2.7	59.9	60.2	60.3	60.7	60.5	60.0	60.0	60.7	61.9	62.6
DK	6.1	63.8	66.3	67.9	68.0	67.9	68.2	69.0	69.8	70.1	69.9
DE	0.1	64.4	66.2	64.8	63.7	63.0	64.2	65.7	65.4	64.7	64.5
EE	-1.5	62.5	62.4	60.8	61.1	61.7	61.9	61.5	61.0	60.4	61.0
IE	3.4	55.8	56.3	56.1	56.3	56.9	57.4	57.0	56.9	57.9	59.3
EL	19.2	42.9	48.8	52.4	54.9	57.5	59.5	60.0	60.3	61.1	62.1
ES	16.9	48.6	54.5	57.9	59.9	61.6	62.6	62.1	62.5	64.1	65.5
FR	2.9	56.7	55.8	56.8	57.6	58.0	58.7	59.1	59.6	59.6	59.6
HR	-0.2	47.7	48.3	48.5	48.9	49.7	50.2	49.4	48.4	47.7	47.5
IT	5.7	48.5	51.1	52.9	52.9	52.6	52.6	52.9	53.6	54.1	54.3
CY	10.5	55.6	58.5	61.7	62.8	64.3	66.0	66.3	66.3	65.9	66.1
LV	2.7	58.4	58.9	57.9	58.2	59.1	60.7	61.1	60.9	60.2	61.2
LT	1.0	57.0	57.1	55.0	53.0	53.0	54.8	56.9	58.4	58.3	58.0
LU	-1.2	59.5	60.3	60.6	60.2	60.2	60.3	60.2	59.8	59.0	58.3
HU	6.1	51.1	56.3	58.6	60.1	60.0	58.3	57.0	57.1	57.8	57.2
MT	4.8	53.7	55.7	57.8	59.3	60.7	60.8	59.9	59.2	58.6	58.5
NL	4.9	66.0	66.9	68.6	68.6	68.7	69.5	70.6	71.2	71.1	70.9
AT	0.9	63.9	65.8	65.5	64.6	64.5	65.3	66.0	65.8	65.1	64.8
PL	0.6	55.1	56.0	55.6	56.4	57.5	57.6	56.8	55.7	55.2	55.6
PT	7.6	55.0	57.7	60.5	61.3	61.7	61.7	61.3	61.5	62.2	62.6
RO	-4.2	54.8	53.7	53.1	52.6	51.5	50.0	49.8	49.9	50.3	50.5
SI	3.4	56.8	58.5	59.4	59.2	59.2	59.3	59.2	59.0	59.4	60.2
SK	1.0	54.4	54.2	53.3	54.1	55.2	55.2	54.1	53.8	54.4	55.5
FI	0.6	60.3	60.3	60.9	61.1	61.5	62.0	62.1	61.5	61.1	60.9
SE	1.9	66.0	67.8	68.6	68.4	68.1	68.3	68.9	69.1	68.5	67.9
UK	2.9	63.5	64.5	64.5	64.3	64.6	65.7	66.7	66.9	66.5	66.4
NO	-1.2	68.7	68.6	68.6	68.5	68.2	68.1	68.5	68.6	68.1	67.5
EU28	4.2	57.0	58.7	59.4	59.6	59.8	60.4	60.7	60.9	61.0	61.2
EA	4.8	56.1	58.0	58.9	59.1	59.3	60.0	60.4	60.6	60.8	61.0

Table III.1.51: Unemployment rate (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-1.1	8.5	7.9	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4
BG	-5.6	13.0	11.9	9.9	9.1	8.2	7.5	7.5	7.5	7.5	7.5
CZ	-1.0	7.0	6.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
DK	-2.3	7.2	5.5	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
DE	0.0	5.4	4.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
EE	-1.4	8.8	7.8	8.3	8.0	7.7	7.5	7.5	7.5	7.5	7.5
IE	-6.5	13.3	10.2	9.0	8.2	7.4	6.8	6.8	6.8	6.8	6.8
EL	-20.6	28.0	22.1	17.2	13.7	10.3	7.5	7.5	7.5	7.5	7.5
ES	-19.0	26.5	19.5	15.0	12.3	9.6	7.5	7.5	7.5	7.5	7.5
FR	-2.5	10.0	9.6	9.4	8.7	8.0	7.5	7.5	7.5	7.5	7.5
HR	-10.3	17.8	13.5	11.9	10.3	8.7	7.5	7.5	7.5	7.5	7.5
IT	-4.9	12.4	10.6	9.2	8.6	8.0	7.5	7.5	7.5	7.5	7.5
CY	-10.8	16.9	16.6	12.3	10.1	7.8	6.1	6.1	6.1	6.1	6.1
LV	-4.7	12.1	12.4	11.8	10.3	8.7	7.5	7.5	7.5	7.5	7.5
LT	-4.6	12.0	10.8	10.7	9.6	8.4	7.5	7.5	7.5	7.5	7.5
LU	-1.7	5.9	5.1	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2
HU	-2.8	10.3	8.6	7.6	7.6	7.5	7.5	7.5	7.5	7.5	7.5
MT	0.2	6.5	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
NL	-2.8	6.7	5.9	4.4	4.2	4.1	3.9	3.9	3.9	3.9	3.9
AT	-1.2	5.0	4.2	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
PL	-3.1	10.5	8.7	9.1	8.5	7.9	7.5	7.5	7.5	7.5	7.5
PT	-9.6	17.0	12.6	8.9	8.4	7.9	7.5	7.5	7.5	7.5	7.5
RO	-0.6	7.4	7.1	7.0	7.0	6.9	6.9	6.9	6.9	6.9	6.9
SI	-3.9	10.2	9.1	6.9	6.7	6.5	6.4	6.4	6.4	6.4	6.4
SK	-6.7	14.2	12.8	12.7	10.8	9.0	7.5	7.5	7.5	7.5	7.5
FI	-1.6	8.4	7.3	7.1	7.0	6.9	6.9	6.9	6.9	6.9	6.9
SE	-2.3	8.2	6.4	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
UK	-1.7	7.8	6.5	6.5	6.4	6.2	6.1	6.1	6.1	6.1	6.1
NO	0.0	3.5	3.3	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6
EU28	-4.4	11.0	9.2	8.4	7.7	7.1	6.6	6.6	6.6	6.6	6.6
EA	-5.4	12.1	10.0	8.9	8.1	7.3	6.6	6.6	6.6	6.7	6.7

Table III.1.52: Unemployment rate (20-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-1.1	8.3	7.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
BG	-5.5	12.7	11.6	9.7	8.8	8.0	7.3	7.3	7.3	7.3	7.3
CZ	-1.0	6.8	6.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
DK	-2.1	6.5	5.1	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
DE	0.0	5.3	4.6	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
EE	-1.4	8.6	7.6	8.1	7.8	7.5	7.3	7.3	7.3	7.2	7.2
IE	-6.3	12.8	9.7	8.6	7.8	7.1	6.6	6.6	6.5	6.5	6.5
EL	-20.3	27.7	21.7	17.0	13.5	10.1	7.4	7.4	7.4	7.4	7.4
ES	-18.6	25.9	19.0	14.6	12.0	9.4	7.3	7.3	7.3	7.3	7.3
FR	-2.4	9.6	9.2	9.0	8.3	7.7	7.1	7.1	7.1	7.1	7.1
HR	1.6	14.5	13.0	12.0	11.1	10.6	10.7	12.2	13.8	15.1	16.1
IT	-4.8	12.0	10.2	8.8	8.2	7.6	7.2	7.2	7.2	7.2	7.2
CY	-10.4	16.3	16.2	11.9	9.7	7.6	5.9	5.9	5.9	5.9	5.9
LV	-4.6	11.9	12.2	11.6	10.1	8.5	7.3	7.3	7.3	7.3	7.3
LT	-4.5	11.9	10.7	10.6	9.5	8.3	7.4	7.4	7.4	7.4	7.4
LU	-1.6	5.7	4.9	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
HU	-2.7	10.0	8.4	7.5	7.4	7.3	7.3	7.3	7.3	7.3	7.3
MT	0.2	5.8	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0
NL	-2.6	6.2	5.4	4.1	3.9	3.7	3.6	3.6	3.6	3.6	3.6
AT	-1.1	4.7	4.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
PL	-3.0	10.3	8.5	8.9	8.4	7.8	7.3	7.3	7.3	7.3	7.3
PT	-9.3	16.5	12.2	8.7	8.2	7.7	7.3	7.3	7.3	7.3	7.3
RO	-0.6	7.1	6.7	6.6	6.6	6.5	6.5	6.5	6.5	6.5	6.5
SI	-3.9	10.2	9.0	6.9	6.7	6.5	6.3	6.3	6.3	6.3	6.3
SK	-6.6	13.9	12.5	12.4	10.6	8.8	7.3	7.3	7.3	7.3	7.3
FI	-1.4	7.5	6.6	6.3	6.2	6.2	6.1	6.1	6.1	6.1	6.1
SE	-2.0	7.1	5.5	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
UK	-1.5	6.7	5.6	5.6	5.5	5.3	5.2	5.3	5.3	5.2	5.2
NO	0.0	3.1	2.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
EU28	-4.3	10.6	8.8	8.0	7.4	6.8	6.3	6.3	6.3	6.3	6.3
EA	-5.3	11.8	9.8	8.6	7.8	7.1	6.4	6.4	6.4	6.4	6.4

Table III.1.53: Unemployment rate (15-74)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-1.2	8.5	7.8	7.4	7.4	7.3	7.3	7.3	7.3	7.3	7.3
BG	-5.7	12.9	11.7	9.7	8.9	8.0	7.3	7.2	7.3	7.2	7.3
CZ	-1.2	7.0	6.2	5.9	5.9	5.9	5.8	5.8	5.8	5.7	5.7
DK	-2.5	7.0	5.4	4.8	4.7	4.7	4.6	4.6	4.6	4.6	4.5
DE	-0.2	5.3	4.6	5.2	5.2	5.1	5.2	5.2	5.2	5.2	5.2
EE	-1.4	8.6	7.6	8.1	7.8	7.5	7.3	7.2	7.2	7.2	7.2
IE	-6.4	13.1	9.9	8.7	7.9	7.1	6.5	6.5	6.5	6.6	6.6
EL	-20.7	27.9	21.8	16.9	13.4	9.9	7.2	7.1	7.1	7.1	7.2
ES	-19.1	26.4	19.3	14.7	11.9	9.2	7.1	7.1	7.2	7.2	7.2
FR	-2.6	10.0	9.6	9.3	8.6	7.9	7.4	7.4	7.4	7.4	7.4
HR	0.0	15.2	13.7	12.3	11.4	10.6	10.7	12.1	13.4	14.4	15.2
IT	-5.2	12.2	10.4	8.8	8.2	7.5	7.1	7.1	7.1	7.1	7.0
CY	-10.9	16.7	16.4	12.0	9.8	7.6	5.9	5.9	5.8	5.8	5.8
LV	-4.7	11.9	12.0	11.4	9.9	8.4	7.2	7.2	7.2	7.2	7.2
LT	-4.5	11.9	10.6	10.5	9.3	8.1	7.3	7.3	7.3	7.3	7.3
LU	-1.7	5.9	5.0	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2
HU	-3.0	10.2	8.5	7.5	7.4	7.4	7.3	7.3	7.3	7.3	7.3
MT	0.2	6.4	6.5	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.6
NL	-2.8	6.7	5.9	4.4	4.2	4.0	3.9	3.9	3.9	3.9	3.9
AT	-1.3	4.9	4.1	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
PL	-3.3	10.4	8.5	8.8	8.3	7.7	7.2	7.1	7.0	7.0	7.1
PT	-9.6	16.5	12.1	8.5	7.9	7.3	6.9	6.8	6.9	6.9	6.9
RO	-0.6	7.1	6.8	6.7	6.7	6.6	6.5	6.5	6.5	6.5	6.5
SI	-4.0	10.1	8.9	6.7	6.5	6.2	6.1	6.1	6.1	6.1	6.1
SK	-7.0	14.2	12.7	12.6	10.7	8.9	7.3	7.3	7.2	7.2	7.2
FI	-1.6	8.3	7.2	6.9	6.8	6.7	6.7	6.7	6.7	6.7	6.7
SE	-2.3	8.1	6.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
UK	-1.7	7.6	6.3	6.4	6.2	6.0	5.9	5.9	5.9	5.9	5.9
NO	0.0	3.4	3.2	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.4
EU28	-4.4	10.8	9.0	8.1	7.5	6.9	6.4	6.4	6.4	6.4	6.4
EA	-5.5	12.0	9.9	8.7	7.8	7.0	6.4	6.4	6.4	6.4	6.4

Table III.1.54: Employment (20-64) (in millions)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.3	4.5	4.8	4.9	5.1	5.2	5.4	5.6	5.7	5.8	5.8
BG	-1.0	2.9	2.8	2.7	2.5	2.4	2.3	2.1	2.0	1.9	1.9
CZ	-0.5	4.8	4.7	4.7	4.7	4.6	4.5	4.4	4.4	4.4	4.4
DK	0.3	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8
DE	-10.1	38.4	37.7	36.1	34.2	32.7	32.1	31.3	30.3	29.2	28.3
EE	-0.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
IE	0.2	1.8	1.8	1.7	1.7	1.8	1.7	1.7	1.7	1.8	2.0
EL	-0.3	3.5	3.8	3.9	3.9	3.9	3.8	3.6	3.4	3.3	3.2
ES	1.9	16.9	18.3	18.9	19.0	19.0	18.6	17.8	17.7	18.1	18.8
FR	3.0	26.4	26.7	27.2	27.4	27.6	27.9	28.2	28.6	29.0	29.3
HR	-0.4	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.1
IT	0.9	21.6	23.0	23.6	23.5	23.2	22.9	22.8	22.7	22.6	22.5
CY	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
LV	-0.3	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5
LT	-0.6	1.3	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
LU	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
HU	-0.4	3.9	4.2	4.2	4.2	4.1	3.9	3.8	3.7	3.6	3.5
MT	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NL	-0.4	7.7	7.8	7.9	7.7	7.5	7.5	7.5	7.5	7.4	7.3
AT	0.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.0
PL	-4.7	16.3	16.1	15.5	15.2	14.9	14.4	13.7	12.8	12.0	11.5
PT	-1.1	4.1	4.2	4.3	4.1	3.9	3.7	3.5	3.3	3.2	3.1
RO	-2.4	8.0	7.7	7.4	7.0	6.6	6.3	6.0	5.8	5.7	5.6
SI	-0.1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
SK	-0.7	2.3	2.3	2.2	2.2	2.1	2.0	1.9	1.8	1.7	1.6
FI	0.1	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
SE	1.3	4.4	4.7	4.8	5.0	5.1	5.3	5.5	5.6	5.7	5.7
UK	5.0	28.3	29.5	29.8	30.1	30.6	31.5	32.2	32.6	32.9	33.3
NO	1.1	2.4	2.6	2.8	2.9	3.1	3.2	3.3	3.4	3.5	3.5
EU28	-8.9	210.4	214.9	214.2	211.8	209.6	208.1	205.9	203.8	202.2	201.6
EA	-6.1	137.9	141.1	141.1	139.1	137.2	135.9	134.1	132.8	132.1	131.8

Table III.1.55: Employment (15-64) (in millions)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.4	4.5	4.9	5.0	5.1	5.3	5.4	5.6	5.7	5.8	5.9
BG	-1.0	2.9	2.8	2.7	2.6	2.4	2.3	2.2	2.0	1.9	1.9
CZ	-0.4	4.8	4.8	4.7	4.7	4.6	4.5	4.5	4.4	4.4	4.4
DK	0.3	2.6	2.8	2.8	2.8	2.8	2.8	2.9	2.9	3.0	2.9
DE	-10.3	39.5	38.8	37.1	35.2	33.7	33.0	32.3	31.2	30.1	29.2
EE	-0.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
IE	0.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0
EL	-0.3	3.5	3.8	3.9	3.9	3.9	3.8	3.6	3.4	3.3	3.2
ES	2.0	17.0	18.4	19.1	19.2	19.2	18.8	18.0	17.9	18.4	19.0
FR	3.1	26.8	27.1	27.6	27.8	28.1	28.4	28.7	29.1	29.5	29.8
HR	-0.2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3
IT	1.0	21.6	23.1	23.7	23.6	23.4	23.1	22.9	22.9	22.8	22.6
CY	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
LV	-0.3	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5
LT	-0.6	1.3	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
LU	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
HU	-0.5	3.9	4.2	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.5
MT	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NL	-0.4	8.2	8.3	8.4	8.2	8.1	8.0	8.0	8.0	7.9	7.8
AT	0.0	4.1	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2
PL	-4.8	16.4	16.2	15.6	15.2	15.0	14.5	13.8	12.9	12.1	11.6
PT	-1.1	4.2	4.2	4.3	4.1	4.0	3.7	3.5	3.3	3.2	3.1
RO	-2.4	8.0	7.8	7.4	7.1	6.7	6.4	6.1	5.9	5.7	5.7
SI	-0.1	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
SK	-0.7	2.3	2.3	2.2	2.2	2.1	2.1	1.9	1.8	1.7	1.6
FI	0.1	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.5	2.5
SE	1.3	4.6	4.8	5.0	5.1	5.3	5.5	5.7	5.8	5.8	5.9
UK	5.3	29.3	30.5	30.9	31.3	31.9	32.8	33.5	33.9	34.2	34.6
NO	1.2	2.5	2.8	2.9	3.1	3.2	3.4	3.5	3.6	3.7	3.7
EU28	-8.2	214.5	219.0	218.6	216.4	214.3	212.9	210.5	208.4	206.9	206.4
EA	-5.9	140.4	143.7	143.8	141.8	139.9	138.7	136.9	135.6	134.8	134.6

Table III.1.56: Share of young (15-24) in employment (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.4%	7.1%	6.9%	7.0%	7.4%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%
BG	1.3%	5.8%	4.8%	5.2%	6.1%	6.5%	6.7%	6.6%	6.6%	6.9%	7.1%
CZ	0.6%	6.1%	4.8%	5.2%	6.4%	6.4%	6.4%	6.3%	6.0%	6.2%	6.6%
DK	-0.5%	14.7%	14.4%	14.2%	14.0%	13.7%	14.3%	14.7%	14.6%	14.4%	14.3%
DE	0.2%	10.3%	9.6%	9.3%	9.6%	10.1%	10.4%	10.4%	10.3%	10.4%	10.5%
EE	0.4%	8.4%	6.3%	7.0%	8.5%	8.4%	8.3%	7.9%	7.7%	8.2%	8.7%
IE	3.9%	8.6%	10.6%	11.8%	13.4%	13.6%	12.5%	11.4%	11.4%	12.0%	12.5%
EL	2.5%	4.3%	4.4%	5.1%	5.9%	6.1%	6.1%	6.1%	6.3%	6.5%	6.8%
ES	3.3%	4.5%	5.0%	6.2%	7.2%	7.3%	7.1%	7.0%	7.2%	7.5%	7.8%
FR	1.0%	8.5%	9.1%	9.2%	9.3%	9.4%	9.6%	9.5%	9.5%	9.5%	9.5%
HR	2.6%	4.9%	6.4%	6.1%	6.8%	7.2%	7.5%	7.4%	7.4%	7.4%	7.5%
IT	1.4%	4.6%	4.7%	5.0%	5.4%	5.6%	5.7%	5.7%	5.8%	5.8%	6.0%
CY	-0.2%	8.3%	6.0%	6.1%	7.1%	8.0%	8.5%	8.2%	7.9%	7.8%	8.1%
LV	1.1%	8.5%	6.0%	6.8%	8.5%	8.8%	9.4%	8.8%	8.4%	8.9%	9.6%
LT	1.0%	7.9%	6.9%	6.0%	7.2%	9.2%	9.7%	9.1%	8.2%	8.1%	8.9%
LU	1.3%	6.2%	7.4%	7.2%	7.2%	7.3%	7.4%	7.4%	7.5%	7.5%	7.5%
HU	-0.3%	6.0%	5.2%	5.0%	5.1%	4.9%	5.3%	5.5%	5.5%	5.5%	5.7%
MT	-2.8%	14.6%	12.0%	10.5%	10.6%	11.2%	11.8%	11.9%	11.7%	11.6%	11.8%
NL	0.1%	15.6%	15.8%	15.8%	15.4%	15.6%	15.9%	16.0%	16.0%	15.9%	15.7%
AT	-0.4%	13.4%	12.1%	11.9%	12.3%	12.8%	13.0%	13.0%	12.8%	12.7%	12.9%
PL	-0.4%	7.3%	6.1%	5.6%	6.5%	6.6%	6.6%	6.4%	6.3%	6.5%	6.9%
PT	1.4%	5.9%	6.7%	7.1%	7.0%	6.7%	6.6%	6.7%	7.0%	7.2%	7.3%
RO	0.7%	6.6%	6.1%	6.2%	6.3%	6.4%	7.1%	7.1%	7.1%	7.2%	7.3%
SI	1.7%	6.2%	5.8%	6.2%	7.3%	7.9%	7.7%	7.4%	7.3%	7.5%	7.9%
SK	-0.3%	6.2%	5.1%	4.8%	5.5%	6.0%	5.8%	5.7%	5.6%	5.7%	5.9%
FI	0.4%	11.4%	11.0%	11.2%	11.7%	11.8%	11.9%	11.8%	11.7%	11.7%	11.8%
SE	-0.1%	11.4%	9.9%	10.5%	11.2%	11.5%	11.7%	11.5%	11.1%	11.0%	11.3%
UK	-0.1%	12.9%	11.8%	11.7%	12.9%	13.3%	13.3%	12.8%	12.5%	12.5%	12.8%
NO	-0.3%	13.8%	13.6%	13.1%	13.3%	13.3%	13.6%	13.6%	13.5%	13.4%	13.4%
EU28	0.8%	8.8%	8.3%	8.4%	9.0%	9.3%	9.4%	9.4%	9.3%	9.4%	9.6%
EA	0.9%	8.2%	8.1%	8.3%	8.7%	8.9%	9.0%	9.0%	9.0%	9.1%	9.1%

Table III.1.57: Share of prime-age (25-54) in employment (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-3.3%	80.2%	76.7%	76.4%	76.6%	77.1%	77.2%	77.1%	76.7%	76.8%	76.8%
BG	-1.2%	77.2%	78.1%	76.5%	73.4%	71.3%	71.1%	70.8%	72.5%	75.5%	76.0%
CZ	-3.9%	78.4%	80.2%	78.6%	73.9%	70.6%	71.0%	71.7%	72.3%	74.3%	74.5%
DK	-3.0%	69.0%	66.6%	65.7%	66.1%	67.6%	68.6%	67.9%	66.1%	65.5%	66.0%
DE	-3.8%	72.3%	68.1%	66.4%	68.4%	69.9%	68.7%	67.3%	67.6%	68.1%	68.4%
EE	0.6%	73.7%	74.6%	73.2%	70.1%	69.4%	68.7%	67.5%	70.0%	74.2%	74.3%
IE	-5.4%	78.0%	72.8%	69.8%	66.3%	64.6%	66.5%	72.3%	76.3%	75.0%	72.6%
EL	-10.6%	82.3%	76.6%	72.6%	69.6%	68.3%	67.9%	69.9%	71.7%	72.2%	71.7%
ES	-9.6%	81.8%	75.4%	70.4%	66.0%	63.9%	65.9%	70.2%	73.3%	73.9%	72.3%
FR	-3.7%	77.3%	74.8%	73.0%	72.5%	73.6%	74.0%	74.4%	74.5%	74.0%	73.6%
HR	-4.9%	80.2%	77.4%	78.1%	77.4%	75.4%	73.4%	73.7%	74.6%	74.5%	75.3%
IT	-10.3%	80.6%	74.7%	70.6%	68.5%	69.1%	70.9%	71.8%	71.3%	70.8%	70.3%
CY	-4.4%	78.5%	77.3%	76.3%	74.5%	72.4%	69.8%	69.0%	70.1%	72.5%	74.1%
LV	1.7%	75.1%	74.8%	72.4%	69.6%	69.6%	68.9%	68.1%	70.8%	76.3%	76.9%
LT	2.7%	76.6%	73.1%	71.6%	68.9%	68.9%	71.3%	72.6%	73.4%	76.5%	79.3%
LU	-4.3%	83.8%	81.2%	81.0%	81.5%	81.6%	81.2%	81.0%	80.2%	79.5%	79.5%
HU	-8.3%	79.9%	77.4%	75.1%	71.6%	69.0%	69.8%	70.8%	69.6%	70.4%	71.6%
MT	-1.8%	73.1%	75.3%	76.2%	74.3%	71.3%	69.4%	68.5%	68.4%	69.7%	71.3%
NL	-4.0%	68.6%	65.8%	64.1%	65.0%	66.6%	66.8%	65.9%	65.0%	64.7%	64.6%
AT	-4.8%	75.6%	72.3%	70.9%	71.4%	72.1%	71.2%	70.5%	70.0%	70.3%	70.8%
PL	-4.7%	78.9%	79.3%	79.9%	76.9%	73.3%	69.8%	69.2%	70.7%	72.8%	74.2%
PT	-8.8%	79.1%	74.8%	72.5%	70.6%	69.3%	70.4%	72.5%	72.8%	71.4%	70.4%
RO	-2.7%	79.2%	80.5%	77.4%	74.6%	73.8%	74.1%	73.8%	75.2%	76.5%	76.5%
SI	-7.1%	83.1%	77.3%	74.6%	72.6%	70.9%	71.0%	72.5%	74.7%	76.0%	75.9%
SK	-8.3%	79.9%	79.7%	79.4%	76.3%	72.4%	70.6%	69.6%	69.7%	71.0%	71.6%
FI	0.7%	70.2%	70.1%	70.4%	71.6%	71.6%	70.8%	70.6%	70.2%	70.4%	70.8%
SE	1.0%	70.0%	71.7%	70.5%	70.7%	70.6%	70.9%	70.0%	69.2%	70.4%	71.0%
UK	-2.0%	72.2%	70.9%	69.7%	69.1%	69.5%	69.1%	68.8%	68.9%	69.5%	70.2%
NO	-0.8%	69.5%	69.7%	69.7%	69.6%	70.6%	70.7%	69.9%	69.0%	68.5%	68.7%
EU28	-4.8%	76.2%	73.4%	71.3%	70.3%	70.2%	70.2%	70.4%	70.9%	71.3%	71.4%
EA	-5.5%	76.6%	72.6%	70.1%	69.4%	69.8%	70.2%	70.8%	71.3%	71.4%	71.1%

Table III.1.58: Share of older (55-64) in employment (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.9%	12.8%	16.4%	16.6%	16.0%	15.4%	15.3%	15.5%	15.9%	15.8%	15.7%
BG	-0.1%	17.0%	17.1%	18.2%	20.5%	22.3%	22.2%	22.7%	21.0%	17.6%	16.9%
CZ	3.3%	15.5%	15.0%	16.2%	19.7%	23.0%	22.5%	22.0%	21.6%	19.5%	18.9%
DK	3.5%	16.3%	19.0%	20.1%	19.9%	18.7%	17.1%	17.4%	19.3%	20.1%	19.8%
DE	3.7%	17.4%	22.3%	24.3%	22.0%	20.0%	20.8%	22.4%	22.1%	21.5%	21.1%
EE	-0.9%	17.9%	19.1%	19.9%	21.4%	22.2%	22.9%	24.6%	22.3%	17.6%	17.0%
IE	1.5%	13.4%	16.6%	18.4%	20.3%	21.7%	21.0%	16.4%	12.3%	13.0%	14.9%
EL	8.1%	13.4%	19.0%	22.4%	24.5%	25.6%	25.9%	24.0%	22.0%	21.3%	21.5%
ES	6.3%	13.6%	19.6%	23.5%	26.8%	28.8%	27.0%	22.7%	19.6%	18.6%	19.9%
FR	2.7%	14.2%	16.1%	17.8%	18.1%	17.0%	16.4%	16.1%	16.0%	16.5%	16.9%
HR	2.3%	14.9%	16.1%	15.8%	15.8%	17.4%	19.2%	18.8%	18.0%	18.1%	17.2%
IT	9.0%	14.8%	20.6%	24.4%	26.0%	25.3%	23.4%	22.5%	22.9%	23.3%	23.7%
CY	4.5%	13.2%	16.7%	17.6%	18.4%	19.6%	21.7%	22.8%	22.0%	19.6%	17.7%
LV	-2.8%	16.3%	19.3%	20.8%	22.0%	21.5%	21.7%	23.1%	20.8%	14.8%	13.5%
LT	-3.7%	15.5%	19.9%	22.4%	23.9%	21.9%	18.9%	18.2%	18.4%	15.5%	11.8%
LU	3.0%	10.0%	11.4%	11.7%	11.3%	11.1%	11.4%	11.6%	12.3%	13.0%	13.0%
HU	8.6%	14.1%	17.4%	19.9%	23.2%	26.1%	24.9%	23.6%	24.8%	24.1%	22.7%
MT	4.6%	12.3%	12.7%	13.3%	15.1%	17.5%	18.8%	19.5%	19.8%	18.7%	16.9%
NL	3.9%	15.9%	18.4%	20.1%	19.6%	17.9%	17.3%	18.1%	19.0%	19.4%	19.8%
AT	5.3%	11.1%	15.6%	17.2%	16.3%	15.1%	15.7%	16.5%	17.2%	16.9%	16.3%
PL	5.1%	13.8%	14.6%	14.5%	16.6%	20.1%	23.6%	24.4%	22.9%	20.6%	18.8%
PT	7.4%	14.9%	18.6%	20.4%	22.4%	24.0%	23.0%	20.7%	20.2%	21.4%	22.4%
RO	1.9%	14.2%	13.4%	16.4%	19.0%	19.8%	18.8%	19.0%	17.7%	16.3%	16.1%
SI	5.4%	10.8%	17.0%	19.3%	20.1%	21.2%	21.3%	20.1%	18.0%	16.5%	16.1%
SK	8.6%	13.9%	15.2%	15.9%	18.1%	21.6%	23.6%	24.7%	24.7%	23.4%	22.5%
FI	-1.1%	18.4%	18.8%	18.4%	16.7%	16.6%	17.3%	17.6%	18.1%	17.9%	17.3%
SE	-0.9%	18.6%	18.3%	19.0%	18.8%	17.9%	17.4%	18.5%	19.8%	18.6%	17.7%
UK	2.1%	14.9%	17.4%	17.3%	18.6%	18.0%	17.1%	17.6%	18.4%	17.9%	17.0%
NO	1.1%	16.8%	16.6%	17.2%	17.0%	16.1%	15.8%	16.5%	17.5%	18.1%	17.9%
EU28	4.0%	15.1%	18.3%	20.2%	20.7%	20.5%	20.4%	20.2%	19.8%	19.3%	19.0%
EA	4.6%	15.1%	19.3%	21.6%	21.9%	21.3%	20.8%	20.2%	19.7%	19.5%	19.7%

Table III.1.59: Share of older population (55-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.2	19.0	20.5	20.3	19.3	18.4	18.2	18.6	19.1	19.1	18.8
BG	-2.2	21.3	21.0	21.4	23.2	25.1	25.3	25.6	24.3	20.5	19.1
CZ	-2.5	20.3	19.1	19.2	21.7	24.6	23.8	22.1	21.3	19.0	17.8
DK	1.0	19.1	20.0	20.9	20.6	19.3	17.6	17.8	19.6	20.4	20.1
DE	2.1	20.1	24.5	26.5	24.1	21.4	22.0	23.4	23.3	22.6	22.2
EE	-2.7	19.6	21.1	20.8	21.5	22.3	23.1	24.7	22.8	18.0	16.9
IE	-0.4	15.8	18.0	19.3	20.5	21.7	21.5	17.6	13.2	13.4	15.4
EL	1.7	18.5	20.6	22.6	24.4	25.3	25.4	23.3	21.0	20.0	20.2
ES	1.6	17.1	20.9	23.3	25.5	27.2	25.7	21.7	18.6	17.6	18.7
FR	-0.7	19.8	20.2	20.5	20.4	19.4	18.5	18.3	18.1	18.6	19.1
HR	0.2	21.0	21.9	21.5	21.2	21.9	23.0	22.9	22.2	22.2	21.3
IT	2.3	19.2	21.6	23.6	24.3	23.4	21.6	20.8	21.0	21.2	21.4
CY	1.4	16.0	18.1	18.5	18.9	19.9	21.7	22.9	22.1	19.7	17.5
LV	-5.6	19.4	22.3	22.4	22.9	22.5	22.5	24.0	22.1	16.0	13.8
LT	-5.7	18.5	23.6	25.1	25.1	23.0	20.0	19.4	19.9	17.1	12.8
LU	3.1	16.3	17.9	18.3	17.5	16.8	16.8	17.2	18.0	19.1	19.3
HU	-0.3	21.2	18.8	18.9	21.7	24.3	23.3	21.8	22.8	22.2	20.8
MT	-1.1	20.6	20.4	18.6	18.4	20.2	21.5	22.3	22.6	21.6	19.6
NL	1.4	19.6	21.6	22.8	22.0	19.9	18.9	19.6	20.5	20.8	21.0
AT	3.2	17.8	21.6	23.3	22.0	19.9	20.1	21.2	22.0	21.8	21.0
PL	-0.3	20.3	19.9	18.0	19.0	22.2	25.3	26.0	24.5	22.1	20.0
PT	4.8	19.4	21.6	22.9	24.5	26.0	25.0	22.6	21.9	23.0	24.1
RO	-0.4	20.3	18.1	19.9	23.2	23.9	23.2	23.1	22.0	20.1	19.9
SI	-2.3	20.6	22.0	22.3	22.3	23.2	23.9	22.9	20.8	18.9	18.3
SK	3.3	18.9	19.4	18.9	20.4	23.9	26.1	26.6	26.2	24.1	22.1
FI	-2.1	21.7	21.1	20.5	18.8	18.5	19.6	19.9	20.4	20.3	19.6
SE	-0.8	18.9	19.0	19.7	19.4	18.3	17.7	18.7	20.1	19.1	18.0
UK	0.4	17.5	19.7	20.7	19.9	18.6	18.7	19.5	19.7	19.0	18.0
NO	1.8	17.8	18.1	18.7	18.8	17.8	17.4	18.1	19.1	19.7	19.5
EU28	0.6	19.2	21.0	22.0	22.1	21.7	21.4	21.2	20.8	20.1	19.8
EA	1.2	19.2	21.8	23.2	23.0	22.1	21.5	21.0	20.5	20.2	20.3

Table III.1.60: Old-age dependency ratio 15-64

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	12.9	27.1	29.7	32.0	34.7	36.5	37.2	37.5	37.9	38.7	39.9
BG	29.6	28.9	33.9	36.7	39.1	41.7	45.8	50.6	54.3	58.4	58.4
CZ	24.9	25.1	31.7	33.7	35.3	36.6	40.8	46.0	48.4	50.0	50.1
DK	13.9	27.9	31.6	33.8	36.9	39.4	40.7	40.5	39.4	39.9	41.8
DE	27.4	31.8	36.2	40.7	47.6	53.9	55.6	56.2	57.4	59.1	59.2
EE	26.9	27.5	32.8	36.5	39.8	42.2	45.5	48.4	51.7	55.7	54.5
IE	16.7	18.9	23.6	27.0	30.7	34.5	39.0	43.2	44.7	40.7	35.6
EL	29.7	31.2	34.6	37.7	41.6	47.7	53.8	59.9	63.7	63.1	60.8
ES	26.4	26.8	30.7	34.7	40.2	46.8	54.3	61.1	62.3	58.5	53.2
FR	14.9	27.9	33.0	36.1	39.4	42.1	44.1	44.0	43.7	43.2	42.9
HR	25.0	27.3	32.1	36.1	39.5	42.0	43.9	46.5	49.3	51.1	52.3
IT	20.3	32.8	35.1	37.3	41.3	45.9	50.2	52.5	52.9	53.0	53.0
CY	27.4	19.1	24.3	28.4	32.1	34.4	36.6	39.1	42.6	45.4	46.5
LV	22.0	28.3	32.5	37.2	42.2	45.3	47.8	49.0	50.7	52.7	50.3
LT	18.3	27.4	32.3	39.5	48.0	53.5	55.7	54.6	51.6	48.5	45.7
LU	15.2	20.3	21.7	23.4	25.8	28.0	29.3	30.4	31.7	33.3	35.6
HU	27.1	25.4	31.0	33.7	34.4	36.7	40.5	45.6	47.5	49.7	52.6
MT	25.1	25.8	33.2	38.0	40.5	40.4	40.9	42.5	45.0	48.1	50.9
NL	21.9	25.9	31.2	35.5	40.6	45.1	47.1	46.8	46.4	46.8	47.8
AT	23.5	27.0	29.5	32.9	37.9	42.4	44.4	45.1	46.8	48.5	50.5
PL	40.5	20.5	27.7	32.9	35.6	37.3	40.4	45.7	52.6	57.9	61.0
PT	34.0	29.8	34.7	38.5	43.6	49.0	55.7	61.8	64.3	64.0	63.9
RO	27.7	24.1	28.8	32.0	32.7	37.6	41.8	46.5	48.7	52.1	51.8
SI	27.2	25.4	32.2	36.8	41.0	44.6	47.7	51.5	54.1	54.6	52.5
SK	47.4	18.7	24.8	29.3	32.9	35.8	40.6	47.7	54.9	61.5	66.1
FI	15.5	29.6	36.1	39.1	41.5	42.3	41.1	41.1	42.0	43.1	45.1
SE	11.2	30.2	33.1	34.3	35.7	36.9	37.4	37.2	37.6	39.3	41.5
UK	16.1	26.6	29.6	31.9	35.2	37.9	39.1	39.6	40.7	41.9	42.8
NO	15.1	23.9	26.5	28.3	30.2	32.3	33.7	34.2	35.1	36.8	39.0
EU28	22.3	27.8	32.1	35.5	39.4	43.3	46.1	48.2	49.5	50.2	50.1
EA	21.8	29.3	33.3	36.8	41.5	46.1	49.4	51.2	52.0	51.8	51.1

Table III.1.61: Old-age dependency ratio 20-64

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	14.6	29.6	32.5	35.3	38.3	40.3	41.1	41.4	41.9	42.8	44.2
BG	33.5	31.0	36.4	39.9	42.6	45.4	49.7	55.0	59.3	64.2	64.5
CZ	28.5	27.0	34.1	37.1	38.7	40.1	44.5	50.2	53.0	55.2	55.5
DK	15.1	31.0	34.8	37.3	40.4	43.4	45.1	44.9	43.6	44.0	46.1
DE	30.3	34.3	38.9	43.8	51.5	58.8	60.5	61.1	62.4	64.4	64.6
EE	30.9	29.7	35.6	40.4	44.0	46.5	49.7	52.8	56.7	61.7	60.6
IE	19.2	20.8	26.4	30.6	34.8	38.6	43.0	47.7	49.9	45.8	40.0
EL	33.0	33.7	37.5	41.2	45.3	51.6	58.2	65.0	69.5	69.3	66.8
ES	29.5	28.8	33.3	38.0	43.7	50.6	58.5	66.1	67.8	64.1	58.2
FR	16.8	30.9	36.6	40.1	43.7	46.8	49.0	49.0	48.7	48.0	47.7
HR	27.4	29.9	34.8	39.4	43.1	45.9	47.9	50.7	53.8	55.8	57.3
IT	22.6	35.3	38.0	40.5	44.8	49.9	54.6	57.1	57.7	57.9	58.0
CY	30.0	21.1	26.3	30.9	35.1	37.8	40.0	42.5	46.3	49.5	51.1
LV	25.8	30.5	35.2	41.0	46.5	50.0	52.5	53.5	55.7	58.6	56.3
LT	21.3	30.1	34.9	43.2	53.3	59.7	61.9	60.0	56.6	53.9	51.4
LU	16.9	22.3	23.7	25.6	28.3	30.7	32.2	33.5	35.0	36.7	39.2
HU	30.0	27.7	33.6	36.7	37.3	39.8	44.1	49.9	51.9	54.5	57.7
MT	27.8	28.2	35.9	41.2	44.3	44.3	44.9	46.6	49.2	52.6	56.0
NL	24.1	28.5	34.4	39.0	44.5	49.7	52.0	51.7	51.2	51.6	52.6
AT	25.8	29.4	31.9	35.6	41.3	46.4	48.5	49.2	51.0	52.9	55.3
PL	44.6	22.3	29.8	36.0	38.8	40.5	43.8	49.4	57.1	63.2	66.9
PT	36.9	32.4	37.7	41.8	47.1	52.7	60.0	66.9	69.9	69.6	69.3
RO	31.0	26.2	31.4	35.0	35.5	41.3	45.9	51.1	53.6	57.5	57.2
SI	30.8	27.3	34.7	40.2	45.1	48.9	52.0	56.1	59.1	60.1	58.1
SK	51.6	20.3	26.7	31.8	35.8	38.7	43.7	51.3	59.2	66.7	71.9
FI	17.3	32.5	39.6	43.1	45.8	46.7	45.4	45.4	46.3	47.6	49.8
SE	12.8	33.2	36.3	37.9	39.5	41.0	41.5	41.2	41.6	43.5	46.0
UK	18.1	29.4	32.4	35.3	39.1	42.2	43.4	43.7	45.0	46.5	47.5
NO	16.6	26.5	29.1	31.2	33.3	35.7	37.3	37.8	38.8	40.7	43.1
EU28	24.9	30.3	35.0	38.9	43.1	47.4	50.6	52.8	54.3	55.2	55.2
EA	24.4	31.8	36.3	40.2	45.4	50.4	54.0	56.0	57.0	56.9	56.1

Table III.1.62: Total dependency ratio

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	15.2	53.1	57.2	60.0	63.0	64.8	65.6	66.0	66.6	67.4	68.4
BG	35.1	49.3	56.1	58.7	60.5	63.0	68.1	74.6	79.6	84.4	84.4
CZ	30.3	47.1	56.7	57.9	58.6	59.5	64.9	72.4	76.2	78.0	77.3
DK	15.0	54.7	57.7	60.1	64.7	68.3	69.6	68.7	66.8	67.2	69.8
DE	31.8	51.4	56.2	61.6	69.5	76.4	77.9	78.5	80.3	82.8	83.2
EE	30.8	51.4	59.2	61.7	63.9	65.5	69.7	74.6	79.7	84.4	82.2
IE	14.2	52.2	57.6	58.1	58.5	61.6	68.6	76.3	79.5	74.1	66.4
EL	30.9	53.6	56.5	58.2	61.4	67.9	75.3	83.0	87.9	87.2	84.5
ES	27.4	49.5	52.8	54.7	58.8	65.8	75.2	84.6	87.1	83.2	77.0
FR	15.6	57.1	62.4	65.6	69.3	72.4	74.8	74.6	74.1	73.2	72.6
HR	27.4	49.5	55.3	59.5	62.8	65.0	66.8	69.8	73.4	75.6	77.0
IT	22.5	54.4	56.8	58.6	62.8	68.3	73.6	76.5	77.1	77.0	76.9
CY	30.9	42.4	49.1	53.4	56.2	56.9	58.6	62.1	67.5	71.7	73.3
LV	29.3	50.2	56.8	61.2	65.7	67.9	71.7	75.2	79.4	82.7	79.5
LT	27.8	49.3	56.2	65.0	73.3	77.8	80.6	81.9	82.0	80.4	77.1
LU	18.1	44.9	47.3	50.0	53.4	56.1	57.4	58.3	59.4	60.8	63.1
HU	31.7	46.6	53.1	55.9	57.0	59.5	63.8	69.8	72.1	74.9	78.3
MT	31.3	47.1	56.5	62.9	66.0	65.0	64.9	66.8	70.4	74.8	78.4
NL	22.6	51.8	56.2	60.9	67.0	72.3	74.4	73.5	72.6	73.0	74.4
AT	26.8	48.3	51.4	55.7	61.4	66.1	67.8	68.4	70.5	72.7	75.1
PL	43.1	41.9	50.7	55.4	57.0	57.5	60.7	67.3	75.8	81.9	85.0
PT	32.7	52.1	54.8	57.6	62.6	68.6	76.4	83.2	85.7	85.0	84.8
RO	32.0	47.1	52.6	55.9	56.7	61.9	66.7	72.5	75.4	79.5	79.1
SI	32.1	46.7	56.3	60.8	63.9	67.0	71.0	76.8	80.9	81.7	78.8
SK	47.5	40.1	46.8	50.4	52.5	54.4	59.3	67.4	75.7	83.0	87.6
FI	18.0	55.0	63.3	66.9	69.6	70.2	68.7	68.7	69.8	71.0	73.1
SE	14.5	56.8	62.3	64.1	65.6	66.2	66.2	66.1	67.0	69.1	71.3
UK	18.6	53.7	58.8	61.4	64.5	66.7	67.7	68.4	70.2	71.7	72.4
NO	15.9	51.7	54.6	56.8	59.4	61.7	62.9	62.9	63.6	65.3	67.6
EU28	25.2	51.4	56.5	59.8	63.8	67.8	71.2	74.0	75.8	76.8	76.6
EA	24.2	52.6	56.8	60.2	65.1	70.2	74.1	76.6	77.8	77.7	76.9

Table III.1.63: Total economic dependency ratio

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	12.7	145.9	142.5	145.7	149.8	152.0	153.1	154.1	155.3	157.1	158.6
BG	27.2	146.7	142.7	141.1	142.8	146.1	151.2	159.5	168.4	173.9	173.9
CZ	22.8	113.1	118.6	122.2	123.4	125.0	128.5	131.9	135.7	137.4	135.9
DK	-2.8	108.0	102.5	101.9	105.0	107.9	109.1	108.2	106.5	105.1	105.2
DE	27.8	102.0	101.0	106.8	113.6	120.0	123.5	124.8	126.4	128.2	129.8
EE	32.8	111.7	117.3	123.2	123.4	124.0	127.3	133.0	139.7	144.8	144.6
IE	7.4	145.8	146.4	145.4	142.1	141.2	146.1	155.8	162.6	161.0	153.2
EL	-64.2	210.8	173.9	154.7	144.1	136.8	134.8	140.6	146.0	148.2	146.7
ES	-40.6	172.2	143.0	127.3	119.8	117.9	121.6	132.1	138.6	137.6	131.6
FR	4.5	143.6	147.2	146.7	147.8	149.7	150.3	150.7	149.8	148.6	148.0
HR	-2.2	181.6	170.6	170.9	171.0	169.1	166.2	168.6	172.4	176.4	179.4
IT	-2.7	173.4	161.4	154.3	155.7	160.6	166.4	172.0	173.5	172.3	170.7
CY	-12.7	130.2	123.6	115.3	112.7	108.4	104.8	106.4	109.9	114.6	117.5
LV	20.2	123.1	127.9	132.5	132.8	132.6	132.0	136.2	142.3	146.1	143.3
LT	29.6	129.7	135.4	148.3	159.7	165.2	164.6	163.5	163.1	163.1	159.3
LU	20.6	120.2	118.2	119.3	123.0	125.7	128.0	130.4	133.0	136.7	140.8
HU	4.5	150.4	130.3	124.1	123.7	126.9	133.2	141.2	145.9	150.2	154.8
MT	12.1	137.4	135.1	135.8	134.6	132.4	131.9	133.9	138.5	144.7	149.5
NL	4.8	100.4	98.3	97.7	101.6	105.4	107.1	106.9	105.8	105.0	105.2
AT	20.3	101.9	100.5	103.5	107.9	111.0	113.2	115.3	117.7	120.2	122.2
PL	33.9	132.2	129.9	133.9	135.1	135.3	136.3	141.4	149.9	159.4	166.1
PT	1.5	140.1	127.9	117.8	117.9	121.3	127.1	133.9	139.3	141.6	141.6
RO	54.2	137.8	143.2	148.2	155.7	164.7	172.4	180.4	186.7	190.9	192.0
SI	20.5	127.7	126.8	124.9	128.7	132.5	137.4	143.2	147.9	149.9	148.2
SK	32.8	132.0	134.2	139.8	139.0	137.8	140.5	148.3	156.1	162.2	164.9
FI	17.2	120.6	124.6	129.1	132.5	133.2	132.6	132.5	133.5	135.6	137.8
SE	9.0	103.4	103.8	105.6	107.3	107.7	107.5	107.3	108.2	110.5	112.4
UK	7.7	111.6	112.6	115.8	117.1	116.9	116.1	116.0	117.2	118.7	119.4
NO	16.1	94.7	95.9	99.0	101.8	104.2	105.5	105.9	106.6	108.3	110.8
EU28	8.6	132.0	127.9	127.6	129.3	131.6	133.9	136.9	139.3	140.6	140.6
EA	6.7	134.5	129.1	127.7	129.6	132.7	135.8	139.5	141.6	142.0	141.3

Table III.1.64: Economic old-age dependency ratio (15-64)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	17.7	43.0	45.3	48.5	52.5	55.1	56.3	56.8	57.6	59.0	60.7
BG	39.1	46.8	50.8	53.7	57.2	61.1	66.6	73.6	79.9	85.7	86.0
CZ	29.0	35.3	42.7	46.0	48.2	49.8	54.1	59.2	62.3	64.3	64.3
DK	10.4	36.0	38.6	40.2	43.0	45.6	47.1	46.9	45.8	45.4	46.4
DE	31.5	41.2	44.6	49.7	57.4	65.1	68.2	69.2	70.5	72.2	72.7
EE	35.8	35.8	42.3	47.9	52.0	54.9	58.5	62.3	66.9	72.0	71.6
IE	23.8	28.7	34.5	39.2	43.9	48.5	53.9	59.8	63.0	59.3	52.5
EL	17.4	62.4	59.5	59.2	61.1	65.0	69.9	76.7	81.7	82.2	79.7
ES	19.7	48.3	47.7	49.0	53.1	58.9	66.2	74.9	77.9	74.6	68.1
FR	17.9	42.8	49.6	53.0	56.6	59.9	62.1	62.2	61.8	61.1	60.7
HR	31.1	50.6	54.8	59.9	64.4	67.3	68.9	72.2	76.2	79.4	81.7
IT	22.2	57.2	57.3	57.8	62.4	68.9	75.2	79.3	80.3	80.0	79.5
CY	25.5	29.4	34.2	36.8	40.6	42.5	44.1	46.3	49.6	52.9	54.9
LV	26.2	40.1	44.7	50.9	56.8	60.3	62.3	63.9	66.4	69.0	66.3
LT	25.0	40.9	47.5	58.3	70.9	79.0	80.9	78.4	73.9	70.0	66.0
LU	21.6	30.3	31.7	33.7	37.0	39.9	41.9	43.7	45.9	48.5	52.0
HU	31.3	43.0	46.0	47.3	47.9	50.7	56.1	63.5	66.8	70.1	74.2
MT	30.0	40.7	49.1	54.4	56.8	56.4	56.9	59.0	62.4	66.7	70.7
NL	20.3	32.8	37.2	40.8	45.9	50.6	53.1	53.1	52.6	52.5	53.1
AT	26.5	35.7	37.7	41.0	46.5	51.6	54.4	55.9	57.9	60.0	62.3
PL	54.0	32.7	40.4	47.1	51.1	53.6	57.1	63.5	72.6	81.0	86.7
PT	37.1	44.6	48.5	50.3	55.1	60.9	68.5	76.3	80.9	81.9	81.8
RO	47.4	36.2	43.6	48.6	51.4	59.5	66.4	74.1	78.5	83.6	83.6
SI	33.3	38.5	45.8	50.1	55.4	60.3	64.6	69.4	72.7	73.8	71.8
SK	62.0	30.6	39.0	45.9	50.7	54.1	60.0	69.4	78.8	87.2	92.6
FI	19.8	40.8	48.0	52.1	55.3	56.5	55.4	55.3	56.4	58.0	60.5
SE	12.3	37.1	39.5	40.9	42.6	44.0	44.6	44.5	45.0	46.9	49.3
UK	17.3	34.6	37.8	40.8	44.3	47.0	48.1	48.3	49.4	50.8	51.9
NO	18.5	28.5	31.2	33.7	36.0	38.5	40.4	41.1	42.3	44.3	46.9
EU28	25.0	41.5	45.3	48.7	53.1	57.6	61.0	63.8	65.6	66.5	66.5
EA	24.0	44.4	47.7	50.9	56.0	61.4	65.4	68.1	69.4	69.3	68.4

Table III.1.65: Economic old-age dependency ratio (15-74)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	17.2	42.7	44.9	47.9	51.8	54.4	55.6	56.1	56.8	58.2	59.9
BG	35.7	46.2	49.1	51.6	54.9	58.4	63.2	69.6	75.6	81.0	81.8
CZ	25.5	34.7	41.6	44.8	46.7	48.1	51.4	55.6	58.6	60.2	60.2
DK	7.8	35.1	37.4	38.5	40.8	43.1	44.3	44.3	43.3	42.5	42.9
DE	28.4	40.4	43.1	47.5	54.1	61.3	64.8	65.8	66.9	68.2	68.8
EE	33.6	34.3	40.5	45.8	49.6	52.3	55.5	59.0	63.0	67.5	67.9
IE	22.7	28.0	33.3	37.5	41.6	45.7	50.4	55.6	59.0	56.7	50.7
EL	12.9	61.5	58.3	57.4	58.5	61.4	65.3	70.8	75.2	76.3	74.4
ES	17.0	48.0	46.7	47.3	50.4	55.3	61.6	69.5	73.1	70.8	65.0
FR	16.9	42.4	49.1	52.2	55.4	58.5	60.6	60.8	60.5	59.8	59.4
HR	28.0	49.8	53.3	57.9	62.1	65.0	66.3	68.9	72.3	75.5	77.8
IT	17.1	56.2	55.8	55.2	58.7	64.2	69.7	73.8	74.9	74.2	73.3
CY	22.1	28.8	33.2	35.3	38.6	40.3	41.6	43.5	46.0	48.9	50.9
LV	24.0	38.9	42.8	48.3	53.6	56.8	58.7	60.3	62.5	64.6	62.9
LT	24.1	40.2	46.5	56.6	68.4	76.0	78.1	76.2	72.0	68.2	64.3
LU	21.3	30.1	31.4	33.5	36.6	39.5	41.5	43.3	45.4	48.0	51.4
HU	29.1	42.6	45.5	46.4	46.8	49.3	54.2	61.1	64.7	67.9	71.6
MT	29.5	40.1	48.4	53.9	56.2	55.8	56.2	58.2	61.4	65.7	69.6
NL	17.5	32.2	35.8	39.0	43.4	47.5	50.0	50.3	49.8	49.4	49.7
AT	24.1	35.2	36.8	39.6	44.4	49.2	52.1	53.6	55.4	57.2	59.3
PL	48.5	32.3	39.2	45.1	48.9	51.3	54.2	59.5	67.1	74.9	80.8
PT	31.7	42.7	46.2	47.4	51.0	55.8	61.8	68.3	73.0	74.6	74.3
RO	44.7	34.6	41.9	46.4	49.3	56.5	62.5	69.8	74.1	78.9	79.3
SI	31.0	37.9	45.0	48.7	53.2	57.6	61.6	65.9	69.1	70.4	68.9
SK	56.0	30.4	38.6	45.3	49.8	52.9	58.1	66.4	74.6	81.8	86.4
FI	18.6	39.9	46.5	50.4	53.5	54.7	53.8	53.7	54.6	56.1	58.5
SE	11.5	35.9	38.1	39.5	41.1	42.4	43.0	43.0	43.5	45.1	47.4
UK	15.7	33.5	36.6	39.5	42.6	45.0	46.0	46.2	47.0	48.2	49.2
NO	17.5	27.6	30.1	32.5	34.7	37.1	38.9	39.7	40.8	42.6	45.0
EU28	22.4	40.7	44.1	46.9	50.8	54.8	58.0	60.5	62.2	63.1	63.1
EA	21.3	43.7	46.5	49.1	53.4	58.3	62.0	64.7	66.0	65.9	65.1

Table III.1.66: Public pensions, gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.3	11.8	12.7	13.8	14.7	15.2	15.2	15.1	15.0	15.1	15.1
BG	-0.4	9.9	8.4	8.2	8.1	8.2	8.4	8.7	9.2	9.4	9.4
CZ	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
DK	-3.1	10.3	8.7	8.4	8.3	8.2	8.0	7.7	7.5	7.3	7.2
DE	2.7	10.0	10.3	10.9	11.6	12.1	12.2	12.3	12.5	12.6	12.7
EE	-1.3	7.6	7.6	7.3	7.1	7.0	6.9	6.8	6.7	6.6	6.3
IE	1.1	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
EL	-1.9	16.2	15.5	15.0	14.4	14.1	14.1	14.1	14.4	14.2	14.3
ES	-0.8	11.8	11.8	11.4	11.2	11.5	11.9	12.5	12.3	11.4	11.0
FR	-2.8	14.9	14.6	14.9	14.7	14.2	13.8	13.3	12.8	12.3	12.1
HR	-3.9	10.8	10.3	10.1	9.5	8.6	7.8	7.4	7.2	7.0	6.9
IT	-1.9	15.7	15.3	15.5	15.7	15.8	15.8	15.5	14.8	14.2	13.8
CY	-0.1	9.5	9.0	9.3	9.7	9.6	9.4	9.3	9.2	9.4	9.3
LV	-3.1	7.7	5.9	5.5	5.5	5.5	5.4	5.3	5.2	5.0	4.6
LT	0.3	7.2	6.8	7.6	8.7	9.4	9.4	9.1	8.6	8.1	7.5
LU	4.1	9.4	10.6	11.2	11.9	12.4	12.7	12.7	12.5	12.4	13.4
HU	-0.1	11.5	9.8	9.3	8.9	9.1	9.6	10.4	10.7	11.0	11.4
MT	3.2	9.6	9.8	9.8	9.7	9.6	9.7	10.3	11.0	12.0	12.8
NL	0.9	6.9	7.1	7.4	7.7	8.1	8.3	8.3	8.1	7.9	7.8
AT	0.5	13.9	13.9	14.1	14.4	14.7	14.7	14.7	14.6	14.6	14.4
PL	-0.7	11.3	10.6	10.5	10.4	10.1	10.0	10.1	10.4	10.7	10.7
PT	-0.7	13.8	14.6	14.9	15.0	15.0	14.8	14.6	14.4	13.8	13.1
RO	-0.1	8.2	8.1	8.0	8.1	8.4	8.4	8.5	8.4	8.3	8.1
SI	3.5	11.8	11.1	11.4	12.3	13.3	14.3	15.1	15.6	15.6	15.3
SK	2.1	8.1	8.0	7.9	7.6	7.7	8.1	8.6	9.1	9.7	10.2
FI	0.1	12.9	14.2	14.9	15.0	14.4	13.6	13.0	12.8	12.8	12.9
SE	-1.4	8.9	8.3	8.1	7.9	7.8	7.5	7.3	7.2	7.4	7.5
UK	0.7	7.7	7.4	7.8	7.9	8.2	8.4	8.1	8.1	8.3	8.4
NO	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
EU28	-0.2	11.3	11.2	11.4	11.6	11.7	11.7	11.6	11.4	11.3	11.2
EA	0.0	12.3	12.4	12.7	12.9	13.0	13.1	13.0	12.8	12.5	12.3

Table III.1.67: Earnings-related pensions, gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.4	11.6	12.5	13.6	14.5	15.0	15.0	14.9	14.8	14.9	15.0
BG	-0.5	9.5	8.1	7.9	7.8	7.9	8.1	8.4	8.8	9.1	9.1
CZ	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
DK	-1.1	1.3	1.1	1.0	0.8	0.7	0.5	0.4	0.3	0.2	0.2
DE	2.7	10.0	10.3	10.9	11.6	12.1	12.2	12.3	12.5	12.6	12.7
EE	-1.3	7.6	7.6	7.2	7.1	6.9	6.9	6.8	6.7	6.6	6.3
IE	1.9	3.9	4.1	4.5	5.0	5.5	6.0	6.5	6.8	6.5	5.8
EL	-2.2	12.4	12.4	12.1	11.5	11.0	10.7	10.4	10.4	10.1	10.2
ES	-0.8	11.8	11.8	11.4	11.2	11.5	11.9	12.5	12.3	11.4	11.0
FR	-2.6	14.4	14.1	14.3	14.1	13.7	13.3	12.8	12.4	12.0	11.8
HR	-3.9	10.8	10.3	10.1	9.5	8.6	7.8	7.4	7.2	7.0	6.9
IT	-2.0	15.5	15.1	15.2	15.4	15.5	15.5	15.1	14.5	13.9	13.4
CY	-0.1	9.2	8.7	9.0	9.4	9.3	9.1	9.0	8.9	9.2	9.1
LV	-3.0	7.6	5.9	5.5	5.5	5.5	5.4	5.2	5.1	5.0	4.6
LT	0.4	6.9	6.5	7.3	8.5	9.2	9.2	8.8	8.3	7.9	7.3
LU	4.1	9.4	10.6	11.2	11.9	12.4	12.7	12.7	12.5	12.4	13.4
HU	-0.1	11.5	9.8	9.2	8.9	9.1	9.6	10.3	10.6	10.9	11.4
MT	3.1	9.3	9.5	9.4	9.3	9.2	9.4	9.9	10.6	11.6	12.4
NL	0.1	1.8	2.0	2.0	1.8	1.8	1.8	1.8	1.9	1.9	1.9
AT	0.3	13.6	13.5	13.6	14.0	14.3	14.3	14.2	14.2	14.1	13.9
PL	0.0	10.4	10.0	10.0	9.9	9.7	9.5	9.8	10.1	10.4	10.5
PT	-1.1	12.1	13.0	13.4	13.5	13.4	13.2	12.8	12.4	11.8	11.1
RO	-0.1	8.1	8.1	8.0	8.0	8.3	8.4	8.4	8.3	8.2	8.0
SI	3.5	11.8	11.1	11.4	12.3	13.3	14.3	15.1	15.6	15.6	15.3
SK	2.0	8.0	7.9	7.7	7.5	7.5	7.9	8.4	8.9	9.5	10.0
FI	0.6	11.6	13.2	13.9	14.0	13.4	12.7	12.2	12.0	12.0	12.2
SE	-2.0	8.2	7.8	7.5	7.3	7.0	6.7	6.3	6.1	6.2	6.2
UK	1.1	7.1	7.0	7.4	7.6	7.9	8.1	7.9	7.9	8.0	8.1
NO	4.4	7.2	8.0	8.7	9.4	10.0	10.3	10.6	10.9	11.3	11.7
EU28	-0.3	11.4	11.3	11.5	11.7	11.7	11.7	11.6	11.4	11.2	11.1
EA	-0.1	12.0	12.0	12.3	12.5	12.6	12.6	12.5	12.3	12.0	11.9

Table III.1.68: Old-age and early pensions (earnings-related), gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.4	9.4	10.3	11.5	12.6	13.1	13.3	13.4	13.4	13.7	13.8
BG	-0.6	7.9	6.3	5.9	5.8	5.8	5.9	6.3	6.7	7.1	7.3
CZ	0.8	7.3	7.5	7.6	7.5	7.3	7.4	7.7	8.0	8.2	8.1
DK	-1.1	1.3	1.1	1.0	0.8	0.7	0.5	0.4	0.3	0.2	0.2
DE	3.2	7.8	8.2	8.8	9.5	10.1	10.3	10.4	10.6	10.8	10.9
EE	-0.9	6.3	6.3	5.9	5.8	5.7	5.7	5.7	5.7	5.7	5.4
IE	2.3	2.4	2.6	2.9	3.2	3.8	4.4	4.9	5.4	5.3	4.7
EL	-1.2	9.7	9.8	9.6	9.0	8.7	8.5	8.3	8.5	8.3	8.4
ES	0.0	8.3	8.6	8.4	8.3	8.6	9.1	9.7	9.6	8.8	8.3
FR	-1.9	12.0	11.8	12.2	12.0	11.7	11.3	11.0	10.6	10.3	10.1
HR	-1.5	5.1	5.8	5.9	5.6	4.9	4.3	4.0	3.8	3.7	3.6
IT	-1.3	12.6	12.2	12.4	12.6	12.8	12.9	12.7	12.2	11.6	11.4
CY	-0.3	7.7	6.8	6.9	7.2	7.2	7.0	7.1	7.1	7.4	7.4
LV	-2.8	6.9	5.2	4.9	4.9	4.9	4.9	4.7	4.7	4.5	4.1
LT	0.7	5.2	4.9	5.7	6.7	7.4	7.6	7.3	6.8	6.4	5.9
LU	4.3	6.7	8.0	8.8	9.5	10.1	10.4	10.4	10.2	10.0	11.0
HU	0.5	9.1	7.9	7.5	7.2	7.4	8.0	8.7	8.9	9.2	9.7
MT	5.0	5.3	5.8	6.1	6.1	6.3	6.7	7.4	8.3	9.4	10.3
NL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AT	1.9	9.4	9.7	10.0	10.4	10.9	11.1	11.2	11.3	11.4	11.3
PL	0.2	9.1	8.9	9.0	8.9	8.5	8.3	8.4	8.8	9.2	9.3
PT	-0.7	10.1	11.1	11.5	11.5	11.5	11.3	11.0	10.7	10.1	9.4
RO	-0.1	6.9	6.9	6.8	6.7	7.0	7.1	7.2	7.1	7.1	6.9
SI	3.8	9.1	8.8	9.1	10.0	11.0	12.0	12.7	13.2	13.1	12.8
SK	1.7	6.1	6.2	6.0	5.7	5.6	6.0	6.4	6.9	7.5	7.9
FI	1.3	9.7	11.6	12.4	12.5	12.0	11.2	10.8	10.6	10.8	11.0
SE	-1.1	6.6	6.6	6.3	6.2	6.0	5.7	5.4	5.3	5.4	5.5
UK	1.1	7.1	7.0	7.4	7.6	7.9	8.1	7.9	7.9	8.0	8.1
NO	4.3	4.4	5.2	5.8	6.5	7.3	7.7	7.9	8.1	8.3	8.7
EU28	0.4	8.5	8.6	8.9	9.1	9.2	9.3	9.2	9.1	9.0	9.0
EA	0.6	9.1	9.3	9.6	9.9	10.1	10.2	10.2	10.0	9.8	9.7

Table III.1.69: Disability pensions (earnings-related), gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.2	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.9
BG	0.3	1.3	1.5	1.6	1.7	1.8	1.9	1.9	1.8	1.7	1.6
CZ	-0.1	1.1	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9
DK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DE	-0.1	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
EE	-0.4	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.8	0.8
IE	0.1	0.4	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.4	0.4
EL	-0.1	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
ES	-0.4	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.9
FR	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
HR	-2.0	2.5	1.3	0.9	0.7	0.6	0.6	0.5	0.5	0.5	0.5
IT	0.0	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
CY	0.1	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
LV	-0.3	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
LT	-0.3	1.4	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.2	1.1
LU	-0.2	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.6
HU	-0.3	1.0	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7
MT	-0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NL	0.2	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.8	1.8	1.8
AT	-0.5	2.2	2.0	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.6
PL	0.0	0.8	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8
PT	-0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
RO	-0.1	0.8	0.7	0.8	0.9	0.9	0.9	0.8	0.7	0.7	0.7
SI	-0.5	1.3	1.2	1.1	1.0	0.9	0.9	0.9	0.9	0.8	0.8
SK	0.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.0	1.0
FI	-0.5	1.1	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
SE	-0.5	1.2	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7
UK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NO	0.2	2.7	2.8	2.8	2.8	2.7	2.6	2.7	2.8	2.9	3.0
EU28	-0.1	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
EA	-0.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7

Table III.1.70: Survivors pensions (earnings-related), gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.9	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3
BG	-0.1	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
CZ	0.1	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
DK	:	:	:	:	:	:	:	:	:	:	:
DE	-0.4	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.2
EE	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IE	-0.4	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4
EL	-0.8	1.9	1.8	1.8	1.8	1.7	1.6	1.5	1.4	1.2	1.1
ES	-0.5	2.3	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8
FR	-0.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	0.9	0.9
HR	-0.7	1.6	1.3	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9
IT	-0.7	2.5	2.5	2.4	2.4	2.3	2.2	2.1	2.0	1.9	1.8
CY	0.1	1.2	1.6	1.7	1.8	1.7	1.6	1.5	1.5	1.4	1.4
LV	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LT	0.0	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3
LU	-0.1	1.9	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
HU	-0.3	1.3	1.2	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0
MT	-0.3	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.5	1.4	1.3
NL	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
AT	-1.1	2.0	1.8	1.7	1.7	1.6	1.5	1.3	1.2	1.1	0.9
PL	-0.1	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4
PT	-0.3	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.2
RO	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SI	0.4	1.2	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6
SK	0.3	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1
FI	-0.2	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6
SE	-0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0
UK	:	:	:	:	:	:	:	:	:	:	:
NO	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EU28	-0.5	1.6	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0
EA	-0.5	1.7	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.1

Table III.1.71: Other pensions (earnings-related), gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	:	:	:	:	:	:	:	:	:	:	:
BG	:	:	:	:	:	:	:	:	:	:	:
CZ	:	:	:	:	:	:	:	:	:	:	:
DK	:	:	:	:	:	:	:	:	:	:	:
DE	:	:	:	:	:	:	:	:	:	:	:
EE	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IE	-0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
EL	:	:	:	:	:	:	:	:	:	:	:
ES	:	:	:	:	:	:	:	:	:	:	:
FR	:	:	:	:	:	:	:	:	:	:	:
HR	0.2	1.7	1.9	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9
IT	:	:	:	:	:	:	:	:	:	:	:
CY	:	:	:	:	:	:	:	:	:	:	:
LV	:	:	:	:	:	:	:	:	:	:	:
LT	:	:	:	:	:	:	:	:	:	:	:
LU	:	:	:	:	:	:	:	:	:	:	:
HU	:	:	:	:	:	:	:	:	:	:	:
MT	-1.6	2.0	1.8	1.5	1.2	1.0	0.7	0.6	0.5	0.5	0.5
NL	:	:	:	:	:	:	:	:	:	:	:
AT	:	:	:	:	:	:	:	:	:	:	:
PL	:	:	:	:	:	:	:	:	:	:	:
PT	:	:	:	:	:	:	:	:	:	:	:
RO	:	:	:	:	:	:	:	:	:	:	:
SI	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SK	:	:	:	:	:	:	:	:	:	:	:
FI	:	:	:	:	:	:	:	:	:	:	:
SE	:	:	:	:	:	:	:	:	:	:	:
UK	:	:	:	:	:	:	:	:	:	:	:
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	-0.1	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
EA	-0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3

Table III.1.72: Non-earning-related pensions, gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
BG	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
CZ	:	:	:	:	:	:	:	:	:	:	:
DK	-2.0	9.0	7.6	7.4	7.5	7.5	7.4	7.3	7.2	7.0	7.0
DE	:	:	:	:	:	:	:	:	:	:	:
EE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IE	-0.4	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.2
EL	0.5	2.3	1.7	1.6	1.5	1.7	2.0	2.3	2.7	2.8	2.8
ES	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
FR	-0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3
HR	:	:	:	:	:	:	:	:	:	:	:
IT	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
CY	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
LV	-0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LT	-0.1	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LU	:	:	:	:	:	:	:	:	:	:	:
HU	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
MT	0.1	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
NL	0.7	5.1	5.2	5.4	5.9	6.3	6.5	6.5	6.2	6.0	5.8
AT	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
PL	-0.7	0.9	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2
PT	0.4	1.7	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.1	2.1
RO	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SI	:	:	:	:	:	:	:	:	:	:	:
SK	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
FI	-0.5	1.3	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.7
SE	0.6	0.7	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
UK	-0.3	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NO	-2.0	2.7	2.7	2.4	2.0	1.5	1.1	0.8	0.7	0.6	0.7
EU28	-0.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
EA	-0.1	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9

Table III.1.73: Private occupational pensions, gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	:	:	:	:	:	:	:	:	:	:	:
BG	:	:	:	:	:	:	:	:	:	:	:
CZ	:	:	:	:	:	:	:	:	:	:	:
DK	1.2	4.6	5.5	5.7	5.3	5.4	5.8	6.0	6.3	6.0	5.8
DE	:	:	:	:	:	:	:	:	:	:	:
EE	:	:	:	:	:	:	:	:	:	:	:
IE	-0.4	1.8	2.5	2.7	2.7	2.7	2.6	2.4	2.0	1.7	1.4
EL	:	:	:	:	:	:	:	:	:	:	:
ES	0.1	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4
FR	:	:	:	:	:	:	:	:	:	:	:
HR	:	:	:	:	:	:	:	:	:	:	:
IT	:	:	:	:	:	:	:	:	:	:	:
CY	:	:	:	:	:	:	:	:	:	:	:
LV	:	:	:	:	:	:	:	:	:	:	:
LT	:	:	:	:	:	:	:	:	:	:	:
LU	:	:	:	:	:	:	:	:	:	:	:
HU	:	:	:	:	:	:	:	:	:	:	:
MT	:	:	:	:	:	:	:	:	:	:	:
NL	1.3	5.2	5.5	6.0	7.4	7.8	8.4	7.9	7.3	7.0	6.5
AT	:	:	:	:	:	:	:	:	:	:	:
PL	:	:	:	:	:	:	:	:	:	:	:
PT	-0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
RO	:	:	:	:	:	:	:	:	:	:	:
SI	:	:	:	:	:	:	:	:	:	:	:
SK	:	:	:	:	:	:	:	:	:	:	:
FI	:	:	:	:	:	:	:	:	:	:	:
SE	0.8	1.8	2.2	2.4	2.6	2.7	2.7	2.5	2.5	2.6	2.6
UK	:	:	:	:	:	:	:	:	:	:	:
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	0.4	1.9	2.2	2.3	2.6	2.7	2.8	2.7	2.6	2.5	2.3
EA	0.2	1.7	1.8	1.9	2.3	2.3	2.5	2.4	2.2	2.0	1.8

Table III.1.74: New pensions, gross as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8
BG	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2
CZ	0.1	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5
DK	:	:	:	:	:	:	:	:	:	:	:
DE	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
EE	-0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2
IE	-0.2	0.7	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.5	0.5
EL	:	:	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7
ES	-0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
FR	-0.1	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4
HR	-0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
IT	0.2	0.6	0.8	0.8	0.9	0.8	0.9	0.7	0.7	0.7	0.7
CY	:	:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
LV	-0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LT	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
LU	:	:	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.7	0.8
HU	0.0	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
MT	:	:	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5
NL	0.0	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.4
AT	0.0	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
PL	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2
PT	-0.3	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.3	0.3
RO	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SI	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2
SK	:	:	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
FI	-0.1	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.3
SE	-0.2	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3
UK	:	:	:	:	:	:	:	:	:	:	:
NO	-0.1	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
EU28	0.0	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
EA	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6

Table III.1.75: Public pensions, net as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.8	10.3	11.1	12.0	12.8	13.2	13.2	13.2	13.0	13.1	13.1
BG	-0.4	9.9	8.4	8.2	8.1	8.2	8.4	8.7	9.2	9.4	9.4
CZ	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
DK	-2.1	7.4	6.3	6.1	6.0	6.0	5.8	5.6	5.5	5.3	5.3
DE	1.8	8.4	8.5	8.9	9.4	9.8	9.8	9.8	9.9	10.1	10.2
EE	:	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:	:	:
ES	-0.8	11.0	10.9	10.6	10.4	10.6	11.1	11.6	11.5	10.6	10.2
FR	-2.5	13.3	13.0	13.3	13.1	12.6	12.3	11.8	11.4	11.0	10.8
HR	-3.9	10.7	10.1	10.0	9.4	8.5	7.7	7.3	7.1	6.9	6.8
IT	-1.6	12.9	12.5	12.7	12.8	12.9	12.9	12.7	12.1	11.6	11.3
CY	:	:	:	:	:	:	:	:	:	:	:
LV	:	:	:	:	:	:	:	:	:	:	:
LT	:	:	:	:	:	:	:	:	:	:	:
LU	:	:	:	:	:	:	:	:	:	:	:
HU	-0.1	11.5	9.8	9.3	8.9	9.1	9.6	10.4	10.7	11.0	11.4
MT	:	:	:	:	:	:	:	:	:	:	:
NL	0.8	5.9	6.1	6.3	6.6	6.9	7.2	7.1	6.9	6.8	6.7
AT	:	:	:	:	:	:	:	:	:	:	:
PL	-0.5	9.5	9.0	8.9	8.8	8.5	8.4	8.5	8.8	9.0	9.0
PT	-0.7	13.0	13.7	14.0	14.0	14.0	13.9	13.7	13.5	12.9	12.3
RO	-0.1	7.8	7.7	7.6	7.7	7.9	8.0	8.0	7.9	7.9	7.7
SI	3.5	11.7	11.1	11.3	12.2	13.3	14.3	15.1	15.5	15.5	15.2
SK	2.1	8.1	8.0	7.9	7.6	7.7	8.1	8.6	9.1	9.7	10.2
FI	:	10.6	11.7	12.2	12.3	11.8	11.1	10.7	10.5	10.5	10.6
SE	-0.9	6.7	6.2	6.1	6.0	5.9	5.8	5.6	5.6	5.7	5.8
UK	:	:	:	:	:	:	:	:	:	:	:
NO	1.9	8.0	8.7	8.9	9.1	9.1	9.1	9.1	9.3	9.5	9.9
EU28	-0.3	10.3	10.2	10.3	10.5	10.5	10.5	10.5	10.3	10.1	10.0
EA	-0.1	10.7	10.6	10.9	11.1	11.2	11.2	11.1	10.9	10.7	10.5

Table III.1.76: Public pensions, contributions as % of GDP

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	:	:	:	:	:	:	:	:	:	:	:
BG	-0.1	7.3	7.0	7.0	7.0	7.0	7.0	7.1	7.1	7.1	7.2
CZ	0.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
DK	-0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DE	2.6	10.5	10.6	11.2	11.9	12.3	12.5	12.6	12.8	13.0	13.0
EE	-0.9	5.9	5.5	5.3	5.2	5.1	5.0	5.0	5.0	5.0	5.0
IE	1.5	5.5	5.5	6.0	6.4	6.9	7.4	7.8	8.0	7.7	7.0
EL	1.0	10.2	10.2	10.2	10.3	9.5	10.0	10.4	10.9	11.1	11.2
ES	-0.7	12.1	12.2	12.2	12.2	12.1	12.0	11.9	11.8	11.6	11.4
FR	-0.7	10.6	10.4	10.0	10.0	10.0	10.1	10.0	9.9	9.9	9.9
HR	-0.3	5.8	5.9	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6
IT	0.2	10.5	10.6	10.5	10.5	10.5	10.5	10.6	10.7	10.7	10.6
CY	2.5	6.4	7.6	8.0	8.3	8.7	9.1	9.1	9.0	9.0	8.9
LV	-0.8	7.0	6.3	6.3	6.2	6.2	6.3	6.3	6.3	6.2	6.2
LT	-0.7	6.3	5.8	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6
LU	-0.1	10.2	10.2	10.1	10.1	10.0	10.0	10.1	10.1	10.1	10.1
HU	-0.3	10.5	10.5	10.5	10.4	10.3	10.2	10.2	10.2	10.2	10.2
MT	-1.2	8.6	7.6	7.7	7.8	7.7	7.7	7.6	7.6	7.5	7.4
NL	1.0	6.5	6.9	7.2	7.7	8.0	8.2	8.2	7.9	7.7	7.5
AT	-0.2	8.3	8.2	8.3	8.3	8.3	8.2	8.2	8.2	8.1	8.1
PL	0.8	6.8	7.3	7.4	7.5	7.6	7.7	7.7	7.7	7.7	7.6
PT	-1.0	10.5	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
RO	1.0	5.5	6.1	6.0	6.1	6.1	6.1	6.2	6.3	6.4	6.5
SI	0.0	9.0	9.3	9.3	9.2	9.1	9.0	9.0	9.0	9.0	9.1
SK	0.1	6.2	5.9	5.8	5.8	5.9	6.0	6.1	6.2	6.3	6.3
FI	-0.4	12.3	13.4	13.7	13.7	13.2	12.7	12.2	11.9	11.8	11.9
SE	0.0	6.0	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.1	6.1
UK	:	:	:	:	:	:	:	:	:	:	:
NO	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
EU28	0.2	9.2	9.3	9.3	9.5	9.6	9.6	9.6	9.6	9.5	9.5
EA	0.4	9.8	9.8	9.9	10.1	10.2	10.3	10.3	10.2	10.2	10.2

Table III.1.77: Public pensions, net/Public pensions, gross, %

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.8%	87.5%	87.4%	87.3%	87.2%	87.1%	87.0%	86.9%	86.8%	86.7%	86.7%
BG	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
CZ	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DK	1.4%	72.0%	72.3%	72.5%	72.7%	72.9%	73.1%	73.3%	73.4%	73.4%	73.4%
DE	-3.8%	83.7%	82.5%	81.8%	81.4%	80.8%	80.2%	79.8%	79.8%	79.8%	79.9%
EE	:	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:	:	:
ES	0.0%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%
FR	0.0%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
HR	0.0%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%
IT	-0.2%	82.0%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%
CY	:	:	:	:	:	:	:	:	:	:	:
LV	:	:	:	:	:	:	:	:	:	:	:
LT	:	:	:	:	:	:	:	:	:	:	:
LU	:	:	:	:	:	:	:	:	:	:	:
HU	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
MT	:	:	:	:	:	:	:	:	:	:	:
NL	0.3%	85.4%	84.8%	85.0%	85.6%	85.9%	85.9%	85.9%	85.8%	85.7%	85.7%
AT	:	:	:	:	:	:	:	:	:	:	:
PL	0.1%	84.2%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%
PT	-0.5%	94.2%	93.9%	93.7%	93.6%	93.6%	93.5%	93.5%	93.5%	93.5%	93.7%
RO	0.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
SI	0.0%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
SK	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
FI	0.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%
SE	1.9%	75.3%	75.5%	75.8%	76.0%	76.2%	76.6%	77.0%	77.2%	77.1%	77.2%
UK	:	:	:	:	:	:	:	:	:	:	:
NO	-1.0%	81.1%	80.9%	80.5%	80.1%	80.0%	80.0%	80.0%	80.1%	80.1%	80.0%
EU28	-1.5%	91.0%	91.0%	90.4%	90.3%	90.0%	89.8%	90.2%	90.1%	89.6%	89.5%
EA	-1.1%	86.6%	86.1%	86.0%	85.9%	85.8%	85.7%	85.6%	85.5%	85.4%	85.5%

Table III.1.78: Pensioners (Public, in 1000 persons)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1831	2655	2988	3267	3544	3779	3966	4092	4194	4325	4487
BG	-315	2196	2090	2046	1994	1949	1931	1928	1930	1917	1881
CZ	433	2882	2876	2954	3023	3066	3152	3266	3311	3325	3315
DK	42	1318	1334	1355	1371	1398	1400	1391	1394	1372	1360
DE	3883	20185	21438	22812	24239	25512	25689	25405	25106	24716	24068
EE	12	413	413	412	419	425	432	434	435	436	425
IE	496	846	934	1008	1090	1190	1286	1350	1395	1390	1342
EL	51	2633	2535	2467	2446	2539	2684	2710	2768	2718	2684
ES	5170	8992	9819	10553	11433	12616	13787	14757	15133	14843	14162
FR	5369	18390	19772	20996	22011	22723	23215	23427	23525	23508	23759
HR	-5	1218	1241	1257	1266	1229	1205	1210	1216	1215	1213
IT	1885	15440	15046	15356	16024	16925	17735	18078	18074	17748	17325
CY	148	142	164	184	205	226	242	259	270	288	290
LV	-102	585	542	529	531	530	529	517	511	506	483
LT	-326	927	858	829	823	809	782	737	687	643	601
LU	284	172	205	238	277	315	349	377	396	412	456
HU	309	2806	2593	2635	2685	2776	2887	3002	3037	3080	3116
MT	59	89	103	111	114	118	122	127	133	140	147
NL	774	3869	4203	4377	4686	4956	5090	5042	4863	4728	4643
AT	977	2284	2430	2571	2718	2862	2985	3095	3178	3228	3260
PL	1685	9218	9364	9594	9750	9770	9811	10163	10591	10884	10903
PT	294	2552	2648	2718	2806	2908	2989	3038	3032	2961	2846
RO	808	5392	5788	5987	6267	6526	6688	6693	6605	6426	6200
SI	203	606	685	710	750	788	818	839	842	831	809
SK	415	1322	1461	1538	1591	1632	1699	1739	1765	1767	1737
FI	411	1376	1515	1607	1681	1708	1701	1702	1719	1747	1787
SE	1789	2375	2653	2864	3076	3258	3410	3533	3699	3948	4165
UK	5769	13124	12873	13877	14509	15973	17036	16948	17406	18106	18894
NO	1410	1125	1318	1460	1609	1758	1895	2031	2186	2359	2534
EU28	32349	124008	128572	134853	141331	148504	153621	155862	157216	157208	156357
EA	21833	83478	87759	92284	97390	102560	106100	107726	108026	106936	105311

Table III.1.79: Pensioners aged 65+ (1000 persons)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1840	1897	2183	2443	2733	2974	3154	3291	3422	3567	3737
BG	171	1445	1528	1521	1476	1437	1448	1500	1553	1611	1616
CZ	998	1799	2030	2163	2255	2314	2455	2643	2747	2803	2796
DK	183	994	1111	1151	1188	1223	1228	1215	1210	1185	1177
DE	5195	16935	18612	20017	21674	23274	23551	23218	22921	22692	22129
EE	82	243	268	279	290	297	308	315	322	332	325
IE	516	548	644	720	803	902	1007	1091	1157	1140	1064
EL	554	2028	2041	2100	2198	2341	2501	2568	2643	2611	2582
ES	5690	7044	7903	8652	9565	10765	12009	13189	13726	13468	12735
FR	7064	12256	14315	15672	17024	18106	18889	19107	19206	19175	19320
HR	228	812	902	962	1007	1013	1000	1011	1029	1036	1040
IT	3932	12484	13054	13421	14255	15410	16485	16993	17074	16784	16415
CY	149	122	146	166	188	208	223	240	251	270	271
LV	11	393	395	410	422	426	432	425	423	424	405
LT	:	:	569	595	624	636	634	603	558	519	489
LU	220	119	145	170	206	246	280	307	328	333	339
HU	947	1689	1940	2053	2075	2155	2289	2459	2504	2565	2637
MT	69	67	84	95	103	105	109	114	120	127	135
NL	815	3029	3396	3571	3877	4148	4284	4237	4060	3927	3844
AT	1116	1917	2134	2303	2496	2681	2815	2918	2988	3021	3033
PL	4530	5570	6852	7759	8247	8392	8506	8972	9556	9977	10099
PT	678	1844	2054	2162	2286	2412	2550	2661	2692	2629	2522
RO	1478	3135	3581	3914	3928	4221	4491	4716	4738	4788	4614
SI	298	391	487	543	593	634	663	693	708	708	689
SK	788	720	900	1036	1131	1189	1282	1386	1461	1512	1508
FI	510	1042	1237	1343	1430	1471	1456	1455	1475	1503	1552
SE	1831	1970	2304	2516	2722	2910	3065	3179	3321	3556	3801
UK	:	:	:	:	:	:	:	:	:	:	:
NO	1276	797	970	1104	1243	1391	1522	1628	1751	1903	2074
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	30016	63078	70568	75699	81897	88226	92629	94810	95534	94744	93093

Table III.1.80: Share of pensioners below age 65 as % of all pensioners

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-11.8%	28.5%	26.9%	25.2%	22.9%	21.3%	20.5%	19.6%	18.4%	17.5%	16.7%
BG	-20.1%	34.2%	26.9%	25.7%	26.0%	26.2%	25.0%	22.2%	19.6%	16.0%	14.0%
CZ	-21.9%	37.6%	29.4%	26.8%	25.4%	24.5%	22.1%	19.1%	17.0%	15.7%	15.7%
DK	-11.1%	24.6%	16.7%	15.1%	13.4%	12.5%	12.3%	12.7%	13.2%	13.6%	13.5%
DE	-8.0%	16.1%	13.2%	12.3%	10.6%	8.8%	8.3%	8.6%	8.7%	8.2%	8.1%
EE	-17.7%	41.3%	35.0%	32.4%	30.7%	30.0%	28.7%	27.5%	26.1%	23.8%	23.6%
IE	-14.6%	35.3%	31.1%	28.5%	26.4%	24.2%	21.7%	19.1%	17.1%	18.0%	20.7%
EL	-19.2%	23.0%	19.5%	14.9%	10.1%	7.8%	6.8%	5.2%	4.5%	3.9%	3.8%
ES	-11.6%	21.7%	19.5%	18.0%	16.3%	14.7%	12.9%	10.6%	9.3%	9.3%	10.1%
FR	-14.7%	33.4%	27.6%	25.4%	22.7%	20.3%	18.6%	18.4%	18.4%	18.4%	18.7%
HR	-19.1%	33.4%	27.3%	23.5%	20.5%	17.6%	17.0%	16.5%	15.4%	14.7%	14.3%
IT	-13.9%	19.2%	13.2%	12.6%	11.0%	8.9%	7.0%	6.0%	5.5%	5.4%	5.3%
CY	-7.7%	14.4%	10.7%	9.7%	8.4%	8.0%	7.7%	7.5%	7.0%	6.3%	6.7%
LV	-16.5%	32.8%	27.0%	22.4%	20.5%	19.5%	18.4%	17.8%	17.1%	16.1%	16.2%
LT	:	:	33.7%	28.2%	24.2%	21.4%	18.9%	18.2%	18.8%	19.4%	18.7%
LU	-5.0%	30.6%	29.4%	28.6%	25.6%	22.0%	19.8%	18.5%	17.3%	19.1%	25.6%
HU	-24.4%	39.8%	25.2%	22.1%	22.7%	22.4%	20.7%	18.1%	17.5%	16.7%	15.4%
MT	-16.9%	25.1%	18.4%	14.0%	10.4%	10.8%	11.0%	10.7%	10.0%	9.3%	8.2%
NL	-4.5%	21.7%	19.2%	18.4%	17.3%	16.3%	15.8%	16.0%	16.5%	16.9%	17.2%
AT	-9.1%	16.1%	12.2%	10.4%	8.2%	6.3%	5.7%	5.7%	6.0%	6.4%	7.0%
PL	-32.2%	39.6%	26.8%	19.1%	15.4%	14.1%	13.3%	11.7%	9.8%	8.3%	7.4%
PT	-16.3%	27.7%	22.4%	20.5%	18.5%	17.1%	14.7%	12.4%	11.2%	11.2%	11.4%
RO	-16.3%	41.8%	38.1%	34.6%	37.3%	35.3%	32.9%	29.5%	28.3%	25.5%	25.6%
SI	-20.6%	35.5%	28.9%	23.5%	21.0%	19.6%	19.0%	17.4%	15.9%	14.7%	14.9%
SK	-32.4%	45.6%	38.4%	32.6%	28.9%	27.2%	24.5%	20.3%	17.2%	14.4%	13.2%
FI	-11.1%	24.3%	18.3%	16.5%	14.9%	13.9%	14.4%	14.5%	14.2%	14.0%	13.2%
SE	-8.3%	17.1%	13.2%	12.1%	11.5%	10.7%	10.1%	10.0%	10.2%	9.9%	8.7%
UK	:	:	:	:	:	:	:	:	:	:	:
NO	-10.9%	29.1%	26.4%	24.4%	22.8%	20.9%	19.7%	19.9%	19.9%	19.3%	18.2%
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	-12.8%	24.4%	19.6%	18.0%	15.9%	14.0%	12.7%	12.0%	11.6%	11.4%	11.6%

Table III.1.81: Benefit ratio (Public pensions)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.7	42.5	43.9	44.9	45.2	45.0	44.3	43.8	43.1	42.6	41.8
BG	-6.7	34.2	30.7	29.6	29.0	28.7	28.4	28.1	27.8	27.6	27.5
CZ	-3.3	42.8	43.8	42.4	41.0	39.7	38.9	38.7	39.1	39.3	39.5
DK	-7.4	42.5	39.1	38.0	37.6	36.7	35.9	35.2	34.8	34.9	35.1
DE	-7.4	44.6	44.0	42.3	40.6	38.6	37.7	37.5	37.3	37.2	37.3
EE	-11.6	30.4	30.9	27.9	25.9	24.5	23.3	22.0	20.7	19.6	18.8
IE	-1.8	27.9	26.5	26.6	26.6	26.6	26.5	26.4	26.2	26.1	26.1
EL	-14.0	65.6	67.4	70.1	68.4	64.4	60.0	56.4	54.1	52.2	51.7
ES	-19.9	59.7	58.3	55.2	51.3	47.8	45.0	42.5	40.2	38.5	39.8
FR	-12.4	51.3	50.8	49.7	47.4	44.9	43.2	41.7	40.5	39.6	38.9
HR	-13.2	30.8	29.9	28.6	26.3	24.3	22.4	20.7	19.3	18.4	17.6
IT	-8.1	58.8	63.1	65.2	64.1	61.0	57.7	54.8	52.4	51.0	50.7
CY	-20.9	64.4	57.3	55.8	53.7	50.6	48.0	45.5	44.1	43.3	43.5
LV	-14.5	27.7	21.5	18.8	17.4	16.7	16.1	15.3	14.6	13.8	13.2
LT	-2.1	35.1	33.0	32.9	33.3	33.6	33.8	33.9	33.7	33.4	33.0
LU	2.1	51.3	57.8	59.0	58.5	57.8	57.1	55.9	54.4	53.3	53.4
HU	-8.9	40.8	39.0	36.9	34.8	33.5	32.9	32.8	32.3	31.9	31.9
MT	-4.2	48.3	47.2	44.9	43.7	42.8	42.5	42.7	43.4	43.9	44.1
NL	-1.7	35.9	35.8	36.0	35.0	34.2	34.0	34.0	34.2	34.3	34.2
AT	-4.1	41.2	41.9	41.4	41.1	40.8	40.1	39.4	38.7	38.0	37.0
PL	-18.5	47.9	45.4	42.8	40.6	38.9	37.2	35.1	32.8	30.9	29.4
PT	-20.0	61.8	64.8	66.3	63.3	59.1	54.4	49.9	46.7	43.9	41.7
RO	-13.6	37.0	34.0	31.4	28.6	27.0	25.6	24.7	23.9	23.6	23.4
SI	-3.6	33.8	29.0	29.0	29.0	29.4	29.8	30.0	30.1	30.1	30.2
SK	-12.4	45.7	41.6	37.6	34.8	33.7	33.2	32.5	32.2	32.5	33.3
FI	-8.3	52.1	54.9	54.5	52.9	50.7	48.8	47.0	45.6	44.6	43.8
SE	-15.8	42.1	36.9	34.5	32.5	31.0	29.7	28.6	27.6	26.8	26.3
UK	-2.5	36.4	37.6	37.5	37.1	36.0	35.4	35.2	34.8	34.5	33.9
NO	-10.3	47.0	45.8	44.7	43.5	42.1	40.7	39.4	38.4	37.4	36.7
EU28	-9.1	44.0	43.1	42.1	40.7	39.2	37.9	36.8	35.9	35.2	34.9
EA	-8.7	46.2	45.8	45.2	43.8	42.2	40.8	39.5	38.5	37.8	37.5

Table III.1.82: Gross replacement rate at retirement (Public pensions; old-age earnings-related for countries preceded with *)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
*BE	-0.7	39.5	41.6	41.8	41.8	41.4	41.0	40.4	40.1	39.2	38.8
BG	2.4	29.5	32.1	29.8	30.2	30.1	30.7	31.5	31.8	31.9	31.9
CZ	1.5	32.2	35.6	34.0	32.5	31.8	32.8	35.1	34.5	33.3	33.7
DK	-6.9	39.7	36.5	35.5	35.1	34.3	33.5	32.9	32.5	32.7	32.8
DE	-7.0	42.5	41.9	40.3	38.7	36.8	35.9	35.7	35.5	35.4	35.5
EE	-14.9	40.1	40.6	36.7	34.5	32.6	31.2	28.9	27.3	25.9	25.2
IE	-2.4	31.2	29.3	29.3	29.3	29.3	29.3	29.2	29.1	28.9	28.7
EL	:	:	32.8	30.7	30.4	27.6	25.3	23.6	22.3	21.8	22.3
ES	-30.4	79.0	73.6	66.1	60.6	58.3	56.1	53.6	51.7	49.9	48.6
FR	-11.4	50.6	50.3	48.8	47.2	44.4	42.9	41.2	40.5	40.6	39.2
HR	-11.4	27.9	27.6	24.5	21.3	20.4	18.8	17.9	17.4	16.9	16.5
*IT	-8.0	59.9	61.2	59.1	57.8	54.3	52.3	49.7	50.2	50.9	51.8
*CY	:	48.2	50.5	48.3	46.5	45.9	44.2	43.8	44.5	49.2	
LV	-15.3	33.4	29.0	26.7	24.3	23.0	20.6	19.4	18.0	17.3	18.1
*LT	:	:	35.6	37.2	37.5	36.6	35.9	35.1	34.8	34.9	34.8
*LU	:	:	74.6	67.0	64.8	67.4	68.2	65.8	63.9	65.7	64.6
HU	-3.9	33.0	25.6	32.6	31.4	32.3	32.9	31.3	29.9	29.5	29.1
MT	:	:	48.0	45.9	46.3	45.0	44.4	44.5	44.9	45.4	45.6
NL	-1.4	29.8	29.7	29.9	29.0	28.3	28.2	28.2	28.4	28.4	28.3
AT	-6.3	51.0	49.1	48.5	52.4	52.0	49.9	49.2	48.7	46.8	44.7
PL	-24.4	53.0	53.8	53.1	47.9	43.8	39.4	34.4	31.2	29.8	28.7
*PT	-26.7	57.5	50.7	44.8	43.2	38.8	36.1	39.0	35.2	31.8	30.7
*RO	-1.9	35.6	36.6	36.8	35.9	35.2	34.4	34.2	34.1	33.9	33.7
*SI	-2.1	36.1	34.6	34.3	34.2	34.2	34.2	34.1	34.1	34.0	34.1
SK	-2.4	51.7	50.3	48.1	45.3	43.9	42.4	40.5	45.8	46.1	49.4
FI	-0.6	46.0	51.3	48.6	46.3	45.3	45.7	45.3	45.7	44.9	44.1
SE	-6.7	35.6	33.7	34.0	33.5	31.6	31.2	30.6	30.8	29.4	29.0
UK	:	:	:	:	:	:	:	:	:	:	:
NO	-7.5	43.7	41.0	39.8	38.4	37.3	36.7	36.0	35.9	35.9	36.2
EU28	-6.5	42.5	42.7	41.3	40.0	38.7	37.7	36.9	36.4	35.9	35.9
EA	-7.6	46.3	45.9	43.9	42.7	41.4	40.3	39.4	38.9	38.6	38.6

Table III.1.83: Average accrual rates (new pensions, earnings related)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.1	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
BG	0.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
CZ	0.1	1.8	2.0	1.9	1.8	1.7	1.7	1.8	1.9	1.8	1.9
DK	:	:	:	:	:	:	:	:	:	:	:
DE	:	:	:	:	:	:	:	:	:	:	:
EE	-0.2	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	2.0	1.9	1.8	1.6	1.4	1.4	1.4	1.4	1.4
ES	-0.7	2.3	2.1	1.9	1.7	1.7	1.7	1.6	1.6	1.6	1.6
FR	0.0	1.7	1.7	1.8	1.7	1.8	1.7	1.8	1.7	1.8	1.7
HR	:	:	:	:	:	:	:	:	:	:	:
IT	-0.2	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
CY	:	:	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
LV	-0.5	1.1	1.0	1.1	1.0	0.9	0.8	0.7	0.7	0.7	0.6
LT	:	:	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
LU	:	:	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6
HU	-0.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MT	:	:	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
NL	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
AT	-0.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1
PL	:	:	:	:	:	:	:	:	:	:	:
PT	0.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
RO	:	:	:	:	:	:	:	:	:	:	:
SI	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
SK	:	:	1.2	1.2	1.1	1.1	1.1	1.0	1.1	1.1	1.2
FI	-1.1	2.9	2.3	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
SE	-0.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
UK	:	:	:	:	:	:	:	:	:	:	:
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	-0.2	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4
EA	-0.3	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4

Table III.1.84: Average contributory period (new pensions, earnings related)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.7	37.2	38.2	38.1	38.4	38.6	38.8	38.9	38.8	38.9	38.9
BG	3.0	34.6	36.6	37.8	38.3	38.1	38.0	37.9	37.8	37.7	37.6
CZ	5.4	43.0	44.5	45.0	45.5	46.0	46.4	47.4	47.4	47.4	48.4
DK	:	:	:	:	:	:	:	:	:	:	:
DE	:	:	:	:	:	:	:	:	:	:	:
EE	-7.8	40.6	37.9	36.5	35.1	34.1	33.8	32.8	32.5	32.2	32.7
IE	5.1	38.5	39.8	40.6	41.3	41.8	42.3	42.7	43.0	43.3	43.6
EL	:	:	30.6	31.5	33.8	34.3	35.1	36.0	36.3	36.9	37.6
ES	3.2	36.6	37.7	38.5	38.9	39.0	39.1	39.2	39.4	39.6	39.7
FR	-1.5	35.6	34.6	34.0	32.9	32.8	33.7	32.2	33.3	32.5	34.1
HR	3.8	35.3	35.8	36.2	36.7	37.6	38.2	38.5	38.8	38.9	39.1
IT	4.5	32.9	35.5	34.8	35.4	35.0	35.4	35.1	35.5	36.2	37.3
CY	:	:	:	:	:	:	:	:	:	:	:
LV	3.6	34.5	36.3	37.0	37.4	37.8	38.1	38.1	38.1	38.1	38.1
LT	:	:	37.8	40.0	41.0	41.0	41.0	40.9	40.9	41.0	41.1
LU	:	:	30.8	31.2	32.4	34.2	34.7	34.8	35.4	36.4	36.6
HU	1.1	39.4	40.6	40.9	40.7	40.6	40.6	40.6	40.5	40.5	40.5
MT	:	:	36.0	36.5	37.0	37.1	37.2	37.3	37.5	37.7	37.9
NL	:	:	:	:	:	:	:	:	:	:	:
AT	1.9	36.3	37.7	38.0	38.1	38.1	38.0	38.0	38.1	38.2	38.1
PL	:	:	34.4	35.6	36.2	37.2	37.6	37.5	37.4	37.5	37.6
PT	8.0	28.4	31.0	31.4	32.4	32.9	33.1	34.0	34.6	35.7	36.4
RO	3.6	30.6	32.4	32.7	33.1	33.2	33.3	33.6	34.0	34.0	34.3
SI	0.9	37.1	38.4	38.3	38.2	38.2	38.2	38.1	38.0	38.0	38.1
SK	:	:	41.1	40.7	40.4	40.2	40.2	40.4	40.7	41.3	42.1
FI*	29.8	2.5	7.7	11.6	15.7	19.6	23.8	27.4	30.4	32.0	32.3
SE	1.8	39.8	40.8	40.0	40.7	40.1	38.9	39.9	41.5	41.5	41.5
UK	:	:	:	:	:	:	:	:	:	:	:
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	4.1	34.3	35.5	36.0	36.5	36.9	37.2	37.5	37.8	38.1	38.4
EA	5.1	32.7	34.4	34.9	35.5	35.9	36.4	36.6	37.0	37.4	37.8

*Contributory period refers to pension rights accrued since 2009.

Table III.1.85: Contributors (Public pensions, in 1000 persons)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1508	4627	5025	5182	5322	5485	5661	5821	5951	6042	6134
BG	-746	2730	2701	2637	2533	2430	2328	2207	2091	2006	1984
CZ	-239	4935	4875	4829	4827	4813	4778	4750	4698	4673	4696
DK	-61	617	480	466	484	509	537	549	555	554	556
DE	-8028	33910	33808	32691	31428	30139	29203	28483	27644	26737	25883
EE	-176	622	590	557	539	525	511	492	471	454	446
IE	312	2300	2354	2347	2371	2399	2401	2376	2388	2472	2612
EL	-75	4188	4603	4814	4882	4905	4831	4605	4389	4224	4113
ES	1732	17186	18603	19367	19662	19669	19329	18551	18177	18371	18918
FR	3056	26388	26821	26752	27171	27646	28125	28289	28761	29155	29443
HR	-181	1453	1489	1469	1447	1435	1426	1390	1348	1307	1272
IT	2568	23309	25103	26197	26554	26597	26382	26218	26088	26028	25877
CY	175	419	445	469	483	504	529	545	561	576	594
LV	-345	937	846	773	713	679	667	644	617	596	591
LT	646	0	1038	892	774	707	688	676	663	649	646
LU	408	445	528	587	639	692	741	782	814	836	853
HU	-367	3978	4219	4345	4332	4253	4116	3940	3818	3719	3612
MT	22	177	188	194	200	204	207	207	204	202	199
NL	15	8238	8549	8796	8705	8545	8450	8407	8381	8332	8253
AT	176	3911	4123	4243	4256	4258	4253	4235	4205	4146	4087
PL	-3920	15980	16062	15636	15332	15074	14757	14185	13436	12670	12060
PT	-917	3586	3498	3589	3524	3402	3244	3067	2903	2773	2669
RO	-920	5948	6044	5896	5790	5505	5336	5167	5104	5025	5028
SI	-85	833	846	853	830	810	792	772	756	747	748
SK	-608	2313	2291	2222	2201	2171	2102	1990	1879	1782	1705
FI	111	2286	2296	2302	2314	2349	2392	2413	2415	2407	2397
SE	1326	5679	5775	5926	6083	6276	6489	6707	6862	6926	7006
UK	:	:	:	:	:	:	:	:	:	:	:
NO	1259	2609	2852	3013	3174	3325	3475	3619	3733	3812	3868
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	495	135675	141553	142826	142568	141687	140507	138573	137266	136528	136170

Table III.1.86: Support ratio (contributors/100 pensioners, Public pensions)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-37.5	174.2	168.2	158.6	150.2	145.2	142.7	142.2	141.9	139.7	136.7
BG	-18.8	124.3	129.2	128.9	127.0	124.7	120.6	114.5	108.3	104.7	105.5
CZ	-29.6	171.2	169.5	163.5	159.7	157.0	151.6	145.5	141.9	140.5	141.6
DK	-5.9	46.8	36.0	34.4	35.3	36.4	38.3	39.5	39.8	40.4	40.9
DE	-60.5	168.0	157.7	143.3	129.7	118.1	113.7	112.1	110.1	108.2	107.5
EE	-45.8	150.7	142.8	135.0	128.7	123.6	118.3	113.3	108.3	104.1	104.9
IE	-77.2	271.9	252.1	232.8	217.5	201.7	186.7	176.1	171.2	177.8	194.7
EL	-5.8	159.1	181.6	195.1	199.6	193.2	180.0	169.9	158.6	155.4	153.3
ES	-57.5	191.1	189.5	183.5	172.0	155.9	140.2	125.7	120.1	123.8	133.6
FR	-19.6	143.5	135.7	127.4	123.4	121.7	121.2	120.8	122.3	124.0	123.9
HR	-14.4	119.3	120.0	116.8	114.3	116.8	118.4	114.9	110.9	107.6	104.9
IT	-1.6	151.0	166.8	170.6	165.7	157.1	148.8	145.0	144.3	146.7	149.4
CY	-90.0	294.4	271.4	254.9	235.7	223.1	218.4	210.4	208.1	199.7	204.4
LV	-37.7	160.1	156.2	146.3	134.3	128.1	126.1	124.4	120.8	117.9	122.4
LT	107.6	0.0	120.9	107.6	94.0	87.4	88.0	91.7	96.4	100.9	107.6
LU	-71.6	258.9	257.4	246.7	230.5	219.4	212.4	207.4	205.6	202.9	187.2
HU	-25.8	141.8	162.7	164.9	161.3	153.2	142.6	131.3	125.7	120.7	115.9
MT	-64.2	199.1	181.4	175.1	174.5	172.9	169.2	162.4	153.7	143.7	134.9
NL	-35.2	212.9	203.4	200.9	185.8	172.4	166.0	166.8	172.4	176.2	177.8
AT	-45.9	171.3	169.7	165.0	156.6	148.8	142.5	136.8	132.3	128.4	125.4
PL	-62.7	173.4	171.5	163.0	157.3	154.3	150.4	139.6	126.9	116.4	110.6
PT	-46.7	140.5	132.1	132.0	125.6	117.0	108.5	101.0	95.7	93.6	93.8
RO	-29.2	110.3	104.4	98.5	92.4	84.4	79.8	77.2	77.3	78.2	81.1
SI	-45.0	137.5	123.4	120.0	110.6	102.8	96.8	92.1	89.8	90.0	92.5
SK	-76.8	175.0	156.8	144.5	138.4	133.0	123.7	114.4	106.5	100.8	98.2
FI	-32.0	166.1	151.6	143.2	137.6	137.5	140.6	141.8	140.5	137.8	134.1
SE	-70.9	239.1	217.7	206.9	197.8	192.6	190.3	189.8	185.5	175.4	168.2
UK	:	:	:	:	:	:	:	:	:	:	:
NO	-79.4	232.0	216.4	206.4	197.3	189.1	183.4	178.1	170.7	161.6	152.6
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	-33.2	162.5	161.3	154.8	146.4	138.2	132.4	128.6	127.1	127.7	129.3

Table III.1.87: Public pensions, gross as % of GDP - High life expectancy scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.1	11.8	12.7	13.9	14.9	15.4	15.5	15.6	15.5	15.7	15.9
BG	0.1	9.9	8.5	8.2	8.3	8.4	8.7	9.1	9.6	9.9	10.0
CZ	1.3	9.0	9.0	9.1	9.1	9.0	9.2	9.6	10.0	10.3	10.3
DK	-2.9	10.3	8.7	8.4	8.4	8.4	8.2	7.9	7.7	7.5	7.3
DE	3.1	10.0	10.4	11.0	11.7	12.2	12.4	12.6	12.7	13.0	13.1
EE	-1.0	7.6	7.7	7.3	7.2	7.1	7.1	7.1	7.0	7.0	6.7
IE	1.5	7.4	8.0	8.7	9.2	9.7	10.2	10.4	10.3	9.7	8.8
EL	-1.8	16.2	15.5	15.1	14.5	14.3	14.0	14.1	14.6	14.6	14.4
ES	-0.7	11.8	11.8	11.4	11.3	11.6	12.1	12.7	12.6	11.7	11.1
FR	-2.3	14.8	14.6	14.9	14.7	14.4	14.0	13.6	13.1	12.7	12.5
HR	-3.4	10.8	10.3	10.2	9.7	8.8	8.1	7.8	7.6	7.5	7.4
IT	-1.6	15.7	15.3	15.5	15.6	15.8	15.7	15.6	15.1	14.4	14.2
CY	-0.2	9.5	9.0	9.2	9.6	9.4	9.3	8.9	9.1	9.1	9.3
LV	-3.0	7.7	5.9	5.5	5.5	5.5	5.5	5.3	5.2	5.1	4.7
LT	0.9	7.2	6.8	7.7	8.9	9.6	9.7	9.4	9.0	8.6	8.1
LU	4.4	9.4	10.6	11.3	12.0	12.5	12.8	12.9	12.7	12.7	13.8
HU	0.4	11.5	9.9	9.3	9.1	9.3	9.9	10.7	11.0	11.4	12.0
MT	3.8	9.6	9.8	9.8	9.8	9.7	10.0	10.6	11.4	12.5	13.4
NL	1.1	6.9	7.1	7.4	7.7	8.1	8.4	8.4	8.3	8.1	7.9
AT	0.9	13.9	13.9	14.1	14.5	14.8	14.8	14.8	14.8	14.9	14.8
PL	-0.4	11.3	10.6	10.6	10.4	10.2	10.1	10.3	10.6	10.9	10.9
PT	0.3	13.8	14.6	15.0	15.3	15.3	15.3	15.4	15.2	14.8	14.2
RO	0.2	8.2	8.1	8.1	8.2	8.5	8.6	8.7	8.6	8.6	8.4
SI	4.4	11.8	11.2	11.5	12.4	13.6	14.7	15.7	16.3	16.4	16.1
SK	2.1	8.1	8.0	7.8	7.7	7.7	8.1	8.6	9.1	9.7	10.2
FI	0.3	12.8	14.2	14.9	15.1	14.5	13.8	13.2	13.0	13.0	13.1
SE	-1.2	8.9	8.3	8.1	8.0	7.9	7.7	7.4	7.4	7.6	7.7
UK	1.2	7.7	7.4	7.8	8.0	8.4	8.6	8.4	8.4	8.7	8.8
NO	2.6	9.9	10.7	11.2	11.4	11.6	11.6	11.6	11.8	12.2	12.5
EU28	0.2	11.3	11.2	11.5	11.7	11.8	11.9	11.8	11.7	11.6	11.5
EA	0.4	12.3	12.4	12.7	12.9	13.1	13.2	13.2	13.1	12.8	12.7

Table III.1.88: Public pensions, gross as % of GDP - High labour productivity scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.5	11.8	12.7	13.7	14.5	14.8	14.7	14.6	14.3	14.3	14.3
BG	-0.6	9.9	8.4	8.1	8.0	8.1	8.3	8.6	9.0	9.2	9.2
CZ	0.4	9.0	9.0	9.0	8.8	8.7	8.8	9.1	9.4	9.5	9.4
DK	-3.1	10.3	8.7	8.3	8.3	8.2	8.0	7.7	7.5	7.3	7.2
DE	2.7	10.0	10.3	10.9	11.5	12.0	12.2	12.3	12.4	12.6	12.7
EE	-1.5	7.6	7.6	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.2
IE	1.1	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
EL	-2.6	16.2	15.4	14.8	14.0	13.6	13.6	13.5	13.8	13.6	13.6
ES	-1.5	11.8	11.3	11.3	11.3	11.4	11.3	11.5	11.3	11.0	10.3
FR	-3.2	14.9	14.6	14.7	14.3	13.8	13.3	12.8	12.3	11.9	11.7
HR	-4.1	10.8	10.3	10.1	9.4	8.5	7.7	7.3	7.0	6.8	6.7
IT	-2.4	15.7	15.3	15.3	15.4	15.4	15.3	15.0	14.3	13.7	13.3
CY	-0.4	9.5	9.0	9.2	9.5	9.5	9.2	9.1	9.0	9.2	9.1
LV	-3.2	7.7	5.9	5.5	5.4	5.4	5.3	5.1	5.0	4.9	4.5
LT	0.3	7.2	6.8	7.6	8.7	9.4	9.4	9.0	8.5	8.1	7.5
LU	3.8	9.4	10.5	11.2	11.8	12.2	12.4	12.5	12.2	12.1	13.2
HU	-0.4	11.5	9.8	9.2	8.8	8.9	9.4	10.1	10.4	10.7	11.1
MT	2.9	9.6	9.8	9.7	9.5	9.4	9.5	10.0	10.8	11.7	12.5
NL	0.9	6.9	7.2	7.4	7.7	8.1	8.3	8.3	8.1	7.9	7.8
AT	-0.5	13.9	13.8	13.9	14.1	14.2	14.0	13.8	13.7	13.6	13.3
PL	-1.0	11.3	10.6	10.4	10.2	9.9	9.7	9.8	10.1	10.3	10.3
PT	-1.7	13.8	14.5	14.8	14.6	14.5	14.2	13.9	13.5	12.9	12.1
RO	-0.4	8.2	8.1	8.0	8.0	8.2	8.2	8.2	8.1	8.0	7.8
SI	3.3	11.8	11.1	11.3	12.2	13.2	14.1	14.9	15.4	15.4	15.0
SK	1.7	8.1	8.0	7.8	7.5	7.5	7.9	8.3	8.8	9.4	9.8
FI	-0.3	12.8	14.2	14.7	14.7	14.1	13.2	12.6	12.4	12.4	12.6
SE	-1.4	8.9	8.2	8.0	7.9	7.7	7.5	7.2	7.2	7.3	7.5
UK	0.7	7.7	7.4	7.8	7.9	8.2	8.4	8.1	8.1	8.3	8.4
NO	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
EU28	-0.5	11.3	11.1	11.4	11.5	11.5	11.5	11.3	11.1	11.0	10.9
EA	-0.4	12.3	12.3	12.5	12.7	12.8	12.7	12.6	12.4	12.1	11.9

Table III.1.89: Public pensions, gross as % of GDP - Low labour productivity scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.3	11.8	12.7	13.9	15.0	15.6	15.7	15.8	15.7	15.9	16.1
BG	-0.2	9.9	8.4	8.2	8.2	8.3	8.5	8.9	9.3	9.6	9.6
CZ	1.1	9.0	9.0	9.1	9.1	9.0	9.2	9.5	9.9	10.1	10.0
DK	-3.1	10.3	8.7	8.4	8.3	8.2	8.0	7.7	7.4	7.2	7.1
DE	2.8	10.0	10.4	10.9	11.6	12.1	12.3	12.4	12.5	12.7	12.8
EE	-1.2	7.6	7.7	7.3	7.1	7.0	7.0	6.9	6.8	6.7	6.4
IE	1.1	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
EL	-1.3	16.2	15.5	15.2	14.7	14.4	14.5	14.6	15.0	14.8	14.9
ES	-0.6	11.8	11.8	11.5	11.4	11.7	12.3	12.9	12.8	11.8	11.2
FR	-2.0	14.9	14.7	15.1	15.0	14.7	14.3	13.9	13.5	13.1	12.9
HR	-3.7	10.8	10.3	10.2	9.6	8.7	8.0	7.6	7.4	7.2	7.1
IT	-1.4	15.7	15.4	15.7	16.0	16.3	16.3	16.0	15.4	14.7	14.3
CY	0.1	9.5	9.0	9.3	9.8	9.8	9.6	9.5	9.4	9.7	9.6
LV	-2.9	7.7	5.9	5.6	5.6	5.6	5.6	5.4	5.3	5.2	4.8
LT	0.3	7.2	6.8	7.6	8.8	9.4	9.4	9.1	8.6	8.1	7.6
LU	4.3	9.4	10.6	11.3	12.0	12.5	12.8	12.9	12.7	12.6	13.7
HU	0.2	11.5	9.9	9.4	9.1	9.3	9.9	10.6	10.9	11.3	11.8
MT	3.5	9.6	9.8	9.9	9.8	9.8	10.0	10.5	11.3	12.3	13.1
NL	0.9	6.9	7.1	7.4	7.7	8.1	8.3	8.3	8.1	7.9	7.8
AT	1.1	13.9	13.9	14.1	14.5	14.9	14.9	14.8	14.9	15.0	15.0
PL	-0.2	11.3	10.7	10.7	10.6	10.4	10.2	10.4	10.8	11.1	11.1
PT	0.4	13.8	14.6	14.8	15.1	15.4	15.4	15.4	15.3	14.8	14.2
RO	0.1	8.2	8.1	8.1	8.2	8.5	8.7	8.7	8.6	8.5	8.4
SI	3.7	11.8	11.2	11.5	12.4	13.5	14.5	15.3	15.8	15.8	15.5
SK	2.6	8.1	8.1	8.0	7.8	7.9	8.4	8.9	9.5	10.1	10.7
FI	0.5	12.8	14.2	15.0	15.2	14.6	13.9	13.3	13.1	13.1	13.3
SE	-1.4	8.9	8.3	8.1	8.0	7.8	7.6	7.3	7.3	7.4	7.6
UK	0.7	7.7	7.4	7.8	7.9	8.2	8.4	8.1	8.1	8.3	8.4
NO	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
EU28	0.1	11.3	11.2	11.5	11.7	11.9	12.0	11.9	11.7	11.6	11.5
EA	0.4	12.3	12.4	12.8	13.1	13.3	13.4	13.4	13.2	12.9	12.7

Table III.1.90: Public pensions, gross as % of GDP - High employment rate

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.0	11.8	12.5	13.5	14.4	14.8	14.8	14.8	14.6	14.7	14.8
BG	-0.5	9.9	8.3	7.9	7.9	8.0	8.2	8.6	9.0	9.3	9.4
CZ	0.5	9.0	8.9	8.8	8.7	8.6	8.7	9.1	9.4	9.5	9.5
DK	-3.2	10.3	8.6	8.2	8.1	8.1	7.8	7.5	7.3	7.1	7.0
DE	2.6	10.0	10.2	10.7	11.4	11.9	12.1	12.2	12.3	12.5	12.6
EE	-1.3	7.6	7.6	7.2	7.0	6.9	6.9	6.8	6.7	6.6	6.3
IE	0.9	7.4	7.9	8.5	8.9	9.4	9.8	10.0	9.8	9.1	8.3
EL	-2.1	16.2	15.3	14.7	14.1	13.8	13.9	13.8	14.2	14.0	14.1
ES	-0.9	11.8	11.6	11.3	11.2	11.4	11.8	12.4	12.2	11.4	10.9
FR	-2.9	14.8	14.3	14.4	14.2	13.8	13.4	12.9	12.5	12.1	11.8
HR	-4.1	10.8	10.1	9.8	9.2	8.4	7.6	7.2	7.0	6.8	6.7
IT	-2.0	15.7	15.1	15.1	15.4	15.5	15.5	15.2	14.6	14.1	13.7
CY	-0.2	9.5	8.9	9.0	9.4	9.4	9.2	9.1	9.0	9.3	9.2
LV	-3.1	7.7	5.9	5.4	5.4	5.5	5.4	5.2	5.1	5.0	4.6
LT	0.1	7.2	6.7	7.4	8.5	9.2	9.2	8.8	8.4	7.9	7.3
LU	4.0	9.4	10.4	11.0	11.7	12.1	12.4	12.4	12.2	12.2	13.4
HU	-0.1	11.5	9.8	9.1	8.9	9.1	9.6	10.4	10.7	11.0	11.4
MT	3.1	9.6	9.7	9.6	9.5	9.4	9.6	10.1	10.9	11.9	12.7
NL	0.8	6.9	7.1	7.2	7.6	7.9	8.2	8.1	7.9	7.8	7.7
AT	0.2	13.9	13.7	13.7	14.1	14.4	14.4	14.3	14.3	14.3	14.1
PL	-0.8	11.3	10.5	10.3	10.2	10.0	9.8	10.0	10.3	10.6	10.6
PT	-1.0	13.8	14.4	14.8	14.8	14.8	14.6	14.4	14.1	13.5	12.8
RO	-0.4	8.2	8.0	7.8	7.9	8.1	8.2	8.2	8.1	8.0	7.8
SI	3.1	11.8	11.0	11.1	12.0	13.0	14.0	14.8	15.2	15.2	14.9
SK	1.8	8.1	7.9	7.7	7.4	7.5	7.9	8.4	8.9	9.5	10.0
FI	0.0	12.8	14.0	14.5	14.6	14.1	13.3	12.8	12.6	12.7	12.8
SE	-1.5	8.9	8.2	7.9	7.7	7.6	7.4	7.1	7.1	7.2	7.4
UK	0.6	7.7	7.3	7.7	7.8	8.1	8.3	8.0	8.0	8.1	8.2
NO	2.3	9.9	10.6	10.9	11.1	11.2	11.2	11.2	11.4	11.7	12.2
EU28	-0.3	11.3	11.0	11.2	11.4	11.5	11.5	11.4	11.3	11.1	11.0
EA	-0.2	12.3	12.2	12.4	12.6	12.8	12.8	12.8	12.6	12.3	12.1

Table III.1.91: Public pensions, gross as % of GDP - High employment of older workers

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.3	11.8	12.2	12.8	13.7	14.1	14.2	14.1	14.0	14.0	14.1
BG	-1.0	9.9	8.0	7.4	7.4	7.5	7.7	8.0	8.5	8.8	8.9
CZ	1.0	9.0	8.4	8.1	8.2	8.3	8.6	9.1	9.6	10.0	10.0
DK	-3.4	10.3	8.5	8.0	7.9	7.9	7.7	7.4	7.2	7.0	6.9
DE	2.5	10.0	10.1	10.5	11.2	11.7	11.9	12.0	12.2	12.3	12.5
EE	-1.3	7.6	7.5	7.1	7.0	6.9	6.9	6.8	6.7	6.6	6.3
IE	0.8	7.4	7.9	8.4	8.8	9.2	9.6	9.8	9.6	9.0	8.2
EL	-2.0	16.2	15.3	14.7	14.4	14.0	14.1	14.0	14.2	14.0	14.2
ES	-1.0	11.8	11.3	11.2	11.3	11.3	11.6	12.2	12.2	11.4	10.8
FR	-2.1	14.9	14.3	14.3	14.3	14.0	13.8	13.5	13.3	12.9	12.8
HR	-4.3	10.8	9.9	9.5	8.9	8.1	7.3	6.9	6.7	6.6	6.5
IT	-1.8	15.7	14.7	13.7	14.3	14.9	15.2	15.2	14.8	14.3	13.9
CY	-0.4	9.5	8.8	8.9	9.2	9.2	9.0	8.8	8.7	9.0	9.0
LV	-3.1	7.7	5.8	5.3	5.3	5.4	5.3	5.2	5.1	5.0	4.6
LT	0.0	7.2	6.6	7.1	8.1	8.8	8.9	8.6	8.1	7.7	7.2
LU	3.8	9.4	10.3	10.8	11.4	11.9	12.1	12.2	11.9	11.9	13.2
HU	-0.3	11.5	9.7	9.0	8.7	8.9	9.4	10.2	10.4	10.8	11.2
MT	2.8	9.6	9.5	9.3	9.2	9.2	9.4	9.9	10.6	11.6	12.4
NL	0.6	6.9	7.0	7.0	7.4	7.7	8.0	8.0	7.8	7.6	7.5
AT	-0.2	13.9	13.3	13.0	13.7	14.2	14.4	14.4	14.2	13.9	13.7
PL	-1.0	11.3	10.4	10.1	10.1	9.8	9.6	9.8	10.0	10.3	10.3
PT	-1.4	13.8	14.2	14.7	14.6	14.5	14.2	13.9	13.7	13.1	12.5
RO	-0.5	8.2	7.9	7.6	7.7	7.9	8.0	8.0	7.9	7.9	7.7
SI	2.6	11.8	10.6	10.1	11.0	12.0	13.0	13.8	14.4	14.6	14.4
SK	1.8	8.1	7.8	7.5	7.3	7.3	7.7	8.2	8.7	9.4	9.9
FI	0.1	12.8	13.5	13.8	14.2	13.9	13.3	12.9	12.7	12.8	12.9
SE	-1.7	8.9	7.8	7.4	7.4	7.4	7.2	7.1	6.9	7.0	7.2
UK	0.4	7.7	7.2	7.6	7.6	8.0	8.1	7.9	7.9	8.0	8.1
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	:	:	:	:	:	:	:	:	:	:	:

Table III.1.92: Public pensions, gross as % of GDP - Lower migration

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.9	11.8	12.8	14.0	15.1	15.6	15.8	15.7	15.6	15.7	15.7
BG	-0.4	9.9	8.4	8.1	8.1	8.2	8.4	8.7	9.2	9.5	9.5
CZ	1.1	9.0	9.0	9.1	9.0	9.0	9.1	9.5	9.9	10.1	10.1
DK	-2.9	10.3	8.7	8.4	8.4	8.3	8.1	7.8	7.6	7.4	7.3
DE	2.9	10.0	10.4	11.0	11.6	12.2	12.4	12.5	12.6	12.8	12.9
EE	-1.2	7.6	7.6	7.3	7.1	7.0	7.0	6.9	6.8	6.7	6.4
IE	1.4	7.4	8.0	8.7	9.1	9.5	10.0	10.3	10.1	9.6	8.7
EL	-1.9	16.2	15.4	14.9	14.3	13.9	14.0	14.0	14.4	14.2	14.3
ES	-0.6	11.8	11.8	11.4	11.3	11.5	12.1	12.8	12.8	11.9	11.2
FR	-2.6	14.8	14.6	14.8	14.6	14.3	13.8	13.4	12.9	12.5	12.2
HR	-3.8	10.8	10.3	10.1	9.5	8.6	7.9	7.5	7.3	7.1	7.0
IT	-1.5	15.7	15.4	15.7	16.0	16.2	16.3	16.0	15.4	14.7	14.2
CY	0.5	9.5	9.0	9.2	9.7	9.7	9.5	9.5	9.5	9.9	9.9
LV	-3.0	7.7	5.9	5.5	5.5	5.5	5.4	5.3	5.2	5.1	4.7
LT	0.6	7.2	6.7	7.4	8.3	8.9	9.0	8.8	8.4	8.2	7.9
LU	4.8	9.4	10.8	11.7	12.6	13.3	13.8	13.9	13.7	13.5	14.2
HU	0.1	11.5	9.9	9.3	9.0	9.2	9.8	10.6	10.9	11.2	11.7
MT	3.8	9.6	9.9	9.9	9.8	9.8	10.0	10.6	11.5	12.5	13.4
NL	1.1	6.9	7.2	7.4	7.8	8.2	8.4	8.4	8.2	8.1	8.0
AT	1.3	13.9	13.9	14.1	14.4	14.7	14.8	14.8	14.9	15.1	15.2
PL	-0.5	11.3	10.6	10.6	10.4	10.2	10.0	10.2	10.5	10.8	10.8
PT	-0.4	13.8	14.6	14.9	15.0	15.0	14.9	14.8	14.6	14.1	13.4
RO	-0.1	8.2	8.1	8.0	8.1	8.3	8.4	8.5	8.4	8.3	8.1
SI	4.0	11.8	11.2	11.5	12.4	13.5	14.6	15.5	16.1	16.1	15.8
SK	2.2	8.1	8.0	7.9	7.6	7.7	8.1	8.6	9.2	9.8	10.3
FI	0.4	12.8	14.2	15.0	15.2	14.6	13.8	13.3	13.1	13.1	13.2
SE	-1.2	8.9	8.3	8.2	8.1	7.9	7.8	7.5	7.5	7.6	7.8
UK	0.9	7.7	7.4	7.8	8.0	8.3	8.5	8.3	8.3	8.5	8.6
NO	2.9	9.9	10.8	11.4	11.7	11.9	11.9	11.9	12.1	12.4	12.8
EU28	0.1	11.3	11.2	11.5	11.7	11.8	11.9	11.8	11.7	11.5	11.4
EA	0.3	12.3	12.4	12.7	13.0	13.2	13.2	13.2	13.0	12.8	12.5

Table III.1.93: Public pensions, gross as % of GDP - TFP risk scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	4.3	11.8	12.7	13.9	14.9	15.5	15.7	15.7	15.7	15.9	16.1
BG	-0.1	9.9	8.4	8.2	8.2	8.3	8.5	8.9	9.4	9.7	9.7
CZ	1.1	9.0	9.0	9.1	9.0	9.0	9.2	9.5	9.9	10.1	10.1
DK	-3.1	10.3	8.7	8.4	8.3	8.3	8.0	7.7	7.5	7.2	7.1
DE	2.8	10.0	10.3	10.9	11.6	12.1	12.3	12.4	12.5	12.7	12.8
EE	-1.2	7.6	7.6	7.3	7.1	7.0	7.0	6.9	6.8	6.7	6.4
IE	1.1	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
EL	-1.0	16.2	15.5	15.1	14.6	14.4	14.6	14.8	15.3	15.2	15.2
ES	-0.7	11.8	11.8	11.4	11.3	11.6	12.2	12.9	12.8	11.8	11.2
FR	-1.9	14.9	14.6	14.9	14.8	14.6	14.3	13.9	13.5	13.1	13.0
HR	-3.7	10.8	10.3	10.1	9.6	8.7	7.9	7.6	7.4	7.3	7.2
IT	-1.2	15.7	15.3	15.6	15.9	16.2	16.4	16.2	15.6	15.0	14.5
CY	0.2	9.5	9.0	9.3	9.7	9.8	9.6	9.5	9.4	9.7	9.6
LV	-2.9	7.7	5.9	5.5	5.5	5.6	5.5	5.3	5.3	5.1	4.7
LT	0.3	7.2	6.8	7.6	8.7	9.4	9.4	9.1	8.6	8.1	7.5
LU	5.2	9.4	10.4	11.1	11.9	12.5	13.0	13.3	13.2	13.3	14.5
HU	0.3	11.5	9.8	9.3	9.0	9.2	9.8	10.7	11.0	11.4	11.9
MT	3.6	9.6	9.8	9.8	9.7	9.7	9.9	10.5	11.3	12.3	13.1
NL	1.0	6.9	7.1	7.3	7.6	8.0	8.3	8.3	8.1	7.9	7.9
AT	1.1	13.9	13.9	14.0	14.4	14.8	14.9	14.9	15.0	15.1	15.0
PL	-0.2	11.3	10.6	10.6	10.4	10.2	10.1	10.3	10.7	11.0	11.1
PT	0.5	13.8	14.6	14.8	15.0	15.3	15.3	15.3	15.3	14.9	14.3
RO	0.3	8.2	8.1	8.1	8.2	8.5	8.7	8.8	8.8	8.7	8.5
SI	3.8	11.8	11.1	11.4	12.3	13.4	14.5	15.3	15.9	15.9	15.6
SK	2.5	8.1	8.0	7.9	7.7	7.8	8.2	8.8	9.4	10.1	10.6
FI	0.6	12.8	14.2	14.9	15.1	14.6	13.9	13.4	13.2	13.3	13.5
SE	-1.4	8.9	8.3	8.1	8.0	7.8	7.6	7.3	7.3	7.4	7.6
UK	0.7	7.7	7.4	7.8	7.9	8.2	8.4	8.1	8.1	8.3	8.4
NO	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
EU28	0.2	11.3	11.2	11.5	11.7	11.9	12.0	11.9	11.8	11.6	11.5
EA	0.5	12.3	12.4	12.7	13.0	13.3	13.4	13.4	13.2	13.0	12.8

Table III.1.94: Public pensions, gross as % of GDP - Policy scenario linking retirement age to increases in life expectancy

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.7	11.8	12.7	13.7	14.5	14.7	14.6	14.3	13.8	13.6	13.5
BG	-1.2	9.9	8.4	8.0	7.8	7.6	7.7	7.9	8.3	8.5	8.7
CZ	0.1	9.0	8.8	8.6	8.4	8.2	8.4	8.6	9.0	9.2	9.1
DK	-3.1	10.3	8.7	8.4	8.3	8.2	8.0	7.7	7.5	7.3	7.1
DE	2.1	10.0	10.3	10.9	11.6	12.0	12.0	12.0	12.0	12.1	12.1
EE	-2.3	7.6	7.6	7.2	6.9	6.6	6.3	6.1	5.7	5.5	5.3
IE	0.7	7.4	8.0	8.7	8.9	9.3	9.7	9.7	9.5	8.8	8.0
EL	:	:	:	:	:	:	:	:	:	:	:
ES	-1.6	11.8	11.8	11.4	11.3	11.4	11.6	11.9	11.5	11.1	10.2
FR	-4.0	15.0	14.7	14.7	14.3	13.7	13.1	12.6	11.9	11.4	11.0
HR	-4.7	10.8	10.2	10.0	9.3	8.3	7.5	7.0	6.6	6.3	6.1
IT	:	:	:	:	:	:	:	:	:	:	:
CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LV	-3.3	7.7	5.9	5.5	5.3	5.3	5.1	5.0	4.8	4.6	4.4
LT	-0.5	7.2	6.8	7.5	8.5	8.9	8.8	8.4	7.8	7.3	6.8
LU	2.1	9.4	10.5	10.8	11.4	11.6	11.8	11.6	11.5	10.9	11.5
HU	-0.4	11.5	9.8	9.3	8.9	9.1	9.6	10.3	10.7	11.0	11.1
MT	2.1	9.6	9.8	9.8	9.7	9.5	9.5	9.8	10.3	11.0	11.6
NL	:	:	:	:	:	:	:	:	:	:	:
AT	-0.7	13.9	13.7	13.7	13.8	13.8	13.7	13.4	13.3	13.3	13.2
PL	-0.9	11.3	10.6	10.5	10.4	10.1	9.8	9.8	10.1	10.3	10.5
PT	-1.0	13.8	14.6	14.9	15.0	15.0	14.9	14.6	14.3	13.6	12.8
RO	-0.7	8.2	8.1	7.9	7.9	8.0	8.0	8.0	7.8	7.7	7.6
SI	3.0	11.8	11.1	11.4	12.3	13.3	14.3	15.0	15.3	15.2	14.8
SK	1.3	8.1	7.9	7.6	7.3	7.2	7.4	7.8	8.3	8.8	9.4
FI	-0.5	12.8	14.2	14.6	14.4	13.7	12.9	12.4	12.0	12.1	12.3
SE	-2.2	8.9	7.5	7.3	7.3	7.3	7.1	7.0	6.9	6.7	6.8
UK	0.4	7.7	7.3	7.7	7.8	8.1	8.2	7.9	7.9	8.0	8.0
NO	1.5	9.9	10.6	10.9	11.0	11.0	10.9	10.8	10.9	11.1	11.4
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	:	:	:	:	:	:	:	:	:	:	:

Table III.1.95: Public pensions, gross as % of GDP (p.p. ch. from 2013)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	3.3	0.0	0.9	2.0	2.9	3.4	3.4	3.3	3.2	3.3	3.3
BG	-0.4	0.0	-1.4	-1.7	-1.7	-1.7	-1.5	-1.1	-0.7	-0.4	-0.4
CZ	0.7	0.0	0.0	0.1	0.0	-0.2	0.0	0.3	0.6	0.8	0.7
DK	-3.1	0.0	-1.5	-1.9	-2.0	-2.0	-2.3	-2.6	-2.8	-3.0	-3.1
DE	2.7	0.0	0.3	0.9	1.6	2.1	2.2	2.3	2.5	2.6	2.7
EE	-1.3	0.0	0.0	-0.4	-0.5	-0.7	-0.7	-0.8	-0.9	-1.0	-1.3
IE	1.1	0.0	0.6	1.4	1.8	2.2	2.7	2.9	2.6	2.0	1.1
EL	-1.9	0.0	-0.7	-1.2	-1.8	-2.1	-2.1	-2.1	-1.8	-2.0	-1.9
ES	-0.8	0.0	0.0	-0.4	-0.6	-0.3	0.1	0.7	0.5	-0.4	-0.8
FR	-2.8	0.0	-0.3	0.0	-0.2	-0.7	-1.1	-1.6	-2.1	-2.5	-2.8
HR	-3.9	0.0	-0.6	-0.7	-1.3	-2.2	-3.0	-3.4	-3.7	-3.8	-3.9
IT	-1.9	0.0	-0.4	-0.2	0.0	0.1	0.1	-0.3	-0.9	-1.5	-1.9
CY	-0.1	0.0	-0.5	-0.2	0.2	0.2	-0.1	-0.2	-0.3	0.0	-0.1
LV	-3.1	0.0	-1.8	-2.2	-2.2	-2.2	-2.3	-2.4	-2.5	-2.7	-3.1
LT	0.3	0.0	-0.4	0.4	1.5	2.2	2.2	1.8	1.4	0.9	0.3
LU	4.1	0.0	1.2	1.9	2.6	3.0	3.3	3.3	3.1	3.0	4.1
HU	-0.1	0.0	-1.7	-2.3	-2.6	-2.4	-1.9	-1.1	-0.9	-0.5	-0.1
MT	3.2	0.0	0.2	0.2	0.1	0.0	0.2	0.7	1.5	2.4	3.2
NL	0.9	0.0	0.3	0.5	0.8	1.2	1.5	1.4	1.2	1.0	0.9
AT	0.5	0.0	0.0	0.2	0.5	0.8	0.8	0.8	0.7	0.7	0.5
PL	-0.7	0.0	-0.7	-0.8	-0.9	-1.2	-1.4	-1.2	-0.9	-0.6	-0.7
PT	-0.7	0.0	0.7	1.1	1.1	1.2	1.0	0.8	0.6	0.0	-0.7
RO	-0.1	0.0	-0.1	-0.2	-0.1	0.1	0.2	0.2	0.2	0.0	-0.1
SI	3.5	0.0	-0.6	-0.4	0.5	1.6	2.6	3.4	3.8	3.8	3.5
SK	2.1	0.0	-0.1	-0.2	-0.5	-0.5	0.0	0.5	1.0	1.6	2.1
FI	0.1	0.0	1.4	2.0	2.1	1.5	0.7	0.1	-0.1	-0.1	0.1
SE	-1.4	0.0	-0.7	-0.9	-1.0	-1.2	-1.4	-1.6	-1.7	-1.6	-1.4
UK	0.7	0.0	-0.3	0.1	0.2	0.6	0.8	0.5	0.5	0.6	0.7
NO	2.5	0.0	0.8	1.2	1.4	1.5	1.5	1.5	1.7	2.0	2.5
EU28	-0.2	0.0	-0.2	0.1	0.3	0.4	0.4	0.3	0.1	-0.1	-0.2
EA	0.0	0.0	0.0	0.3	0.6	0.7	0.8	0.7	0.5	0.2	0.0

Table III.1.96: Public pensions, gross as % of GDP (p.p. ch. from 2013 due to dependency ratio)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	5.6	0.0	1.1	2.2	3.4	4.2	4.5	4.6	4.8	5.1	5.6
BG	6.7	0.0	1.6	2.4	3.0	3.5	4.3	5.2	5.9	6.6	6.7
CZ	6.8	0.0	2.2	3.0	3.4	3.7	4.7	5.8	6.4	6.8	6.8
DK	3.6	0.0	1.2	1.8	2.5	3.1	3.5	3.4	3.2	3.3	3.6
DE	7.3	0.0	1.3	2.6	4.5	6.2	6.5	6.6	6.9	7.3	7.3
EE	5.4	0.0	1.5	2.5	3.1	3.5	4.0	4.4	5.0	5.5	5.4
IE	6.0	0.0	1.9	3.2	4.4	5.3	6.4	7.5	8.0	7.2	6.0
EL	10.6	0.0	1.7	3.3	4.8	6.8	8.6	10.2	11.2	11.1	10.6
ES	8.9	0.0	1.8	3.5	5.2	7.0	8.8	10.3	10.6	10.0	8.9
FR	6.7	0.0	2.7	4.1	5.4	6.4	7.1	7.1	7.0	6.8	6.7
HR	6.4	0.0	1.7	3.1	4.0	4.6	5.0	5.5	5.9	6.2	6.4
IT	8.0	0.0	1.2	2.2	3.8	5.6	7.1	7.8	8.0	8.0	8.0
CY	8.7	0.0	2.2	3.8	5.0	5.7	6.3	6.9	7.7	8.4	8.7
LV	3.8	0.0	1.0	2.0	2.8	3.2	3.5	3.6	3.8	4.1	3.8
LT	4.3	0.0	1.0	2.7	4.4	5.5	5.8	5.6	5.0	4.6	4.3
LU	6.8	0.0	0.6	1.5	2.6	3.7	4.3	4.8	5.3	6.0	6.8
HU	7.8	0.0	2.3	3.2	3.3	3.9	4.9	6.2	6.6	7.1	7.8
MT	7.2	0.0	2.4	3.9	4.6	4.6	4.8	5.1	5.7	6.5	7.2
NL	4.8	0.0	1.4	2.4	3.4	4.3	4.7	4.6	4.6	4.6	4.8
AT	9.4	0.0	1.1	2.8	5.0	6.8	7.5	7.7	8.2	8.8	9.4
PL	12.4	0.0	3.5	5.7	6.5	7.0	7.8	9.1	10.7	11.8	12.4
PT	11.7	0.0	2.2	3.8	5.6	7.4	9.5	11.2	11.9	11.8	11.7
RO	6.8	0.0	1.6	2.5	2.6	3.9	4.9	5.8	6.2	6.8	6.8
SI	9.7	0.0	3.0	4.8	6.2	7.2	8.1	9.2	10.0	10.2	9.7
SK	11.3	0.0	2.5	4.0	5.0	5.6	6.6	8.0	9.4	10.5	11.3
FI	6.0	0.0	2.7	4.0	4.9	5.2	4.8	4.8	5.1	5.4	6.0
SE	2.6	0.0	0.8	1.1	1.5	1.8	1.9	1.8	1.9	2.2	2.6
UK	3.9	0.0	0.8	1.4	2.2	2.9	3.1	3.2	3.4	3.7	3.9
NO	5.6	0.0	1.0	1.8	2.5	3.3	3.8	4.0	4.3	4.8	5.6
EU28	7.2	0.0	1.7	2.9	4.2	5.3	6.1	6.6	7.0	7.2	7.2
EA	7.6	0.0	1.7	3.0	4.7	6.1	7.0	7.5	7.7	7.7	7.6

Table III.1.97: Public pensions, gross as % of GDP (p.p. ch. from 2013 due to coverage ratio)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-1.3	0.0	-0.1	-0.2	-0.5	-0.7	-0.8	-0.9	-1.0	-1.1	-1.3
BG	-3.1	0.0	-1.1	-1.5	-1.8	-2.2	-2.5	-2.8	-2.9	-3.2	-3.1
CZ	-3.6	0.0	-1.6	-1.9	-2.1	-2.3	-2.7	-3.2	-3.4	-3.6	-3.6
DK	-3.6	0.0	-1.2	-1.7	-2.3	-2.6	-2.9	-3.1	-3.0	-3.3	-3.6
DE	-1.3	0.0	-0.3	-0.5	-0.9	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3
EE	-2.0	0.0	-0.7	-1.2	-1.4	-1.4	-1.6	-1.7	-1.8	-2.0	-2.0
IE	-1.7	0.0	-0.7	-1.0	-1.4	-1.6	-1.8	-2.2	-2.3	-2.0	-1.7
EL	-3.2	0.0	-1.4	-2.5	-3.3	-3.8	-3.8	-4.2	-4.0	-3.8	-3.2
ES	-0.6	0.0	-0.1	-0.3	-0.7	-0.8	-0.9	-1.0	-0.9	-0.7	-0.6
FR	-3.2	0.0	-1.3	-1.8	-2.3	-2.8	-3.2	-3.2	-3.2	-3.2	-3.2
HR	-3.3	0.0	-1.0	-1.6	-2.1	-2.6	-3.0	-3.1	-3.2	-3.3	-3.3
IT	-5.0	0.0	-1.7	-2.4	-3.1	-3.7	-4.1	-4.4	-4.5	-4.7	-5.0
CY	-2.1	0.0	-0.7	-1.0	-1.1	-1.0	-1.1	-1.1	-1.6	-1.7	-2.1
LV	-1.4	0.0	-0.7	-1.0	-1.1	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
LT	-2.2	0.0	-0.6	-1.1	-1.6	-1.9	-2.1	-2.2	-2.2	-2.1	-2.2
LU	-2.4	0.0	-0.4	-0.6	-0.8	-1.1	-1.3	-1.5	-2.0	-2.6	-2.4
HU	-3.5	0.0	-2.3	-2.8	-2.7	-2.7	-2.9	-3.3	-3.3	-3.4	-3.5
MT	-0.9	0.0	-0.7	-1.2	-1.5	-1.3	-1.1	-1.1	-1.0	-1.0	-0.9
NL	-2.2	0.0	-0.7	-1.2	-1.4	-1.6	-1.7	-1.7	-1.9	-2.1	-2.2
AT	-3.3	0.0	-0.6	-1.3	-2.4	-3.1	-3.2	-3.0	-3.0	-3.1	-3.3
PL	-5.2	0.0	-2.3	-3.4	-3.8	-4.0	-4.4	-4.7	-5.0	-5.1	-5.2
PT	-3.1	0.0	-0.9	-1.5	-2.1	-2.5	-3.0	-3.3	-3.2	-3.1	-3.1
RO	-2.3	0.0	-0.4	-0.7	-0.3	-0.7	-1.0	-1.5	-1.8	-2.2	-2.3
SI	-2.7	0.0	-0.7	-1.5	-1.9	-2.0	-2.1	-2.3	-2.6	-2.8	-2.7
SK	-4.2	0.0	-1.1	-1.7	-2.2	-2.4	-2.6	-3.1	-3.6	-3.9	-4.2
FI	-2.5	0.0	-1.1	-1.4	-1.7	-1.9	-1.9	-2.0	-2.2	-2.3	-2.5
SE	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.2
UK	-1.6	0.0	-1.0	-1.1	-1.5	-1.4	-1.3	-1.6	-1.7	-1.7	-1.6
NO	-0.5	0.0	-0.2	-0.4	-0.6	-0.9	-1.0	-0.8	-0.6	-0.5	-0.5
EU28	-2.6	0.0	-1.0	-1.4	-1.8	-2.1	-2.2	-2.4	-2.5	-2.6	-2.6
EA	-2.4	0.0	-0.8	-1.2	-1.7	-2.0	-2.2	-2.3	-2.3	-2.4	-2.4

Table III.1.98: Public pensions, gross as % of GDP (p.p. ch. from 2013 due to benefit ratio)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.3	0.0	0.3	0.6	0.7	0.7	0.5	0.3	0.1	0.0	-0.3
BG	-2.5	0.0	-1.2	-1.6	-1.8	-1.9	-2.0	-2.2	-2.3	-2.4	-2.5
CZ	-1.0	0.0	-0.1	-0.3	-0.6	-0.9	-1.1	-1.2	-1.1	-1.0	-1.0
DK	-2.0	0.0	-1.1	-1.4	-1.4	-1.6	-1.8	-2.0	-2.1	-2.0	-2.0
DE	-2.2	0.0	-0.3	-0.7	-1.2	-1.8	-2.1	-2.1	-2.2	-2.3	-2.2
EE	-3.8	0.0	-0.4	-1.2	-1.7	-2.1	-2.4	-2.8	-3.2	-3.6	-3.8
IE	-2.1	0.0	-0.2	-0.1	-0.4	-0.6	-0.8	-1.2	-1.7	-2.0	-2.1
EL	-2.1	0.0	1.3	2.0	1.6	0.9	-0.1	-0.9	-1.5	-2.0	-2.1
ES	-4.4	0.0	0.0	-0.7	-1.5	-2.2	-2.9	-3.6	-4.3	-4.8	-4.4
FR	-4.7	0.0	-1.1	-1.4	-2.1	-2.9	-3.4	-3.9	-4.2	-4.5	-4.7
HR	-5.0	0.0	-0.5	-1.0	-1.8	-2.5	-3.2	-3.8	-4.3	-4.7	-5.0
IT	-2.1	0.0	1.2	1.7	1.4	0.7	-0.2	-1.0	-1.7	-2.1	-2.1
CY	-3.8	0.0	-1.2	-1.5	-1.8	-2.4	-2.9	-3.4	-3.7	-3.8	-3.8
LV	-4.5	0.0	-1.8	-2.6	-3.0	-3.3	-3.5	-3.7	-4.0	-4.3	-4.5
LT	-0.9	0.0	-0.8	-0.8	-0.8	-0.7	-0.7	-0.6	-0.7	-0.8	-0.9
LU	0.1	0.0	1.1	1.3	1.2	1.1	0.9	0.7	0.3	0.1	0.1
HU	-1.9	0.0	0.0	-0.6	-1.1	-1.4	-1.6	-1.7	-1.8	-1.9	-1.9
MT	-1.4	0.0	-0.7	-1.2	-1.5	-1.7	-1.8	-1.7	-1.6	-1.4	-1.4
NL	-0.5	0.0	-0.1	-0.1	-0.3	-0.5	-0.6	-0.6	-0.5	-0.5	-0.5
AT	-4.1	0.0	-0.2	-0.6	-1.0	-1.4	-2.0	-2.5	-3.1	-3.5	-4.1
PL	-5.2	0.0	-0.8	-1.4	-1.9	-2.4	-2.8	-3.4	-4.1	-4.7	-5.2
PT	-5.9	0.0	0.5	0.8	0.1	-0.9	-2.1	-3.4	-4.3	-5.2	-5.9
RO	-4.0	0.0	-1.0	-1.6	-2.3	-2.7	-3.2	-3.5	-3.8	-3.9	-4.0
SI	-1.4	0.0	-1.8	-1.8	-1.9	-1.7	-1.5	-1.4	-1.4	-1.4	-1.4
SK	-2.6	0.0	-0.9	-1.7	-2.3	-2.6	-2.7	-2.8	-2.9	-2.9	-2.6
FI	-2.7	0.0	0.3	0.1	-0.4	-1.0	-1.6	-2.0	-2.3	-2.6	-2.7
SE	-3.7	0.0	-1.1	-1.7	-2.1	-2.5	-2.8	-3.1	-3.3	-3.5	-3.7
UK	-0.7	0.0	0.1	0.1	0.0	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7
NO	-2.2	0.0	0.1	0.0	-0.3	-0.7	-1.0	-1.4	-1.7	-2.0	-2.2
EU28	-3.0	0.0	-0.2	-0.5	-0.9	-1.4	-1.8	-2.2	-2.6	-2.9	-3.0
EA	-3.1	0.0	-0.2	-0.4	-0.8	-1.5	-2.0	-2.4	-2.8	-3.1	-3.1

Table III.1.99: Public pensions, gross as % of GDP (p.p. ch. from 2013 due to labour market ratio)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.6	0.0	-0.4	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
BG	-1.2	0.0	-0.6	-0.9	-0.9	-0.9	-1.0	-1.1	-1.0	-1.2	-1.2
CZ	-1.0	0.0	-0.4	-0.4	-0.4	-0.4	-0.5	-0.8	-0.9	-1.0	-1.0
DK	-0.9	0.0	-0.4	-0.6	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.9
DE	-0.7	0.0	-0.3	-0.4	-0.6	-0.7	-0.7	-0.6	-0.6	-0.7	-0.7
EE	-0.5	0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.6	-0.5
IE	-0.6	0.0	-0.3	-0.4	-0.5	-0.6	-0.8	-0.8	-0.9	-0.7	-0.6
EL	-6.2	0.0	-2.3	-3.6	-4.4	-5.3	-6.0	-6.3	-6.5	-6.3	-6.2
ES	-3.8	0.0	-1.6	-2.6	-3.2	-3.6	-4.0	-4.2	-4.1	-3.9	-3.8
FR	-1.2	0.0	-0.3	-0.6	-0.9	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2
HR	-1.7	0.0	-0.7	-1.0	-1.2	-1.4	-1.5	-1.6	-1.7	-1.7	-1.7
IT	-2.3	0.0	-0.9	-1.5	-1.9	-2.1	-2.2	-2.2	-2.2	-2.2	-2.3
CY	-2.2	0.0	-0.5	-1.1	-1.4	-1.7	-1.9	-2.0	-2.1	-2.2	-2.2
LV	-0.8	0.0	-0.2	-0.3	-0.5	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8
LT	-0.6	0.0	0.0	-0.1	-0.3	-0.3	-0.5	-0.5	-0.5	-0.5	-0.6
LU	-0.3	0.0	-0.2	-0.3	-0.4	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3
HU	-1.9	0.0	-1.3	-1.8	-1.8	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
MT	-1.4	0.0	-0.6	-0.9	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.4
NL	-0.8	0.0	-0.3	-0.5	-0.6	-0.7	-0.8	-0.7	-0.7	-0.8	-0.8
AT	-1.0	0.0	-0.3	-0.5	-0.7	-1.0	-1.0	-0.8	-0.9	-0.9	-1.0
PL	-1.4	0.0	-0.7	-1.0	-1.0	-1.0	-1.1	-1.2	-1.4	-1.5	-1.4
PT	-2.6	0.0	-0.9	-1.7	-2.1	-2.4	-2.7	-2.9	-2.8	-2.6	-2.6
RO	0.0	0.0	-0.1	-0.2	0.1	0.0	0.0	0.0	0.0	-0.1	0.0
SI	-1.5	0.0	-0.8	-1.3	-1.4	-1.4	-1.4	-1.5	-1.6	-1.6	-1.5
SK	-1.3	0.0	-0.2	-0.3	-0.4	-0.5	-0.6	-0.8	-0.9	-1.1	-1.3
FI	-0.5	0.0	-0.4	-0.5	-0.5	-0.6	-0.4	-0.4	-0.5	-0.4	-0.5
SE	-0.4	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4
UK	-0.6	0.0	-0.2	-0.2	-0.3	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
NO	-0.2	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2
EU28	-1.4	0.0	-0.5	-0.8	-1.0	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
EA	-1.6	0.0	-0.6	-1.0	-1.3	-1.5	-1.7	-1.7	-1.6	-1.6	-1.6

Table III.1.100: Public pensions, gross as % of GDP (p.p. ch. from 2013 due to interaction effect (residual))

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
BG	-0.3	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
CZ	-0.5	0.0	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5
DK	-0.2	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
DE	-0.4	0.0	0.0	-0.1	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
EE	-0.4	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
IE	-0.5	0.0	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5
EL	-1.0	0.0	-0.2	-0.4	-0.5	-0.7	-0.8	-0.9	-1.0	-1.0	-1.0
ES	-0.9	0.0	-0.1	-0.3	-0.5	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9
FR	-0.4	0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
HR	-0.4	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
IT	-0.5	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.6	-0.5	-0.5
CY	-0.6	0.0	-0.2	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
LV	-0.3	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
LT	-0.4	0.0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
LU	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
HU	-0.5	0.0	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5
MT	-0.3	0.0	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3
NL	-0.3	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
AT	-0.6	0.0	0.0	-0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6
PL	-1.2	0.0	-0.5	-0.7	-0.8	-0.8	-0.9	-1.0	-1.1	-1.2	-1.2
PT	-0.9	0.0	-0.1	-0.2	-0.4	-0.5	-0.7	-0.9	-0.9	-0.9	-0.9
RO	-0.6	0.0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6
SI	-0.6	0.0	-0.3	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6
SK	-1.0	0.0	-0.3	-0.5	-0.6	-0.6	-0.7	-0.8	-0.9	-1.0	-1.0
FI	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
SE	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
UK	-0.2	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
NO	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
EU28	-0.4	0.0	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
EA	-0.4	0.0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Table III.1.101: Health care spending as % of GDP - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.1	6.0	5.9	5.9	5.9	6.0	6.1	6.1	6.1	6.1	6.1
BG	0.4	4.0	4.2	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.4
CZ	1.0	5.7	5.9	6.1	6.2	6.4	6.5	6.6	6.6	6.7	6.7
DK	0.9	8.1	8.5	8.7	8.8	8.9	8.9	9.0	9.0	9.0	9.0
DE	0.6	7.6	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.3	8.2
EE	0.6	4.4	4.6	4.7	4.8	4.9	5.0	5.0	5.0	5.0	5.0
IE	1.2	6.0	6.3	6.6	6.9	7.2	7.3	7.3	7.3	7.3	7.2
EL	1.3	6.6	6.6	6.8	7.0	7.3	7.5	7.7	7.8	7.9	7.9
ES	1.1	5.9	6.2	6.4	6.6	6.9	7.0	7.1	7.1	7.0	6.9
FR	0.9	7.7	8.0	8.2	8.3	8.5	8.6	8.7	8.7	8.6	8.6
HR	1.7	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.4	7.5	7.5
IT	0.7	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.8	6.7
CY	0.3	3.0	3.1	3.1	3.1	3.2	3.3	3.3	3.3	3.3	3.3
LV	0.6	3.8	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.4	4.4
LT	0.1	4.2	4.4	4.5	4.6	4.7	4.7	4.6	4.5	4.4	4.3
LU	0.5	4.6	4.6	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1
HU	0.8	4.7	4.8	5.0	5.1	5.2	5.3	5.3	5.4	5.4	5.4
MT	2.1	5.7	6.3	6.6	7.0	7.3	7.5	7.6	7.6	7.7	7.8
NL	1.0	7.2	7.5	7.7	7.9	8.1	8.2	8.2	8.2	8.2	8.1
AT	1.3	6.9	7.2	7.4	7.6	7.8	7.9	8.1	8.2	8.2	8.2
PL	1.2	4.2	4.4	4.6	4.8	5.0	5.1	5.1	5.2	5.4	5.5
PT	2.5	6.0	6.4	6.7	7.1	7.4	7.8	8.0	8.3	8.4	8.5
RO	1.0	3.8	4.1	4.2	4.3	4.5	4.6	4.6	4.7	4.7	4.8
SI	1.2	5.7	5.9	6.2	6.4	6.6	6.8	6.8	6.9	6.9	6.8
SK	2.0	5.7	6.1	6.4	6.7	6.9	7.1	7.3	7.5	7.6	7.7
FI	0.7	7.8	8.1	8.2	8.4	8.5	8.5	8.5	8.5	8.5	8.5
SE	0.4	6.9	7.0	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3
UK	1.3	7.8	8.1	8.3	8.5	8.7	8.8	8.9	9.0	9.1	9.1
NO	0.9	7.5	7.7	7.9	8.0	8.1	8.1	8.2	8.3	8.4	8.5
EU28	0.9	6.9	7.2	7.3	7.5	7.6	7.7	7.8	7.9	7.9	7.8
EA	0.8	7.0	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.7

Table III.1.102: Health care spending as % of GDP - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.5	6.0	6.0	6.1	6.1	6.2	6.3	6.4	6.4	6.5	6.5
BG	0.4	4.0	4.2	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5
CZ	1.2	5.7	5.9	6.1	6.3	6.5	6.6	6.8	6.9	7.0	7.0
DK	1.0	8.1	8.5	8.7	8.8	8.9	8.9	9.0	9.1	9.1	9.2
DE	0.7	7.6	7.9	8.0	8.1	8.3	8.4	8.5	8.5	8.5	8.4
EE	0.8	4.4	4.6	4.7	4.8	5.0	5.1	5.1	5.1	5.1	5.1
IE	1.3	6.0	6.3	6.6	6.9	7.2	7.3	7.4	7.4	7.4	7.3
EL	1.4	6.6	6.6	6.9	7.1	7.4	7.6	7.8	7.9	8.0	8.0
ES	1.0	5.9	6.1	6.3	6.6	6.8	6.9	7.0	7.1	7.0	6.9
FR	1.1	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8	8.8
HR	2.0	5.7	6.8	7.0	7.2	7.3	7.4	7.5	7.6	7.6	7.7
IT	0.8	6.1	6.2	6.3	6.5	6.6	6.7	6.8	6.9	6.9	6.9
CY	0.3	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.3	3.2	3.3
LV	0.6	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.4	4.4
LT	0.1	4.2	4.3	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.3
LU	0.7	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.2	5.3
HU	1.0	4.7	4.9	5.0	5.2	5.3	5.4	5.5	5.6	5.7	5.7
MT	2.5	5.7	6.3	6.7	7.1	7.4	7.6	7.7	7.8	7.9	8.1
NL	1.2	7.2	7.5	7.8	8.0	8.1	8.2	8.3	8.3	8.3	8.3
AT	1.6	6.9	7.2	7.4	7.6	7.8	8.1	8.2	8.4	8.4	8.5
PL	1.3	4.2	4.4	4.6	4.8	5.0	5.1	5.2	5.3	5.5	5.6
PT	2.8	6.0	6.4	6.8	7.1	7.5	7.9	8.2	8.5	8.7	8.8
RO	1.1	3.8	4.1	4.2	4.3	4.5	4.6	4.7	4.8	4.8	4.8
SI	1.4	5.7	6.0	6.2	6.5	6.7	6.9	7.0	7.0	7.1	7.1
SK	2.2	5.7	6.1	6.4	6.6	6.9	7.2	7.4	7.6	7.8	7.9
FI	1.1	7.8	8.1	8.3	8.5	8.6	8.7	8.7	8.8	8.8	8.9
SE	0.6	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.4
UK	1.5	7.8	8.1	8.3	8.6	8.8	9.0	9.1	9.2	9.3	9.4
NO	1.2	7.5	7.7	7.9	8.1	8.2	8.3	8.4	8.6	8.7	8.8
EU28	1.1	6.9	7.2	7.3	7.5	7.7	7.8	7.9	8.0	8.0	8.0
EA	0.9	7.0	7.2	7.4	7.5	7.7	7.8	7.9	7.9	7.9	7.9

Table III.1.103: Health care spending as % of GDP - High Life expectancy scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.8	6.0	6.0	6.1	6.2	6.3	6.5	6.5	6.6	6.7	6.8
BG	0.6	4.0	4.2	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.6
CZ	1.6	5.7	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.2	7.3
DK	1.4	8.1	8.5	8.7	8.9	9.0	9.1	9.2	9.3	9.4	9.5
DE	1.2	7.6	7.9	8.1	8.2	8.4	8.6	8.8	8.8	8.8	8.8
EE	1.0	4.4	4.6	4.7	4.9	5.0	5.1	5.2	5.3	5.3	5.3
IE	1.6	6.0	6.3	6.6	7.0	7.3	7.5	7.6	7.6	7.6	7.6
EL	1.8	6.6	6.7	6.9	7.2	7.5	7.7	8.0	8.2	8.3	8.4
ES	1.3	5.9	6.2	6.4	6.6	6.9	7.1	7.2	7.3	7.2	7.2
FR	1.5	7.7	8.0	8.3	8.5	8.7	8.9	9.0	9.1	9.1	9.2
HR	2.3	5.7	6.8	7.0	7.2	7.4	7.6	7.7	7.8	7.9	8.0
IT	1.1	6.1	6.2	6.3	6.5	6.7	6.8	7.0	7.1	7.1	7.2
CY	0.3	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.3
LV	0.8	3.8	3.9	4.0	4.2	4.3	4.4	4.5	4.5	4.6	4.6
LT	0.3	4.2	4.4	4.5	4.6	4.7	4.7	4.7	4.6	4.5	4.5
LU	0.9	4.6	4.7	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.5
HU	1.3	4.7	4.9	5.0	5.2	5.4	5.5	5.6	5.8	5.9	5.9
MT	3.0	5.7	6.3	6.7	7.2	7.6	7.9	8.1	8.2	8.4	8.7
NL	1.5	7.2	7.6	7.8	8.0	8.2	8.4	8.5	8.6	8.6	8.7
AT	2.0	6.9	7.2	7.5	7.7	8.0	8.2	8.5	8.6	8.8	8.9
PL	1.6	4.2	4.4	4.6	4.8	5.0	5.2	5.3	5.5	5.6	5.8
PT	3.4	6.0	6.4	6.8	7.2	7.7	8.1	8.5	8.9	9.2	9.4
RO	1.3	3.8	4.1	4.2	4.4	4.5	4.7	4.8	4.9	5.0	5.1
SI	1.7	5.7	6.0	6.3	6.6	6.8	7.0	7.2	7.3	7.3	7.4
SK	2.5	5.7	6.1	6.4	6.7	7.0	7.3	7.6	7.8	8.0	8.2
FI	1.5	7.8	8.1	8.4	8.6	8.8	8.9	9.0	9.1	9.2	9.3
SE	0.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.7
UK	2.0	7.8	8.1	8.4	8.6	8.9	9.2	9.4	9.6	9.7	9.8
NO	1.6	7.5	7.8	8.0	8.1	8.3	8.4	8.6	8.8	8.9	9.1
EU28	1.4	6.9	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.3	8.4
EA	1.3	7.0	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.2	8.2

Table III.1.104: Health care spending as % of GDP - Constant health scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.3	6.0	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.6
BG	-0.1	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9
CZ	0.3	5.7	5.7	5.8	5.9	6.0	6.0	6.0	6.0	6.1	6.1
DK	0.1	8.1	8.3	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.3
DE	0.0	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.6
EE	0.1	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4
IE	0.6	6.0	6.2	6.4	6.6	6.8	6.9	6.9	6.8	6.7	6.6
EL	0.6	6.6	6.5	6.7	6.8	6.9	7.1	7.2	7.3	7.3	7.2
ES	0.6	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.6	6.6	6.4
FR	0.3	7.7	7.9	8.0	8.1	8.1	8.2	8.2	8.1	8.1	8.0
HR	1.0	5.7	6.6	6.7	6.7	6.8	6.8	6.8	6.8	6.7	6.7
IT	0.2	6.1	6.1	6.1	6.2	6.3	6.4	6.4	6.4	6.4	6.3
CY	0.1	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
LV	0.1	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0	3.9
LT	-0.3	4.2	4.2	4.3	4.3	4.3	4.3	4.2	4.1	4.0	3.9
LU	0.2	4.6	4.6	4.6	4.6	4.6	4.6	4.7	4.7	4.8	4.8
HU	0.1	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8
MT	1.4	5.7	6.1	6.4	6.7	6.9	7.0	7.0	7.0	6.9	7.0
NL	0.4	7.2	7.4	7.6	7.7	7.7	7.8	7.8	7.7	7.6	7.6
AT	0.7	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.6	7.6	7.6
PL	0.7	4.2	4.3	4.4	4.5	4.6	4.6	4.7	4.7	4.8	4.9
PT	1.6	6.0	6.2	6.5	6.7	7.0	7.2	7.4	7.5	7.6	7.7
RO	0.5	3.8	4.0	4.0	4.1	4.1	4.2	4.2	4.3	4.3	4.3
SI	0.6	5.7	5.8	6.0	6.1	6.3	6.3	6.4	6.3	6.3	6.3
SK	1.0	5.7	5.9	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.7
FI	0.1	7.8	7.9	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9
SE	-0.1	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.7
UK	0.6	7.8	8.0	8.1	8.2	8.3	8.4	8.4	8.4	8.4	8.4
NO	0.2	7.5	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8
EU28	0.3	6.9	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3	7.2
EA	0.2	7.0	7.1	7.1	7.2	7.3	7.3	7.4	7.3	7.3	7.2

Table III.1.105: Health care spending as % of GDP - Death-related cost scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.4	6.0	5.9	6.0	6.1	6.2	6.3	6.3	6.3	6.4	6.4
BG	0.4	4.0	4.2	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5
CZ	0.8	5.7	5.8	6.0	6.2	6.3	6.4	6.5	6.5	6.6	6.6
DK	0.7	8.1	8.4	8.6	8.7	8.7	8.8	8.8	8.8	8.8	8.8
DE	0.5	7.6	7.9	8.0	8.0	8.1	8.3	8.4	8.4	8.3	8.2
EE	:	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:	:	:
ES	0.9	5.9	6.1	6.3	6.5	6.7	6.9	7.0	7.0	6.9	6.8
FR	0.8	7.7	8.0	8.1	8.3	8.5	8.6	8.6	8.6	8.6	8.6
HR	:	:	:	:	:	:	:	:	:	:	:
IT	0.7	6.1	6.1	6.3	6.4	6.5	6.6	6.7	6.7	6.7	6.7
CY	:	:	:	:	:	:	:	:	:	:	:
LV	:	:	:	:	:	:	:	:	:	:	:
LT	:	:	:	:	:	:	:	:	:	:	:
LU	:	:	:	:	:	:	:	:	:	:	:
HU	:	:	:	:	:	:	:	:	:	:	:
MT	:	:	:	:	:	:	:	:	:	:	:
NL	0.9	7.2	7.5	7.7	7.9	8.0	8.1	8.1	8.1	8.1	8.1
AT	1.3	6.9	7.2	7.4	7.5	7.7	7.9	8.1	8.2	8.2	8.2
PL	1.1	4.2	4.3	4.5	4.7	4.8	4.9	5.0	5.1	5.2	5.3
PT	:	:	:	:	:	:	:	:	:	:	:
RO	:	:	:	:	:	:	:	:	:	:	:
SI	1.3	5.7	6.0	6.2	6.4	6.6	6.8	6.9	6.9	6.9	6.9
SK	1.9	5.7	6.0	6.3	6.5	6.8	7.0	7.2	7.4	7.5	7.6
FI	0.8	7.8	8.1	8.3	8.4	8.5	8.6	8.6	8.6	8.6	8.7
SE	0.3	6.9	7.0	7.0	7.1	7.1	7.1	7.1	7.2	7.2	7.2
UK	1.2	7.8	8.0	8.2	8.4	8.6	8.8	8.9	9.0	9.0	9.1
NO	:	:	:	:	:	:	:	:	:	:	:
EU28	:	:	:	:	:	:	:	:	:	:	:
EA	:	:	:	:	:	:	:	:	:	:	:

Table III.1.106: Health care spending as % of GDP - Income elasticity scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.7	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.6	6.7
BG	0.7	4.0	4.2	4.4	4.5	4.6	4.7	4.8	4.8	4.8	4.7
CZ	1.5	5.7	6.0	6.2	6.5	6.7	6.8	7.0	7.1	7.2	7.3
DK	1.3	8.1	8.6	8.8	9.0	9.1	9.2	9.3	9.4	9.4	9.5
DE	1.0	7.6	8.0	8.1	8.3	8.4	8.6	8.7	8.8	8.7	8.6
EE	1.0	4.4	4.7	4.8	5.0	5.2	5.3	5.3	5.4	5.4	5.4
IE	1.6	6.0	6.4	6.7	7.1	7.4	7.5	7.6	7.6	7.6	7.6
EL	1.7	6.6	6.7	6.9	7.2	7.5	7.8	8.0	8.2	8.3	8.3
ES	1.3	5.9	6.2	6.5	6.8	7.0	7.2	7.3	7.3	7.3	7.2
FR	1.3	7.7	8.1	8.3	8.5	8.7	8.9	9.0	9.0	9.1	9.1
HR	2.3	5.7	6.9	7.1	7.3	7.5	7.7	7.8	7.9	8.0	8.0
IT	1.0	6.1	6.2	6.4	6.5	6.7	6.8	7.0	7.0	7.0	7.0
CY	0.4	3.0	3.1	3.1	3.2	3.3	3.3	3.3	3.4	3.4	3.4
LV	0.9	3.8	4.0	4.2	4.3	4.5	4.6	4.7	4.7	4.7	4.7
LT	0.4	4.2	4.5	4.6	4.8	4.8	4.9	4.9	4.8	4.7	4.6
LU	0.8	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4
HU	1.3	4.7	4.9	5.1	5.3	5.5	5.6	5.7	5.8	5.9	5.9
MT	2.7	5.7	6.3	6.8	7.2	7.6	7.8	8.0	8.1	8.2	8.4
NL	1.4	7.2	7.6	7.9	8.1	8.3	8.4	8.5	8.5	8.5	8.5
AT	1.8	6.9	7.3	7.5	7.7	8.0	8.2	8.4	8.6	8.6	8.7
PL	1.6	4.2	4.5	4.7	5.0	5.2	5.3	5.5	5.6	5.7	5.9
PT	3.1	6.0	6.5	6.9	7.3	7.8	8.1	8.5	8.8	9.0	9.2
RO	1.3	3.8	4.1	4.3	4.5	4.6	4.8	4.9	5.0	5.0	5.1
SI	1.6	5.7	6.0	6.3	6.6	6.9	7.1	7.2	7.2	7.3	7.3
SK	2.6	5.7	6.2	6.5	6.9	7.2	7.5	7.8	8.0	8.2	8.3
FI	1.3	7.8	8.2	8.4	8.6	8.8	8.9	8.9	8.9	9.0	9.1
SE	0.8	6.9	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.6	7.7
UK	1.8	7.8	8.1	8.4	8.7	8.9	9.1	9.3	9.4	9.5	9.6
NO	1.5	7.5	7.8	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.0
EU28	1.3	6.9	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.2	8.2
EA	1.2	7.0	7.3	7.4	7.6	7.8	8.0	8.1	8.2	8.1	8.1

Table III.1.107: Health care spending as % of GDP - EU28 Cost convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.7	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	6.7
BG	3.1	4.0	4.4	4.7	4.9	5.3	5.6	5.9	6.3	6.7	7.1
CZ	1.5	5.7	5.9	6.2	6.4	6.6	6.8	6.9	7.1	7.2	7.2
DK	1.0	8.1	8.5	8.7	8.8	8.9	9.0	9.0	9.1	9.1	9.2
DE	0.8	7.6	7.9	8.0	8.1	8.3	8.4	8.5	8.5	8.5	8.4
EE	2.6	4.4	4.8	5.0	5.3	5.6	5.9	6.2	6.4	6.7	7.0
IE	1.3	6.0	6.3	6.6	6.9	7.2	7.3	7.4	7.4	7.4	7.3
EL	1.4	6.6	6.6	6.9	7.1	7.4	7.6	7.8	7.9	8.0	8.0
ES	1.6	5.9	6.2	6.4	6.7	7.0	7.2	7.4	7.5	7.5	7.5
FR	1.1	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8	8.9
HR	2.9	5.7	6.9	7.2	7.4	7.7	7.9	8.1	8.3	8.5	8.6
IT	1.2	6.1	6.2	6.4	6.5	6.7	6.9	7.0	7.1	7.2	7.2
CY	3.5	3.0	3.3	3.6	3.9	4.2	4.6	5.1	5.5	6.0	6.5
LV	2.9	3.8	4.1	4.4	4.8	5.1	5.5	5.8	6.1	6.4	6.7
LT	2.1	4.2	4.5	4.8	5.2	5.5	5.8	6.0	6.1	6.2	6.3
LU	1.5	4.6	4.7	4.9	5.0	5.2	5.4	5.6	5.7	5.9	6.1
HU	2.4	4.7	5.0	5.3	5.5	5.8	6.0	6.3	6.5	6.8	7.0
MT	3.1	5.7	6.4	6.8	7.3	7.7	8.0	8.2	8.3	8.5	8.8
NL	1.2	7.2	7.5	7.8	8.0	8.2	8.3	8.3	8.4	8.4	8.4
AT	1.6	6.9	7.2	7.4	7.7	7.9	8.1	8.3	8.4	8.5	8.5
PL	3.0	4.2	4.5	4.9	5.2	5.6	5.9	6.2	6.5	6.8	7.2
PT	3.4	6.0	6.5	6.9	7.4	7.8	8.2	8.6	8.9	9.2	9.5
RO	3.3	3.8	4.3	4.6	5.0	5.3	5.7	6.0	6.4	6.8	7.1
SI	2.1	5.7	6.1	6.4	6.7	7.0	7.3	7.4	7.6	7.7	7.7
SK	2.5	5.7	6.1	6.4	6.7	7.0	7.3	7.6	7.8	8.1	8.2
FI	1.3	7.8	8.2	8.4	8.6	8.7	8.8	8.9	8.9	9.0	9.1
SE	0.6	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5
UK	1.6	7.8	8.1	8.3	8.6	8.8	9.0	9.1	9.3	9.4	9.4
NO	1.2	7.5	7.7	7.9	8.1	8.2	8.3	8.4	8.6	8.7	8.8
EU28	1.3	6.9	7.2	7.4	7.6	7.8	7.9	8.1	8.2	8.2	8.3
EA	1.1	7.0	7.2	7.4	7.6	7.7	7.9	8.0	8.1	8.1	8.1

Table III.1.108: Health care spending as % of GDP - Labour intensity scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.0	6.0	6.0	6.1	6.3	6.5	6.6	6.7	6.8	6.9	7.0
BG	0.7	4.0	4.0	4.0	4.1	4.2	4.4	4.6	4.8	4.8	4.8
CZ	2.0	5.7	6.0	6.4	6.6	6.9	7.1	7.4	7.6	7.8	7.8
DK	1.1	8.1	8.4	8.6	8.9	9.1	9.2	9.2	9.2	9.2	9.2
DE	2.0	7.6	7.9	8.3	8.6	9.0	9.4	9.6	9.6	9.6	9.6
EE	1.2	4.4	4.5	4.7	4.8	4.9	5.1	5.3	5.5	5.6	5.6
IE	1.1	6.0	6.0	6.3	6.5	6.7	7.0	7.3	7.5	7.4	7.1
EL	0.5	6.6	6.6	6.3	6.3	6.3	6.5	6.8	7.1	7.2	7.2
ES	0.8	5.9	6.2	6.0	6.0	6.1	6.4	6.8	7.0	6.9	6.6
FR	1.2	7.7	8.0	8.2	8.5	8.7	8.9	8.9	8.9	8.9	8.9
HR	2.2	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.6	7.8	7.9
IT	1.0	6.1	6.1	6.1	6.3	6.6	6.8	7.1	7.2	7.2	7.1
CY	0.2	3.0	3.1	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.2
LV	0.8	3.8	3.8	4.0	4.1	4.2	4.3	4.4	4.6	4.6	4.6
LT	0.4	4.2	4.2	4.5	4.8	5.0	5.0	4.9	4.8	4.7	4.6
LU	1.4	4.6	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.8	6.0
HU	1.5	4.7	4.7	4.8	4.9	5.1	5.3	5.6	5.8	6.0	6.1
MT	2.6	5.7	6.0	6.4	6.7	7.0	7.2	7.4	7.6	7.9	8.2
NL	1.4	7.2	7.5	7.7	8.0	8.4	8.6	8.6	8.6	8.5	8.5
AT	2.4	6.9	7.1	7.4	7.8	8.2	8.5	8.7	9.0	9.1	9.3
PL	2.3	4.2	4.4	4.7	4.9	5.1	5.3	5.5	5.8	6.2	6.5
PT	3.2	6.0	6.3	6.4	6.8	7.3	7.8	8.4	8.8	9.1	9.3
RO	2.0	3.8	4.1	4.3	4.6	4.9	5.1	5.4	5.6	5.7	5.8
SI	2.4	5.7	6.2	6.4	6.8	7.2	7.5	7.8	8.0	8.1	8.0
SK	3.4	5.7	6.2	6.7	6.9	7.2	7.5	8.0	8.5	8.9	9.1
FI	2.0	7.8	8.4	8.8	9.2	9.3	9.4	9.4	9.5	9.6	9.8
SE	0.9	6.9	7.1	7.2	7.3	7.4	7.4	7.5	7.6	7.7	7.8
UK	1.7	7.8	8.0	8.4	8.7	8.9	9.0	9.2	9.3	9.5	9.6
NO	2.2	7.5	7.9	8.3	8.6	8.8	9.0	9.1	9.3	9.5	9.7
EU28	1.5	6.9	7.2	7.4	7.6	7.8	8.1	8.2	8.4	8.4	8.4
EA	1.3	7.0	7.2	7.3	7.6	7.9	8.1	8.3	8.4	8.3	8.3

Table III.1.109: Health care spending as % of GDP - Sector-specific composite indexation scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.6	6.0	6.0	6.1	6.2	6.3	6.4	6.4	6.5	6.5	6.6
BG	-0.1	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1	4.0	4.0
CZ	1.1	5.7	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.8	6.8
DK	0.6	8.1	8.3	8.4	8.5	8.6	8.6	8.6	8.7	8.7	8.7
DE	0.1	7.6	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.8	7.7
EE	0.6	4.4	4.5	4.6	4.7	4.8	4.9	4.9	4.9	4.9	4.9
IE	0.6	6.0	6.1	6.3	6.4	6.6	6.7	6.7	6.7	6.7	6.6
EL	0.9	6.6	6.6	6.7	6.9	7.0	7.2	7.3	7.4	7.5	7.5
ES	1.1	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.1	7.0	6.9
FR	0.6	7.7	7.9	8.0	8.1	8.3	8.3	8.3	8.3	8.3	8.3
HR	1.7	5.7	6.7	6.9	7.0	7.1	7.2	7.3	7.4	7.4	7.4
IT	0.1	6.1	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.2	6.2
CY	0.2	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
LV	0.5	3.8	3.9	3.9	4.1	4.2	4.3	4.3	4.3	4.3	4.3
LT	-0.5	4.2	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.7
LU	0.7	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.3
HU	0.3	4.7	4.7	4.7	4.7	4.7	4.7	4.8	4.9	4.9	4.9
MT	1.6	5.7	6.1	6.4	6.6	6.8	6.9	7.0	7.0	7.1	7.3
NL	0.7	7.2	7.4	7.6	7.7	7.8	7.9	7.9	7.9	7.8	7.8
AT	1.0	6.9	7.1	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.9
PL	0.5	4.2	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.6	4.7
PT	1.8	6.0	6.2	6.4	6.6	6.9	7.1	7.4	7.6	7.8	7.9
RO	0.5	3.8	3.9	3.9	4.0	4.0	4.1	4.2	4.2	4.2	4.3
SI	0.9	5.7	5.9	6.0	6.2	6.4	6.5	6.5	6.5	6.5	6.5
SK	1.4	5.7	5.8	6.0	6.1	6.3	6.5	6.7	6.8	7.0	7.1
FI	1.2	7.8	8.1	8.4	8.6	8.7	8.8	8.8	8.9	8.9	9.0
SE	-0.1	6.9	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.8
UK	1.5	7.8	8.1	8.3	8.5	8.7	8.9	9.1	9.2	9.2	9.3
NO	0.6	7.5	7.6	7.7	7.8	7.8	7.8	7.9	8.0	8.1	8.2
EU28	0.6	6.9	7.1	7.1	7.3	7.4	7.5	7.5	7.6	7.6	7.6
EA	0.5	7.0	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.4	7.4

Table III.1.110: Health care spending as % of GDP - Non-demographic determinants scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.5	6.0	6.1	6.2	6.4	6.6	6.9	7.1	7.2	7.4	7.5
BG	1.9	4.0	4.5	4.9	5.2	5.4	5.7	5.8	6.0	6.0	6.0
CZ	2.9	5.7	6.2	6.6	7.0	7.4	7.7	8.0	8.3	8.5	8.6
DK	3.1	8.1	8.9	9.4	9.7	10.1	10.3	10.6	10.9	11.1	11.3
DE	2.2	7.6	8.3	8.5	8.8	9.0	9.4	9.7	9.9	9.9	9.9
EE	2.3	4.4	4.9	5.3	5.6	5.9	6.2	6.4	6.5	6.6	6.6
IE	2.8	6.0	6.6	7.1	7.6	8.1	8.5	8.6	8.8	8.8	8.8
EL	3.2	6.6	6.8	7.2	7.6	8.2	8.8	9.2	9.5	9.7	9.8
ES	2.7	5.9	6.5	7.0	7.5	7.9	8.3	8.5	8.6	8.6	8.6
FR	2.7	7.7	8.3	8.6	9.0	9.4	9.7	10.0	10.2	10.4	10.4
HR	4.0	5.7	7.1	7.5	7.9	8.4	8.8	9.2	9.4	9.6	9.7
IT	1.9	6.1	6.3	6.5	6.8	7.1	7.4	7.6	7.8	7.9	8.0
CY	1.0	3.0	3.1	3.2	3.4	3.5	3.7	3.8	3.9	3.9	4.0
LV	2.3	3.8	4.3	4.7	5.1	5.4	5.7	5.9	6.0	6.1	6.1
LT	1.7	4.2	4.8	5.2	5.5	5.8	5.9	6.0	6.0	6.0	5.9
LU	1.4	4.6	4.7	4.8	4.9	5.1	5.3	5.5	5.7	5.9	6.0
HU	2.6	4.7	5.1	5.5	5.9	6.2	6.5	6.8	7.0	7.2	7.3
MT	4.2	5.7	6.5	7.1	7.7	8.4	8.8	9.1	9.4	9.6	9.9
NL	2.6	7.2	7.8	8.1	8.4	8.8	9.1	9.3	9.5	9.7	9.7
AT	3.0	6.9	7.4	7.8	8.2	8.6	9.0	9.3	9.6	9.8	9.9
PL	3.1	4.2	4.8	5.2	5.7	6.1	6.4	6.7	6.9	7.2	7.4
PT	4.9	6.0	6.7	7.4	8.0	8.6	9.2	9.8	10.3	10.7	10.9
RO	2.5	3.8	4.4	4.7	5.0	5.3	5.6	5.9	6.1	6.2	6.3
SI	2.8	5.7	6.2	6.6	7.1	7.5	7.9	8.1	8.3	8.4	8.5
SK	4.7	5.7	6.6	7.2	8.0	8.6	9.1	9.5	9.9	10.3	10.5
FI	2.5	7.8	8.2	8.5	8.9	9.2	9.5	9.8	9.9	10.1	10.3
SE	2.1	6.9	7.3	7.6	7.8	8.1	8.3	8.5	8.7	8.9	9.0
UK	3.1	7.8	8.3	8.6	9.0	9.5	9.9	10.3	10.6	10.8	10.9
NO	2.8	7.5	8.0	8.3	8.7	9.0	9.3	9.6	9.9	10.2	10.4
EU28	2.6	6.9	7.4	7.8	8.1	8.5	8.8	9.1	9.3	9.5	9.5
EA	2.4	7.0	7.4	7.8	8.1	8.4	8.8	9.0	9.2	9.3	9.4

Table III.1.111: Health care spending as % of GDP - AWG risk scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.5	6.0	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.5
BG	1.1	4.0	4.5	4.7	4.9	5.1	5.2	5.3	5.3	5.3	5.2
CZ	1.7	5.7	6.1	6.4	6.7	6.9	7.1	7.2	7.4	7.4	7.5
DK	1.9	8.1	8.8	9.2	9.4	9.6	9.7	9.9	10.0	10.0	10.0
DE	1.3	7.6	8.2	8.4	8.5	8.7	8.9	9.1	9.1	9.1	8.9
EE	1.3	4.4	4.8	5.1	5.3	5.5	5.6	5.7	5.7	5.7	5.7
IE	1.9	6.0	6.5	6.9	7.4	7.7	8.0	8.1	8.1	8.0	7.9
EL	2.1	6.6	6.7	7.0	7.4	7.8	8.2	8.4	8.6	8.7	8.7
ES	1.9	5.9	6.4	6.8	7.2	7.6	7.8	7.9	8.0	7.9	7.8
FR	1.6	7.7	8.2	8.4	8.7	9.0	9.2	9.3	9.4	9.4	9.4
HR	2.7	5.7	7.0	7.3	7.6	7.8	8.1	8.3	8.4	8.4	8.4
IT	1.2	6.1	6.2	6.4	6.6	6.8	7.0	7.1	7.2	7.3	7.2
CY	0.6	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.6	3.6
LV	1.5	3.8	4.3	4.6	4.8	5.0	5.2	5.3	5.4	5.3	5.3
LT	0.9	4.2	4.7	5.1	5.3	5.4	5.5	5.5	5.4	5.3	5.1
LU	0.8	4.6	4.6	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.4
HU	1.5	4.7	5.0	5.3	5.6	5.7	5.9	6.0	6.1	6.2	6.2
MT	3.0	5.7	6.4	6.9	7.4	7.9	8.2	8.3	8.4	8.5	8.7
NL	1.6	7.2	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8
AT	2.0	6.9	7.4	7.6	7.9	8.2	8.5	8.7	8.8	8.9	8.9
PL	2.2	4.2	4.7	5.1	5.4	5.7	5.9	6.0	6.1	6.3	6.4
PT	3.5	6.0	6.6	7.1	7.6	8.1	8.6	8.9	9.2	9.4	9.6
RO	1.7	3.8	4.3	4.6	4.8	5.0	5.2	5.3	5.4	5.5	5.5
SI	1.9	5.7	6.1	6.5	6.8	7.1	7.3	7.4	7.5	7.5	7.5
SK	3.3	5.7	6.4	7.0	7.5	7.9	8.2	8.5	8.8	8.9	9.0
FI	1.3	7.8	8.1	8.4	8.6	8.8	8.9	9.0	9.1	9.1	9.1
SE	1.2	6.9	7.2	7.4	7.6	7.7	7.8	7.9	8.0	8.0	8.0
UK	2.0	7.8	8.2	8.5	8.8	9.1	9.4	9.6	9.7	9.8	9.8
NO	1.7	7.5	7.9	8.1	8.3	8.5	8.7	8.9	9.0	9.1	9.2
EU28	1.6	6.9	7.4	7.6	7.8	8.1	8.3	8.5	8.5	8.6	8.5
EA	1.5	7.0	7.4	7.6	7.8	8.1	8.3	8.4	8.5	8.5	8.4

Table III.1.112: Health care spending as % of GDP - TFP risk scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.1	6.0	5.9	5.9	5.9	6.0	6.0	6.1	6.1	6.1	6.1
BG	0.3	4.0	4.2	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.4
CZ	0.9	5.7	5.9	6.1	6.2	6.4	6.5	6.5	6.6	6.7	6.7
DK	0.8	8.1	8.5	8.7	8.8	8.9	8.9	8.9	9.0	9.0	9.0
DE	0.5	7.6	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.3	8.2
EE	0.6	4.4	4.6	4.7	4.8	4.9	4.9	5.0	5.0	5.0	4.9
IE	1.2	6.0	6.3	6.6	6.9	7.1	7.3	7.3	7.3	7.2	7.2
EL	1.2	6.6	6.6	6.8	7.0	7.3	7.5	7.7	7.8	7.8	7.8
ES	1.0	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.1	7.0	6.9
FR	0.8	7.7	8.0	8.2	8.3	8.5	8.6	8.6	8.6	8.6	8.6
HR	1.7	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.4	7.4	7.4
IT	0.6	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.7	6.7	6.7
CY	0.3	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3
LV	0.6	3.8	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.4	4.4
LT	0.1	4.2	4.4	4.5	4.6	4.7	4.7	4.6	4.5	4.4	4.3
LU	0.5	4.6	4.6	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1
HU	0.8	4.7	4.8	5.0	5.1	5.2	5.3	5.3	5.4	5.4	5.4
MT	2.1	5.7	6.3	6.6	7.0	7.3	7.5	7.5	7.6	7.6	7.8
NL	0.9	7.2	7.5	7.7	7.9	8.0	8.1	8.2	8.2	8.1	8.1
AT	1.3	6.9	7.2	7.4	7.6	7.7	7.9	8.1	8.2	8.2	8.2
PL	1.2	4.2	4.4	4.6	4.8	5.0	5.1	5.1	5.2	5.3	5.4
PT	2.5	6.0	6.4	6.7	7.1	7.4	7.7	8.0	8.3	8.4	8.5
RO	0.9	3.8	4.1	4.2	4.3	4.5	4.5	4.6	4.7	4.7	4.7
SI	1.2	5.7	5.9	6.2	6.4	6.6	6.7	6.8	6.8	6.8	6.8
SK	2.0	5.7	6.1	6.4	6.7	6.9	7.1	7.3	7.5	7.6	7.7
FI	0.7	7.8	8.1	8.2	8.3	8.4	8.5	8.5	8.5	8.5	8.5
SE	0.4	6.9	7.0	7.1	7.2	7.2	7.2	7.2	7.2	7.3	7.3
UK	1.2	7.8	8.1	8.2	8.4	8.6	8.8	8.9	9.0	9.0	9.0
NO	0.9	7.5	7.7	7.8	8.0	8.0	8.1	8.2	8.3	8.4	8.4
EU28	0.8	6.9	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.8
EA	0.7	7.0	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.7

Table III.1.113: Long-term care spending as % of GDP - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.6	2.1	2.3	2.4	2.6	2.8	3.0	3.3	3.5	3.6	3.7
BG	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
CZ	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.4
DK	2.0	2.4	2.7	2.9	3.3	3.6	3.9	4.0	4.2	4.4	4.5
DE	1.5	1.4	1.7	1.8	2.0	2.1	2.3	2.5	2.8	2.9	2.9
EE	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2
IE	0.7	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4
EL	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9
ES	1.4	1.0	1.2	1.2	1.3	1.4	1.6	1.8	2.1	2.3	2.4
FR	0.8	2.0	2.1	2.1	2.2	2.4	2.6	2.7	2.7	2.8	2.8
HR	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IT	0.9	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7
CY	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
LV	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
LT	0.9	1.4	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.3
LU	1.7	1.5	1.6	1.7	1.8	1.9	2.1	2.4	2.7	2.9	3.2
HU	0.4	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2
MT	1.2	1.1	1.3	1.4	1.6	1.9	2.0	2.1	2.1	2.1	2.3
NL	3.0	4.1	3.8	4.1	4.6	5.2	5.8	6.3	6.7	7.0	7.1
AT	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
PL	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
PT	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
RO	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
SI	1.5	1.4	1.7	1.8	1.9	2.2	2.4	2.6	2.7	2.8	2.9
SK	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
FI	2.1	2.4	2.8	3.2	3.6	4.0	4.3	4.4	4.4	4.5	4.6
SE	1.5	3.6	3.9	4.1	4.4	4.6	4.6	4.7	4.8	5.0	5.1
UK	0.4	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5
NO	3.6	5.8	5.9	6.2	6.7	7.3	7.7	8.1	8.5	9.0	9.4
EU28	1.1	1.6	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.7
EA	1.3	1.7	1.9	1.9	2.1	2.2	2.4	2.6	2.8	2.9	3.0

Table III.1.114: Long-term care spending as % of GDP - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.5	2.1	2.3	2.4	2.5	2.7	3.0	3.2	3.4	3.6	3.6
BG	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
CZ	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.5
DK	2.2	2.4	2.7	3.0	3.3	3.7	3.9	4.1	4.3	4.5	4.7
DE	1.4	1.4	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.8	2.8
EE	0.7	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
IE	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5
EL	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0
ES	1.6	1.0	1.2	1.3	1.4	1.5	1.7	1.9	2.2	2.4	2.6
FR	0.9	2.0	2.1	2.2	2.3	2.4	2.6	2.7	2.8	2.9	2.9
HR	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IT	1.0	1.8	1.9	2.0	2.1	2.1	2.3	2.4	2.6	2.7	2.8
CY	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
LV	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
LT	1.0	1.4	1.6	1.8	1.9	2.1	2.2	2.3	2.4	2.4	2.3
LU	1.5	1.5	1.6	1.7	1.7	1.9	2.1	2.3	2.6	2.8	3.0
HU	0.4	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2
MT	1.3	1.1	1.3	1.5	1.8	2.1	2.2	2.3	2.3	2.3	2.4
NL	3.3	4.1	3.9	4.2	4.7	5.3	5.9	6.4	6.9	7.3	7.5
AT	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
PL	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
PT	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.9
RO	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.4
SI	1.4	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.7	2.8
SK	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
FI	1.9	2.4	2.8	3.0	3.4	3.8	4.1	4.2	4.3	4.3	4.4
SE	1.6	3.6	3.9	4.1	4.4	4.6	4.7	4.8	4.9	5.1	5.2
UK	0.4	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.6
NO	3.5	5.8	5.9	6.1	6.6	7.1	7.6	8.0	8.4	8.9	9.3
EU28	1.2	1.6	1.8	1.9	2.0	2.2	2.3	2.5	2.6	2.7	2.8
EA	1.3	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.9	3.0	3.0

Table III.1.115: Long-term care spending as % of GDP - High Life expectancy scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.0	2.1	2.4	2.5	2.6	2.9	3.2	3.5	3.8	4.0	4.1
BG	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
CZ	0.8	0.7	0.9	0.9	1.0	1.2	1.2	1.3	1.4	1.5	1.6
DK	2.8	2.4	2.7	3.0	3.4	3.8	4.1	4.4	4.7	5.0	5.2
DE	1.8	1.4	1.7	1.9	2.0	2.2	2.4	2.7	2.9	3.1	3.2
EE	0.8	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4
IE	1.0	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7
EL	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
ES	2.2	1.1	1.3	1.4	1.5	1.7	2.0	2.2	2.6	3.0	3.3
FR	1.1	2.0	2.1	2.2	2.3	2.5	2.7	2.8	3.0	3.0	3.1
HR	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
IT	1.2	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.7	2.9	3.0
CY	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6
LV	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9
LT	1.2	1.4	1.6	1.8	2.0	2.1	2.3	2.5	2.6	2.6	2.6
LU	1.9	1.5	1.6	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.4
HU	0.5	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.3
MT	1.5	1.1	1.3	1.5	1.8	2.1	2.3	2.4	2.5	2.5	2.6
NL	4.4	4.1	3.9	4.3	4.8	5.5	6.2	6.9	7.6	8.2	8.5
AT	1.7	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.7	3.0	3.1
PL	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
PT	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
RO	0.8	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5
SI	1.7	1.4	1.6	1.8	2.0	2.2	2.4	2.7	2.8	3.0	3.1
SK	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7
FI	2.5	2.4	2.8	3.1	3.5	4.0	4.4	4.6	4.7	4.8	4.9
SE	2.1	3.6	3.9	4.2	4.5	4.8	4.9	5.1	5.3	5.5	5.7
UK	0.5	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6
NO	4.5	5.8	5.9	6.2	6.7	7.4	8.0	8.5	9.0	9.7	10.2
EU28	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.6	2.8	3.0	3.1
EA	1.7	1.7	1.9	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.4

Table III.1.116: Long-term care spending as % of GDP - Base case scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.8	2.1	2.3	2.5	2.6	2.9	3.1	3.4	3.6	3.8	3.9
BG	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
CZ	0.8	0.7	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5
DK	2.2	2.4	2.7	3.0	3.3	3.7	4.0	4.1	4.4	4.6	4.7
DE	1.6	1.4	1.7	1.9	2.0	2.2	2.4	2.7	2.9	3.0	3.0
EE	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.3
IE	0.8	0.7	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.5
EL	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0
ES	1.6	1.0	1.2	1.3	1.3	1.4	1.6	1.9	2.1	2.4	2.6
FR	0.9	2.0	2.1	2.2	2.3	2.5	2.6	2.8	2.8	2.9	2.9
HR	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IT	1.0	1.8	1.9	1.9	2.0	2.1	2.3	2.5	2.6	2.8	2.8
CY	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
LV	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8
LT	1.0	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.5	2.5	2.4
LU	1.9	1.5	1.6	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.3
HU	0.5	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
MT	1.3	1.1	1.3	1.5	1.7	2.0	2.1	2.2	2.2	2.3	2.4
NL	3.5	4.1	3.9	4.2	4.7	5.4	6.1	6.6	7.1	7.5	7.7
AT	1.4	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.6	2.8	2.8
PL	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
PT	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9
RO	1.0	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.7
SI	1.6	1.4	1.7	1.8	2.0	2.2	2.5	2.7	2.8	3.0	3.0
SK	0.5	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7
FI	2.3	2.4	2.9	3.2	3.6	4.1	4.4	4.5	4.6	4.7	4.8
SE	1.8	3.6	3.9	4.2	4.5	4.7	4.8	4.9	5.1	5.3	5.5
UK	0.4	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6
NO	4.2	5.8	6.0	6.3	6.8	7.5	8.0	8.4	8.9	9.4	10.0
EU28	1.3	1.6	1.8	1.9	2.0	2.2	2.4	2.5	2.7	2.8	2.9
EA	1.4	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.9	3.1	3.1

Table III.1.117: Long-term care spending as % of GDP - Constant disability scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.4	2.1	2.3	2.4	2.5	2.7	2.9	3.2	3.3	3.5	3.5
BG	0.1	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
CZ	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.3
DK	1.9	2.4	2.7	2.9	3.2	3.6	3.8	3.9	4.1	4.2	4.3
DE	1.3	1.4	1.7	1.8	1.9	2.0	2.2	2.4	2.6	2.7	2.7
EE	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.1	1.2
IE	0.7	0.7	0.7	0.8	0.9	0.9	1.1	1.2	1.3	1.3	1.3
EL	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9
ES	1.3	1.0	1.2	1.2	1.2	1.4	1.5	1.7	2.0	2.2	2.3
FR	0.7	2.0	2.1	2.1	2.2	2.4	2.5	2.6	2.7	2.7	2.7
HR	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IT	0.8	1.8	1.9	1.9	1.9	2.0	2.1	2.3	2.4	2.5	2.5
CY	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
LV	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
LT	0.8	1.4	1.5	1.7	1.9	2.0	2.1	2.2	2.3	2.2	2.1
LU	1.5	1.5	1.6	1.6	1.7	1.9	2.1	2.3	2.6	2.8	3.0
HU	0.3	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0
MT	1.0	1.1	1.3	1.4	1.6	1.8	2.0	2.0	2.0	2.0	2.2
NL	2.5	4.1	3.8	4.0	4.5	5.0	5.6	6.0	6.3	6.6	6.7
AT	1.2	1.4	1.5	1.6	1.7	1.8	2.0	2.2	2.4	2.5	2.6
PL	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6
PT	0.3	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
RO	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4
SI	1.4	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.7	2.8
SK	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6
FI	1.9	2.4	2.8	3.1	3.5	3.9	4.2	4.2	4.3	4.3	4.4
SE	1.3	3.6	3.8	4.0	4.2	4.4	4.5	4.5	4.6	4.8	4.9
UK	0.3	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
NO	3.2	5.8	5.8	6.1	6.5	7.0	7.5	7.8	8.2	8.6	9.0
EU28	1.0	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.6
EA	1.1	1.7	1.8	1.9	2.0	2.2	2.4	2.5	2.7	2.8	2.8

Table III.1.118: Long-term care spending as % of GDP - Shift 1% of dependents from informal to formal care scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.0	2.1	2.5	2.6	2.8	3.1	3.4	3.6	3.9	4.0	4.2
BG	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8
CZ	0.8	0.7	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6
DK	3.0	2.4	3.2	3.6	4.1	4.5	4.7	4.9	5.1	5.4	5.5
DE	2.7	1.4	2.3	2.7	2.9	3.1	3.4	3.7	3.9	4.1	4.1
EE	0.9	0.6	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5
IE	1.1	0.7	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.7
EL	0.8	0.5	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
ES	1.8	1.0	1.3	1.5	1.5	1.7	1.9	2.1	2.4	2.7	2.8
FR	1.6	2.0	2.5	2.7	2.8	3.1	3.3	3.4	3.5	3.5	3.6
HR	0.5	0.4	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0
IT	1.6	1.8	2.2	2.4	2.5	2.6	2.8	3.0	3.2	3.4	3.4
CY	0.4	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
LV	0.8	0.6	0.9	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4
LT	1.3	1.4	1.7	2.0	2.2	2.4	2.6	2.7	2.8	2.8	2.6
LU	2.3	1.5	1.8	2.0	2.1	2.3	2.5	2.8	3.2	3.5	3.8
HU	1.2	0.8	1.1	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9
MT	1.6	1.1	1.4	1.7	1.9	2.2	2.4	2.5	2.5	2.5	2.7
NL	4.3	4.1	4.2	4.7	5.3	6.0	6.8	7.3	7.8	8.2	8.4
AT	1.7	1.4	1.7	1.8	2.0	2.2	2.3	2.6	2.8	3.0	3.1
PL	2.1	0.8	1.4	1.8	1.9	2.1	2.2	2.4	2.6	2.7	2.9
PT	2.5	0.5	1.4	1.9	2.0	2.2	2.3	2.6	2.7	2.9	3.0
RO	1.5	0.7	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.2
SI	2.1	1.4	2.0	2.2	2.4	2.7	3.0	3.2	3.4	3.5	3.6
SK	0.7	0.2	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9
FI	2.9	2.4	3.1	3.6	4.1	4.6	4.9	5.0	5.1	5.2	5.3
SE	3.0	3.6	4.6	5.2	5.5	5.8	5.9	6.0	6.1	6.4	6.6
UK	1.0	1.2	1.6	1.8	1.9	2.0	2.0	2.0	2.1	2.1	2.2
NO	4.9	5.8	6.3	6.8	7.4	8.1	8.6	9.0	9.5	10.1	10.6
EU28	1.9	1.6	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.5	3.6
EA	2.1	1.7	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.7	3.8

Table III.1.119: Long-term care spending as % of GDP - Coverage convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.8	2.1	2.3	2.5	2.6	2.9	3.2	3.4	3.6	3.8	3.9
BG	1.5	0.4	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.6	1.9
CZ	0.8	0.7	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5
DK	2.3	2.4	2.7	3.0	3.4	3.7	4.0	4.1	4.4	4.6	4.7
DE	2.6	1.4	1.8	2.0	2.2	2.5	2.8	3.2	3.6	3.9	4.0
EE	0.9	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
IE	1.7	0.7	0.8	0.9	1.1	1.3	1.5	1.8	2.0	2.2	2.4
EL	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.0
ES	2.1	1.0	1.2	1.3	1.4	1.6	1.9	2.2	2.6	2.9	3.1
FR	2.9	2.0	2.3	2.4	2.7	3.1	3.5	3.9	4.2	4.5	4.8
HR	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8
IT	1.3	1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.8	3.0	3.1
CY	0.5	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8
LV	2.4	0.6	0.8	0.9	1.1	1.3	1.5	1.8	2.2	2.6	3.1
LT	1.0	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.5	2.5	2.4
LU	3.6	1.5	1.8	1.9	2.1	2.4	2.8	3.3	3.8	4.4	5.0
HU	2.7	0.8	0.9	1.0	1.2	1.5	1.8	2.1	2.4	2.9	3.5
MT	2.0	1.1	1.3	1.5	1.8	2.2	2.4	2.6	2.8	2.9	3.2
NL	3.6	4.1	3.9	4.2	4.8	5.4	6.2	6.7	7.2	7.6	7.8
AT	1.4	1.4	1.5	1.6	1.8	2.0	2.1	2.3	2.6	2.8	2.8
PL	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
PT	1.1	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.4	1.5
RO	1.0	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.7
SI	1.9	1.4	1.7	1.9	2.1	2.3	2.6	2.9	3.1	3.3	3.4
SK	0.5	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7
FI	2.3	2.4	2.9	3.2	3.6	4.1	4.4	4.5	4.6	4.7	4.8
SE	3.8	3.6	4.1	4.5	5.0	5.4	5.7	6.0	6.4	6.9	7.4
UK	0.6	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8
NO	4.2	5.8	6.0	6.3	6.8	7.5	8.0	8.4	8.9	9.4	10.0
EU28	2.0	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.2	3.5	3.6
EA	2.3	1.7	1.9	2.1	2.3	2.6	2.9	3.2	3.6	3.8	4.0

Table III.1.120: Long-term care spending as % of GDP - EU28 cost convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.8	2.1	2.4	2.6	2.8	3.2	3.6	4.0	4.3	4.6	4.9
BG	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
CZ	5.7	0.7	1.0	1.3	1.6	2.0	2.5	3.1	3.9	5.0	6.4
DK	2.8	2.4	2.7	3.0	3.5	3.9	4.2	4.4	4.7	5.1	5.3
DE	2.2	1.4	1.8	1.9	2.1	2.3	2.6	2.9	3.3	3.5	3.6
EE	2.7	0.6	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.7	3.3
IE	1.3	0.7	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.9	2.0
EL	0.8	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2
ES	2.3	1.0	1.2	1.3	1.4	1.6	1.8	2.2	2.6	3.0	3.3
FR	1.0	2.0	2.1	2.2	2.3	2.5	2.7	2.8	2.9	2.9	2.9
HR	0.9	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.0	1.1	1.3
IT	1.1	1.8	1.9	1.9	2.0	2.1	2.3	2.5	2.6	2.8	2.8
CY	0.9	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.2
LV	0.4	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0
LT	3.8	1.4	1.7	2.1	2.6	3.1	3.5	4.0	4.6	5.0	5.2
LU	1.9	1.5	1.7	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.3
HU	1.4	0.8	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.9	2.2
MT	1.8	1.1	1.3	1.5	1.8	2.1	2.3	2.4	2.5	2.7	2.9
NL	4.0	4.1	3.9	4.3	4.9	5.6	6.3	6.9	7.4	7.9	8.1
AT	3.0	1.4	1.6	1.8	2.1	2.4	2.7	3.2	3.7	4.1	4.4
PL	2.1	0.8	1.0	1.1	1.3	1.5	1.8	2.0	2.3	2.5	2.9
PT	1.6	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.2	1.5	2.1
RO	3.5	0.7	0.9	1.0	1.2	1.4	1.7	2.1	2.6	3.2	4.2
SI	2.5	1.4	1.7	1.9	2.1	2.4	2.7	3.1	3.4	3.7	3.9
SK	4.7	0.2	0.4	0.6	0.8	1.1	1.5	2.0	2.7	3.7	5.0
FI	3.6	2.4	3.0	3.4	3.9	4.5	4.9	5.2	5.5	5.7	6.1
SE	2.4	3.6	4.0	4.2	4.6	4.9	5.0	5.2	5.4	5.7	6.0
UK	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.2
NO	4.4	5.8	6.0	6.3	6.9	7.6	8.1	8.6	9.1	9.6	10.2
EU28	1.8	1.6	1.8	2.0	2.1	2.3	2.6	2.8	3.1	3.3	3.5
EA	1.9	1.7	1.9	2.0	2.2	2.4	2.7	3.0	3.3	3.5	3.6

Table III.1.121: Long-term care spending as % of GDP - Cost and coverage convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.8	2.1	2.4	2.6	2.9	3.2	3.6	4.0	4.3	4.7	4.9
BG	2.7	0.4	0.5	0.6	0.7	0.9	1.1	1.4	1.8	2.4	3.1
CZ	5.7	0.7	1.0	1.3	1.6	2.0	2.5	3.1	3.9	5.0	6.4
DK	2.9	2.4	2.7	3.0	3.5	3.9	4.2	4.4	4.7	5.1	5.3
DE	3.4	1.4	1.8	2.1	2.4	2.7	3.1	3.6	4.1	4.5	4.8
EE	3.4	0.6	0.8	0.9	1.1	1.4	1.7	2.2	2.7	3.3	4.0
IE	2.5	0.7	0.8	1.0	1.2	1.4	1.8	2.1	2.5	2.9	3.2
EL	0.9	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
ES	3.1	1.0	1.3	1.4	1.6	1.8	2.2	2.6	3.2	3.7	4.1
FR	2.9	2.0	2.3	2.4	2.7	3.1	3.5	3.9	4.3	4.6	4.9
HR	1.3	0.4	0.5	0.6	0.6	0.7	0.9	1.0	1.2	1.4	1.7
IT	1.3	1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.8	3.0	3.1
CY	1.9	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.2	1.5	2.1
LV	3.0	0.6	0.8	0.9	1.1	1.4	1.6	2.0	2.5	3.0	3.6
LT	3.8	1.4	1.7	2.1	2.6	3.1	3.5	4.0	4.6	5.0	5.2
LU	3.6	1.5	1.8	1.9	2.1	2.4	2.8	3.3	3.9	4.5	5.1
HU	4.7	0.8	1.0	1.1	1.4	1.7	2.2	2.8	3.4	4.3	5.5
MT	2.8	1.1	1.4	1.6	1.9	2.3	2.7	2.9	3.2	3.5	3.9
NL	4.1	4.1	3.9	4.3	4.9	5.6	6.4	7.0	7.5	8.0	8.2
AT	3.0	1.4	1.6	1.8	2.1	2.4	2.7	3.2	3.7	4.1	4.5
PL	2.1	0.8	1.0	1.1	1.3	1.5	1.8	2.0	2.3	2.5	2.9
PT	2.3	0.5	0.6	0.6	0.7	0.9	1.0	1.3	1.6	2.1	2.7
RO	3.6	0.7	0.9	1.0	1.2	1.4	1.8	2.1	2.6	3.3	4.3
SI	2.9	1.4	1.8	1.9	2.2	2.5	2.9	3.3	3.7	4.0	4.3
SK	4.8	0.2	0.4	0.6	0.8	1.1	1.5	2.0	2.7	3.7	5.0
FI	3.6	2.4	3.0	3.4	3.9	4.5	4.9	5.2	5.5	5.7	6.1
SE	4.4	3.6	4.1	4.6	5.1	5.6	5.9	6.3	6.8	7.4	8.0
UK	1.2	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.2	2.4
NO	4.4	5.8	6.0	6.3	6.9	7.6	8.1	8.6	9.1	9.6	10.2
EU28	2.7	1.6	1.9	2.1	2.3	2.6	2.9	3.3	3.6	4.0	4.3
EA	2.9	1.7	2.0	2.2	2.4	2.7	3.1	3.5	3.9	4.3	4.6

Table III.1.122: Long-term care spending as % of GDP - AWG risk scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	2.6	2.1	2.4	2.6	2.8	3.1	3.5	3.8	4.2	4.5	4.7
BG	2.5	0.4	0.5	0.6	0.7	0.8	1.0	1.3	1.7	2.2	2.9
CZ	5.2	0.7	1.0	1.2	1.5	1.9	2.4	3.0	3.7	4.7	6.0
DK	2.6	2.4	2.7	3.0	3.4	3.8	4.1	4.3	4.6	4.9	5.1
DE	3.1	1.4	1.8	2.0	2.3	2.6	2.9	3.4	3.9	4.3	4.5
EE	3.2	0.6	0.8	0.9	1.1	1.3	1.7	2.1	2.5	3.1	3.7
IE	2.3	0.7	0.8	1.0	1.2	1.4	1.7	2.0	2.4	2.7	3.0
EL	0.8	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.2	1.3
ES	2.9	1.0	1.3	1.4	1.5	1.8	2.1	2.5	3.0	3.5	3.9
FR	2.7	2.0	2.2	2.4	2.6	3.0	3.4	3.8	4.1	4.4	4.7
HR	1.1	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.6
IT	1.1	1.8	1.9	2.0	2.0	2.2	2.3	2.5	2.7	2.8	2.9
CY	1.8	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.5	2.0
LV	2.7	0.6	0.8	0.9	1.1	1.3	1.5	1.9	2.3	2.8	3.4
LT	3.5	1.4	1.7	2.1	2.5	2.9	3.3	3.8	4.3	4.7	4.9
LU	3.3	1.5	1.7	1.9	2.1	2.3	2.7	3.2	3.7	4.2	4.8
HU	4.2	0.8	0.9	1.1	1.3	1.6	2.1	2.6	3.1	3.9	5.0
MT	2.6	1.1	1.3	1.6	1.9	2.3	2.6	2.8	3.0	3.3	3.7
NL	3.5	4.1	3.9	4.2	4.8	5.4	6.1	6.6	7.1	7.5	7.6
AT	2.8	1.4	1.6	1.8	2.1	2.3	2.6	3.1	3.5	3.9	4.2
PL	1.9	0.8	1.0	1.1	1.3	1.5	1.7	1.9	2.1	2.4	2.7
PT	2.1	0.5	0.6	0.6	0.7	0.8	1.0	1.2	1.5	2.0	2.6
RO	3.2	0.7	0.9	1.0	1.1	1.4	1.7	2.0	2.4	3.1	3.9
SI	2.7	1.4	1.7	1.9	2.2	2.5	2.9	3.2	3.6	3.9	4.2
SK	4.4	0.2	0.4	0.6	0.8	1.0	1.4	1.9	2.5	3.4	4.6
FI	3.3	2.4	2.9	3.3	3.8	4.3	4.8	5.0	5.2	5.5	5.8
SE	3.8	3.6	4.1	4.5	4.9	5.4	5.7	6.0	6.4	6.9	7.5
UK	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0	2.1	2.3
NO	3.8	5.8	5.9	6.2	6.7	7.3	7.8	8.2	8.6	9.1	9.6
EU28	2.4	1.6	1.9	2.0	2.2	2.5	2.8	3.1	3.5	3.8	4.1
EA	2.6	1.7	2.0	2.1	2.3	2.6	3.0	3.4	3.7	4.1	4.3

Table III.1.123: Long-term care spending as % of GDP - TFP risk scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	1.6	2.1	2.3	2.4	2.6	2.8	3.0	3.3	3.5	3.6	3.7
BG	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
CZ	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.4
DK	2.0	2.4	2.7	2.9	3.3	3.6	3.9	4.0	4.2	4.4	4.5
DE	1.5	1.4	1.7	1.8	2.0	2.1	2.3	2.5	2.8	2.9	2.9
EE	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2
IE	0.7	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4
EL	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9
ES	1.4	1.0	1.2	1.2	1.3	1.4	1.6	1.8	2.1	2.3	2.4
FR	0.8	2.0	2.1	2.1	2.2	2.4	2.6	2.7	2.7	2.8	2.8
HR	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IT	0.9	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7
CY	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
LV	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
LT	0.9	1.4	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.3
LU	1.7	1.5	1.6	1.7	1.8	1.9	2.1	2.4	2.7	2.9	3.2
HU	0.4	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2
MT	1.2	1.1	1.3	1.4	1.6	1.9	2.0	2.1	2.1	2.1	2.3
NL	3.0	4.1	3.8	4.1	4.6	5.2	5.8	6.3	6.7	7.0	7.1
AT	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
PL	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
PT	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
RO	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
SI	1.5	1.4	1.7	1.8	1.9	2.2	2.4	2.6	2.7	2.8	2.9
SK	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
FI	2.1	2.4	2.8	3.2	3.6	4.0	4.3	4.4	4.4	4.5	4.6
SE	1.5	3.6	3.9	4.1	4.4	4.6	4.6	4.7	4.8	5.0	5.1
UK	0.4	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5
NO	3.6	5.8	5.9	6.2	6.7	7.3	7.7	8.1	8.5	9.0	9.4
EU28	1.1	1.6	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.7
EA	1.3	1.7	1.9	1.9	2.1	2.2	2.4	2.6	2.8	2.9	3.0

Table III.1.124: Number of dependent people (in thousands) - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	457	863	921	966	1019	1088	1153	1211	1257	1291	1321
BG	11	280	284	284	286	289	291	291	291	292	291
CZ	335	842	905	955	1009	1052	1077	1094	1116	1146	1177
DK	119	444	478	494	511	523	532	541	550	558	563
DE	167	7395	7918	8066	8023	7966	8065	8195	8182	7945	7562
EE	15	113	120	121	123	126	129	130	129	129	128
IE	131	218	239	251	266	283	300	313	327	339	349
EL	126	866	901	919	936	965	992	1016	1025	1019	992
ES	1254	2452	2627	2729	2855	3022	3201	3379	3546	3662	3706
FR	2295	5826	6320	6608	6963	7356	7667	7870	7997	8084	8120
HR	22	274	287	290	294	299	302	302	300	297	296
IT	1871	4566	4894	5117	5356	5624	5897	6165	6379	6476	6437
CY	56	63	71	77	84	91	97	103	109	114	119
LV	-24	144	142	139	136	134	133	132	129	125	120
LT	-61	251	250	241	232	227	226	224	216	205	190
LU	50	32	39	43	48	54	60	66	71	77	81
HU	180	788	817	844	874	899	915	925	935	951	968
MT	10	15	18	20	21	23	23	24	24	24	25
NL	479	1241	1360	1435	1512	1588	1651	1695	1731	1741	1720
AT	361	776	846	895	942	988	1040	1093	1132	1143	1137
PL	830	2563	2745	2868	3013	3171	3283	3320	3319	3341	3393
PT	126	893	942	970	999	1027	1048	1058	1058	1045	1018
RO	338	1531	1584	1628	1680	1724	1761	1788	1818	1855	1869
SI	50	232	249	258	267	276	283	286	285	284	282
SK	246	521	564	601	643	682	711	729	742	755	767
FI	144	427	466	491	518	542	555	560	563	565	571
SE	310	620	691	728	767	799	824	851	880	907	929
UK	2192	5473	5878	6166	6446	6719	6956	7174	7380	7541	7665
NO	272	317	358	387	420	454	486	514	541	566	589
EU28	12089	39708	42554	44203	45821	47535	49170	50534	51491	51909	51797
EA	7753	26893	28886	29946	30941	32061	33230	34249	34902	35021	34646

Table III.1.125: Number of dependents receiving institutional care - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	165	143	159	168	181	209	236	263	285	298	308
BG	4	15	16	16	16	17	17	18	18	19	19
CZ	172	345	375	394	417	440	459	473	484	500	517
DK	50	44	51	57	65	73	78	82	87	92	95
DE	490	740	836	905	956	979	1045	1148	1240	1276	1231
EE	14	15	18	19	20	22	24	26	27	28	29
IE	48	27	32	35	40	45	51	58	64	70	75
EL	3	4	5	5	5	6	6	7	7	8	8
ES	410	307	354	376	387	423	470	519	589	659	718
FR	634	854	953	1003	1073	1191	1304	1377	1429	1467	1488
HR	1	16	16	16	17	17	17	17	17	17	17
IT	210	294	319	336	354	379	404	436	471	497	504
CY	4	3	4	4	4	5	5	6	6	7	7
LV	-2	11	11	10	10	10	10	10	9	9	9
LT	-10	61	62	61	59	58	59	59	58	55	52
LU	14	4	6	6	7	9	10	13	15	17	19
HU	70	95	104	110	118	127	136	148	152	154	165
MT	2	1	2	2	2	3	3	3	3	3	3
NL	409	383	436	482	541	609	673	720	764	793	792
AT	86	74	82	90	100	110	121	135	149	159	160
PL	79	86	98	107	117	130	143	151	155	158	165
PT	7	23	24	25	27	28	29	30	31	31	30
RO	98	189	203	208	218	230	244	252	261	272	287
SI	22	21	25	27	29	33	36	39	41	42	43
SK	39	45	50	53	58	64	70	74	77	80	84
FI	50	51	60	68	77	87	94	97	98	100	101
SE	92	87	97	107	122	135	143	150	160	171	179
UK	136	243	265	284	305	323	339	350	360	370	379
NO	83	45	49	55	65	77	88	97	108	118	128
EU28	3299	4182	4661	4978	5326	5760	6229	6659	7059	7348	7481
EA	2596	3063	3437	3677	3933	4269	4652	5018	5365	5597	5659

Table III.1.126: Number of dependents receiving home care - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	498	728	785	829	890	968	1042	1108	1159	1194	1226
BG	8	106	109	109	111	113	112	112	112	114	114
CZ	122	94	109	123	140	157	168	175	184	199	216
DK	83	101	116	128	142	153	160	168	175	182	185
DE	134	348	389	412	424	437	463	493	512	506	482
EE	5	6	7	8	9	9	10	10	11	11	11
IE	79	65	75	81	90	99	109	119	128	137	144
EL	5	10	11	12	12	13	13	14	15	15	15
ES	1218	693	826	893	945	1062	1202	1358	1560	1755	1910
FR	705	1089	1203	1261	1345	1481	1600	1677	1731	1772	1793
HR	1	17	18	18	18	18	19	19	18	18	18
IT	505	754	822	868	916	978	1043	1120	1197	1248	1258
CY	5	3	4	4	5	6	6	7	7	8	9
LV	-1	9	9	9	9	8	9	8	8	8	8
LT	18	67	73	75	76	78	82	87	91	90	85
LU	18	9	11	12	14	16	18	21	23	25	27
HU	45	61	66	70	75	81	87	95	97	99	106
MT	10	8	10	12	14	16	17	17	17	17	18
NL	424	544	623	689	766	840	901	945	977	984	968
AT	139	166	184	199	216	233	253	276	295	305	305
PL	113	118	135	147	162	179	198	211	216	221	231
PT	3	14	14	15	15	16	17	17	18	17	17
RO	138	204	223	231	244	263	280	293	306	323	343
SI	26	40	44	47	51	55	59	62	64	65	66
SK	66	62	68	74	82	92	101	108	113	120	127
FI	126	159	182	202	228	254	270	275	278	281	285
SE	173	206	232	256	283	304	317	330	348	365	379
UK	585	1020	1107	1199	1264	1332	1422	1491	1534	1563	1605
NO	232	192	217	240	271	302	329	354	380	404	424
EU28	5248	6701	7456	7984	8546	9259	9977	10616	11197	11641	11949
EA	3981	4772	5342	5702	6106	6660	7212	7722	8206	8558	8753

Table III.1.127: Number of dependents receiving cash benefits - AWG reference scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0	0	0	0	0	0	0	0	0	0	0
BG	0	0	0	0	0	0	0	0	0	0	0
CZ	347	329	375	410	459	508	542	562	584	626	676
DK	106	129	146	160	177	192	202	211	221	230	235
DE	535	1391	1558	1646	1696	1749	1852	1973	2048	2024	1926
EE	8	15	17	18	18	19	20	21	22	22	23
IE	0	0	0	0	0	0	0	0	0	0	0
EL	131	288	316	323	331	343	361	379	398	413	419
ES	733	490	574	618	644	712	797	885	1007	1125	1223
FR	15	428	436	433	431	430	433	437	439	442	443
HR	7	108	112	113	115	117	118	118	116	115	114
IT	1367	1823	2002	2121	2237	2402	2567	2770	2990	3145	3189
CY	10	8	9	10	11	12	13	14	15	16	17
LV	-2	9	9	8	8	8	8	8	8	7	7
LT	6	106	111	111	111	113	117	121	123	119	112
LU	3	2	2	3	3	3	4	4	5	5	5
HU	0	0	0	0	0	0	0	0	0	0	0
MT	0	3	3	3	3	3	3	3	3	3	3
NL	0	0	0	0	0	0	0	0	0	0	0
AT	463	458	513	562	618	671	734	809	878	916	921
PL	948	1583	1736	1840	1962	2106	2272	2377	2420	2448	2531
PT	150	268	293	308	323	342	363	383	401	413	418
RO	210	460	491	506	524	547	575	599	616	636	670
SI	53	47	55	61	66	71	79	88	93	97	100
SK	82	172	188	202	215	226	235	242	248	252	255
FI	152	308	341	367	397	426	442	449	452	455	460
SE	196	224	251	274	304	330	347	361	380	402	420
UK	1344	1508	1661	1799	1965	2139	2302	2462	2633	2771	2853
NO	148	115	128	142	161	181	199	215	232	248	263
EU28	6864	10156	11200	11896	12617	13470	14387	15276	16099	16683	17020
EA	3705	5816	6427	6793	7111	7531	8028	8586	9127	9454	9521

Table III.1.128: Number of dependent people (in thousands) - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	557	863	932	987	1050	1130	1207	1276	1334	1378	1420
BG	44	280	290	294	301	309	314	317	321	323	324
CZ	438	842	919	981	1046	1099	1134	1161	1195	1237	1281
DK	159	444	484	505	527	545	558	570	584	596	603
DE	785	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
EE	29	113	122	125	128	133	138	140	140	141	142
IE	161	218	243	258	277	298	317	334	349	365	379
EL	206	866	916	944	972	1012	1050	1083	1098	1098	1072
ES	1518	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
FR	2782	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
HR	52	274	292	300	308	316	323	325	326	325	326
IT	2321	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
CY	66	63	72	79	87	94	102	109	116	122	128
LV	-12	144	144	143	142	141	142	142	140	136	132
LT	-43	251	255	250	243	241	242	242	235	223	208
LU	58	32	39	45	50	57	64	71	78	84	89
HU	287	788	834	874	916	952	979	1001	1022	1049	1075
MT	12	15	18	20	22	24	25	25	25	26	27
NL	617	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
AT	445	776	858	916	972	1028	1091	1154	1201	1219	1221
PL	1152	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
PT	206	893	955	994	1034	1072	1102	1120	1128	1121	1098
RO	549	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
SI	70	232	252	264	275	286	295	300	301	302	301
SK	326	521	575	621	673	722	760	787	807	828	847
FI	188	427	472	502	535	564	583	592	598	605	615
SE	384	620	699	744	791	831	864	901	939	973	1004
UK	2673	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
NO	317	317	363	396	433	472	509	543	575	605	634
EU28	16028	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
EA	10291	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184

Table III.1.129: Number of dependents receiving institutional care - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	181	143	160	170	186	215	244	273	298	313	324
BG	5	15	16	17	17	17	18	19	19	20	20
CZ	213	345	380	404	430	458	481	499	515	535	557
DK	55	44	51	58	66	74	80	85	90	96	99
DE	554	740	846	922	979	1011	1085	1197	1297	1337	1294
EE	16	15	18	20	21	23	25	27	28	30	31
IE	52	27	32	36	41	47	54	60	67	74	79
EL	4	4	5	5	6	6	6	7	7	8	8
ES	448	307	358	383	396	435	486	540	615	692	755
FR	688	854	960	1016	1092	1216	1336	1416	1473	1516	1543
HR	3	16	17	17	17	18	18	18	18	18	18
IT	236	294	323	342	362	391	419	455	493	521	530
CY	5	3	4	4	5	5	6	6	7	7	8
LV	-1	11	11	11	10	10	10	10	10	10	10
LT	-6	61	63	62	61	61	62	63	62	60	56
LU	15	4	6	6	7	9	11	13	15	18	19
HU	83	95	105	113	122	133	144	157	163	166	178
MT	2	1	2	2	2	3	3	3	3	3	3
NL	466	383	442	493	558	632	704	758	810	844	849
AT	94	74	83	92	103	113	125	140	156	166	168
PL	90	86	100	109	121	135	150	159	163	167	176
PT	9	23	25	26	27	29	31	32	33	33	32
RO	122	189	207	215	227	241	258	269	280	293	311
SI	24	21	25	27	30	33	37	40	42	44	45
SK	45	45	50	55	60	67	73	78	82	86	90
FI	55	51	61	69	79	90	97	100	102	104	106
SE	103	87	97	109	125	139	149	157	168	180	190
UK	157	243	268	289	312	333	351	364	376	388	400
NO	90	45	49	56	66	79	91	101	112	124	135
EU28	3717	4182	4714	5070	5462	5944	6463	6946	7394	7727	7900
EA	2887	3063	3473	3739	4025	4396	4815	5220	5601	5863	5950

Table III.1.130: Number of dependents receiving home care - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	582	728	794	846	915	1003	1087	1163	1224	1268	1310
BG	20	106	111	113	117	120	120	121	123	126	126
CZ	137	94	110	125	144	162	175	184	195	212	231
DK	92	101	117	130	145	157	165	174	183	190	194
DE	162	348	394	419	435	452	482	516	538	533	510
EE	6	6	8	8	9	9	10	11	11	12	12
IE	88	65	75	83	93	103	114	125	136	146	154
EL	6	10	12	12	12	13	14	15	15	16	16
ES	1312	693	833	905	964	1088	1240	1408	1625	1836	2004
FR	791	1089	1215	1282	1377	1524	1652	1739	1802	1851	1880
HR	3	17	18	19	19	20	20	20	20	20	20
IT	572	754	831	883	938	1008	1082	1168	1254	1310	1326
CY	6	3	4	4	5	6	6	7	8	8	9
LV	-1	9	9	9	9	9	9	9	9	9	8
LT	22	67	74	77	78	81	85	91	95	94	89
LU	20	9	11	12	14	17	19	22	24	27	29
HU	53	61	67	72	78	85	92	101	104	106	114
MT	11	8	10	12	15	16	17	18	18	18	20
NL	497	544	631	704	789	873	943	998	1038	1052	1041
AT	157	166	186	203	222	241	263	288	310	321	323
PL	128	118	137	150	167	186	207	220	227	234	246
PT	4	14	14	15	15	16	17	18	18	18	18
RO	164	204	226	238	254	274	295	311	327	347	368
SI	29	40	45	48	52	56	61	64	66	68	69
SK	74	62	69	76	85	95	105	114	120	127	136
FI	142	159	184	205	233	262	279	287	291	295	301
SE	197	206	234	260	290	314	330	346	366	387	403
UK	674	1020	1118	1219	1294	1372	1472	1551	1603	1641	1694
NO	260	192	219	245	278	312	343	372	401	428	452
EU28	5950	6701	7538	8132	8767	9560	10362	11088	11750	12270	12650
EA	4481	4772	5399	5805	6260	6872	7486	8060	8602	9008	9253

Table III.1.131: Number of dependents receiving cash benefits - Demographic scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0	0	0	0	0	0	0	0	0	0	0
BG	0	0	0	0	0	0	0	0	0	0	0
CZ	393	329	380	419	471	525	564	589	616	664	722
DK	117	129	147	163	181	197	208	218	230	240	245
DE	647	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039
EE	10	15	17	18	19	19	21	22	23	24	24
IE	0	0	0	0	0	0	0	0	0	0	0
EL	152	288	319	330	340	355	375	396	417	433	440
ES	792	490	579	627	658	730	822	918	1048	1177	1282
FR	33	428	440	439	439	440	445	450	454	459	461
HR	19	108	114	117	120	124	126	127	127	126	126
IT	1527	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350
CY	11	8	9	10	11	12	13	15	16	17	18
LV	-1	9	9	9	8	8	8	8	8	8	8
LT	13	106	112	113	114	117	123	128	129	126	118
LU	4	2	2	3	3	3	4	4	5	5	6
HU	0	0	0	0	0	0	0	0	0	0	0
MT	0	3	3	3	3	3	3	3	3	3	3
NL	0	0	0	0	0	0	0	0	0	0	0
AT	513	458	519	572	633	692	762	844	918	961	971
PL	1130	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714
PT	173	268	296	313	332	353	377	400	419	434	440
RO	266	460	501	521	546	574	610	639	663	687	725
SI	56	47	56	61	67	73	81	90	96	100	103
SK	108	172	192	208	224	238	250	260	269	276	280
FI	180	308	344	373	407	439	459	468	474	479	488
SE	222	224	254	279	311	341	361	377	400	425	446
UK	1449	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957
NO	164	115	129	144	165	187	206	224	243	262	278
EU28	7813	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968
EA	4217	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032

Table III.1.132: Number of dependent people (in thousands) - Constant disability scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	361	863	909	945	988	1046	1100	1146	1181	1205	1224
BG	-18	280	278	273	272	271	270	268	266	265	262
CZ	242	842	892	930	973	1006	1022	1030	1042	1064	1085
DK	102	444	472	483	497	507	516	525	536	544	546
DE	-316	7395	7792	7860	7759	7637	7670	7737	7703	7462	7079
EE	4	113	117	117	117	119	121	122	120	118	117
IE	111	218	235	244	256	272	286	299	311	321	328
EL	51	866	887	894	901	919	937	952	957	946	917
ES	1001	2452	2595	2671	2772	2912	3059	3206	3341	3429	3453
FR	1867	5826	6251	6487	6788	7134	7404	7561	7647	7695	7693
HR	-3	274	282	281	281	284	286	284	280	275	271
IT	1427	4566	4833	5009	5199	5410	5627	5839	6004	6065	5993
CY	47	63	70	76	81	87	93	98	102	106	110
LV	-35	144	139	134	130	126	125	122	118	114	109
LT	-77	251	244	232	222	216	213	209	200	188	174
LU	45	32	38	42	46	51	57	62	68	72	77
HU	83	788	800	814	832	846	852	852	852	862	871
MT	8	15	17	19	21	22	22	22	22	22	23
NL	366	1241	1342	1403	1465	1526	1575	1604	1631	1635	1607
AT	285	776	835	875	915	951	993	1037	1068	1074	1061
PL	532	2563	2695	2781	2885	3004	3085	3095	3068	3064	3095
PT	56	893	928	946	965	984	998	1002	995	978	949
RO	153	1531	1547	1565	1596	1627	1640	1653	1667	1688	1685
SI	32	232	246	253	260	266	271	272	271	267	263
SK	171	521	553	581	612	642	662	673	679	685	692
FI	110	427	460	480	502	523	533	535	536	535	537
SE	269	620	682	712	744	769	789	811	841	868	889
UK	1750	5473	5814	6051	6285	6510	6697	6868	7024	7143	7223
NO	246	317	354	379	408	438	466	493	518	542	563
EU28	8624	39708	41955	43159	44364	45669	46901	47883	48530	48689	48332
EA	5513	26893	28493	29268	29999	30843	31744	32498	32954	32917	32406

Table III.1.133: Number of dependents receiving institutional care - Constant disability scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	149	143	157	165	177	203	228	252	273	284	292
BG	3	15	16	16	16	16	17	17	17	18	18
CZ	136	345	370	385	404	423	438	448	455	468	481
DK	47	44	50	56	64	71	76	80	85	89	91
DE	434	740	825	888	933	948	1008	1101	1186	1220	1175
EE	12	15	18	19	20	21	24	25	26	27	27
IE	44	27	31	35	39	44	50	55	61	67	71
EL	3	4	5	5	5	6	6	6	7	7	8
ES	374	307	350	370	379	412	454	499	564	628	682
FR	582	854	946	992	1056	1167	1275	1342	1388	1421	1437
HR	0	16	16	16	16	16	16	16	16	15	15
IT	184	294	316	330	345	368	390	418	450	473	478
CY	4	3	4	4	4	5	5	6	6	7	7
LV	-3	11	10	10	9	9	9	9	9	8	8
LT	-14	61	61	59	56	56	56	56	54	51	48
LU	13	4	5	6	7	8	10	12	14	16	18
HU	57	95	102	107	113	121	129	139	142	143	152
MT	2	1	2	2	2	2	3	3	3	3	3
NL	357	383	431	472	526	586	644	683	722	745	740
AT	79	74	81	89	98	107	117	129	143	152	153
PL	68	86	97	104	113	125	137	144	146	148	154
PT	5	23	24	25	26	27	28	29	29	29	28
RO	78	189	199	202	209	220	231	238	245	253	266
SI	20	21	25	27	29	32	35	38	40	41	42
SK	32	45	49	52	56	61	66	70	72	74	78
FI	45	51	60	67	75	85	91	94	95	95	97
SE	84	87	96	105	119	131	139	145	153	163	171
UK	116	243	263	280	298	314	328	336	344	351	358
NO	77	45	48	54	63	75	85	94	103	113	121
EU28	2913	4182	4609	4887	5195	5585	6009	6389	6745	6997	7095
EA	2325	3063	3400	3616	3843	4147	4498	4827	5142	5348	5388

Table III.1.134: Number of dependents receiving home care - Constant disability scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	416	728	776	813	865	933	998	1054	1095	1122	1144
BG	-3	106	106	106	106	107	105	104	103	104	103
CZ	107	94	107	120	136	151	161	167	173	186	201
DK	78	101	115	126	139	149	156	163	171	176	179
DE	110	348	385	404	413	423	445	472	489	483	458
EE	4	6	7	8	8	9	9	10	10	10	11
IE	71	65	74	79	87	96	105	114	122	130	136
EL	4	10	11	12	12	12	13	13	14	14	14
ES	1125	693	819	880	926	1036	1165	1308	1496	1674	1817
FR	627	1089	1191	1241	1316	1443	1554	1622	1669	1702	1715
HR	-1	17	17	17	17	18	18	17	17	17	16
IT	438	754	814	854	894	948	1005	1072	1141	1186	1192
CY	5	3	4	4	5	5	6	7	7	8	8
LV	-2	9	9	9	8	8	8	8	8	7	7
LT	14	67	72	74	74	76	79	84	87	86	81
LU	17	9	11	12	14	15	18	20	22	24	25
HU	37	61	65	69	73	78	83	89	91	92	97
MT	9	8	10	12	14	15	16	16	16	16	17
NL	359	544	615	674	743	809	861	895	921	923	902
AT	122	166	182	195	211	226	243	263	281	289	288
PL	98	118	133	144	157	172	190	201	205	208	216
PT	2	14	14	14	15	16	16	17	17	17	16
RO	114	204	219	225	236	252	267	278	288	302	319
SI	23	40	44	47	50	53	57	60	61	62	63
SK	57	62	67	72	79	88	96	103	107	112	119
FI	111	159	180	198	222	247	261	266	267	268	270
SE	156	206	229	251	276	295	306	317	334	350	363
UK	502	1020	1096	1178	1235	1294	1374	1434	1468	1489	1522
NO	213	192	215	236	264	292	317	341	365	387	405
EU28	4600	6701	7374	7837	8332	8972	9613	10172	10680	11058	11301
EA	3512	4772	5284	5601	5956	6457	6953	7402	7831	8134	8284

Table III.1.135: Number of dependents receiving cash benefits - Constant disability scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0	0	0	0	0	0	0	0	0	0	0
BG	0	0	0	0	0	0	0	0	0	0	0
CZ	306	329	370	402	446	491	521	537	554	591	635
DK	99	129	145	158	174	188	197	206	215	224	228
DE	442	1391	1539	1615	1653	1693	1782	1888	1956	1932	1833
EE	7	15	17	17	18	18	19	20	21	21	22
IE	0	0	0	0	0	0	0	0	0	0	0
EL	111	288	312	318	323	332	347	364	381	394	400
ES	675	490	569	610	632	694	772	853	966	1075	1165
FR	0	428	433	428	424	422	424	426	427	428	427
HR	-3	108	110	110	110	111	111	110	108	106	104
IT	1208	1823	1982	2086	2187	2332	2477	2658	2857	2998	3031
CY	9	8	9	9	10	11	12	13	14	15	16
LV	-3	9	9	8	8	7	7	7	7	7	7
LT	0	106	109	108	108	109	112	116	117	113	105
LU	3	2	2	3	3	3	4	4	4	5	5
HU	0	0	0	0	0	0	0	0	0	0	0
MT	-1	3	3	3	3	3	3	3	3	3	3
NL	0	0	0	0	0	0	0	0	0	0	0
AT	416	458	508	552	604	651	708	775	839	873	874
PL	776	1583	1710	1795	1895	2018	2167	2256	2283	2293	2359
PT	132	268	290	302	315	332	351	369	385	396	399
RO	162	460	482	490	503	523	546	565	578	593	621
SI	49	47	55	60	64	69	77	85	90	94	96
SK	58	172	185	195	205	214	220	224	228	230	231
FI	130	308	338	360	387	413	428	433	434	435	438
SE	180	224	249	269	296	320	335	347	366	387	404
UK	1246	1508	1650	1778	1933	2096	2248	2396	2555	2683	2754
NO	136	115	127	139	157	176	192	207	223	238	251
EU28	6001	10156	11074	11676	12301	13054	13870	14657	15387	15893	16157
EA	3236	5816	6358	6674	6943	7306	7744	8239	8728	9017	9052

Table III.1.136: Number of dependent people (in thousands) - Shift 1% of dependents from informal to formal care scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	557	863	932	987	1050	1130	1207	1276	1334	1378	1420
BG	44	280	290	294	301	309	314	317	321	323	324
CZ	438	842	919	981	1046	1099	1134	1161	1195	1237	1281
DK	159	444	484	505	527	545	558	570	584	596	603
DE	785	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
EE	29	113	122	125	128	133	138	140	140	141	142
IE	161	218	243	258	277	298	317	334	349	365	379
EL	206	866	916	944	972	1012	1050	1083	1098	1098	1072
ES	1518	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
FR	2782	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
HR	52	274	292	300	308	316	323	325	326	325	326
IT	2321	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
CY	66	63	72	79	87	94	102	109	116	122	128
LV	-12	144	144	143	142	141	142	142	140	136	132
LT	-43	251	255	250	243	241	242	242	235	223	208
LU	58	32	39	45	50	57	64	71	78	84	89
HU	287	788	834	874	916	952	979	1001	1022	1049	1075
MT	12	15	18	20	22	24	25	25	25	26	27
NL	617	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
AT	445	776	858	916	972	1028	1091	1154	1201	1219	1221
PL	1152	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
PT	206	893	955	994	1034	1072	1102	1120	1128	1121	1098
RO	549	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
SI	70	232	252	264	275	286	295	300	301	302	301
SK	326	521	575	621	673	722	760	787	807	828	847
FI	188	427	472	502	535	564	583	592	598	605	615
SE	384	620	699	744	791	831	864	901	939	973	1004
UK	2673	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
NO	317	317	363	396	433	472	509	543	575	605	634
EU28	16028	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
EA	10291	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184

Table III.1.137: Number of dependents receiving institutional care - Shift 1% of dependents from informal to formal care scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	203	143	168	183	199	230	261	291	317	333	345
BG	10	15	19	20	21	21	22	23	24	24	25
CZ	308	345	432	482	512	543	568	588	605	628	652
DK	71	44	60	70	80	89	95	100	106	112	115
DE	1098	740	1208	1455	1516	1549	1639	1768	1875	1904	1839
EE	25	15	23	27	29	31	34	36	37	38	40
IE	63	27	37	43	48	55	63	70	77	85	91
EL	36	4	23	31	33	34	36	38	40	41	41
ES	577	307	430	489	505	548	603	660	739	818	884
FR	1051	854	1142	1291	1386	1532	1669	1761	1827	1876	1905
HR	18	16	26	31	32	33	34	34	34	34	34
IT	429	294	418	485	513	550	588	633	681	714	723
CY	11	3	6	8	9	10	11	12	12	13	14
LV	6	11	16	18	18	18	18	18	18	18	17
LT	4	61	73	75	73	73	74	74	73	70	65
LU	17	4	6	7	8	10	12	15	17	20	22
HU	149	95	141	167	178	191	204	218	225	230	244
MT	2	1	2	2	3	3	3	3	3	3	4
NL	544	383	479	550	619	697	774	832	886	922	927
AT	130	74	99	117	129	142	156	173	191	202	204
PL	244	86	180	230	250	273	294	306	311	318	329
PT	85	23	71	95	99	103	107	109	110	110	107
RO	220	189	263	298	313	330	350	362	375	390	409
SI	35	21	31	36	39	43	47	51	53	55	56
SK	81	45	69	83	91	99	107	113	117	122	127
FI	70	51	68	80	91	103	111	114	116	118	121
SE	128	87	109	127	144	159	170	179	191	204	215
UK	312	243	346	407	439	467	489	505	522	540	555
NO	100	45	52	61	72	85	98	109	121	133	145
EU28	5928	4182	5946	6909	7376	7937	8537	9087	9585	9941	10110
EA	4468	3063	4370	5075	5408	5831	6311	6772	7190	7461	7531

Table III.1.138: Number of dependents receiving home care - Shift 1% of dependents from informal to formal care scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	702	728	851	932	1007	1101	1191	1272	1337	1385	1430
BG	48	106	128	139	143	147	148	149	151	153	154
CZ	170	94	123	146	167	187	201	211	223	243	264
DK	136	101	143	168	184	197	207	216	225	233	238
DE	435	348	595	713	729	747	780	816	834	818	783
EE	10	6	11	13	14	14	15	16	16	16	17
IE	115	65	88	102	113	125	137	149	160	171	180
EL	80	10	58	80	83	86	89	92	93	93	91
ES	1579	693	947	1077	1149	1289	1458	1644	1877	2100	2272
FR	1290	1089	1481	1680	1797	1968	2115	2215	2288	2344	2378
HR	20	17	29	34	35	36	37	37	37	37	37
IT	1068	754	1082	1263	1339	1433	1530	1639	1742	1806	1821
CY	13	3	6	8	9	11	12	13	14	15	16
LV	5	9	14	16	15	15	15	15	15	15	14
LT	33	67	83	89	90	93	98	104	108	106	100
LU	27	9	13	16	18	21	24	27	30	33	35
HU	95	61	90	106	114	122	130	139	144	147	155
MT	14	8	12	14	17	18	19	20	20	21	22
NL	605	544	690	793	884	972	1046	1104	1146	1160	1148
AT	243	166	230	270	292	315	342	371	395	407	409
PL	346	118	253	325	351	382	411	429	438	447	464
PT	39	14	35	45	47	49	51	53	53	53	52
RO	274	204	284	323	344	368	393	412	432	455	478
SI	49	40	57	66	70	75	80	84	86	87	89
SK	123	62	90	109	121	135	147	157	165	174	185
FI	189	159	210	244	274	305	324	332	337	341	348
SE	272	206	272	317	350	377	395	414	437	459	478
UK	1334	1020	1456	1729	1829	1932	2057	2160	2233	2287	2354
NO	314	192	242	280	316	353	386	418	450	479	506
EU28	9313	6701	9327	10818	11586	12519	13451	14289	15036	15608	16013
EA	6618	4772	6551	7531	8070	8772	9473	10122	10717	11146	11391

Table III.1.139: Number of dependents receiving cash benefits - Shift 1% of dependents from informal to formal care scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0	0	0	0	0	0	0	0	0	0	0
BG	0	0	0	0	0	0	0	0	0	0	0
CZ	393	329	380	419	471	525	564	589	616	664	722
DK	117	129	147	163	181	197	208	218	230	240	245
DE	647	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039
EE	10	15	17	18	19	19	21	22	23	24	24
IE	0	0	0	0	0	0	0	0	0	0	0
EL	152	288	319	330	340	355	375	396	417	433	440
ES	792	490	579	627	658	730	822	918	1048	1177	1282
FR	33	428	440	439	439	440	445	450	454	459	461
HR	19	108	114	117	120	124	126	127	127	126	126
IT	1527	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350
CY	11	8	9	10	11	12	13	15	16	17	18
LV	-1	9	9	9	8	8	8	8	8	8	8
LT	13	106	112	113	114	117	123	128	129	126	118
LU	4	2	2	3	3	3	4	4	5	5	6
HU	0	0	0	0	0	0	0	0	0	0	0
MT	0	3	3	3	3	3	3	3	3	3	3
NL	0	0	0	0	0	0	0	0	0	0	0
AT	513	458	519	572	633	692	762	844	918	961	971
PL	1130	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714
PT	173	268	296	313	332	353	377	400	419	434	440
RO	266	460	501	521	546	574	610	639	663	687	725
SI	56	47	56	61	67	73	81	90	96	100	103
SK	108	172	192	208	224	238	250	260	269	276	280
FI	180	308	344	373	407	439	459	468	474	479	488
SE	222	224	254	279	311	341	361	377	400	425	446
UK	1449	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957
NO	164	115	129	144	165	187	206	224	243	262	278
EU28	7813	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968
EA	4217	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032

Table III.1.140: Number of dependent people (in thousands) - Coverage convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	557	863	932	987	1050	1130	1207	1276	1334	1378	1420
BG	44	280	290	294	301	309	314	317	321	323	324
CZ	438	842	919	981	1046	1099	1134	1161	1195	1237	1281
DK	159	444	484	505	527	545	558	570	584	596	603
DE	785	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
EE	29	113	122	125	128	133	138	140	140	141	142
IE	161	218	243	258	277	298	317	334	349	365	379
EL	206	866	916	944	972	1012	1050	1083	1098	1098	1072
ES	1518	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
FR	2782	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
HR	52	274	292	300	308	316	323	325	326	325	326
IT	2321	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
CY	66	63	72	79	87	94	102	109	116	122	128
LV	-12	144	144	143	142	141	142	142	140	136	132
LT	-43	251	255	250	243	241	242	242	235	223	208
LU	58	32	39	45	50	57	64	71	78	84	89
HU	287	788	834	874	916	952	979	1001	1022	1049	1075
MT	12	15	18	20	22	24	25	25	25	26	27
NL	617	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
AT	445	776	858	916	972	1028	1091	1154	1201	1219	1221
PL	1152	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
PT	206	893	955	994	1034	1072	1102	1120	1128	1121	1098
RO	549	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
SI	70	232	252	264	275	286	295	300	301	302	301
SK	326	521	575	621	673	722	760	787	807	828	847
FI	188	427	472	502	535	564	583	592	598	605	615
SE	384	620	699	744	791	831	864	901	939	973	1004
UK	2673	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
NO	317	317	363	396	433	472	509	543	575	605	634
EU28	16028	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
EA	10291	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184

Table III.1.141: Number of dependents receiving institutional care - Coverage convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	181	143	160	170	186	215	244	273	298	313	324
BG	70	15	19	22	25	30	37	45	55	67	85
CZ	213	345	380	404	430	458	481	499	515	535	557
DK	55	44	51	58	66	74	80	85	91	96	99
DE	1102	740	895	1012	1120	1203	1336	1521	1701	1822	1842
EE	24	15	19	21	23	26	30	32	34	37	39
IE	98	27	35	41	49	59	70	83	97	111	125
EL	11	4	6	6	7	8	9	11	12	14	15
ES	723	307	382	426	464	531	615	706	818	932	1030
FR	1871	854	1033	1157	1324	1564	1832	2069	2292	2514	2725
HR	16	16	17	18	20	21	23	25	27	29	32
IT	323	294	329	354	382	417	456	501	550	592	616
CY	15	3	4	5	6	7	9	11	13	15	18
LV	29	11	13	14	16	18	21	25	30	34	40
LT	-6	61	63	62	61	61	62	63	62	60	56
LU	25	4	6	7	9	11	14	17	21	25	29
HU	340	95	120	142	169	201	238	278	317	368	435
MT	3	1	2	2	2	3	3	4	4	4	4
NL	476	383	443	495	561	636	709	764	817	853	859
AT	94	74	83	92	103	113	125	140	156	166	168
PL	92	86	100	109	121	135	150	160	164	169	178
PT	31	23	27	30	33	37	41	45	49	52	54
RO	128	189	207	216	228	243	261	272	284	298	317
SI	31	21	26	28	32	36	41	45	48	50	52
SK	47	45	50	55	61	67	74	79	83	87	92
FI	55	51	61	69	79	90	97	100	102	104	106
SE	157	87	101	117	136	156	172	186	204	225	244
UK	206	243	271	294	321	346	370	388	408	429	449
NO	90	45	49	56	66	79	91	101	112	124	135
EU28	6408	4182	4902	5428	6033	6768	7600	8427	9251	10001	10591
EA	5131	3063	3635	4048	4516	5102	5789	6490	7188	7784	8195

Table III.1.142: Number of dependents receiving home care - Coverage convergence scenario

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	610	728	796	849	921	1011	1098	1178	1242	1291	1338
BG	272	106	127	144	166	190	215	243	278	324	378
CZ	137	94	110	125	144	162	175	184	195	212	231
DK	93	101	117	131	145	157	166	174	183	191	194
DE	398	348	419	465	504	546	603	668	720	744	746
EE	10	6	8	9	10	11	12	13	14	15	16
IE	184	65	82	95	112	131	153	176	200	226	249
EL	19	10	13	14	16	17	20	22	25	28	30
ES	1901	693	874	983	1091	1275	1502	1759	2067	2364	2594
FR	2291	1089	1313	1472	1687	1984	2296	2578	2847	3118	3380
HR	17	17	19	20	22	23	25	27	30	32	34
IT	800	754	850	919	994	1085	1185	1297	1410	1501	1553
CY	18	3	4	5	7	8	10	12	15	18	21
LV	28	9	11	12	14	16	20	23	28	32	37
LT	22	67	74	77	78	81	85	91	95	94	89
LU	38	9	12	14	17	21	25	30	36	41	46
HU	216	61	77	91	108	129	152	177	202	234	277
MT	18	8	11	13	16	18	20	21	23	24	26
NL	524	544	634	709	796	883	956	1014	1057	1074	1067
AT	158	166	186	203	222	241	264	289	310	322	324
PL	130	118	137	151	167	187	208	222	229	235	248
PT	15	14	15	17	18	20	22	24	26	28	29
RO	172	204	227	239	255	276	299	315	331	354	377
SI	40	40	46	50	55	61	66	71	75	77	80
SK	77	62	69	76	85	96	106	115	122	129	139
FI	142	159	184	205	233	262	279	287	291	295	301
SE	339	206	245	281	322	359	389	422	463	505	545
UK	893	1020	1130	1242	1332	1430	1553	1659	1746	1825	1913
NO	260	192	219	245	278	312	343	372	401	428	452
EU28	9562	6701	7790	8612	9536	10681	11905	13093	14259	15331	16263
EA	7293	4772	5601	6189	6876	7768	8723	9669	10603	11420	12066

Table III.1.143: Number of dependents receiving cash benefits - Coverage convergence scenario										
Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0	0	0	0	0	0	0	0	0	0	0
BG	0	0	0	0	0	0	0	0	0	0	0
CZ	393	329	380	419	471	525	564	589	616	664	722
DK	117	129	147	163	181	197	208	218	230	240	245
DE	647	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039
EE	10	15	17	18	19	19	21	22	23	24	24
IE	0	0	0	0	0	0	0	0	0	0	0
EL	152	288	319	330	340	355	375	396	417	433	440
ES	792	490	579	627	658	730	822	918	1048	1177	1282
FR	33	428	440	439	439	440	445	450	454	459	461
HR	19	108	114	117	120	124	126	127	127	126	126
IT	1527	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350
CY	11	8	9	10	11	12	13	15	16	17	18
LV	-1	9	9	9	8	8	8	8	8	8	8
LT	13	106	112	113	114	117	123	128	129	126	118
LU	4	2	2	3	3	3	4	4	5	5	6
HU	0	0	0	0	0	0	0	0	0	0	0
MT	0	3	3	3	3	3	3	3	3	3	3
NL	0	0	0	0	0	0	0	0	0	0	0
AT	513	458	519	572	633	692	762	844	918	961	971
PL	1130	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714
PT	173	268	296	313	332	353	377	400	419	434	440
RO	266	460	501	521	546	574	610	639	663	687	725
SI	56	47	56	61	67	73	81	90	96	100	103
SK	108	172	192	208	224	238	250	260	269	276	280
FI	180	308	344	373	407	439	459	468	474	479	488
SE	222	224	254	279	311	341	361	377	400	425	446
UK	1449	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957
NO	164	115	129	144	165	187	206	224	243	262	278
EU28	7813	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968
EA	4217	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032

Table III.1.144: Education spending as % of GDP - Total - Baseline

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.3	5.8	5.7	5.9	6.0	6.0	6.0	6.0	6.0	6.1	6.1
BG	0.4	3.0	2.9	3.0	3.0	3.0	2.9	3.1	3.2	3.4	3.4
CZ	0.7	3.4	3.6	3.9	3.9	3.8	3.7	3.8	4.0	4.1	4.1
DK	-0.7	7.6	7.1	6.9	6.9	7.1	7.2	7.2	7.0	6.9	6.8
DE	0.3	4.1	3.8	3.9	4.0	4.2	4.2	4.2	4.2	4.3	4.4
EE	0.8	4.4	4.6	4.8	4.8	4.6	4.4	4.5	4.8	5.1	5.1
IE	0.0	6.0	6.4	6.3	5.8	5.3	5.2	5.6	6.0	6.2	5.9
EL	-1.1	4.1	3.5	3.2	3.0	2.8	2.7	2.7	2.9	2.9	3.0
ES	-0.8	4.6	4.1	3.8	3.4	3.2	3.1	3.4	3.6	3.8	3.7
FR	-0.2	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.8	4.8
HR	-0.4	3.7	3.5	3.5	3.4	3.4	3.2	3.2	3.3	3.3	3.4
IT	-0.2	3.7	3.5	3.4	3.3	3.3	3.4	3.5	3.6	3.6	3.5
CY	-1.2	7.3	6.5	6.4	6.2	5.9	5.5	5.3	5.5	5.8	6.1
LV	0.8	3.8	3.8	4.0	4.0	3.9	3.8	3.8	4.1	4.4	4.5
LT	0.9	3.9	3.6	3.9	4.2	4.3	4.2	4.1	4.2	4.6	4.8
LU	0.2	3.3	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5
HU	-0.2	3.6	3.1	3.0	3.0	3.0	3.1	3.2	3.2	3.3	3.4
MT	0.1	5.9	5.3	5.5	5.6	5.6	5.5	5.4	5.5	5.7	6.0
NL	-0.5	5.2	4.9	4.7	4.7	4.8	4.9	4.9	4.8	4.7	4.7
AT	0.0	4.9	4.5	4.6	4.7	4.8	4.8	4.7	4.7	4.8	4.9
PL	-0.1	4.4	4.1	4.2	4.1	4.0	3.8	3.8	3.9	4.1	4.3
PT	-1.0	5.2	4.7	4.2	4.0	3.9	4.0	4.2	4.3	4.3	4.2
RO	0.4	2.6	2.6	2.6	2.7	2.8	2.8	2.9	2.9	3.0	3.0
SI	0.8	5.3	5.4	5.5	5.6	5.5	5.5	5.6	5.8	6.1	6.1
SK	-0.4	3.4	3.2	3.2	3.1	2.9	2.8	2.8	2.8	2.9	2.9
FI	0.3	6.1	6.1	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.4
SE	0.2	5.7	5.7	5.7	5.9	5.9	5.8	5.7	5.7	5.8	5.9
UK	0.0	5.1	5.1	5.3	5.3	5.2	5.1	5.0	5.1	5.1	5.2
NO	-0.1	6.0	5.8	5.8	5.9	6.0	6.0	6.0	5.9	5.9	5.9
EU28	0.0	4.7	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6
EA	-0.1	4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4

Table III.1.145: Education spending as % of GDP - Primary education (ISCED1) - Baseline

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.1	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.6
BG	0.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
CZ	0.2	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
DK	-0.2	1.9	1.7	1.6	1.8	1.9	1.9	1.8	1.8	1.7	1.7
DE	0.1	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
EE	0.3	1.3	1.6	1.5	1.4	1.3	1.3	1.4	1.6	1.6	1.6
IE	-0.3	2.2	2.4	2.1	1.7	1.6	1.8	2.0	2.2	2.1	2.0
EL	-0.3	1.0	0.9	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7
ES	-0.3	1.4	1.2	1.0	0.9	0.8	0.9	1.0	1.1	1.1	1.1
FR	-0.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
HR	-0.1	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8	1.8
IT	-0.1	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
CY	-0.1	2.3	2.4	2.4	2.2	2.0	1.8	1.9	2.0	2.2	2.2
LV	0.4	1.4	1.5	1.6	1.5	1.4	1.4	1.5	1.7	1.8	1.8
LT	0.4	0.7	0.9	0.9	1.0	0.9	0.8	0.9	1.1	1.2	1.1
LU	0.1	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.9
HU	0.0	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
MT	0.3	1.2	1.3	1.4	1.4	1.3	1.2	1.2	1.3	1.4	1.4
NL	-0.1	1.3	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2
AT	0.1	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
PL	0.1	1.5	1.7	1.6	1.5	1.4	1.4	1.4	1.5	1.6	1.6
PT	-0.3	1.5	1.3	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1
RO	0.1	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
SI	0.3	1.7	1.9	1.9	1.7	1.7	1.7	1.8	2.0	2.0	2.0
SK	-0.1	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
FI	0.1	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
SE	0.2	1.6	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8
UK	0.0	1.7	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.8
NO	0.1	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.8
EU28	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
EA	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table III.1.146: Education spending as % of GDP - Low secondary education (ISCED2) - Baseline

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BG	0.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0
CZ	0.3	0.9	1.1	1.1	1.1	1.1	1.0	1.1	1.2	1.2	1.2
DK	-0.1	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9
DE	0.1	1.2	1.1	1.1	1.2	1.3	1.3	1.2	1.2	1.3	1.3
EE	0.3	0.7	0.9	1.0	0.9	0.9	0.8	0.8	0.9	1.0	1.0
IE	0.0	1.1	1.1	1.2	1.1	0.9	0.8	0.9	1.1	1.1	1.1
EL	-0.3	1.0	0.9	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7
ES	-0.2	1.2	1.2	1.1	0.9	0.8	0.8	0.9	1.0	1.0	1.0
FR	-0.1	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2
HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IT	0.0	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
CY	-0.1	1.3	1.3	1.3	1.3	1.2	1.1	1.0	1.1	1.2	1.2
LV	0.3	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.9	0.9
LT	0.4	1.3	1.2	1.4	1.5	1.5	1.4	1.3	1.4	1.6	1.7
LU	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
HU	0.0	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
MT	0.1	1.8	1.6	1.7	1.8	1.8	1.8	1.7	1.7	1.8	1.9
NL	-0.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
AT	0.1	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
PL	0.0	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.8
PT	-0.3	1.3	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0
RO	0.1	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7
SI	0.2	0.8	0.9	1.0	1.0	0.9	0.9	0.9	1.0	1.1	1.1
SK	-0.1	0.8	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.8	0.8
FI	0.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
SE	0.1	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	1.0
UK	0.1	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
NO	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
EU28	0.0	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.1	1.1
EA	0.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table III.1.147: Education spending as % of GDP - Upper secondary education (ISCED3&4) - Baseline

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.2	2.7	2.7	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
BG	0.2	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
CZ	0.2	0.8	0.8	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.1
DK	-0.2	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.7	1.7
DE	0.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EE	0.3	1.2	1.2	1.5	1.4	1.4	1.3	1.3	1.3	1.5	1.5
IE	0.1	1.4	1.5	1.6	1.6	1.4	1.3	1.3	1.4	1.5	1.5
EL	-0.2	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.8	0.8
ES	-0.1	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7
FR	0.0	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
HR	-0.2	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
IT	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
CY	-0.3	1.5	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.1	1.2
LV	0.2	0.9	0.8	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.1
LT	0.1	0.7	0.5	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.7
LU	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
HU	-0.1	1.1	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	1.0
MT	-0.1	1.8	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7
NL	-0.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
AT	0.0	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
PL	-0.1	0.9	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8
PT	-0.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
RO	0.1	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
SI	0.2	1.3	1.2	1.3	1.4	1.4	1.3	1.3	1.3	1.4	1.5
SK	-0.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
FI	0.1	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.7	1.7
SE	0.0	1.3	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.4
UK	0.0	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1
NO	-0.1	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
EU28	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
EA	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2

Table III.1.148: Education spending as % of GDP - Tertiary education (ISCED 5&6) - Baseline

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.0	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
BG	-0.1	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
CZ	0.0	1.0	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9	1.0
DK	-0.2	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5
DE	0.0	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3
EE	-0.1	1.1	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
IE	0.1	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.4	1.4
EL	-0.3	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
ES	-0.2	1.2	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0
FR	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
HR	-0.1	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
IT	-0.1	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CY	-0.8	2.2	1.6	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4
LV	-0.1	0.9	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
LT	0.0	1.2	1.0	1.0	1.1	1.2	1.3	1.2	1.2	1.2	1.2
LU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HU	-0.2	0.9	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
MT	-0.2	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
NL	-0.1	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
AT	-0.1	1.5	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
PL	-0.2	1.3	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1
PT	-0.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
RO	0.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
SI	0.0	1.6	1.3	1.3	1.5	1.6	1.5	1.5	1.5	1.5	1.6
SK	-0.2	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
FI	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
SE	-0.2	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
UK	-0.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
NO	-0.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
EU28	-0.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
EA	-0.1	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Table III.1.149: Number of students (in thousands) - Total

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	935	2506	2660	2811	2943	3047	3136	3223	3306	3382	3441
BG	-247	1049	995	981	938	882	839	820	818	817	802
CZ	253	1697	1786	1874	1875	1827	1794	1816	1880	1939	1950
DK	90	1281	1279	1270	1284	1321	1356	1376	1376	1370	1371
DE	-2426	13287	12303	12165	12163	12070	11788	11444	11157	10980	10860
EE	-37	233	231	230	219	204	194	190	193	197	196
IE	117	1097	1170	1156	1082	1001	982	1035	1122	1189	1214
EL	-565	1944	1852	1754	1631	1526	1454	1423	1419	1408	1379
ES	-372	8085	8074	7776	7235	6745	6578	6777	7174	7529	7713
FR	1033	12483	12693	12795	12865	12982	13145	13312	13432	13486	13516
HR	-143	680	648	638	621	601	577	560	549	543	537
IT	735	9431	9773	9841	9830	9865	9988	10147	10250	10251	10166
CY	20	146	137	141	143	140	136	136	144	156	166
LV	-80	347	319	310	289	268	252	247	253	263	267
LT	-193	590	480	439	413	389	367	353	360	380	397
LU	90	89	101	114	128	142	154	163	169	174	179
HU	-254	1697	1576	1548	1526	1517	1504	1485	1464	1451	1443
MT	6	70	67	70	73	74	73	72	72	74	76
NL	-378	3522	3409	3344	3323	3334	3337	3307	3248	3186	3144
AT	66	1454	1428	1463	1509	1536	1536	1525	1517	1517	1519
PL	-1923	7068	6649	6586	6391	5987	5616	5347	5255	5223	5145
PT	-744	2040	1873	1741	1621	1538	1494	1461	1417	1357	1296
RO	-651	3613	3411	3346	3251	3181	3111	3053	3011	2994	2963
SI	16	376	386	399	400	386	372	370	379	389	392
SK	-337	944	896	872	823	756	701	667	649	632	607
FI	135	1233	1256	1281	1310	1333	1345	1353	1358	1363	1368
SE	722	2039	2151	2262	2380	2471	2522	2559	2615	2691	2762
UK	2811	13031	13559	14206	14542	14616	14618	14784	15147	15560	15842
NO	513	1118	1180	1255	1338	1423	1492	1542	1575	1603	1631
EU28	-1320	92032	91162	91413	90807	89738	88970	89005	89736	90503	90713
EA	-1979	59876	59109	58702	57999	57335	57033	57206	57620	57914	57898

Table III.1.150: Number of students as % of population 5-24 - Total

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.5%	96.6%	97.3%	97.5%	96.8%	96.9%	96.8%	96.9%	97.0%	97.1%	97.1%
BG	0.6%	73.8%	76.2%	75.6%	74.2%	73.9%	73.7%	74.2%	74.8%	74.8%	74.3%
CZ	2.3%	79.3%	83.7%	83.2%	80.8%	81.3%	80.9%	81.3%	82.1%	82.2%	81.6%
DK	1.6%	92.4%	94.4%	94.5%	94.1%	94.9%	94.0%	93.5%	93.6%	93.9%	94.0%
DE	0.3%	83.8%	83.7%	84.3%	84.5%	84.2%	83.8%	83.8%	83.9%	84.0%	84.0%
EE	1.6%	81.9%	86.3%	84.9%	82.4%	83.1%	83.1%	83.6%	84.2%	84.2%	83.5%
IE	-3.7%	93.0%	91.0%	89.8%	87.2%	86.6%	89.0%	91.8%	92.3%	90.8%	89.3%
EL	-1.1%	86.9%	86.8%	85.9%	84.8%	86.3%	86.8%	86.6%	86.4%	86.1%	85.7%
ES	-1.0%	87.3%	87.7%	86.3%	85.0%	86.0%	87.2%	87.9%	87.8%	87.1%	86.3%
FR	-0.7%	77.6%	76.8%	76.8%	76.8%	77.0%	77.0%	77.1%	77.1%	76.9%	76.9%
HR	0.8%	74.0%	74.2%	75.9%	74.7%	74.6%	74.2%	74.3%	74.5%	74.8%	74.7%
IT	0.0%	80.6%	81.3%	80.8%	80.2%	80.6%	80.9%	81.1%	81.1%	80.9%	80.6%
CY	4.1%	66.5%	70.1%	71.8%	70.4%	69.0%	67.8%	68.4%	69.8%	70.7%	70.6%
LV	2.1%	80.8%	85.4%	84.4%	82.6%	83.0%	81.9%	82.4%	83.2%	83.4%	82.9%
LT	0.8%	86.6%	87.4%	89.0%	88.0%	86.8%	86.8%	86.9%	87.6%	87.9%	87.4%
LU	-1.3%	69.3%	66.5%	67.7%	68.1%	68.2%	68.2%	68.1%	68.0%	67.9%	68.0%
HU	0.6%	78.8%	79.8%	79.7%	78.9%	79.8%	79.4%	79.2%	79.3%	79.5%	79.4%
MT	3.8%	73.1%	75.0%	77.7%	77.6%	76.5%	75.3%	75.0%	75.7%	76.6%	76.9%
NL	0.2%	87.8%	87.6%	87.4%	88.1%	88.3%	88.1%	87.9%	87.8%	87.8%	88.0%
AT	1.2%	79.1%	80.2%	80.8%	80.6%	80.2%	79.8%	79.8%	80.1%	80.3%	80.3%
PL	1.2%	82.2%	84.1%	84.7%	83.4%	83.5%	83.4%	83.3%	83.6%	83.7%	83.4%
PT	1.7%	93.6%	93.1%	93.3%	94.2%	95.6%	96.6%	96.4%	95.8%	95.3%	95.3%
RO	0.3%	80.9%	81.2%	81.3%	81.1%	81.7%	80.7%	81.1%	81.2%	81.3%	81.2%
SI	-1.2%	93.8%	93.5%	93.6%	92.3%	92.3%	92.8%	93.2%	93.3%	93.0%	92.6%
SK	3.4%	76.6%	80.3%	81.0%	79.1%	78.4%	79.3%	80.0%	80.8%	80.8%	80.1%
FI	0.8%	98.9%	100.8%	100.3%	99.3%	99.5%	99.4%	99.5%	99.7%	99.7%	99.6%
SE	0.9%	89.6%	93.0%	91.0%	89.7%	90.0%	89.9%	89.9%	90.4%	90.7%	90.5%
UK	1.4%	84.1%	86.4%	87.1%	85.2%	84.5%	84.3%	84.9%	85.7%	85.9%	85.5%
NO	0.2%	87.1%	86.6%	87.5%	87.1%	87.5%	87.1%	86.9%	87.0%	87.2%	87.3%
EU28	0.4%	83.3%	84.1%	84.1%	83.4%	83.5%	83.4%	83.7%	83.9%	83.9%	83.7%
EA	-0.6%	84.3%	84.3%	84.0%	83.6%	83.8%	83.9%	84.0%	84.1%	83.9%	83.8%

Table III.1.151: Number of students (in thousands) - Primary education (ISCED1)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	303	757	843	879	915	938	965	1002	1034	1052	1060
BG	-51	260	274	260	236	219	214	220	222	218	209
CZ	77	497	581	562	540	513	518	560	593	592	574
DK	36	433	422	412	444	468	474	472	465	461	469
DE	-280	2884	2845	2934	2912	2815	2716	2648	2622	2623	2604
EE	-10	77	87	79	73	65	63	67	70	70	67
IE	-1	527	562	498	427	399	431	485	526	537	526
EL	-198	641	630	546	498	471	468	478	480	464	444
ES	-337	2959	2903	2514	2222	2109	2198	2405	2581	2637	2622
FR	282	4184	4181	4250	4254	4322	4402	4444	4451	4453	4466
HR	-24	158	162	159	152	145	140	137	137	136	134
IT	152	2914	2978	2914	2914	2978	3063	3139	3161	3121	3066
CY	16	54	60	61	59	55	53	56	62	67	71
LV	-21	116	120	113	100	87	83	88	95	98	95
LT	-18	108	112	103	90	76	70	76	86	91	90
LU	40	35	43	49	55	61	66	69	72	74	75
HU	-32	389	371	377	378	374	364	362	361	359	357
MT	6	24	26	28	29	28	27	27	28	30	30
NL	-131	1248	1179	1167	1196	1205	1197	1170	1137	1118	1118
AT	42	327	342	361	369	366	361	360	365	368	368
PL	-408	2170	2446	2282	2132	1927	1810	1814	1850	1833	1762
PT	-275	695	612	542	511	502	501	490	468	440	420
RO	-136	877	806	855	813	780	761	760	758	754	741
SI	10	110	132	127	117	109	109	115	122	123	119
SK	-73	214	231	203	186	168	158	157	157	151	142
FI	57	350	375	381	393	397	396	398	404	407	406
SE	314	720	818	862	907	919	919	943	984	1017	1035
UK	1118	4642	5166	5323	5277	5193	5211	5386	5610	5740	5760
NO	221	425	468	498	543	575	596	611	623	635	646
EU28	459	28371	29310	28841	28200	27689	27739	28328	28900	29034	28830
EA	-436	18225	18263	17750	17320	17151	17326	17675	17920	17923	17789

Table III.1.152: Number of students (in thousands) - Lower secondary education (ISCED2)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	139	341	372	390	409	424	434	446	460	472	480
BG	-38	232	246	239	226	207	195	194	198	199	193
CZ	114	362	453	461	454	436	416	423	455	478	476
DK	8	240	236	232	224	240	253	257	255	251	249
DE	-775	4681	4286	4290	4393	4367	4223	4072	3965	3917	3906
EE	0	38	44	46	42	39	35	34	36	38	38
IE	28	189	203	221	200	172	158	170	192	211	217
EL	-90	338	344	326	289	263	251	251	257	257	248
ES	22	2031	2223	2171	1933	1732	1649	1709	1862	2002	2053
FR	220	3346	3388	3348	3407	3414	3470	3531	3561	3565	3566
HR	-31	178	176	172	170	162	155	150	148	148	147
IT	162	1852	1974	1941	1911	1921	1961	2008	2044	2045	2014
CY	7	28	27	29	31	30	28	27	29	32	35
LV	-5	56	61	58	56	51	45	43	46	50	51
LT	-56	201	160	162	152	140	125	115	122	136	144
LU	23	22	24	28	31	35	38	40	42	43	44
HU	-29	394	407	377	383	385	379	370	367	366	364
MT	2	24	21	23	25	26	25	24	24	25	26
NL	-100	795	758	738	729	744	749	744	729	708	696
AT	41	340	345	362	381	386	381	375	374	378	381
PL	-259	1201	1150	1240	1175	1090	988	931	935	952	941
PT	-179	480	436	409	370	352	345	342	333	318	301
RO	-141	890	881	794	839	802	774	759	757	755	749
SI	8	55	61	67	64	59	55	56	59	63	63
SK	-80	259	266	269	240	219	199	189	188	187	179
FI	27	183	188	197	200	205	207	206	206	209	210
SE	168	335	379	411	434	456	460	457	468	487	503
UK	750	2438	2726	2848	2953	2937	2898	2911	3004	3121	3187
NO	87	189	195	211	223	241	254	262	267	271	276
EU28	-66	21527	21838	21847	21721	21294	20897	20834	21118	21412	21461
EA	-607	15258	15182	15074	14863	14579	14378	14382	14530	14656	14651

Table III.1.153: Number of students (in thousands) - Upper secondary education (ISCED3&4)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	352	920	960	1035	1078	1123	1155	1181	1210	1244	1272
BG	-46	280	271	290	277	262	242	230	230	235	234
CZ	89	435	423	517	503	498	479	463	474	507	524
DK	13	332	327	331	319	323	338	349	351	349	346
DE	-679	3149	2862	2744	2741	2788	2758	2668	2573	2505	2470
EE	-6	53	50	57	54	51	47	44	44	47	48
IE	47	212	225	249	249	229	204	200	219	242	259
EL	-92	367	354	372	331	300	278	269	272	277	275
ES	30	1214	1250	1329	1245	1128	1047	1037	1097	1185	1244
FR	270	2688	2778	2813	2795	2830	2844	2892	2937	2956	2958
HR	-48	183	154	162	156	154	147	141	137	135	135
IT	321	2777	2920	3035	2988	2946	2965	3015	3069	3107	3097
CY	1	31	25	27	28	29	28	27	27	29	32
LV	-14	73	65	72	65	63	57	52	52	56	60
LT	-40	103	72	67	68	66	63	56	53	57	63
LU	23	25	27	30	34	37	41	44	46	47	48
HU	-103	560	495	504	477	480	482	474	463	459	457
MT	-1	12	10	10	10	11	11	11	11	11	11
NL	-79	761	761	732	712	714	722	721	713	698	682
AT	3	433	402	409	428	446	449	442	434	433	436
PL	-565	1872	1560	1696	1634	1573	1460	1345	1296	1304	1307
PT	-159	467	447	424	389	361	346	340	334	323	308
RO	-157	947	911	909	845	866	839	811	795	793	790
SI	8	99	94	107	111	107	100	95	97	102	106
SK	-90	249	214	228	224	201	185	170	163	162	159
FI	35	385	379	392	398	407	413	415	415	417	420
SE	161	519	510	550	576	612	634	635	637	656	680
UK	697	3486	3360	3701	3853	3939	3908	3874	3915	4048	4183
NO	109	264	265	286	297	320	341	354	362	367	373
EU28	-28	22630	21908	22794	22590	22546	22243	22001	22065	22385	22602
EA	-69	14016	13896	14134	13949	13839	13712	13680	13766	13899	13948

Table III.1.154: Number of students (in thousands) - Tertiary education (ISCED5&6)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	141	488	485	507	541	562	582	594	602	614	629
BG	-111	278	203	193	198	194	188	176	168	166	166
CZ	-27	404	329	334	378	380	380	370	358	361	377
DK	32	276	294	295	298	290	290	299	305	308	308
DE	-692	2572	2310	2197	2118	2099	2091	2056	1998	1935	1880
EE	-21	65	49	48	50	49	48	45	43	43	44
IE	44	169	180	188	205	202	189	180	185	199	213
EL	-185	597	524	509	514	492	458	426	411	409	412
ES	-87	1881	1698	1762	1835	1776	1684	1625	1634	1705	1794
FR	261	2265	2346	2383	2409	2416	2430	2446	2483	2512	2526
HR	-40	162	156	145	143	140	136	132	127	124	122
IT	101	1888	1901	1951	2018	2020	1999	1985	1975	1978	1989
CY	-4	33	25	24	25	26	27	27	27	27	29
LV	-40	101	73	68	68	67	67	63	60	60	61
LT	-79	179	135	107	102	106	110	106	98	95	100
LU	4	6	7	7	8	9	9	10	10	10	11
HU	-90	355	303	291	288	278	279	279	273	267	265
MT	-2	11	9	9	9	9	9	9	9	9	9
NL	-69	717	711	706	686	671	670	672	669	662	648
AT	-20	354	339	331	331	337	345	348	344	338	334
PL	-691	1825	1492	1368	1449	1397	1357	1258	1173	1134	1134
PT	-131	398	378	366	350	323	302	289	282	276	267
RO	-216	899	812	787	754	734	736	723	701	692	683
SI	-9	113	99	98	107	111	109	103	100	100	104
SK	-94	222	186	172	173	167	158	151	141	133	128
FI	16	315	314	311	318	323	329	333	333	331	331
SE	79	465	443	440	441	485	509	524	526	532	544
UK	246	2465	2308	2335	2460	2546	2600	2613	2617	2650	2711
NO	96	240	251	261	276	287	301	315	324	330	336
EU28	-1684	19504	18107	17931	18297	18210	18091	17842	17654	17671	17820
EA	-867	12377	11768	11744	11868	11765	11616	11469	11404	11437	11510

Table III.1.155: Number of teachers (in thousands) - Total

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	74	194	208	219	229	237	244	251	258	264	268
BG	-16	70	67	66	63	59	56	55	55	55	54
CZ	20	112	121	128	127	124	121	122	127	132	133
DK	:	:	:	:	:	:	:	:	:	:	:
DE	-163	873	807	797	796	789	771	749	730	719	710
EE	:	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:	:	:
ES	-26	625	629	607	562	522	508	524	556	585	599
FR	65	779	793	799	802	810	820	831	839	842	844
HR	-13	62	59	58	56	55	53	51	50	49	49
IT	55	699	726	729	727	730	741	753	762	761	754
CY	2	12	11	11	12	11	11	11	12	13	13
LV	-5	27	26	25	23	22	20	20	20	21	22
LT	-17	59	49	47	44	40	37	35	37	40	42
LU	10	10	11	12	14	15	17	18	18	19	19
HU	-18	134	126	124	122	122	121	119	117	117	116
MT	1	7	6	7	7	7	7	7	7	7	7
NL	-27	252	244	240	238	239	239	237	233	228	225
AT	7	116	115	118	122	125	124	123	122	123	123
PL	-141	550	531	526	506	472	441	423	418	417	409
PT	-69	188	173	161	149	142	138	135	131	125	120
RO	-35	205	195	190	187	182	178	174	172	172	170
SI	2	24	25	27	26	25	24	24	25	26	26
SK	-21	60	57	56	53	48	45	42	41	40	39
FI	10	84	86	88	90	92	92	93	93	94	94
SE	54	145	155	163	172	178	181	184	188	194	199
UK	157	704	734	772	791	795	793	801	821	844	861
NO	46	100	106	113	121	128	134	139	142	144	147
EU28	-86	6123	6090	6106	6049	5968	5909	5912	5969	6026	6037
EA	-96	4091	4053	4029	3978	3931	3912	3930	3967	3994	3995

Table III.1.156: Number of teachers (in thousands) - Primary education (ISCED1)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	24	61	68	71	74	76	78	81	83	85	85
BG	-3	15	16	15	14	13	12	13	13	12	12
CZ	4	27	31	30	29	28	28	30	32	32	31
DK	:	:	:	:	:	:	:	:	:	:	:
DE	-17	175	173	178	177	171	165	161	159	159	158
EE	-1	5	5	5	4	4	4	4	4	4	4
IE	0	34	36	32	28	26	28	31	34	35	34
EL	:	:	:	:	:	:	:	:	:	:	:
ES	-25	217	213	185	163	155	161	177	189	194	192
FR	15	223	223	226	226	230	234	236	237	237	238
HR	-2	11	12	11	11	10	10	10	10	10	10
IT	12	232	237	232	232	237	244	250	252	249	244
CY	1	4	4	4	4	4	4	4	5	5	5
LV	-2	10	10	10	9	7	7	8	8	8	8
LT	-2	11	12	11	9	8	7	8	9	9	9
LU	4	4	4	5	6	6	7	7	7	7	8
HU	-3	36	34	35	35	35	34	34	34	33	33
MT	0	2	2	2	2	2	2	2	2	2	2
NL	-10	93	88	87	89	90	89	87	85	83	83
AT	3	27	28	30	30	30	30	30	30	30	30
PL	-39	208	234	219	204	185	173	174	177	176	169
PT	-25	63	56	49	47	46	46	45	43	40	38
RO	-8	52	48	51	48	46	45	45	45	45	44
SI	1	7	8	8	7	7	7	7	8	8	7
SK	-4	13	14	12	11	10	9	9	9	9	8
FI	4	25	27	28	28	29	29	29	29	29	29
SE	25	58	66	69	73	74	74	76	79	82	83
UK	56	234	260	268	265	261	262	271	282	289	290
NO	21	40	44	47	51	54	56	57	59	60	61
EU28	11	1846	1909	1872	1826	1788	1789	1827	1865	1872	1857
EA	-20	1206	1209	1174	1147	1137	1150	1176	1194	1195	1186

Table III.1.157: Number of teachers (in thousands) - Lower secondary education (ISCED2)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	16	38	42	44	46	48	49	50	52	53	54
BG	-3	18	19	18	17	16	15	15	15	15	15
CZ	10	33	41	42	41	39	38	38	41	43	43
DK	2	50	50	49	47	50	53	54	54	53	52
DE	-53	323	295	296	303	301	291	281	273	270	269
EE	0	3	3	3	3	3	2	2	2	3	3
IE	:	:	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:	:	:
ES	2	179	196	192	171	153	146	151	164	177	181
FR	14	220	222	220	224	224	228	232	234	234	234
HR	-3	17	17	17	16	16	15	15	14	14	14
IT	13	154	165	162	159	160	163	167	170	170	168
CY	1	3	3	3	3	3	3	3	3	3	3
LV	-1	7	7	7	7	6	5	5	5	6	6
LT	-9	33	26	26	25	23	20	19	20	22	24
LU	2	2	2	3	3	3	3	4	4	4	4
HU	-3	37	38	36	36	36	36	35	35	35	34
MT	0	3	3	3	3	3	3	3	3	3	3
NL	-6	50	48	47	46	47	47	47	46	45	44
AT	4	37	38	40	42	42	42	41	41	41	42
PL	-23	106	101	109	103	96	87	82	82	84	83
PT	-18	48	43	41	37	35	34	34	33	32	30
RO	-11	71	70	63	66	63	61	60	60	60	59
SI	1	7	8	8	8	7	7	7	7	8	8
SK	-6	19	20	20	18	16	15	14	14	14	13
FI	3	19	20	21	21	22	22	22	22	22	22
SE	14	29	32	35	37	39	39	39	40	42	43
UK	47	151	169	177	183	182	180	181	186	194	198
NO	8	18	19	21	22	24	25	26	26	26	27
EU28	-6	1656	1678	1678	1666	1635	1605	1600	1622	1646	1650
EA	-36	1145	1141	1134	1117	1096	1081	1081	1094	1107	1108

Table III.1.158: Number of teachers (in thousands) - Upper secondary education (ISCED3&4)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	28	73	77	83	86	90	92	94	96	99	101
BG	-4	22	21	22	21	20	19	18	18	18	18
CZ	7	35	34	42	41	40	39	38	39	41	43
DK	:	:	:	:	:	:	:	:	:	:	:
DE	-35	162	148	142	141	144	142	138	133	129	127
EE	0	3	3	3	3	3	3	3	3	3	3
IE	6	26	27	30	30	28	25	24	27	29	32
EL	:	:	:	:	:	:	:	:	:	:	:
ES	2	102	105	112	105	95	88	87	92	100	105
FR	22	223	231	234	232	235	236	240	244	245	246
HR	-5	18	15	16	16	15	15	14	14	13	13
IT	23	203	214	222	219	216	217	221	225	228	227
CY	0	3	2	3	3	3	3	3	3	3	3
LV	-1	6	6	6	6	5	5	4	4	5	5
LT	-3	7	5	4	4	4	4	4	3	4	4
LU	3	3	3	4	4	4	5	5	5	6	6
HU	-8	42	37	38	36	36	36	36	35	35	35
MT	0	1	1	1	1	1	1	1	1	1	1
NL	-7	65	65	62	61	61	62	61	61	60	58
AT	0	34	32	32	34	35	36	35	34	34	34
PL	-41	135	112	122	118	113	105	97	93	94	94
PT	-17	49	47	45	41	38	37	36	35	34	33
RO	-9	54	52	52	48	50	48	46	46	45	45
SI	0	6	6	7	7	7	6	6	6	7	7
SK	-6	17	14	15	15	14	12	11	11	11	11
FI	2	23	23	24	24	24	25	25	25	25	25
SE	10	33	32	34	36	38	40	40	40	41	43
UK	44	220	213	234	244	249	247	245	248	256	265
NO	9	23	23	25	26	28	29	31	31	32	32
EU28	15	1567	1525	1590	1576	1569	1547	1532	1540	1565	1582
EA	19	1008	1008	1028	1016	1007	998	998	1009	1021	1027

Table III.1.159: Number of teachers (in thousands) - Tertiary education (ISCED5&6)

Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	6	21	21	22	24	25	26	26	26	27	28
BG	-6	15	11	11	11	11	10	10	9	9	9
CZ	-1	17	14	14	16	16	16	16	15	16	16
DK	:	:	:	:	:	:	:	:	:	:	:
DE	-57	213	191	182	175	174	173	170	165	160	156
EE	:	:	:	:	:	:	:	:	:	:	:
IE	3	11	12	12	14	13	13	12	12	13	14
EL	:	:	:	:	:	:	:	:	:	:	:
ES	-6	127	114	119	123	120	113	109	110	115	121
FR	13	113	117	119	120	121	121	122	124	126	126
HR	-4	15	15	14	13	13	13	12	12	12	12
IT	6	109	110	113	117	117	116	115	114	115	115
CY	0	2	1	1	1	1	2	2	2	2	2
LV	-2	4	3	3	3	3	3	3	2	2	2
LT	-4	9	7	5	5	5	5	5	5	5	5
LU	1	1	1	1	2	2	2	2	2	2	2
HU	-5	19	16	15	15	15	15	15	14	14	14
MT	0	1	1	1	1	1	1	1	1	1	1
NL	-4	44	44	43	42	41	41	41	41	41	40
AT	-1	18	17	17	17	17	17	17	17	17	17
PL	-39	102	83	76	81	78	76	70	65	63	63
PT	-9	28	26	26	25	23	21	20	20	19	19
RO	-7	28	26	25	24	23	23	23	22	22	21
SI	0	4	4	4	4	4	4	4	4	4	4
SK	-5	11	9	9	9	8	8	8	7	7	6
FI	1	16	16	16	17	17	17	17	17	17	17
SE	4	26	25	25	26	27	28	29	29	30	30
UK	10	99	92	93	98	102	104	104	105	106	108
NO	8	19	20	21	22	23	24	25	26	26	27
EU28	-106	1054	977	966	982	976	968	954	943	942	948
EA	-59	733	696	693	697	691	683	674	670	671	674

Table III.1.160: Education spending as % of GDP - Total - High enrolment rate scenario										
Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	0.4	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.4
BG	0.8	0.1	0.3	0.4	0.5	0.7	0.9	0.9	0.9	0.9	0.9
CZ	0.7	0.1	0.2	0.4	0.5	0.6	0.8	0.8	0.8	0.8	0.8
DK	0.5	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6
DE	0.6	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.7
EE	0.7	0.0	0.2	0.3	0.4	0.5	0.7	0.7	0.7	0.7	0.7
IE	0.8	0.1	0.3	0.4	0.6	0.8	0.9	0.9	0.9	0.9	0.9
EL	0.5	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6
ES	0.7	0.1	0.3	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.8
FR	0.6	0.0	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7
HR	0.5	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6
IT	0.8	0.1	0.2	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.8
CY	2.1	0.2	0.8	1.1	1.5	1.9	2.2	2.2	2.2	2.3	2.3
LV	0.3	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4
LT	0.6	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6
LU	1.3	0.1	0.4	0.6	0.9	1.1	1.3	1.4	1.4	1.4	1.4
HU	0.6	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.7
MT	1.7	0.2	0.7	1.0	1.2	1.5	1.8	1.8	1.9	1.9	1.9
NL	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7
AT	0.9	0.1	0.3	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0
PL	0.2	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
PT	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.8	0.8
RO	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
SI	0.8	0.1	0.2	0.4	0.5	0.6	0.8	0.8	0.8	0.8	0.8
SK	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8
FI	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SE	0.4	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.5
UK	1.0	0.1	0.4	0.5	0.7	0.9	1.1	1.1	1.1	1.1	1.1
NO	0.7	0.0	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7
EU28	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7
EA	0.7	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Table III.1.161: Unemployment benefit spending as % of GDP										
Country	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
BE	-0.2	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
BG	-0.2	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CZ	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
DK	-0.5	1.4	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
DE	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
EE	0.0	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
IE	-1.1	2.1	1.5	1.3	1.2	1.0	1.0	1.0	1.0	1.0	1.0
EL	-0.9	1.2	0.8	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2
ES	-1.7	2.2	1.6	1.1	0.9	0.7	0.5	0.5	0.5	0.5	0.5
FR	-0.4	1.5	1.5	1.4	1.3	1.2	1.1	1.1	1.1	1.1	1.1
HR	-0.3	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
IT	-0.3	0.9	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
CY	-0.6	0.8	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3
LV	-0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
LT	-0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LU	-0.2	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
HU	-0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MT	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NL	-0.8	2.0	1.8	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2
AT	-0.2	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
PL	-0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PT	-0.9	1.5	1.1	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
RO	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SI	-0.2	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SK	-0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
FI	-0.4	1.9	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
SE	-0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
UK	-0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NO	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
EU28	-0.4	1.1	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
EA	-0.4	1.3	1.1	1.0	1.0	0.9	0.8	0.8	0.9	0.9	0.9

Part IV

Statistical Annex – Country Fiches

1. BELGIUM

Belgium	EC-EPC (AWG) 2015 projections										
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.1	1.81	1.82	1.83	1.84	1.84	1.85	1.85	1.86	1.86	1.87
Life expectancy at birth											
males	6.9	77.8	78.9	79.7	80.5	81.2	82.0	82.7	83.3	84.0	84.6
females	6.0	82.9	84.0	84.6	85.3	86.0	86.6	87.2	87.8	88.4	88.9
Life expectancy at 65											
males	4.6	17.6	18.4	18.9	19.4	19.9	20.4	20.9	21.3	21.8	22.2
females	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.2	24.7	25.1	25.6
Net migration (thousand)	-19.1	61.2	80.2	82.0	80.9	76.8	69.8	59.8	46.8	44.5	42.1
Net migration as % of population	-0.3	0.5	0.7	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.3
Population (million)	4.2	11.2	11.9	12.4	12.9	13.5	14.0	14.4	14.8	15.1	15.4
Children population (0-14) as % of total population	-0.1	17.0	17.5	17.5	17.4	17.2	17.2	17.2	17.2	17.1	16.9
Prime age population (25-54) as % of total population	-4.3	40.9	39.2	38.2	37.7	37.7	37.6	37.4	37.0	36.8	36.6
Working age population (15-64) as % of total population	-5.9	65.3	63.6	62.5	61.3	60.7	60.4	60.2	60.0	59.7	59.4
Elderly population (65 and over) as % of total population	6.0	17.7	18.9	20.0	21.3	22.1	22.5	22.6	22.8	23.1	23.7
Very elderly population (80 and over) as % of total population	3.6	5.3	5.4	5.4	6.1	6.8	7.5	8.3	8.7	8.8	8.9
Very elderly population (80 and over) as % of elderly population	7.5	30.0	28.8	26.8	28.5	30.6	33.5	36.6	38.0	38.0	37.5
Very elderly population (80 and over) as % of working age population	6.8	8.1	8.6	8.6	9.9	11.1	12.5	13.7	14.4	14.7	15.0
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.7	0.7	1.5	1.3	1.8	2.2	2.2	2.0	1.9	1.8	1.8
Employment (growth rate)	0.5	0.3	0.9	0.5	0.6	0.6	0.6	0.5	0.3	0.3	0.3
Labour input : hours worked (growth rate)	0.5	0.4	0.9	0.5	0.6	0.6	0.6	0.5	0.4	0.3	0.3
Labour productivity per hour (growth rate)	1.2	0.2	0.6	0.9	1.2	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.8	0.2	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.4	0.0	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.1	0.0	0.6	0.5	1.0	1.4	1.5	1.4	1.4	1.4	1.4
Potential GDP per worker (growth rate)	1.2	0.4	0.6	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	1849	7316	7556	7753	7937	8171	8432	8681	8877	9033	9165
Population growth (working age:15-64)	0.0	0.3	0.5	0.5	0.5	0.6	0.7	0.5	0.4	0.3	0.3
Population (20-64) (in thousands)	1597	6681	6904	7033	7188	7389	7627	7861	8038	8167	8278
Population growth (20-64)	-0.1	0.4	0.4	0.4	0.5	0.6	0.7	0.5	0.4	0.3	0.3
Labour force 15-64 (thousands)	1412	4943	5270	5387	5517	5692	5880	6048	6176	6265	6355
Labour force 20-64 (thousands)	1395	4897	5223	5336	5463	5636	5821	5989	6115	6203	6291
Participation rate (20-64)	2.7	73.3	75.6	75.9	76.0	76.3	76.3	76.2	76.1	75.9	76.0
Participation rate (15-64)	1.8	67.6	69.7	69.5	69.5	69.7	69.7	69.7	69.6	69.4	69.3
young (15-24)	-0.3	31.2	31.7	30.7	31.2	31.3	31.3	31.3	31.1	30.9	30.9
prime-age (25-54)	0.3	85.4	86.0	86.0	85.9	85.7	85.6	85.6	85.6	85.7	85.6
older (55-64)	12.0	44.0	54.0	55.2	55.8	56.5	56.8	56.3	56.3	55.8	56.0
Participation rate (20-64) - FEMALES	5.3	67.6	71.1	71.8	72.3	72.8	72.9	72.9	72.9	72.8	72.9
Participation rate (15-64) - FEMALES	4.1	62.3	65.6	65.8	66.1	66.4	66.6	66.6	66.6	66.4	66.4
young (15-24)	0.0	28.6	29.4	28.4	28.9	29.0	29.0	29.0	28.8	28.6	28.6
prime-age (25-54)	2.4	79.7	81.4	81.8	82.0	81.9	82.0	82.1	82.1	82.1	82.1
older (55-64)	16.7	37.6	49.6	51.6	52.9	54.1	54.5	54.2	54.3	54.1	54.3
Participation rate (20-64) - MALES	0.1	79.0	80.1	79.8	79.7	79.7	79.6	79.4	79.2	79.0	79.0
Participation rate (15-64) - MALES	-0.6	72.7	73.9	73.1	72.9	72.8	72.8	72.7	72.5	72.2	72.2
young (15-24)	-0.6	33.7	33.9	32.8	33.4	33.3	33.4	33.5	33.3	33.0	33.1
prime-age (25-54)	-1.9	90.9	90.6	90.1	89.6	89.3	89.0	89.0	89.1	89.1	89.0
older (55-64)	7.2	50.4	58.5	58.8	58.7	59.0	59.2	58.4	58.2	57.4	57.6
Average effective exit age (TOTAL) (1)	0.2	62.0	62.2	62.2	62.3	62.3	62.3	62.3	62.3	62.3	62.3
Men	0.2	61.9	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
Women	0.3	62.1	62.3	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4
Employment rate (15-64)	2.4	61.8	64.3	64.3	64.3	64.5	64.6	64.5	64.4	64.2	64.2
Employment rate (20-64)	3.3	67.2	69.9	70.4	70.5	70.8	70.9	70.7	70.6	70.5	70.6
Employment rate (15-74)	0.6	54.8	55.9	55.7	55.3	55.5	56.0	56.2	56.1	55.7	55.4
Unemployment rate (15-64)	-1.1	8.5	7.9	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Unemployment rate (20-64)	-1.1	8.3	7.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Unemployment rate (15-74)	-1.2	8.5	7.8	7.4	7.4	7.3	7.3	7.3	7.3	7.3	7.3
Employment (20-64) (in millions)	1.3	4.5	4.8	4.9	5.1	5.2	5.4	5.6	5.7	5.8	5.8
Employment (15-64) (in millions)	1.4	4.5	4.9	5.0	5.1	5.3	5.4	5.6	5.7	5.8	5.9
share of young (15-24)	0%	7%	7%	7%	7%	8%	8%	7%	7%	7%	7%
share of prime-age (25-54)	-3%	80%	77%	76%	77%	77%	77%	77%	77%	77%	77%
share of older (55-64)	3%	13%	16%	17%	16%	15%	15%	15%	16%	16%	16%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.2	19.0	20.5	20.3	19.3	18.4	18.2	18.6	19.1	19.1	18.8
Old-age dependency ratio 15-64 (3)	13	27	30	32	35	36	37	37	38	39	40
Old-age dependency ratio 20-64 (3)	15	30	32	35	38	40	41	41	42	43	44
Total dependency ratio (4)	15	53	57	60	63	65	66	66	67	67	68
Total economic dependency ratio (5)	13	146	142	146	150	152	153	154	155	157	159
Economic old-age dependency ratio (15-64) (6)	18	43	45	49	53	55	56	57	58	59	61
Economic old-age dependency ratio (15-74) (7)	17	43	45	48	52	54	56	56	57	58	60

Belgium		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	3.3	11.8	12.7	13.8	14.7	15.2	15.2	15.1	15.0	15.1	15.1
Earnings-related pensions, gross	3.4	11.6	12.5	13.6	14.5	15.0	15.0	14.9	14.8	14.9	15.0
Of which : Old-age and early pensions	4.4	9.4	10.3	11.5	12.6	13.1	13.3	13.4	13.4	13.7	13.8
Disability pensions	-0.2	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.9
Survivors pensions	-0.9	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8
Public pensions, net	2.8	10.3	11.1	12.0	12.8	13.2	13.2	13.2	13.0	13.1	13.1
Public pensions, contributions	:	:	:	:	:	:	:	:	:	:	:

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-0.8%	87.5%	87.4%	87.3%	87.2%	87.1%	87.0%	86.9%	86.8%	86.7%	86.7%
Pensioners (Public, in 1000 persons)	1831	2655	2988	3267	3544	3779	3966	4092	4194	4325	4487
Pensioners aged 65+ (1000 persons)	1840	1897	2183	2443	2733	2974	3154	3291	3422	3567	3737
Share of pensioners below age 65 as % of all pensioners	-11.8%	28.5%	26.9%	25.2%	22.9%	21.3%	20.5%	19.6%	18.4%	17.5%	16.7%
Benefit ratio (Public pensions)	-0.7	42.5	43.9	44.9	45.2	45.0	44.3	43.8	43.1	42.6	41.8
Gross replacement rate at retirement (Old-age earnings-related pensions)	-0.7	39.5	41.6	41.8	41.8	41.4	41.0	40.4	40.1	39.2	38.8
Average accrual rates (new pensions, earnings related)	-0.1	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Average contributory period (new pensions, earnings-related)	1.7	37.2	38.2	38.1	38.4	38.6	38.8	38.9	38.8	38.9	38.9
Contributors (Public pensions, in 1000 persons)	1507.7	4626.5	5024.7	5182.4	5322.0	5485.4	5660.8	5821.2	5950.6	6042.4	6134.2
Support ratio (contributors/100 pensioners, Public pensions)	-37.5	174.2	168.2	158.6	150.2	145.2	142.7	142.2	141.9	139.7	136.7

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.7	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7
High labour productivity (+0.25 p.p.)	-0.9	0.0	0.0	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9
Lower labour productivity (-0.25 p.p.)	0.9	0.0	0.0	0.1	0.3	0.4	0.5	0.6	0.7	0.8	0.9
High employment rate (+2 p.p)	-0.4	0.0	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
High emp. of older workers (+10 p.p.)	-1.0	0.0	-0.5	-1.0	-1.1	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0
Lower migration (-20%)	0.5	0.0	0.1	0.2	0.3	0.5	0.5	0.6	0.6	0.6	0.5
TFP risk scenario	1.0	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.9	1.0
Policy scenario linking retirement age to increases in life expectancy	-1.7	0.0	0.0	-0.1	-0.3	-0.4	-0.6	-0.9	-1.1	-1.4	-1.7

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	3.3		0.9	2.0	2.9	3.4	3.4	3.3	3.2	3.3	3.3
Dependency ratio	5.6		1.1	2.2	3.4	4.2	4.5	4.6	4.8	5.1	5.6
Coverage ratio	-1.3		-0.1	-0.2	-0.5	-0.7	-0.8	-0.9	-1.0	-1.1	-1.3
Of which : Old-age	0.9		0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.9
Early-age	-3.0		-0.1	0.2	0.3	0.1	-0.2	-1.1	-2.1	-2.6	-3.0
Cohort effect	-5.5		-0.7	-1.9	-3.5	-4.6	-4.9	-4.7	-4.8	-5.2	-5.5
Benefit ratio	-0.3		0.3	0.6	0.7	0.7	0.5	0.3	0.1	0.0	-0.3
Labour market ratio	-0.6		-0.4	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
Of which : Employment rate	-0.6		-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Interaction effect (residual)	-0.1		0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	3.3		0.7	1.1	0.9	0.4	0.0	-0.1	-0.2	0.1	0.1
Dependency ratio	5.6		0.8	1.1	1.2	0.8	0.3	0.1	0.2	0.3	0.5
Coverage ratio	-1.3		-0.1	-0.2	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Of which : Old-age	0.9		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Early-age	-3.0		0.0	0.3	0.1	-0.2	-0.3	-0.9	-1.0	-0.5	-0.5
Cohort effect	-5.5		-0.6	-1.2	-1.6	-1.1	-0.3	0.2	-0.1	-0.3	-0.4
Benefit ratio	-0.3		0.3	0.3	0.1	0.1	-0.2	-0.1	-0.2	-0.1	-0.3
Labour market ratio	-0.6		-0.3	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which : Employment rate	-0.6		-0.3	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.1	6.0	5.9	5.9	5.9	6.0	6.0	6.1	6.1	6.1	6.1
Demographic scenario	0.5	6.0	6.0	6.1	6.1	6.2	6.3	6.4	6.4	6.5	6.5
High Life expectancy scenario	0.8	6.0	6.0	6.1	6.2	6.3	6.5	6.5	6.6	6.7	6.8
Constant health scenario	-0.3	6.0	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.6
Death-related cost scenario	0.4	6.0	5.9	6.0	6.1	6.2	6.3	6.3	6.3	6.4	6.4
Income elasticity scenario	0.7	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.6	6.7
EU28 cost convergence scenario	0.7	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	6.7
Labour intensity scenario	1.0	6.0	6.0	6.1	6.3	6.5	6.6	6.7	6.8	6.9	7.0
Sector-specific composite indexation scenario	0.6	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	6.6
Non-demographic determinants scenario	1.5	6.0	6.1	6.2	6.4	6.6	6.9	7.1	7.2	7.4	7.5
AWG risk scenario	0.5	6.0	6.0	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.5
TFP risk scenario	0.1	6.0	5.9	5.9	5.9	6.0	6.0	6.1	6.1	6.1	6.1

Belgium		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.6	2.1	2.3	2.4	2.6	2.8	3.0	3.3	3.5	3.6	3.7
Demographic scenario	1.5	2.1	2.3	2.4	2.5	2.7	3.0	3.2	3.4	3.6	3.6
High Life expectancy scenario	2.0	2.1	2.4	2.5	2.6	2.9	3.2	3.5	3.8	4.0	4.1
Base case scenario	1.8	2.1	2.3	2.5	2.6	2.9	3.1	3.4	3.6	3.8	3.9
Constant disability scenario	1.4	2.1	2.3	2.4	2.5	2.7	2.9	3.2	3.3	3.5	3.5
Shift to formal care scenario	2.0	2.1	2.5	2.6	2.8	3.1	3.4	3.6	3.9	4.0	4.2
Coverage convergence scenario	1.8	2.1	2.3	2.5	2.6	2.9	3.2	3.4	3.6	3.8	3.9
Cost convergence scenario	2.8	2.1	2.4	2.6	2.8	3.2	3.6	4.0	4.3	4.6	4.9
Cost and coverage convergence scenario	2.8	2.1	2.4	2.6	2.9	3.2	3.6	4.0	4.3	4.7	4.9
AWG risk scenario	2.6	2.1	2.4	2.6	2.8	3.1	3.5	3.8	4.2	4.5	4.7
TFP risk scenario	1.6	2.1	2.3	2.4	2.6	2.8	3.0	3.3	3.5	3.6	3.7
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	53.0%	863	921	966	1019	1088	1153	1211	1257	1291	1321
of which: receiving institutional care	115.7%	143	159	168	181	209	236	263	285	298	308
receiving home care	68.4%	728	785	829	890	968	1042	1108	1159	1194	1226
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Demographic scenario	64.5%	863	932	987	1050	1130	1207	1276	1334	1378	1420
of which: receiving institutional care	126.9%	143	160	170	186	215	244	273	298	313	324
receiving home care	79.9%	728	794	846	915	1003	1087	1163	1224	1268	1310
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Constant disability scenario	41.8%	863	909	945	988	1046	1100	1146	1181	1205	1224
of which: receiving institutional care	104.5%	143	157	165	177	203	228	252	273	284	292
receiving home care	57.1%	728	776	813	865	933	998	1054	1095	1122	1144
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Shift 1% of dependents from informal to formal scenario	64.5%	863	932	987	1050	1130	1207	1276	1334	1378	1420
of which: receiving institutional care	142.0%	143	168	183	199	230	261	291	317	333	345
receiving home care	96.5%	728	851	932	1007	1101	1191	1272	1337	1385	1430
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Coverage convergence scenario	64.5%	863	932	987	1050	1130	1207	1276	1334	1378	1420
of which: receiving institutional care	126.9%	143	160	170	186	215	244	273	298	313	324
receiving home care	83.8%	728	796	849	921	1011	1098	1178	1242	1291	1338
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.3	5.8	5.7	5.9	6.0	6.0	6.0	6.0	6.0	6.1	6.1
Expenditure decomposition (broadly constant) : Transfers (6%) - Capital (3%) - Staff (79%) - Other (12%)											
Primary	0.1	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.6
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (4%) - Staff (85%) - Other (10%)											
Low secondary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure decomposition (broadly constant) : Transfers (-%) - Capital (-%) - Staff (-%) - Other (-%)											
Upper secondary	0.2	2.7	2.7	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (2%) - Staff (83%) - Other (11%)											
Tertiary education	0.0	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (3%) - Staff (66%) - Other (18%)											
Number of students (in thousands)											
Total	935	2506	2660	2811	2943	3047	3136	3223	3306	3382	3441
as % of population 5-24	0%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
Primary	303	757	843	879	915	938	965	1002	1034	1052	1060
Low secondary	139	341	372	390	409	424	434	446	460	472	480
Upper secondary	352	920	960	1035	1078	1123	1155	1181	1210	1244	1272
Tertiary education	141	488	485	507	541	562	582	594	602	614	629
Number of teachers (in thousands)											
Total	74	194	208	219	229	237	244	251	258	264	268
Primary	24	61	68	71	74	76	78	81	83	85	85
Low secondary	16	38	42	44	46	48	49	50	52	53	54
Upper secondary	28	73	77	83	86	90	92	94	96	99	101
Tertiary education	6	21	21	22	24	25	26	26	26	27	28
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.4	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.4

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN, Eurostat (EUROPOP2013), EPC (AWG).

2. BULGARIA

Bulgaria	EC-EPC (AWG) 2015 projections										
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.51	1.59	1.64	1.67	1.70	1.72	1.74	1.75	1.77	1.77
Life expectancy at birth											
males	10.4	71.1	72.9	74.1	75.3	76.5	77.6	78.6	79.6	80.6	81.6
females	8.4	78.0	79.4	80.4	81.3	82.2	83.1	84.0	84.8	85.6	86.4
Life expectancy at 65											
males	6.3	14.0	15.0	15.7	16.4	17.1	17.7	18.4	19.1	19.7	20.3
females	6.1	17.3	18.2	18.9	19.6	20.2	20.9	21.5	22.2	22.8	23.4
Net migration (thousand)	3.5	-2.9	-5.8	-8.8	-5.8	4.6	5.3	4.2	3.7	3.1	0.6
Net migration as % of population	0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1	0.1	0.1	0.1	0.0
Population (million)	-1.8	7.3	7.0	6.7	6.5	6.2	6.1	5.9	5.8	5.6	5.5
Children population (0-14) as % of total population	0.4	13.7	14.3	13.9	13.4	13.1	13.3	13.7	14.1	14.1	14.1
Prime age population (25-54) as % of total population	-8.4	42.1	41.6	39.8	37.5	35.7	34.5	33.1	32.7	33.3	33.7
Working age population (15-64) as % of total population	-12.7	67.0	64.1	63.0	62.3	61.4	59.5	57.3	55.7	54.2	54.2
Elderly population (65 and over) as % of total population	12.3	19.4	21.7	23.1	24.3	25.6	27.2	29.0	30.2	31.6	31.7
Very elderly population (80 and over) as % of total population	7.8	4.4	4.9	5.4	6.7	7.7	8.3	8.8	9.6	10.8	12.2
Very elderly population (80 and over) as % of elderly population	15.9	22.5	22.4	23.2	27.6	30.0	30.6	30.4	31.6	34.3	38.4
Very elderly population (80 and over) as % of working age population	15.4	6.5	7.6	8.5	10.8	12.5	14.0	15.4	17.2	20.0	22.5
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.5	1.4	2.7	1.6	1.3	1.4	1.1	1.1	0.9	1.0	1.1
Employment (growth rate)	-0.8	-0.8	0.0	-0.9	-0.9	-0.9	-1.1	-1.1	-1.1	-0.7	-0.5
Labour input : hours worked (growth rate)	-0.8	-0.8	0.0	-0.9	-0.9	-0.9	-1.1	-1.2	-1.1	-0.8	-0.5
Labour productivity per hour (growth rate)	2.2	2.2	2.6	2.5	2.2	2.3	2.3	2.3	2.0	1.8	1.5
TFP (growth rate)	1.3	0.7	1.2	1.3	1.4	1.5	1.5	1.5	1.3	1.2	1.0
Capital deepening (contribution to labour productivity growth)	0.9	1.5	1.4	1.2	0.8	0.8	0.8	0.8	0.7	0.6	0.5
Potential GDP per capita (growth rate)	2.1	2.0	3.4	2.4	2.0	2.0	1.7	1.6	1.4	1.6	1.7
Potential GDP per worker (growth rate)	2.2	2.2	2.7	2.5	2.2	2.3	2.3	2.3	2.1	1.8	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-1904	4866	4453	4225	4021	3830	3613	3389	3212	3046	2962
Population growth (working age:15-64)	1.1	-1.4	-1.2	-1.0	-0.9	-1.1	-1.3	-1.2	-1.0	-1.0	-0.3
Population (20-64) (in thousands)	-1853	4538	4137	3883	3692	3517	3326	3119	2941	2769	2685
Population growth (20-64)	0.8	-1.0	-1.2	-1.2	-0.8	-1.2	-1.2	-1.2	-1.1	-1.1	-0.3
Labour force 15-64 (thousands)	-1285	3336	3142	2967	2805	2641	2481	2330	2198	2095	2051
Labour force 20-64 (thousands)	-1280	3313	3121	2946	2783	2620	2462	2313	2180	2077	2033
Participation rate (20-64)	2.7	73.0	75.4	75.9	75.4	74.5	74.0	74.2	74.1	75.0	75.7
Participation rate (15-64)	0.7	68.6	70.6	70.2	69.8	69.0	68.7	68.7	68.4	68.8	69.2
young (15-24)	-1.2	30.2	28.8	27.7	29.1	29.7	30.3	29.9	29.2	28.8	29.0
prime-age (25-54)	0.9	83.1	83.9	84.3	84.3	83.8	83.6	83.6	83.8	84.0	83.9
older (55-64)	6.6	54.4	57.4	59.6	61.3	60.9	60.0	60.5	58.8	58.8	61.0
Participation rate (20-64) - FEMALES	1.5	68.9	70.8	71.2	70.5	69.2	68.5	68.5	68.4	69.5	70.4
Participation rate (15-64) - FEMALES	-0.3	64.7	66.2	65.9	65.2	64.0	63.5	63.5	63.1	63.7	64.3
young (15-24)	-1.5	25.5	23.7	22.8	24.0	24.5	25.0	24.7	24.1	23.7	24.0
prime-age (25-54)	0.0	80.2	80.8	81.2	81.1	80.4	79.9	79.7	79.9	80.2	80.2
older (55-64)	3.3	49.2	50.8	52.3	53.5	52.8	51.5	52.2	50.0	50.0	52.5
Participation rate (20-64) - MALES	3.7	77.1	79.9	80.4	80.2	79.6	79.4	79.6	79.7	80.3	80.8
Participation rate (15-64) - MALES	1.6	72.4	74.7	74.5	74.2	73.7	73.7	73.8	73.6	73.7	74.0
young (15-24)	-0.8	34.7	33.5	32.4	34.0	34.6	35.2	34.9	34.0	33.6	33.9
prime-age (25-54)	1.7	85.8	86.9	87.2	87.3	87.1	87.1	87.3	87.5	87.6	87.5
older (55-64)	9.3	60.2	64.5	67.2	69.2	69.2	68.5	68.8	67.6	67.6	69.5
Average effective exit age (TOTAL) (1)	0.8	62.9	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
Men	1.0	63.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
Women	0.5	62.0	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
Employment rate (15-64)	4.4	59.6	62.2	63.3	63.4	63.3	63.5	63.6	63.3	63.6	64.1
Employment rate (20-64)	6.5	63.7	66.7	68.5	68.7	68.6	68.6	68.8	68.7	69.6	70.2
Employment rate (15-74)	2.2	52.0	53.7	55.0	55.2	55.0	54.5	53.7	53.2	53.4	54.2
Unemployment rate (15-64)	-5.6	13.0	11.9	9.9	9.1	8.2	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-5.5	12.7	11.6	9.7	8.8	8.0	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-5.7	12.9	11.7	9.7	8.9	8.0	7.3	7.2	7.3	7.2	7.3
Employment (20-64) (in millions)	-1.0	2.9	2.8	2.7	2.5	2.4	2.3	2.1	2.0	1.9	1.9
Employment (15-64) (in millions)	-1.0	2.9	2.8	2.7	2.6	2.4	2.3	2.2	2.0	1.9	1.9
share of young (15-24)	1%	6%	5%	5%	6%	6%	7%	7%	7%	7%	7%
share of prime-age (25-54)	-1%	77%	78%	77%	73%	71%	71%	71%	71%	72%	76%
share of older (55-64)	0%	17%	17%	18%	20%	22%	22%	23%	21%	18%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-2.2	21.3	21.0	21.4	23.2	25.1	25.3	25.6	24.3	20.5	19.1
Old-age dependency ratio 15-64 (3)	30	29	34	37	39	42	46	51	54	58	58
Old-age dependency ratio 20-64 (3)	33	31	36	40	43	45	50	55	59	64	64
Total dependency ratio (4)	35	49	56	59	61	63	68	75	80	84	84
Total economic dependency ratio (5)	27	147	143	141	143	146	151	160	168	174	174
Economic old-age dependency ratio (15-64) (6)	39	47	51	54	57	61	67	74	80	86	86
Economic old-age dependency ratio (15-74) (7)	36	46	49	52	55	58	63	70	76	81	82

Bulgaria	EC-EPC (AWG) 2015 projections								

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.4	9.9	8.4	8.2	8.1	8.2	8.4	8.7	9.2	9.4	9.4
Earnings-related pensions, gross	-0.5	9.5	8.1	7.9	7.8	7.9	8.1	8.4	8.8	9.1	9.1
Of which : Old-age and early pensions	-0.6	7.9	6.3	5.9	5.8	5.8	5.9	6.3	6.7	7.1	7.3
Disability pensions	0.3	1.3	1.5	1.6	1.7	1.8	1.9	1.9	1.8	1.7	1.6
Survivors pensions	-0.1	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2
Public pensions, net	-0.4	9.9	8.4	8.2	8.1	8.2	8.4	8.7	9.2	9.4	9.4
Public pensions, contributions	-0.1	7.3	7.0	7.0	7.0	7.0	7.0	7.1	7.1	7.1	7.2

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pensioners (Public, in 1000 persons)	-315	2196	2090	2046	1994	1949	1931	1928	1930	1917	1881
Pensioners aged 65+ (1000 persons)	171	1445	1528	1521	1476	1437	1448	1500	1553	1611	1616
Share of pensioners below age 65 as % of all pensioners	-20.1%	34.2%	26.9%	25.7%	26.0%	26.2%	25.0%	22.2%	19.6%	16.0%	14.0%
Benefit ratio (Public pensions)	-6.7	34.2	30.7	29.6	29.0	28.7	28.4	28.1	27.8	27.6	27.5
Gross replacement rate at retirement (Public pensions)	2.4	29.5	32.1	29.8	30.2	30.1	30.7	31.5	31.8	31.9	31.9
Average accrual rates (new pensions, earnings related)	0.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Average contributory period (new pensions, earnings-related)	3.0	34.6	36.6	37.8	38.3	38.1	38.0	37.9	37.8	37.7	37.6
Contributors (Public pensions, in 1000 persons)	-745.8	2729.8	2700.6	2636.8	2533.4	2429.8	2327.7	2207.1	2090.7	2006.3	1984.0
Support ratio (contributors/100 pensioners, Public pensions)	-18.8	124.3	129.2	128.9	127.0	124.7	120.6	114.5	108.3	104.7	105.5

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.6	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6
High labour productivity (+0.25 p.p.)	-0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Lower labour productivity (-0.25 p.p.)	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.6	0.0	-0.5	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6
Lower migration (-20%)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TFP risk scenario	0.3	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Policy scenario linking retirement age to increases in life expectancy	-0.8	0.0	0.0	-0.2	-0.4	-0.6	-0.7	-0.8	-0.9	-0.9	-0.8

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.4		-1.4	-1.7	-1.7	-1.7	-1.5	-1.1	-0.7	-0.4	-0.4
Dependency ratio	6.7		1.6	2.4	3.0	3.5	4.3	5.2	5.9	6.6	6.7
Coverage ratio	-3.1		-1.1	-1.5	-1.8	-2.2	-2.5	-2.8	-2.9	-3.2	-3.1
Of which : Old-age	-0.7		-0.1	-0.4	-0.8	-1.1	-1.3	-1.3	-1.2	-1.0	-0.7
Early-age	-4.5		-1.9	-2.5	-2.7	-2.7	-2.9	-3.0	-2.8	-3.4	-4.5
Cohort effect	-6.3		-1.4	-1.6	-1.6	-1.9	-2.5	-3.6	-4.8	-6.2	-6.3
Benefit ratio	-2.5		-1.2	-1.6	-1.8	-1.9	-2.0	-2.2	-2.3	-2.4	-2.5
Labour market ratio	-1.2		-0.6	-0.9	-0.9	-0.9	-1.0	-1.1	-1.0	-1.2	-1.2
Of which : Employment rate	-0.9		-0.4	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8	-0.9
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3
Interaction effect (residual)	-0.3		-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.4		-1.2	-0.3	0.0	0.1	0.2	0.3	0.4	0.3	0.0
Dependency ratio	6.7		1.1	0.8	0.5	0.5	0.8	0.9	0.7	0.8	0.0
Coverage ratio	-3.1		-0.7	-0.4	-0.3	-0.3	-0.4	-0.3	-0.1	-0.2	0.1
Of which : Old-age	-0.7		-0.2	-0.3	-0.4	-0.3	-0.2	0.0	0.2	0.2	0.3
Early-age	-4.5		-1.1	-0.5	-0.2	0.0	-0.2	-0.1	0.1	-0.6	-1.1
Cohort effect	-6.3		-0.8	-0.2	0.0	-0.3	-0.6	-1.1	-1.3	-1.4	0.0
Benefit ratio	-2.5		-1.2	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Labour market ratio	-1.2		-0.4	-0.3	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0
Of which : Employment rate	-0.9		-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.1
Interaction effect (residual)	-0.3		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	4.0	4.2	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.4
Demographic scenario	0.4	4.0	4.2	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5
High Life expectancy scenario	0.6	4.0	4.2	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.6
Constant health scenario	-0.1	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9
Death-related cost scenario	0.4	4.0	4.2	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5
Income elasticity scenario	0.7	4.0	4.2	4.4	4.6	4.7	4.8	4.8	4.8	4.8	4.7
EU28 cost convergence scenario	3.1	4.0	4.4	4.7	4.9	5.3	5.6	5.9	6.3	6.7	7.1
Labour intensity scenario	0.7	4.0	4.0	4.0	4.1	4.2	4.4	4.6	4.8	4.8	4.8
Sector-specific composite indexation scenario	-0.1	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1	4.0	4.0
Non-demographic determinants scenario	1.9	4.0	4.5	4.9	5.2	5.4	5.7	5.8	6.0	6.0	6.0
AWG risk scenario	1.1	4.0	4.5	4.7	4.9	5.1	5.2	5.3	5.3	5.3	5.2
TFP risk scenario	0.3	4.0	4.2	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.4

Bulgaria		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
Demographic scenario	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
High Life expectancy scenario	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Base case scenario	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Constant disability scenario	0.1	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Shift to formal care scenario	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8
Coverage convergence scenario	1.5	0.4	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.6	1.9
Cost convergence scenario	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
Cost and coverage convergence scenario	2.7	0.4	0.5	0.6	0.7	0.9	1.1	1.4	1.8	2.4	3.1
AWG risk scenario	2.5	0.4	0.5	0.6	0.7	0.8	1.0	1.3	1.7	2.2	2.9
TFP risk scenario	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	3.9%	280	284	284	286	289	291	291	291	292	291
of which: receiving institutional care	24.9%	15	16	16	16	17	17	18	18	19	19
receiving home care	7.1%	106	109	109	111	113	112	112	112	114	114
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Demographic scenario	15.6%	280	290	294	301	309	314	317	321	323	324
of which: receiving institutional care	32.8%	15	16	17	17	17	18	19	19	20	20
receiving home care	18.9%	106	111	113	117	120	120	121	123	126	126
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Constant disability scenario	-6.3%	280	278	273	272	271	270	268	266	265	262
of which: receiving institutional care	17.8%	15	16	16	16	16	17	17	17	18	18
receiving home care	-3.3%	106	106	106	106	107	105	104	103	104	103
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Shift 1% of dependents from informal to formal scenario	15.6%	280	290	294	301	309	314	317	321	323	324
of which: receiving institutional care	64.0%	15	19	20	21	21	22	23	24	24	25
receiving home care	44.8%	106	128	139	143	147	148	149	151	153	154
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Coverage convergence scenario	15.6%	280	290	294	301	309	314	317	321	323	324
of which: receiving institutional care	459.8%	15	19	22	25	30	37	45	55	67	85
receiving home care	255.7%	106	127	144	166	190	215	243	278	324	378
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.4	3.0	2.9	3.0	3.0	3.0	2.9	3.1	3.2	3.4	3.4
Expenditure decomposition (broadly constant) : Transfers (18%) - Capital (4%) - Staff (57%) - Other (21%)											
Primary	0.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (20%) - Capital (3%) - Staff (55%) - Other (23%)											
Low secondary	0.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (17%) - Capital (3%) - Staff (57%) - Other (22%)											
Upper secondary	0.2	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (21%) - Capital (3%) - Staff (56%) - Other (19%)											
Tertiary education	-0.1	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (9%) - Staff (58%) - Other (19%)											
Number of students (in thousands)											
Total	-247	1049	995	981	938	882	839	820	818	817	802
as % of population 5-24	1%	74%	76%	76%	74%	74%	74%	74%	75%	75%	74%
Primary	-51	260	274	260	236	219	214	220	222	218	209
Low secondary	-38	232	246	239	226	207	195	194	198	199	193
Upper secondary	-46	280	271	290	277	262	242	230	230	235	234
Tertiary education	-111	278	203	193	198	194	188	176	168	166	166
Number of teachers (in thousands)											
Total	-16	70	67	66	63	59	56	55	55	55	54
Primary	-3	15	16	15	14	13	12	13	13	12	12
Low secondary	-3	18	19	18	17	16	15	15	15	15	15
Upper secondary	-4	22	21	22	21	20	19	18	18	18	18
Tertiary education	-6	15	11	11	11	11	10	10	9	9	9

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	0.1	0.3	0.4	0.5	0.7	0.9	0.9	0.9	0.9	0.9

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

3. THE CZECH REPUBLIC

Czech Republik		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.52	1.63	1.68	1.72	1.75	1.77	1.78	1.79	1.80	1.80
Life expectancy at birth											
males	8.2	75.1	76.5	77.4	78.3	79.2	80.1	80.9	81.7	82.5	83.3
females	6.7	81.2	82.3	83.1	83.8	84.5	85.3	85.9	86.6	87.3	87.9
Life expectancy at 65											
males	5.5	15.7	16.6	17.2	17.8	18.4	19.0	19.6	20.1	20.7	21.2
females	5.3	19.2	20.0	20.6	21.2	21.8	22.4	22.9	23.5	24.0	24.5
Net migration (thousand)	22.5	-1.3	28.0	31.5	35.8	37.8	40.7	33.9	25.5	23.1	21.2
Net migration as % of population	0.2	0.0	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2
Population (million)	0.6	10.5	10.7	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.1
Children population (0-14) as % of total population	0.5	14.9	16.0	15.3	14.7	14.3	14.7	15.3	15.8	15.7	15.4
Prime age population (25-54) as % of total population	-8.0	43.3	42.5	40.7	38.0	36.1	35.5	35.0	34.6	35.0	35.3
Working age population (15-64) as % of total population	-11.6	68.0	63.8	63.3	63.0	62.7	60.6	58.0	56.7	56.2	56.4
Elderly population (65 and over) as % of total population	11.1	17.1	20.2	21.4	22.3	23.0	24.7	26.7	27.5	28.1	28.2
Very elderly population (80 and over) as % of total population	7.6	3.9	4.2	5.1	6.6	7.7	7.9	8.0	8.4	9.9	11.5
Very elderly population (80 and over) as % of elderly population	18.0	22.8	20.7	23.8	29.7	33.4	31.8	30.1	30.7	35.3	40.8
Very elderly population (80 and over) as % of working age population	14.7	5.7	6.5	8.0	10.5	12.2	13.0	13.9	14.8	17.7	20.4
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.6	0.5	1.6	1.7	1.9	1.6	1.6	1.6	1.5	1.6	1.7
Employment (growth rate)	-0.1	-0.1	-0.3	-0.2	0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.2
Labour input : hours worked (growth rate)	-0.1	-0.4	-0.2	-0.2	0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.2
Labour productivity per hour (growth rate)	1.7	0.9	1.8	1.9	1.9	1.8	1.8	1.8	1.7	1.6	1.5
TFP (growth rate)	1.1	0.4	1.2	1.3	1.2	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.6	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.5	0.4	1.4	1.6	1.8	1.5	1.4	1.4	1.4	1.6	1.8
Potential GDP per worker (growth rate)	1.7	0.6	1.9	1.9	1.9	1.8	1.7	1.8	1.7	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-902	7149	6801	6797	6797	6788	6619	6388	6285	6235	6247
Population growth (working age:15-64)	1.3	-1.1	-0.5	0.3	-0.1	-0.1	-0.8	-0.6	-0.3	-0.1	0.3
Population (20-64) (in thousands)	-1021	6656	6314	6190	6209	6208	6063	5854	5734	5641	5634
Population growth (20-64)	0.9	-0.7	-0.7	-0.1	0.0	-0.1	-0.8	-0.6	-0.4	-0.2	0.3
Labour force 15-64 (thousands)	-535	5215	5075	5002	4982	4940	4830	4748	4696	4655	4680
Labour force 20-64 (thousands)	-539	5186	5049	4971	4949	4908	4799	4719	4667	4623	4647
Participation rate (20-64)	4.6	77.9	80.0	80.3	79.7	79.1	79.2	80.6	81.4	82.0	82.5
Participation rate (15-64)	2.0	72.9	74.6	73.6	73.3	72.8	73.0	74.3	74.7	74.7	74.9
young (15-24)	-3.2	31.7	28.5	26.4	29.4	29.5	29.9	29.9	28.8	28.1	28.6
prime-age (25-54)	-0.5	89.0	89.3	89.4	89.1	88.5	88.0	87.8	88.1	88.4	88.5
older (55-64)	23.3	55.1	58.0	61.4	65.9	67.1	68.0	72.8	74.8	75.5	78.3
Participation rate (20-64) - FEMALES	6.5	69.5	72.2	72.7	72.4	71.7	71.9	73.7	74.8	75.4	76.0
Participation rate (15-64) - FEMALES	3.9	65.1	67.3	66.6	66.5	66.0	66.3	68.0	68.6	68.7	69.0
young (15-24)	-2.7	26.3	23.6	21.8	24.3	24.4	24.8	24.8	23.9	23.3	23.7
prime-age (25-54)	-0.6	81.9	82.4	82.6	82.3	81.2	80.3	79.9	80.2	80.9	81.2
older (55-64)	31.6	44.5	48.1	52.3	58.1	60.1	62.7	69.7	72.5	73.3	76.0
Participation rate (20-64) - MALES	2.6	86.1	87.6	87.6	86.8	86.2	86.1	87.2	87.8	88.2	88.7
Participation rate (15-64) - MALES	0.0	80.6	81.7	80.3	79.8	79.3	79.4	80.5	80.6	80.4	80.6
young (15-24)	-3.6	36.9	33.2	30.8	34.2	34.3	34.8	34.8	33.6	32.7	33.2
prime-age (25-54)	-0.3	95.8	95.9	95.9	95.6	95.4	95.4	95.4	95.5	95.6	95.5
older (55-64)	14.2	66.4	68.2	70.6	73.7	74.2	73.4	75.9	77.0	77.8	80.6
Average effective exit age (TOTAL) (1)	4.4	61.9	62.4	62.9	63.4	64.0	64.7	65.3	65.6	65.9	66.3
Men	3.2	63.1	63.4	63.8	64.1	64.5	64.9	65.3	65.6	65.9	66.3
Women	5.6	60.7	61.4	62.0	62.7	63.5	64.4	65.3	65.6	65.9	66.3
Employment rate (15-64)	2.6	67.8	69.9	69.2	68.9	68.4	68.6	69.8	70.2	70.2	70.4
Employment rate (20-64)	5.1	72.6	75.0	75.6	75.1	74.4	74.5	75.9	76.6	77.2	77.7
Employment rate (15-74)	2.7	59.9	60.2	60.3	60.7	60.5	60.0	60.0	60.7	61.9	62.6
Unemployment rate (15-64)	-1.0	7.0	6.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Unemployment rate (20-64)	-1.0	6.8	6.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Unemployment rate (15-74)	-1.2	7.0	6.2	5.9	5.9	5.9	5.8	5.8	5.8	5.7	5.7
Employment (20-64) (in millions)	-0.5	4.8	4.7	4.7	4.7	4.6	4.5	4.4	4.4	4.4	4.4
Employment (15-64) (in millions)	-0.4	4.8	4.8	4.7	4.7	4.6	4.5	4.5	4.4	4.4	4.4
share of young (15-24)	1%	6%	5%	5%	6%	6%	6%	6%	6%	6%	7%
share of prime-age (25-54)	-4%	78%	80%	79%	74%	71%	71%	72%	72%	74%	74%
share of older (55-64)	3%	16%	15%	16%	20%	23%	23%	22%	22%	20%	19%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-2.5	20.3	19.1	19.2	21.7	24.6	23.8	22.1	21.3	19.0	17.8
Old-age dependency ratio 15-64 (3)	25	25	32	34	35	37	41	46	48	50	50
Old-age dependency ratio 20-64 (3)	29	27	34	37	39	40	44	50	53	55	56
Total dependency ratio (4)	30	47	57	58	59	60	65	72	76	78	77
Total economic dependency ratio (5)	23	113	119	122	123	125	128	132	136	137	136
Economic old-age dependency ratio (15-64) (6)	29	35	43	46	48	50	54	59	62	64	64
Economic old-age dependency ratio (15-74) (7)	26	35	42	45	47	48	51	56	59	60	60

Czech Republik		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
Earnings-related pensions, gross	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
Of which : Old-age and early pensions	0.8	7.3	7.5	7.6	7.5	7.3	7.4	7.7	8.0	8.2	8.1
Disability pensions	-0.1	1.1	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Survivors pensions	0.1	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	:	:	:	:	:	:	:	:	:	:	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.1	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5
Public pensions, net	0.7	9.0	9.0	9.1	9.0	8.8	9.0	9.3	9.6	9.8	9.7
Public pensions, contributions	0.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pensioners (Public, in 1000 persons)	433	2882	2876	2954	3023	3066	3152	3266	3311	3325	3315
Pensioners aged 65+ (1000 persons)	998	1799	2030	2163	2255	2314	2455	2643	2747	2803	2796
Share of pensioners below age 65 as % of all pensioners	-21.9%	37.6%	29.4%	26.8%	25.4%	24.5%	22.1%	19.1%	17.0%	15.7%	15.7%
Benefit ratio (Public pensions)	-3.3	42.8	43.8	42.4	41.0	39.7	38.9	38.7	39.1	39.3	39.5
Gross replacement rate at retirement (Public pensions)	1.5	32.2	35.6	34.0	32.5	31.8	32.8	35.1	34.5	33.3	33.7
Average accrual rates (new pensions, earnings related)	0.1	1.8	2.0	1.9	1.8	1.7	1.7	1.8	1.9	1.8	1.9
Average contributory period (new pensions, earnings-related)	5.4	43.0	44.5	45.0	45.5	46.0	46.4	47.4	47.4	47.4	48.4
Contributors (Public pensions, in 1000 persons)	-239.1	4934.8	4875.0	4829.1	4826.6	4813.4	4777.6	4750.3	4698.5	4673.0	4695.7
Support ratio (contributors/100 pensioners, Public pensions)	-29.6	171.2	169.5	163.5	159.7	157.0	151.6	145.5	141.9	140.5	141.6

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.6	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	0.2	0.0	-0.6	-1.0	-0.8	-0.6	-0.4	-0.2	0.0	0.2	0.2
Lower migration (-20%)	0.3	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
Policy scenario linking retirement age to increases in life expectancy	-0.6	0.0	-0.2	-0.4	-0.6	-0.6	-0.6	-0.7	-0.6	-0.6	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.7		0.0	0.1	0.0	-0.2	0.0	0.3	0.6	0.8	0.7
Dependency ratio	6.8		2.2	3.0	3.4	3.7	4.7	5.8	6.4	6.8	6.8
Coverage ratio	-3.6		-1.6	-1.9	-2.1	-2.3	-2.7	-3.2	-3.4	-3.6	-3.6
Of which : Old-age	-1.0		-0.5	-0.5	-0.6	-0.6	-0.8	-0.9	-0.9	-0.9	-1.0
Early-age	-5.1		-1.6	-2.9	-3.9	-4.3	-4.5	-4.7	-4.7	-4.8	-5.1
Cohort effect	-5.8		-1.9	-1.8	-1.4	-1.5	-2.6	-4.1	-5.2	-6.0	-5.8
Benefit ratio	-1.0		-0.1	-0.3	-0.6	-0.9	-1.1	-1.2	-1.1	-1.0	-1.0
Labour market ratio	-1.0		-0.4	-0.4	-0.4	-0.4	-0.5	-0.8	-0.9	-1.0	-1.0
Of which : Employment rate	-0.6		-0.3	-0.4	-0.3	-0.2	-0.2	-0.4	-0.5	-0.6	-0.6
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4
Interaction effect (residual)	-0.5		-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.7		0.2	0.0	-0.1	-0.1	0.1	0.3	0.3	0.2	0.0
Dependency ratio	6.8		1.6	0.8	0.4	0.3	1.0	1.1	0.5	0.4	0.0
Coverage ratio	-3.6		-0.7	-0.3	-0.2	-0.2	-0.5	-0.4	-0.2	-0.2	-0.1
Of which : Old-age	-1.0		-0.1	0.0	0.0	-0.1	-0.2	-0.1	0.0	0.0	-0.1
Early-age	-5.1		-0.6	-1.2	-1.0	-0.4	-0.2	-0.1	0.0	-0.1	-0.3
Cohort effect	-5.8		-1.3	0.2	0.4	-0.1	-1.1	-1.5	-1.1	-0.8	0.2
Benefit ratio	-1.0		-0.3	-0.3	-0.3	-0.3	-0.2	0.0	0.1	0.1	0.0
Labour market ratio	-1.0		-0.3	-0.1	0.0	0.0	-0.1	-0.3	-0.1	-0.1	-0.1
Of which : Employment rate	-0.6		-0.2	-0.1	0.1	0.1	0.0	-0.2	-0.1	-0.1	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
Interaction effect (residual)	-0.5		-0.2	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.0	5.7	5.9	6.1	6.2	6.4	6.5	6.6	6.6	6.7	6.7
Demographic scenario	1.2	5.7	5.9	6.1	6.3	6.5	6.6	6.8	6.9	7.0	7.0
High Life expectancy scenario	1.6	5.7	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.2	7.3
Constant health scenario	0.3	5.7	5.7	5.8	5.9	6.0	6.0	6.0	6.0	6.1	6.1
Death-related cost scenario	0.8	5.7	5.8	6.0	6.2	6.3	6.4	6.5	6.5	6.6	6.6
Income elasticity scenario	1.5	5.7	6.0	6.2	6.5	6.7	6.8	7.0	7.1	7.2	7.3
EU28 cost convergence scenario	1.5	5.7	5.9	6.2	6.4	6.6	6.8	6.9	7.1	7.2	7.2
Labour intensity scenario	2.0	5.7	6.0	6.4	6.6	6.9	7.1	7.4	7.6	7.8	7.8
Sector-specific composite indexation scenario	1.1	5.7	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.8	6.8
Non-demographic determinants scenario	2.9	5.7	6.2	6.6	7.0	7.4	7.7	8.0	8.3	8.5	8.6
AWG risk scenario	1.7	5.7	6.1	6.4	6.7	6.9	7.1	7.2	7.4	7.4	7.5
TFP risk scenario	0.9	5.7	5.9	6.1	6.2	6.4	6.5	6.5	6.6	6.7	6.7

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Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.4
Demographic scenario	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.5
High Life expectancy scenario	0.8	0.7	0.9	0.9	1.0	1.2	1.2	1.3	1.4	1.5	1.6
Base case scenario	0.8	0.7	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5
Constant disability scenario	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.3
Shift to formal care scenario	0.8	0.7	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6
Coverage convergence scenario	0.8	0.7	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5
Cost convergence scenario	5.7	0.7	1.0	1.3	1.6	2.0	2.5	3.1	3.9	5.0	6.4
Cost and coverage convergence scenario	5.7	0.7	1.0	1.3	1.6	2.0	2.5	3.1	3.9	5.0	6.4
AWG risk scenario	5.2	0.7	1.0	1.2	1.5	1.9	2.4	3.0	3.7	4.7	6.0
TFP risk scenario	0.7	0.7	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.4

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	39.7%	842	905	955	1009	1052	1077	1094	1116	1146	1177
of which: receiving institutional care	49.9%	345	375	394	417	440	459	473	484	500	517
receiving home care	129.1%	94	109	123	140	157	168	175	184	199	216
receiving cash benefits	105.6%	329	375	410	459	508	542	562	584	626	676
Demographic scenario	52.0%	842	919	981	1046	1099	1134	1161	1195	1237	1281
of which: receiving institutional care	61.7%	345	380	404	430	458	481	499	515	535	557
receiving home care	145.2%	94	110	125	144	162	175	184	195	212	231
receiving cash benefits	119.4%	329	380	419	471	525	564	589	616	664	722
Constant disability scenario	28.8%	842	892	930	973	1006	1022	1030	1042	1064	1085
of which: receiving institutional care	39.5%	345	370	385	404	423	438	448	455	468	481
receiving home care	113.2%	94	107	120	136	151	161	167	173	186	201
receiving cash benefits	93.0%	329	370	402	446	491	521	537	554	591	635
Shift 1% of dependents from informal to formal scenario	52.0%	842	919	981	1046	1099	1134	1161	1195	1237	1281
of which: receiving institutional care	89.2%	345	432	482	512	543	568	588	605	628	652
receiving home care	180.3%	94	123	146	167	187	201	211	223	243	264
receiving cash benefits	119.4%	329	380	419	471	525	564	589	616	664	722
Coverage convergence scenario	52.0%	842	919	981	1046	1099	1134	1161	1195	1237	1281
of which: receiving institutional care	61.7%	345	380	404	430	458	481	499	515	535	557
receiving home care	145.2%	94	110	125	144	162	175	184	195	212	231
receiving cash benefits	119.4%	329	380	419	471	525	564	589	616	664	722

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	3.4	3.6	3.9	3.9	3.8	3.7	3.8	4.0	4.1	4.1
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (10%) - Staff (50%) - Other (37%)											
Primary	0.2	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (10%) - Staff (55%) - Other (32%)											
Low secondary	0.3	0.9	1.1	1.1	1.1	1.1	1.0	1.1	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (10%) - Staff (55%) - Other (33%)											
Upper secondary	0.2	0.8	0.8	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (7%) - Staff (51%) - Other (39%)											
Tertiary education	0.0	1.0	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (14%) - Staff (41%) - Other (43%)											
Number of students (in thousands)											
Total	253	1697	1786	1874	1875	1827	1794	1816	1880	1939	1950
as % of population 5-24	2%	79%	84%	83%	81%	81%	81%	81%	82%	82%	82%
Primary	77	497	581	562	540	513	518	560	593	592	574
Low secondary	114	362	453	461	454	436	416	423	455	478	476
Upper secondary	89	435	423	517	503	498	479	463	474	507	524
Tertiary education	-27	404	329	334	378	380	380	370	358	361	377
Number of teachers (in thousands)											
Total	20	112	121	128	127	124	121	122	127	132	133
Primary	4	27	31	30	29	28	28	30	32	32	31
Low secondary	10	33	41	42	41	39	38	38	41	43	43
Upper secondary	7	35	34	42	41	40	39	38	39	41	43
Tertiary education	-1	17	14	14	16	16	16	16	15	16	16

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.4	0.5	0.6	0.8	0.8	0.8	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

4. DENMARK

Denmark				EC-EPC (AWG) 2015 projections							

Main demographic and macroeconomic assumptions

Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.1	1.74	1.78	1.80	1.81	1.82	1.83	1.84	1.85	1.85	1.86
Life expectancy at birth											
males	6.6	78.2	79.3	80.0	80.8	81.5	82.2	82.9	83.5	84.2	84.8
females	6.5	82.1	83.2	84.0	84.7	85.5	86.2	86.8	87.5	88.1	88.7
Life expectancy at 65											
males	4.7	17.5	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.2
females	5.1	20.2	21.1	21.6	22.2	22.8	23.3	23.8	24.3	24.8	25.3
Net migration (thousand)	-11.2	21.2	18.9	19.4	19.9	18.0	16.3	13.7	10.5	10.1	10.0
Net migration as % of population	-0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Population (million)	0.9	5.6	5.8	5.9	6.1	6.2	6.3	6.4	6.4	6.5	6.5
Children population (0-14) as % of total population	-0.8	17.3	16.6	16.4	16.9	17.2	17.1	16.7	16.5	16.4	16.5
Prime age population (25-54) as % of total population	-3.7	39.4	38.4	37.5	36.8	36.9	37.2	36.9	36.4	36.0	35.8
Working age population (15-64) as % of total population	-5.7	64.6	63.4	62.5	60.7	59.4	59.0	59.3	59.9	59.8	58.9
Elderly population (65 and over) as % of total population	6.6	18.0	20.0	21.1	22.4	23.4	24.0	24.0	23.6	23.8	24.6
Very elderly population (80 and over) as % of total population	5.5	4.2	4.8	5.9	7.0	7.5	7.9	8.7	9.3	9.7	9.7
Very elderly population (80 and over) as % of elderly population	16.2	23.1	23.8	27.8	31.5	32.2	33.1	36.1	39.5	40.8	39.2
Very elderly population (80 and over) as % of working age population	10.0	6.4	7.5	9.4	11.6	12.7	13.4	14.6	15.6	16.3	16.4
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.8	0.6	2.1	2.0	1.7	1.7	1.8	1.9	1.9	1.8	1.7
Employment (growth rate)	0.3	-0.3	0.7	0.4	0.1	0.1	0.2	0.4	0.3	0.3	0.1
Labour input : hours worked (growth rate)	0.3	-0.4	0.6	0.4	0.1	0.1	0.2	0.4	0.3	0.3	0.1
Labour productivity per hour (growth rate)	1.5	1.0	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	1.0	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.3	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.4	0.2	1.6	1.5	1.2	1.3	1.5	1.7	1.7	1.6	1.5
Potential GDP per worker (growth rate)	1.5	0.9	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	226	3629	3670	3704	3685	3678	3706	3771	3849	3875	3854
Population growth (working age:15-64)	-0.2	0.1	0.2	0.1	-0.2	0.2	0.2	0.4	0.3	0.0	-0.2
Population (20-64) (in thousands)	223	3271	3329	3357	3362	3340	3345	3399	3478	3509	3494
Population growth (20-64)	-0.3	0.1	0.2	0.2	0.0	-0.1	0.0	0.4	0.4	0.0	-0.1
Labour force 15-64 (thousands)	262	2837	2927	2963	2957	2957	2978	3030	3091	3110	3099
Labour force 20-64 (thousands)	260	2649	2749	2781	2787	2780	2789	2835	2896	2918	2910
Participation rate (20-64)	2.3	81.0	82.6	82.8	82.9	83.2	83.4	83.4	83.3	83.2	83.3
Participation rate (15-64)	2.2	78.2	79.8	80.0	80.2	80.4	80.3	80.4	80.3	80.3	80.4
young (15-24)	0.4	61.9	62.4	62.2	62.7	62.0	61.9	62.1	62.2	62.3	62.3
prime-age (25-54)	-0.6	87.5	87.1	87.1	87.0	87.0	87.0	87.0	86.9	86.9	86.9
older (55-64)	12.7	65.3	74.2	75.7	76.2	76.7	76.8	77.6	77.9	77.8	78.0
Participation rate (20-64) - FEMALES	3.8	77.9	80.3	80.8	80.9	81.3	81.5	81.7	81.7	81.5	81.7
Participation rate (15-64) - FEMALES	3.5	75.7	77.9	78.4	78.6	78.9	78.9	79.1	79.0	79.0	79.2
young (15-24)	0.4	62.5	62.9	62.8	63.2	62.6	62.5	62.7	62.8	62.8	62.8
prime-age (25-54)	0.2	84.9	84.8	85.0	85.1	85.2	85.2	85.2	85.1	85.1	85.1
older (55-64)	16.6	60.1	71.5	73.5	73.8	74.5	74.7	75.8	76.4	76.4	76.8
Participation rate (20-64) - MALES	0.8	84.0	84.8	84.9	84.9	85.1	85.1	85.0	84.8	84.7	84.8
Participation rate (15-64) - MALES	0.9	80.7	81.6	81.6	81.9	81.9	81.7	81.6	81.5	81.5	81.6
young (15-24)	0.5	61.3	61.9	61.7	62.2	61.4	61.3	61.5	61.7	61.7	61.7
prime-age (25-54)	-1.5	90.2	89.4	89.2	89.0	88.8	88.8	88.7	88.6	88.6	88.7
older (55-64)	8.7	70.6	77.0	78.0	78.6	79.1	79.0	79.3	79.3	79.1	79.3
Average effective exit age (TOTAL) (1)	3.3	64.5	65.7	66.1	66.3	66.5	66.7	67.0	67.2	67.5	67.8
Men	2.3	65.6	66.2	66.6	67.0	67.2	67.3	67.5	67.6	67.8	67.9
Women	4.4	63.4	65.3	65.5	65.5	65.8	66.1	66.5	66.9	67.3	67.7
Employment rate (15-64)	3.9	72.6	75.4	76.0	76.3	76.4	76.4	76.4	76.4	76.3	76.5
Employment rate (20-64)	3.9	75.7	78.4	79.1	79.1	79.5	79.6	79.7	79.5	79.4	79.5
Employment rate (15-74)	6.1	63.8	66.3	67.9	68.0	67.9	68.2	69.0	69.8	70.1	69.9
Unemployment rate (15-64)	-2.3	7.2	5.5	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Unemployment rate (20-64)	-2.1	6.5	5.1	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Unemployment rate (15-74)	-2.5	7.0	5.4	4.8	4.7	4.7	4.6	4.6	4.6	4.6	4.5
Employment (20-64) (in millions)	0.3	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8
Employment (15-64) (in millions)	0.3	2.6	2.8	2.8	2.8	2.8	2.8	2.9	2.9	3.0	2.9
share of young (15-24)	0%	15%	14%	14%	14%	14%	14%	15%	15%	14%	14%
share of prime-age (25-54)	-3%	69%	67%	66%	66%	68%	69%	68%	66%	66%	66%
share of older (55-64)	3%	16%	19%	20%	20%	19%	17%	17%	19%	20%	20%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.0	19.1	20.0	20.9	20.6	19.3	17.6	17.8	19.6	20.4	20.1
Old-age dependency ratio 15-64 (3)	14	28	32	34	37	39	41	40	39	40	42
Old-age dependency ratio 20-64 (3)	15	31	35	37	40	43	45	45	44	44	46
Total dependency ratio (4)	15	55	58	60	65	68	70	69	67	67	70
Total economic dependency ratio (5)	-3	108	103	102	105	108	109	108	106	105	105
Economic old-age dependency ratio (15-64) (6)	10	36	39	40	43	46	47	47	46	45	46
Economic old-age dependency ratio (15-74) (7)	8	35	37	39	41	43	44	44	43	43	43

Denmark				EC-EPC (AWG) 2015 projections							

Pension expenditure projections											
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-3.1	10.3	8.7	8.4	8.3	8.2	8.0	7.7	7.5	7.3	7.2
Earnings-related pensions, gross	-1.1	1.3	1.1	1.0	0.8	0.7	0.5	0.4	0.3	0.2	0.2
Of which : Old-age and early pensions	-1.1	1.3	1.1	1.0	0.8	0.7	0.5	0.4	0.3	0.2	0.2
Disability pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Survivors pensions	:	:	:	:	:	:	:	:	:	:	:
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-2.0	9.0	7.6	7.4	7.5	7.5	7.4	7.3	7.2	7.0	7.0
Private occupational pensions, gross	1.2	4.6	5.5	5.7	5.3	5.4	5.8	6.0	6.3	6.0	5.8
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Public pensions, net	-2.1	7.4	6.3	6.1	6.0	6.0	5.8	5.6	5.5	5.3	5.3
Public pensions, contributions	-0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	1.4%	72.0%	72.3%	72.5%	72.7%	72.9%	73.1%	73.3%	73.4%	73.4%	73.4%
Pensioners (Public, in 1000 persons)	42	1318	1334	1355	1371	1398	1400	1391	1394	1372	1360
Pensioners aged 65+ (1000 persons)	183	994	1111	1151	1188	1223	1228	1215	1210	1185	1177
Share of pensioners below age 65 as % of all pensioners	-11.1%	24.6%	16.7%	15.1%	13.4%	12.5%	12.3%	12.7%	13.2%	13.6%	13.5%
Benefit ratio (Public pensions)	-7.4	42.5	39.1	38.0	37.6	36.7	35.9	35.2	34.8	34.9	35.1
Gross replacement rate at retirement (Public pensions)	-6.9	39.7	36.5	35.5	35.1	34.3	33.5	32.9	32.5	32.7	32.8
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	-60.6	616.9	480.3	466.0	484.0	508.8	536.6	549.1	554.6	554.2	556.3
Support ratio (contributors/100 pensioners, Public pensions)	-5.9	46.8	36.0	34.4	35.3	36.4	38.3	39.5	39.8	40.4	40.9
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Lower migration (-20%)	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
TFP risk scenario	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-3.1		-1.5	-1.9	-2.0	-2.0	-2.3	-2.6	-2.8	-3.0	-3.1
Dependency ratio	3.6		1.2	1.8	2.5	3.1	3.5	3.4	3.2	3.3	3.6
Coverage ratio	-3.6		-1.2	-1.7	-2.3	-2.6	-2.9	-3.1	-3.0	-3.3	-3.6
Of which : Old-age	-2.4		-0.2	-0.6	-1.0	-1.3	-1.6	-1.7	-1.7	-2.0	-2.4
Early-age	-5.6		-3.8	-4.7	-5.2	-5.0	-5.3	-5.3	-5.5	-5.5	-5.6
Cohort effect	-3.1		-0.8	-1.3	-2.2	-3.3	-3.7	-3.3	-2.7	-2.7	-3.1
Benefit ratio	-2.0		-1.1	-1.4	-1.4	-1.6	-1.8	-2.0	-2.1	-2.0	-2.0
Labour market ratio	-0.9		-0.4	-0.6	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.9
Of which : Employment rate	-0.5		-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.5
Interaction effect (residual)	-0.2		0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-3.1		-1.2	-0.3	-0.1	-0.1	-0.3	-0.3	-0.2	-0.2	-0.1
Dependency ratio	3.6		0.8	0.6	0.7	0.6	0.3	0.0	-0.2	0.1	0.3
Coverage ratio	-3.6		-0.9	-0.5	-0.6	-0.4	-0.3	-0.1	0.1	-0.2	-0.4
Of which : Old-age	-2.4		-0.2	-0.4	-0.4	-0.3	-0.3	-0.2	0.0	-0.3	-0.3
Early-age	-5.6		-2.8	-0.9	-0.5	0.2	0.0	-0.3	-0.2	-0.1	-0.1
Cohort effect	-3.1		-0.5	-0.5	-1.0	-1.0	-0.4	0.4	0.6	0.0	-0.4
Benefit ratio	-2.0		-0.8	-0.2	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.0
Labour market ratio	-0.9		-0.3	-0.2	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.1
Of which : Employment rate	-0.5		-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1
Interaction effect (residual)	-0.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	8.1	8.5	8.7	8.8	8.9	8.9	9.0	9.0	9.0	9.0
Demographic scenario	1.0	8.1	8.5	8.7	8.8	8.9	8.9	9.0	9.1	9.1	9.2
High Life expectancy scenario	1.4	8.1	8.5	8.7	8.9	9.0	9.1	9.2	9.3	9.4	9.5
Constant health scenario	0.1	8.1	8.3	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.3
Death-related cost scenario	0.7	8.1	8.4	8.6	8.7	8.7	8.8	8.8	8.8	8.8	8.8
Income elasticity scenario	1.3	8.1	8.6	8.8	9.0	9.1	9.2	9.3	9.4	9.4	9.5
EU28 cost convergence scenario	1.0	8.1	8.5	8.7	8.8	8.9	9.0	9.0	9.1	9.1	9.2
Labour intensity scenario	1.1	8.1	8.4	8.6	8.9	9.1	9.2	9.2	9.2	9.2	9.2
Sector-specific composite indexation scenario	0.6	8.1	8.3	8.4	8.5	8.6	8.6	8.6	8.7	8.7	8.7
Non-demographic determinants scenario	3.1	8.1	8.9	9.4	9.7	10.1	10.3	10.6	10.9	11.1	11.3
AWG risk scenario	1.9	8.1	8.8	9.2	9.4	9.6	9.7	9.9	10.0	10.0	10.0
TFP risk scenario	0.8	8.1	8.5	8.7	8.8	8.9	8.9	8.9	9.0	9.0	9.0

Denmark	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.0	2.4	2.7	2.9	3.3	3.6	3.9	4.0	4.2	4.4	4.5
Demographic scenario	2.2	2.4	2.7	3.0	3.3	3.7	3.9	4.1	4.3	4.5	4.7
High Life expectancy scenario	2.8	2.4	2.7	3.0	3.4	3.8	4.1	4.4	4.7	5.0	5.2
Base case scenario	2.2	2.4	2.7	3.0	3.3	3.7	4.0	4.1	4.4	4.6	4.7
Constant disability scenario	1.9	2.4	2.7	2.9	3.2	3.6	3.8	3.9	4.1	4.2	4.3
Shift to formal care scenario	3.0	2.4	3.2	3.6	4.1	4.5	4.7	4.9	5.1	5.4	5.5
Coverage convergence scenario	2.3	2.4	2.7	3.0	3.4	3.7	4.0	4.1	4.4	4.6	4.7
Cost convergence scenario	2.8	2.4	2.7	3.0	3.5	3.9	4.2	4.4	4.7	5.1	5.3
Cost and coverage convergence scenario	2.9	2.4	2.7	3.0	3.5	3.9	4.2	4.4	4.7	5.1	5.3
AWG risk scenario	2.6	2.4	2.7	3.0	3.4	3.8	4.1	4.3	4.6	4.9	5.1
TFP risk scenario	2.0	2.4	2.7	2.9	3.3	3.6	3.9	4.0	4.2	4.4	4.5

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	26.8%	444	478	494	511	523	532	541	550	558	563
of which: receiving institutional care	114.0%	44	51	57	65	73	78	82	87	92	95
receiving home care	82.2%	101	116	128	142	153	160	168	175	182	185
receiving cash benefits	82.4%	129	146	160	177	192	202	211	221	230	235
Demographic scenario	35.9%	444	484	505	527	545	558	570	584	596	603
of which: receiving institutional care	123.8%	44	51	58	66	74	80	85	90	96	99
receiving home care	91.1%	101	117	130	145	157	165	174	183	190	194
receiving cash benefits	90.7%	129	147	163	181	197	208	218	230	240	245
Constant disability scenario	23.0%	444	472	483	497	507	516	525	536	544	546
of which: receiving institutional care	106.6%	44	50	56	64	71	76	80	85	89	91
receiving home care	76.7%	101	115	126	139	149	156	163	171	176	179
receiving cash benefits	77.1%	129	145	158	174	188	197	206	215	224	228
Shift 1% of dependents from informal to formal scenario	35.9%	444	484	505	527	545	558	570	584	596	603
of which: receiving institutional care	160.6%	44	60	70	80	89	95	100	106	112	115
receiving home care	134.6%	101	143	168	184	197	207	216	225	233	238
receiving cash benefits	90.7%	129	147	163	181	197	208	218	230	240	245
Coverage convergence scenario	35.9%	444	484	505	527	545	558	570	584	596	603
of which: receiving institutional care	124.4%	44	51	58	66	74	80	85	91	96	99
receiving home care	91.9%	101	117	131	145	157	166	174	183	191	194
receiving cash benefits	90.7%	129	147	163	181	197	208	218	230	240	245

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.7	7.6	7.1	6.9	6.9	7.1	7.2	7.2	7.0	6.9	6.8
Expenditure decomposition (broadly constant) : Transfers (15%) - Capital (5%) - Staff (60%) - Other (19%)											
Primary	-0.2	1.9	1.7	1.6	1.8	1.9	1.9	1.8	1.8	1.7	1.7
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (8%) - Staff (73%) - Other (18%)											
Low secondary	-0.1	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (12%) - Staff (52%) - Other (35%)											
Upper secondary	-0.2	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.7	1.7
Expenditure decomposition (broadly constant) : Transfers (23%) - Capital (4%) - Staff (58%) - Other (16%)											
Tertiary education	-0.2	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Expenditure decomposition (broadly constant) : Transfers (28%) - Capital (2%) - Staff (56%) - Other (15%)											
Number of students (in thousands)											
Total	90	1281	1279	1270	1284	1321	1356	1376	1376	1370	1371
as % of population 5-24	2%	92%	94%	95%	94%	95%	94%	94%	94%	94%	94%
Primary	36	433	422	412	444	468	474	472	465	461	469
Low secondary	8	240	236	232	224	240	253	257	255	251	249
Upper secondary	13	332	327	331	319	323	338	349	351	349	346
Tertiary education	32	276	294	295	298	290	290	299	305	308	308
Number of teachers (in thousands)											
Total	:	:	:	:	:	:	:	:	:	:	:
Primary	:	:	:	:	:	:	:	:	:	:	:
Low secondary	2	50	50	49	47	50	53	54	54	53	52
Upper secondary	:	:	:	:	:	:	:	:	:	:	:
Tertiary education	:	:	:	:	:	:	:	:	:	:	:

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.5	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.5	1.4	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

5. GERMANY

Germany			EC-EPC (AWG) 2015 projections								
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.40	1.45	1.48	1.51	1.53	1.56	1.58	1.60	1.61	1.63
Life expectancy at birth											
males	6.7	78.5	79.6	80.4	81.1	81.9	82.6	83.2	83.9	84.5	85.2
females	5.9	83.2	84.2	84.8	85.5	86.1	86.8	87.4	87.9	88.5	89.1
Life expectancy at 65											
males	4.7	18.0	18.7	19.3	19.8	20.3	20.8	21.3	21.8	22.2	22.7
females	4.6	21.0	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.1	25.6
Net migration (thousand)	1224.9	-1127.0	228.7	229.8	220.2	181.9	142.6	138.5	119.3	121.1	97.9
Net migration as % of population	1.5	-1.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1
Population (million)	-10.5	81.3	80.6	80.3	79.7	78.8	77.7	76.2	74.5	72.7	70.8
Children population (0-14) as % of total population	0.2	13.0	12.8	13.0	13.0	12.8	12.6	12.5	12.7	12.9	13.1
Prime age population (25-54) as % of total population	-9.0	42.1	38.7	36.2	35.6	35.1	34.3	33.4	33.3	33.1	33.1
Working age population (15-64) as % of total population	-11.5	66.1	64.0	61.9	59.0	56.7	56.2	56.0	55.5	54.7	54.6
Elderly population (65 and over) as % of total population	11.3	21.0	23.2	25.2	28.1	30.6	31.2	31.5	31.8	32.4	32.3
Very elderly population (80 and over) as % of total population	7.9	5.5	7.4	8.0	8.2	9.1	10.6	12.7	14.2	13.8	13.4
Very elderly population (80 and over) as % of elderly population	15.2	26.3	32.0	31.8	29.2	29.8	33.9	40.4	44.5	42.8	41.5
Very elderly population (80 and over) as % of working age population	16.2	8.3	11.6	13.0	13.9	16.1	18.9	22.7	25.6	25.3	24.5
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.0	1.4	1.2	1.0	0.7	0.8	1.0	1.0	0.9	0.9	0.9
Employment (growth rate)	-0.5	1.0	-0.3	-0.7	-0.8	-0.7	-0.5	-0.5	-0.6	-0.7	-0.6
Labour input : hours worked (growth rate)	-0.6	0.7	-0.4	-0.7	-0.8	-0.7	-0.5	-0.5	-0.6	-0.7	-0.6
Labour productivity per hour (growth rate)	1.5	0.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	1.0	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.0	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.3	2.1	1.2	1.1	0.9	1.0	1.4	1.4	1.4	1.4	1.5
Potential GDP per worker (growth rate)	1.5	0.4	1.5	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-15068	53732	51626	49665	46999	44687	43668	42704	41353	39773	38664
Population growth (working age:15-64)	0.4	-0.9	-0.6	-0.9	-1.1	-0.8	-0.3	-0.6	-0.7	-0.8	-0.5
Population (20-64) (in thousands)	-14313	49738	47960	46116	43407	41014	40066	39238	38008	36505	35424
Population growth (20-64)	0.3	-0.8	-0.5	-1.0	-1.3	-0.9	-0.3	-0.5	-0.7	-0.8	-0.5
Labour force 15-64 (thousands)	-10898	41758	40665	39168	37190	35630	34918	34114	33005	31771	30860
Labour force 20-64 (thousands)	-10684	40594	39573	38128	36143	34552	33855	33090	32018	30810	29910
Participation rate (20-64)	2.8	81.6	82.5	82.7	83.3	84.2	84.5	84.3	84.2	84.4	84.4
Participation rate (15-64)	2.1	77.7	78.8	78.9	79.1	79.7	80.0	79.9	79.8	79.9	79.8
young (15-24)	-0.9	51.0	51.1	50.5	50.0	49.9	50.3	50.5	50.5	50.3	50.1
prime-age (25-54)	1.9	87.7	88.5	88.9	89.3	89.6	89.6	89.6	89.5	89.5	89.6
older (55-64)	8.5	67.6	71.9	72.6	72.5	74.5	76.0	76.4	75.9	76.2	76.1
Participation rate (20-64) - FEMALES	5.1	76.2	77.8	78.4	79.5	80.9	81.3	81.2	81.2	81.3	81.3
Participation rate (15-64) - FEMALES	4.2	72.6	74.3	74.8	75.6	76.5	76.9	76.9	76.8	76.9	76.8
young (15-24)	-0.8	48.9	49.1	48.5	47.9	47.9	48.3	48.5	48.4	48.3	48.1
prime-age (25-54)	3.4	82.4	83.9	84.7	85.4	85.8	85.9	85.8	85.8	85.8	85.8
older (55-64)	13.6	60.8	66.1	67.8	68.9	71.9	73.9	74.5	74.2	74.5	74.4
Participation rate (20-64) - MALES	0.5	86.9	87.1	86.8	86.9	87.5	87.6	87.3	87.2	87.4	87.4
Participation rate (15-64) - MALES	0.0	82.7	83.1	82.8	82.6	82.9	82.9	82.8	82.7	82.8	82.7
young (15-24)	-0.9	53.0	53.0	52.5	51.9	51.8	52.2	52.5	52.4	52.2	52.0
prime-age (25-54)	0.4	92.7	92.9	93.0	93.1	93.2	93.2	93.1	93.1	93.1	93.2
older (55-64)	3.1	74.6	77.7	77.4	76.1	77.2	78.2	78.3	77.7	77.9	77.7
Average effective exit age (TOTAL) (1)	0.8	64.7	65.0	65.3	65.4	65.5	65.5	65.5	65.5	65.5	65.5
Men	0.6	65.1	65.4	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.7
Women	1.0	64.2	64.6	64.9	65.2	65.3	65.3	65.3	65.3	65.3	65.3
Employment rate (15-64)	2.0	73.5	75.1	74.6	74.9	75.4	75.7	75.6	75.5	75.6	75.5
Employment rate (20-64)	2.7	77.3	78.7	78.3	78.9	79.8	80.1	79.9	79.8	79.9	80.0
Employment rate (15-74)	0.1	64.4	66.2	64.8	63.7	63.0	64.2	65.7	65.4	64.7	64.5
Unemployment rate (15-64)	0.0	5.4	4.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Unemployment rate (20-64)	0.0	5.3	4.6	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Unemployment rate (15-74)	-0.2	5.3	4.6	5.2	5.2	5.1	5.2	5.2	5.2	5.2	5.2
Employment (20-64) (in millions)	-10.1	38.4	37.7	36.1	34.2	32.7	32.1	31.3	30.3	29.2	28.3
Employment (15-64) (in millions)	-10.3	39.5	38.8	37.1	35.2	33.7	33.0	32.3	31.2	30.1	29.2
share of young (15-24)	0%	10%	10%	9%	10%	10%	10%	10%	10%	10%	10%
share of prime-age (25-54)	-4%	72%	68%	66%	68%	70%	69%	67%	68%	68%	68%
share of older (55-64)	4%	17%	22%	24%	22%	20%	21%	22%	22%	22%	21%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	2.1	20.1	24.5	26.5	24.1	21.4	22.0	23.4	23.3	22.6	22.2
Old-age dependency ratio 15-64 (3)	27	32	36	41	48	54	56	56	57	59	59
Old-age dependency ratio 20-64 (3)	30	34	39	44	52	59	61	61	62	64	65
Total dependency ratio (4)	32	51	56	62	70	76	78	79	80	83	83
Total economic dependency ratio (5)	28	102	101	107	114	120	123	125	126	128	130
Economic old-age dependency ratio (15-64) (6)	31	41	45	50	57	65	68	69	70	72	73
Economic old-age dependency ratio (15-74) (7)	28	40	43	47	54	61	65	66	67	68	69

Germany		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	2.7	10.0	10.3	10.9	11.6	12.1	12.2	12.3	12.5	12.6	12.7
Earnings-related pensions, gross	2.7	10.0	10.3	10.9	11.6	12.1	12.2	12.3	12.5	12.6	12.7
Of which : Old-age and early pensions	3.2	7.8	8.2	8.8	9.5	10.1	10.3	10.4	10.6	10.8	10.9
Disability pensions	-0.1	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Survivors pensions	-0.4	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.2
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	:	:	:	:	:	:	:	:	:	:	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Public pensions, net	1.8	8.4	8.5	8.9	9.4	9.8	9.8	9.8	9.9	10.1	10.2
Public pensions, contributions	2.6	10.5	10.6	11.2	11.9	12.3	12.5	12.6	12.8	13.0	13.0

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-3.8%	83.7%	82.5%	81.8%	81.4%	80.8%	80.2%	79.8%	79.8%	79.8%	79.9%
Pensioners (Public, in 1000 persons)	3883	20185	21438	22812	24239	25512	25689	25405	25106	24716	24068
Pensioners aged 65+ (1000 persons)	5195	16935	18612	20017	21674	23274	23551	23218	22921	22692	22129
Share of pensioners below age 65 as % of all pensioners	-8.0%	16.1%	13.2%	12.3%	10.6%	8.8%	8.3%	8.6%	8.7%	8.2%	8.1%
Benefit ratio (Public pensions)	-7.4	44.6	44.0	42.3	40.6	38.6	37.7	37.5	37.3	37.2	37.3
Gross replacement rate at retirement (Public pensions)	-7.0	42.5	41.9	40.3	38.7	36.8	35.9	35.7	35.5	35.4	35.5
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	-8027.7	33910.2	33807.7	32691.1	31428.2	30139.2	29203.1	28482.6	27643.7	26736.8	25882.5
Support ratio (contributors/100 pensioners, Public pensions)	-60.5	168.0	157.7	143.3	129.7	118.1	113.7	112.1	110.1	108.2	107.5

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
TFP risk scenario	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Policy scenario linking retirement age to increases in life expectancy	-0.6	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.3	-0.4	-0.6	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	2.7		0.3	0.9	1.6	2.1	2.2	2.3	2.5	2.6	2.7
Dependency ratio	7.3		1.3	2.6	4.5	6.2	6.5	6.6	6.9	7.3	7.3
Coverage ratio	-1.3		-0.3	-0.5	-0.9	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3
Of which : Old-age	-0.3		0.0	0.0	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3
Early-age	-1.7		-2.2	-1.8	-1.3	-1.8	-2.5	-2.1	-1.6	-1.7	-1.7
Cohort effect	-6.4		0.1	-1.2	-3.4	-5.3	-5.2	-5.2	-5.5	-6.2	-6.4
Benefit ratio	-2.2		-0.3	-0.7	-1.2	-1.8	-2.1	-2.1	-2.2	-2.3	-2.2
Labour market ratio	-0.7		-0.3	-0.4	-0.6	-0.7	-0.7	-0.6	-0.6	-0.7	-0.7
Of which : Employment rate	-0.4		-0.2	-0.1	-0.2	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.2	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.4	-0.4
Interaction effect (residual)	-0.4		0.0	-0.1	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	2.7		0.3	0.6	0.7	0.5	0.2	0.1	0.1	0.2	0.1
Dependency ratio	7.3		0.9	1.3	1.9	1.6	0.4	0.1	0.3	0.4	0.0
Coverage ratio	-1.3		-0.2	-0.2	-0.4	-0.3	0.0	0.0	0.0	-0.1	0.0
Of which : Old-age	-0.3		0.0	-0.1	-0.2	0.0	0.1	0.0	0.0	0.0	0.0
Early-age	-1.7		-1.1	0.5	0.4	-0.5	-0.7	0.4	0.4	-0.1	0.0
Cohort effect	-6.4		-0.1	-1.3	-2.2	-1.8	0.1	0.0	-0.3	-0.7	-0.2
Benefit ratio	-2.2		-0.2	-0.4	-0.5	-0.6	-0.3	-0.1	-0.1	0.0	0.0
Labour market ratio	-0.7		-0.2	-0.1	-0.2	-0.2	0.1	0.0	0.0	-0.1	0.0
Of which : Employment rate	-0.4		-0.1	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0	-0.1	0.0
Interaction effect (residual)	-0.4		0.0	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.6	7.6	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.3	8.2
Demographic scenario	0.7	7.6	7.9	8.0	8.1	8.3	8.4	8.5	8.5	8.5	8.4
High Life expectancy scenario	1.2	7.6	7.9	8.1	8.2	8.4	8.6	8.8	8.8	8.8	8.8
Constant health scenario	0.0	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.6
Death-related cost scenario	0.5	7.6	7.9	8.0	8.0	8.1	8.3	8.4	8.4	8.3	8.2
Income elasticity scenario	1.0	7.6	8.0	8.1	8.3	8.4	8.6	8.7	8.8	8.7	8.6
EU28 cost convergence scenario	0.8	7.6	7.9	8.0	8.1	8.3	8.4	8.5	8.5	8.5	8.4
Labour intensity scenario	2.0	7.6	7.9	8.3	8.6	9.0	9.4	9.6	9.6	9.6	9.6
Sector-specific composite indexation scenario	0.1	7.6	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.8	7.7
Non-demographic determinants scenario	2.2	7.6	8.3	8.5	8.8	9.0	9.4	9.7	9.9	9.9	9.9
AWG risk scenario	1.3	7.6	8.2	8.4	8.5	8.7	8.9	9.1	9.1	9.1	8.9
TFP risk scenario	0.5	7.6	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.3	8.2

Germany	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.5	1.4	1.7	1.8	2.0	2.1	2.3	2.5	2.8	2.9	2.9
Demographic scenario	1.4	1.4	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.8	2.8
High Life expectancy scenario	1.8	1.4	1.7	1.9	2.0	2.2	2.4	2.7	2.9	3.1	3.2
Base case scenario	1.6	1.4	1.7	1.9	2.0	2.2	2.4	2.7	2.9	3.0	3.0
Constant disability scenario	1.3	1.4	1.7	1.8	1.9	2.0	2.2	2.4	2.6	2.7	2.7
Shift to formal care scenario	2.7	1.4	2.3	2.7	2.9	3.1	3.4	3.7	3.9	4.1	4.1
Coverage convergence scenario	2.6	1.4	1.8	2.0	2.2	2.5	2.8	3.2	3.6	3.9	4.0
Cost convergence scenario	2.2	1.4	1.8	1.9	2.1	2.3	2.6	2.9	3.3	3.5	3.6
Cost and coverage convergence scenario	3.4	1.4	1.8	2.1	2.4	2.7	3.1	3.6	4.1	4.5	4.8
AWG risk scenario	3.1	1.4	1.8	2.0	2.3	2.6	2.9	3.4	3.9	4.3	4.5
TFP risk scenario	1.5	1.4	1.7	1.8	2.0	2.1	2.3	2.5	2.8	2.9	2.9

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.3%	7395	7918	8066	8023	7966	8065	8195	8182	7945	7562
of which: receiving institutional care	66.2%	740	836	905	956	979	1045	1148	1240	1276	1231
receiving home care	38.4%	348	389	412	424	437	463	493	512	506	482
receiving cash benefits	38.4%	1391	1558	1646	1696	1749	1852	1973	2048	2024	1926
Demographic scenario	10.6%	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
of which: receiving institutional care	74.8%	740	846	922	979	1011	1085	1197	1297	1337	1294
receiving home care	46.5%	348	394	419	435	452	482	516	538	533	510
receiving cash benefits	46.5%	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039
Constant disability scenario	-4.3%	7395	7792	7860	7759	7637	7670	7737	7703	7462	7079
of which: receiving institutional care	58.7%	740	825	888	933	948	1008	1101	1186	1220	1175
receiving home care	31.8%	348	385	404	413	423	445	472	489	483	458
receiving cash benefits	31.8%	1391	1539	1615	1653	1693	1782	1888	1956	1932	1833
Shift 1% of dependents from informal to formal scenario	10.6%	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
of which: receiving institutional care	148.4%	740	1208	1455	1516	1549	1639	1768	1875	1904	1839
receiving home care	125.1%	348	595	713	729	747	780	816	834	818	783
receiving cash benefits	46.5%	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039
Coverage convergence scenario	10.6%	7395	8043	8272	8303	8329	8510	8710	8739	8534	8181
of which: receiving institutional care	148.8%	740	895	1012	1120	1203	1336	1521	1701	1822	1842
receiving home care	114.4%	348	419	465	504	546	603	668	720	744	746
receiving cash benefits	46.5%	1391	1577	1678	1740	1809	1928	2065	2150	2132	2039

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.3	4.1	3.8	3.9	4.0	4.2	4.2	4.2	4.2	4.3	4.4
Expenditure decomposition (broadly constant) : Transfers (13%) - Capital (9%) - Staff (61%) - Other (18%)											
Primary	0.1	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (10%) - Staff (74%) - Other (16%)											
Low secondary	0.1	1.2	1.1	1.1	1.2	1.3	1.3	1.2	1.2	1.3	1.3
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (8%) - Staff (76%) - Other (15%)											
Upper secondary	0.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (23%) - Capital (10%) - Staff (52%) - Other (15%)											
Tertiary education	0.0	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3
Expenditure decomposition (broadly constant) : Transfers (21%) - Capital (9%) - Staff (47%) - Other (23%)											
Number of students (in thousands)											
Total	-2426	13287	12303	12165	12163	12070	11788	11444	11157	10980	10860
as % of population 5-24	0%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Primary	-280	2884	2845	2934	2912	2815	2716	2648	2622	2623	2604
Low secondary	-775	4681	4286	4290	4393	4367	4223	4072	3965	3917	3906
Upper secondary	-679	3149	2862	2744	2741	2788	2758	2668	2573	2505	2470
Tertiary education	-692	2572	2310	2197	2118	2099	2091	2056	1998	1935	1880
Number of teachers (in thousands)											
Total	-163	873	807	797	796	789	771	749	730	719	710
Primary	-17	175	173	178	177	171	165	161	159	159	158
Low secondary	-53	323	295	296	303	301	291	281	273	270	269
Upper secondary	-35	162	148	142	141	144	142	138	133	129	127
Tertiary education	-57	213	191	182	175	174	173	170	165	160	156

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.6	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

6. ESTONIA

Estonia		EC-EPC (AWG) 2015 projections									

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.57	1.67	1.71	1.75	1.77	1.79	1.81	1.81	1.82	1.82
Life expectancy at birth											
males	10.4	71.6	73.3	74.5	75.7	76.9	77.9	79.0	80.0	81.0	81.9
females	7.0	81.3	82.5	83.3	84.1	84.9	85.6	86.3	87.0	87.6	88.3
Life expectancy at 65											
males	6.1	14.9	15.9	16.5	17.2	17.9	18.5	19.2	19.8	20.4	21.0
females	5.0	20.1	20.9	21.5	22.0	22.6	23.1	23.6	24.1	24.6	25.1
Net migration (thousand)	2.7	-2.7	-3.7	-3.6	-2.2	0.6	0.6	0.6	0.6	0.4	0.0
Net migration as % of population	0.2	-0.2	-0.3	-0.3	-0.2	0.1	0.1	0.1	0.1	0.0	0.0
Population (million)	-0.2	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1
Children population (0-14) as % of total population	-0.6	15.8	16.6	15.6	14.7	14.1	14.3	15.0	15.6	15.6	15.2
Prime age population (25-54) as % of total population	-7.0	41.6	40.1	38.0	36.1	35.5	34.6	33.1	33.1	34.1	34.5
Working age population (15-64) as % of total population	-11.1	66.0	62.8	61.8	61.0	60.4	58.9	57.3	55.6	54.2	54.9
Elderly population (65 and over) as % of total population	11.7	18.2	20.6	22.6	24.3	25.5	26.8	27.7	28.8	30.2	29.9
Very elderly population (80 and over) as % of total population	7.0	4.8	6.1	6.3	7.2	8.2	9.3	10.0	10.4	11.1	11.8
Very elderly population (80 and over) as % of elderly population	12.9	26.4	29.4	28.1	29.5	32.3	34.7	36.2	36.2	36.8	39.4
Very elderly population (80 and over) as % of working age population	14.2	7.3	9.6	10.2	11.7	13.6	15.8	17.5	18.7	20.5	21.5
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.5	2.1	2.0	1.7	1.5	1.4	1.2	1.1	0.9	1.0	1.4
Employment (growth rate)	-0.6	0.4	-0.7	-0.8	-0.5	-0.5	-0.6	-0.8	-0.9	-0.6	-0.2
Labour input : hours worked (growth rate)	-0.6	0.3	-0.7	-0.8	-0.5	-0.5	-0.6	-0.8	-0.9	-0.6	-0.2
Labour productivity per hour (growth rate)	2.0	1.9	2.7	2.5	2.0	1.9	1.9	1.9	1.8	1.7	1.5
TFP (growth rate)	1.2	0.6	1.3	1.4	1.3	1.2	1.2	1.2	1.2	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.8	1.3	1.4	1.1	0.7	0.7	0.7	0.7	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.9	2.5	2.5	2.3	2.1	1.7	1.5	1.4	1.2	1.4	1.8
Potential GDP per worker (growth rate)	2.0	1.8	2.7	2.5	2.1	1.9	1.9	1.9	1.8	1.7	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-272	870	805	769	735	711	684	656	629	603	599
Population growth (working age:15-64)	1.3	-1.1	-1.1	-0.9	-0.8	-0.7	-0.8	-0.8	-0.8	-0.7	0.2
Population (20-64) (in thousands)	-270	808	742	694	666	646	625	602	573	544	538
Population growth (20-64)	1.0	-0.8	-1.4	-1.2	-0.6	-0.7	-0.7	-0.8	-1.0	-1.0	0.2
Labour force 15-64 (thousands)	-197	655	613	580	559	542	523	503	480	460	458
Labour force 20-64 (thousands)	-197	649	607	573	553	536	517	498	475	454	452
Participation rate (20-64)	3.6	80.3	81.8	82.6	82.9	82.9	82.8	82.7	82.8	83.6	84.0
Participation rate (15-64)	1.2	75.3	76.1	75.5	76.1	76.3	76.5	76.7	76.4	76.3	76.4
young (15-24)	-4.0	40.4	35.4	33.4	37.3	37.7	38.5	38.2	36.7	35.8	36.4
prime-age (25-54)	2.1	87.6	88.7	89.4	89.7	89.6	89.2	89.3	89.6	89.7	89.7
older (55-64)	8.2	66.6	67.4	70.0	73.5	73.8	74.2	74.2	72.6	72.8	74.8
Participation rate (20-64) - FEMALES	4.8	76.4	78.9	80.1	80.5	80.4	80.1	79.8	79.9	80.7	81.2
Participation rate (15-64) - FEMALES	2.2	71.8	73.6	73.4	74.1	74.2	74.1	74.1	73.8	73.8	74.0
young (15-24)	-3.9	37.7	32.7	31.0	34.5	34.9	35.6	35.4	34.0	33.2	33.7
prime-age (25-54)	3.6	82.9	84.8	86.0	86.7	86.5	85.8	85.4	85.7	86.3	86.5
older (55-64)	9.2	66.3	68.7	71.7	74.3	74.0	74.5	74.7	73.2	73.2	75.4
Participation rate (20-64) - MALES	2.2	84.4	84.9	85.1	85.3	85.5	85.5	85.6	85.7	86.4	86.6
Participation rate (15-64) - MALES	-0.1	78.8	78.7	77.5	78.0	78.4	78.8	79.2	78.9	78.8	78.7
young (15-24)	-4.0	42.9	37.8	35.7	40.0	40.3	41.2	40.9	39.2	38.3	38.9
prime-age (25-54)	0.5	92.3	92.4	92.8	92.7	92.5	92.5	92.6	93.1	93.2	93.0	92.8
older (55-64)	7.1	67.0	65.8	68.0	72.5	73.6	73.9	73.8	72.1	72.2	74.2
Average effective exit age (TOTAL) (1)	0.9	64.3	64.7	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2
Men	1.0	64.4	64.7	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4
Women	0.8	64.2	64.6	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Employment rate (15-64)	2.1	68.6	70.2	69.2	70.0	70.4	70.8	70.9	70.7	70.6	70.7
Employment rate (20-64)	4.5	73.4	75.7	75.9	76.5	76.7	76.8	76.8	76.7	77.6	77.9
Employment rate (15-74)	-1.5	62.5	62.4	60.8	61.1	61.7	61.9	61.5	61.0	60.4	61.0
Unemployment rate (15-64)	-1.4	8.8	7.8	8.3	8.0	7.7	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-1.4	8.6	7.6	8.1	7.8	7.5	7.3	7.3	7.3	7.2	7.2
Unemployment rate (15-74)	-1.4	8.6	7.6	8.1	7.8	7.5	7.3	7.2	7.2	7.2	7.2
Employment (20-64) (in millions)	-0.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
Employment (15-64) (in millions)	-0.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
share of young (15-24)	0%	8%	6%	7%	9%	8%	8%	8%	8%	8%	9%
share of prime-age (25-54)	1%	74%	75%	73%	70%	69%	69%	68%	70%	74%	74%
share of older (55-64)	-1%	18%	19%	20%	21%	22%	23%	25%	22%	18%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-2.7	19.6	21.1	20.8	21.5	22.3	23.1	24.7	22.8	18.0	16.9
Old-age dependency ratio 15-64 (3)	27	28	33	36	40	42	45	48	52	56	54
Old-age dependency ratio 20-64 (3)	31	30	36	40	44	46	50	53	57	62	61
Total dependency ratio (4)	31	51	59	62	64	66	70	75	80	84	82
Total economic dependency ratio (5)	33	112	117	123	123	124	127	133	140	145	145
Economic old-age dependency ratio (15-64) (6)	36	36	42	48	52	55	59	62	67	72	72
Economic old-age dependency ratio (15-74) (7)	34	34	41	46	50	52	55	59	63	68	68

Estonia	EC-EPC (AWG) 2015 projections									
Pension expenditure projections										
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-1.3	7.6	7.6	7.3	7.1	7.0	6.9	6.8	6.7	6.6	6.3
Earnings-related pensions, gross	-1.3	7.6	7.6	7.2	7.1	6.9	6.9	6.8	6.7	6.6	6.3
Of which : Old-age and early pensions	-0.9	6.3	6.3	5.9	5.8	5.7	5.7	5.7	5.7	5.7	5.4
Disability pensions	-0.4	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.8	0.8
Survivors pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other pensions	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-earning-related pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	2.2	0.0	0.1	0.2	0.4	0.6	0.9	1.2	1.6	2.1	2.2
New pensions, gross	-0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-0.9	5.9	5.5	5.3	5.2	5.1	5.0	5.0	5.0	5.0	5.0
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	12	413	413	412	419	425	432	434	435	436	425
Pensioners aged 65+ (1000 persons)	82	243	268	279	290	297	308	315	322	332	325
Share of pensioners below age 65 as % of all pensioners	-17.7%	41.3%	35.0%	32.4%	30.7%	30.0%	28.7%	27.5%	26.1%	23.8%	23.6%
Benefit ratio (Public pensions)	-11.6	30.4	30.9	27.9	25.9	24.5	23.3	22.0	20.7	19.6	18.8
Gross replacement rate at retirement (Public pensions)	-14.9	40.1	40.6	36.7	34.5	32.6	31.2	28.9	27.3	25.9	25.2
Average accrual rates (new pensions, earnings related)	-0.2	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
Average contributory period (new pensions, earnings-related)	-7.8	40.6	37.9	36.5	35.1	34.1	33.8	32.8	32.5	32.2	32.7
Contributors (Public pensions, in 1000 persons)	-176.4	622.4	589.6	556.9	539.2	525.4	510.6	491.8	471.1	453.9	446.0
Support ratio (contributors/100 pensioners, Public pensions)	-45.8	150.7	142.8	135.0	128.7	123.6	118.3	113.3	108.3	104.1	104.9
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4
High labour productivity (+0.25 p.p.)	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Lower labour productivity (-0.25 p.p.)	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
High employment rate (+2 p.p)	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
High emp. of older workers (+10 p.p.)	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Lower migration (-20%)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
TFP risk scenario	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Policy scenario linking retirement age to increases in life expectancy	-1.0	0.0	0.0	0.0	-0.2	-0.4	-0.6	-0.7	-1.0	-1.2	-1.0
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-1.3		0.0	-0.4	-0.5	-0.7	-0.7	-0.8	-0.9	-1.0	-1.3
Dependency ratio	5.4		1.5	2.5	3.1	3.5	4.0	4.4	5.0	5.5	5.4
Coverage ratio	-2.0		-0.7	-1.2	-1.4	-1.4	-1.6	-1.7	-1.8	-2.0	-2.0
Of which : Old-age	-0.1		0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1
Early-age	-0.7		-0.9	-1.3	-1.4	-1.5	-1.8	-1.5	-0.7	-0.2	-0.7
Cohort effect	-4.9		-1.0	-1.6	-2.1	-2.2	-2.4	-3.1	-4.2	-5.4	-4.9
Benefit ratio	-3.8		-0.4	-1.2	-1.7	-2.1	-2.4	-2.8	-3.2	-3.6	-3.8
Labour market ratio	-0.5		-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.6	-0.5
Of which : Employment rate	-0.4		-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
Interaction effect (residual)	-0.4		-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-1.3		0.0	-0.4	-0.2	-0.1	0.0	-0.1	-0.1	-0.1	-0.3
Dependency ratio	5.4		1.1	1.0	0.6	0.4	0.5	0.4	0.5	0.6	-0.1
Coverage ratio	-2.0		-0.5	-0.5	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	0.0
Of which : Old-age	-0.1		0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	-0.7		-0.6	-0.4	-0.1	-0.1	-0.3	0.3	0.8	0.5	-0.5
Cohort effect	-4.9		-0.7	-0.6	-0.5	-0.1	-0.2	-0.6	-1.1	-1.2	0.5
Benefit ratio	-3.8		-0.4	-0.8	-0.5	-0.4	-0.3	-0.4	-0.4	-0.4	-0.3
Labour market ratio	-0.5		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	0.1
Of which : Employment rate	-0.4		-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Interaction effect (residual)	-0.4		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.6	4.4	4.6	4.7	4.8	4.9	5.0	5.0	5.0	5.0	5.0
Demographic scenario	0.8	4.4	4.6	4.7	4.8	5.0	5.1	5.1	5.1	5.1	5.1
High Life expectancy scenario	1.0	4.4	4.6	4.7	4.9	5.0	5.1	5.2	5.3	5.3	5.3
Constant health scenario	0.1	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.0	4.4	4.7	4.8	5.0	5.2	5.3	5.3	5.4	5.4	5.4
EU28 cost convergence scenario	2.6	4.4	4.8	5.0	5.3	5.6	5.9	6.2	6.4	6.7	7.0
Labour intensity scenario	1.2	4.4	4.5	4.7	4.8	4.9	5.1	5.3	5.5	5.6	5.6
Sector-specific composite indexation scenario	0.6	4.4	4.5	4.6	4.7	4.8	4.9	4.9	4.9	4.9	4.9
Non-demographic determinants scenario	2.3	4.4	4.9	5.3	5.6	5.9	6.2	6.4	6.5	6.6	6.6
AWG risk scenario	1.3	4.4	4.8	5.1	5.3	5.5	5.6	5.7	5.7	5.7	5.7
TFP risk scenario	0.6	4.4	4.6	4.7	4.8	4.9	4.9	5.0	5.0	5.0	4.9

Estonia	EC-EPC (AWG) 2015 projections

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2
Demographic scenario	0.7	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
High Life expectancy scenario	0.8	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4
Base case scenario	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.3
Constant disability scenario	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.1	1.2
Shift to formal care scenario	0.9	0.6	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5
Coverage convergence scenario	0.9	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
Cost convergence scenario	2.7	0.6	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.7	3.3
Cost and coverage convergence scenario	3.4	0.6	0.8	0.9	1.1	1.4	1.7	2.2	2.7	3.3	4.0
AWG risk scenario	3.2	0.6	0.8	0.9	1.1	1.3	1.7	2.1	2.5	3.1	3.7
TFP risk scenario	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2
Number of dependent people (in thousands)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
AWG reference scenario	13.7%	113	120	121	123	126	129	130	129	129	128
of which: receiving institutional care	91.9%	15	18	19	20	22	24	26	27	28	29
receiving home care	78.1%	6	7	8	9	9	10	10	11	11	11
receiving cash benefits	54.0%	15	17	18	18	19	20	21	22	22	23
Demographic scenario	25.6%	113	122	125	128	133	138	140	140	141	142
of which: receiving institutional care	103.3%	15	18	20	21	23	25	27	28	30	31
receiving home care	88.7%	6	8	8	9	9	10	11	11	12	12
receiving cash benefits	64.1%	15	17	18	19	19	21	22	23	24	24
Constant disability scenario	3.6%	113	117	117	117	119	121	122	120	118	117
of which: receiving institutional care	80.8%	15	18	19	20	21	24	25	26	27	27
receiving home care	68.5%	6	7	8	8	9	9	10	10	10	11
receiving cash benefits	45.1%	15	17	17	18	18	19	20	21	21	22
Shift 1% of dependents from informal to formal scenario	25.6%	113	122	125	128	133	138	140	140	141	142
of which: receiving institutional care	163.5%	15	23	27	29	31	34	36	37	38	40
receiving home care	166.0%	6	11	13	14	14	15	16	16	16	17
receiving cash benefits	64.1%	15	17	18	19	19	21	22	23	24	24
Coverage convergence scenario	25.6%	113	122	125	128	133	138	140	140	141	142
of which: receiving institutional care	157.5%	15	19	21	23	26	30	32	34	37	39
receiving home care	152.9%	6	8	9	10	11	12	13	14	15	16
receiving cash benefits	64.1%	15	17	18	19	19	21	22	23	24	24

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	4.4	4.6	4.8	4.8	4.6	4.4	4.5	4.8	5.1	5.1
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (8%) - Staff (67%) - Other (20%)											
Primary	0.3	1.3	1.6	1.5	1.4	1.3	1.3	1.4	1.6	1.6	1.6
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (7%) - Staff (72%) - Other (19%)											
Low secondary	0.3	0.7	0.9	1.0	0.9	0.9	0.8	0.8	0.9	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (8%) - Staff (74%) - Other (17%)											
Upper secondary	0.3	1.2	1.2	1.5	1.4	1.4	1.3	1.3	1.3	1.5	1.5
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (8%) - Staff (68%) - Other (19%)											
Tertiary education	-0.1	1.1	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (11%) - Capital (10%) - Staff (56%) - Other (23%)											
Number of students (in thousands)											
Total	-37	233	231	230	219	204	194	190	193	197	196
as % of population 5-24	2%	82%	86%	85%	82%	83%	83%	84%	84%	84%	83%
Primary	-10	77	87	79	73	65	63	67	70	70	67
Low secondary	0	38	44	46	42	39	35	34	36	38	38
Upper secondary	-6	53	50	57	54	51	47	44	44	47	48
Tertiary education	-21	65	49	48	50	49	48	45	43	43	44
Number of teachers (in thousands)											
Total	:	:	:	:	:	:	:	:	:	:	:
Primary	-1	5	5	5	4	4	4	4	4	4	4
Low secondary	0	3	3	3	3	3	2	2	2	3	3
Upper secondary	0	3	3	3	3	3	3	3	3	3	3
Tertiary education	:	:	:	:	:	:	:	:	:	:	:
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
Total	0.7	0.0	0.2	0.3	0.4	0.5	0.7	0.7	0.7	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

Ireland	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.0	2.01	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.98	1.98
Life expectancy at birth											
males	6.4	78.7	79.8	80.5	81.3	82.0	82.6	83.3	83.9	84.6	85.2
females	6.2	83.0	84.1	84.8	85.5	86.2	86.8	87.5	88.1	88.7	89.2
Life expectancy at 65											
males	4.5	18.1	18.8	19.3	19.8	20.3	20.8	21.3	21.7	22.2	22.6
females	4.8	21.0	21.8	22.3	22.9	23.4	23.9	24.4	24.9	25.4	25.8
Net migration (thousand)	47.5	-32.4	-30.3	-21.7	-12.1	-3.0	4.8	11.3	16.7	15.9	15.1
Net migration as % of population	1.0	-0.7	-0.7	-0.5	-0.3	-0.1	0.1	0.2	0.3	0.3	0.3
Population (million)	0.7	4.6	4.6	4.6	4.6	4.6	4.7	4.8	5.0	5.1	5.3
Children population (0-14) as % of total population	-3.4	21.9	21.6	19.6	17.5	16.8	17.5	18.8	19.4	19.2	18.5
Prime age population (25-54) as % of total population	-6.0	43.6	39.1	36.9	35.1	34.2	34.2	35.6	36.9	37.2	37.6
Working age population (15-64) as % of total population	-5.6	65.7	63.4	63.3	63.1	61.9	59.3	56.7	55.7	57.4	60.1
Elderly population (65 and over) as % of total population	9.0	12.4	15.0	17.1	19.4	21.4	23.1	24.5	24.9	23.4	21.4
Very elderly population (80 and over) as % of total population	7.3	2.9	3.5	4.2	5.3	6.2	7.1	7.9	8.7	9.5	10.2
Very elderly population (80 and over) as % of elderly population	24.2	23.7	23.6	24.7	27.2	29.1	30.6	32.5	34.9	40.6	47.8
Very elderly population (80 and over) as % of working age population	12.6	4.5	5.6	6.7	8.4	10.1	11.9	14.0	15.6	16.6	17.0
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.7	0.5	1.4	1.4	1.8	1.7	1.4	1.4	1.9	2.5	2.7
Employment (growth rate)	0.3	0.2	0.0	0.0	0.3	0.2	-0.2	-0.2	0.3	0.9	1.2
Labour input : hours worked (growth rate)	0.3	0.6	0.0	-0.1	0.3	0.2	-0.2	-0.1	0.4	0.9	1.2
Labour productivity per hour (growth rate)	1.4	-0.1	1.4	1.4	1.6	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.9	0.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	-0.1	0.6	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.4	0.4	1.5	1.5	1.8	1.4	0.9	0.8	1.3	1.9	2.2
Potential GDP per worker (growth rate)	1.4	0.3	1.4	1.4	1.6	1.5	1.6	1.6	1.6	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	139	3017	2923	2893	2876	2844	2784	2739	2775	2943	3156
Population growth (working age:15-64)	1.9	-0.6	-0.5	-0.1	-0.2	-0.3	-0.4	-0.3	0.7	1.4	1.3
Population (20-64) (in thousands)	71	2737	2616	2551	2535	2541	2522	2481	2486	2618	2808
Population growth (20-64)	2.2	-0.8	-0.6	-0.5	0.1	0.0	-0.2	-0.4	0.4	1.3	1.3
Labour force 15-64 (thousands)	47	2104	2009	1958	1943	1940	1915	1885	1908	2016	2151
Labour force 20-64 (thousands)	33	2059	1957	1902	1883	1886	1869	1841	1859	1962	2092
Participation rate (20-64)	-0.7	75.2	74.8	74.6	74.3	74.2	74.1	74.2	74.8	74.9	74.5
Participation rate (15-64)	-1.6	69.7	68.8	67.7	67.6	68.2	68.8	68.8	68.7	68.5	68.2
young (15-24)	1.5	39.9	40.4	39.4	41.5	43.7	44.2	42.6	40.9	40.8	41.4
prime-age (25-54)	-2.2	80.7	80.2	80.0	79.6	78.9	78.7	78.8	78.6	78.5	78.5
older (55-64)	7.3	57.3	61.8	63.2	65.3	66.9	66.0	62.7	62.7	65.0	64.6
Participation rate (20-64) - FEMALES	1.6	67.2	68.2	68.7	68.9	69.1	69.1	68.8	68.4	68.8	68.8
Participation rate (15-64) - FEMALES	0.5	62.7	63.1	62.7	63.1	63.8	64.1	63.7	63.4	63.3	63.1
young (15-24)	1.2	38.7	38.9	38.0	40.1	42.1	42.6	41.0	39.4	39.3	39.9
prime-age (25-54)	-0.6	72.5	73.1	73.7	73.7	72.8	72.0	71.7	71.8	71.8	71.9
older (55-64)	14.1	47.0	54.6	56.6	59.9	62.9	63.5	60.4	59.4	61.4	61.1
Participation rate (20-64) - MALES	-3.6	83.4	81.6	80.6	79.7	79.4	79.5	79.9	80.6	80.5	79.8
Participation rate (15-64) - MALES	-4.0	76.9	74.5	72.7	72.1	72.6	73.5	73.8	73.9	73.4	72.9
young (15-24)	1.7	41.0	41.7	40.8	42.8	45.1	45.8	44.1	42.3	42.1	42.8
prime-age (25-54)	-4.5	89.2	87.6	86.5	85.6	85.0	85.1	85.2	85.0	84.8	84.7
older (55-64)	0.3	67.7	69.3	70.0	71.1	71.1	69.0	65.6	66.3	68.5	68.0
Average effective exit age (TOTAL) (1)	1.2	64.9	65.3	65.8	66.0	66.0	66.0	66.0	66.0	66.0	66.0
Men	1.2	64.9	65.3	65.8	66.0	66.0	66.0	66.0	66.0	66.0	66.0
Women	1.2	64.8	65.4	65.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1
Employment rate (15-64)	3.1	60.4	61.8	61.6	62.0	63.1	64.1	64.1	64.1	63.8	63.5
Employment rate (20-64)	4.1	67.6	68.2	68.5	68.9	69.3	69.3	69.9	70.0	69.6
Employment rate (15-74)	3.4	55.8	56.3	56.1	56.3	56.9	57.4	57.0	56.9	57.9	59.3
Unemployment rate (15-64)	-6.5	13.3	10.2	9.0	8.2	7.4	6.8	6.8	6.8	6.8	6.8
Unemployment rate (20-64)	-6.3	12.8	9.7	8.6	7.8	7.1	6.6	6.6	6.5	6.5	6.5
Unemployment rate (15-74)	-6.4	13.1	9.9	8.7	7.9	7.1	6.5	6.5	6.5	6.6	6.6
Employment (20-64) (in millions)	0.2	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.8	2.0
Employment (15-64) (in millions)	0.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0
share of young (15-24)	4%	9%	11%	12%	13%	14%	13%	11%	11%	12%	13%
share of prime-age (25-54)	-5%	78%	73%	70%	66%	65%	66%	72%	76%	75%	73%
share of older (55-64)	2%	13%	17%	18%	20%	22%	21%	16%	12%	13%	15%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.4	15.8	18.0	19.3	20.5	21.7	21.5	17.6	13.2	13.4	15.4
Old-age dependency ratio 15-64 (3)	17	19	24	27	31	35	39	43	45	41	36
Old-age dependency ratio 20-64 (3)	19	21	26	31	35	39	43	48	50	46	40
Total dependency ratio (4)	14	52	58	58	58	62	69	76	79	74	66
Total economic dependency ratio (5)	7	146	146	145	142	141	146	156	163	161	153
Economic old-age dependency ratio (15-64) (6)	24	29	35	39	44	48	54	60	63	59	53
Economic old-age dependency ratio (15-74) (7)	23	28	33	37	42	46	50	56	59	57	51

Ireland		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	1.1	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
Earnings-related pensions, gross	1.9	3.9	4.1	4.5	5.0	5.5	6.0	6.5	6.8	6.5	5.8
Of which : Old-age and early pensions	2.3	2.4	2.6	2.9	3.2	3.8	4.4	4.9	5.4	5.3	4.7
Disability pensions	0.1	0.4	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.4	0.4
Survivors pensions	-0.4	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4
Other pensions	-0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Non-earning-related pensions	-0.4	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.2
Private occupational pensions, gross	-0.4	1.8	2.5	2.7	2.7	2.7	2.6	2.4	2.0	1.7	1.4
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	-0.2	0.7	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.5	0.5
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	1.5	5.5	5.5	6.0	6.4	6.9	7.4	7.8	8.0	7.7	7.0
Additional indicators	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	496	846	934	1008	1090	1190	1286	1350	1395	1390	1342
Pensioners aged 65+ (1000 persons)	516	548	644	720	803	902	1007	1091	1157	1140	1064
Share of pensioners below age 65 as % of all pensioners	-14.6%	35.3%	31.1%	28.5%	26.4%	24.2%	21.7%	19.1%	17.1%	18.0%	20.7%
Benefit ratio (Public pensions)	-1.8	27.9	26.5	26.6	26.6	26.6	26.5	26.4	26.2	26.1	26.1
Gross replacement rate at retirement (Public pensions)	-2.4	31.2	29.3	29.3	29.3	29.3	29.3	29.2	29.1	28.9	28.7
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	5.1	38.5	39.8	40.6	41.3	41.8	42.3	42.7	43.0	43.3	43.6
Contributors (Public pensions, in 1000 persons)	311.8	2300.5	2354.0	2346.5	2370.6	2399.3	2401.2	2376.5	2388.0	2471.8	2612.2
Support ratio (contributors/100 pensioners, Public pensions)	-77.2	271.9	252.1	232.8	217.5	201.7	186.7	176.1	171.2	177.8	194.7
Public pensions, gross as % of GDP (difference from Baseline)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.1	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3
Lower migration (-20%)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3
TFP risk scenario	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	-0.4	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.5	-0.5	-0.5	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	1.1		0.6	1.4	1.8	2.2	2.7	2.9	2.6	2.0	1.1
Dependency ratio	6.0		1.9	3.2	4.4	5.3	6.4	7.5	8.0	7.2	6.0
Coverage ratio	-1.7		-0.7	-1.0	-1.4	-1.6	-1.8	-2.2	-2.3	-2.0	-1.7
Of which : Old-age	0.0		-0.2	-0.3	-0.4	-0.3	-0.2	-0.3	-0.2	0.0	0.0
Early-age	-0.7		-0.8	-1.3	-1.7	-1.6	-0.6	0.6	0.8	0.2	-0.7
Cohort effect	-4.3		-0.7	-1.3	-1.9	-2.9	-4.8	-7.3	-8.7	-7.2	-4.3
Benefit ratio	-2.1		-0.2	-0.1	-0.4	-0.6	-0.8	-1.2	-1.7	-2.0	-2.1
Labour market ratio	-0.6		-0.3	-0.4	-0.5	-0.6	-0.8	-0.8	-0.9	-0.7	-0.6
Of which : Employment rate	-0.5		-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.3	-0.1	0.0
Interaction effect (residual)	-0.5		-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	1.1		0.6	0.7	0.4	0.5	0.4	0.2	-0.2	-0.7	-0.9
Dependency ratio	6.0		1.3	1.3	1.2	1.0	1.1	1.1	0.5	-0.8	-1.2
Coverage ratio	-1.7		-0.4	-0.4	-0.4	-0.2	-0.2	-0.4	-0.1	0.3	0.3
Of which : Old-age	0.0		0.0	-0.1	-0.1	0.1	0.1	0.0	0.1	0.2	0.0
Early-age	-0.7		-0.5	-0.5	-0.4	0.0	1.0	1.3	0.2	-0.5	-0.9
Cohort effect	-4.3		-0.5	-0.5	-0.7	-0.9	-2.0	-2.5	-1.4	1.5	2.9
Benefit ratio	-2.1		-0.2	0.0	-0.2	-0.2	-0.3	-0.4	-0.5	-0.3	-0.1
Labour market ratio	-0.6		0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.2	0.1
Of which : Employment rate	-0.5		0.0	-0.1	0.0	-0.1	0.0	0.0	-0.1	0.0	0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		-0.1	-0.1	-0.1	0.0	-0.1	-0.1	0.1	0.2	0.1
Interaction effect (residual)	-0.5		-0.1	-0.1	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.2	6.0	6.3	6.6	6.9	7.2	7.3	7.3	7.3	7.3	7.2
Demographic scenario	1.3	6.0	6.3	6.6	6.9	7.2	7.3	7.4	7.4	7.4	7.3
High Life expectancy scenario	1.6	6.0	6.3	6.6	7.0	7.3	7.5	7.6	7.6	7.6	7.6
Constant health scenario	0.6	6.0	6.2	6.4	6.6	6.8	6.9	6.9	6.8	6.7	6.6
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.6	6.0	6.4	6.7	7.1	7.4	7.5	7.6	7.6	7.6	7.6
EU28 cost convergence scenario	1.3	6.0	6.3	6.6	6.9	7.2	7.3	7.4	7.4	7.4	7.3
Labour intensity scenario	1.1	6.0	6.0	6.3	6.5	6.7	7.0	7.3	7.5	7.4	7.1
Sector-specific composite indexation scenario	0.6	6.0	6.1	6.3	6.4	6.6	6.7	6.7	6.7	6.7	6.6
Non-demographic determinants scenario	2.8	6.0	6.6	7.1	7.6	8.1	8.5	8.6	8.8	8.8	8.8
AWG risk scenario	1.9	6.0	6.5	6.9	7.4	7.7	8.0	8.1	8.1	8.0	7.9
TFP risk scenario	1.2	6.0	6.3	6.6	6.9	7.1	7.3	7.3	7.3	7.2	7.2

Ireland	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.7	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4
Demographic scenario	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5
High Life expectancy scenario	1.0	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7
Base case scenario	0.8	0.7	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.5
Constant disability scenario	0.7	0.7	0.7	0.8	0.9	0.9	1.1	1.2	1.3	1.3	1.3
Shift to formal care scenario	1.1	0.7	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.7
Coverage convergence scenario	1.7	0.7	0.8	0.9	1.1	1.3	1.5	1.8	2.0	2.2	2.4
Cost convergence scenario	1.3	0.7	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.9	2.0
Cost and coverage convergence scenario	2.5	0.7	0.8	1.0	1.2	1.4	1.8	2.1	2.5	2.9	3.2
AWG risk scenario	2.3	0.7	0.8	1.0	1.2	1.4	1.7	2.0	2.4	2.7	3.0
TFP risk scenario	0.7	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	60.3%	218	239	251	266	283	300	313	327	339	349
of which: receiving institutional care	173.7%	27	32	35	40	45	51	58	64	70	75
receiving home care	120.1%	65	75	81	90	99	109	119	128	137	144
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Demographic scenario	73.9%	218	243	258	277	298	317	334	349	365	379
of which: receiving institutional care	189.6%	27	32	36	41	47	54	60	67	74	79
receiving home care	135.2%	65	75	83	93	103	114	125	136	146	154
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Constant disability scenario	50.7%	218	235	244	256	272	286	299	311	321	328
of which: receiving institutional care	160.0%	27	31	35	39	44	50	55	61	67	71
receiving home care	107.9%	65	74	79	87	96	105	114	122	130	136
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Shift 1% of dependents from informal to formal scenario	73.9%	218	243	258	277	298	317	334	349	365	379
of which: receiving institutional care	231.3%	27	37	43	48	55	63	70	77	85	91
receiving home care	175.7%	65	88	102	113	125	137	149	160	171	180
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Coverage convergence scenario	73.9%	218	243	258	277	298	317	334	349	365	379
of which: receiving institutional care	357.4%	27	35	41	49	59	70	83	97	111	125
receiving home care	281.3%	65	82	95	112	131	153	176	200	226	249
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.0	6.0	6.4	6.3	5.8	5.3	5.2	5.6	6.0	6.2	5.9
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (7%) - Staff (66%) - Other (18%)											
Primary	-0.3	2.2	2.4	2.1	1.7	1.6	1.8	2.0	2.2	2.1	2.0
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (9%) - Staff (79%) - Other (11%)											
Low secondary	0.0	1.1	1.1	1.2	1.1	0.9	0.8	0.9	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (6%) - Staff (72%) - Other (19%)											
Upper secondary	0.1	1.4	1.5	1.6	1.6	1.4	1.3	1.3	1.4	1.5	1.5
Expenditure decomposition (broadly constant) : Transfers (19%) - Capital (5%) - Staff (53%) - Other (24%)											
Tertiary education	0.1	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (13%) - Capital (8%) - Staff (56%) - Other (24%)											
Number of students (in thousands)											
Total	117	1097	1170	1156	1082	1001	982	1035	1122	1189	1214
as % of population 5-24	-4%	93%	91%	90%	87%	87%	89%	92%	92%	91%	89%
Primary	-1	527	562	498	427	399	431	485	526	537	526
Low secondary	28	189	203	221	200	172	158	170	192	211	217
Upper secondary	47	212	225	249	249	229	204	200	219	242	259
Tertiary education	44	169	180	188	205	202	189	180	185	199	213
Number of teachers (in thousands)											
Total	:	:	:	:	:	:	:	:	:	:	:
Primary	0	34	36	32	28	26	28	31	34	35	34
Low secondary	:	:	:	:	:	:	:	:	:	:	:
Upper secondary	6	26	27	30	30	28	25	24	27	29	32
Tertiary education	3	11	12	12	14	13	13	12	12	13	14

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	0.1	0.3	0.4	0.6	0.8	0.9	0.9	0.9	0.9	0.9

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-1.1	2.1	1.5	1.3	1.2	1.0	1.0	1.0	1.0	1.0	1.0

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

8. GREECE

Greece	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.34	1.39	1.42	1.45	1.47	1.49	1.52	1.54	1.56	1.58
Life expectancy at birth											
males	6.9	78.0	79.2	80.0	80.8	81.5	82.2	82.9	83.6	84.3	84.9
females	5.7	83.3	84.2	84.9	85.5	86.1	86.7	87.3	87.9	88.5	89.0
Life expectancy at 65											
males	4.7	18.0	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.2	22.7
females	4.6	20.8	21.5	22.0	22.6	23.1	23.6	24.0	24.5	25.0	25.4
Net migration (thousand)	20.6	-15.9	-22.3	-17.1	-10.0	-3.3	1.3	6.0	7.3	5.9	4.7
Net migration as % of population	0.2	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
Population (million)	-2.5	11.0	10.7	10.4	10.1	9.8	9.6	9.3	9.1	8.8	8.6
Children population (0-14) as % of total population	-1.8	14.6	14.0	13.0	12.3	12.1	12.3	12.7	12.9	12.9	12.9
Prime age population (25-54) as % of total population	-9.3	42.6	40.6	38.3	36.2	34.6	33.3	32.9	32.8	33.1	33.3
Working age population (15-64) as % of total population	-10.9	65.1	63.9	63.2	61.9	59.6	57.0	54.6	53.2	53.4	54.2
Elderly population (65 and over) as % of total population	12.7	20.3	22.1	23.8	25.8	28.4	30.7	32.7	33.9	33.7	33.0
Very elderly population (80 and over) as % of total population	9.5	5.8	7.1	7.3	8.1	8.9	10.1	11.3	12.9	14.2	15.3
Very elderly population (80 and over) as % of elderly population	17.8	28.7	31.9	30.6	31.5	31.5	32.9	34.5	38.1	42.1	46.5
Very elderly population (80 and over) as % of working age population	19.3	8.9	11.0	11.5	13.1	15.0	17.7	20.7	24.3	26.6	28.3
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	0.7	-3.5	0.1	0.6	1.5	2.0	1.1	1.0	0.9	1.1	1.1
Employment (growth rate)	-0.4	-2.3	1.0	0.4	0.2	0.0	-0.9	-1.0	-0.9	-0.6	-0.5
Labour input : hours worked (growth rate)	-0.3	-1.7	1.0	0.4	0.2	0.0	-0.9	-1.0	-0.9	-0.6	-0.5
Labour productivity per hour (growth rate)	1.0	-1.8	-0.9	0.2	1.3	2.0	2.0	2.0	1.9	1.7	1.5
TFP (growth rate)	0.7	-1.4	-0.2	0.3	0.8	1.3	1.3	1.3	1.2	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.3	-0.4	-0.8	-0.1	0.4	0.7	0.7	0.7	0.7	0.6	0.5
Potential GDP per capita (growth rate)	1.2	-3.1	0.6	1.2	2.0	2.5	1.6	1.5	1.5	1.7	1.8
Potential GDP per worker (growth rate)	1.1	-1.3	-0.9	0.2	1.3	2.0	2.0	2.0	1.9	1.7	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-2551	7190	6818	6548	6233	5840	5460	5107	4849	4723	4639
Population growth (working age:15-64)	0.6	-0.9	-0.8	-0.8	-1.1	-1.4	-1.3	-1.3	-0.7	-0.5	-0.3
Population (20-64) (in thousands)	-2419	6645	6286	5988	5732	5388	5044	4703	4441	4306	4226
Population growth (20-64)	0.6	-0.9	-0.9	-1.0	-0.8	-1.3	-1.4	-1.4	-0.8	-0.5	-0.3
Labour force 15-64 (thousands)	-1371	4871	4901	4761	4579	4355	4120	3876	3685	3574	3500
Labour force 20-64 (thousands)	-1361	4827	4858	4718	4537	4318	4086	3844	3652	3541	3467
Participation rate (20-64)	9.4	72.6	77.3	78.8	79.1	80.1	81.0	81.7	82.2	82.2	82.0
Participation rate (15-64)	7.7	67.7	71.9	72.7	73.5	74.6	75.5	75.9	76.0	75.7	75.4
young (15-24)	-0.3	30.8	30.0	29.3	31.2	31.8	31.4	30.9	30.4	30.2	30.6
prime-age (25-54)	4.1	84.0	86.4	87.1	87.6	87.9	88.2	88.3	88.4	88.3	88.1
older (55-64)	35.5	42.4	59.4	66.4	69.4	72.0	74.5	75.9	77.2	77.7	78.0
Participation rate (20-64) - FEMALES	13.3	62.8	68.7	71.1	72.0	73.5	74.6	75.6	76.3	76.3	76.1
Participation rate (15-64) - FEMALES	11.3	58.7	64.0	65.7	66.9	68.4	69.5	70.2	70.5	70.2	69.9
young (15-24)	-0.1	27.6	27.0	26.3	28.1	28.7	28.3	27.9	27.4	27.2	27.6
prime-age (25-54)	8.0	74.4	78.9	80.5	81.7	82.3	82.4	82.6	82.7	82.6	82.4
older (55-64)	39.9	30.8	46.9	55.5	59.1	62.6	66.2	68.3	69.9	70.4	70.7
Participation rate (20-64) - MALES	5.2	82.6	85.9	86.5	86.2	86.6	87.2	87.6	88.0	87.9	87.7
Participation rate (15-64) - MALES	3.9	76.9	79.8	79.7	79.9	80.6	81.2	81.4	81.3	81.0	80.7
young (15-24)	-0.4	33.9	32.8	32.0	34.1	34.6	34.3	33.8	33.2	33.0	33.4
prime-age (25-54)	-0.1	93.6	93.7	93.6	93.4	93.4	93.6	93.8	93.8	93.7	93.5
older (55-64)	30.1	55.1	73.2	78.3	80.3	81.8	83.0	83.5	84.6	85.0	85.2
Average effective exit age (TOTAL) (1)	2.9	64.4	64.9	65.3	65.7	66.1	66.6	66.9	67.3	67.3	67.3
Men	3.1	64.4	64.9	65.4	65.9	66.4	66.9	67.2	67.5	67.5	67.5
Women	2.6	64.5	64.8	65.1	65.5	65.9	66.3	66.7	67.1	67.1	67.1
Employment rate (15-64)	21.1	48.7	56.0	60.2	63.4	66.9	69.8	70.2	70.3	70.0	69.8
Employment rate (20-64)	23.4	52.6	60.5	65.4	68.4	72.0	75.0	75.7	76.2	76.2	76.0
Employment rate (15-74)	19.2	42.9	48.8	52.4	54.9	57.5	59.5	60.0	60.3	61.1	62.1
Unemployment rate (15-64)	-20.6	28.0	22.1	17.2	13.7	10.3	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-20.3	27.7	21.7	17.0	13.5	10.1	7.4	7.4	7.4	7.4	7.4
Unemployment rate (15-74)	-20.7	27.9	21.8	16.9	13.4	9.9	7.2	7.1	7.1	7.1	7.2
Employment (20-64) (in millions)	-0.3	3.5	3.8	3.9	3.9	3.9	3.8	3.6	3.4	3.3	3.2
Employment (15-64) (in millions)	-0.3	3.5	3.8	3.9	3.9	3.9	3.8	3.6	3.4	3.3	3.2
share of young (15-24)	2%	4%	4%	5%	6%	6%	6%	6%	6%	7%	7%
share of prime-age (25-54)	-11%	82%	77%	73%	70%	68%	68%	70%	72%	72%	72%
share of older (55-64)	8%	13%	19%	22%	24%	26%	26%	24%	22%	21%	22%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.7	18.5	20.6	22.6	24.4	25.3	25.4	23.3	21.0	20.0	20.2
Old-age dependency ratio 15-64 (3)	30	31	35	38	42	48	54	60	64	63	61
Old-age dependency ratio 20-64 (3)	33	34	37	41	45	52	58	65	70	69	67
Total dependency ratio (4)	31	54	57	58	61	68	75	83	88	87	85
Total economic dependency ratio (5)	-64	211	174	155	144	137	135	141	146	148	147
Economic old-age dependency ratio (15-64) (6)	17	62	60	59	61	65	70	77	82	82	80
Economic old-age dependency ratio (15-74) (7)	13	62	58	57	59	61	65	71	75	76	74

Greece		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-1.9	16.2	15.5	15.0	14.4	14.1	14.1	14.1	14.4	14.2	14.3
Earnings-related pensions, gross	-2.2	12.4	12.4	12.1	11.5	11.0	10.7	10.4	10.4	10.1	10.2
Of which : Old-age and early pensions	-1.2	9.7	9.8	9.6	9.0	8.7	8.5	8.3	8.5	8.3	8.4
Disability pensions	-0.1	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
Survivors pensions	-0.8	1.9	1.8	1.8	1.8	1.7	1.6	1.5	1.4	1.2	1.1
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.5	2.3	1.7	1.6	1.5	1.7	2.0	2.3	2.7	2.8	2.8
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	1.0	10.2	10.2	10.2	10.3	9.5	10.0	10.4	10.9	11.1	11.2

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	51	2633	2535	2467	2446	2539	2684	2710	2768	2718	2684
Pensioners aged 65+ (1000 persons)	554	2028	2041	2100	2198	2341	2501	2568	2643	2611	2582
Share of pensioners below age 65 as % of all pensioners	-19.2%	23.0%	19.5%	14.9%	10.1%	7.8%	6.8%	5.2%	4.5%	3.9%	3.8%
Benefit ratio (Public pensions)	-14.0	65.6	67.4	70.1	68.4	64.4	60.0	56.4	54.1	52.2	51.7
Gross replacement rate at retirement (Public pensions)	:	:	32.8	30.7	30.4	27.6	25.3	23.6	22.3	21.8	22.3
Average accrual rates (new pensions, earnings related)	:	:	2.0	1.9	1.8	1.6	1.4	1.4	1.4	1.4	1.4
Average contributory period (new pensions, earnings-related)	:	:	30.6	31.5	33.8	34.3	35.1	36.0	36.3	36.9	37.6
Contributors (Public pensions, in 1000 persons)	-74.9	4188.2	4603.4	4813.6	4882.4	4905.3	4831.3	4604.6	4389.0	4223.6	4113.4
Support ratio (contributors/100 pensioners, Public pensions)	-5.8	159.1	181.6	195.1	199.6	193.2	180.0	169.9	158.6	155.4	153.3

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.2	0.0	0.0	0.1	0.1	0.2	-0.1	0.0	0.2	0.4	0.2
High labour productivity (+0.25 p.p.)	-0.7	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.6	-0.7	-0.7
Lower labour productivity (-0.25 p.p.)	0.6	0.0	0.0	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.6
High employment rate (+2 p.p)	-0.1	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
High emp. of older workers (+10 p.p.)	-0.1	0.0	-0.1	-0.3	-0.3	-0.1	0.0	-0.1	-0.2	-0.3	-0.1
Lower migration (-20%)	0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1
TFP risk scenario	0.9	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.9	0.9	0.9
Policy scenario linking retirement age to increases in life expectancy	:	:	:	:	:	:	:	:	:	:	:

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-1.9		-0.7	-1.2	-1.8	-2.1	-2.1	-2.1	-1.8	-2.0	-1.9
Dependency ratio	10.6		1.7	3.3	4.8	6.8	8.6	10.2	11.2	11.1	10.6
Coverage ratio	-3.2		-1.4	-2.5	-3.3	-3.8	-3.8	-4.2	-4.0	-3.8	-3.2
Of which : Old-age	0.1		-0.7	-1.0	-1.0	-1.1	-1.0	-1.2	-0.9	-0.6	0.1
Early-age	-19.0		-3.9	-8.1	-13.0	-15.3	-14.8	-16.4	-16.5	-18.1	-19.0
Cohort effect	-7.5		0.2	-0.2	-0.8	-2.5	-4.5	-6.8	-8.6	-8.7	-7.5
Benefit ratio	-2.1		1.3	2.0	1.6	0.9	-0.1	-0.9	-1.5	-2.0	-2.1
Labour market ratio	-6.2		-2.3	-3.6	-4.4	-5.3	-6.0	-6.3	-6.5	-6.3	-6.2
Of which : Employment rate	-5.5		-2.2	-3.3	-4.0	-4.7	-5.3	-5.4	-5.5	-5.5	-5.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.8		-0.1	-0.3	-0.4	-0.7	-0.8	-1.0	-1.0	-0.9	-0.8
Interaction effect (residual)	-1.0		-0.2	-0.4	-0.5	-0.7	-0.8	-0.9	-1.0	-1.0	-1.0

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-1.9		-0.2	-0.4	-0.6	-0.3	0.0	0.0	0.4	-0.2	0.1
Dependency ratio	10.6		1.2	1.5	1.5	2.0	1.8	1.6	1.0	-0.1	-0.5
Coverage ratio	-3.2		-0.9	-1.1	-0.9	-0.5	0.0	-0.4	0.2	0.2	0.6
Of which : Old-age	0.1		-0.4	-0.3	-0.1	-0.1	0.2	-0.2	0.3	0.3	0.6
Early-age	-19.0		-2.9	-4.2	-4.9	-2.3	0.5	-1.6	-0.1	-1.7	-0.9
Cohort effect	-7.5		0.3	-0.4	-0.6	-1.7	-2.1	-2.3	-1.7	-0.1	1.2
Benefit ratio	-2.1		0.6	0.6	-0.3	-0.8	-0.9	-0.8	-0.6	-0.5	-0.1
Labour market ratio	-6.2		-1.0	-1.3	-0.8	-0.9	-0.7	-0.3	-0.1	0.1	0.1
Of which : Employment rate	-5.5		-1.0	-1.2	-0.7	-0.7	-0.6	-0.1	-0.1	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.8		-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	0.0	0.1	0.1
Interaction effect (residual)	-1.0		-0.1	-0.2	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.3	6.6	6.6	6.8	7.0	7.3	7.5	7.7	7.8	7.9	7.9
Demographic scenario	1.4	6.6	6.6	6.9	7.1	7.4	7.6	7.8	7.9	8.0	8.0
High Life expectancy scenario	1.8	6.6	6.7	6.9	7.2	7.5	7.7	8.0	8.2	8.3	8.4
Constant health scenario	0.6	6.6	6.5	6.7	6.8	6.9	7.1	7.2	7.3	7.3	7.2
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.7	6.6	6.7	6.9	7.2	7.5	7.8	8.0	8.2	8.3	8.3
EU28 cost convergence scenario	1.4	6.6	6.6	6.9	7.1	7.4	7.6	7.8	7.9	8.0	8.0
Labour intensity scenario	0.5	6.6	6.6	6.3	6.3	6.3	6.5	6.8	7.1	7.2	7.2
Sector-specific composite indexation scenario	0.9	6.6	6.6	6.7	6.9	7.0	7.2	7.3	7.4	7.5	7.5
Non-demographic determinants scenario	3.2	6.6	6.8	7.2	7.6	8.2	8.8	9.2	9.5	9.7	9.8
AWG risk scenario	2.1	6.6	6.7	7.0	7.4	7.8	8.2	8.4	8.6	8.7	8.7
TFP risk scenario	1.2	6.6	6.6	6.8	7.0	7.3	7.5	7.7	7.8	7.8	7.8

Greece		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9
Demographic scenario	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0
High Life expectancy scenario	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
Base case scenario	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0
Constant disability scenario	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9
Shift to formal care scenario	0.8	0.5	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
Coverage convergence scenario	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.0
Cost convergence scenario	0.8	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2
Cost and coverage convergence scenario	0.9	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
AWG risk scenario	0.8	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.2	1.3
TFP risk scenario	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	14.5%	866	901	919	936	965	992	1016	1025	1019	992
of which: receiving institutional care	75.7%	4	5	5	5	6	6	7	7	8	8
receiving home care	45.4%	10	11	12	12	13	13	14	15	15	15
receiving cash benefits	45.4%	288	316	323	331	343	361	379	398	413	419
Demographic scenario	23.8%	866	916	944	972	1012	1050	1083	1098	1098	1072
of which: receiving institutional care	83.0%	4	5	5	6	6	6	7	7	8	8
receiving home care	53.4%	10	12	12	12	13	14	15	15	16	16
receiving cash benefits	52.9%	288	319	330	340	355	375	396	417	433	440
Constant disability scenario	5.8%	866	887	894	901	919	937	952	957	946	917
of which: receiving institutional care	69.0%	4	5	5	5	6	6	6	7	7	8
receiving home care	38.2%	10	11	12	12	12	13	13	14	14	14
receiving cash benefits	38.6%	288	312	318	323	332	347	364	381	394	400
Shift 1% of dependents from informal to formal scenario	23.8%	866	916	944	972	1012	1050	1083	1098	1098	1072
of which: receiving institutional care	813.0%	4	23	31	33	34	36	38	40	41	41
receiving home care	768.4%	10	58	80	83	86	89	92	93	93	91
receiving cash benefits	52.9%	288	319	330	340	355	375	396	417	433	440
Coverage convergence scenario	23.8%	866	916	944	972	1012	1050	1083	1098	1098	1072
of which: receiving institutional care	240.6%	4	6	6	7	8	9	11	12	14	15
receiving home care	185.8%	10	13	14	16	17	20	22	25	28	30
receiving cash benefits	52.9%	288	319	330	340	355	375	396	417	433	440

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-1.1	4.1	3.5	3.2	3.0	2.8	2.7	2.7	2.9	2.9	3.0
Expenditure decomposition (broadly constant) : Transfers (8%) - Capital (8%) - Staff (65%) - Other (19%)											
Primary	-0.3	1.0	0.9	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (7%) - Staff (73%) - Other (19%)											
Low secondary	-0.3	1.0	0.9	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (8%) - Staff (75%) - Other (17%)											
Upper secondary	-0.2	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (12%) - Capital (8%) - Staff (62%) - Other (18%)											
Tertiary education	-0.3	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
Expenditure decomposition (broadly constant) : Transfers (18%) - Capital (9%) - Staff (51%) - Other (21%)											
Number of students (in thousands)											
Total	-565	1944	1852	1754	1631	1526	1454	1423	1419	1408	1379
as % of population 5-24	-1%	87%	87%	86%	85%	86%	87%	87%	86%	86%	86%
Primary	-198	641	630	546	498	471	468	478	480	464	444
Low secondary	-90	338	344	326	289	263	251	251	257	257	248
Upper secondary	-92	367	354	372	331	300	278	269	272	277	275
Tertiary education	-185	597	524	509	514	492	458	426	411	409	412
Number of teachers (in thousands)											
Total	:	:	:	:	:	:	:	:	:	:	:
Primary	:	:	:	:	:	:	:	:	:	:	:
Low secondary	:	:	:	:	:	:	:	:	:	:	:
Upper secondary	:	:	:	:	:	:	:	:	:	:	:
Tertiary education	:	:	:	:	:	:	:	:	:	:	:
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.5	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.9	1.2	0.8	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

9. SPAIN

Spain	EC-EPC (AWG) 2015 projections										
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.32	1.36	1.39	1.42	1.44	1.46	1.48	1.51	1.53	1.55
Life expectancy at birth											
males	6.0	79.5	80.5	81.2	81.9	82.5	83.2	83.8	84.4	85.0	85.5
females	4.8	85.2	86.0	86.6	87.1	87.6	88.1	88.6	89.1	89.6	90.0
Life expectancy at 65											
males	4.3	18.6	19.3	19.7	20.2	20.7	21.1	21.6	22.0	22.4	22.9
females	3.8	22.5	23.1	23.5	24.0	24.4	24.8	25.2	25.6	26.0	26.3
Net migration (thousand)	585.9	-310.9	-79.0	6.4	87.5	159.7	225.2	269.0	305.6	290.3	275.0
Net migration as % of population	1.3	-0.7	-0.2	0.0	0.2	0.4	0.5	0.6	0.7	0.6	0.6
Population (million)	-0.5	46.6	45.7	45.0	44.5	44.4	44.7	45.1	45.6	45.9	46.1
Children population (0-14) as % of total population	-1.8	15.2	14.4	12.9	11.7	11.4	11.9	12.7	13.3	13.4	13.4
Prime age population (25-54) as % of total population	-9.9	45.7	41.9	38.8	36.0	33.9	33.3	33.8	34.6	35.4	35.8
Working age population (15-64) as % of total population	-10.4	66.9	65.4	64.7	63.0	60.3	57.1	54.2	53.4	54.6	56.5
Elderly population (65 and over) as % of total population	12.1	17.9	20.1	22.4	25.3	28.2	31.0	33.1	33.3	32.0	30.0
Very elderly population (80 and over) as % of total population	9.4	5.6	6.2	6.8	7.7	8.5	9.8	11.3	12.7	14.0	14.9
Very elderly population (80 and over) as % of elderly population	18.6	31.1	30.8	30.1	30.3	30.2	31.6	34.1	38.2	43.8	49.7
Very elderly population (80 and over) as % of working age population	18.1	8.3	9.5	10.5	12.2	14.1	17.2	20.8	23.8	25.7	26.4
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (grow th rate)	1.4	-0.4	1.7	1.7	1.7	1.6	0.8	0.9	1.5	2.0	2.2
Employment (grow th rate)	0.0	-1.9	0.9	0.5	0.3	0.0	-0.7	-0.6	-0.1	0.4	0.7
Labour input : hours w orked (grow th rate)	0.0	-1.8	0.9	0.5	0.3	0.0	-0.7	-0.6	-0.1	0.4	0.7
Labour productivity per hour (grow th rate)	1.4	1.4	0.7	1.2	1.4	1.5	1.5	1.5	1.5	1.5	1.5
TFP (grow th rate)	0.9	0.6	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity grow th)	0.5	0.8	0.0	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (grow th rate)	1.4	-0.1	2.0	2.0	1.9	1.5	0.6	0.7	1.2	1.8	2.1
Potential GDP per w orker (grow th rate)	1.4	1.4	0.8	1.1	1.4	1.5	1.6	1.6	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-5095	31165	29918	29075	28016	26782	25488	24444	24366	25085	26069
Population grow th (w orking age:15-64)	1.8	-1.0	-0.5	-0.6	-0.9	-0.9	-1.0	-0.6	0.3	0.7	0.8
Population (20-64) (in thousands)	-5220	29013	27597	26588	25741	24776	23651	22613	22393	22922	23792
Population grow th (20-64)	1.8	-1.0	-0.7	-0.7	-0.7	-0.8	-1.0	-0.7	0.1	0.6	0.8
Labour force 15-64 (thousands)	-2547	23112	22898	22437	21918	21195	20284	19488	19371	19845	20564
Labour force 20-64 (thousands)	-2564	22825	22599	22109	21604	20919	20034	19244	19111	19560	20261
Participation rate (20-64)	6.5	78.7	81.9	83.2	83.9	84.4	84.7	85.1	85.3	85.3	85.2
Participation rate (15-64)	4.7	74.2	76.5	77.2	78.2	79.1	79.6	79.7	79.5	79.1	78.9
young (15-24)	-0.4	37.9	35.6	35.9	38.5	39.5	39.3	38.5	37.5	37.1	37.5
prime-age (25-54)	2.7	86.9	89.0	89.7	89.8	89.6	89.5	89.6	89.7	89.7	89.6
older (55-64)	28.2	54.2	67.8	74.5	79.4	81.6	81.8	81.8	81.8	82.1	82.5
Participation rate (20-64) - FEMALES	12.4	72.4	78.6	81.2	82.8	83.9	84.4	84.7	84.9	84.9	84.8
Participation rate (15-64) - FEMALES	10.0	68.4	73.5	75.4	77.2	78.7	79.3	79.3	78.9	78.6	78.4
young (15-24)	-0.6	36.1	33.6	33.8	36.3	37.3	37.1	36.3	35.4	35.1	35.4
prime-age (25-54)	7.4	81.3	86.1	88.1	88.8	88.6	88.3	88.4	88.6	88.7	88.7
older (55-64)	40.5	45.0	63.2	71.9	78.4	82.7	84.4	84.7	84.7	85.1	85.5
Participation rate (20-64) - MALES	0.6	84.8	85.2	85.1	85.0	84.9	85.0	85.5	85.8	85.7	85.5
Participation rate (15-64) - MALES	-0.5	79.9	79.5	78.9	79.2	79.6	79.9	80.2	80.1	79.6	79.3
young (15-24)	-0.1	39.6	37.6	37.8	40.5	41.5	41.4	40.5	39.4	39.1	39.5
prime-age (25-54)	-2.0	92.5	91.8	91.3	90.8	90.6	90.7	90.8	90.7	90.6	90.5
older (55-64)	15.7	63.9	72.5	77.1	80.4	80.5	79.2	78.6	78.8	79.1	79.6
Average effective exit age (TOTAL) (1)	3.0	63.4	65.3	66.0	66.3	66.3	66.3	66.4	66.4	66.4	66.4
Men	3.4	62.8	64.8	65.7	66.0	66.0	66.1	66.1	66.1	66.2	66.2
Women	2.6	64.1	65.8	66.3	66.5	66.5	66.6	66.6	66.6	66.6	66.7
Employment rate (15-64)	18.5	54.5	61.6	65.6	68.6	71.5	73.6	73.8	73.6	73.2	73.0
Employment rate (20-64)	20.7	58.3	66.3	71.0	74.3	76.5	78.5	78.9	79.1	79.1	79.0
Employment rate (15-74)	16.9	48.6	54.5	57.9	59.9	61.6	62.6	62.1	62.5	64.1	65.5
Unemployment rate (15-64)	-19.0	26.5	19.5	15.0	12.3	9.6	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-18.6	25.9	19.0	14.6	12.0	9.4	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-19.1	26.4	19.3	14.7	11.9	9.2	7.1	7.1	7.2	7.2	7.2
Employment (20-64) (in millions)	1.9	16.9	18.3	18.9	19.0	19.0	19.0	18.6	17.7	18.1	18.8
Employment (15-64) (in millions)	2.0	17.0	18.4	19.1	19.2	19.2	18.8	18.0	17.9	18.4	19.0
share of young (15-24)	3%	5%	5%	6%	7%	7%	7%	7%	7%	8%	8%
share of prime-age (25-54)	-10%	82%	75%	70%	66%	64%	66%	70%	73%	74%	72%
share of older (55-64)	6%	14%	20%	23%	27%	29%	27%	23%	20%	19%	20%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.6	17.1	20.9	23.3	25.5	27.2	25.7	21.7	18.6	17.6	18.7
Old-age dependency ratio 15-64 (3)	26	27	31	35	40	47	54	61	62	59	53
Old-age dependency ratio 20-64 (3)	29	29	33	38	44	51	59	66	68	64	58
Total dependency ratio (4)	27	50	53	55	59	66	75	85	87	83	77
Total economic dependency ratio (5)	-41	172	143	127	120	118	122	132	139	138	132
Economic old-age dependency ratio (15-64) (6)	20	48	48	49	53	59	66	75	78	75	68
Economic old-age dependency ratio (15-74) (7)	17	48	47	47	50	55	62	69	73	71	65

Spain	EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.8	11.8	11.8	11.4	11.2	11.5	11.9	12.5	12.3	11.4	11.0
Earnings-related pensions, gross	-0.8	11.8	11.8	11.4	11.2	11.5	11.9	12.5	12.3	11.4	11.0
Of which : Old-age and early pensions	0.0	8.3	8.6	8.4	8.3	8.6	9.1	9.7	9.6	8.8	8.3
Disability pensions	-0.4	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.9
Survivors pensions	-0.5	2.3	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Private occupational pensions, gross	0.1	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4
Private individual pensions, gross	0.1	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4
New pensions, gross	-0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
Public pensions, net	-0.8	11.0	10.9	10.6	10.4	10.6	11.1	11.6	11.5	10.6	10.2
Public pensions, contributions	-0.7	12.1	12.2	12.2	12.2	12.1	12.0	11.9	11.8	11.6	11.4

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%	92.8%
Pensioners (Public, in 1000 persons)	5170	8992	9819	10553	11433	12616	13787	14757	15133	14843	14162
Pensioners aged 65+ (1000 persons)	5690	7044	7903	8652	9565	10765	12009	13189	13726	13468	12735
Share of pensioners below age 65 as % of all pensioners	-11.6%	21.7%	19.5%	18.0%	16.3%	14.7%	12.9%	10.6%	9.3%	9.3%	10.1%
Benefit ratio (Public pensions)	-19.9	59.7	58.3	55.2	51.3	47.8	45.0	42.5	40.2	38.5	39.8
Gross replacement rate at retirement (Public pensions)	-30.4	79.0	73.6	66.1	60.6	58.3	56.1	53.6	51.7	49.9	48.6
Average accrual rates (new pensions, earnings related)	-0.7	2.3	2.1	1.9	1.7	1.7	1.7	1.6	1.6	1.6	1.6
Average contributory period (new pensions, earnings-related)	3.2	36.6	37.7	38.5	38.9	39.0	39.1	39.2	39.4	39.6	39.7
Contributors (Public pensions, in 1000 persons)	1732.2	17185.5	18603.4	19367.5	19662.0	19668.8	19328.8	18550.7	18176.9	18371.3	18917.7
Support ratio (contributors/100 pensioners, Public pensions)	-57.5	191.1	189.5	183.5	172.0	155.9	140.2	125.7	120.1	123.8	133.6

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.2	0.1
High labour productivity (+0.25 p.p.)	-0.7	0.0	-0.4	-0.1	0.0	-0.1	-0.6	-1.0	-1.0	-0.4	-0.7
Lower labour productivity (-0.25 p.p.)	0.2	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.4	0.2
High employment rate (+2 p.p)	-0.1	0.0	-0.2	-0.1	0.0	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.1	0.0	-0.5	-0.2	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.4	0.2
TFP risk scenario	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.2
Policy scenario linking retirement age to increases in life expectancy	-0.7	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.7	-0.9	-0.4	-0.7

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.8		0.0	-0.4	-0.6	-0.3	0.1	0.7	0.5	-0.4	-0.8
Dependency ratio	8.9		1.8	3.5	5.2	7.0	8.8	10.3	10.6	10.0	8.9
Coverage ratio	-0.6		-0.1	-0.3	-0.7	-0.8	-0.9	-1.0	-0.9	-0.7	-0.6
Of which : Old-age	1.0		0.2	0.2	0.1	0.2	0.3	0.5	0.8	1.0	1.0
Early-age	-2.4		-1.7	-2.6	-3.1	-2.5	-1.4	-0.7	-0.9	-1.6	-2.4
Cohort effect	-5.9		0.5	0.1	-0.7	-2.4	-4.8	-7.5	-8.9	-8.0	-5.9
Benefit ratio	-4.4		0.0	-0.7	-1.5	-2.2	-2.9	-3.6	-4.3	-4.8	-4.4
Labour market ratio	-3.8		-1.6	-2.6	-3.2	-3.6	-4.0	-4.2	-4.1	-3.9	-3.8
Of which : Employment rate	-3.5		-1.5	-2.3	-2.7	-3.1	-3.4	-3.4	-3.5	-3.5	-3.5
Labour intensity	0.0		0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Career shift	-0.4		-0.2	-0.4	-0.5	-0.6	-0.8	-0.8	-0.7	-0.5	-0.4
Interaction effect (residual)	-0.9		-0.1	-0.3	-0.5	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.8		-0.2	-0.4	-0.2	0.2	0.5	0.6	-0.2	-0.9	-0.5
Dependency ratio	8.9		1.3	1.6	1.7	1.8	1.8	1.5	0.3	-0.7	-1.0
Coverage ratio	-0.6		0.0	-0.2	-0.3	-0.1	-0.1	-0.1	0.1	0.2	0.1
Of which : Old-age	1.0		0.2	0.0	-0.1	0.1	0.1	0.2	0.3	0.2	0.0
Early-age	-2.4		-1.2	-0.8	-0.5	0.5	1.2	0.7	-0.2	-0.7	-0.8
Cohort effect	-5.9		0.4	-0.3	-0.9	-1.7	-2.4	-2.7	-1.3	0.9	2.1
Benefit ratio	-4.4		-0.3	-0.6	-0.8	-0.8	-0.7	-0.6	-0.7	-0.5	0.4
Labour market ratio	-3.8		-1.1	-1.0	-0.6	-0.5	-0.4	-0.1	0.1	0.1	0.1
Of which : Employment rate	-3.5		-1.0	-0.8	-0.4	-0.4	-0.3	-0.1	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.1	0.2	0.1
Interaction effect (residual)	-0.9		-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.1	5.9	6.2	6.4	6.6	6.9	7.0	7.1	7.1	7.0	6.9
Demographic scenario	1.0	5.9	6.1	6.3	6.6	6.8	6.9	7.0	7.1	7.0	6.9
High Life expectancy scenario	1.3	5.9	6.2	6.4	6.6	6.9	7.1	7.2	7.3	7.2	7.2
Constant health scenario	0.6	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.6	6.6	6.4
Death-related cost scenario	0.9	5.9	6.1	6.3	6.5	6.7	6.9	7.0	7.0	6.9	6.8
Income elasticity scenario	1.3	5.9	6.2	6.5	6.8	7.0	7.2	7.3	7.3	7.3	7.2
EU28 cost convergence scenario	1.6	5.9	6.2	6.4	6.7	7.0	7.2	7.4	7.5	7.5	7.5
Labour intensity scenario	0.8	5.9	6.2	6.0	6.0	6.1	6.4	6.8	7.0	6.9	6.6
Sector-specific composite indexation scenario	1.1	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.1	7.0	6.9
Non-demographic determinants scenario	2.7	5.9	6.5	7.0	7.5	7.9	8.3	8.5	8.6	8.6	8.6
AWG risk scenario	1.9	5.9	6.4	6.8	7.2	7.6	7.8	7.9	8.0	7.9	7.8
TFP risk scenario	1.0	5.9	6.2	6.4	6.6	6.8	7.0	7.1	7.1	7.0	6.9

Spain				EC-EPC (AWG) 2015 projections							

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.4	1.0	1.2	1.2	1.3	1.4	1.6	1.8	2.1	2.3	2.4
Demographic scenario	1.6	1.0	1.2	1.3	1.4	1.5	1.7	1.9	2.2	2.4	2.6
High Life expectancy scenario	2.2	1.1	1.3	1.4	1.5	1.7	2.0	2.2	2.6	3.0	3.3
Base case scenario	1.6	1.0	1.2	1.3	1.3	1.4	1.6	1.9	2.1	2.4	2.6
Constant disability scenario	1.3	1.0	1.2	1.2	1.2	1.4	1.5	1.7	2.0	2.2	2.3
Shift to formal care scenario	1.8	1.0	1.3	1.5	1.5	1.7	1.9	2.1	2.4	2.7	2.8
Coverage convergence scenario	2.1	1.0	1.2	1.3	1.4	1.6	1.9	2.2	2.6	2.9	3.1
Cost convergence scenario	2.3	1.0	1.2	1.3	1.4	1.6	1.8	2.2	2.6	3.0	3.3
Cost and coverage convergence scenario	3.1	1.0	1.3	1.4	1.4	1.6	1.8	2.2	2.6	3.2	3.7	4.1
AWG risk scenario	2.9	1.0	1.3	1.4	1.5	1.8	2.1	2.5	3.0	3.5	3.9
TFP risk scenario	1.4	1.0	1.2	1.2	1.3	1.4	1.6	1.8	2.1	2.3	2.4

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	51.1%	2452	2627	2729	2855	3022	3201	3379	3546	3662	3706
of which: receiving institutional care	133.5%	307	354	376	387	423	470	519	589	659	718
receiving home care	175.9%	693	826	893	945	1062	1202	1358	1560	1755	1910
receiving cash benefits	149.4%	490	574	618	644	712	797	885	1007	1125	1223
Demographic scenario	61.9%	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
of which: receiving institutional care	145.7%	307	358	383	396	435	486	540	615	692	755
receiving home care	189.4%	693	833	905	964	1088	1240	1408	1625	1836	2004
receiving cash benefits	161.5%	490	579	627	658	730	822	918	1048	1177	1282
Constant disability scenario	40.8%	2452	2595	2671	2772	2912	3059	3206	3341	3429	3453
of which: receiving institutional care	121.8%	307	350	370	379	412	454	499	564	628	682
receiving home care	162.4%	693	819	880	926	1036	1165	1308	1496	1674	1817
receiving cash benefits	137.6%	490	569	610	632	694	772	853	966	1075	1165
Shift 1% of dependents from informal to formal scenario	61.9%	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
of which: receiving institutional care	187.7%	307	430	489	505	548	603	660	739	818	884
receiving home care	228.1%	693	947	1077	1149	1289	1458	1644	1877	2100	2272
receiving cash benefits	161.5%	490	579	627	658	730	822	918	1048	1177	1282
Coverage convergence scenario	61.9%	2452	2659	2786	2940	3136	3346	3557	3755	3903	3970
of which: receiving institutional care	235.2%	307	382	426	464	531	615	706	818	932	1030
receiving home care	274.6%	693	874	983	1091	1275	1502	1759	2067	2364	2594
receiving cash benefits	161.5%	490	579	627	658	730	822	918	1048	1177	1282

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.8	4.6	4.1	3.8	3.4	3.2	3.1	3.4	3.6	3.8	3.7
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (69%) - Other (18%)											
Primary	-0.3	1.4	1.2	1.0	0.9	0.8	0.9	1.0	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (6%) - Staff (74%) - Other (19%)											
Low secondary	-0.2	1.2	1.2	1.1	0.9	0.8	0.8	0.9	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (5%) - Staff (81%) - Other (14%)											
Upper secondary	-0.1	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (9%) - Staff (66%) - Other (20%)											
Tertiary education	-0.2	1.2	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (16%) - Staff (56%) - Other (19%)											
Number of students (in thousands)											
Total	-372	8085	8074	7776	7235	6745	6578	6777	7174	7529	7713
as % of population 5-24	-1%	87%	88%	86%	85%	86%	87%	88%	88%	87%	86%
Primary	-337	2959	2903	2514	2222	2109	2198	2405	2581	2637	2622
Low secondary	22	2031	2223	2171	1933	1732	1649	1709	1862	2002	2053
Upper secondary	30	1214	1250	1329	1245	1128	1047	1037	1097	1185	1244
Tertiary education	-87	1881	1698	1762	1835	1776	1684	1625	1634	1705	1794
Number of teachers (in thousands)											
Total	-26	625	629	607	562	522	508	524	556	585	599
Primary	-25	217	213	185	163	155	161	177	189	194	192
Low secondary	2	179	196	192	171	153	146	151	164	177	181
Upper secondary	2	102	105	112	105	95	88	87	92	100	105
Tertiary education	-6	127	114	119	123	120	113	109	110	115	121
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.3	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-1.7	2.2	1.6	1.1	0.9	0.7	0.5	0.5	0.5	0.5	0.5

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

10. FRANCE

France				EC-EPC (AWG) 2015 projections							
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.0	2.02	2.01	2.00	2.00	1.99	1.99	1.99	1.98	1.98	1.98
Life expectancy at birth											
males	6.6	78.6	79.8	80.5	81.3	82.0	82.7	83.4	84.0	84.6	85.2
females	5.1	85.0	85.8	86.4	87.0	87.5	88.1	88.6	89.1	89.6	90.0
Life expectancy at 65											
males	4.1	18.9	19.6	20.0	20.5	20.9	21.4	21.8	22.2	22.6	23.0
females	3.7	22.9	23.5	23.9	24.3	24.7	25.1	25.5	25.9	26.2	26.6
Net migration (thousand)	14.0	52.8	90.2	91.2	91.2	89.0	84.0	79.7	74.2	70.5	66.8
Net migration as % of population	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Population (million)	9.9	65.7	67.8	69.2	70.5	71.8	72.9	73.7	74.4	75.0	75.7
Children population (0-14) as % of total population	-1.3	18.5	18.1	17.8	17.7	17.6	17.6	17.5	17.4	17.3	17.2
Prime age population (25-54) as % of total population	-3.9	39.0	36.9	35.8	35.0	35.0	34.9	35.1	35.3	35.2	35.1
Working age population (15-64) as % of total population	-5.7	63.7	61.6	60.4	59.1	58.0	57.2	57.3	57.4	57.8	57.9
Elderly population (65 and over) as % of total population	7.1	17.8	20.3	21.8	23.2	24.4	25.2	25.2	25.1	24.9	24.8
Very elderly population (80 and over) as % of total population	4.9	5.7	6.0	6.1	7.5	8.6	9.4	10.0	10.4	10.8	10.6
Very elderly population (80 and over) as % of elderly population	10.7	32.0	29.7	28.2	32.1	35.1	37.1	39.7	41.5	43.1	42.6
Very elderly population (80 and over) as % of working age population	9.4	8.9	9.8	10.2	12.6	14.7	16.4	17.5	18.1	18.6	18.3
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.6	1.0	1.2	1.4	1.5	1.8	1.7	1.8	1.8	1.8	1.7
Employment (growth rate)	0.3	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.2
Labour input : hours worked (growth rate)	0.3	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.2
Labour productivity per hour (growth rate)	1.3	0.7	0.9	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.8	0.3	0.5	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.4	0.4	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.3	0.6	0.8	1.0	1.1	1.4	1.4	1.6	1.6	1.6	1.6
Potential GDP per worker (growth rate)	1.3	0.7	0.8	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	1987	41844	41748	41775	41658	41646	41677	42197	42719	43318	43831
Population growth (working age:15-64)	0.4	-0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.2
Population (20-64) (in thousands)	1572	37865	37605	37590	37510	37440	37456	37903	38356	38925	39437
Population growth (20-64)	0.5	-0.3	0.0	0.0	-0.1	0.0	0.2	0.2	0.3	0.3	0.2
Labour force 15-64 (thousands)	2524	29729	30026	30472	30507	30515	30700	31055	31471	31910	32253
Labour force 20-64 (thousands)	2455	29137	29400	29842	29885	29881	30067	30412	30816	31250	31592
Participation rate (20-64)	3.2	76.9	78.2	79.4	79.7	79.8	80.3	80.2	80.3	80.3	80.1
Participation rate (15-64)	2.5	71.0	71.9	72.9	73.2	73.3	73.7	73.6	73.7	73.7	73.6
young (15-24)	0.9	37.7	38.4	38.6	38.7	38.5	38.6	38.4	38.4	38.5	38.6
prime-age (25-54)	0.1	88.4	88.6	88.6	88.5	88.5	88.5	88.5	88.5	88.5	88.5
older (55-64)	14.2	49.2	55.4	61.5	63.0	62.4	63.6	63.0	63.4	63.7	63.4
Participation rate (20-64) - FEMALES	3.9	72.4	74.1	75.5	75.8	75.8	76.4	76.4	76.5	76.5	76.3
Participation rate (15-64) - FEMALES	3.1	66.9	68.2	69.3	69.6	69.7	70.0	69.9	70.0	70.0	69.9
young (15-24)	0.6	34.1	34.5	34.7	34.9	34.7	34.7	34.5	34.5	34.6	34.7
prime-age (25-54)	0.7	83.5	84.3	84.4	84.4	84.3	84.2	84.2	84.2	84.2	84.2
older (55-64)	15.6	46.3	52.9	59.0	60.9	60.6	62.3	61.5	61.7	62.1	61.9
Participation rate (20-64) - MALES	2.1	81.6	82.3	83.4	83.5	83.6	84.1	84.1	84.1	84.0	83.7
Participation rate (15-64) - MALES	1.8	75.3	75.7	76.6	76.8	76.8	77.2	77.2	77.3	77.2	77.1
young (15-24)	1.1	41.2	42.2	42.3	42.4	42.1	42.3	42.1	42.1	42.2	42.3
prime-age (25-54)	-0.8	93.3	93.0	92.8	92.7	92.6	92.6	92.6	92.6	92.5	92.5
older (55-64)	12.5	52.4	58.2	64.1	65.3	64.3	65.1	64.6	65.2	65.4	64.9
Average effective exit age (TOTAL) (1)	2.3	60.9	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
Men	2.3	60.8	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
Women	2.2	60.9	62.3	63.0	63.1	63.1	63.1	63.1	63.1	63.1	63.1
Employment rate (15-64)	4.1	63.9	65.0	66.1	66.8	67.4	68.2	68.1	68.2	68.2	68.1
Employment rate (20-64)	4.8	69.6	71.0	72.3	73.0	73.7	74.5	74.5	74.6	74.6	74.4
Employment rate (15-74)	2.9	56.7	55.8	56.8	57.6	58.0	58.7	59.1	59.6	59.6	59.6
Unemployment rate (15-64)	-2.5	10.0	9.6	9.4	8.7	8.0	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-2.4	9.6	9.2	9.0	8.3	7.7	7.1	7.1	7.1	7.1	7.1
Unemployment rate (15-74)	-2.6	10.0	9.6	9.3	8.6	7.9	7.4	7.4	7.4	7.4	7.4
Employment (20-64) (in millions)	3.0	26.4	26.7	27.2	27.4	27.6	27.9	28.2	28.6	29.0	29.3
Employment (15-64) (in millions)	3.1	26.8	27.1	27.6	27.8	28.1	28.4	28.7	29.1	29.5	29.8
share of young (15-24)	1%	9%	9%	9%	9%	9%	10%	9%	10%	10%	9%
share of prime-age (25-54)	-4%	77%	75%	73%	73%	74%	74%	74%	74%	74%	74%
share of older (55-64)	3%	14%	16%	18%	18%	17%	16%	16%	16%	17%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.7	19.8	20.2	20.5	20.4	19.4	18.5	18.3	18.1	18.6	19.1
Old-age dependency ratio 15-64 (3)	15	28	33	36	39	42	44	44	44	43	43
Old-age dependency ratio 20-64 (3)	17	31	37	40	44	47	49	49	49	48	48
Total dependency ratio (4)	16	57	62	66	69	72	75	75	74	73	73
Total economic dependency ratio (5)	4	144	147	147	148	150	150	151	150	149	148
Economic old-age dependency ratio (15-64) (6)	18	43	50	53	57	60	62	62	62	61	61
Economic old-age dependency ratio (15-74) (7)	17	42	49	52	55	58	61	61	60	60	59

France	EC-EPC (AWG) 2015 projections									
Pension expenditure projections										
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-2.8	14.9	14.6	14.9	14.7	14.2	13.8	13.3	12.8	12.3	12.1
Earnings-related pensions, gross	-2.6	14.4	14.1	14.3	14.1	13.7	13.3	12.8	12.4	12.0	11.8
Of which : Old-age and early pensions	-1.9	12.0	11.8	12.2	12.0	11.7	11.3	11.0	10.6	10.3	10.1
Disability pensions	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Survivors pensions	-0.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	0.9	0.9
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	-0.1	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4
Public pensions, net	-2.5	13.3	13.0	13.3	13.1	12.6	12.3	11.8	11.4	11.0	10.8
Public pensions, contributions	-0.7	10.6	10.4	10.0	10.0	10.0	10.1	10.0	9.9	9.9	9.9
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%	89.1%
Pensioners (Public, in 1000 persons)	5369	18390	19772	20996	22011	22723	23215	23427	23525	23508	23759
Pensioners aged 65+ (1000 persons)	7064	12256	14315	15672	17024	18106	18889	19107	19206	19175	19320
Share of pensioners below age 65 as % of all pensioners	-14.7%	33.4%	27.6%	25.4%	22.7%	20.3%	18.6%	18.4%	18.4%	18.4%	18.7%
Benefit ratio (Public pensions)	-12.4	51.3	50.8	49.7	47.4	44.9	43.2	41.7	40.5	39.6	38.9
Gross replacement rate at retirement (Public pensions)	-11.4	50.6	50.3	48.8	47.2	44.4	42.9	41.2	40.5	40.6	39.2
Average accrual rates (new pensions, earnings related)	0.0	1.7	1.7	1.8	1.7	1.8	1.7	1.8	1.7	1.8	1.7
Average contributory period (new pensions, earnings-related)	-1.5	35.6	34.6	34.0	32.9	32.8	33.7	32.2	33.3	32.5	34.1
Contributors (Public pensions, in 1000 persons)	3055.5	26387.6	26821.1	26752.2	27171.4	27646.0	28124.7	28289.0	28760.6	29155.0	29443.1
Support ratio (contributors/100 pensioners, Public pensions)	-19.6	143.5	135.7	127.4	123.4	121.7	121.2	120.8	122.3	124.0	123.9
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.5	-0.1	0.0	0.1	0.0	0.2	0.2	0.3	0.3	0.3	0.3
High labour productivity (+0.25 p.p.)	-0.5	0.0	0.0	-0.2	-0.3	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5
Lower labour productivity (-0.25 p.p.)	0.8	0.0	0.1	0.2	0.3	0.5	0.6	0.6	0.7	0.7	0.8
High employment rate (+2 p.p)	-0.2	-0.1	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
High emp. of older workers (+10 p.p.)	0.7	0.0	-0.3	-0.5	-0.4	-0.2	0.0	0.2	0.5	0.6	0.7
Lower migration (-20%)	0.2	-0.1	-0.1	0.0	-0.1	0.1	0.1	0.1	0.1	0.1	0.1
TFP risk scenario	0.8	0.0	0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.8
Policy scenario linking retirement age to increases in life expectancy	-1.2	0.1	0.0	-0.2	-0.4	-0.5	-0.7	-0.7	-0.9	-0.9	-1.1
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-2.8		-0.3	0.0	-0.2	-0.7	-1.1	-1.6	-2.1	-2.5	-2.8
Dependency ratio	6.7		2.7	4.1	5.4	6.4	7.1	7.1	7.0	6.8	6.7
Coverage ratio	-3.2		-1.3	-1.8	-2.3	-2.8	-3.2	-3.2	-3.2	-3.2	-3.2
Of which : Old-age	-0.3		-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Early-age	-4.6		-1.9	-2.4	-2.7	-3.4	-3.8	-3.9	-4.2	-4.6	-4.6
Cohort effect	-6.7		-2.1	-3.3	-5.0	-6.4	-7.5	-7.6	-7.4	-7.0	-6.7
Benefit ratio	-4.7		-1.1	-1.4	-2.1	-2.9	-3.4	-3.9	-4.2	-4.5	-4.7
Labour market ratio	-1.2		-0.3	-0.6	-0.9	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2
Of which : Employment rate	-1.0		-0.3	-0.5	-0.7	-0.8	-1.0	-1.0	-1.0	-1.0	-1.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Interaction effect (residual)	-0.4		-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-2.8	-0.3	0.3	-0.2	-0.5	-0.4	-0.5	-0.5	-0.5	-0.2
Dependency ratio	6.7	1.7	1.4	1.3	1.0	0.7	0.0	-0.1	-0.2	-0.1
Coverage ratio	-3.2	-0.8	-0.4	-0.5	-0.5	-0.4	0.0	0.0	0.0	0.1
Of which : Old-age	-0.3	-0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
Early-age	-4.6	-0.9	-0.5	-0.4	-0.6	-0.4	-0.1	-0.3	-0.4	0.0
Cohort effect	-6.7	-1.4	-1.2	-1.7	-1.4	-1.1	0.0	0.2	0.4	0.3
Benefit ratio	-4.7	-0.8	-0.3	-0.7	-0.8	-0.5	-0.5	-0.4	-0.3	-0.2
Labour market ratio	-1.2	-0.3	-0.3	-0.3	-0.2	-0.2	0.0	0.0	0.0	0.0
Of which : Employment rate	-1.0	-0.3	-0.3	-0.2	-0.1	-0.2	0.0	0.0	0.0	0.0
Labour intensity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.4	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0

Health care										
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	7.7	8.0	8.2	8.3	8.5	8.6	8.7	8.7	8.6	8.6
Demographic scenario	1.1	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8	8.8
High Life expectancy scenario	1.5	7.7	8.0	8.3	8.5	8.7	8.9	9.0	9.1	9.1	9.2
Constant health scenario	0.3	7.7	7.9	8.0	8.1	8.1	8.2	8.2	8.1	8.1	8.0
Death-related cost scenario	0.8	7.7	8.0	8.1	8.3	8.5	8.6	8.6	8.6	8.6	8.6
Income elasticity scenario	1.3	7.7	8.1	8.3	8.5	8.7	8.9	9.0	9.0	9.1	9.1
EU28 cost convergence scenario	1.1	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8	8.9
Labour intensity scenario	1.2	7.7	8.0	8.2	8.5	8.7	8.9	8.9	8.9	8.9	8.9
Sector-specific composite indexation scenario	0.6	7.7	7.9	8.0	8.1	8.3	8.3	8.3	8.3	8.3	8.3
Non-demographic determinants scenario	2.7	7.7	8.3	8.6	9.0	9.4	9.7	10.0	10.2	10.4	10.4
AWG risk scenario	1.6	7.7	8.2	8.4	8.7	9.0	9.2	9.3	9.4	9.4	9.4
TFP risk scenario	0.8	7.7	8.0	8.2	8.3	8.5	8.6	8.6	8.6	8.6	8.6

France	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.8	2.0	2.1	2.1	2.2	2.4	2.6	2.7	2.7	2.8	2.8
Demographic scenario	0.9	2.0	2.1	2.2	2.3	2.4	2.6	2.7	2.8	2.9	2.9
High Life expectancy scenario	1.1	2.0	2.1	2.2	2.3	2.5	2.7	2.8	3.0	3.0	3.1
Base case scenario	0.9	2.0	2.1	2.2	2.3	2.5	2.6	2.8	2.8	2.9	2.9
Constant disability scenario	0.7	2.0	2.1	2.1	2.2	2.4	2.5	2.6	2.7	2.7	2.7
Shift to formal care scenario	1.6	2.0	2.5	2.7	2.8	3.1	3.3	3.4	3.5	3.5	3.6
Coverage convergence scenario	2.9	2.0	2.3	2.4	2.7	3.1	3.5	3.9	4.2	4.5	4.8
Cost convergence scenario	1.0	2.0	2.1	2.2	2.3	2.5	2.7	2.8	2.9	2.9	2.9
Cost and coverage convergence scenario	2.9	2.0	2.3	2.4	2.7	3.1	3.5	3.9	4.3	4.6	4.9
AWG risk scenario	2.7	2.0	2.2	2.4	2.6	3.0	3.4	3.8	4.1	4.4	4.7
TFP risk scenario	0.8	2.0	2.1	2.1	2.2	2.4	2.6	2.7	2.7	2.8	2.8

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	39.4%	5826	6320	6608	6963	7356	7667	7870	7997	8084	8120
of which: receiving institutional care	74.2%	854	953	1003	1073	1191	1304	1377	1429	1467	1488
receiving home care	64.7%	1089	1203	1261	1345	1481	1600	1677	1731	1772	1793
receiving cash benefits	3.5%	428	436	433	431	430	433	437	439	442	443
Demographic scenario	47.8%	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
of which: receiving institutional care	80.6%	854	960	1016	1092	1216	1336	1416	1473	1516	1543
receiving home care	72.7%	1089	1215	1282	1377	1524	1652	1739	1802	1851	1880
receiving cash benefits	7.8%	428	440	439	439	440	445	450	454	459	461
Constant disability scenario	32.0%	5826	6251	6487	6788	7134	7404	7561	7647	7695	7693
of which: receiving institutional care	68.1%	854	946	992	1056	1167	1275	1342	1388	1421	1437
receiving home care	57.6%	1089	1191	1241	1316	1443	1554	1622	1669	1702	1715
receiving cash benefits	-0.1%	428	433	428	424	422	424	426	427	428	427
Shift 1% of dependents from informal to formal scenario	47.8%	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
of which: receiving institutional care	123.0%	854	1142	1291	1386	1532	1669	1761	1827	1876	1905
receiving home care	118.5%	1089	1481	1680	1797	1968	2115	2215	2288	2344	2378
receiving cash benefits	7.8%	428	440	439	439	440	445	450	454	459	461
Coverage convergence scenario	47.8%	5826	6389	6731	7145	7597	7962	8219	8394	8527	8608
of which: receiving institutional care	218.9%	854	1033	1157	1324	1564	1832	2069	2292	2514	2725
receiving home care	210.5%	1089	1313	1472	1687	1984	2296	2578	2847	3118	3380
receiving cash benefits	7.8%	428	440	439	439	440	445	450	454	459	461

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.2	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.8	4.8
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (70%) - Other (17%)											
Primary	-0.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (8%) - Staff (69%) - Other (20%)											
Low secondary	-0.1	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (9%) - Staff (73%) - Other (15%)											
Upper secondary	0.0	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (71%) - Other (16%)											
Tertiary education	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Expenditure decomposition (broadly constant) : Transfers (8%) - Capital (9%) - Staff (65%) - Other (18%)											
Number of students (in thousands)											
Total	1033	12483	12693	12795	12865	12982	13145	13312	13432	13486	13516
as % of population 5-24	-1%	78%	77%	77%	77%	77%	77%	77%	77%	77%	77%
Primary	282	4184	4181	4250	4254	4322	4402	4444	4451	4453	4466
Low secondary	220	3346	3388	3348	3407	3414	3470	3531	3561	3565	3566
Upper secondary	270	2688	2778	2813	2795	2830	2844	2892	2937	2956	2958
Tertiary education	261	2265	2346	2383	2409	2416	2430	2446	2483	2512	2526
Number of teachers (in thousands)											
Total	65	779	793	799	802	810	820	831	839	842	844
Primary	15	223	223	226	226	230	234	236	237	237	238
Low secondary	14	220	222	220	224	224	228	232	234	234	234
Upper secondary	22	223	231	234	232	235	236	240	244	245	246
Tertiary education	13	113	117	119	120	121	121	122	124	126	126
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.6	0.0	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.4	1.5	1.5	1.4	1.3	1.2	1.1	1.1	1.1	1.1	1.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

11. CROATIA

Croatia		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.1	1.53	1.56	1.57	1.59	1.61	1.62	1.63	1.65	1.66	1.67
Life expectancy at birth											
males	8.7	74.0	75.4	76.4	77.4	78.3	79.3	80.2	81.0	81.9	82.7
females	6.9	80.7	81.8	82.6	83.4	84.1	84.8	85.6	86.2	86.9	87.6
Life expectancy at 65											
males	5.8	15.0	15.9	16.6	17.2	17.8	18.5	19.1	19.7	20.3	20.8
females	5.5	18.7	19.6	20.2	20.8	21.4	22.0	22.5	23.1	23.6	24.2
Net migration (thousand)	2.5	2.3	2.4	2.9	3.5	3.5	4.6	5.5	5.7	5.1	4.8
Net migration as % of population	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Population (million)	-0.6	4.3	4.2	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7
Children population (0-14) as % of total population	-0.9	14.9	14.9	14.7	14.3	13.9	13.7	13.7	13.9	14.0	13.9
Prime age population (25-54) as % of total population	-6.6	41.1	39.5	38.9	37.9	36.8	35.8	35.3	34.9	34.4	34.5
Working age population (15-64) as % of total population	-10.4	66.9	64.4	62.7	61.4	60.6	59.9	58.9	57.7	56.9	56.5
Elderly population (65 and over) as % of total population	11.3	18.3	20.7	22.6	24.2	25.4	26.3	27.4	28.4	29.1	29.6
Very elderly population (80 and over) as % of total population	6.7	4.4	5.3	5.5	6.2	7.4	8.7	9.5	9.9	10.3	11.1
Very elderly population (80 and over) as % of elderly population	13.7	23.9	25.8	24.2	25.5	29.3	32.9	34.5	34.8	35.4	37.5
Very elderly population (80 and over) as % of working age population	13.1	6.5	8.3	8.7	10.1	12.3	14.5	16.1	17.2	18.1	19.6
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (grow th rate)	1.4	-0.3	1.5	1.1	1.5	2.1	1.8	1.6	1.4	1.2	1.0
Employment (grow th rate)	-0.4	-0.8	0.1	-0.3	-0.3	-0.1	-0.4	-0.6	-0.6	-0.6	-0.5
Labour input : hours w orked (grow th rate)	-0.4	-0.8	0.1	-0.3	-0.3	-0.1	-0.4	-0.6	-0.6	-0.6	-0.5
Labour productivity per hour (grow th rate)	1.7	0.5	1.4	1.5	1.8	2.2	2.2	2.2	2.0	1.8	1.5
TFP (grow th rate)	1.1	-0.1	0.7	0.9	1.2	1.4	1.4	1.4	1.3	1.1	1.0
Capital deepening (contribution to labour productivity grow th)	0.7	0.6	0.8	0.6	0.6	0.8	0.8	0.8	0.7	0.6	0.5
Potential GDP per capita (grow th rate)	1.7	0.1	1.8	1.3	1.6	2.0	1.8	1.9	1.9	2.0	1.8
Potential GDP per w orker (grow th rate)	1.7	0.5	1.4	1.4	1.6	1.7	1.9	2.1	2.2	2.2	2.0
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-757	2847	2700	2596	2507	2435	2369	2288	2204	2141	2090
Population grow th (w orking age:15-64)	-0.1	-0.4	-0.9	-0.7	-0.6	-0.5	-0.6	-0.8	-0.7	-0.5	-0.5
Population (20-64) (in thousands)	-692	2600	2494	2380	2296	2228	2170	2098	2021	1959	1908
Population grow th (20-64)	0.0	-0.5	-0.9	-0.9	-0.6	-0.4	-0.6	-0.8	-0.7	-0.6	-0.5
Labour force 15-64 (thousands)	-445	1809	1744	1675	1619	1581	1543	1491	1438	1398	1363
Labour force 20-64 (thousands)	-438	1780	1719	1650	1594	1556	1520	1468	1417	1377	1342
Participation rate (20-64)	1.9	68.5	68.9	69.3	69.4	69.8	70.0	70.0	70.1	70.3	70.3
Participation rate (15-64)	1.7	63.5	64.6	64.5	64.6	64.9	65.2	65.2	65.3	65.3	65.2
young (15-24)	3.6	28.7	33.8	31.6	32.3	32.4	32.7	32.8	32.7	32.4	32.3
prime-age (25-54)	-1.3	81.0	80.1	80.1	80.1	79.7	79.5	79.6	79.7	79.9	79.8
older (55-64)	9.5	41.4	44.5	44.6	45.8	49.4	52.5	51.7	51.0	51.4	50.9
Participation rate (20-64) - FEMALES	4.0	63.4	65.0	66.0	66.5	67.2	67.3	67.2	67.1	67.3	67.3
Participation rate (15-64) - FEMALES	3.6	58.9	60.9	61.4	61.9	62.4	62.6	62.5	62.5	62.5	62.5
young (15-24)	2.2	24.0	27.4	25.7	26.3	26.3	26.6	26.6	26.6	26.3	26.2
prime-age (25-54)	-0.7	77.9	77.8	78.1	78.1	77.7	77.1	77.1	77.1	77.3	77.2
older (55-64)	17.4	32.7	39.9	41.4	44.0	48.7	52.4	51.6	50.5	50.7	50.2
Participation rate (20-64) - MALES	-0.4	73.6	72.9	72.7	72.4	72.5	72.7	72.7	73.0	73.2	73.2
Participation rate (15-64) - MALES	-0.3	68.2	68.2	67.6	67.3	67.3	67.6	67.7	67.9	68.0	67.9
young (15-24)	4.8	33.2	39.8	37.2	38.1	38.2	38.6	38.6	38.5	38.1	38.0
prime-age (25-54)	-1.9	84.1	82.4	82.2	82.0	81.7	81.8	82.0	82.2	82.4	82.2
older (55-64)	1.0	50.7	49.6	48.1	47.6	50.2	52.5	51.9	51.6	52.0	51.6
Average effective exit age (TOTAL) (1)	2.0	61.9	62.3	62.6	62.9	63.5	63.9	63.9	63.9	63.9	63.9
Men	1.6	62.4	62.6	62.8	62.9	63.6	64.0	64.0	64.0	64.0	64.0
Women	2.3	61.4	61.9	62.4	62.9	63.4	63.7	63.7	63.7	63.7	63.7
Employment rate (15-64)	8.1	52.3	55.9	56.9	57.9	59.2	60.3	60.3	60.4	60.4	60.4
Employment rate (20-64)	0.5	58.5	60.0	61.0	61.7	62.5	62.5	61.4	60.0	59.7	59.0
Employment rate (15-74)	-0.2	47.7	48.3	48.5	48.9	49.7	50.2	49.4	48.4	47.7	47.5
Unemployment rate (15-64)	-10.3	17.8	13.5	11.9	10.3	8.7	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	1.6	14.5	13.0	12.0	11.1	10.6	10.7	12.2	13.8	15.1	16.1
Unemployment rate (15-74)	0.0	15.2	13.7	12.3	11.4	10.6	10.7	12.1	13.4	14.4	15.2
Employment (20-64) (in millions)	-0.4	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.1
Employment (15-64) (in millions)	-0.2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3
share of young (15-24)	3%	5%	6%	6%	7%	7%	7%	7%	7%	7%	7%
share of prime-age (25-54)	-5%	80%	77%	78%	77%	75%	75%	73%	74%	75%	75%
share of older (55-64)	2%	15%	16%	16%	16%	17%	19%	19%	18%	18%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	0.2	21.0	21.9	21.5	21.2	21.9	23.0	22.9	22.2	22.2	21.3
Old-age dependency ratio 15-64 (3)	25	27	32	36	39	42	44	47	49	51	52
Old-age dependency ratio 20-64 (3)	27	30	35	39	43	46	48	51	54	56	57
Total dependency ratio (4)	27	50	55	59	63	65	67	70	73	76	77
Total economic dependency ratio (5)	-2	182	171	171	171	169	166	169	172	176	179
Economic old-age dependency ratio (15-64) (6)	31	51	55	60	64	67	69	72	76	79	82
Economic old-age dependency ratio (15-74) (7)	28	50	53	58	62	65	66	69	72	75	78

Croatia				EC-EPC (AWG) 2015 projections						

Pension expenditure projections											
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-3.9	10.8	10.3	10.1	9.5	8.6	7.8	7.4	7.2	7.0	6.9
Earnings-related pensions, gross	-3.9	10.8	10.3	10.1	9.5	8.6	7.8	7.4	7.2	7.0	6.9
Of which : Old-age and early pensions	-1.5	5.1	5.8	5.9	5.6	4.9	4.3	4.0	3.8	3.7	3.6
Disability pensions	-2.0	2.5	1.3	0.9	0.7	0.6	0.6	0.5	0.5	0.5	0.5
Survivors pensions	-0.7	1.6	1.3	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9
Other pensions	0.2	1.7	1.9	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9
Non-earning-related pensions	:	:	:	:	:	:	:	:	:	:	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	1.6	0.0	0.0	0.1	0.3	0.5	0.8	1.1	1.3	1.5	1.6
New pensions, gross	-0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Public pensions, net	-3.9	10.7	10.1	10.0	9.4	8.5	7.7	7.3	7.1	6.9	6.8
Public pensions, contributions	-0.3	5.8	5.9	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%
Pensioners (Public, in 1000 persons)	-5	1218	1241	1257	1266	1229	1205	1210	1216	1215	1213
Pensioners aged 65+ (1000 persons)	228	812	902	962	1007	1013	1000	1011	1029	1036	1040
Share of pensioners below age 65 as % of all pensioners	-19.1%	33.4%	27.3%	23.5%	20.5%	17.6%	17.0%	16.5%	15.4%	14.7%	14.3%
Benefit ratio (Public pensions)	-13.2	30.8	29.9	28.6	26.3	24.3	22.4	20.7	19.3	18.4	17.6
Gross replacement rate at retirement (Public pensions)	-11.4	27.9	27.6	24.5	21.3	20.4	18.8	17.9	17.4	16.9	16.5
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	3.8	35.3	35.8	36.2	36.7	37.6	38.2	38.5	38.8	38.9	39.1
Contributors (Public pensions, in 1000 persons)	-180.5	1452.9	1489.1	1468.6	1447.1	1435.0	1426.3	1390.3	1348.4	1307.4	1272.4
Support ratio (contributors/100 pensioners, Public pensions)	-14.4	119.3	120.0	116.8	114.3	116.8	118.4	114.9	110.9	107.6	104.9
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.5	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.5
High labour productivity (+0.25 p.p.)	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Lower labour productivity (-0.25 p.p.)	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
High employment rate (+2 p.p)	-0.2	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	-0.4	0.0	-0.3	-0.7	-0.6	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4
Lower migration (-20%)	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
TFP risk scenario	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3
Policy scenario linking retirement age to increases in life expectancy	-0.8	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.6	-0.7	-0.8
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-3.9		-0.6	-0.7	-1.3	-2.2	-3.0	-3.4	-3.7	-3.8	-3.9
Dependency ratio	6.4		1.7	3.1	4.0	4.6	5.0	5.5	5.9	6.2	6.4
Coverage ratio	-3.3		-1.0	-1.6	-2.1	-2.6	-3.0	-3.1	-3.2	-3.3	-3.3
Of which : Old-age	-0.9		-0.1	-0.2	-0.3	-0.5	-0.8	-0.9	-0.9	-0.9	-0.9
Early-age	-5.1		-1.4	-2.3	-3.3	-4.9	-5.3	-5.1	-5.2	-5.1	-5.1
Cohort effect	-5.8		-1.5	-2.8	-3.5	-3.8	-4.1	-4.6	-5.1	-5.6	-5.8
Benefit ratio	-5.0		-0.5	-1.0	-1.8	-2.5	-3.2	-3.8	-4.3	-4.7	-5.0
Labour market ratio	-1.7		-0.7	-1.0	-1.2	-1.4	-1.5	-1.6	-1.7	-1.7	-1.7
Of which : Employment rate	-1.4		-0.6	-0.8	-1.0	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
Interaction effect (residual)	-0.4		-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-3.9		-0.5	-0.2	-0.6	-0.9	-0.8	-0.4	-0.2	-0.2	-0.1
Dependency ratio	6.4		1.3	1.3	1.0	0.6	0.4	0.5	0.5	0.3	0.2
Coverage ratio	-3.3		-0.7	-0.6	-0.5	-0.6	-0.3	-0.1	-0.1	-0.1	0.0
Of which : Old-age	-0.9		0.0	-0.1	-0.1	-0.3	-0.3	-0.1	0.0	0.0	0.0
Early-age	-5.1		-1.1	-1.0	-0.8	-1.6	-0.4	0.1	-0.1	0.1	0.0
Cohort effect	-5.8		-1.2	-1.3	-0.7	-0.3	-0.3	-0.5	-0.5	-0.5	-0.2
Benefit ratio	-5.0		-0.3	-0.5	-0.8	-0.7	-0.7	-0.6	-0.5	-0.4	-0.3
Labour market ratio	-1.7		-0.6	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0
Of which : Employment rate	-1.4		-0.6	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
Interaction effect (residual)	-0.4		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.7	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.4	7.5	7.5
Demographic scenario	2.0	5.7	6.8	7.0	7.2	7.3	7.4	7.5	7.6	7.6	7.7
High Life expectancy scenario	2.3	5.7	6.8	7.0	7.2	7.4	7.6	7.7	7.8	7.9	8.0
Constant health scenario	1.0	5.7	6.6	6.7	6.7	6.8	6.8	6.8	6.8	6.7	6.7
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	2.3	5.7	6.9	7.1	7.3	7.5	7.7	7.8	7.9	8.0	8.0
EU28 cost convergence scenario	2.9	5.7	6.9	7.2	7.4	7.7	7.9	8.1	8.3	8.5	8.6
Labour intensity scenario	2.2	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.6	7.8	7.9
Sector-specific composite indexation scenario	1.7	5.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.4	7.4
Non-demographic determinants scenario	4.0	5.7	7.1	7.5	7.9	8.4	8.8	9.2	9.4	9.6	9.7
AWG risk scenario	2.7	5.7	7.0	7.3	7.6	7.8	8.1	8.3	8.4	8.4	8.4
TFP risk scenario	1.7	5.7	6.8	6.9	7.1	7.2	7.3	7.4	7.4	7.4	7.4

Croatia	EC-EPC (AWG) 2015 projections									
Long-term care										
Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Demographic scenario	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
High Life expectancy scenario	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
Base case scenario	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Constant disability scenario	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Shift to formal care scenario	0.5	0.4	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0
Coverage convergence scenario	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8
Cost convergence scenario	0.9	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.0	1.1	1.3
Cost and coverage convergence scenario	1.3	0.4	0.5	0.6	0.6	0.7	0.9	1.0	1.2	1.4	1.7
AWG risk scenario	1.1	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.6
TFP risk scenario	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	7.9%	274	287	290	294	299	302	302	300	297	296
of which: receiving institutional care	6.2%	16	16	16	17	17	17	17	17	17	17
receiving home care	6.2%	17	18	18	18	18	19	19	18	18	18
receiving cash benefits	6.2%	108	112	113	115	117	118	118	116	115	114
Demographic scenario	18.8%	274	292	300	308	316	323	325	326	325	326
of which: receiving institutional care	17.5%	16	17	17	17	18	18	18	18	18	18
receiving home care	17.5%	17	18	19	19	20	20	20	20	20	20
receiving cash benefits	17.5%	108	114	117	120	124	126	127	127	126	126
Constant disability scenario	-1.2%	274	282	281	281	284	286	284	280	275	271
of which: receiving institutional care	-3.1%	16	16	16	16	16	16	16	16	15	15
receiving home care	-3.1%	17	17	17	17	18	18	17	17	17	16
receiving cash benefits	-3.1%	108	110	110	110	111	111	110	108	106	104
Shift 1% of dependents from informal to formal scenario	18.8%	274	292	300	308	316	323	325	326	325	326
of which: receiving institutional care	117.4%	16	26	31	32	33	34	34	34	34	34
receiving home care	117.4%	17	29	34	35	36	37	37	37	37	37
receiving cash benefits	17.5%	108	114	117	120	124	126	127	127	126	126
Coverage convergence scenario	18.8%	274	292	300	308	316	323	325	326	325	326
of which: receiving institutional care	102.9%	16	17	18	20	21	23	25	27	29	32
receiving home care	102.9%	17	19	20	22	23	25	27	30	32	34
receiving cash benefits	17.5%	108	114	117	120	124	126	127	127	126	126
Education										
Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.4	3.7	3.5	3.5	3.4	3.4	3.2	3.2	3.3	3.3	3.4
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (5%) - Staff (73%) - Other (21%)										
Primary	-0.1	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8	1.8
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (4%) - Staff (76%) - Other (21%)										
Low secondary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure decomposition (broadly constant) : Transfers (-%) - Capital (-%) - Staff (-%) - Other (-%)										
Upper secondary	-0.2	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (5%) - Staff (77%) - Other (18%)										
Tertiary education	-0.1	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (10%) - Staff (62%) - Other (23%)										
Number of students (in thousands)										
Total	-143	680	648	638	621	601	577	560	549	543	537
as % of population 5-24	1%	74%	74%	76%	75%	75%	74%	74%	75%	75%	75%
Primary	-24	158	162	159	152	145	140	137	137	136	134
Low secondary	-31	178	176	172	170	162	155	150	148	148	147
Upper secondary	-48	183	154	162	156	154	147	141	137	135	135
Tertiary education	-40	162	156	145	143	140	136	132	127	124	122
Number of teachers (in thousands)										
Total	-13	62	59	58	56	55	53	51	50	49	49
Primary	-2	11	12	11	11	10	10	10	10	10	10
Low secondary	-3	17	17	17	16	16	15	15	14	14	14
Upper secondary	-5	18	15	16	16	15	15	14	14	13	13
Tertiary education	-4	15	15	14	13	13	13	12	12	12	12
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.5	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6
Unemployment benefit										
Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.3	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

12. ITALY

Italy	EC-EPC (AWG) 2015 projections										
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.43	1.47	1.49	1.51	1.53	1.55	1.56	1.58	1.60	1.61
Life expectancy at birth											
males	5.7	79.8	80.8	81.4	82.1	82.7	83.3	83.9	84.4	85.0	85.5
females	5.1	84.7	85.5	86.1	86.6	87.2	87.7	88.2	88.7	89.2	89.7
Life expectancy at 65											
males	4.3	18.4	19.1	19.6	20.0	20.5	21.0	21.4	21.8	22.3	22.7
females	4.0	22.0	22.6	23.1	23.5	24.0	24.4	24.8	25.2	25.6	26.0
Net migration (thousand)	-939.1	1135.5	348.1	368.4	382.4	367.7	335.9	277.8	214.8	206.9	196.4
Net migration as % of population	-1.6	1.9	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.3
Population (million)	6.1	60.2	62.1	63.1	64.2	65.3	66.3	66.9	67.0	66.8	66.3
Children population (0-14) as % of total population	-0.5	14.0	13.8	13.4	13.3	13.3	13.5	13.6	13.6	13.6	13.5
Prime age population (25-54) as % of total population	-7.8	42.4	40.1	38.0	36.4	35.7	35.6	35.4	35.0	34.8	34.5
Working age population (15-64) as % of total population	-8.2	64.8	63.8	63.0	61.4	59.4	57.6	56.7	56.5	56.5	56.5
Elderly population (65 and over) as % of total population	8.8	21.2	22.4	23.5	25.3	27.3	28.9	29.7	29.9	29.9	30.0
Very elderly population (80 and over) as % of total population	6.8	6.3	7.1	7.4	8.1	8.6	9.3	10.6	11.9	12.9	13.1
Very elderly population (80 and over) as % of elderly population	14.1	29.8	31.8	31.3	31.9	31.4	32.2	35.6	39.9	43.2	43.8
Very elderly population (80 and over) as % of working age population	13.5	9.8	11.2	11.7	13.2	14.4	16.2	18.7	21.1	22.9	23.3
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.3	-0.4	1.3	1.1	1.3	1.6	1.5	1.5	1.6	1.6	1.5
Employment (growth rate)	0.1	-0.2	1.2	0.5	0.1	-0.1	-0.3	-0.2	0.0	0.0	0.0
Labour input : hours worked (growth rate)	0.1	-0.4	1.2	0.5	0.1	-0.1	-0.3	-0.2	0.0	0.0	0.0
Labour productivity per hour (growth rate)	1.2	0.0	0.1	0.6	1.2	1.7	1.7	1.7	1.7	1.6	1.5
TFP (growth rate)	0.8	-0.1	0.2	0.4	0.8	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.4	0.1	-0.1	0.2	0.4	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.1	-1.6	1.0	0.7	0.9	1.3	1.2	1.4	1.6	1.7	1.7
Potential GDP per worker (growth rate)	1.2	-0.2	0.1	0.6	1.2	1.7	1.7	1.7	1.7	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-1512	38993	39592	39787	39442	38809	38180	37914	37858	37723	37481
Population growth (working age:15-64)	-0.9	0.8	0.1	0.0	-0.3	-0.3	-0.3	0.0	0.0	-0.1	-0.1
Population (20-64) (in thousands)	-1855	36135	36590	36651	36344	35764	35125	34811	34699	34520	34280
Population growth (20-64)	-0.9	0.8	0.1	0.0	-0.3	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1
Labour force 15-64 (thousands)	-280	24707	25841	26089	25832	25373	24941	24757	24699	24594	24427
Labour force 20-64 (thousands)	-304	24493	25619	25858	25599	25145	24715	24527	24466	24357	24189
Participation rate (20-64)	2.8	67.8	70.0	70.6	70.4	70.5	70.5	70.5	70.5	70.6	70.6
Participation rate (15-64)	1.8	63.4	65.3	65.6	65.5	65.4	65.3	65.3	65.2	65.2	65.2
young (15-24)	-0.3	27.5	27.2	27.1	27.7	27.8	27.5	27.2	27.1	27.0	27.2
prime-age (25-54)	-2.4	77.1	76.9	76.3	75.5	74.9	74.7	74.8	74.8	74.7	74.7
older (55-64)	23.6	45.4	58.6	64.2	66.7	67.5	67.7	67.6	68.1	68.6	69.0
Participation rate (20-64) - FEMALES	6.1	57.1	60.6	61.4	61.9	62.3	62.7	62.9	63.0	63.2	63.1
Participation rate (15-64) - FEMALES	4.8	53.5	56.6	57.1	57.5	57.9	58.1	58.3	58.3	58.3	58.3
young (15-24)	-0.1	23.5	23.4	23.3	23.9	24.0	23.8	23.5	23.4	23.3	23.5
prime-age (25-54)	0.6	66.0	67.4	67.6	67.3	66.7	66.4	66.6	66.7	66.7	66.6
older (55-64)	28.3	34.6	48.7	53.2	56.7	59.3	61.0	61.4	61.9	62.6	62.9
Participation rate (20-64) - MALES	-0.9	78.7	79.5	79.7	78.9	78.2	77.9	77.8	77.8	77.7	77.8
Participation rate (15-64) - MALES	-1.5	73.4	74.0	74.0	73.3	72.7	72.3	72.1	72.0	71.9	71.8
young (15-24)	-0.4	31.2	30.8	30.7	31.4	31.4	31.1	30.8	30.6	30.6	30.8
prime-age (25-54)	-5.7	88.3	86.4	84.9	83.5	82.7	82.6	82.6	82.6	82.6	82.5
older (55-64)	18.0	56.9	69.1	75.8	77.0	75.9	74.4	73.8	74.0	74.4	75.0
Average effective exit age (TOTAL) (1)	5.1	62.3	65.7	65.7	65.8	66.1	66.4	66.7	67.0	67.2	67.4
Men	4.9	62.4	65.9	66.0	66.1	66.3	66.4	66.5	66.8	67.0	67.3
Women	5.4	62.1	65.5	65.4	65.4	65.9	66.4	66.8	67.1	67.4	67.5
Employment rate (15-64)	4.8	55.5	58.4	59.6	59.9	60.2	60.4	60.4	60.4	60.3	60.3
Employment rate (20-64)	5.8	59.7	62.9	64.3	64.6	64.9	65.3	65.4	65.5	65.5	65.5
Employment rate (15-74)	5.7	48.5	51.1	52.9	52.9	52.6	52.6	52.9	53.6	54.1	54.3
Unemployment rate (15-64)	-4.9	12.4	10.6	9.2	8.6	8.0	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-4.8	12.0	10.2	8.8	8.2	7.6	7.2	7.2	7.2	7.2	7.2
Unemployment rate (15-74)	-5.2	12.2	10.4	8.8	8.2	7.5	7.1	7.1	7.1	7.1	7.0
Employment (20-64) (in millions)	0.9	21.6	23.0	23.6	23.5	23.2	22.9	22.8	22.7	22.6	22.5
Employment (15-64) (in millions)	1.0	21.6	23.1	23.7	23.6	23.4	23.1	22.9	22.9	22.8	22.6
share of young (15-24)	1%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%
share of prime-age (25-54)	-10%	81%	75%	71%	69%	69%	71%	72%	71%	71%	70%
share of older (55-64)	9%	15%	21%	24%	26%	25%	23%	22%	23%	23%	24%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	2.3	19.2	21.6	23.6	24.3	23.4	21.6	20.8	21.0	21.2	21.4
Old-age dependency ratio 15-64 (3)	20	33	35	37	41	46	50	52	53	53	53
Old-age dependency ratio 20-64 (3)	23	35	38	41	45	50	55	57	58	58	58
Total dependency ratio (4)	22	54	57	59	63	68	74	76	77	77	77
Total economic dependency ratio (5)	-3	173	161	154	156	161	166	172	174	172	171
Economic old-age dependency ratio (15-64) (6)	22	57	57	58	62	69	75	79	80	80	79
Economic old-age dependency ratio (15-74) (7)	17	56	56	55	59	64	70	74	75	74	73

Italy				EC-EPC (AWG) 2015 projections							

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-1.9	15.7	15.3	15.5	15.7	15.8	15.8	15.5	14.8	14.2	13.8
Earnings-related pensions, gross	-2.0	15.5	15.1	15.2	15.4	15.5	15.5	15.1	14.5	13.9	13.4
Of which : Old-age and early pensions	-1.3	12.6	12.2	12.4	12.6	12.8	12.9	12.7	12.2	11.6	11.4
Disability pensions	0.0	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Survivors pensions	-0.7	2.5	2.5	2.4	2.4	2.3	2.2	2.1	2.0	1.9	1.8
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.2	0.6	0.8	0.8	0.9	0.8	0.9	0.7	0.7	0.7	0.7
Public pensions, net	-1.6	12.9	12.5	12.7	12.8	12.9	12.9	12.7	12.1	11.6	11.3
Public pensions, contributions	0.2	10.5	10.6	10.5	10.5	10.5	10.5	10.6	10.7	10.7	10.6

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-0.2%	82.0%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%	81.8%
Pensioners (Public, in 1000 persons)	1885	15440	15046	15356	16024	16925	17735	18078	18074	17748	17325
Pensioners aged 65+ (1000 persons)	3932	12484	13054	13421	14255	15410	16485	16993	17074	16784	16415
Share of pensioners below age 65 as % of all pensioners	-13.9%	19.2%	13.2%	12.6%	11.0%	8.9%	7.0%	6.0%	5.5%	5.4%	5.3%
Benefit ratio (Public pensions)	-8.1	58.8	63.1	65.2	64.1	61.0	57.7	54.8	52.4	51.0	50.7
Gross replacement rate at retirement (Old-age earnings-related pensions)	-8.0	59.9	61.2	59.1	57.8	54.3	52.3	49.7	50.2	50.9	51.8
Average accrual rates (new pensions, earnings related)	-0.2	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Average contributory period (new pensions, earnings-related)	4.5	32.9	35.5	34.8	35.4	35.0	35.4	35.1	35.5	36.2	37.3
Contributors (Public pensions, in 1000 persons)	2568.2	23309.1	25102.6	26196.8	26554.4	26596.8	26382.2	26218.4	26087.8	26027.8	25877.3
Support ratio (contributors/100 pensioners, Public pensions)	-1.6	151.0	166.8	170.6	165.7	157.1	148.8	145.0	144.3	146.7	149.4

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.2	0.2	0.2	0.4
High labour productivity (+0.25 p.p.)	-0.5	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5
Lower labour productivity (-0.25 p.p.)	0.5	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5
High employment rate (+2 p.p)	-0.1	0.0	-0.2	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1
High emp. of older workers (+10 p.p.)	0.1	0.0	-0.6	-1.8	-1.4	-1.0	-0.6	-0.3	0.0	0.1	0.1
Lower migration (-20%)	0.4	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.4
TFP risk scenario	0.7	0.0	0.0	0.1	0.2	0.4	0.6	0.7	0.8	0.8	0.7
Policy scenario linking retirement age to increases in life expectancy	:	:	:	:	:	:	:	:	:	:	:

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-1.9		-0.4	-0.2	0.0	0.1	0.1	-0.3	-0.9	-1.5	-1.9
Dependency ratio	8.0		1.2	2.2	3.8	5.6	7.1	7.8	8.0	8.0	8.0
Coverage ratio	-5.0		-1.7	-2.4	-3.1	-3.7	-4.1	-4.4	-4.5	-4.7	-5.0
Of which : Old-age	-2.5		-0.6	-1.2	-1.7	-1.9	-2.0	-2.1	-2.1	-2.3	-2.5
Early-age	-17.4		-7.2	-8.5	-9.5	-10.8	-12.7	-14.5	-15.7	-16.4	-17.4
Cohort effect	-6.0		0.7	0.5	-1.1	-3.4	-5.4	-6.3	-6.4	-6.2	-6.0
Benefit ratio	-2.1		1.2	1.7	1.4	0.7	-0.2	-1.0	-1.7	-2.1	-2.1
Labour market ratio	-2.3		-0.9	-1.5	-1.9	-2.1	-2.2	-2.2	-2.2	-2.2	-2.3
Of which : Employment rate	-1.4		-0.8	-1.2	-1.2	-1.3	-1.4	-1.4	-1.4	-1.4	-1.4
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Career shift	-1.0		-0.2	-0.4	-0.7	-0.8	-0.9	-0.8	-0.9	-0.9	-1.0
Interaction effect (residual)	-0.5		-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.6	-0.5	-0.5

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-1.9		-0.3	0.2	0.2	0.1	0.0	-0.3	-0.6	-0.6	-0.4
Dependency ratio	8.0		0.8	1.0	1.6	1.8	1.5	0.7	0.2	0.0	0.0
Coverage ratio	-5.0		-1.0	-0.7	-0.7	-0.6	-0.4	-0.3	-0.1	-0.2	-0.3
Of which : Old-age	-2.5		-0.6	-0.6	-0.5	-0.2	-0.1	-0.1	0.0	-0.2	-0.2
Early-age	-17.4		-3.9	-1.3	-1.0	-1.3	-1.9	-1.8	-1.3	-0.7	-0.9
Cohort effect	-6.0		0.6	-0.1	-1.6	-2.3	-2.1	-0.9	-0.1	0.2	0.2
Benefit ratio	-2.1		0.9	0.6	-0.3	-0.8	-0.9	-0.8	-0.7	-0.4	-0.1
Labour market ratio	-2.3		-0.8	-0.6	-0.3	-0.2	-0.2	0.0	0.0	-0.1	-0.1
Of which : Employment rate	-1.4		-0.7	-0.3	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-1.0		-0.2	-0.3	-0.2	-0.1	-0.1	0.1	0.0	-0.1	-0.1
Interaction effect (residual)	-0.5		-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.7	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.8	6.7
Demographic scenario	0.8	6.1	6.2	6.3	6.5	6.6	6.7	6.8	6.9	6.9	6.9
High Life expectancy scenario	1.1	6.1	6.2	6.3	6.5	6.7	6.8	7.0	7.1	7.1	7.2
Constant health scenario	0.2	6.1	6.1	6.1	6.2	6.3	6.4	6.4	6.4	6.4	6.3
Death-related cost scenario	0.7	6.1	6.1	6.3	6.4	6.5	6.6	6.7	6.7	6.7	6.7
Income elasticity scenario	1.0	6.1	6.2	6.4	6.5	6.6	6.8	7.0	7.0	7.0	7.0
EU28 cost convergence scenario	1.2	6.1	6.2	6.4	6.5	6.7	6.9	7.0	7.1	7.2	7.2
Labour intensity scenario	1.0	6.1	6.1	6.1	6.3	6.6	6.8	7.1	7.2	7.2	7.1
Sector-specific composite indexation scenario	0.1	6.1	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.2	6.2
Non-demographic determinants scenario	1.9	6.1	6.3	6.5	6.8	7.1	7.4	7.6	7.8	7.9	8.0
AWG risk scenario	1.2	6.1	6.2	6.4	6.6	6.8	7.0	7.1	7.2	7.3	7.2
TFP risk scenario	0.6	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.7	6.7	6.7

Italy				EC-EPC (AWG) 2015 projections								

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7
Demographic scenario	1.0	1.8	1.9	2.0	2.1	2.1	2.3	2.4	2.6	2.7	2.8
High Life expectancy scenario	1.2	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.7	2.9	3.0
Base case scenario	1.0	1.8	1.9	1.9	2.0	2.1	2.3	2.5	2.6	2.8	2.8
Constant disability scenario	0.8	1.8	1.9	1.9	1.9	2.0	2.1	2.3	2.4	2.5	2.5
Shift to formal care scenario	1.6	1.8	2.2	2.4	2.5	2.6	2.8	3.0	3.2	3.4	3.4
Coverage convergence scenario	1.3	1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.8	3.0	3.1
Cost convergence scenario	1.1	1.8	1.9	1.9	2.0	2.1	2.3	2.5	2.6	2.8	2.8
Cost and coverage convergence scenario	1.3	1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.8	3.0	3.1
AWG risk scenario	1.1	1.8	1.9	2.0	2.0	2.2	2.3	2.5	2.7	2.8	2.9
TFP risk scenario	0.9	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	41.0%	4566	4894	5117	5356	5624	5897	6165	6379	6476	6437
of which: receiving institutional care	71.5%	294	319	336	354	379	404	436	471	497	504
receiving home care	67.0%	754	822	868	916	978	1043	1120	1197	1248	1258
receiving cash benefits	75.0%	1823	2002	2121	2237	2402	2567	2770	2990	3145	3189
Demographic scenario	50.8%	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
of which: receiving institutional care	80.4%	294	323	342	362	391	419	455	493	521	530
receiving home care	75.9%	754	831	883	938	1008	1082	1168	1254	1310	1326
receiving cash benefits	83.8%	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350
Constant disability scenario	31.3%	4566	4833	5009	5199	5410	5627	5839	6004	6065	5993
of which: receiving institutional care	62.7%	294	316	330	345	368	390	418	450	473	478
receiving home care	58.1%	754	814	854	894	948	1005	1072	1141	1186	1192
receiving cash benefits	66.3%	1823	1982	2086	2187	2332	2477	2658	2857	2998	3031
Shift 1% of dependents from informal to formal scenario	50.8%	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
of which: receiving institutional care	146.1%	294	418	485	513	550	588	633	681	714	723
receiving home care	141.7%	754	1082	1263	1339	1433	1530	1639	1742	1806	1821
receiving cash benefits	83.8%	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350
Coverage convergence scenario	50.8%	4566	4956	5226	5517	5840	6169	6494	6757	6890	6886
of which: receiving institutional care	109.8%	294	329	354	382	417	456	501	550	592	616
receiving home care	106.1%	754	850	919	994	1085	1185	1297	1410	1501	1553
receiving cash benefits	83.8%	1823	2021	2155	2288	2473	2657	2883	3123	3293	3350

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.2	3.7	3.5	3.4	3.3	3.3	3.4	3.5	3.6	3.6	3.5
Expenditure decomposition (broadly constant) : Transfers (7%) - Capital (4%) - Staff (69%) - Other (20%)											
Primary	-0.1	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (4%) - Staff (76%) - Other (18%)											
Low secondary	0.0	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (3%) - Staff (77%) - Other (18%)											
Upper secondary	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (4%) - Staff (73%) - Other (19%)											
Tertiary education	-0.1	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (22%) - Capital (7%) - Staff (45%) - Other (26%)											
Number of students (in thousands)											
Total	735	9431	9773	9841	9830	9865	9988	10147	10250	10251	10166
as % of population 5-24	0%	81%	81%	81%	80%	81%	81%	81%	81%	81%	81%
Primary	152	2914	2978	2914	2914	2978	3063	3139	3161	3121	3066
Low secondary	162	1852	1974	1941	1911	1921	1961	2008	2044	2045	2014
Upper secondary	321	2777	2920	3035	2988	2946	2965	3015	3069	3107	3097
Tertiary education	101	1888	1901	1951	2018	2020	1999	1985	1975	1978	1989
Number of teachers (in thousands)											
Total	55	699	726	729	727	730	741	753	762	761	754
Primary	12	232	237	232	232	237	244	250	252	249	244
Low secondary	13	154	165	162	159	160	163	167	170	170	168
Upper secondary	23	203	214	222	219	216	217	221	225	228	227
Tertiary education	6	109	110	113	117	117	116	115	114	115	115
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	0.1	0.2	0.4	0.5	0.7	0.8	0.8	0.8	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.3	0.9	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

13. CYPRUS

Cyprus	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.40	1.44	1.47	1.50	1.52	1.54	1.56	1.58	1.60	1.62
Life expectancy at birth											
males	6.1	79.1	80.1	80.9	81.5	82.2	82.8	83.5	84.1	84.6	85.2
females	5.6	83.3	84.3	84.9	85.5	86.1	86.7	87.3	87.8	88.4	88.9
Life expectancy at 65											
males	4.2	18.3	18.9	19.4	19.9	20.3	20.8	21.2	21.7	22.1	22.5
females	4.4	20.8	21.4	21.9	22.4	22.9	23.4	23.8	24.3	24.7	25.2
Net migration (thousand)	8.5	-0.6	-0.6	1.1	2.8	4.5	6.0	7.5	8.8	8.4	7.9
Net migration as % of population	0.8	-0.1	-0.1	0.1	0.3	0.5	0.6	0.7	0.8	0.8	0.7
Population (million)	0.3	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1
Children population (0-14) as % of total population	-0.9	16.3	16.6	16.3	15.4	14.4	13.9	14.2	14.8	15.3	15.4
Prime age population (25-54) as % of total population	-7.1	44.3	43.9	42.5	40.8	39.5	37.9	36.9	36.4	36.7	37.1
Working age population (15-64) as % of total population	-12.5	70.2	67.0	65.2	64.0	63.7	63.0	61.7	59.7	58.2	57.7
Elderly population (65 and over) as % of total population	13.4	13.4	16.3	18.5	20.5	21.9	23.1	24.1	25.5	26.4	26.8
Very elderly population (80 and over) as % of total population	6.5	3.0	3.8	4.5	5.6	6.5	7.4	8.1	8.5	8.9	9.5
Very elderly population (80 and over) as % of elderly population	13.1	22.2	23.2	24.1	27.2	29.6	32.1	33.7	33.3	33.6	35.3
Very elderly population (80 and over) as % of working age population	12.2	4.2	5.6	6.8	8.7	10.2	11.8	13.2	14.2	15.2	16.4
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.9	-2.0	2.8	1.5	1.9	2.8	2.5	2.4	2.2	2.0	2.1
Employment (growth rate)	0.5	-2.6	2.0	0.5	0.7	0.9	0.6	0.5	0.4	0.4	0.5
Labour input : hours worked (growth rate)	0.5	-2.4	2.0	0.5	0.7	0.9	0.6	0.5	0.4	0.4	0.5
Labour productivity per hour (growth rate)	1.4	0.5	0.8	0.9	1.3	1.9	1.9	1.9	1.8	1.7	1.5
TFP (growth rate)	0.8	-0.3	0.1	0.3	0.8	1.2	1.2	1.2	1.2	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.6	0.8	0.7	0.6	0.4	0.7	0.7	0.7	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.3	-2.4	2.5	1.1	1.6	2.3	1.9	1.6	1.3	1.2	1.4
Potential GDP per worker (growth rate)	1.4	0.6	0.8	0.9	1.3	1.9	1.9	1.9	1.8	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	39	609	598	592	591	600	609	616	621	631	648
Population growth (working age:15-64)	0.7	0.0	-0.3	-0.1	0.2	0.3	0.4	0.1	0.2	0.4	0.7
Population (20-64) (in thousands)	38	552	553	543	539	546	557	567	572	578	590
Population growth (20-64)	0.0	0.6	-0.3	-0.4	0.1	0.4	0.5	0.2	0.2	0.3	0.6
Labour force 15-64 (thousands)	65	444	464	460	459	464	474	483	489	497	509
Labour force 20-64 (thousands)	66	438	459	455	453	458	468	478	484	491	503
Participation rate (20-64)	6.0	79.2	83.0	83.8	84.0	84.0	84.1	84.2	84.6	84.9	85.2
Participation rate (15-64)	5.7	72.9	77.6	77.7	77.7	77.5	77.9	78.4	78.8	78.7	78.6
young (15-24)	-1.2	40.6	41.6	38.3	39.5	41.0	41.6	41.1	39.9	39.3
prime-age (25-54)	2.0	87.7	89.2	89.3	89.5	89.5	89.5	89.6	89.8	89.8	89.7
older (55-64)	21.4	57.0	68.2	71.6	73.7	74.7	76.4	76.8	77.2	77.4	78.4
Participation rate (20-64) - FEMALES	8.0	72.7	77.3	78.4	78.8	78.8	79.1	79.3	79.9	80.3	80.7
Participation rate (15-64) - FEMALES	7.1	66.9	72.3	72.8	72.9	72.7	73.1	73.7	74.1	74.1	74.1
young (15-24)	-2.0	37.3	37.4	34.1	34.4	35.2	36.7	37.4	36.9	35.8	35.3
prime-age (25-54)	3.5	82.0	84.5	84.7	85.1	85.2	85.3	85.4	85.6	85.6	85.5
older (55-64)	30.1	42.8	57.8	63.6	66.7	68.0	70.0	70.8	71.5	71.8	73.0
Participation rate (20-64) - MALES	3.4	86.3	89.1	89.5	89.5	89.5	89.3	89.1	89.0	89.1	89.7
Participation rate (15-64) - MALES	3.8	79.3	83.2	82.9	82.7	82.4	82.7	83.1	83.3	83.2	83.0
young (15-24)	-0.3	43.7	45.7	42.4	43.1	43.7	45.3	45.9	45.3	44.0	43.4
prime-age (25-54)	-0.2	94.0	94.2	94.1	94.0	93.8	93.6	93.7	93.8	93.9	93.9
older (55-64)	12.1	71.5	79.3	80.8	82.2	82.7	83.5	83.0	82.8	82.8	83.6
Average effective exit age (TOTAL) (1)	3.7	63.9	66.0	66.1	66.3	66.5	66.7	66.9	67.1	67.3	67.5
Men	2.7	64.9	66.4	66.5	66.7	66.9	67.0	67.2	67.3	67.5	67.7
Women	4.5	62.8	65.6	65.7	65.9	66.1	66.4	66.6	66.9	67.1	67.4
Employment rate (15-64)	13.2	60.6	64.7	68.2	69.9	71.4	73.2	73.6	74.0	73.9	73.8
Employment rate (20-64)	13.9	66.3	69.6	73.8	75.8	77.6	79.1	79.2	79.6	79.9	80.2
Employment rate (15-74)	10.5	55.6	58.5	61.7	62.8	64.3	66.0	66.3	66.3	65.9	66.1
Unemployment rate (15-64)	-10.8	16.9	16.6	12.3	10.1	7.8	6.1	6.1	6.1	6.1	6.1
Unemployment rate (20-64)	-10.4	16.3	16.2	11.9	9.7	7.6	5.9	5.9	5.9	5.9	5.9
Unemployment rate (15-74)	-10.9	16.7	16.4	12.0	9.8	7.6	5.9	5.9	5.8	5.8	5.8
Employment (20-64) (in millions)	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Employment (15-64) (in millions)	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
share of young (15-24)	0%	8%	6%	6%	7%	8%	9%	8%	8%	8%	8%
share of prime-age (25-54)	-4%	79%	77%	76%	74%	72%	70%	69%	70%	73%	74%
share of older (55-64)	5%	13%	17%	18%	18%	20%	22%	23%	22%	20%	18%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.4	16.0	18.1	18.5	18.9	19.9	21.7	22.9	22.1	19.7	17.5
Old-age dependency ratio 15-64 (3)	27	19	24	28	32	34	37	39	43	45	47
Old-age dependency ratio 20-64 (3)	30	21	26	31	35	38	40	42	46	50	51
Total dependency ratio (4)	31	42	49	53	56	57	59	62	67	72	73
Total economic dependency ratio (5)	-13	130	124	115	113	108	105	106	110	115	118
Economic old-age dependency ratio (15-64) (6)	26	29	34	37	41	43	44	46	50	53	55
Economic old-age dependency ratio (15-74) (7)	22	29	33	35	39	40	42	43	46	49	51

Cyprus		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.1	9.5	9.0	9.3	9.7	9.6	9.4	9.3	9.2	9.4	9.3
Earnings-related pensions, gross	-0.1	9.2	8.7	9.0	9.4	9.3	9.1	9.0	8.9	9.2	9.1
Of which : Old-age and early pensions	-0.3	7.7	6.8	6.9	7.2	7.2	7.0	7.1	7.1	7.4	7.4
Disability pensions	0.1	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Survivors pensions	0.1	1.2	1.6	1.7	1.8	1.7	1.6	1.5	1.5	1.4	1.4
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	2.5	6.4	7.6	8.0	8.3	8.7	9.1	9.1	9.0	9.0	8.9
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	148	142	164	184	205	226	242	259	270	288	290
Pensioners aged 65+ (1000 persons)	149	122	146	166	188	208	223	240	251	270	271
Share of pensioners below age 65 as % of all pensioners	-7.7%	14.4%	10.7%	9.7%	8.4%	8.0%	7.7%	7.5%	7.0%	6.3%	6.7%
Benefit ratio (Public)	-20.9	64.4	57.3	55.8	53.7	50.6	48.0	45.5	44.1	43.3	43.5
Gross replacement rate at retirement (Old-age earnings-related pensions)	:	:	48.2	50.5	48.3	46.5	45.9	44.2	43.8	44.5	49.2
Average accrual rates (new pensions, earnings related)	:	:	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	174.9	418.7	445.1	468.9	482.9	504.0	528.5	545.0	560.9	575.7	593.6
Support ratio (contributors/100 pensioners, Public pensions)	-90.0	294.4	271.4	254.9	235.7	223.1	218.4	210.4	208.1	199.7	204.4
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.4	-0.1	-0.3	0.0
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3
Lower migration (-20%)	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.6
TFP risk scenario	0.3	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3
Policy scenario linking retirement age to increases in life expectancy	0.1	-9.5	-9.0	-9.3	-9.7	-9.6	-9.4	-9.3	-9.2	-9.4	-9.3
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.1		-0.5	-0.2	0.2	0.2	-0.1	-0.2	-0.3	0.0	-0.1
Dependency ratio	8.7		2.2	3.8	5.0	5.7	6.3	6.9	7.7	8.4	8.7
Coverage ratio	-2.1		-0.7	-1.0	-1.1	-1.0	-1.1	-1.1	-1.6	-1.7	-2.1
Of which : Old-age	-1.4		-0.3	-0.5	-0.5	-0.3	-0.4	-0.4	-0.9	-0.9	-1.4
Early-age	-1.6		-1.8	-2.0	-2.6	-2.9	-3.2	-3.1	-2.7	-2.3	-1.6
Cohort effect	-7.1		-1.5	-2.5	-3.2	-3.2	-3.3	-3.8	-5.2	-6.5	-7.1
Benefit ratio	-3.8		-1.2	-1.5	-1.8	-2.4	-2.9	-3.4	-3.7	-3.8	-3.8
Labour market ratio	-2.2		-0.5	-1.1	-1.4	-1.7	-1.9	-2.0	-2.1	-2.2	-2.2
Of which : Employment rate	-1.7		-0.4	-0.9	-1.2	-1.4	-1.6	-1.6	-1.6	-1.7	-1.7
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-0.5	-0.5	-0.5
Interaction effect (residual)	-0.6		-0.2	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.1		-0.3	0.3	0.4	0.0	-0.2	-0.1	-0.1	0.3	-0.1
Dependency ratio	8.7		1.5	1.6	1.3	0.7	0.6	0.6	0.8	0.6	0.3
Coverage ratio	-2.1		-0.5	-0.2	-0.1	0.1	-0.1	-0.1	-0.5	-0.1	-0.4
Of which : Old-age	-1.4		-0.3	-0.1	0.0	0.2	-0.1	-0.1	-0.4	0.0	-0.4
Early-age	-1.6		-0.5	-0.1	-0.6	-0.3	-0.3	0.2	0.3	0.4	0.7
Cohort effect	-7.1		-1.0	-1.0	-0.7	0.0	-0.1	-0.5	-1.4	-1.3	-0.6
Benefit ratio	-3.8		-0.6	-0.3	-0.3	-0.6	-0.5	-0.5	-0.3	-0.2	0.0
Labour market ratio	-2.2		-0.5	-0.6	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	0.0
Of which : Employment rate	-1.7		-0.4	-0.5	-0.3	-0.2	-0.2	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0
Interaction effect (residual)	-0.6		-0.2	-0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.3	3.0	3.1	3.1	3.1	3.2	3.3	3.3	3.3	3.3	3.3
Demographic scenario	0.3	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.3	3.2	3.3
High Life expectancy scenario	0.3	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.3
Constant health scenario	0.1	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	0.4	3.0	3.1	3.1	3.2	3.3	3.3	3.3	3.4	3.4	3.4
EU28 cost convergence scenario	3.5	3.0	3.3	3.6	3.9	4.2	4.6	5.1	5.5	6.0	6.5
Labour intensity scenario	0.2	3.0	3.1	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.2
Sector-specific composite indexation scenario	0.2	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
Non-demographic determinants scenario	1.0	3.0	3.1	3.2	3.4	3.5	3.7	3.8	3.9	3.9	4.0
AWG risk scenario	0.6	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.6	3.6
TFP risk scenario	0.3	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3

Cyprus				EC-EPC (AWG) 2015 projections							

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Demographic scenario	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
High Life expectancy scenario	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6
Base case scenario	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Constant disability scenario	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Shift to formal care scenario	0.4	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
Coverage convergence scenario	0.5	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8
Cost convergence scenario	0.9	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.2
Cost and coverage convergence scenario	1.9	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.2	1.5	2.1
AWG risk scenario	1.8	0.3	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.5	2.0
TFP risk scenario	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	90.1%	63	71	77	84	91	97	103	109	114	119
of which: receiving institutional care	136.7%	3	4	4	4	5	5	6	6	7	7
receiving home care	167.1%	3	4	4	5	6	6	7	7	8	9
receiving cash benefits	127.0%	8	9	10	11	12	13	14	15	16	17
Demographic scenario	104.8%	63	72	79	87	94	102	109	116	122	128
of which: receiving institutional care	150.0%	3	4	4	5	5	6	6	7	7	8
receiving home care	181.4%	3	4	4	5	6	6	7	8	8	9
receiving cash benefits	140.0%	8	9	10	11	12	13	15	16	17	18
Constant disability scenario	75.6%	63	70	76	81	87	93	98	102	106	110
of which: receiving institutional care	123.5%	3	4	4	4	5	5	6	6	7	7
receiving home care	153.0%	3	4	4	5	5	6	7	7	8	8
receiving cash benefits	114.1%	8	9	9	10	11	12	13	14	15	16
Shift 1% of dependents from informal to formal scenario	104.8%	63	72	79	87	94	102	109	116	122	128
of which: receiving institutional care	347.4%	3	6	8	9	10	11	12	12	13	14
receiving home care	386.3%	3	6	8	9	11	12	13	14	15	16
receiving cash benefits	140.0%	8	9	10	11	12	13	15	16	17	18
Coverage convergence scenario	104.8%	63	72	79	87	94	102	109	116	122	128
of which: receiving institutional care	468.9%	3	4	5	6	7	9	11	13	15	18
receiving home care	545.7%	3	4	5	7	8	10	12	15	18	21
receiving cash benefits	140.0%	8	9	10	11	12	13	15	16	17	18

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-1.2	7.3	6.5	6.4	6.2	5.9	5.5	5.3	5.5	5.8	6.1
Expenditure decomposition (broadly constant) : Transfers (16%) - Capital (8%) - Staff (64%) - Other (12%)											
Primary	-0.1	2.3	2.4	2.4	2.2	2.0	1.8	1.9	2.0	2.2	2.2
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (12%) - Staff (77%) - Other (11%)											
Low secondary	-0.1	1.3	1.3	1.3	1.3	1.2	1.1	1.0	1.1	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (9%) - Staff (80%) - Other (8%)											
Upper secondary	-0.3	1.5	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.1	1.2
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (7%) - Staff (83%) - Other (7%)											
Tertiary education	-0.8	2.2	1.6	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (52%) - Capital (4%) - Staff (23%) - Other (21%)											
Number of students (in thousands)											
Total	20	146	137	141	143	140	136	136	144	156	166
as % of population 5-24	4%	66%	70%	72%	70%	69%	68%	68%	70%	71%	71%
Primary	16	54	60	61	59	55	53	56	62	67	71
Low secondary	7	28	27	29	31	30	28	27	29	32	35
Upper secondary	1	31	25	27	28	29	28	27	27	29	32
Tertiary education	-4	33	25	24	25	26	27	27	27	27	29
Number of teachers (in thousands)											
Total	2	12	11	11	12	11	11	11	12	13	13
Primary	1	4	4	4	4	4	4	4	5	5	5
Low secondary	1	3	3	3	3	3	3	3	3	3	3
Upper secondary	0	3	2	3	3	3	3	3	3	3	3
Tertiary education	0	2	1	1	1	1	2	2	2	2	2
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	2.1	0.2	0.8	1.1	1.5	1.9	2.2	2.2	2.2	2.3	2.3

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.6	0.8	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

14. LATVIA

Latvia		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.50	1.60	1.65	1.68	1.71	1.73	1.75	1.76	1.77	1.78
Life expectancy at birth											
males	11.8	69.1	71.1	72.5	73.8	75.1	76.4	77.6	78.7	79.8	80.9
females	8.2	78.9	80.3	81.2	82.2	83.1	83.9	84.7	85.5	86.3	87.0
Life expectancy at 65											
males	6.6	13.8	14.8	15.5	16.3	17.0	17.7	18.4	19.1	19.7	20.4
females	5.8	18.4	19.4	20.0	20.6	21.3	21.9	22.5	23.1	23.6	24.2
Net migration (thousand)	10.1	-10.1	-14.3	-14.5	-9.9	0.9	0.9	0.8	0.7	0.4	0.0
Net migration as % of population	0.5	-0.5	-0.8	-0.8	-0.6	0.1	0.1	0.1	0.1	0.0	0.0
Population (million)	-0.6	2.0	1.9	1.7	1.6	1.5	1.5	1.5	1.5	1.4	1.4
Children population (0-14) as % of total population	1.7	14.6	15.5	14.9	14.1	13.5	13.9	15.0	16.0	16.4	16.3
Prime age population (25-54) as % of total population	-5.9	41.9	40.1	37.4	35.1	34.5	33.8	32.9	33.1	35.0	36.1
Working age population (15-64) as % of total population	-10.9	66.6	63.8	62.0	60.4	59.5	58.3	57.1	55.7	54.7	55.7
Elderly population (65 and over) as % of total population	9.2	18.9	20.7	23.1	25.5	27.0	27.9	28.0	28.3	28.9	28.0
Very elderly population (80 and over) as % of total population	6.3	4.7	5.9	6.5	7.1	8.0	9.2	10.2	10.6	10.9	11.0
Very elderly population (80 and over) as % of elderly population	14.2	24.9	28.6	28.1	27.8	29.5	33.1	36.5	37.4	37.9	39.1
Very elderly population (80 and over) as % of working age population	12.6	7.1	9.3	10.5	11.8	13.4	15.8	17.9	18.9	20.0	19.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (grow th rate)	1.6	1.9	2.6	1.8	1.1	1.4	1.3	1.1	0.9	1.2	1.6
Employment (grow th rate)	-0.9	-0.6	-1.3	-1.6	-1.3	-0.6	-0.7	-0.9	-0.9	-0.5	0.1
Labour input : hours w orked (grow th rate)	-0.9	-0.5	-1.4	-1.6	-1.3	-0.6	-0.7	-0.8	-0.9	-0.5	0.1
Labour productivity per hour (grow th rate)	2.4	2.4	4.0	3.4	2.4	1.9	1.9	2.0	1.8	1.7	1.5
TFP (grow th rate)	1.4	0.9	1.8	1.9	1.6	1.3	1.3	1.3	1.2	1.1	1.0
Capital deepening (contribution to labour productivity grow th)	1.0	1.5	2.2	1.5	0.9	0.7	0.7	0.7	0.6	0.6	0.5
Potential GDP per capita (grow th rate)	2.4	2.9	3.9	3.3	2.4	2.0	1.7	1.5	1.3	1.6	2.0
Potential GDP per w orker (grow th rate)	2.4	2.4	4.0	3.4	2.5	2.0	2.0	2.0	1.8	1.7	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-563	1341	1191	1081	980	921	879	844	809	779	778
Population grow th (w orking age:15-64)	2.0	-1.6	-1.8	-2.1	-1.6	-0.9	-0.9	-0.8	-0.9	-0.6	0.4
Population (20-64) (in thousands)	-549	1244	1100	981	890	834	802	773	737	701	695
Population grow th (20-64)	1.5	-1.0	-2.0	-2.3	-1.7	-0.9	-0.8	-0.7	-1.1	-0.8	0.4
Labour force 15-64 (thousands)	-408	996	896	806	734	686	662	639	609	585	588
Labour force 20-64 (thousands)	-406	987	888	798	727	679	655	633	603	579	581
Participation rate (20-64)	4.2	79.3	80.8	81.3	81.6	81.4	81.7	81.8	81.8	82.6	83.6
Participation rate (15-64)	1.3	74.3	75.2	74.6	74.9	74.5	75.3	75.7	75.3	75.1	75.6
young (15-24)	-4.3	40.7	35.1	33.9	37.1	37.0	39.1	39.0	37.3	36.0	36.3
prime-age (25-54)	1.5	87.6	88.7	88.8	89.0	88.9	88.9	89.0	89.1	89.2	89.1
older (55-64)	11.6	61.5	63.9	67.6	70.7	69.9	71.4	71.9	69.8	68.1	73.1
Participation rate (20-64) - FEMALES	4.4	76.2	77.6	78.2	78.6	78.3	78.5	78.7	78.8	79.6	80.6
Participation rate (15-64) - FEMALES	1.3	71.6	72.6	72.1	72.5	72.0	72.5	72.9	72.5	72.4	72.9
young (15-24)	-4.3	36.6	31.1	30.0	33.0	32.7	34.7	34.6	33.1	32.0	32.3
prime-age (25-54)	1.9	84.7	85.7	86.1	86.5	86.5	86.3	86.2	86.5	86.7	86.7
older (55-64)	10.9	60.5	62.6	65.8	68.6	67.9	69.3	70.1	68.2	66.6	71.4
Participation rate (20-64) - MALES	3.7	82.7	84.1	84.6	84.7	84.5	84.9	85.0	84.8	85.5	86.4
Participation rate (15-64) - MALES	1.0	77.1	78.0	77.2	77.4	77.1	78.0	78.5	78.0	77.8	78.2
young (15-24)	-4.4	44.5	38.7	37.4	40.9	40.8	43.2	43.1	41.2	39.8	40.1
prime-age (25-54)	0.8	90.6	91.7	91.6	91.4	91.4	91.5	91.6	91.6	91.5	91.4
older (55-64)	12.2	62.7	65.5	69.9	73.2	72.4	73.9	74.0	71.5	69.7	74.9
Average effective exit age (TOTAL) (1)	1.1	64.2	64.8	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
Men	0.7	64.6	65.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
Women	1.3	64.0	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
Employment rate (15-64)	4.7	65.3	65.9	65.8	67.2	68.0	69.7	70.0	69.7	69.5	69.9
Employment rate (20-64)	7.6	69.9	70.9	71.9	73.4	74.4	75.7	75.9	75.8	76.6	77.5
Employment rate (15-74)	2.7	58.4	58.9	57.9	58.2	59.1	60.7	61.1	60.9	60.2	61.2
Unemployment rate (15-64)	-4.7	12.1	12.4	11.8	10.3	8.7	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-4.6	11.9	12.2	11.6	10.1	8.5	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-4.7	11.9	12.0	11.4	9.9	8.4	7.2	7.2	7.2	7.2	7.2
Employment (20-64) (in millions)	-0.3	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5
Employment (15-64) (in millions)	-0.3	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5
share of young (15-24)	1%	9%	6%	7%	8%	9%	9%	9%	8%	9%	10%
share of prime-age (25-54)	2%	75%	75%	72%	70%	70%	70%	69%	68%	71%	77%
share of older (55-64)	-3%	16%	19%	21%	22%	22%	22%	23%	21%	15%	14%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-5.6	19.4	22.3	22.4	22.9	22.5	22.5	24.0	22.1	16.0	13.8
Old-age dependency ratio 15-64 (3)	22	28	32	37	42	45	48	49	51	53	50
Old-age dependency ratio 20-64 (3)	26	31	35	41	47	50	52	53	56	59	56
Total dependency ratio (4)	29	50	57	61	66	68	72	75	79	83	80
Total economic dependency ratio (5)	20	123	128	132	133	133	132	136	142	146	143
Economic old-age dependency ratio (15-64) (6)	26	40	45	51	57	60	62	64	66	69	66
Economic old-age dependency ratio (15-74) (7)	24	39	43	48	54	57	59	60	62	65	63

Latvia — EC-EPC (AWG) 2015 projections

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-3.1	7.7	5.9	5.5	5.5	5.5	5.4	5.3	5.2	5.0	4.6
Earnings-related pensions, gross	-3.0	7.6	5.9	5.5	5.5	5.5	5.4	5.2	5.1	5.0	4.6
Of which : Old-age and early pensions	-2.8	6.9	5.2	4.9	4.9	4.9	4.9	4.7	4.7	4.5	4.1
Disability pensions	-0.3	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Survivors pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	0.0	0.1	0.3	0.5	0.8	1.1	1.5	1.9	2.2
New pensions, gross	-0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-0.8	7.0	6.3	6.3	6.2	6.2	6.3	6.3	6.3	6.2	6.2

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	-102	585	542	529	531	530	529	517	511	506	483
Pensioners aged 65+ (1000 persons)	11	393	395	410	422	426	432	425	423	424	405
Share of pensioners below age 65 as % of all pensioners	-16.5%	32.8%	27.0%	22.4%	20.5%	19.5%	18.4%	17.8%	17.1%	16.1%	16.2%
Benefit ratio (Public pensions)	-14.5	27.7	21.5	18.8	17.4	16.7	16.1	15.3	14.6	13.8	13.2
Gross replacement rate at retirement (Public pensions)	-15.3	33.4	29.0	26.7	24.3	23.0	20.6	19.4	18.0	17.3	18.1
Average accrual rates (new pensions, earnings related)	-0.5	1.1	1.0	1.0	1.1	1.0	0.9	0.8	0.7	0.7	0.6
Average contributory period (new pensions, earnings-related)	3.6	34.5	36.3	37.0	37.4	37.8	38.1	38.1	38.1	38.1	38.1
Contributors (Public pensions, in 1000 persons)	-345.1	936.6	845.9	773.5	713.4	678.9	666.6	644.0	617.0	596.1	591.5
Support ratio (contributors/100 pensioners, Public pensions)	-37.7	160.1	156.2	146.3	134.3	128.1	126.1	124.4	120.8	117.9	122.4

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
High labour productivity (+0.25 p.p.)	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Lower labour productivity (-0.25 p.p.)	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1
High employment rate (+2 p.p)	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
High emp. of older workers (+10 p.p.)	0.0	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0
Lower migration (-20%)	0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1
TFP risk scenario	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Policy scenario linking retirement age to increases in life expectancy	-0.2	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.2	-0.4	-0.4	-0.2

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-3.1		-1.8	-2.2	-2.2	-2.2	-2.3	-2.4	-2.5	-2.7	-3.1
Dependency ratio	3.8		1.0	2.0	2.8	3.2	3.5	3.6	3.8	4.1	3.8
Coverage ratio	-1.4		-0.7	-1.0	-1.1	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
Of which : Old-age	0.0		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
Early-age	-0.9		-1.4	-2.2	-2.1	-2.2	-2.2	-2.1	-1.3	-0.6	-0.9
Cohort effect	-4.1		-0.5	-1.1	-1.8	-2.0	-2.2	-2.5	-3.5	-4.5	-4.1
Benefit ratio	-4.5		-1.8	-2.6	-3.0	-3.3	-3.5	-3.7	-4.0	-4.3	-4.5
Labour market ratio	-0.8		-0.2	-0.3	-0.5	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8
Of which : Employment rate	-0.6		-0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1
Interaction effect (residual)	-0.3		-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-3.1		-0.9	-0.4	0.0	0.0	-0.1	-0.2	-0.1	-0.2	-0.4
Dependency ratio	3.8		0.8	1.0	0.7	0.4	0.3	0.1	0.2	0.3	-0.2
Coverage ratio	-1.4		-0.5	-0.4	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0
Of which : Old-age	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	-0.9		-1.1	-0.8	0.1	0.0	-0.2	0.1	0.9	0.7	-0.3
Cohort effect	-4.1		-0.3	-0.6	-0.7	-0.3	-0.2	-0.3	-1.0	-1.0	0.3
Benefit ratio	-4.5		-1.2	-0.8	-0.4	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2
Labour market ratio	-0.8		0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0
Of which : Employment rate	-0.6		0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Interaction effect (residual)	-0.3		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.6	3.8	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.4	4.4
Demographic scenario	0.6	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.4	4.4
High Life expectancy scenario	0.8	3.8	3.9	4.0	4.2	4.3	4.4	4.5	4.6	4.6	4.6
Constant health scenario	0.1	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0	3.9
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	0.9	3.8	4.0	4.2	4.3	4.5	4.6	4.7	4.7	4.7	4.7
EU28 cost convergence scenario	2.9	3.8	4.1	4.4	4.8	5.1	5.5	5.8	6.1	6.4	6.7
Labour intensity scenario	0.8	3.8	3.8	4.0	4.1	4.2	4.3	4.4	4.6	4.6	4.6
Sector-specific composite indexation scenario	0.5	3.8	3.9	3.9	4.1	4.2	4.3	4.3	4.3	4.3	4.3
Non-demographic determinants scenario	2.3	3.8	4.3	4.7	5.1	5.4	5.7	5.9	6.0	6.1	6.1
AWG risk scenario	1.5	3.8	4.3	4.6	4.8	5.0	5.2	5.3	5.4	5.3	5.3
TFP risk scenario	0.6	3.8	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.4	4.4

Latvia	EC-EPC (AWG) 2015 projections

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Demographic scenario	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
High Life expectancy scenario	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9
Base case scenario	0.2	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8
Constant disability scenario	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Shift to formal care scenario	0.8	0.6	0.9	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4
Coverage convergence scenario	2.4	0.6	0.8	0.9	1.1	1.3	1.5	1.8	2.2	2.6	3.1
Cost convergence scenario	0.4	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0
Cost and coverage convergence scenario	3.0	0.6	0.8	0.9	1.1	1.4	1.6	2.0	2.5	3.0	3.6
AWG risk scenario	2.7	0.6	0.8	0.9	1.1	1.3	1.5	1.9	2.3	2.8	3.4
TFP risk scenario	0.1	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	-16.8%	144	142	139	136	134	133	132	129	125	120
of which: receiving institutional care	-17.9%	11	11	10	10	10	10	10	9	9	9
receiving home care	-15.6%	9	9	9	9	8	9	8	8	8	8
receiving cash benefits	-21.4%	9	9	8	8	8	8	8	8	7	7
Demographic scenario	-8.3%	144	144	143	142	141	142	142	140	136	132
of which: receiving institutional care	-9.4%	11	11	11	10	10	10	10	10	10	10
receiving home care	-7.9%	9	9	9	9	9	9	9	9	9	8
receiving cash benefits	-14.1%	9	9	9	8	8	8	8	8	8	8
Constant disability scenario	-24.5%	144	139	134	130	126	125	122	118	114	109
of which: receiving institutional care	-25.1%	11	10	10	9	9	9	9	9	8	8
receiving home care	-22.6%	9	9	9	8	8	8	8	8	7	7
receiving cash benefits	-27.7%	9	9	8	8	7	7	7	7	7	7
Shift 1% of dependents from informal to formal scenario	-8.3%	144	144	143	142	141	142	142	140	136	132
of which: receiving institutional care	59.1%	11	16	18	18	18	18	18	18	18	17
receiving home care	55.8%	9	14	16	15	15	15	15	15	15	14
receiving cash benefits	-14.1%	9	9	9	8	8	8	8	8	8	8
Coverage convergence scenario	-8.3%	144	144	143	142	141	142	142	140	136	132
of which: receiving institutional care	269.1%	11	13	14	16	18	21	25	30	34	40
receiving home care	305.1%	9	11	12	14	16	20	23	28	32	37
receiving cash benefits	-14.1%	9	9	9	8	8	8	8	8	8	8

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	3.8	3.8	4.0	4.0	3.9	3.8	3.8	4.1	4.4	4.5
Expenditure decomposition (broadly constant) : Transfers (7%) - Capital (11%) - Staff (60%) - Other (22%)											
Primary	0.4	1.4	1.5	1.6	1.5	1.4	1.4	1.5	1.7	1.8	1.8
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (13%) - Staff (66%) - Other (20%)											
Low secondary	0.3	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (13%) - Staff (66%) - Other (20%)											
Upper secondary	0.2	0.9	0.8	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.1
Expenditure decomposition (broadly constant) : Transfers (13%) - Capital (9%) - Staff (57%) - Other (21%)											
Tertiary education	-0.1	0.9	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (12%) - Capital (11%) - Staff (52%) - Other (25%)											
Number of students (in thousands)											
Total	-80	347	319	310	289	268	252	247	253	263	267
as % of population 5-24	2%	81%	85%	84%	83%	83%	82%	82%	83%	83%	83%
Primary	-21	116	120	113	100	87	83	88	95	98	95
Low secondary	-5	56	61	58	56	51	45	43	46	50	51
Upper secondary	-14	73	65	72	65	63	57	52	52	56	60
Tertiary education	-40	101	73	68	68	67	67	63	60	60	61
Number of teachers (in thousands)											
Total	-5	27	26	25	23	22	20	20	20	21	22
Primary	-2	10	10	10	9	7	7	8	8	8	8
Low secondary	-1	7	7	7	7	6	5	5	5	6	6
Upper secondary	-1	6	6	6	6	5	5	4	4	5	5
Tertiary education	-2	4	3	3	3	3	3	3	2	2	2
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.3	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

15. LITHUANIA

Lithuania	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.61	1.66	1.69	1.71	1.73	1.75	1.76	1.77	1.78	1.79
Life expectancy at birth											
males	12.2	68.7	70.8	72.2	73.6	75.0	76.3	77.5	78.7	79.8	80.9
females	7.8	79.6	80.9	81.9	82.7	83.6	84.4	85.2	86.0	86.7	87.4
Life expectancy at 65											
males	6.5	14.3	15.3	16.0	16.8	17.5	18.2	18.8	19.5	20.1	20.8
females	5.4	19.2	20.0	20.6	21.2	21.8	22.4	23.0	23.5	24.1	24.6
Net migration (thousand)	16.8	-16.8	-37.4	-33.5	-21.1	1.4	1.0	0.6	0.4	0.2	0.0
Net migration as % of population	0.6	-0.6	-1.4	-1.4	-1.0	0.1	0.0	0.0	0.0	0.0	0.0
Population (million)	-1.1	3.0	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.8
Children population (0-14) as % of total population	3.1	14.7	15.3	15.4	14.6	13.7	13.8	15.0	16.7	17.7	17.8
Prime age population (25-54) as % of total population	-4.4	41.1	38.4	35.5	32.2	31.1	32.1	33.0	33.4	34.8	36.7
Working age population (15-64) as % of total population	-10.5	67.0	64.0	60.6	57.7	56.2	55.4	55.0	55.0	55.4	56.5
Elderly population (65 and over) as % of total population	7.5	18.3	20.7	24.0	27.7	30.1	30.8	30.0	28.3	26.9	25.8
Very elderly population (80 and over) as % of total population	6.5	4.9	6.2	6.9	7.7	8.7	10.4	12.0	12.5	12.4	11.4
Very elderly population (80 and over) as % of elderly population	17.4	26.7	30.2	28.9	27.6	28.8	33.8	39.9	44.1	45.9	44.2
Very elderly population (80 and over) as % of working age population	12.9	7.3	9.8	11.4	13.3	15.4	18.8	21.8	22.7	22.3	20.2
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.2	2.6	1.5	0.8	-0.1	0.8	1.2	1.4	1.2	1.2	1.7
Employment (growth rate)	-1.1	-0.4	-2.3	-2.9	-2.5	-1.0	-0.5	-0.3	-0.4	-0.4	0.2
Labour input : hours worked (growth rate)	-1.1	-0.1	-2.3	-2.9	-2.5	-0.9	-0.5	-0.3	-0.4	-0.4	0.2
Labour productivity per hour (growth rate)	2.3	2.7	3.9	3.7	2.4	1.7	1.7	1.7	1.7	1.6	1.5
TFP (growth rate)	1.4	1.3	2.0	2.0	1.6	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity growth)	1.0	1.3	1.9	1.7	0.9	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	2.3	3.6	3.4	2.8	1.7	1.6	1.7	1.8	1.7	1.7	2.1
Potential GDP per worker (growth rate)	2.4	3.0	4.0	3.8	2.5	1.7	1.7	1.7	1.7	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-947	1982	1694	1455	1260	1153	1103	1070	1048	1035	1035
Population growth (working age:15-64)	1.6	-1.1	-2.6	-3.1	-2.5	-1.2	-0.7	-0.5	-0.4	-0.2	0.4
Population (20-64) (in thousands)	-880	1799	1568	1332	1134	1033	992	973	954	931	919
Population growth (20-64)	0.9	-0.6	-2.5	-3.6	-2.6	-1.2	-0.6	-0.3	-0.5	-0.5	0.3
Labour force 15-64 (thousands)	-692	1437	1234	1053	897	813	786	776	763	747	745
Labour force 20-64 (thousands)	-688	1426	1227	1047	890	806	780	770	758	742	739
Participation rate (20-64)	1.1	79.3	78.3	78.6	78.5	78.1	78.6	79.2	79.5	79.7	80.3
Participation rate (15-64)	-0.5	72.5	72.9	72.3	71.2	70.5	71.2	72.5	72.9	72.2	72.0
young (15-24)	-1.3	32.1	33.9	29.7	29.3	32.2	33.7	34.5	33.3	31.0	30.8
prime-age (25-54)	-2.1	89.4	88.2	87.8	87.5	87.3	87.0	87.1	87.4	87.5	87.3
older (55-64)	5.5	60.2	61.1	63.7	66.9	66.2	66.6	67.4	66.6	64.5	65.6
Participation rate (20-64) - FEMALES	1.5	76.6	75.7	76.5	76.6	75.8	76.0	76.6	76.9	77.3	78.1
Participation rate (15-64) - FEMALES	-0.5	70.3	70.8	70.8	69.9	68.8	69.1	70.1	70.4	69.9	69.8
young (15-24)	-1.4	27.5	28.8	24.9	24.4	27.1	28.5	29.3	28.3	26.3	26.1
prime-age (25-54)	-2.3	88.3	87.0	86.5	86.2	86.0	85.5	85.5	85.8	86.1	86.0
older (55-64)	8.1	56.1	58.0	62.3	66.3	65.0	65.3	66.2	65.5	63.1	64.2
Participation rate (20-64) - MALES	0.3	82.2	81.1	80.8	80.6	80.5	81.2	81.8	82.0	82.1	82.5
Participation rate (15-64) - MALES	-0.8	74.8	75.1	74.0	72.6	72.3	73.4	74.9	75.2	74.5	74.1
young (15-24)	-1.2	36.4	38.5	34.1	33.8	36.8	38.5	39.5	38.1	35.6	35.2
prime-age (25-54)	-2.1	90.7	89.5	89.2	88.9	88.5	88.5	88.7	88.9	88.9	88.5
older (55-64)	1.7	65.4	65.1	65.5	67.7	67.8	68.2	68.8	68.0	65.9	67.1
Average effective exit age (TOTAL) (1)	1.7	62.3	63.2	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0
Men	1.5	62.8	63.6	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3
Women	1.9	61.9	62.8	63.6	63.8	63.8	63.8	63.8	63.8	63.8	63.8
Employment rate (15-64)	2.8	63.8	65.0	64.6	64.4	64.6	65.9	67.1	67.4	66.8	66.6
Employment rate (20-64)	4.6	69.8	69.7	70.2	71.1	71.6	72.8	73.3	73.6	73.8	74.4
Employment rate (15-74)	1.0	57.0	57.1	55.0	53.0	53.0	54.8	56.9	58.4	58.3	58.0
Unemployment rate (15-64)	-4.6	12.0	10.8	10.7	10.7	9.6	8.4	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-4.5	11.9	10.7	10.6	9.5	8.3	7.4	7.4	7.4	7.4	7.4
Unemployment rate (15-74)	-4.5	11.9	10.6	10.5	9.3	8.1	7.3	7.3	7.3	7.3	7.3
Employment (20-64) (in millions)	-0.6	1.3	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Employment (15-64) (in millions)	-0.6	1.3	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
share of young (15-24)	1%	8%	7%	6%	7%	9%	10%	9%	8%	8%	9%
share of prime-age (25-54)	3%	77%	73%	72%	69%	69%	71%	73%	73%	76%	79%
share of older (55-64)	-4%	16%	20%	22%	24%	22%	19%	18%	18%	15%	12%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-5.7	18.5	23.6	25.1	25.1	23.0	20.0	19.4	19.9	17.1	12.8
Old-age dependency ratio 15-64 (3)	18	27	32	40	48	53	56	55	52	49	46
Old-age dependency ratio 20-64 (3)	21	30	35	43	53	60	62	60	57	54	51
Total dependency ratio (4)	28	49	56	65	73	78	81	82	82	80	77
Total economic dependency ratio (5)	30	130	135	148	160	165	165	164	163	163	159
Economic old-age dependency ratio (15-64) (6)	25	41	48	58	71	79	81	78	74	70	66
Economic old-age dependency ratio (15-74) (7)	24	40	47	57	68	76	78	76	72	68	64

Lithuania				EC-EPC (AWG) 2015 projections						

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.3	7.2	6.8	7.6	8.7	9.4	9.4	9.1	8.6	8.1	7.5
Earnings-related pensions, gross	0.4	6.9	6.5	7.3	8.5	9.2	9.2	8.8	8.3	7.9	7.3
Of which : Old-age and early pensions	0.7	5.2	4.9	5.7	6.7	7.4	7.6	7.3	6.8	6.4	5.9
Disability pensions	-0.3	1.4	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.2	1.1
Survivors pensions	0.0	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.1	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.9	1.1
New pensions, gross	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-0.7	6.3	5.8	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:		:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	-326	927	858	829	823	809	782	737	687	643	601
Pensioners aged 65+ (1000 persons)	:	:	569	595	624	636	634	603	558	519	489
Share of pensioners below age 65 as % of all pensioners	:	:	33.7%	28.2%	24.2%	21.4%	18.9%	18.2%	18.8%	19.4%	18.7%
Benefit ratio (Public pensions)	-2.1	35.1	33.0	32.9	33.3	33.6	33.8	33.9	33.7	33.4	33.0
Gross replacement rate at retirement (Old-age earnings-related pensions)	:	:	35.6	37.2	37.5	36.6	35.9	35.1	34.8	34.9	34.8
Average accrual rates (new pensions, earnings related)	:	:	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Average contributory period (new pensions, earnings-related)	:	:	37.8	40.0	41.0	41.0	41.0	40.9	40.9	41.0	41.1
Contributors (Public pensions, in 1000 persons)	646.4	0.0	1037.6	892.5	773.9	707.2	688.4	675.7	662.8	649.0	646.4
Support ratio (contributors/100 pensioners, Public pensions)	107.6	0.0	120.9	107.6	94.0	87.4	88.0	91.7	96.4	100.9	107.6

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.6	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.5	-0.6	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3
Lower migration (-20%)	0.3	0.0	-0.1	-0.2	-0.4	-0.5	-0.4	-0.3	-0.1	0.1	0.3
TFP risk scenario	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	-0.8	0.0	0.0	-0.1	-0.3	-0.5	-0.6	-0.7	-0.7	-0.8	-0.8

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.3		-0.4	0.4	1.5	2.2	2.2	1.8	1.4	0.9	0.3
Dependency ratio	4.3		1.0	2.7	4.4	5.5	5.8	5.6	5.0	4.6	4.3
Coverage ratio	-2.2		-0.6	-1.1	-1.6	-1.9	-2.1	-2.2	-2.2	-2.1	-2.2
Of which : Old-age	-0.1		:	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Early-age	-0.3		:	-1.5	-1.4	-1.1	-1.4	-2.0	-1.3	-0.1	-0.3
Cohort effect	-6.4		-0.2	-1.2	-2.7	-4.2	-5.3	-5.2	-5.4	-6.2	-6.4
Benefit ratio	-0.9		-0.8	-0.8	-0.8	-0.7	-0.7	-0.6	-0.7	-0.8	-0.9
Labour market ratio	-0.6		0.0	-0.1	-0.3	-0.3	-0.5	-0.5	-0.5	-0.5	-0.6
Of which : Employment rate	-0.5		0.0	0.0	-0.1	-0.2	-0.4	-0.4	-0.5	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
Interaction effect (residual)	-0.4		-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.3		0.1	0.8	1.1	0.7	0.0	-0.4	-0.5	-0.5	-0.6
Dependency ratio	4.3		0.8	1.6	1.8	1.0	0.3	-0.3	-0.5	-0.4	-0.4
Coverage ratio	-2.2		-0.4	-0.6	-0.4	-0.3	-0.3	-0.1	0.1	0.1	-0.1
Of which : Old-age	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	-0.3		-0.8	-0.7	0.1	0.2	-0.3	-0.5	0.6	1.3	-0.2
Cohort effect	-6.4		-0.2	-1.0	-1.5	-1.5	-1.0	0.1	-0.2	-0.8	-0.2
Benefit ratio	-0.9		-0.4	0.0	0.0	0.1	0.1	0.0	0.0	-0.1	-0.1
Labour market ratio	-0.6		0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	-0.1
Of which : Employment rate	-0.5		0.1	0.0	-0.1	-0.1	-0.2	-0.1	0.0	0.0	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		0.0	-0.1	-0.1	0.0	0.0	0.1	0.0	0.0	0.0
Interaction effect (residual)	-0.4		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.1	4.2	4.4	4.5	4.6	4.7	4.7	4.6	4.5	4.4	4.3
Demographic scenario	0.1	4.2	4.3	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.3
High Life expectancy scenario	0.3	4.2	4.4	4.5	4.6	4.7	4.7	4.7	4.6	4.5	4.5
Constant health scenario	-0.3	4.2	4.2	4.3	4.3	4.3	4.3	4.2	4.1	4.0	3.9
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	0.4	4.2	4.5	4.6	4.8	4.8	4.9	4.9	4.8	4.7	4.6
EU28 cost convergence scenario	2.1	4.2	4.5	4.8	5.2	5.5	5.8	6.0	6.1	6.2	6.3
Labour intensity scenario	0.4	4.2	4.2	4.5	4.8	5.0	5.0	4.9	4.8	4.7	4.6
Sector-specific composite indexation scenario	-0.5	4.2	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.7
Non-demographic determinants scenario	1.7	4.2	4.8	5.2	5.5	5.8	5.9	6.0	6.0	6.0	5.9
AWG risk scenario	0.9	4.2	4.7	5.1	5.3	5.4	5.5	5.5	5.4	5.3	5.1
TFP risk scenario	0.1	4.2	4.4	4.5	4.6	4.7	4.7	4.6	4.5	4.4	4.3

Lithuania		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	1.4	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.3
Demographic scenario	1.0	1.4	1.6	1.8	1.9	2.1	2.2	2.3	2.4	2.4	2.3
High Life expectancy scenario	1.2	1.4	1.6	1.8	2.0	2.1	2.3	2.5	2.6	2.6	2.6
Base case scenario	1.0	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.5	2.5	2.4
Constant disability scenario	0.8	1.4	1.5	1.7	1.9	2.0	2.1	2.2	2.3	2.2	2.1
Shift to formal care scenario	1.3	1.4	1.7	2.0	2.2	2.4	2.6	2.7	2.8	2.8	2.6
Coverage convergence scenario	1.0	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.5	2.5	2.4
Cost convergence scenario	3.8	1.4	1.7	2.1	2.6	3.1	3.5	4.0	4.6	5.0	5.2
Cost and coverage convergence scenario	3.8	1.4	1.7	2.1	2.6	3.1	3.5	4.0	4.6	5.0	5.2
AWG risk scenario	3.5	1.4	1.7	2.1	2.5	2.9	3.3	3.8	4.3	4.7	4.9
TFP risk scenario	0.9	1.4	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.3
Number of dependent people (in thousands)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
AWG reference scenario	-24.3%	251	250	241	232	227	226	224	216	205	190
of which: receiving institutional care	-15.8%	61	62	61	59	58	59	59	58	55	52
receiving home care	27.1%	67	73	75	76	78	82	87	91	90	85
receiving cash benefits	5.8%	106	111	111	111	113	117	121	123	119	112
Demographic scenario	-17.1%	251	255	250	243	241	242	242	235	223	208
of which: receiving institutional care	-9.2%	61	63	62	61	61	62	63	62	60	56
receiving home care	33.3%	67	74	77	78	81	85	91	95	94	89
receiving cash benefits	11.9%	106	112	113	114	117	123	128	129	126	118
Constant disability scenario	-30.8%	251	244	232	222	216	213	209	200	188	174
of which: receiving institutional care	-22.1%	61	61	59	56	56	56	56	54	51	48
receiving home care	21.0%	67	72	74	74	76	79	84	87	86	81
receiving cash benefits	-0.1%	106	109	108	108	109	112	116	117	113	105
Shift 1% of dependents from informal to formal scenario	-17.1%	251	255	250	243	241	242	242	235	223	208
of which: receiving institutional care	6.4%	61	73	75	73	73	74	74	73	70	65
receiving home care	50.1%	67	83	89	90	93	98	104	108	106	100
receiving cash benefits	11.9%	106	112	113	114	117	123	128	129	126	118
Coverage convergence scenario	-17.1%	251	255	250	243	241	242	242	235	223	208
of which: receiving institutional care	-9.2%	61	63	62	61	61	62	63	62	60	56
receiving home care	33.3%	67	74	77	78	81	85	91	95	94	89
receiving cash benefits	11.9%	106	112	113	114	117	123	128	129	126	118

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.9	3.9	3.6	3.9	4.2	4.3	4.2	4.1	4.2	4.6	4.8
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (9%) - Staff (67%) - Other (18%)											
Primary	0.4	0.7	0.9	0.9	1.0	0.9	0.8	0.9	1.1	1.2	1.1
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (4%) - Staff (79%) - Other (15%)											
Low secondary	0.4	1.3	1.2	1.4	1.5	1.5	1.4	1.3	1.4	1.6	1.7
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (5%) - Staff (78%) - Other (15%)											
Upper secondary	0.1	0.7	0.5	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (7%) - Staff (69%) - Other (19%)											
Tertiary education	0.0	1.2	1.0	1.0	1.1	1.2	1.3	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (11%) - Capital (18%) - Staff (47%) - Other (23%)											
Number of students (in thousands)											
Total	-193	590	480	439	413	389	367	353	360	380	397
as % of population 5-24	1%	87%	87%	89%	88%	87%	87%	87%	88%	88%	87%
Primary	-18	108	112	103	90	76	70	76	86	91	90
Low secondary	-56	201	160	162	152	140	125	115	122	136	144
Upper secondary	-40	103	72	67	68	66	64	56	53	57	63
Tertiary education	-79	179	135	107	102	106	110	106	98	95	100
Number of teachers (in thousands)											
Total	-17	59	49	47	44	40	37	35	37	40	42
Primary	-2	11	12	11	9	8	7	8	9	9	9
Low secondary	-9	33	26	26	25	23	20	19	20	22	24
Upper secondary	-3	7	5	4	4	4	4	4	3	4	4
Tertiary education	-4	9	7	5	5	5	5	5	5	5	5
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
Total	0.6	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

16. LUXEMBOURG

Luxembourg		EC-EPC (AWG) 2015 projections									

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.59	1.64	1.67	1.69	1.71	1.73	1.75	1.76	1.77	1.78
Life expectancy at birth											
males	6.3	79.1	80.2	80.9	81.6	82.3	83.0	83.6	84.2	84.8	85.4
females	6.0	83.5	84.6	85.3	86.0	86.7	87.3	87.9	88.4	89.0	89.5
Life expectancy at 65											
males	4.3	18.6	19.3	19.8	20.2	20.7	21.2	21.6	22.0	22.5	22.9
females	4.1	22.0	22.6	23.1	23.6	24.0	24.4	24.9	25.3	25.7	26.1
Net migration (thousand)	-5.7	10.5	11.7	11.6	11.2	10.3	9.1	7.4	5.4	5.1	4.9
Net migration as % of population	-1.5	1.9	1.8	1.6	1.4	1.2	1.0	0.7	0.5	0.5	0.4
Population (million)	0.6	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.1
Children population (0-14) as % of total population	-0.1	17.0	17.3	17.7	18.0	18.0	17.9	17.6	17.4	17.1	16.9
Prime age population (25-54) as % of total population	-7.8	45.5	43.4	42.5	41.9	41.3	40.8	40.3	39.4	38.5	37.8
Working age population (15-64) as % of total population	-7.7	69.0	67.9	66.7	65.2	64.1	63.5	63.2	62.7	62.2	61.3
Elderly population (65 and over) as % of total population	7.8	14.0	14.8	15.6	16.8	17.9	18.6	19.2	19.9	20.7	21.8
Very elderly population (80 and over) as % of total population	3.9	3.9	4.1	4.1	4.4	4.9	5.6	6.4	7.1	7.5	7.8
Very elderly population (80 and over) as % of elderly population	7.7	28.1	27.6	26.1	26.1	27.3	30.0	33.4	35.7	36.1	35.8
Very elderly population (80 and over) as % of working age population	7.0	5.7	6.0	6.1	6.7	7.6	8.8	10.1	11.3	12.0	12.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	2.5	1.4	3.0	2.7	2.9	3.0	2.8	2.5	2.2	2.0	1.9
Employment (growth rate)	1.4	2.2	2.7	1.9	1.7	1.5	1.3	1.0	0.7	0.5	0.4
Labour input : hours worked (growth rate)	1.3	1.7	2.6	1.8	1.7	1.5	1.3	1.0	0.7	0.5	0.4
Labour productivity per hour (growth rate)	1.2	-0.3	0.4	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.7	-0.7	0.2	0.5	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.4	0.4	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	0.9	-1.0	0.6	0.5	0.9	1.3	1.3	1.3	1.3	1.2	1.2
Potential GDP per worker (growth rate)	1.1	-0.9	0.3	0.8	1.2	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	326	375	434	477	517	557	597	634	662	685	701
Population growth (working age:15-64)	-2.0	2.4	2.0	1.8	1.6	1.5	1.4	1.1	0.8	0.6	0.4
Population (20-64) (in thousands)	294	342	399	437	472	506	542	575	601	621	636
Population growth (20-64)	-2.0	2.4	2.1	1.7	1.5	1.4	1.3	1.1	0.8	0.6	0.4
Labour force 15-64 (thousands)	230	260	306	338	368	398	426	451	469	481	491
Labour force 20-64 (thousands)	227	256	302	333	363	392	420	444	462	474	483
Participation rate (20-64)	1.0	74.9	75.8	76.3	76.9	77.5	77.5	77.2	76.9	76.3	76.0
Participation rate (15-64)	0.5	69.4	70.5	70.9	71.2	71.5	71.4	71.1	70.8	70.3	70.0
young (15-24)	2.6	27.0	31.2	30.6	30.1	29.9	29.8	29.6	29.6	29.7	29.6
prime-age (25-54)	2.3	87.5	89.1	89.6	90.0	90.0	89.9	89.9	89.8	89.8	89.8
older (55-64)	4.3	42.2	44.4	45.0	45.3	47.1	48.0	47.5	47.9	47.4	46.5
Participation rate (20-64) - FEMALES	4.8	67.6	70.7	71.9	72.7	73.4	73.5	73.3	73.1	72.7	72.4
Participation rate (15-64) - FEMALES	4.0	62.6	65.6	66.5	67.1	67.6	67.5	67.3	67.2	66.8	66.6
young (15-24)	4.0	22.5	28.0	27.4	27.0	26.8	26.7	26.5	26.5	26.5	26.5
prime-age (25-54)	4.5	80.4	83.2	84.4	85.0	84.8	84.8	84.8	84.9	84.9	84.9
older (55-64)	13.9	33.6	41.0	43.3	45.0	47.8	49.2	48.1	48.8	48.4	47.5
Participation rate (20-64) - MALES	-2.6	82.0	80.8	80.6	81.0	81.4	81.4	81.0	80.4	79.7	79.4
Participation rate (15-64) - MALES	-2.7	76.0	75.3	75.1	75.2	75.4	75.2	74.8	74.2	73.6	73.3
young (15-24)	1.3	31.4	34.3	33.7	33.2	32.9	32.8	32.6	32.6	32.7	32.6
prime-age (25-54)	0.3	94.3	94.7	94.7	94.8	94.7	94.7	94.7	94.7	94.6	94.6
older (55-64)	-4.9	50.6	47.6	46.6	45.7	46.3	46.8	46.8	47.1	46.5	45.6
Average effective exit age (TOTAL) (1)	0.0	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
Men	0.0	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
Women	0.0	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
Employment rate (15-64)	1.7	65.3	67.0	67.8	68.2	68.5	68.4	68.1	67.8	67.3	67.0
Employment rate (20-64)	2.2	70.7	72.1	73.2	73.7	74.3	74.3	74.1	73.7	73.2	72.9
Employment rate (15-74)	-1.2	59.5	60.3	60.6	60.2	60.2	60.3	60.2	59.8	59.0	58.3
Unemployment rate (15-64)	-1.7	5.9	5.1	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2
Unemployment rate (20-64)	-1.6	5.7	4.9	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Unemployment rate (15-74)	-1.7	5.9	5.0	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Employment (20-64) (in millions)	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Employment (15-64) (in millions)	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
share of young (15-24)	1%	6%	7%	7%	7%	7%	7%	7%	7%	8%	8%
share of prime-age (25-54)	-4%	84%	81%	81%	82%	82%	81%	81%	80%	79%	79%
share of older (55-64)	3%	10%	11%	12%	11%	11%	11%	12%	12%	13%	13%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	3.1	16.3	17.9	18.3	17.5	16.8	16.8	17.2	18.0	19.1	19.3
Old-age dependency ratio 15-64 (3)	15	20	22	23	26	28	29	30	32	33	36
Old-age dependency ratio 20-64 (3)	17	22	24	26	28	31	32	33	35	37	39
Total dependency ratio (4)	18	45	47	50	53	56	57	58	59	61	63
Total economic dependency ratio (5)	21	120	118	119	123	126	128	130	133	137	141
Economic old-age dependency ratio (15-64) (6)	22	30	32	34	37	40	42	44	46	49	52
Economic old-age dependency ratio (15-74) (7)	21	30	31	33	37	40	41	43	45	48	51

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Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	4.1	9.4	10.6	11.2	11.9	12.4	12.7	12.7	12.5	12.4	13.4
Earnings-related pensions, gross	4.1	9.4	10.6	11.2	11.9	12.4	12.7	12.7	12.5	12.4	13.4
Of which : Old-age and early pensions	4.3	6.7	8.0	8.8	9.5	10.1	10.4	10.4	10.2	10.0	11.0
Disability pensions	-0.2	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.6
Survivors pensions	-0.1	1.9	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	:	:	:	:	:	:	:	:	:	:	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.7	0.8
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-0.1	10.2	10.2	10.1	10.1	10.0	10.0	10.1	10.1	10.1	10.1

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	284	172	205	238	277	315	349	377	396	412	456
Pensioners aged 65+ (1000 persons)	220	119	145	170	206	246	280	307	328	333	339
Share of pensioners below age 65 as % of all pensioners	-5.0%	30.6%	29.4%	28.6%	25.6%	22.0%	19.8%	18.5%	17.3%	19.1%	25.6%
Benefit ratio (Public pensions)	2.1	51.3	57.8	59.0	58.5	57.8	57.1	55.9	54.4	53.3	53.4
Gross replacement rate at retirement (Old-age earnings-related pensions)	:	:	74.6	67.0	64.8	67.4	68.2	65.8	63.9	65.7	64.6
Average accrual rates (new pensions, earnings related)	:	:	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6
Average contributory period (new pensions, earnings-related)	:	:	30.8	31.2	32.4	34.2	34.7	34.8	35.4	36.4	36.6
Contributors (Public pensions, in 1000 persons)	408.1	445.2	527.7	586.7	639.2	691.7	740.6	782.4	814.3	835.9	853.3
Support ratio (contributors/100 pensioners, Public pensions)	-71.6	258.9	257.4	246.7	230.5	219.4	212.4	207.4	205.6	202.9	187.2

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.4
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.1
High emp. of older workers (+10 p.p.)	-0.2	0.0	-0.2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.2
Lower migration (-20%)	0.8	0.0	0.2	0.4	0.7	0.9	1.1	1.2	1.2	1.1	0.8
TFP risk scenario	1.1	0.0	-0.2	-0.1	0.0	0.2	0.4	0.6	0.7	0.9	1.1
Policy scenario linking retirement age to increases in life expectancy	-1.9	0.0	-0.1	-0.5	-0.5	-0.8	-0.8	-1.1	-1.0	-1.5	-1.9

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	4.1		1.2	1.9	2.6	3.0	3.3	3.3	3.1	3.0	4.1
Dependency ratio	6.8		0.6	1.5	2.6	3.7	4.3	4.8	5.3	6.0	6.8
Coverage ratio	-2.4		-0.4	-0.6	-0.8	-1.1	-1.3	-1.5	-2.0	-2.6	-2.4
Of which : Old-age	-1.7		-0.2	-0.3	-0.1	0.2	0.3	0.3	0.0	-0.8	-1.7
Early-age	2.3		-0.6	-0.2	-0.2	-1.0	-2.0	-2.9	-4.2	-3.2	2.3
Cohort effect	-5.2		-0.1	-1.0	-2.4	-3.6	-4.1	-4.2	-4.2	-4.5	-5.2
Benefit ratio	0.1		1.1	1.3	1.2	1.1	0.9	0.7	0.3	0.1	0.1
Labour market ratio	-0.3		-0.2	-0.3	-0.4	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3
Of which : Employment rate	-0.3		-0.2	-0.3	-0.4	-0.5	-0.5	-0.5	-0.4	-0.3	-0.3
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Career shift	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.2		0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	4.1		0.9	0.7	0.7	0.5	0.3	0.0	-0.2	-0.1	1.1
Dependency ratio	6.8		0.5	0.8	1.2	1.0	0.6	0.5	0.6	0.6	0.8
Coverage ratio	-2.4		-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.5	-0.5	0.1
Of which : Old-age	-1.7		-0.1	-0.1	0.2	0.3	0.2	0.0	-0.3	-0.8	-0.9
Early-age	2.3		-0.3	0.5	0.0	-0.8	-0.9	-1.0	-1.3	1.0	5.5
Cohort effect	-5.2		-0.2	-0.9	-1.4	-1.2	-0.5	-0.1	0.0	-0.3	-0.7
Benefit ratio	0.1		0.7	0.2	-0.1	-0.2	-0.1	-0.3	-0.4	-0.2	0.0
Labour market ratio	-0.3		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.0
Of which : Employment rate	-0.3		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.0
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.5	4.6	4.6	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1
Demographic scenario	0.7	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.2	5.3
High Life expectancy scenario	0.9	4.6	4.7	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.5
Constant health scenario	0.2	4.6	4.6	4.6	4.6	4.6	4.6	4.7	4.7	4.8	4.8
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	0.8	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4
EU28 cost convergence scenario	1.5	4.6	4.7	4.9	5.0	5.2	5.4	5.6	5.7	5.9	6.1
Labour intensity scenario	1.4	4.6	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.8	6.0
Sector-specific composite indexation scenario	0.7	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.3
Non-demographic determinants scenario	1.4	4.6	4.7	4.8	4.9	5.1	5.3	5.5	5.7	5.9	6.0
AWG risk scenario	0.8	4.6	4.6	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.4
TFP risk scenario	0.5	4.6	4.6	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1

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Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.7	1.5	1.6	1.7	1.8	1.9	2.1	2.4	2.7	2.9	3.2
Demographic scenario	1.5	1.5	1.6	1.7	1.7	1.9	2.1	2.3	2.6	2.8	3.0
High Life expectancy scenario	1.9	1.5	1.6	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.4
Base case scenario	1.9	1.5	1.6	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.3
Constant disability scenario	1.5	1.5	1.6	1.6	1.7	1.9	2.1	2.3	2.6	2.8	3.0
Shift to formal care scenario	2.3	1.5	1.8	2.0	2.1	2.3	2.5	2.8	3.2	3.5	3.8
Coverage convergence scenario	3.6	1.5	1.8	1.9	2.1	2.4	2.8	3.3	3.8	4.4	5.0
Cost convergence scenario	1.9	1.5	1.7	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.3
Cost and coverage convergence scenario	3.6	1.5	1.8	1.9	2.1	2.4	2.8	3.3	3.9	4.5	5.1
AWG risk scenario	3.3	1.5	1.7	1.9	2.1	2.3	2.7	3.2	3.7	4.2	4.8
TFP risk scenario	1.7	1.5	1.6	1.7	1.8	1.9	2.1	2.4	2.7	2.9	3.2
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	156.9%	32	39	43	48	54	60	66	71	77	81
of which: receiving institutional care	330.4%	4	6	6	7	9	10	13	15	17	19
receiving home care	205.5%	9	11	12	14	16	18	21	23	25	27
receiving cash benefits	181.7%	2	2	3	3	3	4	4	5	5	5
Demographic scenario	182.4%	32	39	45	50	57	64	71	78	84	89
of which: receiving institutional care	352.9%	4	6	6	7	9	11	13	15	18	19
receiving home care	227.5%	9	11	12	14	17	19	22	24	27	29
receiving cash benefits	207.1%	2	2	3	3	3	4	4	5	5	6
Constant disability scenario	142.6%	32	38	42	46	51	57	62	68	72	77
of which: receiving institutional care	310.0%	4	5	6	7	8	10	12	14	16	18
receiving home care	190.9%	9	11	12	14	15	18	20	22	24	25
receiving cash benefits	168.2%	2	2	3	3	3	4	4	4	5	5
Shift 1% of dependents from informal to formal scenario	182.4%	32	39	45	50	57	64	71	78	84	89
of which: receiving institutional care	406.4%	4	6	7	8	10	12	15	17	20	22
receiving home care	303.1%	9	13	16	18	21	24	27	30	33	35
receiving cash benefits	207.1%	2	2	3	3	3	4	4	5	5	6
Coverage convergence scenario	182.4%	32	39	45	50	57	64	71	78	84	89
of which: receiving institutional care	581.0%	4	6	7	9	11	14	17	21	25	29
receiving home care	429.6%	9	12	14	17	21	25	30	36	41	46
receiving cash benefits	207.1%	2	2	3	3	3	4	4	5	5	6

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.2	3.3	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (12%) - Staff (74%) - Other (13%)											
Primary	0.1	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.9
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (14%) - Staff (70%) - Other (15%)											
Low secondary	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (10%) - Staff (78%) - Other (10%)											
Upper secondary	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (10%) - Staff (78%) - Other (11%)											
Tertiary education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure decomposition (broadly constant) : Transfers (-%) - Capital (-%) - Staff (-%) - Other (-%)											
Number of students (in thousands)											
Total	90	89	101	114	128	142	154	163	169	174	179
as % of population 5-24	-1%	69%	67%	68%	68%	68%	68%	68%	68%	68%	68%
Primary	40	35	43	49	55	61	66	69	72	74	75
Low secondary	23	22	24	28	31	35	38	40	42	43	44
Upper secondary	23	25	27	30	34	37	41	44	46	47	48
Tertiary education	4	6	7	7	8	9	9	10	10	10	11
Number of teachers (in thousands)											
Total	10	10	11	12	14	15	17	18	18	19	19
Primary	4	4	4	5	6	6	7	7	7	7	8
Low secondary	2	2	2	3	3	3	3	4	4	4	4
Upper secondary	3	3	3	4	4	4	5	5	5	6	6
Tertiary education	1	1	1	1	2	2	2	2	2	2	2
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	1.3	0.1	0.4	0.6	0.9	1.1	1.3	1.4	1.4	1.4	1.4

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

Hungary						EC-EPC (AWG) 2015 projections					

Main demographic and macroeconomic assumptions

Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.4	1.38	1.50	1.57	1.61	1.65	1.68	1.70	1.72	1.73	1.74
Life expectancy at birth											
males	10.1	71.9	73.6	74.8	75.9	77.0	78.1	79.1	80.1	81.1	82.0
females	8.2	78.8	80.2	81.2	82.1	83.0	83.8	84.7	85.5	86.3	87.0
Life expectancy at 65											
males	6.3	14.5	15.5	16.2	16.8	17.5	18.2	18.9	19.5	20.1	20.8
females	6.0	18.1	19.1	19.8	20.4	21.1	21.7	22.3	22.9	23.5	24.1
Net migration (thousand)	5.9	8.1	24.3	21.7	20.9	22.2	24.2	19.1	15.3	15.3	14.0
Net migration as % of population	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Population (million)	-0.7	9.9	9.8	9.7	9.7	9.6	9.5	9.4	9.3	9.3	9.2
Children population (0-14) as % of total population	0.0	14.4	14.4	14.3	14.4	14.3	14.2	14.2	14.3	14.4	14.4
Prime age population (25-54) as % of total population	-7.5	41.8	42.6	41.6	39.6	37.4	36.5	35.8	34.7	34.4	34.3
Working age population (15-64) as % of total population	-12.1	68.2	65.3	64.1	63.7	62.7	61.1	58.9	58.1	57.2	56.1
Elderly population (65 and over) as % of total population	12.1	17.4	20.3	21.6	21.9	23.0	24.7	26.9	27.6	28.4	29.5
Very elderly population (80 and over) as % of total population	7.5	4.1	4.6	5.2	6.1	7.4	8.1	8.0	8.6	10.0	11.7
Very elderly population (80 and over) as % of elderly population	15.7	23.8	22.6	24.2	27.8	32.4	32.6	29.7	31.3	35.2	39.5
Very elderly population (80 and over) as % of working age population	14.7	6.1	7.0	8.1	9.6	11.9	13.2	13.5	14.9	17.5	20.8
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.5	0.4	1.9	2.1	2.0	1.5	1.2	1.3	1.4	1.2	1.0
Employment (growth rate)	-0.3	0.1	0.5	0.0	-0.2	-0.6	-0.9	-0.7	-0.5	-0.6	-0.5
Labour input : hours worked (growth rate)	-0.3	0.1	0.5	0.0	-0.2	-0.6	-0.9	-0.7	-0.5	-0.6	-0.5
Labour productivity per hour (growth rate)	1.8	0.3	1.4	2.1	2.2	2.1	2.1	2.1	1.9	1.7	1.5
TFP (growth rate)	1.2	0.1	0.9	1.4	1.4	1.3	1.3	1.3	1.2	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.6	0.2	0.5	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.5
Potential GDP per capita (growth rate)	1.6	0.5	2.0	2.3	2.1	1.7	1.3	1.5	1.6	1.3	1.2
Potential GDP per worker (growth rate)	1.8	0.2	1.4	2.1	2.2	2.1	2.1	2.1	1.9	1.7	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-1615	6750	6397	6247	6161	6017	5809	5556	5426	5290	5136
Population growth (working age:15-64)	0.1	-0.7	-0.9	-0.3	-0.3	-0.6	-1.0	-0.7	-0.4	-0.6	-0.5
Population (20-64) (in thousands)	-1515	6194	5907	5740	5690	5537	5327	5083	4965	4832	4679
Population growth (20-64)	-0.2	-0.4	-1.0	-0.4	-0.2	-0.6	-1.1	-0.7	-0.4	-0.6	-0.6
Labour force 15-64 (thousands)	-620	4368	4597	4611	4570	4444	4258	4072	3977	3866	3748
Labour force 20-64 (thousands)	-614	4341	4574	4588	4548	4422	4236	4051	3956	3845	3727
Participation rate (20-64)	9.6	70.1	77.4	79.9	79.9	79.9	79.5	79.7	79.7	79.6	79.6
Participation rate (15-64)	8.3	64.7	71.9	73.8	74.2	73.9	73.3	73.3	73.3	73.1	73.0
young (15-24)	-0.6	27.3	27.7	26.4	27.6	26.5	26.8	27.0	27.1	26.8	26.7
prime-age (25-54)	1.8	83.3	84.7	85.0	85.0	85.2	85.2	85.1	85.1	85.1	85.1
older (55-64)	35.7	41.8	64.8	76.0	77.7	77.5	76.4	77.5	77.9	77.3	77.5
Participation rate (20-64) - FEMALES	11.4	63.3	72.3	75.1	75.2	75.2	74.6	74.8	74.8	74.6	74.7
Participation rate (15-64) - FEMALES	9.9	58.5	67.2	69.4	69.8	69.4	68.8	68.8	68.8	68.5	68.4
young (15-24)	-0.7	23.9	24.1	22.9	24.0	23.0	23.2	23.4	23.5	23.2	23.2
prime-age (25-54)	2.1	77.2	78.9	79.2	79.3	79.5	79.6	79.4	79.2	79.2	79.3
older (55-64)	40.5	34.8	62.9	74.6	75.9	74.9	73.6	75.4	76.0	75.1	75.4
Participation rate (20-64) - MALES	7.4	77.1	82.6	84.8	84.7	84.6	84.3	84.4	84.4	84.4	84.5
Participation rate (15-64) - MALES	6.4	71.0	76.5	78.2	78.5	78.2	77.7	77.7	77.6	77.5	77.4
young (15-24)	-0.4	30.5	31.2	29.8	31.1	29.9	30.1	30.4	30.5	30.2	30.1
prime-age (25-54)	1.2	89.5	90.3	90.6	90.6	90.6	90.6	90.7	90.7	90.7	90.7
older (55-64)	29.6	50.1	67.0	77.6	79.6	80.1	79.3	79.7	79.9	79.5	79.7
Average effective exit age (TOTAL) (1)	2.1	63.0	64.5	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
Men	2.3	63.0	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
Women	1.9	63.0	64.4	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9
Employment rate (15-64)	9.5	58.0	65.7	68.2	68.6	68.3	67.8	67.8	67.8	67.6	67.5
Employment rate (20-64)	10.8	63.0	70.9	74.0	74.0	74.0	73.7	73.9	73.9	73.8	73.8
Employment rate (15-74)	6.1	51.1	56.3	58.6	60.1	60.0	58.3	57.0	57.1	57.8	57.2
Unemployment rate (15-64)	-2.8	10.3	8.6	7.6	7.6	7.5	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-2.7	10.0	8.4	7.5	7.4	7.3	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-3.0	10.2	8.5	7.5	7.4	7.4	7.3	7.3	7.3	7.3	7.3
Employment (20-64) (in millions)	-0.4	3.9	4.2	4.2	4.2	4.1	3.9	3.8	3.7	3.6	3.5
Employment (15-64) (in millions)	-0.5	3.9	4.2	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.5
share of young (15-24)	0%	6%	5%	5%	5%	5%	5%	6%	6%	6%	6%
share of prime-age (25-54)	-8%	80%	77%	75%	72%	69%	70%	71%	70%	70%	72%
share of older (55-64)	9%	14%	17%	20%	23%	26%	25%	24%	25%	24%	23%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.3	21.2	18.8	18.9	21.7	24.3	23.3	21.8	22.8	22.2	20.8
Old-age dependency ratio 15-64 (3)	27	25	31	34	34	37	40	46	48	50	53
Old-age dependency ratio 20-64 (3)	30	28	34	37	37	40	44	50	52	54	58
Total dependency ratio (4)	32	47	53	56	57	59	64	70	72	75	78
Total economic dependency ratio (5)	4	150	130	124	124	127	133	141	146	150	155
Economic old-age dependency ratio (15-64) (6)	31	43	46	47	48	51	56	63	67	70	74
Economic old-age dependency ratio (15-74) (7)	29	43	45	46	47	49	54	61	65	68	72

Hungary — EC-EPC (AWG) 2015 projections

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.1	11.5	9.8	9.3	8.9	9.1	9.6	10.4	10.7	11.0	11.4
Earnings-related pensions, gross	-0.1	11.5	9.8	9.2	8.9	9.1	9.6	10.3	10.6	10.9	11.4
Of which : Old-age and early pensions	0.5	9.1	7.9	7.5	7.2	7.4	8.0	8.7	8.9	9.2	9.7
Disability pensions	-0.3	1.0	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7
Survivors pensions	-0.3	1.3	1.2	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Public pensions, net	-0.1	11.5	9.8	9.3	8.9	9.1	9.6	10.4	10.7	11.0	11.4
Public pensions, contributions	-0.3	10.5	10.5	10.5	10.4	10.3	10.2	10.2	10.2	10.2	10.2

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pensioners (Public, in 1000 persons)	309	2806	2593	2635	2685	2776	2887	3002	3037	3080	3116
Pensioners aged 65+ (1000 persons)	947	1689	1940	2053	2075	2155	2289	2459	2504	2565	2637
Share of pensioners below age 65 as % of all pensioners	-24.4%	39.8%	25.2%	22.1%	22.7%	22.4%	20.7%	18.1%	17.5%	16.7%	15.4%
Benefit ratio (Public pensions)	-8.9	40.8	39.0	36.9	34.8	33.5	32.9	32.8	32.3	31.9	31.9
Gross replacement rate at retirement (Public pensions)	-3.9	33.0	25.6	32.6	31.4	32.3	32.9	31.3	29.9	29.5	29.1
Average accrual rates (new pensions, earnings related)	-0.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Average contributory period (new pensions, earnings-related)	1.1	39.4	40.6	40.9	40.7	40.6	40.6	40.6	40.5	40.5	40.5
Contributors (Public pensions, in 1000 persons)	-366.6	3978.2	4218.7	4344.8	4331.8	4253.3	4115.7	3940.3	3817.8	3718.5	3611.6
Support ratio (contributors/100 pensioners, Public pensions)	-25.8	141.8	162.7	164.9	161.3	153.2	142.6	131.3	125.7	120.7	115.9

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.5	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.5
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
High employment rate (+2 p.p)	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
High emp. of older workers (+10 p.p.)	-0.2	0.0	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.4
Policy scenario linking retirement age to increases in life expectancy	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.1		-1.7	-2.3	-2.6	-2.4	-1.9	-1.1	-0.9	-0.5	-0.1
Dependency ratio	7.8		2.3	3.2	3.3	3.9	4.9	6.2	6.6	7.1	7.8
Coverage ratio	-3.5		-2.3	-2.8	-2.7	-2.7	-2.9	-3.3	-3.3	-3.4	-3.5
Of which : Old-age	-0.1		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Early-age	-6.0		-4.4	-5.8	-6.2	-5.9	-5.8	-6.1	-5.9	-5.8	-6.0
Cohort effect	-6.6		-2.4	-2.7	-1.8	-2.3	-3.3	-4.5	-5.1	-5.8	-6.6
Benefit ratio	-1.9		0.0	-0.6	-1.1	-1.4	-1.6	-1.7	-1.8	-1.9	-1.9
Labour market ratio	-1.9		-1.3	-1.8	-1.8	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
Of which : Employment rate	-1.7		-1.3	-1.7	-1.7	-1.7	-1.6	-1.7	-1.7	-1.7	-1.7
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2
Interaction effect (residual)	-0.5		-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.1		-1.0	-0.6	-0.3	0.2	0.5	0.7	0.3	0.3	0.4
Dependency ratio	7.8		1.7	0.9	0.2	0.6	1.0	1.3	0.4	0.5	0.7
Coverage ratio	-3.5		-1.4	-0.4	0.1	0.0	-0.2	-0.3	-0.1	-0.1	-0.2
Of which : Old-age	-0.1		-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	-6.0		-2.7	-1.3	-0.5	0.3	0.1	-0.3	0.2	0.2	-0.2
Cohort effect	-6.6		-1.7	-0.3	0.9	-0.5	-1.0	-1.2	-0.5	-0.7	-0.8
Benefit ratio	-1.9		-0.3	-0.5	-0.5	-0.3	-0.2	-0.1	-0.1	-0.1	0.0
Labour market ratio	-1.9		-0.8	-0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Of which : Employment rate	-1.7		-0.8	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		-0.1	-0.1	0.0	0.0	-0.1	0.0	0.1	0.0	0.0
Interaction effect (residual)	-0.5		-0.2	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.8	4.7	4.8	5.0	5.1	5.2	5.3	5.3	5.4	5.4	5.4
Demographic scenario	1.0	4.7	4.9	5.0	5.2	5.3	5.4	5.5	5.6	5.7	5.7
High Life expectancy scenario	1.3	4.7	4.9	5.0	5.2	5.4	5.5	5.6	5.8	5.9	5.9
Constant health scenario	0.1	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.3	4.7	4.9	5.1	5.3	5.5	5.6	5.7	5.8	5.9	5.9
EU28 cost convergence scenario	2.4	4.7	5.0	5.3	5.5	5.8	6.0	6.3	6.5	6.8	7.0
Labour intensity scenario	1.5	4.7	4.7	4.8	4.9	5.1	5.3	5.6	5.8	6.0	6.1
Sector-specific composite indexation scenario	0.3	4.7	4.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	4.9
Non-demographic determinants scenario	2.6	4.7	5.1	5.5	5.9	6.2	6.5	6.8	7.0	7.2	7.3
AWG risk scenario	1.5	4.7	5.0	5.3	5.6	5.7	5.9	6.0	6.1	6.2	6.2
TFP risk scenario	0.8	4.7	4.8	5.0	5.1	5.2	5.3	5.3	5.4	5.4	5.4

Hungary		EC-EPC (AWG) 2015 projections									

Long-term care											
Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2
Demographic scenario	0.4	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2
High Life expectancy scenario	0.5	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.3
Base case scenario	0.5	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3
Constant disability scenario	0.3	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0
Shift to formal care scenario	1.2	0.8	1.1	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9
Coverage convergence scenario	2.7	0.8	0.9	1.0	1.2	1.5	1.8	2.1	2.4	2.9	3.5
Cost convergence scenario	1.4	0.8	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.9	2.2
Cost and coverage convergence scenario	4.7	0.8	1.0	1.1	1.4	1.7	2.2	2.8	3.4	4.3	5.5
AWG risk scenario	4.2	0.8	0.9	1.1	1.3	1.6	2.1	2.6	3.1	3.9	5.0
TFP risk scenario	0.4	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	22.9%	788	817	844	874	899	915	925	935	951	968
of which: receiving institutional care	73.5%	95	104	110	118	127	136	148	152	154	165
receiving home care	73.9%	61	66	70	75	81	87	95	97	99	106
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Demographic scenario	36.4%	788	834	874	916	952	979	1001	1022	1049	1075
of which: receiving institutional care	87.5%	95	105	113	122	133	144	157	163	166	178
receiving home care	87.7%	61	67	72	78	85	92	101	104	106	114
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Constant disability scenario	10.5%	788	800	814	832	846	852	852	852	862	871
of which: receiving institutional care	60.0%	95	102	107	113	121	129	139	142	143	152
receiving home care	60.4%	61	65	69	73	78	83	89	91	92	97
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Shift 1% of dependents from informal to formal scenario	36.4%	788	834	874	916	952	979	1001	1022	1049	1075
of which: receiving institutional care	157.0%	95	141	167	178	191	204	218	225	230	244
receiving home care	156.0%	61	90	106	114	122	130	139	144	147	155
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Coverage convergence scenario	36.4%	788	834	874	916	952	979	1001	1022	1049	1075
of which: receiving institutional care	358.6%	95	120	142	169	201	238	278	317	368	435
receiving home care	355.6%	61	77	91	108	129	152	177	202	234	277
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0

Education											
Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.2	3.6	3.1	3.0	3.0	3.0	3.0	3.1	3.2	3.2	3.3	3.4
Expenditure decomposition (broadly constant) : Transfers (7%) - Capital (8%) - Staff (65%) - Other (19%)											
Primary	0.0	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (7%) - Staff (70%) - Other (19%)											
Low secondary	0.0	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (7%) - Staff (72%) - Other (17%)											
Upper secondary	-0.1	1.1	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	1.0
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (8%) - Staff (67%) - Other (19%)											
Tertiary education	-0.2	0.9	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (13%) - Capital (9%) - Staff (55%) - Other (23%)											
Number of students (in thousands)											
Total	-254	1697	1576	1548	1526	1517	1504	1485	1464	1451	1443
as % of population 5-24	1%	79%	80%	80%	79%	80%	79%	79%	79%	79%	79%
Primary	-32	389	371	377	378	374	364	362	361	359	357
Low secondary	-29	394	407	377	383	385	379	370	367	366	364
Upper secondary	-103	560	495	504	477	480	482	474	463	459	457
Tertiary education	-90	355	303	291	288	278	279	279	273	267	265
Number of teachers (in thousands)											
Total	-18	134	126	124	122	122	121	119	117	117	116
Primary	-3	36	34	35	35	35	34	34	34	33	33
Low secondary	-3	37	38	36	36	36	36	35	35	35	34
Upper secondary	-8	42	37	38	36	36	36	36	35	35	35
Tertiary education	-5	19	16	15	15	15	15	15	14	14	14
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.6	0.0	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.7

Unemployment benefit											
Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

18. MALTA

Malta						EC-EPC (AWG) 2015 projections					

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.44	1.56	1.62	1.67	1.70	1.73	1.75	1.76	1.77	1.78
Life expectancy at birth											
males	6.4	78.7	79.8	80.5	81.3	82.0	82.6	83.3	83.9	84.5	85.1
females	6.3	82.8	84.0	84.7	85.4	86.1	86.8	87.4	88.0	88.6	89.1
Life expectancy at 65											
males	4.3	18.1	18.8	19.3	19.7	20.2	20.7	21.1	21.6	22.0	22.4
females	4.4	21.3	22.0	22.5	23.0	23.5	24.0	24.4	24.9	25.3	25.7
Net migration (thousand)	-0.5	1.6	1.6	1.6	1.5	1.4	1.4	1.4	1.3	1.3	1.1
Net migration as % of population	-0.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Population (million)	0.1	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Children population (0-14) as % of total population	0.9	14.5	14.9	15.3	15.4	15.0	14.6	14.6	14.9	15.3	15.4
Prime age population (25-54) as % of total population	-6.2	40.9	40.3	40.2	39.0	37.6	36.5	35.6	34.9	34.6	34.7
Working age population (15-64) as % of total population	-11.9	68.0	63.9	61.4	60.2	60.6	60.7	59.9	58.7	57.2	56.1
Elderly population (65 and over) as % of total population	11.0	17.5	21.2	23.3	24.4	24.5	24.8	25.5	26.4	27.5	28.5
Very elderly population (80 and over) as % of total population	6.7	3.8	4.9	5.8	7.8	8.8	9.6	9.8	9.4	9.6	10.5
Very elderly population (80 and over) as % of elderly population	15.1	21.7	23.1	24.8	31.8	36.0	38.9	38.4	35.6	35.1	36.7
Very elderly population (80 and over) as % of working age population	13.1	5.6	7.7	9.4	12.9	14.5	15.9	16.3	16.0	16.8	18.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.7	1.7	1.9	1.9	1.9	2.1	1.8	1.6	1.4	1.3	1.4
Employment (growth rate)	0.3	2.4	0.6	0.5	0.4	0.3	0.0	-0.1	-0.3	-0.3	-0.1
Labour input : hours worked (growth rate)	0.3	2.5	0.6	0.4	0.4	0.3	0.0	-0.1	-0.3	-0.3	-0.1
Labour productivity per hour (growth rate)	1.4	-0.7	1.3	1.5	1.5	1.7	1.7	1.8	1.7	1.6	1.5
TFP (growth rate)	0.9	0.0	0.6	0.8	1.0	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	-0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.5	1.0	1.3	1.5	1.6	1.9	1.7	1.5	1.2	1.1	1.3
Potential GDP per worker (growth rate)	1.4	-0.7	1.3	1.5	1.5	1.7	1.7	1.8	1.7	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-20	287	281	276	275	279	281	279	275	270	267
Population growth (working age:15-64)	0.0	-0.1	-0.4	-0.3	0.1	0.3	0.0	-0.2	-0.3	-0.4	-0.1
Population (20-64) (in thousands)	-20	262	260	254	252	254	256	255	251	247	243
Population growth (20-64)	-0.4	0.2	-0.2	-0.4	0.0	0.2	0.0	-0.1	-0.3	-0.5	-0.2
Labour force 15-64 (thousands)	14	188	197	202	206	210	211	210	207	204	201
Labour force 20-64 (thousands)	14	181	192	197	201	204	205	204	201	198	195
Participation rate (20-64)	11.4	69.0	73.8	77.4	79.6	80.2	80.1	80.1	80.0	80.0	80.4
Participation rate (15-64)	10.1	65.3	70.2	73.3	75.1	75.3	75.2	75.3	75.4	75.3	75.4
young (15-24)	-1.1	53.2	54.9	52.4	51.7	51.8	52.5	53.3	53.3	52.7	52.1
prime-age (25-54)	7.4	78.2	82.9	84.4	85.1	85.4	85.7	85.7	85.7	85.7	85.7
older (55-64)	26.2	38.7	43.3	52.3	61.1	64.8	65.2	65.7	65.7	64.9	64.8
Participation rate (20-64) - FEMALES	18.6	52.8	60.9	65.9	69.1	70.5	70.8	71.0	71.0	71.0	71.4
Participation rate (15-64) - FEMALES	16.7	50.2	58.1	62.5	65.2	66.2	66.5	66.8	66.9	66.8	66.9
young (15-24)	-0.8	49.5	51.3	49.1	48.1	48.4	49.1	49.8	49.8	49.2	48.6
prime-age (25-54)	14.9	61.3	70.3	73.6	75.0	75.8	76.4	76.5	76.4	76.3	76.3
older (55-64)	35.4	19.5	27.1	36.1	46.5	52.8	54.1	55.2	55.7	54.8	54.9
Participation rate (20-64) - MALES	4.3	84.7	86.1	88.4	89.7	89.4	88.9	88.7	88.6	88.6	89.0
Participation rate (15-64) - MALES	3.7	79.7	81.8	83.6	84.5	83.9	83.4	83.4	83.4	83.3	83.4
young (15-24)	-1.3	56.7	58.4	55.4	55.1	55.0	55.8	56.5	56.6	55.9	55.3
prime-age (25-54)	0.1	94.4	94.8	94.7	94.6	94.5	94.4	94.4	94.5	94.6	94.5
older (55-64)	16.6	58.0	59.8	68.6	75.7	76.7	76.1	75.9	75.5	74.6	74.5
Average effective exit age (TOTAL) (1)	1.8	61.5	62.6	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
Men	2.0	62.0	63.1	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
Women	1.6	61.0	62.0	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
Employment rate (15-64)	9.3	61.0	65.6	68.4	70.0	70.3	70.2	70.3	70.4	70.2	70.3
Employment rate (20-64)	10.6	65.0	69.4	72.7	74.8	75.3	75.3	75.2	75.2	75.2	75.6
Employment rate (15-74)	4.8	53.7	55.7	57.8	59.3	60.7	60.8	59.9	59.2	58.6	58.5
Unemployment rate (15-64)	0.2	6.5	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Unemployment rate (20-64)	0.2	5.8	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0
Unemployment rate (15-74)	0.2	6.4	6.5	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.6
Employment (20-64) (in millions)	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Employment (15-64) (in millions)	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
share of young (15-24)	-3%	15%	12%	10%	11%	11%	12%	12%	12%	12%	12%
share of prime-age (25-54)	-2%	73%	75%	76%	74%	71%	69%	69%	68%	70%	71%
share of older (55-64)	5%	12%	13%	13%	15%	17%	19%	20%	20%	19%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-1.1	20.6	20.4	18.6	18.4	20.2	21.5	22.3	22.6	21.6	19.6
Old-age dependency ratio 15-64 (3)	25	26	33	38	41	40	41	43	45	48	51
Old-age dependency ratio 20-64 (3)	28	28	36	41	44	44	44	47	49	53	56
Total dependency ratio (4)	31	47	56	63	66	65	65	67	70	75	78
Total economic dependency ratio (5)	12	137	135	136	135	132	132	134	138	145	150
Economic old-age dependency ratio (15-64) (6)	30	41	49	54	57	56	57	59	62	67	71
Economic old-age dependency ratio (15-74) (7)	29	40	48	54	56	56	56	58	61	66	70

Malta		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	3.2	9.6	9.8	9.8	9.7	9.6	9.7	10.3	11.0	12.0	12.8
Earnings-related pensions, gross	3.1	9.3	9.5	9.4	9.3	9.2	9.4	9.9	10.6	11.6	12.4
Of which : Old-age and early pensions	5.0	5.3	5.8	6.1	6.1	6.3	6.7	7.4	8.3	9.4	10.3
Disability pensions	-0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Survivors pensions	-0.3	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.5	1.4	1.3
Other pensions	-1.6	2.0	1.8	1.5	1.2	1.0	0.7	0.6	0.5	0.5	0.5
Non-earning-related pensions	0.1	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-1.2	8.6	7.6	7.7	7.8	7.7	7.7	7.6	7.6	7.5	7.4
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	59	89	103	111	114	118	122	127	133	140	147
Pensioners aged 65+ (1000 persons)	69	67	84	95	103	105	109	114	120	127	135
Share of pensioners below age 65 as % of all pensioners	-16.9%	25.1%	18.4%	14.0%	10.4%	10.8%	11.0%	10.7%	10.0%	9.3%	8.2%
Benefit ratio (Public pensions)	-4.2	48.3	47.2	44.9	43.7	42.8	42.5	42.7	43.4	43.9	44.1
Gross replacement rate at retirement (Public pensions)	:	:	48.0	45.9	46.3	45.0	44.4	44.5	44.9	45.4	45.6
Average accrual rates (new pensions, earnings related)	:	:	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Average contributory period (new pensions, earnings-related)	:	:	36.0	36.5	37.0	37.1	37.2	37.3	37.5	37.7	37.9
Contributors (Public pensions, in 1000 persons)	21.8	176.9	187.6	193.8	199.6	203.9	206.6	206.5	204.5	201.8	198.8
Support ratio (contributors/100 pensioners, Public pensions)	-64.2	199.1	181.4	175.1	174.5	172.9	169.2	162.4	153.7	143.7	134.9
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.6	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.4	0.0	-0.3	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Lower migration (-20%)	0.6	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
Policy scenario linking retirement age to increases in life expectancy	-1.2	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.7	-1.0	-1.2
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	3.2		0.2	0.2	0.1	0.0	0.2	0.7	1.5	2.4	3.2
Dependency ratio	7.2		2.4	3.9	4.6	4.6	4.8	5.1	5.7	6.5	7.2
Coverage ratio	-0.9		-0.7	-1.2	-1.5	-1.3	-1.1	-1.1	-1.0	-1.0	-0.9
Of which : Old-age	1.1		0.1	0.1	0.2	0.4	0.5	0.6	0.7	0.9	1.1
Early-age	-4.0		-0.7	-2.2	-4.7	-4.8	-4.8	-4.6	-4.6	-3.9	-4.0
Cohort effect	-7.1		-2.8	-4.2	-4.5	-3.8	-3.5	-3.7	-4.5	-5.8	-7.1
Benefit ratio	-1.4		-0.7	-1.2	-1.5	-1.7	-1.8	-1.7	-1.6	-1.4	-1.4
Labour market ratio	-1.4		-0.6	-0.9	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.4
Of which : Employment rate	-1.4		-0.6	-1.1	-1.3	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
Labour intensity	0.1		0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Career shift	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.3		-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	3.2		0.2	0.0	-0.1	-0.1	0.2	0.5	0.8	1.0	0.8
Dependency ratio	7.2		1.6	1.5	0.7	0.0	0.1	0.4	0.6	0.8	0.8
Coverage ratio	-0.9		-0.4	-0.5	-0.3	0.2	0.2	0.1	0.0	0.1	0.0
Of which : Old-age	1.1		0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Early-age	-4.0		-0.4	-1.5	-2.5	-0.1	0.0	0.0	0.2	0.7	-0.1
Cohort effect	-7.1		-1.8	-1.4	-0.3	0.7	0.3	-0.2	-0.8	-1.3	-1.3
Benefit ratio	-1.4		-0.4	-0.5	-0.3	-0.2	-0.1	0.1	0.2	0.1	0.0
Labour market ratio	-1.4		-0.3	-0.4	-0.3	-0.1	0.0	0.0	0.0	0.0	-0.1
Of which : Employment rate	-1.4		-0.4	-0.4	-0.3	-0.1	0.0	0.0	0.0	0.0	-0.1
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.3		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.1	5.7	6.3	6.6	7.0	7.3	7.5	7.6	7.6	7.7	7.8
Demographic scenario	2.5	5.7	6.3	6.7	7.1	7.4	7.6	7.7	7.8	7.9	8.1
High Life expectancy scenario	3.0	5.7	6.3	6.7	7.2	7.6	7.9	8.1	8.2	8.4	8.7
Constant health scenario	1.4	5.7	6.1	6.4	6.7	6.9	7.0	7.0	7.0	6.9	7.0
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	2.7	5.7	6.3	6.8	7.2	7.6	7.8	8.0	8.1	8.2	8.4
EU28 cost convergence scenario	3.1	5.7	6.4	6.8	7.3	7.7	8.0	8.2	8.3	8.5	8.8
Labour intensity scenario	2.6	5.7	6.0	6.4	6.7	7.0	7.2	7.4	7.6	7.9	8.2
Sector-specific composite indexation scenario	1.6	5.7	6.1	6.4	6.6	6.8	6.9	7.0	7.0	7.1	7.3
Non-demographic determinants scenario	4.2	5.7	6.5	7.1	7.7	8.4	8.8	9.1	9.4	9.6	9.9
AWG risk scenario	3.0	5.7	6.4	6.9	7.4	7.9	8.2	8.3	8.4	8.5	8.7
TFP risk scenario	2.1	5.7	6.3	6.6	7.0	7.3	7.5	7.5	7.6	7.6	7.8

Malta	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.2	1.1	1.3	1.4	1.6	1.9	2.0	2.1	2.1	2.1	2.3
Demographic scenario	1.3	1.1	1.3	1.5	1.8	2.1	2.2	2.3	2.3	2.3	2.4
High Life expectancy scenario	1.5	1.1	1.3	1.5	1.8	2.1	2.3	2.4	2.5	2.5	2.6
Base case scenario	1.3	1.1	1.3	1.5	1.7	2.0	2.1	2.2	2.2	2.3	2.4
Constant disability scenario	1.0	1.1	1.3	1.4	1.6	1.8	2.0	2.0	2.0	2.0	2.2
Shift to formal care scenario	1.6	1.1	1.4	1.7	1.9	2.2	2.4	2.5	2.5	2.5	2.7
Coverage convergence scenario	2.0	1.1	1.3	1.5	1.8	2.2	2.4	2.6	2.8	2.9	3.2
Cost convergence scenario	1.8	1.1	1.3	1.5	1.8	2.1	2.3	2.4	2.5	2.7	2.9
Cost and coverage convergence scenario	2.8	1.1	1.4	1.6	1.9	2.3	2.7	2.9	3.2	3.5	3.9
AWG risk scenario	2.6	1.1	1.3	1.6	1.9	2.3	2.6	2.8	3.0	3.3	3.7
TFP risk scenario	1.2	1.1	1.3	1.4	1.6	1.9	2.0	2.1	2.1	2.1	2.3

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	66.4%	15	18	20	21	23	23	24	24	24	25
of which: receiving institutional care	156.9%	1	2	2	2	3	3	3	3	3	3
receiving home care	124.3%	8	10	12	14	16	17	17	17	17	18
receiving cash benefits	-11.1%	3	3	3	3	3	3	3	3	3	3
Demographic scenario	81.7%	15	18	20	22	24	25	25	25	26	27
of which: receiving institutional care	171.9%	1	2	2	2	3	3	3	3	3	3
receiving home care	140.8%	8	10	12	15	16	17	18	18	18	20
receiving cash benefits	-1.0%	3	3	3	3	3	3	3	3	3	3
Constant disability scenario	52.5%	15	17	19	21	22	22	22	22	22	23
of which: receiving institutional care	142.3%	1	2	2	2	2	3	3	3	3	3
receiving home care	108.4%	8	10	12	14	15	16	16	16	16	17
receiving cash benefits	-17.8%	3	3	3	3	3	3	3	3	3	3
Shift 1% of dependents from informal to formal scenario	81.7%	15	18	20	22	24	25	25	25	26	27
of which: receiving institutional care	205.1%	1	2	2	3	3	3	3	3	3	4
receiving home care	169.3%	8	12	14	17	18	19	20	20	21	22
receiving cash benefits	-1.0%	3	3	3	3	3	3	3	3	3	3
Coverage convergence scenario	81.7%	15	18	20	22	24	25	25	25	26	27
of which: receiving institutional care	268.2%	1	2	2	2	3	3	4	4	4	4
receiving home care	226.6%	8	11	13	16	18	20	21	23	24	26
receiving cash benefits	-1.0%	3	3	3	3	3	3	3	3	3	3

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.1	5.9	5.3	5.5	5.6	5.6	5.5	5.4	5.5	5.7	6.0
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (7%) - Staff (53%) - Other (26%)											
Primary	0.3	1.2	1.3	1.4	1.4	1.3	1.2	1.2	1.3	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (15%) - Capital (6%) - Staff (63%) - Other (16%)											
Low secondary	0.1	1.8	1.6	1.7	1.8	1.8	1.8	1.7	1.7	1.8	1.9
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (4%) - Staff (69%) - Other (13%)											
Upper secondary	-0.1	1.8	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7
Expenditure decomposition (broadly constant) : Transfers (13%) - Capital (3%) - Staff (41%) - Other (43%)											
Tertiary education	-0.2	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (16%) - Capital (18%) - Staff (36%) - Other (30%)											
Number of students (in thousands)											
Total	6	70	67	70	73	74	73	72	72	74	76
as % of population 5-24	4%	73%	75%	78%	78%	77%	75%	75%	76%	77%	77%
Primary	6	24	26	28	29	28	27	27	28	30	30
Low secondary	2	24	21	23	25	26	25	24	24	25	26
Upper secondary	-1	12	10	10	10	11	11	11	11	11	11
Tertiary education	-2	11	9	9	9	9	9	9	9	9	9
Number of teachers (in thousands)											
Total	1	7	6	7	7	7	7	7	7	7	7
Primary	0	2	2	2	2	2	2	2	2	2	2
Low secondary	0	3	3	3	3	3	3	3	3	3	3
Upper secondary	0	1	1	1	1	1	1	1	1	1	1
Tertiary education	0	1	1	1	1	1	1	1	1	1	1

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	1.7	0.2	0.7	1.0	1.2	1.5	1.8	1.8	1.9	1.9	1.9

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

19. THE NETHERLANDS

Netherlands					EC-EPC (AWG) 2015 projections						
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.1	1.72	1.73	1.74	1.75	1.76	1.77	1.77	1.78	1.79	1.80
Life expectancy at birth											
males	6.0	79.3	80.3	80.9	81.6	82.3	82.9	83.5	84.1	84.7	85.2
females	6.0	82.9	83.9	84.6	85.3	86.0	86.6	87.2	87.8	88.4	88.9
Life expectancy at 65											
males	4.4	18.0	18.7	19.1	19.6	20.1	20.6	21.0	21.5	21.9	22.4
females	4.6	20.9	21.7	22.2	22.7	23.2	23.7	24.1	24.6	25.0	25.5
Net migration (thousand)	-12.8	22.1	24.2	24.0	23.5	20.8	13.0	11.0	8.9	10.6	9.3
Net migration as % of population	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Population (million)	0.3	16.8	17.2	17.4	17.6	17.7	17.6	17.5	17.4	17.2	17.1
Children population (0-14) as % of total population	-1.8	17.0	16.0	15.8	15.8	15.8	15.6	15.4	15.2	15.1	15.3
Prime age population (25-54) as % of total population	-6.2	40.7	38.3	36.5	35.8	35.7	35.6	35.3	35.0	34.8	34.6
Working age population (15-64) as % of total population	-8.5	65.9	64.0	62.1	59.9	58.0	57.3	57.6	57.9	57.8	57.3
Elderly population (65 and over) as % of total population	10.3	17.1	20.0	22.1	24.3	26.2	27.0	27.0	26.9	27.1	27.4
Very elderly population (80 and over) as % of total population	6.9	4.2	4.9	5.6	7.1	8.1	9.1	10.3	11.3	11.5	11.1
Very elderly population (80 and over) as % of elderly population	15.8	24.7	24.3	25.4	29.3	31.0	33.8	38.2	42.0	42.5	40.5
Very elderly population (80 and over) as % of working age population	12.9	6.4	7.6	9.0	11.9	14.0	15.9	17.9	19.5	19.9	19.4
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.2	0.1	1.3	0.9	1.0	1.3	1.4	1.4	1.5	1.4	1.3
Employment (growth rate)	0.0	-0.1	0.6	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2
Labour input : hours worked (growth rate)	0.0	-0.1	0.6	-0.1	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	-0.2
Labour productivity per hour (growth rate)	1.2	0.2	0.6	1.0	1.2	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.8	0.0	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.4	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.2	-0.2	1.0	0.6	0.8	1.2	1.4	1.6	1.7	1.6	1.5
Potential GDP per worker (growth rate)	1.2	0.2	0.6	0.9	1.2	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-1280	11067	10986	10807	10522	10250	10119	10108	10068	9951	9788
Population growth (working age:15-64)	0.0	-0.3	-0.2	-0.4	-0.6	-0.6	-0.1	-0.1	-0.1	-0.3	-0.3
Population (20-64) (in thousands)	-1177	10073	9973	9853	9595	9312	9165	9155	9127	9035	8896
Population growth (20-64)	0.0	-0.3	-0.1	-0.4	-0.6	-0.7	-0.1	-0.1	-0.1	-0.3	-0.3
Labour force 15-64 (thousands)	-702	8816	8860	8793	8609	8426	8357	8350	8319	8231	8114
Labour force 20-64 (thousands)	-650	8210	8228	8200	8032	7843	7764	7758	7733	7661	7559
Participation rate (20-64)	3.5	81.5	82.5	83.2	83.7	84.2	84.7	84.7	84.7	84.8	85.0
Participation rate (15-64)	3.2	79.7	80.7	81.4	81.8	82.2	82.6	82.6	82.6	82.7	82.9
young (15-24)	1.2	70.0	71.2	71.4	71.3	71.0	71.0	71.1	71.2	71.2	71.2
prime-age (25-54)	0.9	87.5	88.0	88.3	88.4	88.4	88.4	88.3	88.3	88.3	88.4
older (55-64)	13.5	64.1	68.5	71.6	72.6	73.4	75.3	76.0	76.5	76.8	77.6
Participation rate (20-64) - FEMALES	6.7	75.8	78.1	79.4	80.5	81.4	82.2	82.3	82.3	82.3	82.5
Participation rate (15-64) - FEMALES	6.2	74.6	76.8	78.0	79.0	79.8	80.5	80.6	80.6	80.6	80.8
young (15-24)	1.2	70.8	71.9	72.1	72.0	71.8	71.7	71.8	71.9	72.0	71.9
prime-age (25-54)	3.5	82.6	84.6	85.6	86.1	86.2	86.2	86.2	86.2	86.2	86.2
older (55-64)	20.7	52.9	59.5	63.5	65.7	67.9	70.7	71.8	72.3	72.6	73.6
Participation rate (20-64) - MALES	0.1	87.1	86.9	87.0	86.9	87.0	87.1	87.1	87.1	87.1	87.3
Participation rate (15-64) - MALES	0.2	84.7	84.4	84.6	84.6	84.5	84.6	84.6	84.6	84.7	84.9
young (15-24)	1.2	69.3	70.5	70.7	70.6	70.3	70.3	70.4	70.5	70.6	70.6
prime-age (25-54)	-1.8	92.3	91.4	91.0	90.7	90.5	90.4	90.4	90.4	90.4	90.4
older (55-64)	6.3	75.3	77.5	79.7	79.5	79.1	80.0	80.2	80.6	81.0	81.6
Average effective exit age (TOTAL) (1)	2.6	64.6	65.6	66.0	66.2	66.3	66.5	66.7	66.8	67.0	67.2
Men	2.7	65.5	66.6	67.0	67.2	67.3	67.5	67.7	67.8	68.0	68.1
Women	2.5	63.7	64.6	65.0	65.2	65.4	65.5	65.7	65.9	66.0	66.2
Employment rate (15-64)	5.3	74.3	75.9	77.8	78.3	78.9	79.3	79.4	79.4	79.5	79.6
Employment rate (20-64)	5.4	76.5	78.0	79.8	80.4	81.1	81.6	81.7	81.7	81.7	81.9
Employment rate (15-74)	4.9	66.0	66.9	68.6	68.6	68.7	69.5	70.6	71.2	71.1	70.9
Unemployment rate (15-64)	-2.8	6.7	5.9	4.4	4.2	4.1	3.9	3.9	3.9	3.9	3.9
Unemployment rate (20-64)	-2.6	6.2	5.4	4.1	3.9	3.7	3.6	3.6	3.6	3.6	3.6
Unemployment rate (15-74)	-2.8	6.7	5.9	4.4	4.2	4.0	3.9	3.9	3.9	3.9	3.9
Employment (20-64) (in millions)	-0.4	7.7	7.8	7.9	7.7	7.5	7.5	7.5	7.5	7.4	7.3
Employment (15-64) (in millions)	-0.4	8.2	8.3	8.4	8.2	8.1	8.0	8.0	8.0	7.9	7.8
share of young (15-24)	0%	16%	16%	16%	15%	16%	16%	16%	16%	16%	16%
share of prime-age (25-54)	-4%	69%	66%	64%	65%	67%	66%	66%	65%	65%	65%
share of older (55-64)	4%	16%	18%	20%	20%	18%	17%	18%	19%	19%	20%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.4	19.6	21.6	22.8	22.0	19.9	18.9	19.6	20.5	20.8	21.0
Old-age dependency ratio 15-64 (3)	22	26	31	36	41	45	47	47	46	47	48
Old-age dependency ratio 20-64 (3)	24	29	34	39	45	50	52	52	51	52	53
Total dependency ratio (4)	23	52	56	61	67	72	74	73	73	73	74
Total economic dependency ratio (5)	5	100	98	98	102	105	107	107	106	105	105
Economic old-age dependency ratio (15-64) (6)	20	33	37	41	46	51	53	53	53	53	53
Economic old-age dependency ratio (15-74) (7)	18	32	36	39	43	48	50	50	50	49	50

Netherlands	EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.9	6.9	7.1	7.4	7.7	8.1	8.3	8.3	8.1	7.9	7.8
Earnings-related pensions, gross	0.1	1.8	2.0	2.0	1.8	1.8	1.8	1.8	1.9	1.9	1.9
Of which : Old-age and early pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disability pensions	0.2	1.6	1.9	1.9	1.7	1.7	1.8	1.7	1.8	1.8	1.8
Survivors pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.7	5.1	5.2	5.4	5.9	6.3	6.5	6.5	6.2	6.0	5.8
Private occupational pensions, gross	1.3	5.2	5.5	6.0	7.4	7.8	8.4	7.9	7.3	7.0	6.5
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.4
Public pensions, net	0.8	5.9	6.1	6.3	6.6	6.9	7.2	7.1	6.9	6.8	6.7
Public pensions, contributions	1.0	6.5	6.9	7.2	7.7	8.0	8.2	8.2	7.9	7.7	7.5

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.3%	85.4%	84.8%	85.0%	85.6%	85.9%	85.9%	85.9%	85.8%	85.7%	85.7%
Pensioners (Public, in 1000 persons)	774	3869	4203	4377	4686	4956	5090	5042	4863	4728	4643
Pensioners aged 65+ (1000 persons)	815	3029	3396	3571	3877	4148	4284	4237	4060	3927	3844
Share of pensioners below age 65 as % of all pensioners	-4.5%	21.7%	19.2%	18.4%	17.3%	16.3%	15.8%	16.0%	16.5%	16.9%	17.2%
Benefit ratio (Public pensions)	-1.7	35.9	35.8	36.0	35.0	34.2	34.0	34.0	34.2	34.3	34.2
Gross replacement rate at retirement (Public pensions)	-1.4	29.8	29.7	29.9	29.0	28.3	28.2	28.2	28.4	28.4	28.3
Average accrual rates (new pensions, earnings related)	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	15.4	8237.8	8549.4	8795.7	8704.9	8545.4	8450.1	8407.4	8380.8	8332.3	8253.1
Support ratio (contributors/100 pensioners, Public pensions)	-35.2	212.9	203.4	200.9	185.8	172.4	166.0	166.8	172.4	176.2	177.8

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
Lower migration (-20%)	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
TFP risk scenario	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	:	:	:	:	:	:	:	:	:	:	:

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.9		0.3	0.5	0.8	1.2	1.5	1.4	1.2	1.0	0.9
Dependency ratio	4.8		1.4	2.4	3.4	4.3	4.7	4.6	4.6	4.6	4.8
Coverage ratio	-2.2		-0.7	-1.2	-1.4	-1.6	-1.7	-1.7	-1.9	-2.1	-2.2
Of which : Old-age	-1.9		-0.4	-0.9	-1.1	-1.1	-1.1	-1.2	-1.4	-1.7	-1.9
Early-age	0.6		-0.7	-0.6	0.1	0.7	0.9	0.6	0.4	0.4	0.6
Cohort effect	-4.1		-0.8	-1.7	-2.9	-4.1	-4.5	-4.2	-3.9	-3.9	-4.1
Benefit ratio	-0.5		-0.1	-0.1	-0.3	-0.5	-0.6	-0.6	-0.5	-0.5	-0.5
Labour market ratio	-0.8		-0.3	-0.5	-0.6	-0.7	-0.8	-0.7	-0.7	-0.8	-0.8
Of which : Employment rate	-0.5		-0.1	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Interaction effect (residual)	-0.3		-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.9		-0.1	0.2	0.4	0.4	0.3	0.0	-0.2	-0.2	-0.1
Dependency ratio	4.8		1.0	0.9	1.0	0.9	0.4	-0.1	-0.1	0.1	0.2
Coverage ratio	-2.2		-0.5	-0.5	-0.3	-0.2	0.0	0.0	-0.2	-0.2	-0.2
Of which : Old-age	-1.9		-0.4	-0.4	-0.2	-0.1	0.0	0.0	-0.3	-0.2	-0.2
Early-age	0.6		-0.4	0.1	0.7	0.7	0.2	-0.3	-0.2	0.0	0.2
Cohort effect	-4.1		-0.5	-0.9	-1.3	-1.2	-0.4	0.3	0.3	0.1	-0.2
Benefit ratio	-0.5		-0.3	0.1	-0.2	-0.2	-0.1	0.0	0.1	0.0	0.0
Labour market ratio	-0.8		-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1
Of which : Employment rate	-0.5		-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.3		-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.0	7.2	7.5	7.7	7.9	8.1	8.2	8.2	8.2	8.2	8.1
Demographic scenario	1.2	7.2	7.5	7.8	8.0	8.1	8.2	8.3	8.3	8.3	8.3
High Life expectancy scenario	1.5	7.2	7.6	7.8	8.0	8.2	8.4	8.5	8.6	8.6	8.7
Constant health scenario	0.4	7.2	7.4	7.6	7.7	7.7	7.8	7.8	7.7	7.6	7.6
Death-related cost scenario	0.9	7.2	7.5	7.7	7.9	8.0	8.1	8.1	8.1	8.1	8.1
Income elasticity scenario	1.4	7.2	7.6	7.9	8.1	8.3	8.4	8.5	8.5	8.5	8.5
EU28 cost convergence scenario	1.2	7.2	7.5	7.8	8.0	8.2	8.3	8.3	8.4	8.4	8.4
Labour intensity scenario	1.4	7.2	7.5	7.7	8.0	8.4	8.6	8.6	8.6	8.5	8.5
Sector-specific composite indexation scenario	0.7	7.2	7.4	7.6	7.7	7.8	7.9	7.9	7.9	7.8	7.8
Non-demographic determinants scenario	2.6	7.2	7.8	8.1	8.4	8.8	9.1	9.3	9.5	9.7	9.7
AWG risk scenario	1.6	7.2	7.7	8.0	8.2	8.4	8.6	8.7	8.8	8.8	8.8
TFP risk scenario	0.9	7.2	7.5	7.7	7.9	8.0	8.1	8.2	8.2	8.1	8.1

Netherlands	EC-EPC (AWG) 2015 projections									

Long-term care										
Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	3.0	4.1	3.8	4.1	4.6	5.2	5.8	6.3	6.7	7.0	7.1
Demographic scenario	3.3	4.1	3.9	4.2	4.7	5.3	5.9	6.4	6.9	7.3	7.5
High Life expectancy scenario	4.4	4.1	3.9	4.3	4.8	5.5	6.2	6.9	7.6	8.2	8.5
Base case scenario	3.5	4.1	3.9	4.2	4.7	5.4	6.1	6.6	7.1	7.5	7.7
Constant disability scenario	2.5	4.1	3.8	4.0	4.5	5.0	5.6	6.0	6.3	6.6	6.7
Shift to formal care scenario	4.3	4.1	4.2	4.7	5.3	6.0	6.8	7.3	7.8	8.2	8.4
Coverage convergence scenario	3.6	4.1	3.9	4.2	4.8	5.4	6.2	6.7	7.2	7.6	7.8
Cost convergence scenario	4.0	4.1	3.9	4.3	4.9	5.6	6.3	6.9	7.4	7.9	8.1
Cost and coverage convergence scenario	4.1	4.1	3.9	4.3	4.9	5.6	6.4	7.0	7.5	8.0	8.2
AWG risk scenario	3.5	4.1	3.9	4.2	4.8	5.4	6.1	6.6	7.1	7.5	7.6
TFP risk scenario	3.0	4.1	3.8	4.1	4.6	5.2	5.8	6.3	6.7	7.0	7.1
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	38.6%	1241	1360	1435	1512	1588	1651	1695	1731	1741	1720
of which: receiving institutional care	106.9%	383	436	482	541	609	673	720	764	793	792
receiving home care	78.0%	544	623	689	766	840	901	945	977	984	968
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Demographic scenario	49.7%	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
of which: receiving institutional care	121.8%	383	442	493	558	632	704	758	810	844	849
receiving home care	91.5%	544	631	704	789	873	943	998	1038	1052	1041
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Constant disability scenario	29.5%	1241	1342	1403	1465	1526	1575	1604	1631	1635	1607
of which: receiving institutional care	93.2%	383	431	472	526	586	644	683	722	745	740
receiving home care	66.0%	544	615	674	743	809	861	895	921	923	902
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Shift 1% of dependents from informal to formal scenario	49.7%	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
of which: receiving institutional care	142.2%	383	479	550	619	697	774	832	886	922	927
receiving home care	111.2%	544	690	793	884	972	1046	1104	1146	1160	1148
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0
Coverage convergence scenario	49.7%	1241	1378	1467	1560	1653	1734	1796	1845	1868	1858
of which: receiving institutional care	124.5%	383	443	495	561	636	709	764	817	853	859
receiving home care	96.3%	544	634	709	796	883	956	1014	1057	1074	1067
receiving cash benefits	:	0	0	0	0	0	0	0	0	0	0

Education										
Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.5	5.2	4.9	4.7	4.7	4.8	4.9	4.9	4.8	4.7	4.7
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (10%) - Staff (61%) - Other (15%)											
Primary	-0.1	1.3	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (12%) - Staff (73%) - Other (14%)											
Low secondary	-0.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (13%) - Staff (70%) - Other (15%)											
Upper secondary	-0.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (24%) - Capital (7%) - Staff (55%) - Other (14%)											
Tertiary education	-0.1	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Expenditure decomposition (broadly constant) : Transfers (28%) - Capital (7%) - Staff (47%) - Other (18%)											
Number of students (in thousands)											
Total	-378	3522	3409	3344	3323	3334	3337	3307	3248	3186	3144
as % of population 5-24	0%	88%	88%	87%	88%	88%	88%	88%	88%	88%	88%
Primary	-131	1248	1179	1167	1196	1205	1197	1170	1137	1118	1118
Low secondary	-100	795	758	738	729	744	749	744	729	708	696
Upper secondary	-79	761	761	732	712	714	722	721	713	698	682
Tertiary education	-69	717	711	706	686	671	670	672	669	662	648
Number of teachers (in thousands)											
Total	-27	252	244	240	238	239	239	237	233	228	225
Primary	-10	93	88	87	89	90	89	87	85	83	83
Low secondary	-6	50	48	47	46	47	47	46	45	45	44
Upper secondary	-7	65	65	62	61	61	62	61	61	60	58
Tertiary education	-4	44	44	43	42	41	41	41	41	41	40
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Unemployment benefit										
Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.8	2.0	1.8	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

20. AUSTRIA

Austria	EC-EPC (AWG) 2015 projections										
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.45	1.48	1.51	1.53	1.54	1.56	1.58	1.59	1.61	1.62
Life expectancy at birth											
males	6.5	78.4	79.5	80.2	81.0	81.7	82.4	83.0	83.7	84.3	84.9
females	5.6	83.5	84.4	85.1	85.7	86.3	86.9	87.5	88.0	88.6	89.1
Life expectancy at 65											
males	4.5	17.9	18.7	19.2	19.7	20.1	20.6	21.1	21.6	22.0	22.4
females	4.4	21.2	21.9	22.4	22.9	23.3	23.8	24.3	24.7	25.1	25.6
Net migration (thousand)	-30.8	55.5	51.3	52.5	51.9	47.4	41.9	35.1	27.2	26.5	24.8
Net migration as % of population	-0.4	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3
Population (million)	1.2	8.5	8.8	9.1	9.3	9.5	9.6	9.7	9.7	9.7	9.7
Children population (0-14) as % of total population	-0.3	14.4	14.5	14.6	14.6	14.3	14.0	13.8	13.9	14.0	14.0
Prime age population (25-54) as % of total population	-8.3	43.4	41.2	39.1	38.1	37.8	37.1	36.5	35.7	35.3	35.1
Working age population (15-64) as % of total population	-10.3	67.4	66.0	64.2	61.9	60.2	59.6	59.4	58.7	57.9	57.1
Elderly population (65 and over) as % of total population	10.7	18.2	19.5	21.1	23.5	25.5	26.4	26.8	27.4	28.1	28.9
Very elderly population (80 and over) as % of total population	6.1	5.0	5.5	6.3	6.8	7.3	8.4	9.9	11.2	11.4	11.1
Very elderly population (80 and over) as % of elderly population	11.1	27.5	28.5	29.7	28.9	28.5	31.6	37.2	40.7	40.4	38.6
Very elderly population (80 and over) as % of working age population	12.1	7.4	8.4	9.8	11.0	12.1	14.0	16.7	19.0	19.6	19.5
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.5	1.1	1.9	1.4	1.5	1.6	1.6	1.5	1.3	1.3	1.3
Employment (growth rate)	0.1	1.0	0.9	0.1	0.1	0.1	0.1	-0.1	-0.2	-0.3	-0.2
Labour input : hours worked (growth rate)	0.1	0.5	0.8	0.1	0.0	0.1	0.1	-0.1	-0.2	-0.3	-0.2
Labour productivity per hour (growth rate)	1.4	0.6	1.1	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.9	0.3	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.2	0.6	1.3	0.9	1.0	1.3	1.3	1.3	1.3	1.3	1.4
Potential GDP per worker (growth rate)	1.3	0.2	1.0	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-181	5717	5824	5822	5756	5706	5732	5768	5717	5634	5536
Population growth (working age:15-64)	-0.7	0.4	0.2	-0.1	-0.2	-0.1	0.2	0.0	-0.2	-0.3	-0.3
Population (20-64) (in thousands)	-180	5242	5390	5380	5293	5221	5242	5287	5245	5164	5062
Population growth (20-64)	-0.9	0.6	0.2	-0.2	-0.4	-0.4	0.2	0.0	-0.2	-0.4	-0.3
Labour force 15-64 (thousands)	-36	4353	4490	4475	4444	4452	4489	4501	4454	4383	4317
Labour force 20-64 (thousands)	-32	4150	4308	4289	4249	4248	4282	4298	4255	4186	4118
Participation rate (20-64)	2.2	79.2	79.9	79.7	80.3	81.4	81.7	81.3	81.1	81.1	81.3
Participation rate (15-64)	1.8	76.1	77.1	76.9	77.2	78.0	78.3	78.0	77.9	77.8	78.0
young (15-24)	-0.2	59.9	60.6	60.0	59.7	59.9	59.9	60.1	60.1	59.8	59.7
prime-age (25-54)	0.6	88.8	89.0	89.1	89.3	89.3	89.3	89.3	89.4	89.4	89.4
older (55-64)	13.3	46.4	54.9	56.2	56.6	58.4	60.5	60.1	60.1	59.5	59.7
Participation rate (20-64) - FEMALES	5.2	74.1	75.5	76.1	77.3	79.0	79.6	79.3	79.1	79.0	79.3
Participation rate (15-64) - FEMALES	4.6	71.1	72.6	73.1	74.1	75.4	76.0	75.7	75.6	75.5	75.7
young (15-24)	-0.9	55.9	55.9	55.3	55.0	54.9	55.2	55.4	55.4	55.1	55.0
prime-age (25-54)	2.7	85.0	86.5	87.0	87.5	87.7	87.8	87.7	87.7	87.7	87.7
older (55-64)	20.9	36.8	45.4	49.2	51.5	55.2	58.2	58.2	58.2	57.4	57.7
Participation rate (20-64) - MALES	-1.0	84.3	84.3	83.3	83.2	83.7	83.7	83.3	83.1	83.0	83.3
Participation rate (15-64) - MALES	-1.0	81.2	81.5	80.6	80.3	80.6	80.6	80.3	80.2	80.1	80.2
young (15-24)	0.4	63.7	65.0	64.5	64.1	64.2	64.4	64.6	64.5	64.3	64.2
prime-age (25-54)	-1.6	92.7	91.5	91.2	91.0	90.9	90.8	90.9	91.0	91.1	91.1
older (55-64)	5.1	56.6	64.7	63.4	61.8	61.8	62.8	62.0	62.0	61.5	61.7
Average effective exit age (TOTAL) (1)	2.0	61.7	63.1	63.3	63.5	63.7	63.7	63.7	63.7	63.7	63.7
Men	1.8	62.5	64.0	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2
Women	2.1	61.0	62.2	62.6	62.9	63.2	63.2	63.2	63.2	63.2	63.2
Employment rate (15-64)	2.7	72.3	73.9	73.9	74.2	75.0	75.3	75.1	74.9	74.8	75.0
Employment rate (20-64)	3.0	75.5	76.8	76.9	77.4	78.5	78.8	78.4	78.2	78.1	78.4
Employment rate (15-74)	0.9	63.9	65.8	65.5	64.6	64.5	65.3	66.0	65.8	65.1	64.8
Unemployment rate (15-64)	-1.2	5.0	4.2	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Unemployment rate (20-64)	-1.1	4.7	4.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Unemployment rate (15-74)	-1.3	4.9	4.1	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Employment (20-64) (in millions)	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.0
Employment (15-64) (in millions)	0.0	4.1	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2
share of young (15-24)	0%	13%	12%	12%	12%	13%	13%	13%	13%	13%	13%
share of prime-age (25-54)	-5%	76%	72%	71%	71%	72%	71%	70%	70%	70%	71%
share of older (55-64)	5%	11%	16%	17%	16%	15%	16%	17%	17%	17%	16%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	3.2	17.8	21.6	23.3	22.0	19.9	20.1	21.2	22.0	21.8	21.0
Old-age dependency ratio 15-64 (3)	24	27	29	33	38	42	44	45	47	49	51
Old-age dependency ratio 20-64 (3)	26	29	32	36	41	46	49	49	51	53	55
Total dependency ratio (4)	27	48	51	56	61	66	68	68	70	73	75
Total economic dependency ratio (5)	20	102	100	103	108	111	113	115	118	120	122
Economic old-age dependency ratio (15-64) (6)	27	36	38	41	46	52	54	56	58	60	62
Economic old-age dependency ratio (15-74) (7)	24	35	37	40	44	49	52	54	55	57	59

Austria				EC-EPC (AWG) 2015 projections						

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.5	13.9	13.9	14.1	14.4	14.7	14.7	14.7	14.6	14.6	14.4
Earnings-related pensions, gross	0.3	13.6	13.5	13.6	14.0	14.3	14.3	14.2	14.2	14.1	13.9
Of which : Old-age and early pensions	1.9	9.4	9.7	10.0	10.4	10.9	11.1	11.2	11.3	11.4	11.3
Disability pensions	-0.5	2.2	2.0	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.6
Survivors pensions	-1.1	2.0	1.8	1.7	1.7	1.6	1.5	1.3	1.2	1.1	0.9
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	-0.2	8.3	8.2	8.3	8.3	8.3	8.2	8.2	8.2	8.1	8.1
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	977	2284	2430	2571	2718	2862	2985	3095	3178	3228	3260
Pensioners aged 65+ (1000 persons)	1116	1917	2134	2303	2496	2681	2815	2918	2988	3021	3033
Share of pensioners below age 65 as % of all pensioners	-9.1%	16.1%	12.2%	10.4%	8.2%	6.3%	5.7%	5.7%	6.0%	6.4%	7.0%
Benefit ratio (Public pensions)	-4.1	41.2	41.9	41.4	41.1	40.8	40.1	39.4	38.7	38.0	37.0
Gross replacement rate at retirement (Public pensions)	-6.3	51.0	49.1	48.5	52.4	52.0	49.9	49.2	48.7	46.8	44.7
Average accrual rates (new pensions, earnings related)	-0.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1
Average contributory period (new pensions, earnings-related)	1.9	36.3	37.7	38.0	38.1	38.1	38.0	38.0	38.1	38.2	38.1
Contributors (Public pensions, in 1000 persons)	175.9	3910.9	4123.1	4242.7	4256.1	4257.8	4252.9	4234.7	4204.9	4146.1	4086.8
Support ratio (contributors/100 pensioners, Public pensions)	-45.9	171.3	169.7	165.0	156.6	148.8	142.5	136.8	132.3	128.4	125.4
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4
High labour productivity (+0.25 p.p.)	-1.0	0.0	0.0	-0.2	-0.3	-0.5	-0.7	-0.8	-0.9	-1.0	-1.0
Lower labour productivity (-0.25 p.p.)	0.6	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6
High employment rate (+2 p.p)	-0.3	0.0	-0.2	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
High emp. of older workers (+10 p.p.)	-0.7	0.0	-0.6	-1.0	-0.8	-0.5	-0.3	-0.3	-0.5	-0.6	-0.7
Lower migration (-20%)	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.8
TFP risk scenario	0.6	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.5	0.6
Policy scenario linking retirement age to increases in life expectancy	-1.1	0.0	-0.1	-0.4	-0.6	-0.9	-1.1	-1.3	-1.3	-1.3	-1.1
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.5		0.0	0.2	0.5	0.8	0.8	0.8	0.7	0.7	0.5
Dependency ratio	9.4		1.1	2.8	5.0	6.8	7.5	7.7	8.2	8.8	9.4
Coverage ratio	-3.3		-0.6	-1.3	-2.4	-3.1	-3.2	-3.0	-3.0	-3.1	-3.3
Of which : Old-age	0.0		:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	0.0		:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cohort effect	-7.5		0.6	-0.8	-3.4	-5.3	-5.8	-5.4	-5.9	-6.6	-7.5
Benefit ratio	-4.1		-0.2	-0.6	-1.0	-1.4	-2.0	-2.5	-3.1	-3.5	-4.1
Labour market ratio	-1.0		-0.3	-0.5	-0.7	-1.0	-1.0	-0.8	-0.9	-0.9	-1.0
Of which : Employment rate	-0.5		-0.2	-0.3	-0.4	-0.5	-0.6	-0.5	-0.5	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.3	-0.4	-0.5	-0.4	-0.4	-0.4	-0.4	-0.5
Interaction effect (residual)	-0.6		0.0	-0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.5		0.0	0.2	0.4	0.3	0.0	-0.1	0.0	0.0	-0.2
Dependency ratio	9.4		0.8	1.6	2.2	1.8	0.7	0.2	0.5	0.6	0.6
Coverage ratio	-3.3		-0.4	-0.7	-1.0	-0.7	-0.1	0.2	0.0	-0.1	-0.2
Of which : Old-age	0.0		:	:	:	:	:	:	:	:	:
Early-age	0.0		:	:	:	:	:	:	:	:	:
Cohort effect	-7.5		0.4	-1.4	-2.5	-1.9	-0.5	0.4	-0.5	-0.7	-0.9
Benefit ratio	-4.1		-0.2	-0.4	-0.4	-0.4	-0.5	-0.6	-0.5	-0.5	-0.6
Labour market ratio	-1.0		-0.2	-0.2	-0.2	-0.2	0.0	0.1	0.0	0.0	-0.1
Of which : Employment rate	-0.5		-0.1	0.0	-0.1	-0.2	-0.1	0.1	0.0	0.0	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		-0.1	-0.2	-0.1	0.0	0.1	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.6		0.0	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.3	6.9	7.2	7.4	7.6	7.8	7.9	8.1	8.2	8.2	8.2
Demographic scenario	1.6	6.9	7.2	7.4	7.6	7.8	8.1	8.2	8.4	8.4	8.5
High Life expectancy scenario	2.0	6.9	7.2	7.5	7.7	8.0	8.2	8.5	8.6	8.8	8.9
Constant health scenario	0.7	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.6	7.6	7.6
Death-related cost scenario	1.3	6.9	7.2	7.4	7.5	7.7	7.9	8.1	8.2	8.2	8.2
Income elasticity scenario	1.8	6.9	7.3	7.5	7.7	8.0	8.2	8.4	8.6	8.6	8.7
EU28 cost convergence scenario	1.6	6.9	7.2	7.4	7.7	7.9	8.1	8.3	8.4	8.5	8.5
Labour intensity scenario	2.4	6.9	7.1	7.4	7.8	8.2	8.5	8.7	9.0	9.1	9.3
Sector-specific composite indexation scenario	1.0	6.9	7.1	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.9
Non-demographic determinants scenario	3.0	6.9	7.4	7.8	8.2	8.6	9.0	9.3	9.6	9.8	9.9
AWG risk scenario	2.0	6.9	7.4	7.6	7.9	8.2	8.5	8.7	8.8	8.9	8.9
TFP risk scenario	1.3	6.9	7.2	7.4	7.6	7.7	7.9	8.1	8.2	8.2	8.2

Austria	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
Demographic scenario	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
High Life expectancy scenario	1.7	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.7	3.0	3.1
Base case scenario	1.4	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.6	2.8	2.8
Constant disability scenario	1.2	1.4	1.5	1.6	1.7	1.8	2.0	2.2	2.4	2.5	2.6
Shift to formal care scenario	1.7	1.4	1.7	1.8	2.0	2.2	2.3	2.6	2.8	3.0	3.1
Coverage convergence scenario	1.4	1.4	1.5	1.6	1.8	2.0	2.1	2.3	2.6	2.8	2.8
Cost convergence scenario	3.0	1.4	1.6	1.8	2.1	2.4	2.7	3.2	3.7	4.1	4.4
Cost and coverage convergence scenario	3.0	1.4	1.6	1.8	2.1	2.4	2.7	3.2	3.7	4.1	4.5
AWG risk scenario	2.8	1.4	1.6	1.8	2.1	2.3	2.6	3.1	3.5	3.9	4.2
TFP risk scenario	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.7
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	46.5%	776	846	895	942	988	1040	1093	1132	1143	1137
of which: receiving institutional care	116.3%	74	82	90	100	110	121	135	149	159	160
receiving home care	83.8%	166	184	199	216	233	253	276	295	305	305
receiving cash benefits	101.0%	458	513	562	618	671	734	809	878	916	921
Demographic scenario	57.4%	776	858	916	972	1028	1091	1154	1201	1219	1221
of which: receiving institutional care	127.0%	74	83	92	103	113	125	140	156	166	168
receiving home care	94.8%	166	186	203	222	241	263	288	310	321	323
receiving cash benefits	111.9%	458	519	572	633	692	762	844	918	961	971
Constant disability scenario	36.8%	776	835	875	915	951	993	1037	1068	1074	1061
of which: receiving institutional care	106.1%	74	81	89	98	107	117	129	143	152	153
receiving home care	73.5%	166	182	195	211	226	243	263	281	289	288
receiving cash benefits	90.7%	458	508	552	604	651	708	775	839	873	874
Shift 1% of dependents from informal to formal scenario	57.4%	776	858	916	972	1028	1091	1154	1201	1219	1221
of which: receiving institutional care	176.0%	74	99	117	129	142	156	173	191	202	204
receiving home care	146.5%	166	230	270	292	315	342	371	395	407	409
receiving cash benefits	111.9%	458	519	572	633	692	762	844	918	961	971
Coverage convergence scenario	57.4%	776	858	916	972	1028	1091	1154	1201	1219	1221
of which: receiving institutional care	127.2%	74	83	92	103	113	125	140	156	166	168
receiving home care	95.1%	166	186	203	222	241	264	289	310	322	324
receiving cash benefits	111.9%	458	519	572	633	692	762	844	918	961	971

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.0	4.9	4.5	4.6	4.7	4.8	4.8	4.7	4.7	4.8	4.9
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (3%) - Staff (64%) - Other (24%)											
Primary	0.1	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (2%) - Staff (70%) - Other (25%)											
Low secondary	0.1	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (1%) - Staff (74%) - Other (21%)											
Upper secondary	0.0	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (7%) - Capital (2%) - Staff (70%) - Other (21%)											
Tertiary education	-0.1	1.5	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (18%) - Capital (7%) - Staff (47%) - Other (28%)											
Number of students (in thousands)											
Total	66	1454	1428	1463	1509	1536	1536	1525	1517	1517	1519
as % of population 5-24	1%	79%	80%	81%	81%	80%	80%	80%	80%	80%	80%
Primary	42	327	342	361	369	366	361	360	365	368	368
Low secondary	41	340	345	362	381	386	381	375	374	378	381
Upper secondary	3	433	402	409	428	446	449	442	434	433	436
Tertiary education	-20	354	339	331	331	337	345	348	344	338	334
Number of teachers (in thousands)											
Total	7	116	115	118	122	125	124	123	122	123	123
Primary	3	27	28	30	30	30	30	30	30	30	30
Low secondary	4	37	38	40	42	42	42	41	41	41	42
Upper secondary	0	34	32	32	34	35	36	35	34	34	34
Tertiary education	-1	18	17	17	17	17	17	17	17	17	17
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.9	0.1	0.3	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

21. POLAND

Poland		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.32	1.39	1.43	1.47	1.50	1.53	1.55	1.58	1.60	1.62
Life expectancy at birth											
males	9.7	72.8	74.5	75.6	76.7	77.8	78.8	79.8	80.8	81.7	82.6
females	7.1	80.9	82.2	83.0	83.8	84.6	85.3	86.1	86.8	87.4	88.1
Life expectancy at 65											
males	5.9	15.4	16.3	17.0	17.7	18.3	18.9	19.5	20.1	20.7	21.3
females	5.3	19.6	20.5	21.1	21.7	22.2	22.8	23.4	23.9	24.4	24.9
Net migration (thousand)	27.1	-15.6	2.9	-4.3	-0.9	13.7	25.4	30.7	29.5	20.3	11.6
Net migration as % of population	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Population (million)	-5.3	38.5	38.4	38.0	37.5	36.8	36.2	35.5	34.8	34.0	33.2
Children population (0-14) as % of total population	-2.1	15.0	15.3	14.5	13.6	12.8	12.6	12.9	13.2	13.2	13.0
Prime age population (25-54) as % of total population	-10.0	43.6	43.0	42.4	40.7	38.8	36.3	34.8	33.8	33.5	33.6
Working age population (15-64) as % of total population	-16.4	70.5	66.3	64.3	63.7	63.5	62.2	59.8	56.9	55.0	54.1
Elderly population (65 and over) as % of total population	18.5	14.5	18.4	21.2	22.7	23.7	25.1	27.3	29.9	31.8	33.0
Very elderly population (80 and over) as % of total population	8.5	3.8	4.4	4.4	4.4	5.8	7.7	9.2	9.5	9.5	12.3
Very elderly population (80 and over) as % of elderly population	10.9	26.2	23.8	21.0	25.5	32.5	36.8	34.9	31.8	32.7	37.2
Very elderly population (80 and over) as % of working age population	17.3	5.4	6.6	6.9	9.1	12.1	14.9	16.0	16.8	18.9	22.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.6	3.2	2.6	2.5	1.9	1.5	1.3	0.9	0.6	0.5	0.7
Employment (growth rate)	-0.6	0.7	-0.4	-0.4	-0.4	-0.3	-0.6	-0.9	-1.2	-1.1	-0.9
Labour input : hours worked (growth rate)	-0.6	0.4	-0.5	-0.4	-0.4	-0.4	-0.6	-0.9	-1.2	-1.1	-0.8
Labour productivity per hour (growth rate)	2.2	2.8	3.1	2.9	2.3	1.9	1.9	1.9	1.8	1.7	1.5
TFP (growth rate)	1.4	1.4	1.8	1.8	1.5	1.2	1.2	1.2	1.1	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.9	1.4	1.3	1.1	0.8	0.7	0.7	0.7	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.9	3.3	2.7	2.8	2.3	1.9	1.6	1.3	1.0	1.0	1.2
Potential GDP per worker (growth rate)	2.2	2.5	3.1	2.9	2.3	1.9	1.9	1.9	1.8	1.7	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-9200	27151	25455	24456	23864	23385	22511	21216	19779	18699	17951
Population growth (working age:15-64)	0.0	-0.6	-1.0	-0.6	-0.4	-0.5	-1.0	-1.3	-1.4	-1.0	-0.7
Population (20-64) (in thousands)	-8608	24976	23631	22380	21887	21490	20785	19631	18236	17124	16368
Population growth (20-64)	-0.4	-0.3	-1.0	-0.9	-0.3	-0.4	-1.0	-1.5	-1.1	-1.0	-0.7
Labour force 15-64 (thousands)	-5738	18296	17732	17111	16668	16273	15699	14874	13890	13099	12557
Labour force 20-64 (thousands)	-5693	18149	17613	16985	16539	16150	15585	14770	13791	12999	12456
Participation rate (20-64)	3.4	72.7	74.5	75.9	75.6	75.1	75.0	75.2	75.6	75.9	76.1
Participation rate (15-64)	2.6	67.4	69.7	70.0	69.8	69.6	69.7	70.1	70.2	70.1	70.0
young (15-24)	-2.3	33.9	33.1	29.8	31.9	32.2	33.0	33.0	32.2	31.5	31.6
prime-age (25-54)	-1.8	84.6	84.3	83.8	83.2	82.7	82.6	82.8	83.0	83.1	82.8
older (55-64)	20.1	44.2	50.0	55.2	59.4	61.7	63.7	64.5	64.2	63.8	64.3
Participation rate (20-64) - FEMALES	4.6	65.2	66.7	68.2	68.3	68.1	68.4	68.9	69.3	69.6	69.8
Participation rate (15-64) - FEMALES	3.6	60.6	62.4	63.0	63.2	63.2	63.7	64.3	64.4	64.2	64.2
young (15-24)	-2.1	28.7	27.9	25.1	26.9	27.2	27.8	27.8	27.1	26.5	26.6
prime-age (25-54)	-2.5	79.1	78.4	77.9	77.3	76.7	76.4	76.4	76.6	76.7	76.6
older (55-64)	25.9	33.4	37.5	42.3	48.7	53.0	57.3	59.5	59.4	58.9	59.3
Participation rate (20-64) - MALES	2.0	80.2	82.4	83.6	82.8	82.1	81.5	81.5	81.8	82.1	82.2
Participation rate (15-64) - MALES	1.3	74.2	76.9	76.9	76.5	76.0	75.8	75.9	75.9	75.7	75.5
young (15-24)	-2.6	38.9	37.9	34.2	36.7	37.0	37.9	37.9	37.0	36.2	36.3
prime-age (25-54)	-1.2	90.1	90.1	89.6	89.0	88.6	88.7	89.0	89.3	89.2	88.9
older (55-64)	13.1	56.2	63.6	69.0	70.8	70.9	70.4	69.7	69.3	69.0	69.3
Average effective exit age (TOTAL) (1)	3.9	62.0	63.9	64.5	65.0	65.4	65.9	65.9	65.9	65.9	65.9
Men	2.1	63.9	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
Women	5.6	60.2	62.0	63.2	64.0	64.9	65.8	65.8	65.8	65.8	65.8
Employment rate (15-64)	4.4	60.3	63.6	63.6	63.9	64.1	64.5	64.9	65.0	64.8	64.7
Employment rate (20-64)	5.4	65.2	68.2	69.1	69.3	69.3	69.5	69.7	70.1	70.4	70.5
Employment rate (15-74)	0.6	55.1	56.0	55.6	56.4	57.5	57.6	56.8	55.7	55.2	55.6
Unemployment rate (15-64)	-3.1	10.5	8.7	9.1	8.5	7.9	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-3.0	10.3	8.5	8.9	8.4	7.8	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-3.3	10.4	8.5	8.8	8.3	7.7	7.2	7.1	7.0	7.0	7.1
Employment (20-64) (in millions)	-4.7	16.3	16.1	15.5	15.2	14.9	14.4	13.7	12.8	12.0	11.5
Employment (15-64) (in millions)	-4.8	16.4	16.2	15.6	15.2	15.0	14.5	13.8	12.9	12.1	11.6
share of young (15-24)	0%	7%	6%	6%	7%	7%	7%	6%	6%	7%	7%
share of prime-age (25-54)	-5%	79%	79%	80%	77%	73%	70%	69%	71%	73%	74%
share of older (55-64)	5%	14%	15%	15%	17%	20%	24%	24%	23%	21%	19%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.3	20.3	19.9	18.0	19.0	22.2	25.3	26.0	24.5	22.1	20.0
Old-age dependency ratio 15-64 (3)	40	21	28	33	36	37	40	46	53	58	61
Old-age dependency ratio 20-64 (3)	45	22	30	36	39	41	44	49	57	63	67
Total dependency ratio (4)	43	42	51	55	57	57	61	67	76	82	85
Total economic dependency ratio (5)	34	132	130	134	135	135	136	141	150	159	166
Economic old-age dependency ratio (15-64) (6)	54	33	40	47	51	54	57	64	73	81	87
Economic old-age dependency ratio (15-74) (7)	48	32	39	45	49	51	54	59	67	75	81

Poland		**EC-EPC (AWG) 2015 projections**									
Pension expenditure projections											
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.7	11.3	10.6	10.5	10.4	10.1	10.0	10.1	10.4	10.7	10.7
Earnings-related pensions, gross	0.0	10.4	10.0	10.0	9.9	9.7	9.5	9.8	10.1	10.4	10.5
Of which : Old-age and early pensions	0.2	9.1	8.9	9.0	8.9	8.5	8.3	8.4	8.8	9.2	9.3
Disability pensions	0.0	0.8	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8
Survivors pensions	-0.1	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.7	0.9	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Public pensions, net	-0.5	9.5	9.0	8.9	8.8	8.5	8.4	8.5	8.8	9.0	9.0
Public pensions, contributions	0.8	6.8	7.3	7.4	7.5	7.6	7.7	7.7	7.7	7.7	7.6
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.1%	84.2%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%	84.3%
Pensioners (Public, in 1000 persons)	1685	9218	9364	9594	9750	9770	9811	10163	10591	10884	10903
Pensioners aged 65+ (1000 persons)	4530	5570	6852	7759	8247	8392	8506	8972	9556	9977	10099
Share of pensioners below age 65 as % of all pensioners	-32.2%	39.6%	26.8%	19.1%	15.4%	14.1%	13.3%	11.7%	9.8%	8.3%	7.4%
Benefit ratio (Public pensions)	-18.5	47.9	45.4	42.8	40.6	38.9	37.2	35.1	32.8	30.9	29.4
Gross replacement rate at retirement (Public pensions)	-24.4	53.0	53.8	53.1	47.9	43.8	39.4	34.4	31.2	29.8	28.7
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	:	:	34.4	35.6	36.2	37.2	37.6	37.5	37.4	37.5	37.6
Contributors (Public pensions, in 1000 persons)	-3920.1	15980.4	16061.6	15636.0	15332.2	15074.4	14756.7	14185.5	13435.6	12669.9	12060.3
Support ratio (contributors/100 pensioners, Public pensions)	-62.7	173.4	171.5	163.0	157.3	154.3	150.4	139.6	126.9	116.4	110.6
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.3	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3
High labour productivity (+0.25 p.p.)	-0.4	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4
Lower labour productivity (-0.25 p.p.)	0.4	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.4	0.0	-0.3	-0.4	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.4
Policy scenario linking retirement age to increases in life expectancy	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.3	-0.2
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.7		-0.7	-0.8	-0.9	-1.2	-1.4	-1.2	-0.9	-0.6	-0.7
Dependency ratio	12.4		3.5	5.7	6.5	7.0	7.8	9.1	10.7	11.8	12.4
Coverage ratio	-5.2		-2.3	-3.4	-3.8	-4.0	-4.4	-4.7	-5.0	-5.1	-5.2
Of which : Old-age	-0.8		-0.3	-0.4	-0.3	-0.4	-0.7	-0.8	-0.9	-0.8	-0.8
Early-age	-11.0		-2.7	-5.2	-7.7	-9.4	-10.1	-10.4	-10.3	-10.3	-11.0
Cohort effect	-10.0		-3.5	-5.2	-5.1	-4.3	-4.5	-5.7	-7.7	-9.4	-10.0
Benefit ratio	-5.2		-0.8	-1.4	-1.9	-2.4	-2.8	-3.4	-4.1	-4.7	-5.2
Labour market ratio	-1.4		-0.7	-1.0	-1.0	-1.0	-1.1	-1.2	-1.4	-1.5	-1.4
Of which : Employment rate	-0.8		-0.5	-0.6	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.6		-0.2	-0.3	-0.3	-0.3	-0.4	-0.5	-0.7	-0.7	-0.6
Interaction effect (residual)	-1.2		-0.5	-0.7	-0.8	-0.8	-0.9	-1.0	-1.1	-1.2	-1.2
Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.7		-0.4	-0.1	-0.2	-0.2	-0.2	0.2	0.3	0.3	0.0
Dependency ratio	12.4		2.6	2.2	0.8	0.5	0.8	1.3	1.6	1.1	0.6
Coverage ratio	-5.2		-1.5	-1.1	-0.4	-0.2	-0.4	-0.3	-0.3	-0.1	-0.1
Of which : Old-age	-0.8		-0.2	-0.1	0.1	-0.1	-0.3	-0.1	-0.1	0.0	0.0
Early-age	-11.0		-1.8	-2.5	-2.5	-1.8	-0.7	-0.3	0.0	0.1	-0.7
Cohort effect	-10.0		-2.5	-1.8	0.2	0.8	-0.3	-1.2	-2.0	-1.7	-0.6
Benefit ratio	-5.2		-0.6	-0.6	-0.5	-0.4	-0.4	-0.6	-0.7	-0.6	-0.5
Labour market ratio	-1.4		-0.5	-0.3	0.0	0.0	-0.1	-0.2	-0.2	0.0	0.0
Of which : Employment rate	-0.8		-0.3	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.6		-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.1
Interaction effect (residual)	-1.2		-0.4	-0.3	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0
Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.2	4.2	4.4	4.6	4.8	5.0	5.1	5.1	5.2	5.4	5.5
Demographic scenario	1.3	4.2	4.4	4.6	4.8	5.0	5.1	5.2	5.3	5.5	5.6
High Life expectancy scenario	1.6	4.2	4.4	4.6	4.8	5.0	5.2	5.3	5.5	5.6	5.8
Constant health scenario	0.7	4.2	4.3	4.4	4.5	4.6	4.6	4.7	4.7	4.8	4.9
Death-related cost scenario	1.1	4.2	4.3	4.5	4.7	4.8	4.9	5.0	5.1	5.2	5.3
Income elasticity scenario	1.6	4.2	4.5	4.7	5.0	5.2	5.3	5.5	5.6	5.7	5.9
EU28 cost convergence scenario	3.0	4.2	4.5	4.9	5.2	5.6	5.9	6.2	6.5	6.8	7.2
Labour intensity scenario	2.3	4.2	4.4	4.7	4.9	5.1	5.3	5.5	5.8	6.2	6.5
Sector-specific composite indexation scenario	0.5	4.2	4.1	4.2	4.2	4.3	4.4	4.5	4.5	4.6	4.7
Non-demographic determinants scenario	3.1	4.2	4.8	5.2	5.7	6.1	6.4	6.7	6.9	7.2	7.4
AWG risk scenario	2.2	4.2	4.7	5.1	5.4	5.7	5.9	6.0	6.1	6.3	6.4
TFP risk scenario	1.2	4.2	4.4	4.6	4.8	5.0	5.1	5.1	5.2	5.3	5.4

Poland		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
Demographic scenario	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
High Life expectancy scenario	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
Base case scenario	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
Constant disability scenario	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6
Shift to formal care scenario	2.1	0.8	1.4	1.8	1.9	2.1	2.2	2.4	2.6	2.7	2.9
Coverage convergence scenario	1.0	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
Cost convergence scenario	2.1	0.8	1.0	1.1	1.3	1.5	1.8	2.0	2.3	2.5	2.9
Cost and coverage convergence scenario	2.1	0.8	1.0	1.1	1.3	1.5	1.8	2.0	2.3	2.5	2.9
AWG risk scenario	1.9	0.8	1.0	1.1	1.3	1.5	1.7	1.9	2.1	2.4	2.7
TFP risk scenario	0.9	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	32.4%	2563	2745	2868	3013	3171	3283	3320	3319	3341	3393
of which: receiving institutional care	92.0%	86	98	107	117	130	143	151	155	158	165
receiving home care	95.6%	118	135	147	162	179	198	211	216	221	231
receiving cash benefits	59.9%	1583	1736	1840	1962	2106	2272	2377	2420	2448	2531
Demographic scenario	44.9%	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
of which: receiving institutional care	105.0%	86	100	109	121	135	150	159	163	167	176
receiving home care	108.3%	118	137	150	167	186	207	220	227	234	246
receiving cash benefits	71.4%	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714
Constant disability scenario	20.8%	2563	2695	2781	2885	3004	3085	3095	3068	3064	3095
of which: receiving institutional care	79.4%	86	97	104	113	125	137	144	146	148	154
receiving home care	83.2%	118	133	144	157	172	190	201	205	208	216
receiving cash benefits	49.0%	1583	1710	1795	1895	2018	2167	2256	2283	2293	2359
Shift 1% of dependents from informal to formal scenario	44.9%	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
of which: receiving institutional care	283.6%	86	180	230	250	273	294	306	311	318	329
receiving home care	292.9%	118	253	325	351	382	411	429	438	447	464
receiving cash benefits	71.4%	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714
Coverage convergence scenario	44.9%	2563	2795	2956	3142	3341	3488	3556	3585	3634	3715
of which: receiving institutional care	106.7%	86	100	109	121	135	150	160	164	169	178
receiving home care	110.0%	118	137	151	167	187	208	222	229	235	248
receiving cash benefits	71.4%	1583	1761	1885	2030	2197	2382	2504	2564	2611	2714

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.1	4.4	4.1	4.2	4.1	4.0	3.8	3.8	3.9	4.1	4.3
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (61%) - Other (25%)											
Primary	0.1	1.5	1.7	1.6	1.5	1.4	1.4	1.4	1.5	1.6	1.6
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (7%) - Staff (65%) - Other (27%)											
Low secondary	0.0	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.8
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (4%) - Staff (67%) - Other (27%)											
Upper secondary	-0.1	0.9	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (1%) - Capital (5%) - Staff (62%) - Other (32%)											
Tertiary education	-0.2	1.3	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1
Expenditure decomposition (broadly constant) : Transfers (11%) - Capital (18%) - Staff (53%) - Other (18%)											
Number of students (in thousands)											
Total	-1923	7068	6649	6586	6391	5987	5616	5347	5255	5223	5145
as % of population 5-24	1%	82%	84%	85%	83%	84%	83%	83%	84%	84%	83%
Primary	-408	2170	2446	2282	2132	1927	1810	1814	1850	1833	1762
Low secondary	-259	1201	1150	1240	1175	1090	988	931	935	952	941
Upper secondary	-565	1872	1560	1696	1634	1573	1460	1345	1296	1304	1307
Tertiary education	-691	1825	1492	1368	1449	1397	1357	1258	1173	1134	1134
Number of teachers (in thousands)											
Total	-141	550	531	526	506	472	441	423	418	417	409
Primary	-39	208	234	219	204	185	173	174	177	176	169
Low secondary	-23	106	101	109	103	96	87	82	82	84	83
Upper secondary	-41	135	112	122	118	113	105	97	93	94	94
Tertiary education	-39	102	83	76	81	78	76	70	65	63	63
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.2	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

22. PORTUGAL

Portugal				EC-EPC (AWG) 2015 projections							
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.27	1.32	1.35	1.37	1.40	1.43	1.45	1.47	1.49	1.52
Life expectancy at birth											
males	7.1	77.4	78.6	79.4	80.2	81.0	81.7	82.4	83.1	83.8	84.5
females	5.7	83.5	84.4	85.1	85.7	86.3	86.9	87.5	88.1	88.6	89.2
Life expectancy at 65											
males	4.7	17.6	18.3	18.8	19.4	19.9	20.4	20.9	21.3	21.8	22.3
females	4.4	21.2	21.9	22.4	22.9	23.3	23.8	24.3	24.7	25.2	25.6
Net migration (thousand)	48.2	-40.3	0.3	6.9	9.2	10.2	11.9	10.2	8.3	8.0	7.9
Net migration as % of population	0.5	-0.4	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Population (million)	-2.3	10.5	10.1	9.9	9.8	9.6	9.4	9.1	8.8	8.5	8.2
Children population (0-14) as % of total population	-3.3	14.7	13.0	12.1	11.6	11.6	11.7	11.7	11.5	11.3	11.3
Prime age population (25-54) as % of total population	-10.1	42.3	39.9	38.5	36.7	34.9	34.0	33.7	33.3	32.7	32.2
Working age population (15-64) as % of total population	-11.6	65.7	64.6	63.5	61.5	59.3	56.7	54.6	53.8	54.1	54.1
Elderly population (65 and over) as % of total population	14.9	19.6	22.4	24.5	26.8	29.1	31.6	33.7	34.6	34.6	34.6
Very elderly population (80 and over) as % of total population	10.7	5.4	6.6	7.2	8.1	9.3	10.5	11.9	13.3	14.8	16.1
Very elderly population (80 and over) as % of elderly population	18.8	27.7	29.4	29.3	30.3	31.9	33.2	35.4	38.3	42.9	46.5
Very elderly population (80 and over) as % of working age population	21.5	8.3	10.2	11.3	13.2	15.6	18.5	21.9	24.6	27.5	29.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	0.9	-0.7	1.7	1.3	1.2	1.0	0.8	0.7	0.7	0.8	0.8
Employment (growth rate)	-0.6	-1.5	0.7	-0.2	-0.5	-0.8	-1.1	-1.1	-1.1	-0.8	-0.7
Labour input : hours worked (growth rate)	-0.6	-1.2	0.7	-0.3	-0.5	-0.8	-1.1	-1.1	-1.0	-0.8	-0.7
Labour productivity per hour (growth rate)	1.5	0.4	1.0	1.6	1.7	1.9	1.9	1.9	1.8	1.7	1.5
TFP (growth rate)	1.0	0.5	0.8	0.9	1.1	1.2	1.2	1.2	1.1	1.1	1.0
Capital deepening (contribution to labour productivity growth)	0.5	-0.1	0.2	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.4	-0.2	2.1	1.7	1.6	1.5	1.3	1.3	1.4	1.6	1.6
Potential GDP per worker (growth rate)	1.6	0.7	1.0	1.5	1.7	1.9	1.9	1.9	1.8	1.7	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-2437	6872	6538	6307	6003	5676	5308	4977	4756	4605	4435
Population growth (working age:15-64)	0.1	-0.9	-0.6	-0.8	-1.1	-1.2	-1.4	-1.1	-0.7	-0.7	-0.8
Population (20-64) (in thousands)	-2236	6323	6008	5812	5559	5275	4924	4594	4375	4236	4087
Population growth (20-64)	0.1	-0.9	-0.5	-0.7	-0.9	-1.1	-1.5	-1.2	-0.8	-0.7	-0.7
Labour force 15-64 (thousands)	-1687	5021	4842	4718	4531	4299	4022	3771	3595	3468	3334
Labour force 20-64 (thousands)	-1663	4954	4776	4656	4473	4248	3974	3723	3548	3422	3290
Participation rate (20-64)	2.2	78.3	79.5	80.1	80.5	80.5	80.7	81.0	81.1	80.8	80.5
Participation rate (15-64)	2.1	73.1	74.1	74.8	75.5	75.7	75.8	75.8	75.6	75.3	75.2
young (15-24)	1.6	35.3	36.2	36.9	37.7	37.6	36.8	36.2	36.2	36.6	36.9
prime-age (25-54)	0.2	88.2	88.6	88.7	88.8	88.7	88.6	88.5	88.5	88.4	88.4
older (55-64)	14.3	54.3	61.8	65.2	67.6	68.6	68.6	68.3	68.6	68.8	68.6
Participation rate (20-64) - FEMALES	4.9	74.6	77.3	78.6	79.3	79.5	79.7	80.0	80.1	79.8	79.5
Participation rate (15-64) - FEMALES	4.5	69.8	72.3	73.6	74.6	74.9	74.9	74.9	74.7	74.4	74.3
young (15-24)	1.5	34.0	34.9	35.5	36.4	36.4	35.4	34.9	34.8	35.2	35.6
prime-age (25-54)	2.1	85.6	87.3	88.0	88.2	88.1	87.8	87.8	87.7	87.7	87.7
older (55-64)	20.9	46.8	57.0	61.8	65.8	67.5	67.9	67.7	67.6	67.8	67.6
Participation rate (20-64) - MALES	-0.9	82.3	81.8	81.7	81.7	81.7	81.6	81.8	82.0	82.1	81.7	81.4
Participation rate (15-64) - MALES	-0.4	76.5	75.9	76.1	76.4	76.5	76.6	76.6	76.5	76.2	76.0
young (15-24)	1.5	36.6	37.4	38.2	38.8	38.8	38.0	37.5	37.4	37.8	38.2
prime-age (25-54)	-1.9	91.0	89.9	89.4	89.4	89.3	89.3	89.3	89.2	89.1	89.1
older (55-64)	6.8	62.7	67.1	69.1	69.7	69.8	69.3	69.1	69.6	69.8	69.5
Average effective exit age (TOTAL) (1)	2.3	64.1	65.2	65.8	66.1	66.1	66.2	66.3	66.3	66.4	66.4
Men	2.4	64.3	65.3	65.9	66.4	66.4	66.5	66.6	66.6	66.6	66.7
Women	2.3	63.9	65.1	65.6	65.8	65.9	66.0	66.0	66.1	66.1	66.2
Employment rate (15-64)	8.9	60.6	64.7	68.1	69.1	69.8	70.1	70.1	69.9	69.7	69.6
Employment rate (20-64)	9.3	65.4	69.8	73.2	73.9	74.4	74.8	75.2	75.2	74.9	74.7
Employment rate (15-74)	7.6	55.0	57.7	60.5	61.3	61.7	61.7	61.3	61.5	62.2	62.6
Unemployment rate (15-64)	-9.6	17.0	12.6	8.9	8.4	7.9	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-9.3	16.5	12.2	8.7	8.2	7.7	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-9.6	16.5	12.1	8.5	7.9	7.3	6.9	6.8	6.9	6.9	6.9
Employment (20-64) (in millions)	-1.1	4.1	4.2	4.3	4.1	3.9	3.7	3.5	3.3	3.2	3.1
Employment (15-64) (in millions)	-1.1	4.2	4.2	4.3	4.1	4.0	3.7	3.5	3.3	3.2	3.1
share of young (15-24)	1%	6%	7%	7%	7%	7%	7%	7%	7%	7%	7%
share of prime-age (25-54)	-9%	79%	75%	72%	71%	69%	70%	73%	73%	71%	70%
share of older (55-64)	7%	15%	19%	20%	22%	24%	23%	21%	20%	21%	22%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	4.8	19.4	21.6	22.9	24.5	26.0	25.0	22.6	21.9	23.0	24.1
Old-age dependency ratio 15-64 (3)	34	30	35	39	44	49	56	62	64	64	64
Old-age dependency ratio 20-64 (3)	37	32	38	42	47	53	60	67	70	70	69
Total dependency ratio (4)	33	52	55	58	63	69	76	83	86	85	85
Total economic dependency ratio (5)	1	140	128	118	118	121	127	134	139	142	142
Economic old-age dependency ratio (15-64) (6)	37	45	49	50	55	61	69	76	81	82	82
Economic old-age dependency ratio (15-74) (7)	32	43	46	47	51	56	62	68	73	75	74

Portugal		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.7	13.8	14.6	14.9	15.0	15.0	14.8	14.6	14.4	13.8	13.1
Earnings-related pensions, gross	-1.1	12.1	13.0	13.4	13.5	13.4	13.2	12.8	12.4	11.8	11.1
Of which : Old-age and early pensions	-0.7	10.1	11.1	11.5	11.5	11.5	11.3	11.0	10.7	10.1	9.4
Disability pensions	-0.1	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
Survivors pensions	-0.3	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.2
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.4	1.7	1.5	1.5	1.5	1.6	1.7	1.8	2.0	2.1	2.1
Private occupational pensions, gross	-0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	-0.3	0.6	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.3	0.3
Public pensions, net	-0.7	13.0	13.7	14.0	14.0	14.0	13.9	13.7	13.5	12.9	12.3
Public pensions, contributions	-1.0	10.5	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-0.5%	94.2%	93.9%	93.7%	93.6%	93.6%	93.5%	93.5%	93.5%	93.5%	93.7%
Pensioners (Public, in 1000 persons)	294	2552	2648	2718	2806	2908	2989	3038	3032	2961	2846
Pensioners aged 65+ (1000 persons)	678	1844	2054	2162	2286	2412	2550	2661	2692	2629	2522
Share of pensioners below age 65 as % of all pensioners	-16.3%	27.7%	22.4%	20.5%	18.5%	17.1%	14.7%	12.4%	11.2%	11.2%	11.4%
Benefit ratio (Public pensions)	-20.0	61.8	64.8	66.3	63.3	59.1	54.4	49.9	46.7	43.9	41.7
Gross replacement rate at retirement (Old-age earnings-related pensions)	-26.7	57.5	50.7	44.8	43.2	38.8	36.1	39.0	35.2	31.8	30.7
Average accrual rates (new pensions, earnings related)	0.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Average contributory period (new pensions, earnings-related)	8.0	28.4	31.0	31.4	32.4	32.9	33.1	34.0	34.6	35.7	36.4
Contributors (Public pensions, in 1000 persons)	-917.2	3586.2	3497.8	3588.6	3524.0	3402.4	3244.2	3067.0	2902.9	2772.6	2669.0
Support ratio (contributors/100 pensioners, Public pensions)	-46.7	140.5	132.1	132.0	125.6	117.0	108.5	101.0	95.7	93.6	93.8
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	1.0	0.0	0.0	0.1	0.3	0.4	0.5	0.8	0.8	0.9	1.0
High labour productivity (+0.25 p.p.)	-1.0	0.0	0.0	-0.1	-0.3	-0.5	-0.6	-0.8	-0.9	-1.0	-1.0
Lower labour productivity (-0.25 p.p.)	1.1	0.0	0.1	-0.1	0.2	0.4	0.6	0.8	0.9	1.0	1.1
High employment rate (+2 p.p)	-0.3	0.0	-0.2	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
High emp. of older workers (+10 p.p.)	-0.7	0.0	-0.4	-0.2	-0.3	-0.5	-0.6	-0.7	-0.7	-0.7	-0.7
Lower migration (-20%)	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3
TFP risk scenario	1.2	0.0	0.0	-0.1	0.1	0.3	0.5	0.7	0.9	1.1	1.2
Policy scenario linking retirement age to increases in life expectancy	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.7		0.7	1.1	1.1	1.2	1.0	0.8	0.6	0.0	-0.7
Dependency ratio	11.7		2.2	3.8	5.6	7.4	9.5	11.2	11.9	11.8	11.7
Coverage ratio	-3.1		-0.9	-1.5	-2.1	-2.5	-3.0	-3.3	-3.2	-3.1	-3.1
Of which : Old-age	-0.2		0.1	-0.2	-0.4	-0.5	-0.6	-0.6	-0.3	-0.1	-0.2
Early-age	-7.0		-2.8	-4.1	-5.0	-4.9	-4.9	-5.5	-6.4	-6.8	-7.0
Cohort effect	-8.2		-0.8	-1.4	-2.5	-4.1	-6.6	-8.7	-9.3	-8.6	-8.2
Benefit ratio	-5.9		0.5	0.8	0.1	-0.9	-2.1	-3.4	-4.3	-5.2	-5.9
Labour market ratio	-2.6		-0.9	-1.7	-2.1	-2.4	-2.7	-2.9	-2.8	-2.6	-2.6
Of which : Employment rate	-1.9		-0.9	-1.6	-1.7	-1.8	-1.9	-2.0	-2.0	-1.9	-1.9
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.7		-0.1	-0.2	-0.4	-0.6	-0.8	-0.9	-0.8	-0.7	-0.7
Interaction effect (residual)	-0.9		-0.1	-0.2	-0.4	-0.5	-0.7	-0.9	-0.9	-0.9	-0.9

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.7		0.8	0.3	0.1	0.0	-0.1	-0.2	-0.2	-0.6	-0.7
Dependency ratio	11.7		1.5	1.6	1.9	1.8	2.1	1.7	0.7	-0.1	-0.1
Coverage ratio	-3.1		-0.6	-0.6	-0.6	-0.4	-0.5	-0.3	0.0	0.2	0.0
Of which : Old-age	-0.2		-0.1	-0.3	-0.3	-0.1	-0.1	0.1	0.2	0.2	0.0
Early-age	-7.0		-1.6	-1.3	-0.9	0.1	0.0	-0.6	-0.9	-0.4	-0.1
Cohort effect	-8.2		-0.6	-0.6	-1.1	-1.6	-2.5	-2.1	-0.5	0.6	0.4
Benefit ratio	-5.9		0.6	0.3	-0.7	-1.0	-1.2	-1.2	-1.0	-0.9	-0.7
Labour market ratio	-2.6		-0.5	-0.8	-0.4	-0.3	-0.3	-0.2	0.1	0.2	0.0
Of which : Employment rate	-1.9		-0.5	-0.7	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.7		-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	0.1	0.1	0.0
Interaction effect (residual)	-0.9		-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.5	6.0	6.4	6.7	7.1	7.4	7.8	8.0	8.3	8.4	8.5
Demographic scenario	2.8	6.0	6.4	6.8	7.1	7.5	7.9	8.2	8.5	8.7	8.8
High Life expectancy scenario	3.4	6.0	6.4	6.8	7.2	7.7	8.1	8.5	8.9	9.2	9.4
Constant health scenario	1.6	6.0	6.2	6.5	6.7	7.0	7.2	7.4	7.5	7.6	7.7
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	3.1	6.0	6.5	6.9	7.3	7.8	8.1	8.5	8.8	9.0	9.2
EU28 cost convergence scenario	3.4	6.0	6.5	6.9	7.4	7.8	8.2	8.6	8.9	9.2	9.5
Labour intensity scenario	3.2	6.0	6.3	6.4	6.8	7.3	7.8	8.4	8.8	9.1	9.3
Sector-specific composite indexation scenario	1.8	6.0	6.2	6.4	6.6	6.9	7.1	7.4	7.6	7.8	7.9
Non-demographic determinants scenario	4.9	6.0	6.7	7.4	8.0	8.6	9.2	9.8	10.3	10.7	10.9
AWG risk scenario	3.5	6.0	6.6	7.1	7.6	8.1	8.6	8.9	9.2	9.4	9.6
TFP risk scenario	2.5	6.0	6.4	6.7	7.1	7.4	7.7	8.0	8.3	8.4	8.5

Portugal	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
Demographic scenario	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.9
High Life expectancy scenario	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
Base case scenario	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9
Constant disability scenario	0.3	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
Shift to formal care scenario	2.5	0.5	1.4	1.9	2.0	2.2	2.3	2.6	2.7	2.9	3.0
Coverage convergence scenario	1.1	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.4	1.5
Cost convergence scenario	1.6	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.2	1.5	2.1
Cost and coverage convergence scenario	2.3	0.5	0.6	0.6	0.7	0.9	1.0	1.3	1.6	2.1	2.7
AWG risk scenario	2.1	0.5	0.6	0.6	0.7	0.8	1.0	1.2	1.5	2.0	2.6
TFP risk scenario	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	14.1%	893	942	970	999	1027	1048	1058	1058	1045	1018
of which: receiving institutional care	31.6%	23	24	25	27	28	29	30	31	31	30
receiving home care	23.4%	14	14	15	15	16	17	17	18	17	17
receiving cash benefits	56.1%	268	293	308	323	342	363	383	401	413	418
Demographic scenario	23.0%	893	955	994	1034	1072	1102	1120	1128	1121	1098
of which: receiving institutional care	40.1%	23	25	26	27	29	31	32	33	33	32
receiving home care	29.8%	14	14	15	15	16	17	18	18	18	18
receiving cash benefits	64.5%	268	296	313	332	353	377	400	419	434	440
Constant disability scenario	6.3%	893	928	946	965	984	998	1002	995	978	949
of which: receiving institutional care	23.7%	23	24	25	26	27	28	29	29	29	28
receiving home care	17.5%	14	14	14	15	16	16	17	17	16	16
receiving cash benefits	49.3%	268	290	302	315	332	351	369	385	396	399
Shift 1% of dependents from informal to formal scenario	23.0%	893	955	994	1034	1072	1102	1120	1128	1121	1098
of which: receiving institutional care	371.8%	23	71	95	99	103	107	109	110	110	107
receiving home care	276.0%	14	35	45	47	49	51	53	53	53	52
receiving cash benefits	64.5%	268	296	313	332	353	377	400	419	434	440
Coverage convergence scenario	23.0%	893	955	994	1034	1072	1102	1120	1128	1121	1098
of which: receiving institutional care	136.6%	23	27	30	33	37	41	45	49	52	54
receiving home care	108.6%	14	15	17	18	20	22	24	26	28	29
receiving cash benefits	64.5%	268	296	313	332	353	377	400	419	434	440

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-1.0	5.2	4.7	4.2	4.0	3.9	4.0	4.2	4.3	4.3	4.2
Expenditure decomposition (broadly constant) : Transfers (6%) - Capital (3%) - Staff (81%) - Other (11%)											
Primary	-0.3	1.5	1.3	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (1%) - Staff (90%) - Other (6%)											
Low secondary	-0.3	1.3	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (2%) - Staff (87%) - Other (8%)											
Upper secondary	-0.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (3%) - Capital (2%) - Staff (86%) - Other (9%)											
Tertiary education	-0.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (15%) - Capital (6%) - Staff (57%) - Other (22%)											
Number of students (in thousands)											
Total	-744	2040	1873	1741	1621	1538	1494	1461	1417	1357	1296
as % of population 5-24	2%	94%	93%	93%	94%	96%	97%	96%	96%	95%	95%
Primary	-275	695	612	542	511	502	501	490	468	440	420
Low secondary	-179	480	436	409	370	352	345	342	333	318	301
Upper secondary	-159	467	447	424	389	361	346	340	334	323	308
Tertiary education	-131	398	378	366	350	323	302	289	282	276	267
Number of teachers (in thousands)											
Total	-69	188	173	161	149	142	138	135	131	125	120
Primary	-25	63	56	49	47	46	46	45	43	40	38
Low secondary	-18	48	43	41	37	35	34	34	33	32	30
Upper secondary	-17	49	47	45	41	38	37	36	35	34	33
Tertiary education	-9	28	26	26	25	23	21	20	20	19	19
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.9	1.5	1.1	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

23. ROMANIA

Romania		EC-EPC (AWG) 2015 projections									

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.65	1.73	1.76	1.79	1.80	1.81	1.82	1.82	1.83	1.83
Life expectancy at birth											
males	10.6	71.2	73.0	74.3	75.5	76.7	77.8	78.8	79.9	80.9	81.8
females	8.5	78.2	79.7	80.7	81.6	82.6	83.5	84.3	85.1	85.9	86.7
Life expectancy at 65											
males	6.2	14.5	15.5	16.2	16.9	17.5	18.2	18.8	19.5	20.1	20.7
females	6.1	17.7	18.6	19.3	20.0	20.6	21.3	21.9	22.6	23.2	23.8
Net migration (thousand)	11.6	-9.2	0.4	-24.1	-24.7	11.6	11.6	10.0	7.1	5.3	2.4
Net migration as % of population	0.1	0.0	0.0	-0.1	-0.1	0.1	0.1	0.1	0.0	0.0	0.0
Population (million)	-2.6	20.0	19.7	19.4	19.0	18.7	18.4	18.2	17.9	17.7	17.4
Children population (0-14) as % of total population	-0.4	15.6	15.6	15.3	15.3	15.0	14.9	15.0	15.2	15.3	15.3
Prime age population (25-54) as % of total population	-8.5	42.5	42.7	40.4	38.3	36.3	35.2	34.0	34.0	34.0	34.1
Working age population (15-64) as % of total population	-12.1	68.0	65.5	64.1	63.8	61.8	60.0	58.0	57.0	55.7	55.8
Elderly population (65 and over) as % of total population	12.5	16.4	18.9	20.5	20.8	23.2	25.1	27.0	27.8	29.0	28.9
Very elderly population (80 and over) as % of total population	7.7	3.9	4.7	4.7	5.5	6.8	7.7	7.5	9.0	10.3	11.5
Very elderly population (80 and over) as % of elderly population	16.3	23.6	24.6	22.9	26.3	29.1	30.6	27.7	32.5	35.4	39.9
Very elderly population (80 and over) as % of working age population	15.0	5.7	7.1	7.3	8.6	10.9	12.8	12.9	15.9	18.5	20.7
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.6	1.9	2.2	1.9	1.4	1.4	1.5	1.5	1.4	1.3	1.1
Employment (growth rate)	-0.7	0.1	-0.6	-0.8	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5	-0.4
Labour input : hours worked (growth rate)	-0.7	0.4	-0.6	-0.8	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5	-0.4
Labour productivity per hour (growth rate)	2.3	1.5	2.7	2.7	2.5	2.3	2.3	2.3	2.1	1.8	1.5
TFP (growth rate)	1.4	0.7	1.5	1.7	1.6	1.5	1.5	1.5	1.3	1.2	1.0
Capital deepening (contribution to labour productivity growth)	0.9	0.8	1.2	1.1	0.9	0.8	0.8	0.8	0.7	0.6	0.5
Potential GDP per capita (growth rate)	1.9	2.2	2.4	2.3	1.8	1.7	1.8	1.8	1.6	1.6	1.5
Potential GDP per worker (growth rate)	2.3	1.8	2.8	2.8	2.5	2.3	2.3	2.3	2.1	1.8	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-3867	13588	12882	12415	12103	11529	11056	10551	10236	9863	9721
Population growth (working age:15-64)	0.5	-0.8	-0.9	-0.6	-0.3	-1.0	-1.0	-0.9	-0.6	-0.6	-0.3
Population (20-64) (in thousands)	-3695	12496	11824	11349	11135	10512	10082	9609	9311	8939	8801
Population growth (20-64)	0.6	-0.9	-0.9	-0.6	-0.3	-1.0	-1.0	-0.9	-0.7	-0.3	-0.3
Labour force 15-64 (thousands)	-2610	8683	8344	8008	7655	7196	6844	6557	6351	6166	6073
Labour force 20-64 (thousands)	-2590	8560	8225	7888	7548	7081	6734	6450	6247	6063	5970
Participation rate (20-64)	-0.7	68.5	69.6	69.5	67.8	67.4	66.8	67.1	67.1	67.8	67.8
Participation rate (15-64)	-1.4	63.9	64.8	64.5	63.2	62.4	61.9	62.1	62.0	62.5	62.5
young (15-24)	-1.1	29.8	28.7	28.4	29.1	29.1	29.0	29.0	28.8	28.6	28.6
prime-age (25-54)	-2.5	80.1	79.1	78.5	77.8	77.7	77.4	77.5	77.6	77.6	77.6
older (55-64)	5.7	43.0	46.3	51.3	50.0	49.7	48.4	49.4	47.8	48.6	48.7
Participation rate (20-64) - FEMALES	-1.5	59.7	60.1	59.9	58.1	57.7	57.1	57.5	57.5	58.2	58.2
Participation rate (15-64) - FEMALES	-2.1	55.7	56.0	55.7	54.3	53.5	53.0	53.2	53.2	53.7	53.6
young (15-24)	-0.6	24.7	24.2	23.9	24.5	23.6	24.5	24.4	24.2	24.1	24.1
prime-age (25-54)	-3.8	72.0	70.3	69.4	68.6	68.4	68.0	68.1	68.2	68.2	68.1
older (55-64)	4.3	33.4	35.2	39.9	39.0	39.0	37.7	38.5	36.9	37.7	37.7
Participation rate (20-64) - MALES	-0.1	77.3	78.9	78.9	77.3	76.8	76.3	76.5	76.5	77.2	77.2
Participation rate (15-64) - MALES	-1.0	72.0	73.4	73.2	72.0	71.1	70.7	70.8	70.7	71.1	71.1
young (15-24)	-1.6	34.6	33.1	32.7	33.5	32.3	33.5	33.4	33.2	33.0	33.0
prime-age (25-54)	-1.2	87.8	87.7	87.2	86.8	86.7	86.5	86.6	86.6	86.7	86.6
older (55-64)	6.0	53.9	58.4	63.3	61.5	60.9	59.5	60.5	58.8	59.8	59.9
Average effective exit age (TOTAL) (1)	0.2	63.1	63.2	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3
Men	0.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
Women	0.3	62.3	62.4	62.5	62.6	62.6	62.6	62.6	62.6	62.6	62.6
Employment rate (15-64)	-1.0	59.1	60.2	60.0	58.9	58.1	57.7	57.9	57.8	58.2	58.2
Employment rate (20-64)	-0.2	63.6	64.9	64.9	63.3	62.9	62.5	62.8	63.4	63.4	63.4
Employment rate (15-74)	-4.2	54.8	53.7	53.1	52.6	51.5	50.0	49.8	49.9	50.3	50.5
Unemployment rate (15-64)	-0.6	7.4	7.1	7.0	7.0	6.9	6.9	6.9	6.9	6.9	6.9
Unemployment rate (20-64)	-0.6	7.1	6.7	6.6	6.6	6.5	6.5	6.5	6.5	6.5	6.5
Unemployment rate (15-74)	-0.6	7.1	6.8	6.7	6.7	6.6	6.5	6.5	6.5	6.5	6.5
Employment (20-64) (in millions)	-2.4	8.0	7.7	7.4	7.0	6.6	6.3	6.0	5.8	5.7	5.6
Employment (15-64) (in millions)	-2.4	8.0	7.8	7.4	7.1	6.7	6.4	6.1	5.9	5.7	5.7
share of young (15-24)	1%	7%	6%	6%	6%	6%	7%	7%	7%	7%	7%
share of prime-age (25-54)	-3%	79%	80%	77%	75%	74%	74%	74%	74%	75%	77%
share of older (55-64)	2%	14%	13%	16%	19%	20%	19%	19%	18%	16%	16%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.4	20.3	18.1	19.9	23.2	23.9	23.2	23.1	22.0	20.1	19.9
Old-age dependency ratio 15-64 (3)	28	24	29	32	33	38	42	47	49	52	52
Old-age dependency ratio 20-64 (3)	31	26	31	35	35	41	46	51	54	58	57
Total dependency ratio (4)	32	47	53	56	57	62	67	72	75	80	79
Total economic dependency ratio (5)	54	138	143	148	156	165	172	180	187	191	192
Economic old-age dependency ratio (15-64) (6)	47	36	44	49	51	59	66	74	78	84	84
Economic old-age dependency ratio (15-74) (7)	45	35	42	46	49	56	62	70	74	79	79

Romania		EC-EPC (AWG) 2015 projections									
Pension expenditure projections											
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.1	8.2	8.1	8.0	8.1	8.4	8.4	8.5	8.4	8.3	8.1
Earnings-related pensions, gross	-0.1	8.1	8.1	8.0	8.0	8.3	8.4	8.4	8.3	8.2	8.0
Of which : Old-age and early pensions	-0.1	6.9	6.9	6.8	6.7	7.0	7.1	7.2	7.1	7.1	6.9
Disability pensions	-0.1	0.8	0.7	0.8	0.9	0.9	0.9	0.8	0.7	0.7	0.7
Survivors pensions	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	0.8
New pensions, gross	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Public pensions, net	-0.1	7.8	7.7	7.6	7.7	7.9	8.0	8.0	7.9	7.9	7.7
Public pensions, contributions	1.0	5.5	6.1	6.0	6.1	6.1	6.1	6.2	6.3	6.4	6.5
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Pensioners (Public, in 1000 persons)	808	5392	5788	5987	6267	6526	6688	6693	6605	6426	6200
Pensioners aged 65+ (1000 persons)	1478	3135	3581	3914	3928	4221	4491	4716	4738	4788	4614
Share of pensioners below age 65 as % of all pensioners	-16.3%	41.8%	38.1%	34.6%	37.3%	35.3%	32.9%	29.5%	28.3%	25.5%	25.6%
Benefit ratio (Public pensions)	-13.6	37.0	34.0	31.4	28.6	27.0	25.6	24.7	23.9	23.6	23.4
Gross replacement rate at retirement (Old-age earnings-related pensions)	-1.9	35.6	36.6	36.8	35.9	35.2	34.4	34.2	34.1	33.9	33.7
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	3.6	30.6	32.4	32.7	33.1	33.2	33.3	33.6	34.0	34.0	34.3
Contributors (Public pensions, in 1000 persons)	-920.2	5947.8	6043.6	5895.5	5790.0	5505.5	5335.7	5167.1	5104.1	5025.4	5027.6
Support ratio (contributors/100 pensioners, Public pensions)	-29.2	110.3	104.4	98.5	92.4	84.4	79.8	77.2	77.3	78.2	81.1
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4
High labour productivity (+0.25 p.p.)	-0.3	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	-0.4	0.0	-0.2	-0.4	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4
Lower migration (-20%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4
Policy scenario linking retirement age to increases in life expectancy	-0.5	0.0	-0.1	-0.1	-0.2	-0.4	-0.4	-0.5	-0.5	-0.6	-0.5
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.1		-0.1	-0.2	-0.1	0.1	0.2	0.2	0.2	0.0	-0.1
Dependency ratio	6.8		1.6	2.5	2.6	3.9	4.9	5.8	6.2	6.8	6.8
Coverage ratio	-2.3		-0.4	-0.7	-0.3	-0.7	-1.0	-1.5	-1.8	-2.2	-2.3
Of which : Old-age	-0.4		0.1	0.2	0.3	0.1	0.1	0.0	-0.1	-0.2	-0.4
Early-age	-0.4		0.1	-0.5	-0.2	0.2	0.1	0.1	0.1	-0.2	-0.4
Cohort effect	-5.6		-1.2	-1.6	-0.9	-2.1	-2.8	-4.1	-4.7	-5.7	-5.6
Benefit ratio	-4.0		-1.0	-1.6	-2.3	-2.7	-3.2	-3.5	-3.8	-3.9	-4.0
Labour market ratio	0.0		-0.1	-0.2	0.1	0.0	0.0	0.0	0.0	-0.1	0.0
Of which : Employment rate	0.0		-0.2	-0.2	0.0	0.1	0.2	0.1	0.1	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Interaction effect (residual)	-0.6		-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6
Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.1		-0.1	-0.1	0.0	0.3	0.1	0.0	-0.1	-0.1	-0.2
Dependency ratio	6.8		1.1	0.9	0.1	1.3	0.9	1.0	0.4	0.6	0.0
Coverage ratio	-2.3		-0.4	-0.3	0.4	-0.4	-0.3	-0.5	-0.2	-0.5	-0.1
Of which : Old-age	-0.4		0.1	0.2	0.1	-0.2	0.0	-0.1	-0.1	-0.2	-0.1
Early-age	-0.4		-0.4	-0.6	0.3	0.4	-0.1	0.0	0.0	-0.3	-0.2
Cohort effect	-5.6		-0.6	-0.4	0.8	-1.2	-0.8	-1.3	-0.6	-1.0	0.1
Benefit ratio	-4.0		-0.7	-0.6	-0.7	-0.5	-0.4	-0.3	-0.3	-0.1	-0.1
Labour market ratio	0.0		-0.1	0.0	0.2	0.0	0.0	0.0	0.0	-0.1	0.0
Of which : Employment rate	0.0		-0.1	0.0	0.2	0.0	0.1	0.0	0.0	-0.1	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.6		-0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.0	3.8	4.1	4.2	4.3	4.5	4.6	4.6	4.7	4.7	4.8
Demographic scenario	1.1	3.8	4.1	4.2	4.3	4.5	4.6	4.7	4.8	4.8	4.8
High Life expectancy scenario	1.3	3.8	4.1	4.2	4.4	4.5	4.7	4.8	4.9	5.0	5.1
Constant health scenario	0.5	3.8	4.0	4.0	4.1	4.1	4.2	4.2	4.3	4.3	4.3
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.3	3.8	4.1	4.3	4.5	4.6	4.8	4.9	5.0	5.0	5.1
EU28 cost convergence scenario	3.3	3.8	4.3	4.6	5.0	5.3	5.7	6.0	6.4	6.8	7.1
Labour intensity scenario	2.0	3.8	4.1	4.3	4.6	4.9	5.1	5.4	5.6	5.7	5.8
Sector-specific composite indexation scenario	0.5	3.8	3.9	3.9	4.0	4.0	4.1	4.2	4.2	4.2	4.3
Non-demographic determinants scenario	2.5	3.8	4.4	4.7	5.0	5.3	5.6	5.9	6.1	6.2	6.3
AWG risk scenario	1.7	3.8	4.3	4.6	4.8	5.0	5.2	5.3	5.4	5.5	5.5
TFP risk scenario	0.9	3.8	4.1	4.2	4.3	4.5	4.5	4.6	4.7	4.7	4.7

Romania	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
Demographic scenario	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.4
High Life expectancy scenario	0.8	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5
Base case scenario	1.0	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.7
Constant disability scenario	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4
Shift to formal care scenario	1.5	0.7	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.2
Coverage convergence scenario	1.0	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.7
Cost convergence scenario	3.5	0.7	0.9	1.0	1.2	1.4	1.7	2.1	2.6	3.2	4.2
Cost and coverage convergence scenario	3.6	0.7	0.9	1.0	1.2	1.4	1.8	2.1	2.6	3.3	4.3
AWG risk scenario	3.2	0.7	0.9	1.0	1.1	1.4	1.7	2.0	2.4	3.1	3.9
TFP risk scenario	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	22.1%	1531	1584	1628	1680	1724	1761	1788	1818	1855	1869
of which: receiving institutional care	52.1%	189	203	208	218	230	244	252	261	272	287
receiving home care	67.5%	204	223	231	244	263	280	293	306	323	343
receiving cash benefits	45.8%	460	491	506	524	547	575	599	616	636	670
Demographic scenario	35.9%	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
of which: receiving institutional care	64.5%	189	207	215	227	241	258	269	280	293	311
receiving home care	80.2%	204	226	238	254	274	295	311	327	347	368
receiving cash benefits	57.9%	460	501	521	546	574	610	639	663	687	725
Constant disability scenario	10.0%	1531	1547	1565	1596	1627	1640	1653	1667	1688	1685
of which: receiving institutional care	41.1%	189	199	202	209	220	231	238	245	253	266
receiving home care	55.9%	204	219	225	236	252	267	278	288	302	319
receiving cash benefits	35.2%	460	482	490	503	523	546	565	578	593	621
Shift 1% of dependents from informal to formal scenario	35.9%	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
of which: receiving institutional care	116.5%	189	263	298	313	330	350	362	375	390	409
receiving home care	133.9%	204	284	323	344	368	393	412	432	455	478
receiving cash benefits	57.9%	460	501	521	546	574	610	639	663	687	725
Coverage convergence scenario	35.9%	1531	1620	1692	1770	1831	1898	1945	1995	2048	2081
of which: receiving institutional care	67.7%	189	207	216	228	243	261	272	284	298	317
receiving home care	84.2%	204	227	239	255	276	299	315	331	354	377
receiving cash benefits	57.9%	460	501	521	546	574	610	639	663	687	725

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.4	2.6	2.6	2.6	2.7	2.8	2.8	2.9	2.9	3.0	3.0
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (61%) - Other (26%)											
Primary	0.1	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (4%) - Staff (75%) - Other (20%)											
Low secondary	0.1	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (11%) - Staff (68%) - Other (20%)											
Upper secondary	0.1	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (5%) - Capital (7%) - Staff (63%) - Other (25%)											
Tertiary education	0.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (8%) - Capital (11%) - Staff (47%) - Other (33%)											
Number of students (in thousands)											
Total	-651	3613	3411	3346	3251	3181	3111	3053	3011	2994	2963
as % of population 5-24	0%	81%	81%	81%	81%	82%	81%	81%	81%	81%	81%
Primary	-136	877	806	855	813	780	761	760	758	754	741
Low secondary	-141	890	881	794	839	802	774	759	757	755	749
Upper secondary	-157	947	911	909	845	866	839	811	795	793	790
Tertiary education	-216	899	812	787	754	734	736	723	701	692	683
Number of teachers (in thousands)											
Total	-35	205	195	190	187	182	178	174	172	172	170
Primary	-8	52	48	51	48	46	45	45	45	45	44
Low secondary	-11	71	70	63	66	63	61	60	60	60	59
Upper secondary	-9	54	52	52	48	50	48	46	46	45	45
Tertiary education	-7	28	26	25	24	23	23	23	22	22	21

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

24. SLOVENIA

Slovenia				EC-EPC (AWG) 2015 projections							

Main demographic and macroeconomic assumptions

Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.59	1.63	1.65	1.67	1.69	1.70	1.71	1.73	1.74	1.75
Life expectancy at birth											
males	7.1	77.2	78.4	79.2	80.0	80.8	81.5	82.3	83.0	83.6	84.3
females	5.9	83.1	84.1	84.7	85.4	86.0	86.7	87.3	87.8	88.4	88.9
Life expectancy at 65											
males	4.9	17.1	17.9	18.5	19.0	19.5	20.0	20.6	21.1	21.5	22.0
females	4.6	20.9	21.6	22.2	22.7	23.2	23.6	24.1	24.6	25.0	25.5
Net migration (thousand)	3.7	0.8	4.1	4.0	4.6	4.8	5.5	5.7	5.4	4.7	4.5
Net migration as % of population	0.2	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Population (million)	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
Children population (0-14) as % of total population	0.2	14.5	15.4	14.9	14.0	13.4	13.6	14.3	14.9	14.9	14.7
Prime age population (25-54) as % of total population	-8.9	43.8	40.6	38.4	36.4	34.9	34.2	33.8	34.1	34.5	35.0
Working age population (15-64) as % of total population	-12.2	68.2	64.0	62.2	61.0	59.9	58.5	56.6	55.3	55.0	55.9
Elderly population (65 and over) as % of total population	12.1	17.3	20.6	22.9	25.0	26.7	27.9	29.2	29.9	30.0	29.4
Very elderly population (80 and over) as % of total population	7.8	4.6	5.5	6.0	6.8	8.4	9.6	10.6	11.1	11.6	12.4
Very elderly population (80 and over) as % of elderly population	15.8	26.5	26.7	26.0	27.3	31.5	34.6	36.2	37.2	38.6	42.3
Very elderly population (80 and over) as % of working age population	15.5	6.7	8.6	9.6	11.2	14.0	16.5	18.7	20.1	21.1	22.2
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.3	-0.6	1.9	1.5	1.4	1.4	1.2	1.3	1.3	1.4	1.6
Employment (growth rate)	-0.3	-1.4	0.7	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4	-0.2	0.1
Labour input : hours worked (growth rate)	-0.3	-1.8	0.5	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4	-0.2	0.1
Labour productivity per hour (growth rate)	1.6	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.5
TFP (growth rate)	1.0	0.4	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.6	0.8	0.4	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.3	-0.8	1.8	1.5	1.4	1.4	1.3	1.3	1.4	1.6	1.8
Potential GDP per worker (growth rate)	1.6	0.8	1.3	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-263	1404	1336	1301	1273	1246	1215	1174	1144	1132	1141
Population growth (working age:15-64)	0.8	-0.6	-0.8	-0.4	-0.5	-0.4	-0.6	-0.7	-0.4	0.0	0.2
Population (20-64) (in thousands)	-275	1307	1242	1191	1158	1137	1115	1079	1046	1027	1032
Population growth (20-64)	0.7	-0.5	-0.9	-0.8	-0.4	-0.2	-0.5	-0.7	-0.5	-0.2	0.2
Labour force 15-64 (thousands)	-151	993	995	971	938	915	892	866	847	838	842
Labour force 20-64 (thousands)	-152	981	984	959	925	902	880	855	836	826	829
Participation rate (20-64)	5.3	75.1	79.2	80.5	79.8	79.3	78.9	79.3	79.9	80.4	80.4
Participation rate (15-64)	3.1	70.7	74.5	74.6	73.7	73.4	73.4	73.8	74.1	74.1	73.8
young (15-24)	-0.2	33.1	33.7	31.6	32.6	34.1	34.6	34.2	33.4	32.7	32.9
prime-age (25-54)	-1.4	90.8	90.4	90.1	89.5	89.1	89.1	89.4	89.5	89.5	89.4
older (55-64)	27.9	35.6	55.5	62.8	64.7	65.1	63.6	62.8	62.4	63.0	63.4
Participation rate (20-64) - FEMALES	7.1	71.0	75.5	78.0	77.7	77.1	76.7	77.0	77.6	78.1	78.1
Participation rate (15-64) - FEMALES	4.9	66.8	71.0	72.3	71.6	71.3	71.2	71.6	71.9	71.9	71.6
young (15-24)	0.0	30.3	30.9	28.9	30.0	31.4	31.8	31.5	30.7	30.0	30.2
prime-age (25-54)	-1.5	88.7	88.3	88.1	87.3	86.9	86.9	87.2	87.3	87.3	87.2
older (55-64)	35.7	26.4	48.1	60.4	63.6	63.8	62.2	61.4	60.9	61.6	62.0
Participation rate (20-64) - MALES	3.5	79.0	82.7	82.9	81.9	81.4	81.0	81.5	82.1	82.6	82.3
Participation rate (15-64) - MALES	1.4	74.4	77.8	76.9	75.6	75.3	75.4	75.8	76.1	76.1	75.8
young (15-24)	-0.4	35.9	36.3	34.0	35.1	36.7	37.1	36.8	35.9	35.2	35.4
prime-age (25-54)	-1.3	92.7	92.3	92.1	91.5	91.1	91.2	91.4	91.6	91.6	91.4
older (55-64)	20.1	44.7	62.9	65.2	65.7	66.3	65.0	64.3	63.8	64.5	64.8
Average effective exit age (TOTAL) (1)	2.7	61.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
Men	1.6	62.5	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
Women	3.7	60.0	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
Employment rate (15-64)	5.7	63.4	67.7	69.5	68.7	68.6	68.7	69.1	69.4	69.4	69.1
Employment rate (20-64)	7.9	67.4	72.1	75.0	74.5	74.2	73.9	74.3	74.9	75.4	75.3
Employment rate (15-74)	3.4	56.8	58.5	59.4	59.2	59.2	59.3	59.2	59.0	59.4	60.2
Unemployment rate (15-64)	-3.9	10.2	9.1	6.9	6.7	6.5	6.4	6.4	6.4	6.4	6.4
Unemployment rate (20-64)	-3.9	10.2	9.0	6.9	6.7	6.5	6.3	6.3	6.3	6.3	6.3
Unemployment rate (15-74)	-4.0	10.1	8.9	6.7	6.5	6.2	6.1	6.1	6.1	6.1	6.1
Employment (20-64) (in millions)	-0.1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Employment (15-64) (in millions)	-0.1	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
share of young (15-24)	2%	6%	6%	6%	7%	8%	8%	7%	7%	7%	8%
share of prime-age (25-54)	-7%	83%	77%	75%	73%	71%	71%	73%	75%	76%	76%
share of older (55-64)	5%	11%	17%	19%	20%	21%	21%	20%	18%	17%	16%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-2.3	20.6	22.0	22.3	22.3	23.2	23.9	22.9	20.8	18.9	18.3
Old-age dependency ratio 15-64 (3)	27	25	32	37	41	45	48	52	54	55	53
Old-age dependency ratio 20-64 (3)	31	27	35	40	45	49	52	56	59	60	58
Total dependency ratio (4)	32	47	56	61	64	67	71	77	81	82	79
Total economic dependency ratio (5)	21	128	127	125	129	132	137	143	148	150	148
Economic old-age dependency ratio (15-64) (6)	33	38	46	50	55	60	65	69	73	74	72
Economic old-age dependency ratio (15-74) (7)	31	38	45	49	53	58	62	66	69	70	69

Slovenia	EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	3.5	11.8	11.1	11.4	12.3	13.3	14.3	15.1	15.6	15.6	15.3
Earnings-related pensions, gross	3.5	11.8	11.1	11.4	12.3	13.3	14.3	15.1	15.6	15.6	15.3
Of which : Old-age and early pensions	3.8	9.1	8.8	9.1	10.0	11.0	12.0	12.7	13.2	13.1	12.8
Disability pensions	-0.5	1.3	1.2	1.1	1.0	0.9	0.9	0.9	0.9	0.8	0.8
Survivors pensions	0.4	1.2	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6
Other pensions	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-earning-related pensions	:	:	:	:	:	:	:	:	:	:	:
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Public pensions, net	3.5	11.7	11.1	11.3	12.2	13.3	14.3	15.1	15.5	15.5	15.2
Public pensions, contributions	0.0	9.0	9.3	9.3	9.2	9.1	9.0	9.0	9.0	9.0	9.1
Additional indicators	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
Public pensions, net/Public pensions, gross, %	0.0%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
Pensioners (Public, in 1000 persons)	203	606	685	710	750	788	818	839	842	831	809
Pensioners aged 65+ (1000 persons)	298	391	487	543	593	634	663	693	708	708	689
Share of pensioners below age 65 as % of all pensioners	-20.6%	35.5%	28.9%	23.5%	21.0%	19.6%	19.0%	17.4%	15.9%	14.7%	14.9%
Benefit ratio (Public pensions)	-3.6	33.8	29.0	29.0	29.0	29.4	29.8	30.0	30.1	30.1	30.2
Gross replacement rate at retirement (Old-age earnings-related pensions)	-2.1	36.1	34.6	34.3	34.2	34.2	34.2	34.1	34.1	34.0	34.1
Average accrual rates (new pensions, earnings related)	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Average contributory period (new pensions, earnings-related)	0.9	37.1	38.4	38.3	38.2	38.2	38.2	38.1	38.0	38.0	38.1
Contributors (Public pensions, in 1000 persons)	-85.0	833.1	846.1	852.6	829.6	809.9	792.2	772.5	756.0	747.5	748.1
Support ratio (contributors/100 pensioners, Public pensions)	-45.0	137.5	123.4	120.0	110.6	102.8	96.8	92.1	89.8	90.0	92.5
Public pensions, gross as % of GDP (difference from Baseline)	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
High life expectancy (+2 years)	0.9	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.8	0.9
High labour productivity (+0.25 p.p.)	-0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2
Lower labour productivity (-0.25 p.p.)	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
High employment rate (+2 p.p)	-0.4	0.0	-0.1	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
High emp. of older workers (+10 p.p.)	-0.9	0.0	-0.5	-1.3	-1.3	-1.3	-1.3	-1.3	-1.2	-1.0	-0.9
Lower migration (-20%)	0.5	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.5
TFP risk scenario	0.3	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3
Policy scenario linking retirement age to increases in life expectancy	-0.5	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.3	-0.4	-0.5
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	**Ch 13-60**	**2013**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2055**	**2060**
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	3.5		-0.6	-0.4	0.5	1.6	2.6	3.4	3.8	3.8	3.5
Dependency ratio	9.7		3.0	4.8	6.2	7.2	8.1	9.2	10.0	10.2	9.7
Coverage ratio	-2.7		-0.7	-1.5	-1.9	-2.0	-2.1	-2.3	-2.6	-2.8	-2.7
Of which : Old-age	0.6		0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
Early-age	-3.1		-0.9	-2.5	-3.2	-3.4	-2.8	-2.1	-2.4	-3.1
Cohort effect	-9.7		-2.0	-3.3	-4.2	-5.0	-6.0	-7.9	-9.6	-10.7	-9.7
Benefit ratio	-1.4		-1.8	-1.8	-1.9	-1.7	-1.5	-1.4	-1.4	-1.4	-1.4
Labour market ratio	-1.5		-0.8	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.6	-1.5
Of which : Employment rate	-1.3		-0.8	-1.2	-1.1	-1.1	-1.0	-1.1	-1.2	-1.3	-1.3
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		0.0	-0.1	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3
Interaction effect (residual)	-0.6		-0.3	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	**2013-2060**		**2015- 2020**	**2020- 2025**	**2025- 2030**	**2030- 2035**	**2035- 2040**	**2040- 2045**	**2045- 2050**	**2050- 2055**	**2055- 2060**
Public pensions, gross as % of GDP	3.5		-0.4	0.3	0.9	1.1	1.0	0.8	0.5	0.0	-0.3
Dependency ratio	9.7		2.2	1.8	1.4	1.0	0.9	1.1	0.8	0.3	-0.5
Coverage ratio	-2.7		-0.7	-0.8	-0.4	-0.2	-0.1	-0.3	-0.3	-0.2	0.1
Of which : Old-age	0.6		0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Early-age	-3.1		-1.0	-1.6	-0.7	-0.2	0.5	0.5	0.2	-0.3	-0.8
Cohort effect	-9.7		-1.6	-1.3	-0.9	-0.8	-0.9	-1.9	-1.8	-1.1	1.0
Benefit ratio	-1.4		-1.0	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0
Labour market ratio	-1.5		-0.6	-0.5	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.1
Of which : Employment rate	-1.3		-0.6	-0.4	0.1	0.1	0.0	-0.1	-0.1	-0.1	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.3		0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1
Interaction effect (residual)	-0.6		-0.3	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.2	5.7	5.9	6.2	6.4	6.6	6.8	6.8	6.9	6.9	6.8
Demographic scenario	1.4	5.7	6.0	6.2	6.5	6.7	6.9	7.0	7.0	7.1	7.1
High Life expectancy scenario	1.7	5.7	6.0	6.3	6.6	6.8	7.0	7.2	7.3	7.3	7.4
Constant health scenario	0.6	5.7	5.8	6.0	6.1	6.3	6.3	6.4	6.3	6.3	6.3
Death-related cost scenario	1.3	5.7	6.0	6.2	6.4	6.6	6.8	6.9	6.9	6.9	6.9
Income elasticity scenario	1.6	5.7	6.0	6.3	6.6	6.9	7.1	7.2	7.2	7.3	7.3
EU28 cost convergence scenario	2.1	5.7	6.1	6.4	6.7	7.0	7.3	7.4	7.6	7.7	7.7
Labour intensity scenario	2.4	5.7	6.2	6.4	6.8	7.2	7.5	7.8	8.0	8.1	8.0
Sector-specific composite indexation scenario	0.9	5.7	5.9	6.0	6.2	6.4	6.5	6.5	6.5	6.5	6.5
Non-demographic determinants scenario	2.8	5.7	6.2	6.6	7.1	7.5	7.9	8.1	8.3	8.4	8.5
AWG risk scenario	1.9	5.7	6.1	6.5	6.8	7.1	7.3	7.4	7.5	7.5	7.5
TFP risk scenario	1.2	5.7	5.9	6.2	6.4	6.6	6.7	6.8	6.8	6.8	6.8

Slovenia		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.5	1.4	1.7	1.8	1.9	2.2	2.4	2.6	2.7	2.8	2.9
Demographic scenario	1.4	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.7	2.8
High Life expectancy scenario	1.7	1.4	1.6	1.8	2.0	2.2	2.4	2.7	2.8	3.0	3.1
Base case scenario	1.6	1.4	1.7	1.8	2.0	2.2	2.5	2.7	2.8	3.0	3.0
Constant disability scenario	1.4	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.7	2.8
Shift to formal care scenario	2.1	1.4	2.0	2.2	2.4	2.7	3.0	3.2	3.4	3.5	3.6
Coverage convergence scenario	1.9	1.4	1.7	1.9	2.1	2.3	2.6	2.9	3.1	3.3	3.4
Cost convergence scenario	2.5	1.4	1.7	1.9	2.1	2.4	2.7	3.1	3.4	3.7	3.9
Cost and coverage convergence scenario	2.9	1.4	1.8	1.9	2.2	2.5	2.9	3.3	3.7	4.0	4.3
AWG risk scenario	2.7	1.4	1.7	1.9	2.2	2.5	2.9	3.2	3.6	3.9	4.2
TFP risk scenario	1.5	1.4	1.7	1.8	1.9	2.2	2.4	2.6	2.7	2.8	2.9
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	21.5%	232	249	258	267	276	283	286	285	284	282
of which: receiving institutional care	105.2%	21	25	27	29	33	36	39	41	42	43
receiving home care	66.0%	40	44	47	51	55	59	62	64	65	66
receiving cash benefits	112.7%	47	55	61	66	71	79	88	93	97	100
Demographic scenario	30.0%	232	252	264	275	286	295	300	301	302	301
of which: receiving institutional care	114.0%	21	25	27	30	33	37	40	42	44	45
receiving home care	73.8%	40	45	48	52	56	61	64	66	68	69
receiving cash benefits	120.5%	47	56	61	67	73	81	90	96	100	103
Constant disability scenario	13.6%	232	246	253	260	266	271	272	271	267	263
of which: receiving institutional care	96.8%	21	25	27	29	32	35	38	40	41	42
receiving home care	58.8%	40	44	47	50	53	57	60	61	62	63
receiving cash benefits	105.5%	47	55	60	64	69	77	85	90	94	96
Shift 1% of dependents from informal to formal scenario	30.0%	232	252	264	275	286	295	300	301	302	301
of which: receiving institutional care	164.3%	21	31	36	39	43	47	51	53	55	56
receiving home care	123.0%	40	57	66	70	75	80	84	86	87	89
receiving cash benefits	120.5%	47	56	61	67	73	81	90	96	100	103
Coverage convergence scenario	30.0%	232	252	264	275	286	295	300	301	302	301
of which: receiving institutional care	144.9%	21	26	28	32	36	41	45	48	50	52
receiving home care	101.0%	40	46	50	55	61	66	71	75	77	80
receiving cash benefits	120.5%	47	56	61	67	73	81	90	96	100	103

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	5.3	5.4	5.5	5.6	5.5	5.5	5.6	5.8	6.1	6.1
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (7%) - Staff (63%) - Other (20%)											
Primary	0.3	1.7	1.9	1.9	1.7	1.7	1.7	1.8	2.0	2.0	2.0
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (8%) - Staff (75%) - Other (17%)											
Low secondary	0.2	0.8	0.9	1.0	1.0	0.9	0.9	0.9	1.0	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (8%) - Staff (75%) - Other (17%)											
Upper secondary	0.2	1.3	1.2	1.3	1.4	1.4	1.3	1.3	1.3	1.4	1.5
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (5%) - Staff (59%) - Other (22%)											
Tertiary education	0.0	1.6	1.3	1.3	1.5	1.6	1.5	1.5	1.5	1.5	1.6
Expenditure decomposition (broadly constant) : Transfers (21%) - Capital (7%) - Staff (48%) - Other (23%)											
Number of students (in thousands)											
Total	16	376	386	399	400	386	372	370	379	389	392
as % of population 5-24	-1%	94%	94%	94%	92%	92%	93%	93%	93%	93%	93%
Primary	10	110	132	127	117	109	109	115	122	123	119
Low secondary	8	55	61	67	64	59	55	56	59	63	63
Upper secondary	8	99	94	107	111	107	100	95	97	102	106
Tertiary education	-9	113	99	98	107	111	109	103	100	100	104
Number of teachers (in thousands)											
Total	2	24	25	27	26	25	24	24	25	26	26
Primary	1	7	8	8	7	7	7	7	8	8	7
Low secondary	1	7	8	8	8	7	7	7	7	8	8
Upper secondary	0	6	6	7	7	7	6	6	6	7	7
Tertiary education	0	4	4	4	4	4	4	4	4	4	4
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.8	0.1	0.2	0.4	0.5	0.6	0.8	0.8	0.8	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.2	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

25. SLOVAKIA

Slovakia	EC-EPC (AWG) 2015 projections										

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.3	1.28	1.32	1.35	1.38	1.41	1.44	1.46	1.48	1.51	1.53
Life expectancy at birth											
males	9.7	72.7	74.3	75.4	76.5	77.6	78.6	79.6	80.5	81.5	82.3
females	7.5	79.9	81.1	82.0	82.8	83.7	84.5	85.2	86.0	86.7	87.4
Life expectancy at 65											
males	6.1	14.7	15.6	16.3	17.0	17.7	18.3	19.0	19.6	20.2	20.8
females	5.8	18.4	19.3	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2
Net migration (thousand)	0.4	2.0	3.0	2.0	2.5	2.8	4.7	4.9	4.7	3.9	2.4
Net migration as % of population	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Population (million)	-0.9	5.4	5.4	5.4	5.3	5.2	5.1	5.0	4.9	4.7	4.6
Children population (0-14) as % of total population	-3.8	15.3	15.0	14.0	12.8	12.1	11.7	11.8	11.8	11.7	11.5
Prime age population (25-54) as % of total population	-12.3	45.1	44.7	43.7	41.5	39.0	37.0	35.0	33.5	33.0	32.8
Working age population (15-64) as % of total population	-18.0	71.4	68.1	66.5	65.6	64.8	62.8	59.7	56.9	54.6	53.3
Elderly population (65 and over) as % of total population	21.9	13.3	16.9	19.5	21.6	23.2	25.5	28.5	31.3	33.6	35.2
Very elderly population (80 and over) as % of total population	10.1	3.0	3.3	3.9	5.0	6.7	7.9	8.8	9.4	10.8	13.1
Very elderly population (80 and over) as % of elderly population	14.6	22.6	19.8	20.0	23.1	28.7	31.1	30.8	30.0	32.3	37.1
Very elderly population (80 and over) as % of working age population	20.3	4.2	4.9	5.8	7.6	10.3	12.6	14.7	16.5	19.8	24.5
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (grow th rate)	1.5	2.3	2.6	3.0	2.5	1.3	0.7	0.6	0.5	0.6	0.8
Employment (grow th rate)	-0.6	0.5	-0.6	-0.2	-0.1	-0.4	-1.0	-1.1	-1.1	-1.0	-0.8
Labour input : hours w orked (grow th rate)	-0.7	0.4	-0.7	-0.2	-0.1	-0.4	-1.0	-1.1	-1.1	-1.0	-0.8
Labour productivity per hour (grow th rate)	2.2	2.0	3.2	3.2	2.6	1.7	1.7	1.7	1.7	1.6	1.5
TFP (grow th rate)	1.6	2.2	2.5	2.4	1.7	1.1	1.1	1.1	1.1	1.0	1.0
Capital deepening (contribution to labour productivity grow th)	0.6	-0.2	0.7	0.9	0.9	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (grow th rate)	1.9	2.2	2.7	3.2	2.8	1.7	1.1	1.1	1.1	1.2	1.5
Potential GDP per w orker (grow th rate)	2.2	1.9	3.2	3.2	2.6	1.7	1.7	1.7	1.7	1.6	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-1433	3863	3688	3575	3479	3373	3203	2978	2763	2576	2429
Population grow th (w orking age:15-64)	-0.6	-0.3	-0.7	-0.5	-0.7	-0.7	-1.3	-1.5	-1.5	-1.3	-0.9
Population (20-64) (in thousands)	-1320	3553	3424	3292	3198	3123	2975	2769	2564	2378	2233
Population grow th (20-64)	-1.0	0.1	-0.8	-0.6	-0.5	-0.6	-1.2	-1.5	-1.6	-1.4	-1.0
Labour force 15-64 (thousands)	-971	2706	2623	2533	2446	2355	2222	2077	1941	1824	1736
Labour force 20-64 (thousands)	-963	2687	2608	2517	2429	2340	2208	2064	1930	1812	1724
Participation rate (20-64)	1.6	75.6	76.2	76.5	75.9	74.9	74.2	74.6	75.3	76.2	77.2
Participation rate (15-64)	1.4	70.1	71.1	70.9	70.3	69.8	69.4	69.7	70.2	70.8	71.4
young (15-24)	-1.5	31.2	30.7	28.5	29.6	31.1	30.8	30.9	30.3	29.6	29.7
prime-age (25-54)	-4.3	87.2	85.5	84.7	83.9	83.3	82.8	82.7	82.9	83.0	82.9
older (55-64)	20.8	49.6	53.8	57.2	60.5	61.3	61.2	62.9	64.5	66.8	70.4
Participation rate (20-64) - FEMALES	0.7	67.5	68.4	68.9	68.2	66.9	65.8	65.9	66.4	67.3	68.2
Participation rate (15-64) - FEMALES	0.5	62.6	63.9	63.8	63.1	62.3	61.5	61.7	62.0	62.5	63.1
young (15-24)	-1.5	24.1	23.4	21.7	22.5	23.8	23.5	23.5	23.1	22.6	22.6
prime-age (25-54)	-7.3	80.5	77.6	76.3	75.1	74.2	73.3	72.7	72.9	73.1	73.2
older (55-64)	24.4	40.5	49.6	54.8	58.1	57.8	56.8	58.5	59.7	61.4	64.9
Participation rate (20-64) - MALES	2.2	83.7	83.9	84.0	83.6	82.8	82.5	83.1	83.9	84.9	85.9
Participation rate (15-64) - MALES	2.0	77.5	78.3	77.8	77.4	77.1	77.0	77.6	78.3	78.8	79.5
young (15-24)	-1.5	38.0	37.6	34.9	36.3	38.1	37.8	37.9	37.1	36.3	36.4
prime-age (25-54)	-1.4	93.7	93.2	92.8	92.4	92.2	92.1	92.3	92.5	92.5	92.3
older (55-64)	16.2	59.7	58.4	59.8	63.0	64.8	65.6	67.4	69.5	72.2	75.9
Average effective exit age (TOTAL) (1)	5.4	60.6	61.8	62.1	62.5	63.0	63.5	64.0	64.6	65.3	66.0
Men	4.6	61.6	61.9	62.2	62.6	63.1	63.6	64.1	64.7	65.4	66.2
Women	6.2	59.7	61.7	62.0	62.4	62.8	63.3	63.9	64.5	65.1	65.9
Employment rate (15-64)	6.0	60.1	62.1	61.9	62.7	63.6	64.2	64.5	65.0	65.5	66.1
Employment rate (20-64)	6.4	65.2	66.7	67.0	67.9	68.4	68.8	69.1	69.8	70.7	71.6
Employment rate (15-74)	1.0	54.4	54.2	53.3	54.1	55.2	55.2	54.1	53.8	54.4	55.5
Unemployment rate (15-64)	-6.7	14.2	12.8	12.7	10.8	9.0	7.5	7.5	7.5	7.5	7.5
Unemployment rate (20-64)	-6.6	13.9	12.5	12.4	10.6	8.8	7.3	7.3	7.3	7.3	7.3
Unemployment rate (15-74)	-7.0	14.2	12.7	12.6	10.7	8.9	7.3	7.3	7.2	7.2	7.2
Employment (20-64) (in millions)	-0.7	2.3	2.3	2.2	2.2	2.1	2.0	1.9	1.8	1.7	1.6
Employment (15-64) (in millions)	-0.7	2.3	2.3	2.2	2.2	2.1	2.1	1.9	1.8	1.7	1.6
share of young (15-24)	0%	6%	5%	5%	6%	6%	6%	6%	6%	6%	6%
share of prime-age (25-54)	-8%	80%	80%	79%	76%	72%	71%	70%	70%	71%	72%
share of older (55-64)	9%	14%	15%	16%	18%	22%	24%	25%	25%	23%	22%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	3.3	18.9	19.4	18.9	20.4	23.9	26.1	26.6	26.2	24.1	22.1
Old-age dependency ratio 15-64 (3)	47	19	25	29	33	36	41	48	55	62	66
Old-age dependency ratio 20-64 (3)	52	20	27	32	36	39	44	51	59	67	72
Total dependency ratio (4)	47	40	47	50	53	54	59	67	76	83	88
Total economic dependency ratio (5)	33	132	134	140	139	138	141	148	156	162	165
Economic old-age dependency ratio (15-64) (6)	62	31	39	46	51	54	60	69	79	87	93
Economic old-age dependency ratio (15-74) (7)	56	30	39	45	50	53	58	66	75	82	86

Slovakia	EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	2.1	8.1	8.0	7.9	7.6	7.7	8.1	8.6	9.1	9.7	10.2
Earnings-related pensions, gross	2.0	8.0	7.9	7.7	7.5	7.5	7.9	8.4	8.9	9.5	10.0
Of which : Old-age and early pensions	1.7	6.1	6.2	6.0	5.7	5.6	6.0	6.4	6.9	7.5	7.9
Disability pensions	0.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.0	1.0
Survivors pensions	0.3	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
Public pensions, net	2.1	8.1	8.0	7.9	7.6	7.7	8.1	8.6	9.1	9.7	10.2
Public pensions, contributions	0.1	6.2	5.9	5.8	5.8	5.9	6.0	6.1	6.2	6.3	6.3

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pensioners (Public, in 1000 persons)	415	1322	1461	1538	1591	1632	1699	1739	1765	1767	1737
Pensioners aged 65+ (1000 persons)	788	720	900	1036	1131	1189	1282	1386	1461	1512	1508
Share of pensioners below age 65 as % of all pensioners	-32.4%	45.6%	38.4%	32.6%	28.9%	27.2%	24.5%	20.3%	17.2%	14.4%	13.2%
Benefit ratio (Public pensions)	-12.4	45.7	41.6	37.6	34.8	33.7	33.2	32.5	32.2	32.5	33.3
Gross replacement rate at retirement (Public pensions)	-2.4	51.7	50.3	48.1	45.3	43.9	42.4	40.5	45.8	46.1	49.4
Average accrual rates (new pensions, earnings related)	:	:	1.2	1.2	1.1	1.1	1.1	1.0	1.1	1.1	1.2
Average contributory period (new pensions, earnings-related)	:	:	41.1	40.7	40.4	40.2	40.2	40.4	40.7	41.3	42.1
Contributors (Public pensions, in 1000 persons)	-607.9	2312.9	2290.9	2222.4	2200.9	2171.2	2102.1	1989.6	1879.2	1781.6	1705.0
Support ratio (contributors/100 pensioners, Public pensions)	-76.8	175.0	156.8	144.5	138.4	133.0	123.7	114.4	106.5	100.8	98.2

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.0	0.0	0.0	-0.1	0.1	0.0	-0.1	0.0	0.0	0.0	0.0
High labour productivity (+0.25 p.p.)	-0.4	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4
Lower labour productivity (-0.25 p.p.)	0.5	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5
High employment rate (+2 p.p)	-0.3	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.2	-0.4	-0.4	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3
Lower migration (-20%)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
TFP risk scenario	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4
Policy scenario linking retirement age to increases in life expectancy	-0.8	0.0	-0.2	-0.3	-0.3	-0.4	-0.7	-0.8	-0.8	-0.9	-0.8

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	2.1		-0.1	-0.2	-0.5	-0.5	0.0	0.5	1.0	1.6	2.1
Dependency ratio	11.3		2.5	4.0	5.0	5.6	6.6	8.0	9.4	10.5	11.3
Coverage ratio	-4.2		-1.1	-1.7	-2.2	-2.4	-2.6	-3.1	-3.6	-3.9	-4.2
Of which : Old-age	-0.5		-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5
Early-age	-5.3		-0.3	-1.2	-2.4	-3.1	-3.6	-4.3	-4.5	-4.9	-5.3
Cohort effect	-8.6		-2.1	-3.0	-3.1	-3.0	-3.6	-4.8	-6.3	-7.8	-8.6
Benefit ratio	-2.6		-0.9	-1.7	-2.3	-2.6	-2.7	-2.8	-2.9	-2.9	-2.6
Labour market ratio	-1.3		-0.2	-0.3	-0.4	-0.5	-0.6	-0.8	-0.9	-1.1	-1.3
Of which : Employment rate	-0.8		-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.7	-0.8
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5	-0.5
Interaction effect (residual)	-1.0		-0.3	-0.5	-0.6	-0.6	-0.7	-0.8	-0.9	-1.0	-1.0

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	2.1		-0.3	-0.2	-0.3	0.0	0.4	0.5	0.5	0.6	0.5
Dependency ratio	11.3		1.9	1.5	1.0	0.6	1.0	1.4	1.3	1.2	0.8
Coverage ratio	-4.2		-0.9	-0.6	-0.4	-0.2	-0.3	-0.5	-0.4	-0.4	-0.3
Of which : Old-age	-0.5		-0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Early-age	-5.3		-0.3	-0.9	-1.2	-0.7	-0.5	-0.7	-0.2	-0.4	-0.3
Cohort effect	-8.6		-1.6	-0.9	-0.1	0.1	-0.6	-1.2	-1.5	-1.5	-0.8
Benefit ratio	-2.6		-0.9	-0.8	-0.6	-0.2	-0.1	-0.2	-0.1	0.1	0.2
Labour market ratio	-1.3		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Of which : Employment rate	-0.8		-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.5		0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Interaction effect (residual)	-1.0		-0.3	-0.2	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.0	5.7	6.1	6.4	6.7	6.9	7.1	7.3	7.5	7.6	7.7
Demographic scenario	2.2	5.7	6.1	6.4	6.6	6.9	7.2	7.4	7.6	7.8	7.9
High Life expectancy scenario	2.5	5.7	6.1	6.4	6.7	7.0	7.3	7.6	7.8	8.0	8.2
Constant health scenario	1.0	5.7	5.9	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.7
Death-related cost scenario	1.9	5.7	6.0	6.3	6.5	6.8	7.0	7.2	7.4	7.5	7.6
Income elasticity scenario	2.6	5.7	6.2	6.5	6.9	7.2	7.5	7.8	8.0	8.2	8.3
EU28 cost convergence scenario	2.5	5.7	6.1	6.4	6.7	7.0	7.3	7.6	7.8	8.1	8.2
Labour intensity scenario	3.4	5.7	6.2	6.7	6.9	7.2	7.5	8.0	8.5	8.9	9.1
Sector-specific composite indexation scenario	1.4	5.7	5.8	6.0	6.1	6.3	6.5	6.7	6.8	7.0	7.1
Non-demographic determinants scenario	4.7	5.7	6.6	7.2	8.0	8.6	9.1	9.5	9.9	10.3	10.5
AWG risk scenario	3.3	5.7	6.4	7.0	7.5	7.9	8.2	8.5	8.8	8.9	9.0
TFP risk scenario	2.0	5.7	6.1	6.4	6.7	6.9	7.1	7.3	7.5	7.6	7.7

Slovakia	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
Demographic scenario	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
High Life expectancy scenario	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7
Base case scenario	0.5	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7
Constant disability scenario	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6
Shift to formal care scenario	0.7	0.2	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9
Coverage convergence scenario	0.5	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7
Cost convergence scenario	4.7	0.2	0.4	0.6	0.8	1.1	1.5	2.0	2.7	3.7	5.0
Cost and coverage convergence scenario	4.8	0.2	0.4	0.6	0.8	1.1	1.5	2.0	2.7	3.7	5.0
AWG risk scenario	4.4	0.2	0.4	0.6	0.8	1.0	1.4	1.9	2.5	3.4	4.6
TFP risk scenario	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	47.2%	521	564	601	643	682	711	729	742	755	767
of which: receiving institutional care	85.3%	45	50	53	58	64	70	74	77	80	84
receiving home care	106.6%	62	68	74	82	92	101	108	113	120	127
receiving cash benefits	47.7%	172	188	202	215	226	235	242	248	252	255
Demographic scenario	62.7%	521	575	621	673	722	760	787	807	828	847
of which: receiving institutional care	99.7%	45	50	55	60	67	73	78	82	86	90
receiving home care	120.8%	62	69	76	85	95	105	114	120	127	136
receiving cash benefits	62.6%	172	192	208	224	238	250	260	269	276	280
Constant disability scenario	32.9%	521	553	581	612	642	662	673	679	685	692
of which: receiving institutional care	71.6%	45	49	52	56	61	66	70	72	74	78
receiving home care	93.1%	62	67	72	79	88	96	103	107	112	119
receiving cash benefits	33.7%	172	185	195	205	214	220	224	228	230	231
Shift 1% of dependents from informal to formal scenario	62.7%	521	575	621	673	722	760	787	807	828	847
of which: receiving institutional care	179.7%	45	69	83	91	99	107	113	117	122	127
receiving home care	199.5%	62	90	109	121	135	147	157	165	174	185
receiving cash benefits	62.6%	172	192	208	224	238	250	260	269	276	280
Coverage convergence scenario	62.7%	521	575	621	673	722	760	787	807	828	847
of which: receiving institutional care	103.7%	45	50	55	61	67	74	79	83	87	92
receiving home care	125.1%	62	69	76	85	96	106	115	122	129	139
receiving cash benefits	62.6%	172	192	208	224	238	250	260	269	276	280

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.4	3.4	3.2	3.2	3.1	2.9	2.8	2.8	2.8	2.9	2.9
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (9%) - Staff (53%) - Other (29%)											
Primary	-0.1	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (9%) - Staff (56%) - Other (32%)											
Low secondary	-0.1	0.8	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (10%) - Staff (57%) - Other (31%)											
Upper secondary	-0.1	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
Expenditure decomposition (broadly constant) : Transfers (10%) - Capital (2%) - Staff (59%) - Other (29%)											
Tertiary education	-0.2	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure decomposition (broadly constant) : Transfers (21%) - Capital (16%) - Staff (38%) - Other (25%)											
Number of students (in thousands)											
Total	-337	944	896	872	823	756	701	667	649	632	607
as % of population 5-24	3%	77%	80%	81%	79%	78%	79%	80%	81%	81%	80%
Primary	-73	214	231	203	186	168	158	157	157	151	142
Low secondary	-80	259	266	269	240	219	199	189	188	187	179
Upper secondary	-90	249	214	228	224	201	185	170	163	162	159
Tertiary education	-94	222	186	172	173	167	158	151	141	133	128
Number of teachers (in thousands)											
Total	-21	60	57	56	53	48	45	42	41	40	39
Primary	-4	13	14	12	11	10	9	9	9	9	8
Low secondary	-6	19	20	20	18	16	15	14	14	14	13
Upper secondary	-6	17	14	15	15	14	12	11	11	11	11
Tertiary education	-5	11	9	9	9	8	8	8	7	7	6
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

26. FINLAND

Finland		EC-EPC (AWG) 2015 projections									

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.1	1.80	1.81	1.82	1.83	1.83	1.84	1.85	1.85	1.85	1.86
Life expectancy at birth											
males	6.9	77.7	78.9	79.7	80.4	81.2	81.9	82.6	83.3	84.0	84.6
females	5.6	83.5	84.5	85.1	85.8	86.4	87.0	87.6	88.1	88.7	89.2
Life expectancy at 65											
males	4.6	17.8	18.5	19.0	19.5	20.0	20.5	21.0	21.5	21.9	22.4
females	4.3	21.4	22.1	22.6	23.1	23.5	24.0	24.4	24.9	25.3	25.7
Net migration (thousand)	-8.3	17.2	22.0	22.3	21.7	20.2	17.7	14.1	9.6	9.4	8.9
Net migration as % of population	-0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1
Population (million)	0.8	5.4	5.6	5.8	5.9	6.0	6.1	6.1	6.2	6.2	6.2
Children population (0-14) as % of total population	-0.2	16.4	16.6	16.6	16.6	16.4	16.3	16.3	16.4	16.3	16.2
Prime age population (25-54) as % of total population	-3.1	38.4	37.3	36.6	36.6	36.6	36.3	36.2	35.7	35.5	35.3
Working age population (15-64) as % of total population	-6.7	64.5	61.2	59.9	59.0	58.7	59.3	59.3	58.9	58.5	57.8
Elderly population (65 and over) as % of total population	7.0	19.1	22.1	23.4	24.5	24.8	24.4	24.4	24.7	25.2	26.0
Very elderly population (80 and over) as % of total population	4.8	5.0	5.6	6.2	7.9	8.9	9.4	9.7	9.7	9.5	9.8
Very elderly population (80 and over) as % of elderly population	11.3	26.1	25.1	26.4	32.4	35.9	38.4	39.6	39.2	37.5	37.5
Very elderly population (80 and over) as % of working age population	9.2	7.7	9.1	10.3	13.5	15.2	15.8	16.3	16.5	16.2	16.9
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (grow th rate)	1.4	0.0	0.9	1.2	1.6	1.9	1.8	1.7	1.5	1.5	1.5
Employment (grow th rate)	0.1	-0.3	0.0	0.0	0.2	0.3	0.3	0.1	0.0	-0.1	0.0
Labour input : hours w orked (grow th rate)	0.1	-0.4	0.0	0.0	0.2	0.3	0.3	0.1	0.0	-0.1	0.0
Labour productivity per hour (grow th rate)	1.3	0.4	0.9	1.1	1.4	1.5	1.5	1.5	1.5	1.5	1.5
TFP (grow th rate)	0.8	-0.1	0.5	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity grow th)	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (grow th rate)	1.1	-0.5	0.4	0.7	1.2	1.6	1.6	1.5	1.4	1.3	1.4
Potential GDP per w orker (grow th rate)	1.3	0.3	0.9	1.1	1.4	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	100	3508	3449	3458	3474	3519	3596	3629	3630	3626	3608
Population grow th (w orking age:15-64)	0.4	-0.5	-0.1	0.1	0.1	0.4	0.3	0.1	0.0	-0.1	-0.1
Population (20-64) (in thousands)	73	3191	3148	3137	3149	3183	3255	3290	3292	3286	3264
Population grow th (20-64)	0.2	-0.3	-0.2	0.0	0.1	0.4	0.3	0.2	0.0	-0.1	-0.1
Labour force 15-64 (thousands)	89	2634	2622	2622	2633	2670	2718	2742	2744	2734	2724
Labour force 20-64 (thousands)	82	2528	2523	2516	2525	2559	2605	2629	2632	2622	2610
Participation rate (20-64)	0.8	79.2	80.1	80.2	80.2	80.4	80.0	79.9	80.0	79.8	80.0
Participation rate (15-64)	0.4	75.1	76.0	75.8	75.8	75.9	75.6	75.5	75.6	75.4	75.5
young (15-24)	-0.6	52.4	52.3	51.5	52.1	51.6	52.0	52.1	52.0	51.8	51.8
prime-age (25-54)	-0.7	86.8	86.2	86.0	85.9	86.0	86.0	86.0	86.0	86.0	86.1
older (55-64)	3.0	62.7	66.8	67.3	66.3	67.0	66.1	65.9	66.4	65.5	65.7
Participation rate (20-64) - FEMALES	1.6	77.0	78.0	78.1	78.3	78.7	78.5	78.5	78.6	78.5	78.6
Participation rate (15-64) - FEMALES	1.2	73.5	74.4	74.3	74.4	74.7	74.6	74.6	74.8	74.6	74.7
young (15-24)	-0.2	53.7	53.8	53.1	53.7	53.5	53.6	53.7	53.6	53.4	53.4
prime-age (25-54)	0.6	83.3	83.0	83.0	83.3	83.6	83.8	83.8	83.8	83.9	83.9
older (55-64)	2.9	63.9	67.5	67.6	66.6	67.1	66.2	66.4	67.3	66.5	66.7
Participation rate (20-64) - MALES	-0.1	81.4	82.2	82.2	82.0	82.1	81.6	81.3	81.3	81.1	81.3
Participation rate (15-64) - MALES	-0.4	76.7	77.6	77.3	77.1	77.0	76.6	76.4	76.4	76.2	76.3
young (15-24)	-0.9	51.2	50.9	50.0	50.5	50.3	50.5	50.6	50.5	50.3	50.3
prime-age (25-54)	-1.9	90.1	89.3	88.9	88.5	88.3	88.2	88.1	88.1	88.2	88.1
older (55-64)	3.3	61.5	66.2	67.0	66.0	66.8	66.0	65.4	65.5	64.5	64.8
Average effective exit age (TOTAL) (1)	0.6	63.4	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
Men	0.5	63.6	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
Women	0.7	63.1	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
Employment rate (15-64)	1.5	68.8	70.4	70.5	70.5	70.6	70.4	70.4	70.4	70.2	70.3
Employment rate (20-64)	1.8	73.2	74.8	75.1	75.2	75.5	75.5	75.1	75.0	74.9	75.1
Employment rate (15-74)	0.6	60.3	60.3	60.9	61.1	61.5	62.0	62.1	61.5	61.1	60.9
Unemployment rate (15-64)	-1.6	8.4	7.3	7.1	7.0	6.9	6.9	6.9	6.9	6.9	6.9
Unemployment rate (20-64)	-1.4	7.5	6.6	6.3	6.2	6.2	6.1	6.1	6.1	6.1	6.1
Unemployment rate (15-74)	-1.6	8.3	7.2	6.9	6.8	6.7	6.7	6.7	6.7	6.7	6.7
Employment (20-64) (in millions)	0.1	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
Employment (15-64) (in millions)	0.1	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.5	2.5
share of young (15-24)	0%	11%	11%	11%	12%	12%	12%	12%	12%	12%	12%
share of prime-age (25-54)	1%	70%	70%	70%	72%	72%	71%	71%	71%	70%	71%
share of older (55-64)	-1%	18%	19%	18%	17%	17%	17%	18%	18%	18%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-2.1	21.7	21.1	20.5	18.8	18.5	19.6	19.9	20.4	20.3	19.6
Old-age dependency ratio 15-64 (3)	15	30	36	39	41	42	41	41	42	43	45
Old-age dependency ratio 20-64 (3)	17	33	40	43	46	47	45	45	46	48	50
Total dependency ratio (4)	18	55	63	67	70	70	69	69	70	71	73
Total economic dependency ratio (5)	17	121	125	129	133	133	133	133	134	136	138
Economic old-age dependency ratio (15-64) (6)	20	41	48	52	55	56	55	55	56	58	61
Economic old-age dependency ratio (15-74) (7)	19	40	47	50	53	55	54	54	55	56	58

Finland		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.1	12.9	14.2	14.9	15.0	14.4	13.6	13.0	12.8	12.8	12.9
Earnings-related pensions, gross	0.6	11.6	13.2	13.9	14.0	13.4	12.7	12.2	12.0	12.0	12.2
Of which : Old-age and early pensions	1.3	9.7	11.6	12.4	12.5	12.0	11.2	10.8	10.6	10.8	11.0
Disability pensions	-0.5	1.1	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Survivors pensions	-0.2	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.5	1.3	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.7
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	-0.1	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.3
Public pensions, net	0.0	10.6	11.7	12.2	12.3	11.8	11.1	10.7	10.5	10.5	10.6
Public pensions, contributions	-0.4	12.3	13.4	13.7	13.7	13.2	12.7	12.2	11.9	11.8	11.9

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	0.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%	82.0%
Pensioners (Public, in 1000 persons)	411	1376	1515	1607	1681	1708	1701	1702	1719	1747	1787
Pensioners aged 65+ (1000 persons)	510	1042	1237	1343	1430	1471	1456	1455	1475	1503	1552
Share of pensioners below age 65 as % of all pensioners	-11.1%	24.3%	18.3%	16.5%	14.9%	13.9%	14.4%	14.5%	14.2%	14.0%	13.2%
Benefit ratio (Public pensions)	-8.3	52.1	54.9	54.5	52.9	50.7	48.8	47.0	45.6	44.6	43.8
Gross replacement rate at retirement (Public pensions)	-1.9	46.0	51.3	48.6	46.3	45.3	45.7	45.3	45.7	44.9	44.1
Average accrual rates (new pensions, earnings related)	-1.1	2.9	2.3	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Average contributory period (new pensions, earnings-related) (8)	29.8	2.5	7.7	11.6	15.7	19.6	23.8	27.4	30.4	32.0	32.3
Contributors (Public pensions, in 1000 persons)	111.1	2286.3	2295.5	2301.7	2313.7	2348.6	2391.9	2413.1	2415.1	2406.8	2397.4
Support ratio (contributors/100 pensioners, Public pensions)	-32.0	166.1	151.6	143.2	137.6	137.5	140.6	141.8	140.5	137.8	134.1

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.3	-0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2
High labour productivity (+0.25 p.p.)	-0.3	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Lower labour productivity (-0.25 p.p.)	0.4	-0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4
High employment rate (+2 p.p)	0.0	-0.1	-0.2	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1
High emp. of older workers (+10 p.p.)	0.1	-0.1	-0.7	-1.1	-0.8	-0.4	-0.2	-0.1	0.0	0.0	0.0
Lower migration (-20%)	0.4	-0.1	0.0	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
TFP risk scenario	0.6	-0.1	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5
Policy scenario linking retirement age to increases in life expectancy	-0.5	-0.1	0.0	-0.3	-0.5	-0.7	-0.7	-0.6	-0.8	-0.7	-0.6

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.1		1.4	2.0	2.1	1.5	0.7	0.1	-0.1	-0.1	0.1
Dependency ratio	6.0		2.7	4.0	4.9	5.2	4.8	4.8	5.1	5.4	6.0
Coverage ratio	-2.5		-1.1	-1.4	-1.7	-1.9	-1.9	-2.0	-2.2	-2.3	-2.5
Of which : Old-age	-0.7		-0.2	-0.2	-0.2	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7
Early-age	-4.0		-1.7	-1.6	-2.1	-3.2	-3.4	-3.7	-3.9	-3.7	-4.0
Cohort effect	-6.4		-2.9	-4.7	-5.9	-6.1	-5.3	-5.0	-5.3	-5.7	-6.4
Benefit ratio	-2.7		0.3	0.1	-0.4	-1.0	-1.6	-2.0	-2.3	-2.6	-2.7
Labour market ratio	-0.5		-0.4	-0.5	-0.5	-0.6	-0.4	-0.4	-0.5	-0.4	-0.5
Of which : Employment rate	-0.3		-0.3	-0.3	-0.3	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
Interaction effect (residual)	-0.2		-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.1		0.9	0.7	0.1	-0.6	-0.8	-0.6	-0.2	0.0	0.1
Dependency ratio	6.0		1.8	1.3	0.9	0.3	-0.4	0.0	0.3	0.3	0.6
Coverage ratio	-2.5		-0.7	-0.3	-0.3	-0.2	0.0	-0.1	-0.2	-0.1	-0.2
Of which : Old-age	-0.7		-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Early-age	-4.0		-1.0	0.1	-0.5	-1.1	-0.2	-0.4	-0.1	0.2	-0.3
Cohort effect	-6.4		-1.9	-1.8	-1.2	-0.2	0.8	0.3	-0.3	-0.4	-0.6
Benefit ratio	-2.7		0.2	-0.2	-0.5	-0.7	-0.6	-0.4	-0.3	-0.2	-0.2
Labour market ratio	-0.5		-0.3	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Of which : Employment rate	-0.3		-0.2	-0.1	0.0	-0.1	0.1	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.2		-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.7	7.8	8.1	8.2	8.4	8.5	8.5	8.5	8.5	8.5	8.5
Demographic scenario	1.1	7.8	8.1	8.3	8.5	8.6	8.7	8.7	8.8	8.8	8.9
High Life expectancy scenario	1.5	7.8	8.1	8.4	8.6	8.8	8.9	9.0	9.1	9.2	9.3
Constant health scenario	0.1	7.8	7.9	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9
Death-related cost scenario	0.8	7.8	8.1	8.3	8.4	8.5	8.6	8.6	8.6	8.6	8.7
Income elasticity scenario	1.3	7.8	8.2	8.4	8.6	8.8	8.9	8.9	8.9	9.0	9.1
EU28 cost convergence scenario	1.3	7.8	8.2	8.4	8.6	8.7	8.8	8.9	8.9	9.0	9.1
Labour intensity scenario	2.0	7.8	8.4	8.8	9.2	9.3	9.4	9.4	9.5	9.6	9.8
Sector-specific composite indexation scenario	1.2	7.8	8.1	8.4	8.6	8.7	8.8	8.8	8.9	8.9	9.0
Non-demographic determinants scenario	2.5	7.8	8.2	8.5	8.9	9.2	9.5	9.8	9.9	10.1	10.3
AWG risk scenario	1.3	7.8	8.1	8.4	8.6	8.8	8.9	9.0	9.1	9.1	9.1
TFP risk scenario	0.7	7.8	8.1	8.2	8.3	8.4	8.5	8.5	8.5	8.5	8.5

Finland	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	2.1	2.4	2.8	3.2	3.6	4.0	4.3	4.4	4.4	4.5	4.6
Demographic scenario	1.9	2.4	2.8	3.0	3.4	3.8	4.1	4.2	4.3	4.3	4.4
High Life expectancy scenario	2.5	2.4	2.8	3.1	3.5	4.0	4.4	4.6	4.7	4.8	4.9
Base case scenario	2.3	2.4	2.9	3.2	3.6	4.1	4.4	4.5	4.6	4.7	4.8
Constant disability scenario	1.9	2.4	2.8	3.1	3.5	3.9	4.2	4.2	4.3	4.3	4.4
Shift to formal care scenario	2.9	2.4	3.1	3.6	4.1	4.6	4.9	5.0	5.1	5.2	5.3
Coverage convergence scenario	2.3	2.4	2.9	3.2	3.6	4.1	4.4	4.5	4.6	4.7	4.8
Cost convergence scenario	3.6	2.4	3.0	3.4	3.9	4.5	4.9	5.2	5.5	5.7	6.1
Cost and coverage convergence scenario	3.6	2.4	3.0	3.4	3.9	4.5	4.9	5.2	5.5	5.7	6.1
AWG risk scenario	3.3	2.4	2.9	3.3	3.8	4.3	4.8	5.0	5.2	5.5	5.8
TFP risk scenario	2.1	2.4	2.8	3.2	3.6	4.0	4.3	4.4	4.4	4.5	4.6

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	33.7%	427	466	491	518	542	555	560	563	565	571
of which: receiving institutional care	97.6%	51	60	68	77	87	94	97	98	100	101
receiving home care	79.1%	159	182	202	228	254	270	275	278	281	285
receiving cash benefits	49.4%	308	341	367	397	426	442	449	452	455	460
Demographic scenario	44.0%	427	472	502	535	564	583	592	598	605	615
of which: receiving institutional care	107.5%	51	61	69	79	90	97	100	102	104	106
receiving home care	89.3%	159	184	205	233	262	279	287	291	295	301
receiving cash benefits	58.4%	308	344	373	407	439	459	468	474	479	488
Constant disability scenario	25.7%	427	460	480	502	523	533	535	536	535	537
of which: receiving institutional care	88.4%	51	60	67	75	85	91	94	95	95	97
receiving home care	70.1%	159	180	198	222	247	261	266	267	268	270
receiving cash benefits	42.2%	308	338	360	387	413	428	433	434	435	438
Shift 1% of dependents from informal to formal scenario	44.0%	427	472	502	535	564	583	592	598	605	615
of which: receiving institutional care	135.7%	51	68	80	91	103	111	114	116	118	121
receiving home care	118.9%	159	210	244	274	305	324	332	337	341	348
receiving cash benefits	58.4%	308	344	373	407	439	459	468	474	479	488
Coverage convergence scenario	44.0%	427	472	502	535	564	583	592	598	605	615
of which: receiving institutional care	107.5%	51	61	69	79	90	97	100	102	104	106
receiving home care	89.3%	159	184	205	233	262	279	287	291	295	301
receiving cash benefits	58.4%	308	344	373	407	439	459	468	474	479	488

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.3	6.1	6.1	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.4
Expenditure decomposition (broadly constant) : Transfers (7%) - Capital (6%) - Staff (55%) - Other (31%)											
Primary	0.1	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (8%) - Staff (60%) - Other (32%)											
Low secondary	0.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (8%) - Staff (60%) - Other (32%)											
Upper secondary	0.1	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.7	1.7
Expenditure decomposition (broadly constant) : Transfers (9%) - Capital (9%) - Staff (52%) - Other (31%)											
Tertiary education	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Expenditure decomposition (broadly constant) : Transfers (15%) - Capital (3%) - Staff (53%) - Other (29%)											
Number of students (in thousands)											
Total	135	1233	1256	1281	1310	1333	1345	1353	1358	1363	1368
as % of population 5-24	1%	99%	101%	100%	99%	99%	99%	99%	100%	100%	100%
Primary	57	350	375	381	393	397	396	398	404	407	406
Low secondary	27	183	188	197	200	205	207	206	206	209	210
Upper secondary	35	385	379	392	398	407	413	415	415	417	420
Tertiary education	16	315	314	311	318	323	329	333	333	331	331
Number of teachers (in thousands)											
Total	10	84	86	88	90	92	92	93	93	94	94
Primary	4	25	27	28	28	29	29	29	29	29	29
Low secondary	3	19	20	21	21	22	22	22	22	22	22
Upper secondary	2	23	23	24	24	24	25	25	25	25	25
Tertiary education	1	16	16	16	17	17	17	17	17	17	17
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.4	1.9	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
(8) Contributory period refers to pension rights accrued since 2009
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

Sweden		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.0	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.92
Life expectancy at birth											
males	5.5	80.1	81.0	81.6	82.2	82.8	83.4	84.0	84.5	85.1	85.6
females	5.5	83.6	84.5	85.2	85.8	86.4	87.0	87.6	88.1	88.6	89.2
Life expectancy at 65											
males	4.1	18.6	19.2	19.7	20.1	20.6	21.0	21.4	21.9	22.3	22.7
females	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.2	24.7	25.1	25.6
Net migration (thousand)	-34.6	65.8	55.3	56.6	56.0	53.5	49.1	42.8	34.7	32.9	31.2
Net migration as % of population	-0.4	0.7	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2
Population (million)	3.5	9.6	10.2	10.6	11.0	11.4	11.8	12.1	12.5	12.8	13.1
Children population (0-14) as % of total population	0.5	17.0	18.0	18.2	18.1	17.7	17.4	17.4	17.6	17.6	17.4
Prime age population (25-54) as % of total population	-2.8	39.0	39.0	37.6	36.8	37.0	37.2	36.9	36.3	36.4	36.2
Working age population (15-64) as % of total population	-5.4	63.8	61.6	60.9	60.4	60.2	60.2	60.2	59.9	59.1	58.4
Elderly population (65 and over) as % of total population	4.9	19.3	20.4	20.9	21.5	22.2	22.5	22.4	22.5	23.3	24.2
Very elderly population (80 and over) as % of total population	3.7	5.2	5.3	6.2	7.2	7.5	7.6	8.0	8.5	8.9	8.9
Very elderly population (80 and over) as % of elderly population	9.9	26.9	25.8	29.6	33.5	33.9	34.0	35.7	37.8	38.1	36.8
Very elderly population (80 and over) as % of working age population	7.1	8.1	8.5	10.2	12.0	12.5	12.7	13.3	14.2	15.0	15.2
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	2.0	2.2	1.9	2.1	2.1	2.2	2.2	2.1	1.9	1.8	1.8
Employment (growth rate)	0.5	1.0	0.6	0.6	0.6	0.7	0.7	0.6	0.4	0.2	0.3
Labour input : hours worked (growth rate)	0.6	1.2	0.6	0.6	0.6	0.7	0.7	0.6	0.4	0.2	0.3
Labour productivity per hour (growth rate)	1.5	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	1.0	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.4	1.3	1.0	1.2	1.4	1.5	1.6	1.5	1.4	1.3	1.4
Potential GDP per worker (growth rate)	1.5	1.1	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	1516	6121	6273	6476	6667	6865	7083	7304	7472	7564	7637
Population growth (working age:15-64)	0.2	0.1	0.5	0.7	0.5	0.7	0.6	0.5	0.4	0.1	0.3
Population (20-64) (in thousands)	1310	5567	5725	5861	6020	6175	6372	6600	6768	6835	6877
Population growth (20-64)	-0.3	0.6	0.4	0.6	0.6	0.4	0.7	0.6	0.4	0.1	0.3
Labour force 15-64 (thousands)	1310	4977	5153	5307	5460	5627	5819	6015	6155	6218	6286
Labour force 20-64 (thousands)	1250	4783	4972	5103	5244	5397	5580	5778	5919	5975	6033
Participation rate (20-64)	1.8	85.9	86.8	87.1	87.1	87.4	87.6	87.5	87.5	87.4	87.7
Participation rate (15-64)	1.0	81.3	82.1	82.0	81.9	82.0	82.2	82.3	82.4	82.2	82.3
young (15-24)	-2.2	55.4	53.4	52.7	53.4	53.2	53.6	54.0	53.7	53.3	53.2
prime-age (25-54)	1.7	90.9	91.7	92.3	92.5	92.5	92.5	92.5	92.5	92.6	92.6
older (55-64)	1.3	77.7	77.1	77.3	77.3	78.1	78.7	79.2	79.2	78.0	78.9
Participation rate (20-64) - FEMALES	1.8	82.9	83.6	83.8	83.9	84.2	84.4	84.4	84.3	84.3	84.7
Participation rate (15-64) - FEMALES	1.0	79.0	79.6	79.4	79.4	79.5	79.7	79.9	79.9	79.8	80.0
young (15-24)	-2.0	56.0	54.1	53.6	54.2	54.1	54.4	54.7	54.5	54.1	54.0
prime-age (25-54)	1.9	88.1	88.9	89.5	89.8	89.8	89.8	89.8	89.9	90.0	90.0
older (55-64)	0.4	73.6	72.3	72.5	72.3	73.0	73.6	74.2	74.3	72.9	74.0
Participation rate (20-64) - MALES	1.8	88.9	90.0	90.2	90.2	90.5	90.6	90.6	90.5	90.4	90.7
Participation rate (15-64) - MALES	1.0	83.5	84.6	84.4	84.4	84.4	84.5	84.7	84.7	84.5	84.6
young (15-24)	-2.4	54.8	52.7	51.9	52.7	52.4	52.9	53.3	53.0	52.5	52.4
prime-age (25-54)	1.6	93.6	94.4	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.2
older (55-64)	1.9	81.7	81.8	81.9	82.3	83.1	83.7	84.1	84.0	83.0	83.6
Average effective exit age (TOTAL) (1)	-0.1	65.2	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Men	-0.2	65.8	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
Women	0.0	64.5	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
Employment rate (15-64)	2.8	74.6	76.9	77.1	77.0	77.1	77.3	77.5	77.5	77.3	77.4
Employment rate (20-64)	3.5	79.8	82.0	82.6	82.7	83.0	83.1	83.1	83.0	83.0	83.3
Employment rate (15-74)	1.9	66.0	67.8	68.6	68.4	68.1	68.3	68.9	69.1	68.5	67.9
Unemployment rate (15-64)	-2.3	8.2	6.4	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Unemployment rate (20-64)	-2.0	7.1	5.5	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Unemployment rate (15-74)	-2.3	8.1	6.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Employment (20-64) (in millions)	1.3	4.4	4.7	4.8	5.0	5.1	5.3	5.5	5.6	5.7	5.7
Employment (15-64) (in millions)	1.3	4.6	4.8	5.0	5.1	5.3	5.5	5.7	5.8	5.8	5.9
share of young (15-24)	0%	11%	10%	10%	11%	11%	12%	11%	11%	11%	11%
share of prime-age (25-54)	1%	70%	72%	71%	70%	71%	71%	70%	69%	70%	71%
share of older (55-64)	-1%	19%	18%	19%	19%	18%	17%	18%	20%	19%	18%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	-0.8	18.9	19.0	19.7	19.4	18.3	17.7	18.7	20.1	19.1	18.0
Old-age dependency ratio 15-64 (3)	11	30	33	34	36	37	37	37	38	39	41
Old-age dependency ratio 20-64 (3)	13	33	36	38	40	41	42	41	42	44	46
Total dependency ratio (4)	14	57	62	64	66	66	66	66	67	69	71
Total economic dependency ratio (5)	9	103	104	106	107	108	107	107	108	111	112
Economic old-age dependency ratio (15-64) (6)	12	37	39	41	43	44	45	45	45	47	49
Economic old-age dependency ratio (15-74) (7)	11	36	38	39	41	42	43	43	44	45	47

Sweden	EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-1.4	8.9	8.3	8.1	7.9	7.8	7.5	7.3	7.2	7.4	7.5
Earnings-related pensions, gross	-2.0	8.2	7.8	7.5	7.3	7.0	6.7	6.3	6.1	6.2	6.2
Of which : Old-age and early pensions	-1.1	6.6	6.6	6.3	6.2	6.0	5.7	5.4	5.3	5.4	5.5
Disability pensions	-0.5	1.2	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7
Survivors pensions	-0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	0.6	0.7	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
Private occupational pensions, gross	0.8	1.8	2.2	2.4	2.6	2.7	2.7	2.5	2.5	2.6	2.6
Private individual pensions, gross	0.7	0.6	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3
New pensions, gross	-0.2	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3
Public pensions, net	-0.9	6.7	6.2	6.1	6.0	5.9	5.8	5.6	5.6	5.7	5.8
Public pensions, contributions	0.0	6.0	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.1	6.1
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	1.9%	75.3%	75.5%	75.8%	76.0%	76.2%	76.6%	77.0%	77.2%	77.1%	77.2%
Pensioners (Public, in 1000 persons)	1789	2375	2653	2864	3076	3258	3410	3533	3699	3948	4165
Pensioners aged 65+ (1000 persons)	1831	1970	2304	2516	2722	2910	3065	3179	3321	3556	3801
Share of pensioners below age 65 as % of all pensioners	-8.3%	17.1%	13.2%	12.1%	11.5%	10.7%	10.1%	10.0%	10.2%	9.9%	8.7%
Benefit ratio (Public pensions)	-15.8	42.1	36.9	34.5	32.5	31.0	29.7	28.6	27.6	26.8	26.3
Gross replacement rate at retirement (Public pensions)	-6.7	35.6	33.7	34.0	33.5	31.6	31.2	30.6	30.8	29.4	29.0
Average accrual rates (new pensions, earnings related)	-0.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
Average contributory period (new pensions, earnings-related)	1.8	39.8	40.8	40.0	40.7	40.1	38.9	39.9	41.5	41.5	41.5
Contributors (Public pensions, in 1000 persons)	1326.1	5679.5	5775.2	5925.8	6083.5	6275.5	6489.4	6706.6	6861.9	6926.2	7005.6
Support ratio (contributors/100 pensioners, Public pensions)	-70.9	239.1	217.7	206.9	197.8	192.6	190.3	189.8	185.5	175.4	168.2
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.5	-0.7	-0.6	-0.4	-0.3	-0.2	-0.3	-0.3	-0.3
Lower migration (-20%)	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2
TFP risk scenario	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1
Policy scenario linking retirement age to increases in life expectancy	-0.8	0.0	-0.8	-0.7	-0.6	-0.5	-0.4	-0.3	-0.4	-0.7	-0.8
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-1.4		-0.7	-0.9	-1.0	-1.2	-1.4	-1.6	-1.7	-1.6	-1.4
Dependency ratio	2.6		0.8	1.1	1.5	1.8	1.9	1.8	1.9	2.2	2.6
Coverage ratio	0.2		0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.2
Of which : Old-age	1.0		0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0
Early-age	-2.5		-1.7	-2.0	-1.9	-2.0	-2.3	-2.4	-2.2	-2.0	-2.5
Cohort effect	-2.5		-0.5	-0.7	-1.3	-1.8	-1.8	-1.4	-1.6	-2.0	-2.5
Benefit ratio	-3.7		-1.1	-1.7	-2.1	-2.5	-2.8	-3.1	-3.3	-3.5	-3.7
Labour market ratio	-0.4		-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4
Of which : Employment rate	-0.4		-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Interaction effect (residual)	-0.1		0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-1.4		-0.1	-0.2	-0.1	-0.2	-0.2	-0.3	-0.1	0.1	0.2
Dependency ratio	2.6		0.5	0.4	0.4	0.3	0.1	-0.1	0.1	0.3	0.4
Coverage ratio	0.2		0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	-0.1
Of which : Old-age	1.0		0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.0
Early-age	-2.5		-1.0	-0.3	0.2	-0.1	-0.4	-0.4	0.4	0.4	-0.5
Cohort effect	-2.5		-0.2	-0.2	-0.6	-0.5	0.0	0.4	-0.1	-0.5	-0.5
Benefit ratio	-3.7		-0.5	-0.6	-0.5	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1
Labour market ratio	-0.4		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which : Employment rate	-0.4		-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	6.9	7.0	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3
Demographic scenario	0.6	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.4
High Life expectancy scenario	0.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.7
Constant health scenario	-0.1	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.7
Death-related cost scenario	0.3	6.9	7.0	7.0	7.1	7.1	7.1	7.1	7.2	7.2	7.2
Income elasticity scenario	0.8	6.9	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.6	7.7
EU28 cost convergence scenario	0.6	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5
Labour intensity scenario	0.9	6.9	7.1	7.2	7.3	7.4	7.4	7.5	7.6	7.7	7.8
Sector-specific composite indexation scenario	-0.1	6.9	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.8
Non-demographic determinants scenario	2.1	6.9	7.3	7.6	7.8	8.1	8.3	8.5	8.7	8.9	9.0
AWG risk scenario	1.2	6.9	7.2	7.4	7.6	7.7	7.8	7.9	8.0	8.0	8.0
TFP risk scenario	0.4	6.9	7.0	7.1	7.2	7.2	7.2	7.2	7.2	7.3	7.3

Sweden	EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.5	3.6	3.9	4.1	4.4	4.6	4.6	4.7	4.8	5.0	5.1
Demographic scenario	1.6	3.6	3.9	4.1	4.4	4.6	4.7	4.8	4.9	5.1	5.2
High Life expectancy scenario	2.1	3.6	3.9	4.2	4.5	4.8	4.9	5.1	5.3	5.5	5.7
Base case scenario	1.8	3.6	3.9	4.2	4.5	4.7	4.8	4.9	5.1	5.3	5.5
Constant disability scenario	1.3	3.6	3.8	4.0	4.2	4.4	4.5	4.5	4.6	4.8	4.9
Shift to formal care scenario	3.0	3.6	4.6	5.2	5.5	5.8	5.9	6.0	6.1	6.4	6.6
Coverage convergence scenario	3.8	3.6	4.1	4.5	5.0	5.4	5.7	6.0	6.4	6.9	7.4
Cost convergence scenario	2.4	3.6	4.0	4.2	4.6	4.9	5.0	5.2	5.4	5.7	6.0
Cost and coverage convergence scenario	4.4	3.6	4.1	4.6	5.1	5.6	5.9	6.3	6.8	7.4	8.0
AWG risk scenario	3.8	3.6	4.1	4.5	4.9	5.4	5.7	6.0	6.4	6.9	7.5
TFP risk scenario	1.5	3.6	3.9	4.1	4.4	4.6	4.6	4.7	4.8	5.0	5.1
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	50.0%	620	691	728	767	799	824	851	880	907	929
of which: receiving institutional care	106.3%	87	97	107	122	135	143	150	160	171	179
receiving home care	83.9%	206	232	256	283	304	317	330	348	365	379
receiving cash benefits	87.6%	224	251	274	304	330	347	361	380	402	420
Demographic scenario	62.0%	620	699	744	791	831	864	901	939	973	1004
of which: receiving institutional care	118.6%	87	97	109	125	139	149	157	168	180	190
receiving home care	95.6%	206	234	260	290	314	330	346	366	387	403
receiving cash benefits	99.3%	224	254	279	311	341	361	377	400	425	446
Constant disability scenario	43.4%	620	682	712	744	769	789	811	841	868	889
of which: receiving institutional care	97.0%	87	96	105	119	131	139	145	153	163	171
receiving home care	75.9%	206	229	251	276	295	306	317	334	350	363
receiving cash benefits	80.4%	224	249	269	296	320	335	347	366	387	404
Shift 1% of dependents from informal to formal scenario	62.0%	620	699	744	791	831	864	901	939	973	1004
of which: receiving institutional care	148.0%	87	109	127	144	159	170	179	191	204	215
receiving home care	131.9%	206	272	317	350	377	395	414	437	459	478
receiving cash benefits	99.3%	224	254	279	311	341	361	377	400	425	446
Coverage convergence scenario	62.0%	620	699	744	791	831	864	901	939	973	1004
of which: receiving institutional care	181.3%	87	101	117	136	156	172	186	204	225	244
receiving home care	164.3%	206	245	281	322	359	389	422	463	505	545
receiving cash benefits	99.3%	224	254	279	311	341	361	377	400	425	446

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.2	5.7	5.7	5.7	5.9	5.9	5.8	5.7	5.7	5.8	5.9
Expenditure decomposition (broadly constant) : Transfers (12%) - Capital (5%) - Staff (55%) - Other (28%)											
Primary	0.2	1.6	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (6%) - Staff (65%) - Other (29%)											
Low secondary	0.1	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (6%) - Staff (64%) - Other (28%)											
Upper secondary	0.0	1.3	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.4
Expenditure decomposition (broadly constant) : Transfers (15%) - Capital (7%) - Staff (48%) - Other (30%)											
Tertiary education	-0.2	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Expenditure decomposition (broadly constant) : Transfers (24%) - Capital (2%) - Staff (46%) - Other (27%)											
Number of students (in thousands)											
Total	722	2039	2151	2262	2380	2471	2522	2559	2615	2691	2762
as % of population 5-24	1%	90%	93%	91%	90%	90%	90%	90%	90%	91%	91%
Primary	314	720	818	862	907	919	919	943	984	1017	1035
Low secondary	168	335	379	411	434	456	460	457	468	487	503
Upper secondary	161	519	510	550	576	612	634	635	637	656	680
Tertiary education	79	465	443	440	462	485	509	524	526	532	544
Number of teachers (in thousands)											
Total	54	145	155	163	172	178	181	184	188	194	199
Primary	25	58	66	69	73	74	74	76	79	82	83
Low secondary	14	29	32	35	37	39	39	40	42	43
Upper secondary	10	33	32	34	36	38	40	40	40	41	43
Tertiary education	4	26	25	25	26	27	28	29	29	30	30
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.4	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.5

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

28. UNITED KINGDOM

United-Kingdom	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.0	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93
Life expectancy at birth											
males	6.2	79.1	80.2	80.9	81.6	82.3	82.9	83.6	84.2	84.8	85.3
females	6.1	82.8	83.9	84.6	85.3	85.9	86.6	87.2	87.8	88.4	89.0
Life expectancy at 65											
males	4.3	18.4	19.1	19.5	20.0	20.5	21.0	21.4	21.9	22.3	22.7
females	4.8	20.8	21.6	22.1	22.7	23.2	23.7	24.2	24.6	25.1	25.6
Net migration (thousand)	6.2	165.0	172.1	192.9	203.3	210.1	209.3	203.0	190.2	180.7	171.2
Net migration as % of population	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Population (million)	16.0	64.1	66.9	68.8	70.6	72.3	74.0	75.7	77.3	78.8	80.1
Children population (0-14) as % of total population	-0.4	17.6	18.4	18.3	17.8	17.3	17.0	17.1	17.3	17.3	17.2
Prime age population (25-54) as % of total population	-4.8	40.8	39.3	37.7	36.6	36.5	36.3	36.1	35.8	35.8	36.0
Working age population (15-64) as % of total population	-7.0	65.1	63.0	61.9	60.8	60.0	59.6	59.4	58.8	58.2	58.0
Elderly population (65 and over) as % of total population	7.5	17.3	18.7	19.8	21.4	22.7	23.3	23.5	23.9	24.4	24.8
Very elderly population (80 and over) as % of total population	4.8	4.7	5.1	5.6	6.6	7.1	7.7	8.6	9.3	9.5	9.5
Very elderly population (80 and over) as % of elderly population	11.2	27.1	27.2	28.3	30.8	31.1	32.8	36.5	38.9	39.0	38.2
Very elderly population (80 and over) as % of working age population	9.1	7.2	8.1	9.0	10.9	11.8	12.8	14.4	15.8	16.3	16.3
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.7	0.7	1.1	1.3	1.7	2.0	2.1	2.0	1.8	1.8	1.8
Employment (growth rate)	0.4	0.7	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.2	0.3
Labour input : hours worked (growth rate)	0.4	1.1	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.2	0.3
Labour productivity per hour (growth rate)	1.2	-0.4	0.8	1.0	1.3	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	0.8	-0.4	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.0	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.2	0.2	0.5	0.7	1.2	1.6	1.6	1.5	1.4	1.4	1.5
Potential GDP per worker (growth rate)	1.3	0.0	0.8	0.9	1.3	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	4783	41678	42111	42644	42952	43394	44139	44966	45446	45872	46461
Population growth (working age:15-64)	0.3	0.0	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.2	0.3
Population (20-64) (in thousands)	4031	37796	38501	38576	38671	38986	39775	40669	41130	41411	41827
Population growth (20-64)	0.2	0.1	0.2	0.0	0.1	0.3	0.5	0.3	0.2	0.1	0.3
Labour force 15-64 (thousands)	5082	31820	32647	33060	33450	34037	34880	35641	36075	36411	36902
Labour force 20-64 (thousands)	4815	30317	31280	31520	31815	32344	33198	33987	34423	34711	35132
Participation rate (20-64)	3.8	80.2	81.2	81.7	82.3	83.0	83.5	83.6	83.7	83.8	84.0
Participation rate (15-64)	3.1	76.3	77.5	77.5	77.9	78.4	79.0	79.3	79.4	79.4	79.4
young (15-24)	-0.9	58.3	58.2	56.5	57.3	57.7	58.1	58.1	57.8	57.4	57.4
prime-age (25-54)	2.5	85.8	86.6	87.2	87.7	87.9	88.1	88.2	88.2	88.3	88.3
older (55-64)	10.4	62.9	66.5	67.7	68.6	70.2	72.2	72.7	73.2	73.1	73.3
Participation rate (20-64) - FEMALES	6.0	74.0	75.8	76.9	78.0	78.9	79.4	79.4	79.6	79.8	80.0
Participation rate (15-64) - FEMALES	5.0	70.9	72.7	73.3	74.1	74.9	75.5	75.6	75.7	75.8	75.9
young (15-24)	-0.8	56.5	56.4	54.9	55.7	56.0	56.4	56.4	56.2	55.8	55.7
prime-age (25-54)	4.2	79.6	81.0	82.1	82.8	83.2	83.5	83.6	83.6	83.7	83.8
older (55-64)	15.7	55.4	60.8	63.8	66.2	68.3	70.3	70.1	70.6	70.8	71.1
Participation rate (20-64) - MALES	1.3	86.5	86.7	86.5	86.5	87.0	87.4	87.6	87.7	87.7	87.8
Participation rate (15-64) - MALES	0.9	81.9	82.4	81.8	81.6	81.9	82.5	82.8	82.9	82.8	82.8
young (15-24)	-1.1	60.0	59.9	58.0	58.8	59.2	59.7	59.8	59.5	59.0	58.9
prime-age (25-54)	0.6	92.0	92.1	92.4	92.6	92.5	92.5	92.6	92.6	92.6	92.6
older (55-64)	4.8	70.7	72.4	71.8	71.1	72.3	74.3	75.4	75.7	75.4	75.5
Average effective exit age (TOTAL) (1)	1.6	64.3	64.5	64.8	65.1	65.3	65.7	65.8	65.8	65.8	65.8
Men	0.9	64.9	64.9	64.9	64.9	65.1	65.6	65.8	65.8	65.8	65.8
Women	2.2	63.6	64.2	64.8	65.2	65.6	65.8	65.8	65.8	65.8	65.8
Employment rate (15-64)	4.2	70.4	72.5	72.5	72.9	73.6	74.2	74.4	74.5	74.5	74.6
Employment rate (20-64)	4.8	74.8	76.7	77.1	77.8	78.5	79.1	79.2	79.3	79.4	79.6
Employment rate (15-74)	2.9	63.5	64.5	64.5	64.3	64.6	65.7	66.7	66.9	66.5	66.4
Unemployment rate (15-64)	-1.7	7.8	6.5	6.5	6.4	6.2	6.1	6.1	6.1	6.1	6.1
Unemployment rate (20-64)	-1.5	6.7	5.6	5.6	5.5	5.3	5.2	5.3	5.3	5.2	5.2
Unemployment rate (15-74)	-1.7	7.6	6.3	6.4	6.2	6.0	5.9	5.9	5.9	5.9	5.9
Employment (20-64) (in millions)	5.0	28.3	29.5	29.8	30.1	30.6	31.5	32.2	32.6	32.9	33.3
Employment (15-64) (in millions)	5.3	29.3	30.5	30.9	31.3	31.9	32.8	33.5	33.9	34.2	34.6
share of young (15-24)	0%	13%	12%	12%	13%	13%	13%	13%	13%	13%	13%
share of prime-age (25-54)	-2%	72%	71%	70%	69%	70%	69%	69%	69%	70%	70%
share of older (55-64)	2%	15%	17%	19%	18%	17%	18%	18%	19%	18%	17%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	0.4	17.5	19.7	20.7	19.9	18.6	18.7	19.5	19.7	19.0	18.0
Old-age dependency ratio 15-64 (3)	16	27	30	32	35	38	39	40	41	42	43
Old-age dependency ratio 20-64 (3)	18	29	32	35	39	42	43	44	45	46	47
Total dependency ratio (4)	19	54	59	61	64	67	68	68	70	72	72
Total economic dependency ratio (5)	8	112	113	116	117	117	116	116	117	119	119
Economic old-age dependency ratio (15-64) (6)	17	35	38	41	44	47	48	48	49	51	52
Economic old-age dependency ratio (15-74) (7)	16	34	37	40	43	45	46	46	47	48	49

United-Kingdom		EC-EPC (AWG) 2015 projections									

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.7	7.7	7.4	7.8	7.9	8.2	8.4	8.1	8.1	8.3	8.4
Earnings-related pensions, gross	1.1	7.1	7.0	7.4	7.6	7.9	8.1	7.9	7.9	8.0	8.1
Of which : Old-age and early pensions	1.1	7.1	7.0	7.4	7.6	7.9	8.1	7.9	7.9	8.0	8.1
Disability pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Survivors pensions	:	:	:	:	:	:	:	:	:	:	:
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-0.3	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Public pensions, net	:	:	:	:	:	:	:	:	:	:	:
Public pensions, contributions	:	:	:	:	:	:	:	:	:	:	:

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	:	:	:	:	:	:	:	:	:	:	:
Pensioners (Public, in 1000 persons)	5769	13124	12873	13877	14509	15973	17036	16948	17406	18106	18894
Pensioners aged 65+ (1000 persons)	:	:	:	:	:	:	:	:	:	:	:
Share of pensioners below age 65 as % of all pensioners	:	:	:	:	:	:	:	:	:	:	:
Benefit ratio (Public)	-2.5	36.4	37.6	37.5	37.1	36.0	35.4	35.2	34.8	34.5	33.9
Gross replacement rate at retirement (Public pensions)	:	:	:	:	:	:	:	:	:	:	:
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	:	:	:	:	:	:	:	:	:	:	:
Support ratio (contributors/100 pensioners, Public pensions)	:	:	:	:	:	:	:	:	:	:	:

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.5	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
High emp. of older workers (+10 p.p.)	-0.3	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
TFP risk scenario	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	-0.4	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.7		-0.3	0.1	0.2	0.6	0.8	0.5	0.5	0.6	0.7
Dependency ratio	3.9		0.8	1.4	2.2	2.9	3.1	3.2	3.4	3.7	3.9
Coverage ratio	-1.6		-1.0	-1.1	-1.5	-1.4	-1.3	-1.6	-1.7	-1.7	-1.6
Of which : Old-age	0.0		:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early-age	0.0		:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cohort effect	-3.6		-0.1	-0.6	-1.7	-2.4	-2.5	-2.5	-2.8	-3.4	-3.6
Benefit ratio	-0.7		0.1	0.1	0.0	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7
Labour market ratio	-0.6		-0.2	-0.2	-0.3	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
Of which : Employment rate	-0.5		-0.2	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Interaction effect (residual)	-0.2		-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.7		0.1	0.4	0.1	0.3	0.2	-0.3	0.0	0.2	0.1
Dependency ratio	3.9		0.5	0.7	0.8	0.6	0.2	0.1	0.2	0.3	0.2
Coverage ratio	-1.6		-0.7	-0.1	-0.4	0.1	0.1	-0.3	-0.1	0.0	0.1
Of which : Old-age	:		:	:	:	:	:	:	:	:	:
Early-age	:		:	:	:	:	:	:	:	:	:
Cohort effect	-3.6		0.0	-0.5	-1.0	-0.7	-0.2	0.1	-0.4	-0.5	-0.2
Benefit ratio	-0.7		0.4	-0.1	-0.2	-0.1	0.0	-0.1	-0.1	-0.2	
Labour market ratio	-0.6		0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Of which : Employment rate	-0.5		0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.2		0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.2		-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.3	7.8	8.1	8.3	8.5	8.7	8.8	8.9	9.0	9.1	9.1
Demographic scenario	1.5	7.8	8.1	8.3	8.6	8.8	9.0	9.1	9.2	9.3	9.4
High Life expectancy scenario	2.0	7.8	8.1	8.4	8.6	8.9	9.2	9.4	9.6	9.7	9.8
Constant health scenario	0.6	7.8	8.0	8.1	8.2	8.3	8.4	8.4	8.4	8.4	8.4
Death-related cost scenario	1.2	7.8	8.0	8.2	8.4	8.6	8.8	8.9	9.0	9.0	9.1
Income elasticity scenario	1.8	7.8	8.1	8.4	8.7	8.9	9.1	9.3	9.4	9.5	9.6
EU28 cost convergence scenario	1.6	7.8	8.1	8.3	8.6	8.8	9.0	9.1	9.3	9.4	9.4
Labour intensity scenario	1.7	7.8	8.0	8.4	8.7	8.9	9.0	9.2	9.3	9.5	9.6
Sector-specific composite indexation scenario	1.5	7.8	8.1	8.3	8.5	8.7	8.9	9.1	9.2	9.2	9.3
Non-demographic determinants scenario	3.1	7.8	8.3	8.6	9.0	9.5	9.9	10.3	10.6	10.8	10.9
AWG risk scenario	2.0	7.8	8.2	8.5	8.8	9.1	9.4	9.6	9.7	9.8	9.8
TFP risk scenario	1.2	7.8	8.1	8.2	8.4	8.6	8.8	8.9	9.0	9.0	9.0

United-Kingdom		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.4	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5
Demographic scenario	0.4	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.6
High Life expectancy scenario	0.5	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6
Base case scenario	0.4	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6
Constant disability scenario	0.3	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Shift to formal care scenario	1.0	1.2	1.6	1.8	1.9	2.0	2.0	2.0	2.1	2.1	2.2
Coverage convergence scenario	0.6	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8
Cost convergence scenario	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.2
Cost and coverage convergence scenario	1.2	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.2	2.4
AWG risk scenario	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0	2.1	2.3
TFP risk scenario	0.4	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	40.1%	5473	5878	6166	6446	6719	6956	7174	7380	7541	7665
of which: receiving institutional care	56.1%	243	265	284	305	323	339	350	360	370	379
receiving home care	57.4%	1020	1107	1199	1264	1332	1422	1491	1534	1563	1605
receiving cash benefits	89.1%	1508	1661	1799	1965	2139	2302	2462	2633	2771	2853
Demographic scenario	48.8%	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
of which: receiving institutional care	64.9%	243	268	289	312	333	351	364	376	388	400
receiving home care	66.1%	1020	1118	1219	1294	1372	1472	1551	1603	1641	1694
receiving cash benefits	96.1%	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957
Constant disability scenario	32.0%	5473	5814	6051	6285	6510	6697	6868	7024	7143	7223
of which: receiving institutional care	47.6%	243	263	280	298	314	328	336	344	351	358
receiving home care	49.2%	1020	1096	1178	1235	1294	1374	1434	1468	1489	1522
receiving cash benefits	82.6%	1508	1650	1778	1933	2096	2248	2396	2555	2683	2754
Shift 1% of dependents from informal to formal scenario	48.8%	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
of which: receiving institutional care	128.7%	243	346	407	439	467	489	505	522	540	555
receiving home care	130.7%	1020	1456	1729	1829	1932	2057	2160	2233	2287	2354
receiving cash benefits	96.1%	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957
Coverage convergence scenario	48.8%	5473	5941	6281	6615	6941	7227	7499	7759	7968	8145
of which: receiving institutional care	84.9%	243	271	294	321	346	370	388	408	429	449
receiving home care	87.5%	1020	1130	1242	1332	1430	1553	1659	1746	1825	1913
receiving cash benefits	96.1%	1508	1673	1821	1998	2184	2358	2531	2715	2864	2957

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.0	5.1	5.1	5.3	5.3	5.2	5.1	5.0	5.1	5.1	5.2
Expenditure decomposition (broadly constant) : Transfers (27%) - Capital (7%) - Staff (19%) - Other (47%)											
Primary	0.0	1.7	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.8	1.8
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (9%) - Staff (22%) - Other (65%)											
Low secondary	0.1	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Expenditure decomposition (broadly constant) : Transfers (16%) - Capital (8%) - Staff (20%) - Other (57%)											
Upper secondary	0.0	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (32%) - Capital (8%) - Staff (23%) - Other (36%)											
Tertiary education	-0.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Expenditure decomposition (broadly constant) : Transfers (75%) - Capital (2%) - Staff (6%) - Other (17%)											
Number of students (in thousands)											
Total	2811	13031	13559	14206	14542	14616	14618	14784	15147	15560	15842
as % of population 5-24	1%	84%	86%	87%	85%	84%	84%	85%	86%	86%	86%
Primary	1118	4642	5166	5323	5277	5193	5211	5386	5610	5740	5760
Low secondary	750	2438	2726	2848	2953	2937	2898	2911	3004	3121	3187
Upper secondary	697	3486	3360	3701	3853	3939	3908	3874	3915	4048	4183
Tertiary education	246	2465	2308	2335	2460	2546	2600	2613	2617	2650	2711
Number of teachers (in thousands)											
Total	157	704	734	772	791	795	793	801	821	844	861
Primary	56	234	260	268	265	261	262	271	282	289	290
Low secondary	47	151	169	177	183	182	180	181	186	194	198
Upper secondary	44	220	213	234	244	249	247	245	248	256	265
Tertiary education	10	99	92	93	98	102	104	104	105	106	108
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	1.0	0.1	0.4	0.5	0.7	0.9	1.1	1.1	1.1	1.1	1.1

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

29. NORWAY

Norway	EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions										
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.0	1.85	1.85	1.86	1.86	1.86	1.87	1.87	1.87	1.88	1.88
Life expectancy at birth											
males	5.8	79.6	80.5	81.2	81.9	82.5	83.1	83.7	84.3	84.8	85.4
females	5.6	83.5	84.5	85.1	85.8	86.4	87.0	87.5	88.1	88.6	89.1
Life expectancy at 65											
males	4.2	18.4	19.0	19.5	20.0	20.4	20.9	21.3	21.8	22.2	22.6
females	4.5	21.1	21.8	22.3	22.8	23.3	23.8	24.3	24.7	25.1	25.6
Net migration (thousand)	-16.8	39.2	53.4	53.6	51.8	48.1	42.3	34.6	24.9	23.7	22.4
Net migration as % of population	-0.5	0.8	1.0	0.9	0.8	0.7	0.6	0.5	0.3	0.3	0.3
Population (million)	3.1	5.1	5.6	6.0	6.4	6.8	7.1	7.4	7.7	7.9	8.2
Children population (0-14) as % of total population	-1.3	18.3	18.2	18.2	18.3	18.2	17.9	17.6	17.4	17.2	17.0
Prime age population (25-54) as % of total population	-4.6	41.1	40.6	39.8	39.0	39.0	38.7	38.3	37.6	36.9	36.5
Working age population (15-64) as % of total population	-6.3	65.9	64.7	63.8	62.7	61.8	61.4	61.4	61.1	60.5	59.7
Elderly population (65 and over) as % of total population	7.5	15.8	17.1	18.1	19.0	20.0	20.7	21.0	21.5	22.3	23.3
Very elderly population (80 and over) as % of total population	4.1	4.4	4.1	4.6	5.6	6.1	6.6	7.1	7.8	8.3	8.5
Very elderly population (80 and over) as % of elderly population	8.7	27.6	24.0	25.5	29.4	30.7	31.9	33.8	36.2	37.1	36.3
Very elderly population (80 and over) as % of working age population	7.6	6.6	6.4	7.2	8.9	9.9	10.8	11.5	12.7	13.7	14.2
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	2.3	2.4	2.4	2.7	2.6	2.4	2.4	2.3	2.1	1.9	1.8
Employment (growth rate)	0.8	1.2	0.9	1.1	1.0	0.9	0.9	0.8	0.5	0.4	0.3
Labour input : hours worked (growth rate)	0.8	0.5	1.0	1.1	1.0	0.9	0.9	0.8	0.5	0.4	0.3
Labour productivity per hour (growth rate)	1.5	1.5	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
TFP (growth rate)	1.0	0.9	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Potential GDP per capita (growth rate)	1.3	1.2	0.9	1.3	1.3	1.3	1.4	1.5	1.4	1.3	1.3
Potential GDP per worker (growth rate)	1.5	1.2	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	1516	3349	3615	3823	4019	4198	4383	4574	4716	4805	4865
Population growth (working age:15-64)	-0.9	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.5	0.3	0.2
Population (20-64) (in thousands)	1378	3024	3290	3468	3651	3800	3958	4132	4266	4349	4401
Population growth (20-64)	-1.0	1.2	1.2	1.1	1.0	0.8	0.9	0.8	0.5	0.3	0.2
Labour force 15-64 (thousands)	1229	2620	2849	3017	3173	3319	3474	3624	3736	3804	3849
Labour force 20-64 (thousands)	1172	2485	2714	2871	3021	3155	3298	3442	3550	3615	3657
Participation rate (20-64)	0.9	82.2	82.5	82.8	82.8	83.0	83.3	83.3	83.2	83.1	83.1
Participation rate (15-64)	0.9	78.2	78.8	78.9	79.0	79.1	79.3	79.2	79.2	79.2	79.1
young (15-24)	1.0	57.4	59.4	58.4	58.4	58.5	58.5	58.5	58.5	58.5	58.4
prime-age (25-54)	1.7	86.6	87.0	87.5	87.9	88.0	88.2	88.3	88.3	88.3	88.3
older (55-64)	-1.4	72.1	70.9	70.9	69.8	69.7	70.4	70.5	71.1	71.0	70.8
Participation rate (20-64) - FEMALES	2.2	79.4	80.3	80.8	80.9	81.3	81.7	81.8	81.7	81.7	81.6
Participation rate (15-64) - FEMALES	2.1	76.0	77.1	77.3	77.6	77.8	78.1	78.2	78.2	78.1	78.1
young (15-24)	1.3	58.4	60.4	59.6	60.0	59.6	59.6	59.7	59.8	59.7	59.7
prime-age (25-54)	2.7	84.0	84.9	85.5	86.0	86.3	86.6	86.7	86.7	86.7	86.7
older (55-64)	1.3	67.9	67.9	68.2	67.8	67.5	68.2	68.8	69.4	69.4	69.2
Participation rate (20-64) - MALES	-0.3	84.9	84.6	84.7	84.5	84.7	84.9	84.8	84.7	84.6	84.5
Participation rate (15-64) - MALES	-0.2	80.3	80.5	80.4	80.3	80.3	80.4	80.3	80.2	80.1	80.1
young (15-24)	0.8	56.5	58.4	57.2	57.7	57.1	57.1	57.3	57.3	57.3	57.2
prime-age (25-54)	0.8	89.1	89.1	89.3	89.7	89.6	89.7	89.8	89.9	89.9	89.9
older (55-64)	-4.0	76.2	73.8	73.5	71.8	71.8	72.4	72.1	72.7	72.6	72.3
Average effective exit age (TOTAL) (1)	0.0	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
Men	0.0	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
Women	0.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
Employment rate (15-64)	0.8	75.5	76.2	76.1	76.2	76.3	76.4	76.4	76.4	76.3	76.3
Employment rate (20-64)	0.8	79.7	80.1	80.2	80.2	80.5	80.8	80.7	80.7	80.6	80.5
Employment rate (15-74)	-1.2	68.7	68.6	68.6	68.5	68.2	68.1	68.5	68.6	68.1	67.5
Unemployment rate (15-64)	0.0	3.5	3.3	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6
Unemployment rate (20-64)	0.0	3.1	2.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Unemployment rate (15-74)	0.0	3.4	3.2	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.4
Employment (20-64) (in millions)	1.1	2.4	2.6	2.8	2.9	3.1	3.2	3.3	3.4	3.5	3.5
Employment (15-64) (in millions)	1.2	2.5	2.8	2.9	3.1	3.2	3.4	3.5	3.6	3.7	3.7
share of young (15-24)	0%	14%	14%	13%	13%	13%	14%	14%	13%	13%	13%
share of prime-age (25-54)	-1%	69%	70%	70%	70%	71%	71%	70%	69%	68%	69%
share of older (55-64)	1%	17%	17%	17%	17%	16%	16%	16%	18%	18%	18%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.8	17.8	18.1	18.7	18.8	17.8	17.4	18.1	19.1	19.7	19.5
Old-age dependency ratio 15-64 (3)	15	24	26	28	30	32	34	34	35	37	39
Old-age dependency ratio 20-64 (3)	17	27	29	31	33	36	37	38	39	41	43
Total dependency ratio (4)	16	52	55	57	59	62	63	63	64	65	68
Total economic dependency ratio (5)	16	95	96	99	102	104	105	106	107	108	111
Economic old-age dependency ratio (15-64) (6)	18	28	31	34	36	39	40	41	42	44	47
Economic old-age dependency ratio (15-74) (7)	17	28	30	33	35	37	39	40	41	43	45

Norway				EC-EPC (AWG) 2015 projections							

Pension expenditure projections											
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
Earnings-related pensions, gross	4.4	7.2	8.0	8.7	9.4	10.0	10.3	10.6	10.9	11.3	11.7
Of which : Old-age and early pensions	4.3	4.4	5.2	5.8	6.5	7.3	7.7	7.9	8.1	8.3	8.7
Disability pensions	0.2	2.7	2.8	2.8	2.8	2.7	2.6	2.7	2.8	2.9	3.0
Survivors pensions	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other pensions	:	:	:	:	:	:	:	:	:	:	:
Non-earning-related pensions	-2.0	2.7	2.7	2.4	2.0	1.5	1.1	0.8	0.7	0.6	0.7
Private occupational pensions, gross	:	:	:	:	:	:	:	:	:	:	:
Private individual pensions, gross	:	:	:	:	:	:	:	:	:	:	:
New pensions, gross	-0.1	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
Public pensions, net	1.9	8.0	8.7	8.9	9.1	9.1	9.1	9.1	9.3	9.5	9.9
Public pensions, contributions	2.5	9.9	10.7	11.1	11.3	11.4	11.4	11.4	11.6	11.9	12.4
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-1.0%	81.1%	80.9%	80.5%	80.1%	80.0%	80.0%	80.0%	80.1%	80.1%	80.0%
Pensioners (Public, in 1000 persons)	1410	1125	1318	1460	1609	1758	1895	2031	2186	2359	2534
Pensioners aged 65+ (1000 persons)	1276	797	970	1104	1243	1391	1522	1628	1751	1903	2074
Share of pensioners below age 65 as % of all pensioners	-10.9%	29.1%	26.4%	24.4%	22.8%	20.9%	19.7%	19.9%	19.9%	19.3%	18.2%
Benefit ratio (Public pensions)	-10.3	47.0	45.8	44.7	43.5	42.1	40.7	39.4	38.4	37.4	36.7
Gross replacement rate at retirement (Public pensions)	-7.5	43.7	41.0	39.8	38.4	37.3	36.7	36.0	35.9	35.9	36.2
Average accrual rates (new pensions, earnings related)	:	:	:	:	:	:	:	:	:	:	:
Average contributory period (new pensions, earnings-related)	:	:	:	:	:	:	:	:	:	:	:
Contributors (Public pensions, in 1000 persons)	1258.6	2609.2	2852.3	3013.4	3174.2	3324.8	3475.0	3618.9	3733.1	3811.5	3867.8
Support ratio (contributors/100 pensioners, Public pensions)	-79.4	232.0	216.4	206.4	197.3	189.1	183.4	178.1	170.7	161.6	152.6
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
High labour productivity (+0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower labour productivity (-0.25 p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High employment rate (+2 p.p)	-0.2	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	:	:	:	:	:	:	:	:	:	:	:
Lower migration (-20%)	0.4	0.0	0.1	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.4
TFP risk scenario	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Policy scenario linking retirement age to increases in life expectancy	-1.0	0.0	-0.1	-0.2	-0.4	-0.5	-0.5	-0.6	-0.7	-0.8	-1.0
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	2.5		0.8	1.2	1.4	1.5	1.5	1.5	1.7	2.0	2.5
Dependency ratio	5.6		1.0	1.8	2.5	3.3	3.8	4.0	4.3	4.8	5.6
Coverage ratio	-0.5		-0.2	-0.4	-0.6	-0.9	-1.0	-0.8	-0.6	-0.5	-0.5
Of which : Old-age	1.1		0.2	0.3	0.3	0.3	0.4	0.5	0.7	0.9	1.1
Early-age	-1.1		-0.5	-0.9	-0.9	-1.0	-1.4	-1.4	-1.3	-1.0	-1.1
Cohort effect	-4.5		-0.7	-1.3	-2.3	-3.3	-3.7	-3.4	-3.3	-3.8	-4.5
Benefit ratio	-2.2		0.1	0.0	-0.3	-0.7	-1.0	-1.4	-1.7	-2.0	-2.2
Labour market ratio	-0.2		-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2
Of which : Employment rate	-0.1		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1
Interaction effect (residual)	-0.2		0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	2.5		0.3	0.4	0.2	0.1	0.0	0.0	0.2	0.4	0.4
Dependency ratio	5.6		0.7	0.8	0.7	0.8	0.5	0.1	0.3	0.6	0.7
Coverage ratio	-0.5		-0.2	-0.2	-0.2	-0.2	-0.1	0.2	0.2	0.1	0.0
Of which : Old-age	1.1		0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.2
Early-age	-1.1		-0.4	-0.4	0.0	-0.2	-0.3	0.0	0.1	0.2	0.0
Cohort effect	-4.5		-0.4	-0.6	-1.0	-1.0	-0.4	0.3	0.1	-0.5	-0.7
Benefit ratio	-2.2		-0.1	-0.1	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.2
Labour market ratio	-0.2		-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Of which : Employment rate	-0.1		-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	7.5	7.7	7.9	8.0	8.1	8.1	8.2	8.3	8.4	8.5
Demographic scenario	1.2	7.5	7.7	7.9	8.1	8.2	8.3	8.4	8.6	8.7	8.8
High Life expectancy scenario	1.6	7.5	7.8	8.0	8.1	8.3	8.4	8.6	8.8	8.9	9.1
Constant health scenario	0.2	7.5	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.5	7.5	7.8	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.0
EU28 cost convergence scenario	1.2	7.5	7.7	7.9	8.1	8.2	8.3	8.4	8.6	8.7	8.8
Labour intensity scenario	2.2	7.5	7.9	8.3	8.6	8.8	9.0	9.1	9.3	9.5	9.7
Sector-specific composite indexation scenario	0.6	7.5	7.6	7.7	7.8	7.8	7.8	7.9	8.0	8.1	8.2
Non-demographic determinants scenario	2.8	7.5	8.0	8.3	8.7	9.0	9.3	9.6	9.9	10.2	10.4
AWG risk scenario	1.7	7.5	7.9	8.1	8.3	8.5	8.7	8.9	9.0	9.1	9.2
TFP risk scenario	0.9	7.5	7.7	7.8	8.0	8.0	8.1	8.2	8.3	8.4	8.4

Norway		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	3.6	5.8	5.9	6.2	6.7	7.3	7.7	8.1	8.5	9.0	9.4
Demographic scenario	3.5	5.8	5.9	6.1	6.6	7.1	7.6	8.0	8.4	8.9	9.3
High Life expectancy scenario	4.5	5.8	5.9	6.2	6.7	7.4	8.0	8.5	9.0	9.7	10.2
Base case scenario	4.2	5.8	6.0	6.3	6.8	7.5	8.0	8.4	8.9	9.4	10.0
Constant disability scenario	3.2	5.8	5.8	6.1	6.5	7.0	7.5	7.8	8.2	8.6	9.0
Shift to formal care scenario	4.9	5.8	6.3	6.8	7.4	8.1	8.6	9.0	9.5	10.1	10.6
Coverage convergence scenario	4.2	5.8	6.0	6.3	6.8	7.5	8.0	8.4	8.9	9.4	10.0
Cost convergence scenario	4.4	5.8	6.0	6.3	6.9	7.6	8.1	8.6	9.1	9.6	10.2
Cost and coverage convergence scenario	4.4	5.8	6.0	6.3	6.9	7.6	8.1	8.6	9.1	9.6	10.2
AWG risk scenario	3.8	5.8	5.9	6.2	6.7	7.3	7.8	8.2	8.6	9.1	9.6
TFP risk scenario	3.6	5.8	5.9	6.2	6.7	7.3	7.7	8.1	8.5	9.0	9.4
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	86.0%	317	358	387	420	454	486	514	541	566	589
of which: receiving institutional care	185.7%	45	49	55	65	77	88	97	108	118	128
receiving home care	120.8%	192	217	240	271	302	329	354	380	404	424
receiving cash benefits	129.2%	115	128	142	161	181	199	215	232	248	263
Demographic scenario	100.1%	317	363	396	433	472	509	543	575	605	634
of which: receiving institutional care	200.9%	45	49	56	66	79	91	101	112	124	135
receiving home care	135.5%	192	219	245	278	312	343	372	401	428	452
receiving cash benefits	142.9%	115	129	144	165	187	206	224	243	262	278
Constant disability scenario	77.7%	317	354	379	408	438	466	493	518	542	563
of which: receiving institutional care	171.3%	45	48	54	63	75	85	94	103	113	121
receiving home care	111.1%	192	215	236	264	292	317	341	365	387	405
receiving cash benefits	119.0%	115	127	139	157	176	192	207	223	238	251
Shift 1% of dependents from informal to formal scenario	100.1%	317	363	396	433	472	509	543	575	605	634
of which: receiving institutional care	223.7%	45	52	61	72	85	98	109	121	133	145
receiving home care	163.2%	192	242	280	316	353	386	418	450	479	506
receiving cash benefits	142.9%	115	129	144	165	187	206	224	243	262	278
Coverage convergence scenario	100.1%	317	363	396	433	472	509	543	575	605	634
of which: receiving institutional care	200.9%	45	49	56	66	79	91	101	112	124	135
receiving home care	135.5%	192	219	245	278	312	343	372	401	428	452
receiving cash benefits	142.9%	115	129	144	165	187	206	224	243	262	278

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.1	6.0	5.8	5.8	5.9	6.0	6.0	6.0	5.9	5.9	5.9
Expenditure decomposition (broadly constant) : Transfers (18%) - Capital (9%) - Staff (56%) - Other (17%)											
Primary	0.1	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.8
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (12%) - Staff (70%) - Other (18%)											
Low secondary	0.0	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Expenditure decomposition (broadly constant) : Transfers (0%) - Capital (12%) - Staff (70%) - Other (18%)											
Upper secondary	-0.1	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Expenditure decomposition (broadly constant) : Transfers (18%) - Capital (11%) - Staff (56%) - Other (15%)											
Tertiary education	-0.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Expenditure decomposition (broadly constant) : Transfers (41%) - Capital (4%) - Staff (37%) - Other (18%)											
Number of students (in thousands)											
Total	513	1118	1180	1255	1338	1423	1492	1542	1575	1603	1631
as % of population 5-24	0%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%
Primary	221	425	468	498	543	575	596	611	623	635	646
Low secondary	87	189	195	211	223	241	254	262	267	271	276
Upper secondary	109	264	265	286	297	320	341	354	362	367	373
Tertiary education	96	240	251	261	276	287	301	315	324	330	336
Number of teachers (in thousands)											
Total	46	100	106	113	121	128	134	139	142	144	147
Primary	21	40	44	47	51	54	56	57	59	60	61
Low secondary	8	18	19	21	22	24	25	26	26	26	27
Upper secondary	9	23	23	25	26	28	29	31	31	32	32
Tertiary education	8	19	20	21	22	23	24	25	26	26	27
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.0	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

30. EUROPEAN UNION

European Union		EC-EPC (AWG) 2015 projections									
Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.60	1.64	1.66	1.68	1.69	1.71	1.72	1.74	1.75	1.76
Life expectancy at birth											
males	7.1	77.6	78.9	79.7	80.5	81.3	82.0	82.8	83.5	84.1	84.8
females	6.0	83.1	84.1	84.8	85.5	86.1	86.8	87.4	88.0	88.5	89.1
Life expectancy at 65											
males	4.8	17.6	18.4	18.9	19.5	20.0	20.5	21.0	21.5	22.0	22.4
females	4.6	21.0	21.8	22.3	22.8	23.3	23.8	24.3	24.7	25.2	25.6
Net migration (thousand)	1000.8	35.9	976.3	1101.1	1244.1	1369.3	1363.8	1304.6	1188.3	1129.9	1036.7
Net migration as % of population	0.2	0.0	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Population (million)	15.6	507.2	512.8	516.0	518.8	521.4	523.7	525.3	525.5	524.5	522.8
Children population (0-14) as % of total population	-0.6	15.6	15.6	15.2	14.9	14.6	14.6	14.8	15.0	15.0	15.0
Prime age population (25-54) as % of total population	-7.1	41.9	39.9	38.1	36.7	35.9	35.3	34.9	34.8	34.8	34.8
Working age population (15-64) as % of total population	-9.4	66.0	63.9	62.6	61.1	59.6	58.4	57.5	56.9	56.6	56.6
Elderly population (65 and over) as % of total population	10.0	18.4	20.5	22.2	24.1	25.8	27.0	27.7	28.2	28.4	28.4
Very elderly population (80 and over) as % of total population	6.7	5.1	5.9	6.3	7.2	8.1	9.1	10.1	11.0	11.5	11.8
Very elderly population (80 and over) as % of elderly population	13.8	27.8	28.6	28.3	29.9	31.4	33.6	36.4	39.0	40.5	41.6
Very elderly population (80 and over) as % of working age population	13.1	7.7	9.2	10.1	11.8	13.6	15.5	17.5	19.3	20.3	20.8
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.4	0.7	1.4	1.3	1.4	1.5	1.4	1.4	1.4	1.5	1.5
Employment (growth rate)	0.0	0.1	0.3	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	0.0
Labour input : hours worked (growth rate)	-0.1	0.1	0.3	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	0.0
Labour productivity per hour (growth rate)	1.4	0.6	1.1	1.3	1.5	1.6	1.6	1.6	1.6	1.6	1.6
TFP (growth rate)	0.9	0.3	0.7	0.9	1.0	1.1	1.1	1.1	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Potential GDP per capita (growth rate)	1.3	0.6	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
Potential GDP per worker (growth rate)	1.5	0.6	1.1	1.4	1.5	1.7	1.7	1.7	1.6	1.6	1.6
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-38902	334932	327747	322976	316783	310691	305921	301949	298829	296709	296030
Population growth (working age:15-64)	0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3	-0.2	-0.1	0.0
Population (20-64) (in thousands)	-38891	307605	301227	295141	289325	283376	279186	275589	272343	269729	268714
Population growth (20-64)	0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2	0.0
Labour force 15-64 (thousands)	-20138	241068	241114	238529	234477	230626	227874	225351	223101	221447	220930
Labour force 20-64 (thousands)	-20222	235358	235633	232867	228742	224812	222110	219674	217451	215736	215135
Participation rate (20-64)	3.5	76.5	78.2	78.9	79.1	79.3	79.6	79.7	79.8	80.0	80.1
Participation rate (15-64)	2.7	72.0	73.6	73.9	74.0	74.2	74.5	74.6	74.7	74.6	74.6
young (15-24)	-0.2	42.4	42.1	41.2	42.0	42.4	42.8	42.5	42.2	42.2	42.2
prime-age (25-54)	0.6	85.3	85.8	85.9	85.9	85.8	85.7	85.8	85.9	85.9	85.9
older (55-64)	15.8	54.4	62.2	66.1	67.6	68.6	69.5	69.7	69.7	69.9	70.2
Participation rate (20-64) - FEMALES	5.9	70.0	72.6	73.7	74.3	74.8	75.2	75.4	75.6	75.8	75.9
Participation rate (15-64) - FEMALES	4.7	66.0	68.4	69.1	69.6	70.1	70.4	70.6	70.7	70.7	70.7
young (15-24)	-0.1	39.5	39.2	38.4	39.2	39.6	40.0	40.0	39.7	39.4	39.4
prime-age (25-54)	2.1	79.2	80.5	81.0	81.2	81.1	81.1	81.2	81.2	81.3	81.3
older (55-64)	20.9	46.5	55.5	60.1	62.6	64.6	66.2	66.6	66.7	67.0	67.4
Participation rate (20-64) - MALES	1.1	83.0	83.8	84.1	83.8	83.8	83.9	84.0	84.1	84.1	84.2
Participation rate (15-64) - MALES	0.4	77.9	78.7	78.6	78.3	78.3	78.4	78.5	78.5	78.4	78.4
young (15-24)	-0.3	45.1	44.8	43.8	44.7	45.1	45.5	45.5	45.1	44.8	44.8
prime-age (25-54)	-1.1	91.4	91.0	90.7	90.5	90.3	90.3	90.3	90.3	90.3	90.3
older (55-64)	10.2	62.8	69.2	72.2	72.7	72.8	72.8	72.8	72.8	72.8	73.0
Average effective exit age (TOTAL) (1)	2.3	63.1	64.3	64.7	64.8	65.0	65.2	65.3	65.3	65.4	65.4
Men	2.0	63.5	64.7	65.0	65.1	65.2	65.3	65.4	65.4	65.5	65.5
Women	2.6	62.7	63.9	64.4	64.6	64.8	65.0	65.1	65.2	65.3	65.3
Employment rate (15-64)	5.7	64.0	66.8	67.7	68.3	69.0	69.6	69.7	69.7	69.7	69.7
Employment rate (20-64)	6.6	68.4	71.3	72.6	73.2	74.0	74.6	74.7	74.7	74.9	75.0
Employment rate (15-74)	4.2	57.0	58.7	59.4	59.6	59.8	60.4	60.7	60.9	61.0	61.2
Unemployment rate (15-64)	-4.4	11.0	9.2	8.4	7.7	7.1	6.6	6.6	6.6	6.6	6.6
Unemployment rate (20-64)	-4.3	10.6	8.8	8.0	7.4	6.8	6.3	6.3	6.3	6.3	6.3
Unemployment rate (15-74)	-4.4	10.8	9.0	8.1	7.5	6.9	6.4	6.4	6.4	6.4	6.4
Employment (20-64) (in millions)	-8.9	210.4	214.9	214.2	211.8	209.6	208.1	205.9	203.8	202.2	201.6
Employment (15-64) (in millions)	-8.2	214.5	219.0	218.6	216.4	214.3	212.9	210.5	208.4	206.9	206.4
share of young (15-24)	1%	9%	8%	8%	9%	9%	9%	9%	9%	9%	10%
share of prime-age (25-54)	-5%	76%	73%	71%	70%	70%	70%	70%	71%	71%	71%
share of older (55-64)	4%	15%	18%	20%	21%	21%	20%	20%	20%	19%	19%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	0.6	19.2	21.0	22.0	22.1	21.7	21.4	21.2	20.8	20.1	19.8
Old-age dependency ratio 15-64 (3)	22	28	32	36	39	43	46	48	50	50	50
Old-age dependency ratio 20-64 (3)	25	30	35	39	43	47	51	53	54	55	55
Total dependency ratio (4)	25	51	56	60	64	68	71	74	76	77	77
Total economic dependency ratio (5)	9	132	128	128	129	132	134	137	139	141	141
Economic old-age dependency ratio (15-64) (6)	25	41	45	49	53	58	61	64	66	67	66
Economic old-age dependency ratio (15-74) (7)	22	41	44	47	51	55	58	61	62	63	63

European Union	EC-EPC (AWG) 2015 projections									
Pension expenditure projections										
Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	-0.2	11.3	11.2	11.4	11.6	11.7	11.7	11.6	11.4	11.3	11.2
Earnings-related pensions, gross	-0.3	11.4	11.3	11.5	11.7	11.7	11.7	11.6	11.4	11.2	11.1
Of which : Old-age and early pensions	0.4	8.5	8.6	8.9	9.1	9.2	9.3	9.2	9.1	9.0	9.0
Disability pensions	-0.1	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Survivors pensions	-0.5	1.6	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0
Other pensions	-0.1	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Non-earning-related pensions	-0.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Private occupational pensions, gross	0.4	1.9	2.2	2.3	2.6	2.7	2.8	2.7	2.6	2.5	2.3
Private individual pensions, gross	0.4	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6
New pensions, gross	0.0	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Public pensions, net	-0.3	10.3	10.2	10.3	10.5	10.5	10.5	10.5	10.3	10.1	10.0
Public pensions, contributions	0.2	9.2	9.3	9.3	9.5	9.6	9.6	9.6	9.6	9.5	9.5
Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-1.5%	91.0%	91.0%	90.4%	90.3%	90.0%	89.8%	90.2%	90.1%	89.6%	89.5%
Pensioners (Public, in 1000 persons)	32349	124008	128572	134853	141331	148504	153621	155862	157216	157208	156357
Pensioners aged 65+ (1000 persons)	:	:	:	:	:	:	:	:	:	:	:
Share of pensioners below age 65 as % of all pensioners	:	:	:	:	:	:	:	:	:	:	:
Benefit ratio (Public pensions)	-9.1	44.0	43.1	42.1	40.7	39.2	37.9	36.8	35.9	35.2	34.9
Gross replacement rate at retirement (Public pensions)	-6.6	42.5	42.7	41.3	40.0	38.7	37.7	36.9	36.4	35.9	35.9
Average accrual rates (new pensions, earnings related)	-0.2	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4
Average contributory period (new pensions, earnings-related)	4.1	34.3	35.5	36.0	36.5	36.9	37.2	37.5	37.8	38.1	38.4
Contributors (Public pensions, in 1000 persons)	:	:	:	:	:	:	:	:	:	:	:
Support ratio (contributors/100 pensioners, Public pensions)	:	:	:	:	:	:	:	:	:	:	:
Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4
High labour productivity (+0.25 p.p.)	-0.3	0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Lower labour productivity (-0.25 p.p.)	0.3	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
High employment rate (+2 p.p)	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	:	:	:	:	:	:	:	:	:	:	:
Lower migration (-20%)	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2
TFP risk scenario	0.4	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.3	0.4
Policy scenario linking retirement age to increases in life expectancy	:	:	:	:	:	:	:	:	:	:	:
Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	-0.2		-0.2	0.1	0.3	0.4	0.4	0.3	0.1	-0.1	-0.2
Dependency ratio	7.2		1.7	2.9	4.2	5.3	6.1	6.6	7.0	7.2	7.2
Coverage ratio	-2.6		-1.0	-1.4	-1.8	-2.1	-2.2	-2.4	-2.5	-2.6	-2.6
Of which : Old-age	-0.7		0.0	-0.1	-0.3	-0.4	-0.5	-0.5	-0.5	-0.6	-0.7
Early-age	-5.1		-2.4	-3.2	-3.5	-3.8	-4.2	-4.5	-4.6	-4.9	-5.1
Cohort effect	-6.4		-0.7	-1.6	-2.8	-4.0	-4.8	-5.5	-6.1	-6.4	-6.4
Benefit ratio	-3.0		-0.2	-0.5	-0.9	-1.4	-1.8	-2.2	-2.6	-2.9	-3.0
Labour market ratio	-1.4		-0.5	-0.8	-1.0	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
Of which : Employment rate	-1.0		-0.5	-0.7	-0.8	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Career shift	-0.4		-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
Interaction effect (residual)	-0.4		-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	-0.2		0.0	0.3	0.2	0.1	0.0	-0.1	-0.2	-0.2	-0.1
Dependency ratio	7.2		1.2	1.2	1.3	1.2	0.8	0.5	0.3	0.2	0.0
Coverage ratio	-2.6		-0.6	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1	0.0
Of which : Old-age	-0.7		-0.1	-0.1	-0.2	-0.1	0.0	0.0	0.0	-0.1	-0.1
Early-age	-5.1		-1.5	-0.8	-0.3	-0.3	-0.4	-0.3	-0.1	-0.2	-0.2
Cohort effect	-6.4		-0.5	-0.9	-1.2	-1.2	-0.9	-0.7	-0.6	-0.4	0.1
Benefit ratio	-3.0		-0.2	-0.2	-0.4	-0.5	-0.4	-0.4	-0.4	-0.3	-0.1
Labour market ratio	-1.4		-0.4	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0
Of which : Employment rate	-1.0		-0.3	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.4		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0

Health care											
Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.9	6.9	7.2	7.3	7.5	7.6	7.7	7.8	7.9	7.9	7.8
Demographic scenario	1.1	6.9	7.2	7.3	7.5	7.7	7.8	7.9	8.0	8.0	8.0
High Life expectancy scenario	1.4	6.9	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.3	8.4
Constant health scenario	0.3	6.9	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3	7.2
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.3	6.9	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.2	8.2
EU28 cost convergence scenario	1.3	6.9	7.2	7.4	7.6	7.8	7.9	8.1	8.2	8.2	8.3
Labour intensity scenario	1.5	6.9	7.2	7.4	7.6	7.8	8.1	8.2	8.4	8.4	8.4
Sector-specific composite indexation scenario	0.6	6.9	7.1	7.1	7.3	7.4	7.5	7.5	7.6	7.6	7.6
Non-demographic determinants scenario	2.6	6.9	7.4	7.8	8.1	8.5	8.8	9.1	9.3	9.5	9.5
AWG risk scenario	1.6	6.9	7.4	7.6	7.8	8.1	8.3	8.5	8.5	8.6	8.5
TFP risk scenario	0.8	6.9	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.8

European Union		EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.1	1.6	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.7
Demographic scenario	1.2	1.6	1.8	1.9	2.0	2.2	2.3	2.5	2.6	2.7	2.8
High Life expectancy scenario	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.6	2.8	3.0	3.1
Base case scenario	1.3	1.6	1.8	1.9	2.0	2.2	2.4	2.5	2.7	2.8	2.9
Constant disability scenario	1.0	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.6
Shift to formal care scenario	1.9	1.6	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.5	3.6
Coverage convergence scenario	2.0	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.2	3.5	3.6
Cost convergence scenario	1.8	1.6	1.8	2.0	2.1	2.3	2.6	2.8	3.1	3.3	3.5
Cost and coverage convergence scenario	2.7	1.6	1.9	2.1	2.3	2.6	2.9	3.3	3.6	4.0	4.3
AWG risk scenario	2.4	1.6	1.9	2.0	2.2	2.5	2.8	3.1	3.5	3.8	4.1
TFP risk scenario	1.1	1.6	1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.7
Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	30.4%	39708	42554	44203	45821	47535	49170	50534	51491	51909	51797
of which: receiving institutional care	78.9%	4182	4661	4978	5326	5760	6229	6659	7059	7348	7481
receiving home care	78.3%	6701	7456	7984	8546	9259	9977	10616	11197	11641	11949
receiving cash benefits	67.6%	10156	11200	11896	12617	13470	14387	15276	16099	16683	17020
Demographic scenario	40.4%	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
of which: receiving institutional care	88.9%	4182	4714	5070	5462	5944	6463	6946	7394	7727	7900
receiving home care	88.8%	6701	7538	8132	8767	9560	10362	11088	11750	12270	12650
receiving cash benefits	76.9%	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968
Constant disability scenario	21.7%	39708	41955	43159	44364	45669	46901	47883	48530	48689	48332
of which: receiving institutional care	69.7%	4182	4609	4887	5195	5585	6009	6389	6745	6997	7095
receiving home care	68.6%	6701	7374	7837	8332	8972	9613	10172	10680	11058	11301
receiving cash benefits	59.1%	10156	11074	11676	12301	13054	13870	14657	15387	15893	16157
Shift 1% of dependents from informal to formal scenario	40.4%	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
of which: receiving institutional care	141.7%	4182	5946	6909	7376	7937	8537	9087	9585	9941	10110
receiving home care	139.0%	6701	9327	10818	11586	12519	13451	14289	15036	15608	16013
receiving cash benefits	76.9%	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968
Coverage convergence scenario	40.4%	39708	43154	45256	47338	49523	51622	53424	54767	55522	55737
of which: receiving institutional care	153.2%	4182	4902	5428	6033	6768	7600	8427	9251	10001	10591
receiving home care	142.7%	6701	7790	8612	9536	10681	11905	13093	14259	15331	16263
receiving cash benefits	76.9%	10156	11326	12118	12942	13908	14937	15940	16869	17544	17968

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.0	4.7	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6
Expenditure decomposition (broadly constant) : Transfers (12%) - Capital (7%) - Staff (57%) - Other (24%)											
Primary	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (8%) - Staff (62%) - Other (29%)											
Low secondary	0.0	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.1	1.1
Expenditure decomposition (broadly constant) : Transfers (4%) - Capital (7%) - Staff (64%) - Other (24%)											
Upper secondary	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
Expenditure decomposition (broadly constant) : Transfers (14%) - Capital (7%) - Staff (58%) - Other (21%)											
Tertiary education	-0.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (24%) - Capital (8%) - Staff (47%) - Other (21%)											
Number of students (in thousands)											
Total	-1320	92032	91162	91413	90807	89738	88970	89005	89736	90503	90713
as % of population 5-24	0%	83%	84%	84%	84%	83%	83%	83%	84%	84%	84%
Primary	459	28371	29310	28841	28200	27689	27739	28328	28900	29034	28830
Low secondary	-66	21527	21838	21847	21721	21294	20897	20834	21118	21412	21461
Upper secondary	-28	22630	21908	22794	22590	22546	22243	22001	22065	22385	22602
Tertiary education	-1684	19504	18107	17931	18297	18210	18091	17842	17654	17671	17820
Number of teachers (in thousands)											
Total	-86	6123	6090	6106	6049	5968	5909	5912	5969	6026	6037
Primary	11	1846	1909	1872	1826	1788	1789	1827	1865	1872	1857
Low secondary	-6	1656	1678	1678	1666	1635	1605	1600	1622	1646	1650
Upper secondary	15	1567	1525	1590	1576	1569	1547	1532	1540	1565	1582
Tertiary education	-106	1054	977	966	982	976	968	954	943	942	948
Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.4	1.1	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

31. EURO AREA

Euro-Area					EC-EPC (AWG) 2015 projections						

Main demographic and macroeconomic assumptions											
Demographic projections - EUROPOP2013 (EUROSTAT)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fertility rate	0.2	1.56	1.59	1.61	1.63	1.65	1.67	1.68	1.69	1.71	1.72
Life expectancy at birth											
males	6.5	78.7	79.8	80.5	81.3	82.0	82.7	83.3	84.0	84.6	85.2
females	5.5	84.0	84.9	85.6	86.2	86.8	87.3	87.9	88.5	89.0	89.5
Life expectancy at 65											
males	4.5	18.2	18.9	19.4	19.9	20.4	20.9	21.4	21.8	22.2	22.7
females	4.3	21.7	22.4	22.9	23.3	23.8	24.3	24.7	25.1	25.5	26.0
Net migration (thousand)	967.1	-197.4	677.7	813.4	936.0	994.3	977.3	941.6	866.2	834.0	769.6
Net migration as % of population	0.3	-0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Population (million)	6.7	334.5	337.7	339.6	341.4	343.2	344.6	345.2	344.6	343.1	341.2
Children population (0-14) as % of total population	-0.7	15.3	15.0	14.6	14.3	14.2	14.2	14.4	14.5	14.6	14.6
Prime age population (25-54) as % of total population	-7.4	42.0	39.3	37.3	36.0	35.3	34.9	34.7	34.6	34.6	34.6
Working age population (15-64) as % of total population	-9.0	65.5	63.8	62.4	60.6	58.7	57.4	56.6	56.3	56.3	56.5
Elderly population (65 and over) as % of total population	9.7	19.2	21.3	23.0	25.1	27.1	28.3	29.0	29.2	29.2	28.9
Very elderly population (80 and over) as % of total population	7.0	5.5	6.4	6.8	7.6	8.5	9.6	10.8	11.9	12.4	12.5
Very elderly population (80 and over) as % of elderly population	14.5	28.8	30.3	29.7	30.4	31.4	33.7	37.4	40.7	42.4	43.2
Very elderly population (80 and over) as % of working age population	13.7	8.4	10.1	11.0	12.6	14.5	16.6	19.1	21.1	22.0	22.1
Macroeconomic assumptions*	AVG 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Potential GDP (growth rate)	1.3	0.5	1.3	1.3	1.3	1.4	1.3	1.3	1.4	1.5	1.5
Employment (growth rate)	-0.1	0.0	0.4	0.1	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	0.0
Labour input : hours worked (growth rate)	-0.1	-0.2	0.4	0.1	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	0.0
Labour productivity per hour (growth rate)	1.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.6	1.6	1.5
TFP (growth rate)	0.9	0.3	0.6	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Capital deepening (contribution to labour productivity growth)	0.5	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.5
Potential GDP per capita (growth rate)	1.3	0.4	1.2	1.1	1.2	1.3	1.3	1.3	1.5	1.6	1.6
Potential GDP per worker (growth rate)	1.4	0.5	0.9	1.2	1.4	1.6	1.6	1.6	1.6	1.6	1.5
Labour force assumptions	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Working age population (15-64) (in thousands)	-26235	219172	215311	211962	206768	201617	197914	195449	193871	193090	192937
Population growth (working age:15-64)	0.4	-0.4	-0.3	-0.4	-0.5	-0.5	-0.3	-0.2	-0.1	-0.1	0.0
Population (20-64) (in thousands)	-26190	201711	197798	194093	189230	184350	180949	178555	176805	175779	175522
Population growth (20-64)	0.3	-0.3	-0.3	-0.4	-0.6	-0.5	-0.3	-0.1	-0.1	0.0	0.0
Labour force 15-64 (thousands)	-15557	159727	159753	157825	154311	150930	148541	146593	145230	144428	144170
Labour force 20-64 (thousands)	-15393	156279	156330	154435	150934	147554	145206	143302	141955	141148	140886
Participation rate (20-64)	2.8	77.5	79.0	79.6	79.8	80.0	80.2	80.3	80.3	80.3	80.3
Participation rate (15-64)	2.1	72.2	73.6	74.0	74.2	74.4	74.6	74.6	74.5	74.4	74.3
young (15-24)	-1.0	41.2	40.8	40.3	40.7	41.0	41.2	40.9	40.5	40.3	40.2
prime-age (25-54)	0.3	85.5	86.1	86.1	86.1	85.9	85.8	85.8	85.8	85.8	85.8
older (55-64)	15.8	54.8	63.3	67.3	69.0	70.1	70.8	70.5	70.4	70.5	70.7
Participation rate (20-64) - FEMALES	5.7	70.4	73.1	74.2	74.9	75.6	75.9	75.9	76.0	76.1	76.1
Participation rate (15-64) - FEMALES	4.5	66.3	68.7	69.5	70.1	70.7	71.0	70.9	70.9	70.8	70.7
young (15-24)	-1.1	38.5	38.1	37.5	37.9	38.2	38.3	38.1	37.7	37.5	37.4
prime-age (25-54)	2.3	79.2	80.9	81.6	81.8	81.7	81.5	81.5	81.5	81.5	81.6
older (55-64)	21.1	47.3	57.2	61.8	64.5	66.7	68.4	68.2	68.0	68.1	68.4
Participation rate (20-64) - MALES	0.2	83.2	83.7	83.8	83.6	83.6	83.6	83.6	83.6	83.6	83.6
Participation rate (15-64) - MALES	-0.4	78.2	78.5	78.4	78.2	78.1	78.2	78.1	78.0	77.9	77.8
young (15-24)	-0.9	43.8	43.5	42.9	43.4	43.7	43.8	43.6	43.2	42.9	42.9
prime-age (25-54)	-1.9	91.8	91.1	90.7	90.3	90.0	89.9	89.9	89.9	89.9	89.9
older (55-64)	10.2	62.7	69.7	73.0	73.6	73.5	73.3	72.9	72.7	72.8	72.9
Average effective exit age (TOTAL) (1)	2.4	63.0	64.4	64.8	64.9	65.0	65.1	65.2	65.3	65.3	65.4
Men	2.3	63.1	64.6	64.9	65.1	65.2	65.2	65.3	65.3	65.4	65.4
Women	2.5	62.9	64.3	64.6	64.7	64.9	65.0	65.1	65.2	65.3	65.3
Employment rate (15-64)	5.9	63.5	66.2	67.4	68.2	69.0	69.7	69.6	69.6	69.4	69.4
Employment rate (20-64)	7.0	67.7	70.8	72.2	73.1	74.0	74.7	74.7	74.7	74.7	74.7
Employment rate (15-74)	4.8	56.1	58.0	58.9	59.1	59.3	60.0	60.4	60.6	60.8	61.0
Unemployment rate (15-64)	-5.4	12.1	10.0	8.9	8.1	7.3	6.6	6.6	6.6	6.7	6.7
Unemployment rate (20-64)	-5.3	11.8	9.8	8.6	7.8	7.1	6.4	6.4	6.4	6.4	6.4
Unemployment rate (15-74)	-5.5	12.0	9.9	8.7	7.8	7.0	6.4	6.4	6.4	6.4	6.4
Employment (20-64) (in millions)	-6.1	137.9	141.1	141.1	141.1	139.1	137.2	135.9	134.1	132.8	131.8
Employment (15-64) (in millions)	-5.9	140.4	143.7	143.8	141.8	139.9	138.7	136.9	135.6	134.8	134.6
share of young (15-24)	1%	8%	8%	8%	9%	9%	9%	9%	9%	9%	9%
share of prime-age (25-54)	-5%	77%	73%	70%	69%	70%	70%	70%	71%	71%	71%
share of older (55-64)	5%	15%	19%	22%	22%	21%	21%	20%	20%	20%	20%
Dependency ratios	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Share of older population (55-64) (2)	1.2	19.2	21.8	23.2	23.0	22.1	21.5	21.0	20.5	20.2	20.3
Old-age dependency ratio 15-64 (3)	22	29	33	37	42	46	49	51	52	52	51
Old-age dependency ratio 20-64 (3)	24	32	36	40	45	50	54	56	57	57	56
Total dependency ratio (4)	24	53	57	60	65	70	74	77	78	78	77
Total economic dependency ratio (5)	7	135	129	128	130	133	136	139	142	142	141
Economic old-age dependency ratio (15-64) (6)	24	44	48	51	56	61	65	68	69	69	68
Economic old-age dependency ratio (15-74) (7)	21	44	47	49	53	58	62	65	66	66	65

Euro-Area			EC-EPC (AWG) 2015 projections								

Pension expenditure projections

Baseline scenario as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross	0.0	12.3	12.4	12.7	12.9	13.0	13.1	13.0	12.8	12.5	12.3
Earnings-related pensions, gross	-0.1	12.0	12.0	12.3	12.5	12.6	12.6	12.5	12.3	12.0	11.9
Of which : Old-age and early pensions	0.6	9.1	9.3	9.6	9.9	10.1	10.2	10.2	10.0	9.8	9.7
Disability pensions	-0.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Survivors pensions	-0.5	1.7	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.1
Other pensions	-0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Non-earning-related pensions	-0.1	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9
Private occupational pensions, gross	0.2	1.7	1.8	1.9	2.3	2.3	2.5	2.4	2.2	2.0	1.8
Private individual pensions, gross	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4
New pensions, gross	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Public pensions, net	-0.1	10.7	10.6	10.9	11.1	11.2	11.2	11.1	10.9	10.7	10.5
Public pensions, contributions	0.4	9.8	9.8	9.9	10.1	10.2	10.3	10.3	10.2	10.2	10.2

Additional indicators	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, net/Public pensions, gross, %	-1.1%	86.6%	86.1%	86.0%	85.9%	85.8%	85.7%	85.6%	85.5%	85.4%	85.5%
Pensioners (Public, in 1000 persons)	21833	83478	87759	92284	97390	102560	106100	107726	108026	106936	105311
Pensioners aged 65+ (1000 persons)	30016	63078	70568	75699	81897	88226	92629	94810	95534	94744	93093
Share of pensioners below age 65 as % of all pensioners	-12.8%	24.4%	19.6%	18.0%	15.9%	14.0%	12.7%	12.0%	11.6%	11.4%	11.6%
Benefit ratio (Public pensions)	-8.7	46.2	45.8	45.2	43.8	42.2	40.8	39.5	38.5	37.8	37.5
Gross replacement rate at retirement (Public pensions)	-7.7	46.3	45.9	43.9	42.7	41.4	40.3	39.4	38.9	38.6	38.6
Average accrual rates (new pensions, earnings related)	-0.3	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4
Average contributory period (new pensions, earnings-related)	5.1	32.7	34.4	34.9	35.5	35.9	36.4	36.6	37.0	37.4	37.8
Contributors (Public pensions, in 1000 persons)	494.8	135674.8	141553.2	142826.0	142568.4	141687.3	140506.9	138572.5	137266.2	136528.1	136169.5
Support ratio (contributors/100 pensioners, Public pensions)	-33.2	162.5	161.3	154.8	146.4	138.2	132.4	128.6	127.1	127.7	129.3

Public pensions, gross as % of GDP (difference from Baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
High life expectancy (+2 years)	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3
High labour productivity (+0.25 p.p.)	-0.4	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4
Lower labour productivity (-0.25 p.p.)	0.4	0.0	0.0	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4
High employment rate (+2 p.p)	-0.2	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
High emp. of older workers (+10 p.p.)	:	:	:	:	:	:	:	:	:	:	:
Lower migration (-20%)	0.3	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.2
TFP risk scenario	0.5	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.4	0.5	0.5
Policy scenario linking retirement age to increases in life expectancy	:	:	:	:	:	:	:	:	:	:	:

Decomposition of the increase (in p.p.) in pension expenditure (public) - cumulated change from 2013	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Public pensions, gross as % of GDP - p.p. ch. from 2013 due to :	0.0		0.0	0.3	0.6	0.7	0.8	0.7	0.5	0.2	0.0
Dependency ratio	7.6		1.7	3.0	4.7	6.1	7.0	7.5	7.7	7.7	7.6
Coverage ratio	-2.4		-0.8	-1.2	-1.7	-2.0	-2.2	-2.3	-2.3	-2.4	-2.4
Of which : Old-age	-0.6		-0.1	-0.3	-0.5	-0.5	-0.5	-0.6	-0.5	-0.6	-0.6
Early-age	-4.4		-2.6	-3.1	-3.4	-3.6	-3.8	-3.9	-4.1	-4.3	-4.4
Cohort effect	-6.5		-0.4	-1.3	-2.9	-4.6	-5.7	-6.5	-6.9	-6.9	-6.5
Benefit ratio	-3.1		-0.2	-0.4	-0.8	-1.5	-2.0	-2.4	-2.8	-3.1	-3.1
Labour market ratio	-1.6		-0.6	-1.0	-1.3	-1.5	-1.7	-1.7	-1.6	-1.6	-1.6
Of which : Employment rate	-1.2		-0.5	-0.8	-0.9	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.3	-0.4	-0.5	-0.5	-0.5	-0.4	-0.4	-0.4
Interaction effect (residual)	-0.4		-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Decomposition of the increase (in p.p.) in pension expenditure (public) - change over selected time periods	2013-2060		2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060
Public pensions, gross as % of GDP	0.0		0.0	0.3	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.2
Dependency ratio	7.6		1.2	1.3	1.6	1.4	0.9	0.5	0.2	0.0	-0.2
Coverage ratio	-2.4		-0.5	-0.4	-0.5	-0.4	-0.2	-0.1	0.0	0.0	0.0
Of which : Old-age	-0.6		-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0
Early-age	-4.4		-1.4	-0.5	-0.3	-0.2	-0.2	-0.1	-0.2	-0.2	-0.1
Cohort effect	-6.5		-0.3	-0.9	-1.6	-1.6	-1.2	-0.8	-0.4	0.0	0.3
Benefit ratio	-3.1		-0.2	-0.2	-0.5	-0.6	-0.5	-0.5	-0.4	-0.2	0.0
Labour market ratio	-1.6		-0.5	-0.4	-0.3	-0.2	-0.1	0.0	0.0	0.0	0.0
Of which : Employment rate	-1.2		-0.4	-0.2	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0
Labour intensity	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Career shift	-0.4		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Interaction effect (residual)	-0.4		-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0

Health care

Health care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	0.8	7.0	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.7
Demographic scenario	0.9	7.0	7.2	7.4	7.5	7.7	7.8	7.9	7.9	7.9	7.9
High Life expectancy scenario	1.3	7.0	7.2	7.4	7.6	7.8	8.0	8.1	8.2	8.2	8.2
Constant health scenario	0.2	7.0	7.1	7.1	7.2	7.3	7.3	7.4	7.3	7.3	7.2
Death-related cost scenario	:	:	:	:	:	:	:	:	:	:	:
Income elasticity scenario	1.2	7.0	7.3	7.4	7.6	7.8	8.0	8.1	8.2	8.1	8.1
EU28 cost convergence scenario	1.1	7.0	7.2	7.4	7.6	7.7	7.9	8.0	8.1	8.1	8.1
Labour intensity scenario	1.3	7.0	7.2	7.3	7.6	7.9	8.1	8.3	8.4	8.3	8.3
Sector-specific composite indexation scenario	0.5	7.0	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.4	7.4
Non-demographic determinants scenario	2.4	7.0	7.4	7.8	8.1	8.4	8.8	9.0	9.2	9.3	9.4
AWG risk scenario	1.5	7.0	7.4	7.6	7.8	8.1	8.3	8.4	8.5	8.5	8.4
TFP risk scenario	0.7	7.0	7.2	7.3	7.5	7.6	7.7	7.8	7.8	7.8	7.7

Euro-Area			EC-EPC (AWG) 2015 projections									

Long-term care

Long-term care spending as % of GDP	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	1.3	1.7	1.9	1.9	2.1	2.2	2.4	2.6	2.8	2.9	3.0
Demographic scenario	1.3	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.9	3.0	3.0
High Life expectancy scenario	1.7	1.7	1.9	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.4
Base case scenario	1.4	1.7	1.9	2.0	2.1	2.3	2.5	2.7	2.9	3.1	3.1
Constant disability scenario	1.1	1.7	1.8	1.9	2.0	2.2	2.4	2.5	2.7	2.8	2.8
Shift to formal care scenario	2.1	1.7	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.7	3.8
Coverage convergence scenario	2.3	1.7	1.9	2.1	2.3	2.6	2.9	3.2	3.6	3.8	4.0
Cost convergence scenario	1.9	1.7	1.9	2.0	2.2	2.4	2.7	3.0	3.3	3.5	3.6
Cost and coverage convergence scenario	2.9	1.7	2.0	2.2	2.4	2.7	3.1	3.5	3.9	4.3	4.6
AWG risk scenario	2.6	1.7	2.0	2.1	2.3	2.6	3.0	3.4	3.7	4.1	4.3
TFP risk scenario	1.3	1.7	1.9	1.9	2.1	2.2	2.4	2.6	2.8	2.9	3.0

Number of dependent people (in thousands)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
AWG reference scenario	28.8%	26893	28886	29946	30941	32061	33230	34249	34902	35021	34646
of which: receiving institutional care	84.7%	3063	3437	3677	3933	4269	4652	5018	5365	5597	5659
receiving home care	83.4%	4772	5342	5702	6106	6660	7212	7722	8206	8558	8753
receiving cash benefits	63.7%	5816	6427	6793	7111	7531	8028	8586	9127	9454	9521
Demographic scenario	38.3%	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184
of which: receiving institutional care	94.2%	3063	3473	3739	4025	4396	4815	5220	5601	5863	5950
receiving home care	93.9%	4772	5399	5805	6260	6872	7486	8060	8602	9008	9253
receiving cash benefits	72.5%	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032
Constant disability scenario	20.5%	26893	28493	29268	29999	30843	31744	32498	32954	32917	32406
of which: receiving institutional care	75.9%	3063	3400	3616	3843	4147	4498	4827	5142	5348	5388
receiving home care	73.6%	4772	5284	5601	5956	6457	6953	7402	7831	8134	8284
receiving cash benefits	55.6%	5816	6358	6674	6943	7306	7744	8239	8728	9017	9052
Shift 1% of dependents from informal to formal scenario	38.3%	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184
of which: receiving institutional care	145.8%	3063	4370	5075	5408	5831	6311	6772	7190	7461	7531
receiving home care	138.7%	4772	6551	7531	8070	8772	9473	10122	10717	11146	11391
receiving cash benefits	72.5%	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032
Coverage convergence scenario	38.3%	26893	29279	30630	31923	33358	34837	36149	37042	37368	37184
of which: receiving institutional care	167.5%	3063	3635	4048	4516	5102	5789	6490	7188	7784	8195
receiving home care	152.8%	4772	5601	6189	6876	7768	8723	9669	10603	11420	12066
receiving cash benefits	72.5%	5816	6496	6912	7285	7767	8329	8954	9554	9927	10032

Education

Education spending as % of GDP - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	-0.1	4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4
Expenditure decomposition (broadly constant) : Transfers (8%) - Capital (8%) - Staff (66%) - Other (18%)											
Primary	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (7%) - Staff (74%) - Other (18%)											
Low secondary	0.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Expenditure decomposition (broadly constant) : Transfers (2%) - Capital (7%) - Staff (75%) - Other (16%)											
Upper secondary	0.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (11%) - Capital (7%) - Staff (65%) - Other (17%)											
Tertiary education	-0.1	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Expenditure decomposition (broadly constant) : Transfers (17%) - Capital (8%) - Staff (53%) - Other (22%)											
Number of students (in thousands)											
Total	-1979	59876	59109	58702	57999	57335	57033	57206	57620	57914	57898
as % of population 5-24	-1%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Primary	-436	18225	18263	17750	17320	17151	17326	17675	17920	17923	17789
Low secondary	-607	15258	15182	15074	14863	14579	14378	14382	14530	14656	14651
Upper secondary	-69	14016	13896	14134	13949	13839	13712	13680	13766	13899	13948
Tertiary education	-867	12377	11768	11744	11868	11765	11616	11469	11404	11437	11510
Number of teachers (in thousands)											
Total	-96	4091	4053	4029	3978	3931	3912	3930	3967	3994	3995
Primary	-20	1206	1209	1174	1147	1137	1150	1176	1194	1195	1186
Low secondary	-36	1145	1141	1134	1117	1096	1081	1081	1094	1107	1108
Upper secondary	19	1008	1008	1028	1016	1007	998	998	1009	1021	1027
Tertiary education	-59	733	696	693	697	691	683	674	670	671	674

Education spending as % of GDP - High enrolment rate scenario (diff. from baseline)	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total	0.7	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7	0.7

Unemployment benefit

Unemployment benefit - Baseline	Ch 13-60	2013	2020	2025	2030	2035	2040	2045	2050	2055	2060
Unemployment benefit spending as % of GDP	-0.4	1.3	1.1	1.0	1.0	0.9	0.8	0.8	0.9	0.9	0.9

LEGENDA:
* The potential GDP and its components are used to estimate the rate of potential output growth, net of normal cyclical variations
(1) Based on the calculation of the average probability of labour force entry and exit observed over the last 10 years (2004-2013)
(2) Share of older population = Population aged 55 to 64 as a % of the population aged 15-64
(3) Old-age dependency ratio = Population aged 65 and over as a % of the population aged 15-64 or 20-64
(4) Total dependency ratio = Population under 15 and over 64 as a % of the population aged 15-64
(5) Total economic dependency ratio = Total population less employed as a % of the employed population 15-74
(6) Economic old-age dependency ratio (15-64) = Inactive population aged 65+ as a % of the employed population 15-64
(7) Economic old-age dependency ratio (15-74) = Inactive population aged 65+ as a % of the employed population 15-74
NB: : = data not provided
Source : Commission Services (DG ECFIN), Eurostat (EUROPOP2013), EPC (AWG).

Part V

Resources

1. ABBREVIATIONS AND SYMBOLS USED

Member States

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
EI	Ireland
EL	Greece
ES	Spain
FR	France
HR	Croatia
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovak Republic

FI	Finland
SE	Sweden
UK	United Kingdom
NO	Norway
EA	Euro area
EU	European Union
EU28	European Union, 28 Member States
EU15	European Union, 15 Member States before 1 May 2004
NMS	European Union, 13 Member States that joined the EU on and after 1 May 2004 (BG, CZ, EE, HR, CY, LV, LT, HU, MT, PL, RO, SI, SK)

Other

2009 AR	2009 Ageing Report
2012 AR	2012 Ageing Report
2015 AR	2015 Ageing Report
ADL	Activity of daily living
AGIRC	Association générale des institutions de retraite des cadres
AMECO	Macro-economic database of the European Commission
ARRCO	Association pour le régime de retraite complémentaire des salariés
AWG	Ageing Working Group
CNAVTS	Caisse nationale de l'assurance vieillesse des travailleurs salaries
COFOG	Classification of the functions of government
COM	Commission
CPI	Consumer price index
CSM	Cohort Simulation Model/Method
DB	Defined benefits
DC	Defined contributions
DG ECFIN	Directorate-General Economic and Financial Affairs

EC	European Commission
ECB	European Central Bank
ECOFIN	Economic and Financial Council
EPC	Economic Policy Committee
ESA (95)	Old European System of National and Regional Accounts
ESA (2010)	New European System of National and Regional Accounts
ESSPROS	European System of Integrated Social Protection Statistics
EU KLEMS	European database on capital, labour, energy, material and services
EUR	Euro
EUROPOP2008	Eurostat demographic projections 2007-2060
EUROPOP2010	Eurostat demographic projections 2010-2060
EUROPOP2013	Eurostat demographic projections 2013-2060
EU-SILC	European Union Statistics on Income and Living Conditions
FELICIE	Future of Elderly Living Conditions in Europe
GDP	Gross domestic product
HC	Health care
IADL	Instrumental activity of daily living
ICT	Information and communications technology
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
LTC	Long-term care
MS	Member State(s)
MTO	Medium-term budgetary objective
NAWRU	Non accelerating wage rate of unemployment
NDC	Notional Defined Contributions
NDD	Non demographics drivers
OECD	Organisation of Economic Co-operation and Development

OG	Output Gap
OGWG	Output Gap Working Group
PHI	Private Health Insurance
PS	Point System
p.p.	Percentage points
PAYG system	Pay-as-you-go system
SHA	System of Health Accounts
SHI	Social health Insurance
SHARE	Survey of Health, Ageing and Retirement in Europe
TFP	Total factor productivity
TFR	Total fertility rate
UB	Unemployment benefits
UN	United Nations
VAT	Value Added Tax
WHO	World Health Organization

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