Is public spending on pensions in Belgium sustainable ?
A comparison with other euro area countries

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National Bank OF BELGIUM

Eurosystem

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Introduction

Belgium, like other European countries, is currently experiencing a grey wave. An increasing share of the population is retired, while the working age population, which has the potential to fund pension expenditure, is shrinking. This trend will only become more pronounced in the coming decades.

This situation puts public finances under pressure and raises the question of the sustainability of public spending on pensions in Belgium. In 2023, according to the Study Committee on Ageing's definition, this expenditure amounts to 11.5 % of GDP. The committee projects this percentage to rise to around 13.5 % of GDP by 2050.

The question of the sustainability of pension spending in Belgium should be viewed in the context of concerns about the sustainability of Belgian public finances in general. The country's public debt, which currently stands at 104 % of GDP, will continue to rise steadily in the coming years, driven by a structural budget deficit approaching 5 % of GDP. To curb the debt increase, it will be necessary to narrow the budget deficit. The expected ballooning of ageing costs, in particular pension expenditure, exacerbates this challenge considerably.

Alongside financial sustainability, the social sustainability of pension spending is equally important, as a pension system is sustainable only if it is accepted and supported by the population. For instance, an adequate pension system is expected to contribute to the containment of poverty risk in old age and to the preservation of a certain level of income during the transition to retirement.

This article focuses on public expenditure on pensions, namely pension spending which has an impact on the government budget balance. A key criterion for the classification of pension expenditure as public spending is that it be funded by the government, with the latter bearing the financial risk for payment of the pension benefits. Supplementary pensions, such as those falling under the so-called second and third pillars, which are

not financed by the government and for which the government does not bear the financial risk associated with payout, are thus excluded.

The choice to focus on public pensions is based on the particular interest in the sustainability of public finances, a crucial requirement for safeguarding price and financial stability, for a central bank.

Our study follows a macroeconomic approach. The pensions-to-GDP ratio is disentangled into a number of factors, such as the number of pensioners, the average pension, employment and productivity. This allows us to identify a set of general policy options to influence pension spending. We do not address the question, however, of which specific features of the Belgian pension system should be adjusted.

To analyse the sustainability of public spending on pensions in Belgium, we compared the current and future level of expenditure with the situation in other euro area countries. In particular, we used neighbouring countries (the Netherlands, Germany and France), other high-debt countries (Italy and Spain) and the euro area as a whole as our reference points. The European Commission's harmonised projections in its 2021 Ageing Report allow coherent comparisons to be made between European countries. In addition, we referred to the Study Committee on Ageing's 2023 projections to deepen the analysis for Belgium.

Section one of this article outlines the fiscal challenge posed by population ageing and the related increase in pension spending. Section two analyses the financial sustainability of pension expenditure. First, current and future public spending on pensions in Belgium and the reference countries is broken down into factors. Next, policy options to make pension spending more financially sustainable are explored. Section 3 looks at some key variables that can provide information on the social sustainability of the Belgian public pension system. Finally, Section 4 sets out our conclusion and reflects on the policy implications.

1. Population ageing, public spending on pensions and fiscal sustainability

Population ageing continues to put pressure on pension expenditure and other age-related public spending in Belgium and other European countries. This poses a substantial challenge to the sustainability of public finances. This section sets out the progression of pension expenditure and its impact on public finances in Belgium and selected other euro area countries. More particularly, in this article, we compare Belgium to the euro area average, its three main neighbours (Germany, France and the Netherlands) and two other high-debt countries (Italy and Spain).

## 1.1 Population ageing will continue in the coming decades

Populations have become greyer in every country in the euro area over the past two decades. This process can be illustrated by the change in the old-age dependency ratio, which equals the population aged 65 and over divided by the working age population (aged 20 to 64). According to the EC, this ratio rose from 28 % to 34 % in Belgium over the period 2000-2022 and from 27 % to 37 % on average in the euro area. The increase was generalised in euro area countries, albeit with some notable differences between countries. Belgium's ratio was below that of the reference countries in 2022, except for Spain.

Eurostat's April 2020 demographic projections over the long term (2023-2070) reveal that the euro area population is set to become even greyer in the coming decades, as a result of a fall in the working age population and substantial growth of the population aged 65 and over.

Figure 1

Ageing is in full swing and will continue in the coming decades [1]

(old-age dependency ratio)
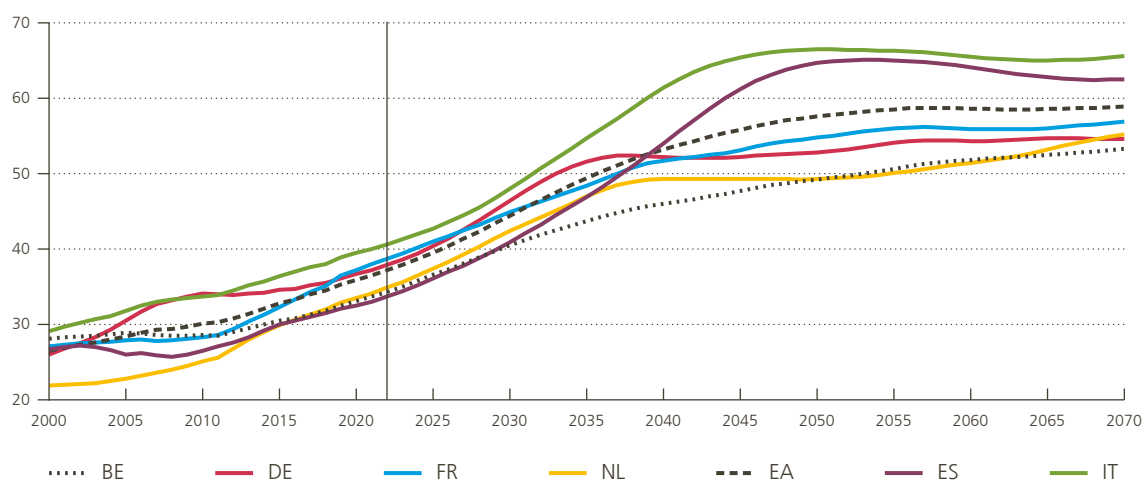
Sources: EC (Eurostat, 2021 Ageing Report), NBB.
1 Figures over the period 2000-2018 are those published by Eurostat. Figures over the period 2019-2070 originate from the EC projections in the 2021 Ageing Report for the sake of consistency with the rest of this article.

As a result, the old-age dependency ratio is projected to further increase substantially. Importantly, a large portion of this increase will occur in the next two decades. In Belgium, the ratio is projected to rise from 35 % in 2023 to 53 % in 2070. For the euro area, the ratio is projected to grow from 38 % to 59 %. An increase is projected in all euro area countries, although to varying extents. At the end of the projection period, Belgium is still expected to be situated at the lowest end of the reference countries.

Population ageing can be explained by the traditional determinants of demographic change: life expectancy, the average birth rate and net migration. Projected changes in population structure reflect assumptions regarding life expectancy, fertility rates and migration flows. [1]

In the past few decades, there has been a significant rise in life expectancy at birth. This increase is due primarily to the fact that, particularly since the first half of the 20th century, more children survive infancy and reach adulthood due to medical advances. At the same time, as a result of improvements in diet and medical progress, more and more people are living longer. In the coming decades, life expectancy at birth is likely to increase further.

Since the end of the post-World War II baby boom, which lasted until the first half of the 1960s, birth rates have declined sharply overall. Nowadays, the average is around 1.5 for the euro area. According to population projections, this figure is set to rise marginally, to 1.6, in the coming decades and to stabilise thereafter. This means that fertility will remain at a relatively low level in historical terms, below the replacement rate of 2.1 children per woman. Sub-replacement fertility implies a lesser increase in the working age population. On the other hand, cohort effects resulting from the ageing of the sizeable baby boom population will contribute to a strong increase in the retirement-age population.

1 See also Melyn, Van Meensel and Van Parys (2016).

The third and final determinant of the change in population size and age structure is net migration, which equals the difference between the number of immigrants and the number of emigrants. Annual net migration inflows to Belgium are projected to fall from 0.4 % of the total population in 2019 to 0.2 % in 2070, somewhat below the rate for the euro area.

1.2 Population ageing increases budgetary costs and poses a challenge for fiscal sustainability

Population ageing is a human success story. Life expectancy today is longer than ever before. However, this situation presents governments with a number of challenges in terms of healthcare and long-term care for the ageing population and the associated sustainability of the social model. The main reason for this is that, as a result of ageing, more people will be unable to work, will have to depend on different types of replacement income, such as pensions, and will need care, causing healthcare and long-term care costs to increase. This is a challenge facing all European countries, albeit to varying degrees.

In Belgium, the Study Committee on Ageing (SCA) estimates each year the budgetary cost, defined as the change in social benefits as a percentage of GDP, associated with population ageing. To do so, the SCA relies on various demographic, socioeconomic, macroeconomic and social policy assumptions. The modelling is based on an unchanged regulatory framework, with the inclusion of approved reforms.

According to the SCA's latest estimates, from July 2023, social benefits will continue to rise in the long term due to demographic changes. In the reference scenario, total social benefits will increase from 25.7 % of GDP in 2022 to 29.9 % in 2070, after having peaked at 30.1 % in the period 2047-2059. The budgetary cost of ageing will therefore peak at 4.4 percentage points of GDP during that period, before gradually declining to 4.2 percentage points of GDP in 2070. These long-term projections are subject to considerable uncertainty as they depend on the underlying demographic and economic assumptions.

Public expenditure on pensions represents the largest share of social benefits – equal to 10.9 % of GDP in 2022 – or around 40 % of the total. It is projected to rise by 2.6 percentage points of GDP by 2070, thus accounting for more than half the budgetary cost of ageing.[2] A large portion of this increase will occur in the coming two decades, with half taking place in the next eight years. This rise in expenditure will cause the government budget balance to deteriorate.

Rising public spending on pensions will thus put pressure on public finances in the decades ahead. More specifically, the EC assesses that the projected rise in public pension expenditure will contribute significantly, over the long term, to Belgium's overall high level of fiscal sustainability risk.[3] The central factor in the EC's long-term sustainability analysis is the S2 indicator, which measures the permanent fiscal effort (in terms of the structural primary budget balance) required to stabilise the debt ratio in the long term. For Belgium, stabilisation of the debt ratio will require significant, prolonged consolidation efforts of 6.6 percentage points of GDP as of 2024 (Figure 2, right-hand chart). Of this, 1.6 percentage points of GDP should stem from public spending on pensions. In other euro area countries, including high-debt countries, pension spending is set to contribute less to long-term fiscal sustainability challenges and is even projected to decline in France, Italy and Spain, easing their fiscal pressures.[4] Thus, when addressing long-term fiscal sustainability challenges, Belgium cannot ignore the role of pension spending.

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2 These projections do not factor in the impact of the July 2023 federal pension reform.

3 The EC has a comprehensive fiscal sustainability framework to assess short-, medium- and long-term risks to the sustainability of public finances in EU Member States. For more information on the methodology and recent results, see the 2022 Debt Sustainability Monitor and the 2023 European Semester Country Reports.

4 It should be noted that the S2 indicator does not take into account the level at which debt stabilisation takes place and thus ignores risks linked to high debt ratios. According to the S2, some countries' debt could thus be found to be on a sustainable long-term path, despite their debt ratios stabilizing at a high level. To address this shortcoming, the EC's long-term fiscal sustainability analysis also includes an S1 indicator, which measures the fiscal effort required to bring debt back to 60 % of GDP by 2070. Based on the S1 indicator, the analysis would however not change qualitatively compared to what is described here.

Pension expenditure makes up a large share of ageing costs and poses a major risk to the sustainability of Belgian public finances
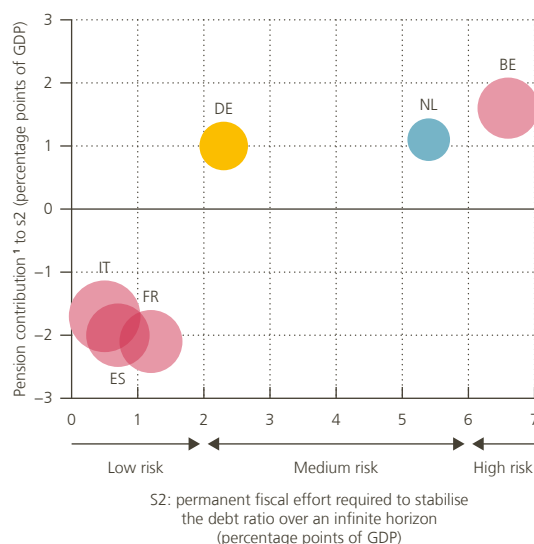
Ageing costs in Belgium
(change compared to 2022, in percentage points of GDP)
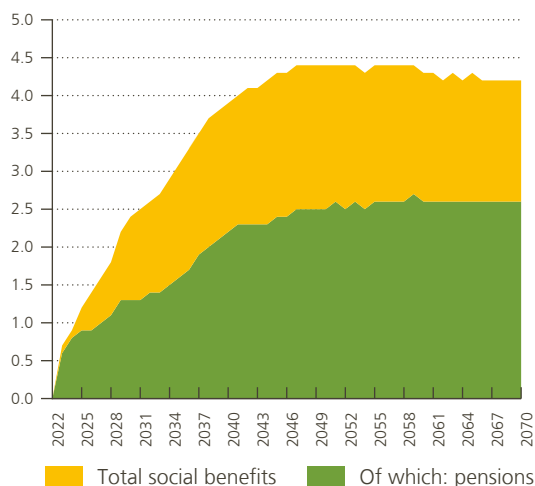
Pension expenditure and long-term fiscal sustainability risks
(the size of the dot equals the 2022 debt ratio, with blue < 60 %, yellow < 90 %, red ≥ 90 %)

Sources: SCA (2023 Annual Report), EC (2023 European Semester: Country Report – Belgium).

1 The EC's fiscal sustainability framework incorporates projections on public spending on pensions from the 2021 Ageing Report. It should be noted, though, that the framework uses a net pension expenditure concept, meaning pension spending net of taxes on pensions and compulsory social security contributions paid by pensioners. The analysis in this article – except for the right-hand chart in this figure – is based on a gross concept.

1.3 Pension expenditure is projected to increase more in Belgium than in the reference countries

Estimates of the budgetary cost of ageing are also produced at European level. For that purpose, since 2001, the European Commission and the Member States have jointly drawn up long-term projections in the Economic Policy Committee's Working Group on Ageing Populations (AWG). The projections of this technical working group, as set out in the 2021 Ageing Report, cover expenditure on pensions, healthcare, long-term care and education.

The data are, to a large extent, internationally comparable as they are based on commonly agreed methodologies and assumptions. The projections for pensions are run by the Member States using their own national model(s), which reflect current pension legislation. To ensure high-quality, comparable projection results, an in-depth peer review is carried out by the AWG and the Commission services. In this way, the projections capture the country-specific circumstances prevailing in the Member States as a result of differences in current pension legislation, with consistency ensured by basing the projections on commonly agreed underlying assumptions.[5]

Pension expenditure has increased in the past two decades. According to the EC, Belgian pension expenditure rose by 2.2 percentage points of GDP over the period 2001-2019. A roughly similar increase of 1.8 percentage points of GDP was recorded using the SCA's definition. These figures are higher than the projections set out in the

5 European Commission (2021a).

SCA's first annual report, published in 2002, which forecast an increase of one percentage point of GDP. This is mainly due to the impact of the financial and economic crises of 2008-2009, which revised GDP levels downwards.

Pension expenditure grew in all reference countries over the period 2001-2019, with the exception of Germany. The rise in Belgium was above the euro area average, with pension expenditure close to the average in 2019. At that time, pension expenditure was clearly higher in Italy and France compared to Belgium but lower in Germany and the Netherlands. The low figures for the Netherlands can be explained by the prominence of the second pillar (supplementary pensions) in that country's pension system.

Pension expenditure in Belgium is forecast to continue to rise in the coming decades. According to the 2023-2070 projections[6] in the 2021 Ageing Report, it should increase by 2.1 percentage points of GDP, while the Study Committee on Ageing projects growth of two percentage points of GDP over the same period in its 2023 Annual Report.
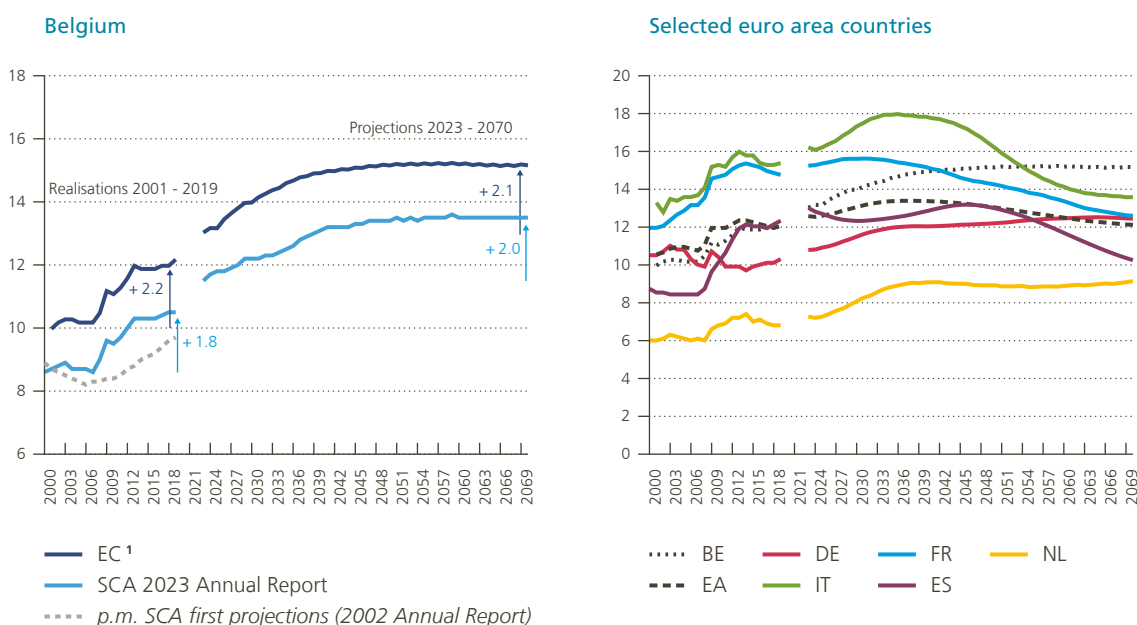
The Ageing Report's projected increase of 2.1 percentage points of GDP is the largest increase of the reference countries. Pension expenditure is projected to further increase in Germany and the Netherlands as well, although these countries started from a lower level. In the high-debt countries (France, Italy and Spain), expenditure is set to decrease substantially. At the end of the period, in 2070, Belgium is consequently expected to have the highest level of pension expenditure of the reference countries, more than three percentage points of GDP above the average for the euro area. The next section analyses why this is the case. It should be noted that

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6 Observations for the period 2020-2022 are disregarded as they were highly influenced by the impact of the COVID-19 pandemic on economic activity (GDP).

Figure 3

Pension expenditure in Belgium is projected to increase more than in most other euro area countries in the coming decades

(in % of GDP)

Belgium

Selected euro area countries

EC[1]
SCA 2023 Annual Report
p.m. SCA first projections (2002 Annual Report)

BE   DE   FR   NL
EA   IT   ES

Sources: EC (COFOG, 2021 Ageing Report), SCA (2002 and 2023 Annual Reports).
1 The EC figures for the period 2001-2019 were retropolated starting from the 2019 realisation in the 2021 EC Ageing Report with COFOG figures (sum of the old-age and survivor's pensions).

even though the magnitude of the increase for Belgium is roughly comparable according to both the EC and the SCA, the level is clearly higher using the EC's definition. This difference can largely be explained by the inclusion of disability pensions in the Ageing Report methodology.

2. The financial sustainability of pension expenditure

This section examines the level of and change in Belgian pension expenditure in an international context, using an analytical framework. This framework is useful to explain the progression of this expenditure, perform expenditure simulations with various policy options, and classify recent Belgian pension measures.

2.1 Driving factors behind rising pension spending

Analytical framework

The pensions-to-GDP ratio can be disentangled into various factors by decomposing the numerator and the denominator into underlying variables. This results in a product of factors representing the main drivers of the ratio. Each factor's numerator appears in another factor's denominator, except for total pension expenditure and GDP. We have opted for decomposition into five main factors.

The first factor is the old-age dependency ratio. This is a purely demographic variable which measures, as mentioned above, the relative size of the elderly population compared with the working age population. The ratio is calculated by dividing the number of people aged 65 and over by the number of people aged 20 to 64. This factor is (largely) exogenous and constitutes the driving force behind the rise in pension spending.

The other factors can be affected by policy decisions, to varying degrees, resulting in higher or lower pension expenditure.

The coverage ratio is equal to the number of pensioners as a share of the population aged 65 and over. It provides an idea of the extent to which pensions are paid to people under the age of 65. This ratio is determined by the effective retirement age and the percentage of the population covered by the pension system.

Table 1

Pension expenditure is determined by a demographic factor and other factors, which can be influenced by policy
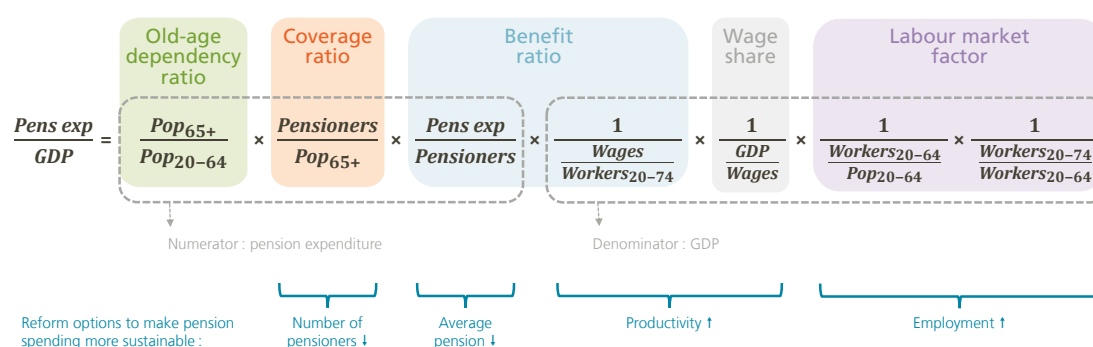
Sources: EC, NBB.

The benefit ratio reveals how the average pension compares to the average wage of current workers.[7] It measures the generosity of the pension system and reflects the characteristics of the statutory framework for the pension system in terms of calculation and indexation. In this article, we define the average wage as total compensation of employees (wages, salaries and employer social security contributions) and the self-employed, whereby it is assumed that the latter receive the same compensation on average per person as employees.[8]

The labour market factor describes the effects of labour market behaviour on pension expenditure. It can be divided into two sub-components. The first sub-component measures the employment rate for the population aged 20 to 64. The second sub-component measures employment among older workers. It is calculated as the ratio of workers aged 20 to 74 to those aged 20 to 64. For both sub-components, an increase will result in lower pension expenditure.

The last factor, wage share, measures the share of national income allocated to labour rather than capital. A lower wage share means lower income for wage earners (relative to other types of income, including gross operating surplus, mixed income and net taxes on production and imports) and thus lower pensions. This is a residual factor used to cancel the wage component in the decomposition of the formula.

Comparing pension expenditure between countries and over time

Using the logarithms in Table 1, the percentage difference between the pensions-to-GDP ratio in Belgium and each reference country can be decomposed into the sum of the percentage difference in each of the five driving factors. Likewise, based on these logarithms, the percentage change in the pensions-to-GDP ratio over time within a country can be decomposed into the sum of the percentage change over time of the five factors.[9] Subsequently, to express the difference (between countries) or change (within a country) in percentage points of GDP instead of as a percentage, we multiply the weight of each of the five factors in the total percentage difference or change in the pensions-to-GDP ratio by the total difference or change in the pensions-to-GDP ratio in percentage points of GDP. The following analysis uses the series underlying the 2021 Ageing Report.[10]

We first focus on the *difference* in pension spending between Belgium and the reference countries in 2019 and 2070. In 2019, public spending on pensions in Belgium was comparable to the average for the euro area. Compared to the reference countries, Belgium spent more than the Netherlands and Germany but less than the other high-debt countries (Italy, France and Spain). The higher spending in Belgium compared to the Netherlands and Germany was not due to stronger ageing (the old-age dependency ratio) but rather to higher average relative pensions (the benefit ratio), lower employment (the labour market factor) and a higher share of pensioners (the coverage ratio). Compared to the other high-debt countries, the lower spending in Belgium was mainly due to a lower benefit ratio (compared to Italy and Spain) or a lower coverage ratio (compared to France). By 2070, Belgium is projected to be spending more than all reference countries. Public spending on pensions in Belgium is forecast to be three percentage points of GDP higher than the euro area average. This difference is, again, not due to a higher old-age dependency ratio. Rather, higher pension spending in Belgium will be driven mainly by a higher benefit ratio and a worse labour market factor.

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7 The definition of benefit ratio used in this article is similar to that used in Martin and Ramos (2023). It differs from that used in the EC Ageing Report, i.e., the ratio of the average pension income over the average wage per hour (GDP divided by hours worked by the population aged 20 to 74).

8 When looking at the labour share or wage share in nominal domestic income, it is common practice to adjust the national accounts data on compensation (which cover only employees) to take account of the self-employed. For a discussion on this subject, see ILO (2019) and for a recent study using the adjusted concept, see Bodnár and Mohr (2023).

9 The differences in the logarithms are used to calculate the percentage difference/change in the individual factors. This is only an approximation, which deviates least in the case of small changes. This approach has nevertheless the advantage that the obtained percentage changes in the individual factors add up to the percentage change in the total (see Martin and Ramos (2023)). In the alternative method, i.e., directly using percentage changes in the individual factors, interaction effects between factors are not considered, while these constitute a substantial share of the total change.

10 The underlying series of variables in Table 1 were obtained from the EC. The series for workers aged 20 to 74 was calculated based on the series for workers aged 20 to 64 multiplied by the ratio of hours worked by workers aged 20 to 74 and hours worked by those aged 20 to 64.
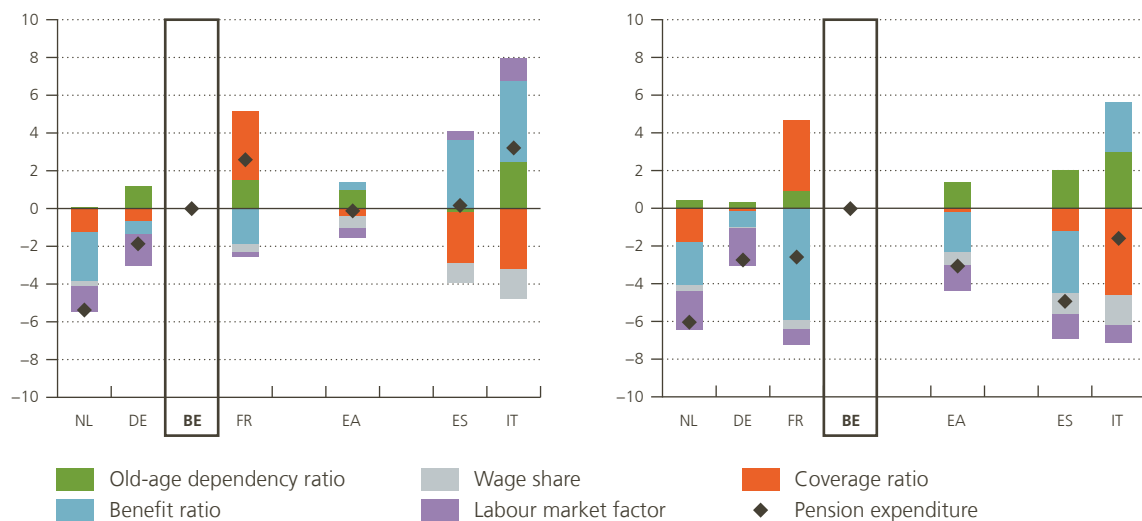
Pension expenditure is higher in Belgium, but not due to more pronounced population ageing

In 2019, Belgium spent more on pensions than
NL and DE, but less than IT, FR and ES
(contribution to the difference in pension
expenditure between other countries and Belgium,
2019, in percentage points of GDP)

In 2070, Belgium is projected to be spending
more on pensions than the reference countries
(contribution to the difference in pension
expenditure between other countries and Belgium,
2070, in percentage points of GDP)

Legend:
- Old-age dependency ratio
- Benefit ratio
- Wage share
- Labour market factor
- Coverage ratio
- ◆ Pension expenditure
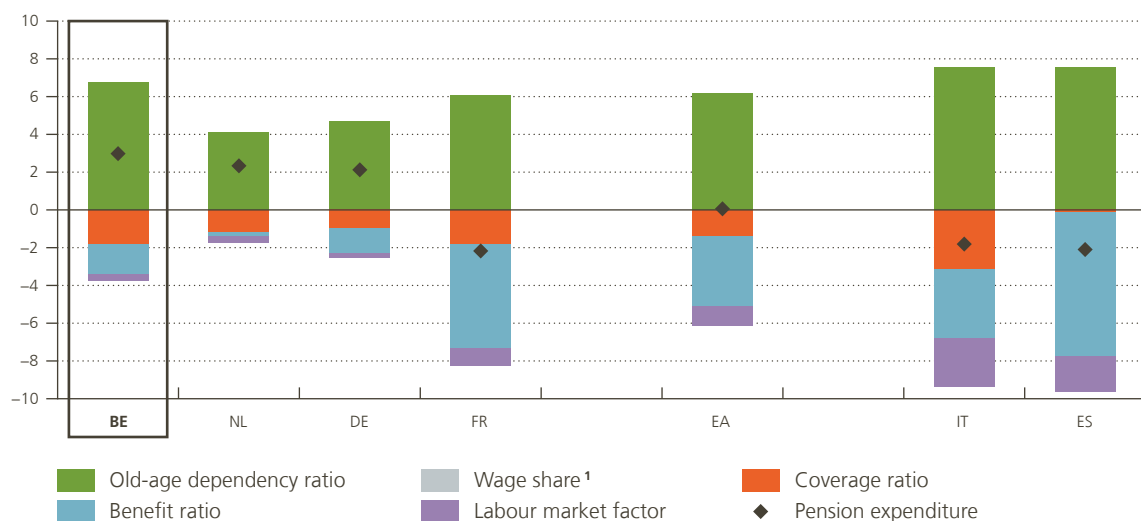
Sources: EC (2021 Ageing Report), NBB.

Next, we apply the analytical framework to explain the difference in the *change* in projected pension
expenditure over the period 2019-2070 between Belgium and the reference countries. When looking at the
change in the projected pension expenditure over the period 2019-2070, pension spending will increase more
sharply in Belgium than in the euro area on average and in other high-debt countries (France, Italy and Spain),
where a fall is projected. This is not due to a much larger upward contribution of the old-age dependency ratio
in Belgium, but rather to a much smaller downward contribution of the other factors. [11] In particular, the benefit
ratio and the labour market ratio contribute less to the dampening of pension expenditure. In the Netherlands
and Germany, pension expenditure is projected to increase slightly less than in Belgium.

11 When comparing the contribution of a specific factor between countries, it should be noted that the contribution of the factor depends
not only on its development but also on the level of pension expenditure in a country. For example, a stronger increase in the old-age
dependency ratio in the Netherlands compared to Belgium corresponds to a smaller contribution to the change in pension expenditure in
the Netherlands as the level of pension expenditure is much lower in that country.

Figure 5

Between 2019 and 2070, pension expenditure in Belgium is projected to increase much more than in other high-debt reference countries (France, Italy and Spain)

(contribution to the change in pension expenditure over the period 2019-2070, in percentage points of GDP)

Sources: EC (2021 Ageing Report), NBB.
1 The wage share is assumed to stay constant over the entire period and consequently to make a nil contribution.

A closer look at the contribution of the five factors

The **old-age dependency ratio** quantifies the impact of projected demographic changes and increases sharply over the period 2019-2070 in all reference countries, as shown in Figure 1. In 2019, Belgium had the second lowest dependency ratio, at 33%, meaning that for every person aged 65 or over there were around three persons of working age. The projected increase over the period 2019-2070 is slightly smaller in Belgium than in the euro area due to a less pronounced expected decline in the working age population in Belgium. In 2070, Belgium is expected to have the lowest and thus most favourable dependency ratio of the countries studied, with slightly fewer than two persons of working age per person aged 65 or over. Italy and Spain will be the hardest hit by population ageing.

In 2019, the **coverage ratio**, which reflects the number of pensioners below the age of 65, was higher in Belgium than on average in the euro area and the reference countries, with the exception of France. A significant decline in this ratio is expected in all reference countries, mainly over the next two decades. Belgium's coverage ratio is also expected to fall to a slightly greater extent than on average in the euro area, due to relatively stronger growth in the population aged 65 and over. However, in 2070, it is expected to remain above that of the euro area and most reference countries.

There is a clear negative correlation between the labour market exit age, which is used as a proxy for the effective retirement age, [12] and the coverage ratio. In Belgium, the labour market exit age is relatively low, at 63.4 years in 2019, which increases the share of pensioners among the elderly. Only in France do people leave the labour market at a younger age.

12 The labour market exit age is used as a proxy for the effective retirement age due to a lack of data. We note that both ages can differ due to a period of unemployment or invalidity after leaving the labour market and that some people may continue to work upon (partial) retirement.

Figure 6

Belgium is expected to continue to have a higher share of pensioners among the elderly than other euro area countries, except France

Belgium's coverage ratio is expected to fall but to remain slightly above the euro area average
(coverage ratio, in %, 2019 versus 2070)
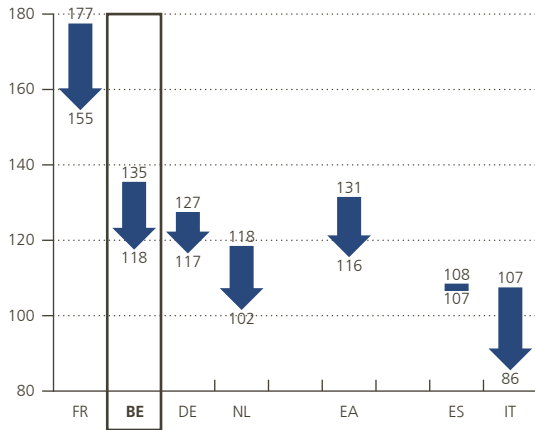
The labour market exit age is relatively low in Belgium, and even more so in France
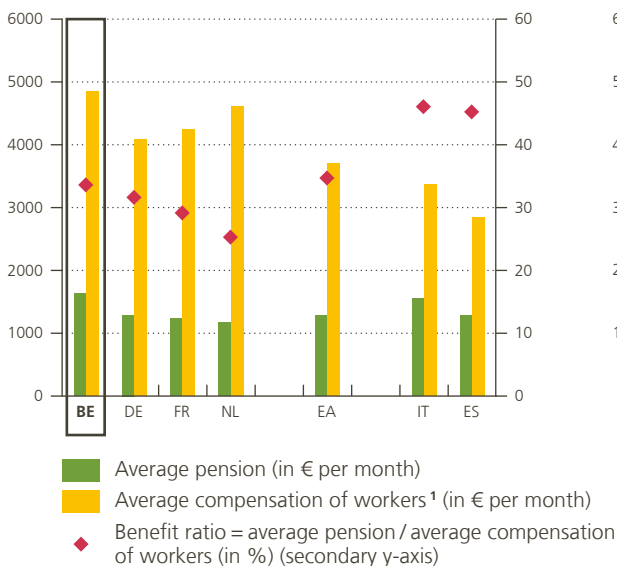(2019)

Sources: EC (2021 Ageing Report), NBB.

Figure 7

The benefit ratio is higher in Belgium than in neighbouring countries

The average pension, expressed in €, is higher in Belgium than in the reference countries
(2019)

- Average pension (in € per month)
- Average compensation of workers[1] (in € per month)
- ◆ Benefit ratio = average pension / average compensation of workers (in %) (secondary y-axis)

The benefit ratio is projected to fall in Belgium but to remain higher than in neighbouring countries
(benefit ratio, in %, 2019 versus 2070)
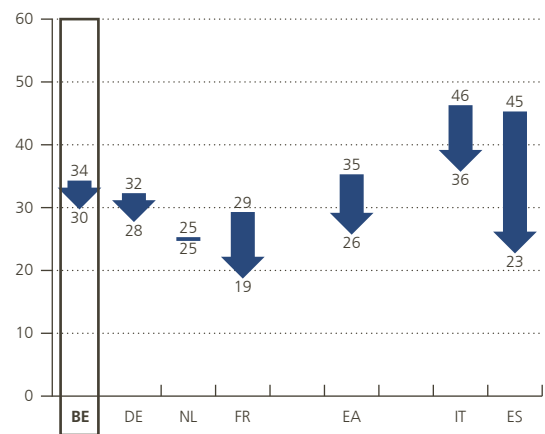
Sources: EC (Eurostat, 2021 Ageing Report), NBB.

1 The compensation of workers (often referred to as adjusted labour income) covers compensation of employees (wages, salaries and employer social security contributions) and of the self-employed, whereby it is assumed that the latter receive the same compensation on average per person as employees.

The **benefit ratio** relates the average pension to the average wage. In 2019, the average monthly pension in Belgium was €1628, more than 25 % above the average for the euro area and the highest of the reference countries. The average monthly compensation in Belgium was €4844, more than 30 % above the average for the euro area and also the highest of the reference countries. The benefit ratio, which provides a fairer comparison of average pensions between countries, was 33 % in Belgium, close to the euro area average but higher than in the three neighbouring countries.

According to the 2021 Ageing Report, the benefit ratio is projected to fall in all countries over the period 2019-2070 as a result of approved reforms. The biggest drop is expected in the other high-debt reference countries. The decrease in Belgium should be rather limited. As a result, this ratio is set to be clearly above the euro area average in 2070.

Belgium scores weak on both components of the **labour market factor**. In 2019, Belgium had an employment rate of 71 %, below the euro area average of 73 %. Only Spain and Italy had fewer people of working age in employment. The Netherlands and Germany, on the other hand, had a high employment rate of around 80 %. According to the 2021 Ageing Report, the employment rate in Belgium is expected to remain very low over the entire projection horizon, scarcely above its 2019 level. It should be noted, however, that this projection is based on survey data that turned out to be too pessimistic. According to more recent estimates by the Study Committee on Ageing, Belgium's employment rate, calculated on a comparable basis, is projected to increase considerably, from 70.5 % in 2019 to 75 % in 2030. As a result, Belgium can expect to see a more favorable contribution by this factor in the 2024 Ageing Report. The employment rate should nonetheless remain far below that expected in the Netherlands and Germany. Belgium also had a particularly low share of older workers compared to the reference countries and the euro area average in 2019. Workers aged 65 to 74 represented only 1 % of total workers between 20 and 64 years of age. Due to a small increase over the period 2019-2070, Belgium will have the lowest share of older workers at the end of this period.

Finally, the **wage share** indicates the share of national income allocated to wages (labour income) rather than capital. A lower wage share means less income for wage earners relative to capital income from production and thus lower pensions as a share of total income or GDP. The wage share in Belgium is similar to that of

Figure 8

Belgium's low employment rate indicates a possibility to lower its pensions-to-GDP ratio

The modest increase in Belgium's employment rate is likely to be revised upwards in the next Ageing Report
(workers aged 20 to 64/population aged 20 to 64, in %, 2019 versus 2070)
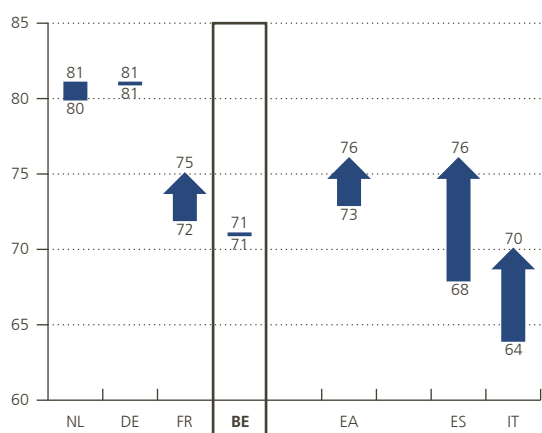
Belgium has a particularly low share of older workers
(workers aged 20 to 74/workers aged 20 to 64, in %, 2019 versus 2070)
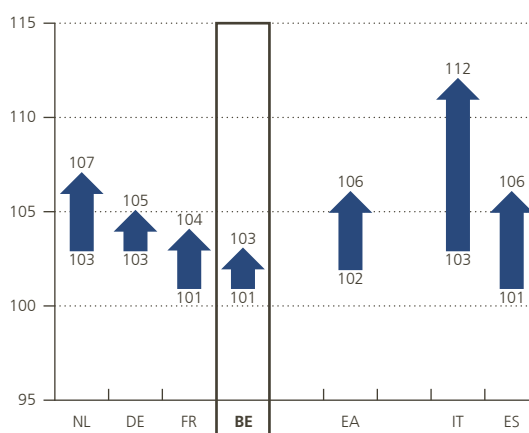
Sources: EC (2021 Ageing Report), NBB.

Figure 9

The higher share of capital income in Italy and Spain slightly lowers their pensions-to-GDP ratio

(2019, in %)

Sources: EC (Eurostat, 2021 Ageing Report), NBB.

neighbouring countries. The southern countries are characterised by a higher capital income share, which lowers their pensions-to-GDP ratio.

### *Checking the 2021 Ageing Report figures*

As with any projections looking far into the future, pension spending projections are surrounded by considerable uncertainty. In this respect, it is useful to compare the EC's 2021 Ageing Report projections for Belgium with the more recent projections in the Study Committee on Ageing's 2023 Annual Report.

This comparison shows that the total projected change in the pension expenditure ratio over the period 2023-2070 is very similar according to both sources. Moreover, the sign of the contributing factors is the same. The magnitude of these factors is however somewhat different due to differences in the assumptions used and the cut-off dates. The demographic factor (old-age dependency ratio) makes a smaller upside contribution to the change in pension expenditure in the SCA figures due to an increase in the working age population (20 to 64 years) compared to a fall in the EC figures. The impact of the SCA's more favorable demographic outlook is practically cancelled out by a stronger increase in the number of pensioners, leading to a much smaller negative contribution of the coverage ratio compared to the EC projections. According to the SCA figures, the benefit ratio is expected to make a smaller negative contribution. The SCA figures are more up to date as they take into account pension reform measures by the De Croo government until June 2023, the most notable of which is a significant increase in the minimum pension (see Section 2.2). Moreover, the SCA projects a weaker increase in the average wage. Finally, the labour market factor is expected to have a larger negative impact on pension expenditure according to the SCA projections due to an increase in the number of workers, compared to a fall in the EC projections. Here, as well, the SCA figures are more up to date as the EC figures rely on outdated employment projections.

Figure 10

For 2023-2070, the EC and SCA projections are similar in terms of overall magnitude and the signs of the contributing factors

(contribution in percentage points of GDP to the change in pension expenditure over the period 2023-2070)
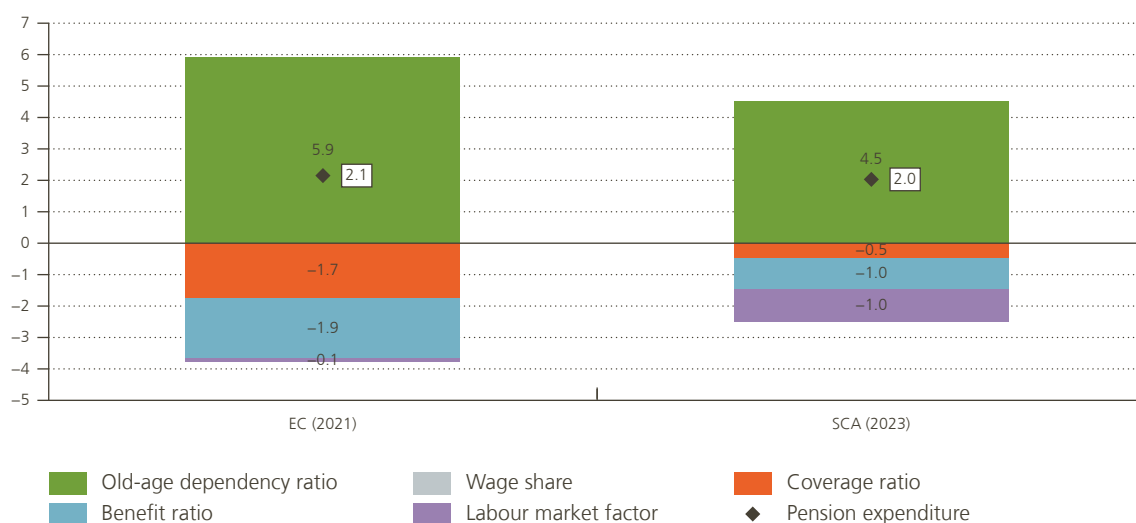
Sources: EC (2021 Ageing Report), Study Committee on Ageing (2023 Annual Report), NBB.

2.2 How to improve the financial sustainability of public spending on pensions

Given a high structural deficit and a high debt ratio which is set to rise further, Belgium's public finances are not equipped to absorb the projected rise in pension expenditure without risk. Going forward, further action will be required to safeguard fiscal sustainability. Measures can be taken on both the revenue and expenditure sides, but there is no easy fix. On the revenue side, given the high overall tax burden, there appears to be little room to raise social security contributions and taxes. At the same time, primary expenditure is under considerable pressure. In addition to pension spending, other factors, such as rising healthcare costs and support for the climate transition, imply structurally higher spending. Significant consolidation efforts will thus be required. In this context, reforms that curb the ratio of public spending on pensions to GDP appear indispensable. Such measures would be less harmful for economic growth than a reduction in most other primary expenditure items. Moreover, as demonstrated above, pension spending is relatively high in Belgium.

Below we take a closer look at several policy options which could help to keep the Belgian pensions bill under control. The first part of our analysis is backward-looking and provides an overview of the budgetary impact of specific pension reforms which have been implemented or announced by the Belgian government since 2011. Each of these reforms can be linked to one or more of the driving factors of pension spending focused on in this article. The second part of our analysis is forward-looking: from a macroeconomic perspective, we develop four technical scenarios to explore the savings potential of the four main drivers of pension expenditure that can be influenced by policymakers.

An overview of significant pension reforms in Belgium since 2011

Public pension systems have been reformed frequently in EU countries over the past decades, mainly to improve long-term fiscal sustainability.[13] Following the 2008-9 financial and economic crises, there was a marked

13 For an overview of reforms after the 2008-9 financial and economic crises, see EC (2019).

intensification of these reforms, which introduced a variety of measures affecting the various constituent factors of the pensions-to-GDP ratio. In Belgium, as well, pension reforms were introduced. This section focuses on the main reforms to the public pension introduced in Belgium over the past decade and assigns them to the factors in our analytical framework. In doing so, we indicate the parameters of specific features of the pension system, changes to which can help keep pension spending in check.

Pension reforms up to 2019 were integrated into the 2021 Ageing Report. Many reforms were introduced in Belgium during the period 2011-2019, in various waves, by the Di Rupo and Michel governments. The focus in this section is on measures with a significant budgetary impact.

Substantial efforts have been made to reduce the coverage ratio. One such measure is an increase in the statutory retirement age. It has been agreed that the statutory retirement age will be raised from 65 to 66 on 1 January 2025 and to 67 on 1 January 2030. Upon reaching this age, it is possible to receive a public pension without having to meet any conditions relating to length of career. Furthermore, the early retirement age was raised, from 60 in 2012 to 62 in 2016 and then to 63 in 2018. The additionally required length of career to qualify for an early pension was also increased, to 40 years in 2016 and to 42 years in 2019. The minimum early retirement age is lower for those with a career of 43 years or longer. These measures have had a positive impact on the coverage ratio and the labour market factor as the number of younger pensioners has been reduced and the number of workers increased.

The benefit ratio has been influenced downwards by various reforms to the pension bonus for delayed retirement, a measure to encourage longer working lives. This system was first reformed in 2013, to allow fewer people to qualify for the bonus and to decrease the average bonus. In 2015, the measure was abolished altogether. [14] The pension bonus was found to no longer have an incentive effect given the raising of the qualifying age for early retirement. The benefit ratio has also been lowered by reforms to public sector pensions, such as abolition of the inclusion of periods of study when calculating the length of career for civil servants in the case of early retirement (so-called *diplomabonificatie* or *bonification pour diplôme*) and a change to the valuation of periods worked by civil servants as contract staff for the purpose of calculating pension entitlements. However, the increase in the retirement age and stricter career length conditions have led to higher pensions and therefore to an increase in the benefit ratio.

Certain other measures have also been introduced, mainly focused on reducing the benefit ratio and the coverage ratio. All in all, the measures taken over the period 2011-2019 have clearly reduced projected pension expenditure in the long term.

More recent measures, adopted since the end of 2020 by the De Croo government, were not factored into the projections of pension expenditure in the 2021 Ageing Report. In most cases, these will impact the benefit ratio. The main measure was an increase in minimum pensions. In addition, the pension for the self-employed and for some employees was adjusted by, respectively, cancellation of a correction coefficient for new pensions and the raising of the upper wage limit used to calculate pension entitlements. A pension bonus will also be introduced which can be received as either additional pension benefits or as capital, so as to encourage people reaching retirement age to continue working. The rise in the benefit ratio was partly cancelled out by a number of measures adopted in July 2023, the most important of which was the introduction of a cap on the increase in pensions of public sector employees. All in all, the measures taken by the De Croo government are expected to result in a small net increase in pension expenditure, based on estimates by various advisory institutions.

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14 With some transitional measures for those who met the conditions before 1 December 2014.

Table 2

Main pension reforms in Belgium since 2011

Main reforms	Main factor(s) impacted	Budgetary impact (in % of GDP, initial estimate)
Included in the 2021 Ageing Report		
2011 (Di Rupo)		
Stricter conditions for early retirement	Coverage ratio Labour market factor Benefit ratio	−0.1 (2060)
Different valuation of certain periods of unemployment for the purpose of calculating employee pensions	Benefit ratio	
Easing of the pension malus for the self-employed	Benefit ratio	
2013 (Di Rupo)		
Modification of the pension bonus and the age supplement	Benefit ratio Coverage ratio	−0.3 (2060)
2014-2015 (Michel)		
Raising of the statutory retirement age	Coverage ratio Labour market factor Benefit ratio	−1.5 (2060) (reference scenario)
Stricter conditions for early retirement	Coverage ratio Labour market factor Benefit ratio	
Abolition of the pension bonus	Benefit ratio Coverage ratio	
Abolition of the inclusion of periods of study in the length of career for civil servants	Benefit ratio	
Raising of the age threshold for a survivor's pension and the creation of a transitional benefit	Benefit ratio Coverage ratio	No estimate available
2017 (Michel)		
Harmonisation of the regularisation of periods of study	Benefit ratio	−0.1 (2060)
2018 (Michel)		
Change in the valuation of periods worked as contract staff for the purpose of calculating pension entitlements of civil servants	Benefit ratio	0.0 (2060)
Not included in the 2021 Ageing Report		
2020-2021 (De Croo)		
Increase in minimum pensions (2021, 2022, 2023 and 2024)	Benefit ratio	0.65[1] (2070)
Abolition of the correction coefficient for new pensions of the self-employed	Benefit ratio	
Raising of the upper wage limit used to calculate pension entitlements (2021, 2022, 2023 and 2024)	Benefit ratio	
2023 (De Croo)[2]		
Capping of equalisation for civil service pensions	Benefit ratio	−0.5 (2070) (July 2023 government estimate)
Scaling back of the fourth and final planned increase in the minimum pensions and upper wage limit used to calculate pension entitlements	Benefit ratio	
Introduction of a pension bonus	Benefit ratio Coverage ratio	

Sources: Federal Planning Bureau, Study Committee on Ageing.
1 Cabinet of the pensions minister based on calculations of the Federal Planning Bureau.
2 This includes a re-estimation of the impact of the measures announced in July 2022: introduction of a pension bonus for delayed retirement, reform of access to the minimum pension and revaluation of part time work for the purpose of calculating employee pensions.

Four general policy options

A breakdown of the pensions-to-GDP ratio into its underlying drivers (see the formula in Table 1) reveals four main avenues through which policymakers can contain the rise in the pensions bill : (1) lowering the number of pensioners, (2) lowering the average pension, (3) increasing productivity (defined as GDP per worker), and (4) raising the employment rate by increasing the number of workers. The first two options reduce the numerator of the ratio, pension expenditure, while the last two increase the denominator, GDP. We develop four scenarios in which each of these options is explored in turn. More specifically, we apply the following changes to the factors driving pension spending in the EC's 2021 Ageing Report projections (which represents our baseline scenario) :

Scenario 1: Lowering the number of pensioners (implying that the entry in retirement is postponed). From 2025, the Belgian coverage ratio gradually declines to equal the euro area average as from 2030. This means that, compared to the baseline, the Belgian coverage ratio declines by 5.9 percentage points to 121.3 % in 2030 and by 2 percentage points to 116.2 % in 2070. The decline in pensioners is assumed to translate into an equal rise in the workforce, thus the labour market factor is also altered.

Scenario 2: Lowering the average public pension. From 2025, the Belgian benefit ratio gradually falls to equal the euro area ratio as from 2030. Consequently, compared to the baseline, the benefit ratio in Belgium falls by 0.6 percentage points to 33.3 % in 2030 and by 4.2 percentage points to 25.6 % in 2070. As the average wage is assumed to remain unchanged from the baseline, the decline in the benefit ratio implies a drop in the average public pension.

Scenario 3: Increasing productivity growth. From 2025 onwards, labour productivity growth gradually rises by 0.2 percentage points compared to the baseline as from 2030. This scenario implies that productivity growth is 0.9 % in 2030 and 1.7 % in 2070. It is assumed that wage growth rises in line with the increase in productivity growth, as does GDP growth. This implies that the share of wages in GDP remains constant. The average pension is also held constant.

Scenario 4: Raising employment. From 2025, the Belgian employment rate (of persons aged 20-64) gradually rises to 80 % as from 2030. [15] This corresponds to the ambitious employment target set by the Belgian government in its September 2020 coalition agreement. It is assumed that the number of pensioners does not change, meaning the additional workers will need to come from the unemployed and inactive (but not retired) population. In addition, by keeping all other factors constant, this scenario assumes that the additional workers work the same number of hours as in the baseline.

It should be noted that the scenarios are kept rather simple – and are therefore easy to understand – as only the selected factors are altered. Spillovers to other factors are not considered (except in scenario 1). This is important when interpreting the results. For example, in scenario 1, the benefit ratio is left unchanged while in practice older workers who retire later (compared to the baseline) are expected to receive a higher pension. Another critical factor concerns the feasibility of the proposed scenarios. The following discussion of the scenario results looks more closely at the adjustments they require from society and makes clear that putting these scenarios into practice will be far from easy, especially considering that the reforms need to be socially accepted and to remain in place in order to achieve the desired result.

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15 In the simulations, the employment rate of workers aged 20-64 and 20-74 rises.

Table 3

Four general policy options to reduce public spending on pensions in Belgium as a percentage of GDP

Left-hand decomposition:

$$\frac{Pens\ exp}{GDP} = \frac{Pop_{65+}}{Pop_{20-64}} \cdot \frac{Pensioners}{Pop_{65+}} \cdot \frac{Pens\ exp}{Pensioners} \cdot \frac{1}{\dfrac{Wages}{Workers_{20-74}}} \cdot \frac{1}{\dfrac{GDP}{Wages}} \cdot \frac{1}{\dfrac{Workers_{20-64}}{Pop_{20-64}}} \cdot \frac{1}{\dfrac{Workers_{20-74}}{Workers_{20-64}}}$$

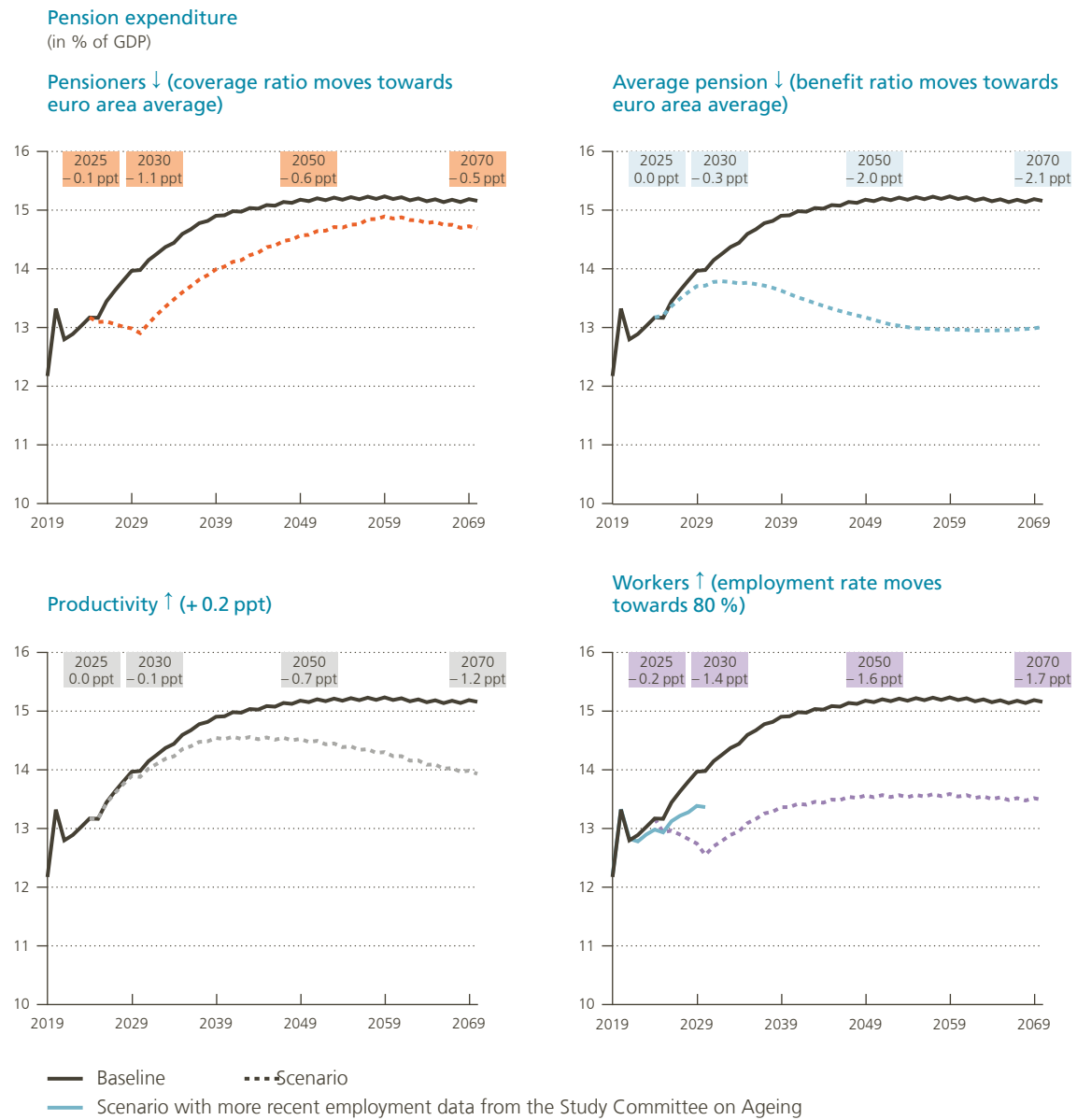| Baseline	Pensioners ↓	Average pension ↓	Productivity ↑	Workers ↑
	= Baseline	= Baseline	= Baseline	= Baseline
EC Ageing Report (2021)	Coverage ratio BE = EA from 2030	= Baseline	= Baseline	= Baseline
	= Baseline	Benefit ratio BE = EA from 2030	= Baseline	= Baseline
	= Baseline	(average wage = Baseline	Productivity growth +0.2 ppt from 2030	= Baseline
	= Baseline		Δ prod. growth = Δ wage growth	= Baseline
	= Baseline	= Baseline	(GDP / wages = Baseline)	= Baseline
	Decrease in pensioners = increase in workers	= Baseline	= Baseline	Employment rate = 80 % from 2030
		= Baseline	= Baseline	

Source: NBB.

Scenario results

In the first scenario, a reduction in the number of new pensioners noticeably reduces public spending on pensions in the shorter term. This reflects the fact that the gap between the Belgian and euro area coverage ratios is highest over the period 2025-2050 as well as the relatively low labour market exit age in Belgium. Compared to the baseline, the number of pensioners drops by 0.3 % in 2025 (or 10 000 fewer pensioners), 4.7 % in 2030 (or 159 000 fewer pensioners) and 1.7 % in 2070 (or 65 000 fewer pensioners). At the same time, the employment rate (of persons aged 20-64) rises by 0.2 percentage points to 72.2 % in 2025, by 2.4 percentage points to 74 % in 2030, and by 1.1 percentage points to 72 % in 2070. This raises the question of whether these reductions in the number of pensioners are feasible. On the one hand, yes, the scenario is technically plausible as – except for the period 2030-2033 – the drop in pensioners is smaller than the number of new pensioners. On paper, the reduction in pensioners could thus, for example, be achieved by delaying retirement by one year for all new pensioners over the period 2025-2033 and for half of new pensioners thereafter. On the other hand, it appears far from straightforward to raise the effective retirement age by one year in the short run. Furthermore, it is one thing to extend the statutory retirement age but quite another to effectively delay the decision to retire. In other words, it is possible that part of the workforce will not be willing or able to work (significantly) longer.

In the second scenario, a reduction in the average public pension persistently and significantly lowers public spending on pensions compared to the baseline projections. The average public pension in Belgium is assumed to fall by 1.9 % in 2030 and by 14.2 % in 2070, compared to the baseline. This constitutes a sizeable reduction. Whether this scenario strikes a good balance between ensuring financial sustainability and the adequacy of the pension system is debatable. In any case, as the benefit ratio is an important driver of the pensions bill, it is worthwhile considering a certain reduction in the average Belgian public pension, as this would yield sizeable and persistent savings in pension spending. [16]

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16 It could be argued that the consolidation of the deficit in this scenario may have a negative impact on GDP that is not captured by the simulation. Yet assuming deficit reduction is necessary in any case to at least stabilise the public debt ratio (including in the baseline) and knowing that pension expenditure is one of the least productive items of government expenditure (meaning it has a low fiscal multiplier), the omission of an impact on GDP seems to have little relevance. Moreover, the reduction in the average pension could also encourage some workers to stay in work longer and thus support GDP.

Figure 11

A combination of measures is needed to keep pension spending in check

Pension expenditure
(in % of GDP)

Pensioners ↓ (coverage ratio moves towards euro area average)

2025	2030		2050		2070
− 0.1 ppt	− 1.1 ppt		− 0.6 ppt		− 0.5 ppt

Average pension ↓ (benefit ratio moves towards euro area average)

2025	2030		2050		2070
0.0 ppt	− 0.3 ppt		− 2.0 ppt		− 2.1 ppt

Productivity ↑ (+ 0.2 ppt)

2025	2030		2050		2070
0.0 ppt	− 0.1 ppt		− 0.7 ppt		− 1.2 ppt

Workers ↑ (employment rate moves towards 80 %)

2025	2030		2050		2070
− 0.2 ppt	− 1.4 ppt		− 1.6 ppt		− 1.7 ppt

— Baseline   ▪▪▪▪ Scenario
— Scenario with more recent employment data from the Study Committee on Ageing

Sources : EC (2021 Ageing Report), SCA (2023 Annual Report), NBB.

In the third scenario of higher productivity growth, public expenditure on pensions as a share of GDP only starts to fall significantly in the longer term. It should be noted that the results of this scenario should be viewed with caution as there is substantial uncertainty regarding the future development of productivity growth, a key macroeconomic variable for projections of pension expenditure (as a % of GDP). The baseline projections assume, for instance, that in the long term, productivity growth will be substantially higher compared to the average over the past two decades. The SCA acknowledges that these long-term productivity growth projections could be too optimistic and therefore includes an alternative scenario for its pension spending

projections, with lower long-term productivity growth compared to the baseline. [17] The scenario presented here, in which productivity growth accelerates, may thus be unrealistic. On paper, continued productivity gains are a panacea, but in practice achieving them is not straightforward. However, it is clear that policies supporting productivity growth constitute an important part of the strategy to achieve sustainable public finances.

The fourth scenario indicates the substantial potential gains from increasing the employment rate in the short and long term. Compared to the baseline, the number of workers rises by 1.8 % in 2025 (or 86 000 additional workers), by 11.7 % in 2030 (or 554 000 additional workers) and by 12.8 % in 2070 (or 562 000 additional workers, compared to 65 000 additional workers in scenario 1). As mentioned above, more recent employment projections for Belgium are more optimistic than those in the EC's 2021 Ageing Report, implying that a portion of the pension savings gains depicted here is likely to be realised. More precisely, according to the SCA's 2023 Annual Report, the employment rate of persons aged 20-64 was 71.9 % in 2022 and is expected to rise to 75 % in 2030, [18] whereas the projections in the EC's 2021 Ageing Report were, respectively, 71.3 % and 71.6 %. Inserting these more favourable employment figures into the formula, the rise in pension expenditure is projected to be limited to 13.4 % of GDP by 2030, compared to 14 % in the baseline scenario. Additional improvements in the employment rate required to reach the 80 % target could, however, prove difficult to achieve in practice. In its 2022 Annual Report, the SCA mentioned that an employment rate of 80 % cannot be attained by getting all unemployed persons into work ; it will also require an increase in the labour force (our simulations confirm this). Increasing incentives for older people to (stay in) work is again crucial, but there is no easy solution to activate this group or to postpone early retirement.

Overall, the scenarios indicate that a reduction in public spending on pensions (as a % of GDP) is feasible (but will not be easy to achieve). Increasing labour supply, in particular among the elderly, is key as this will slow down the rise in public pension expenditure in the coming decades. In practice, a combination of measures that affect the various drivers of the pensions bill seems indispensable.

3. The social sustainability of pension expenditure

In addition to financial sustainability, the social sustainability of the pension system is very important. Ideally, a pension system needs to be accepted by the population in order to last. There are various stumbling blocks to such social acceptance upon retirement : the risk of poverty, inequalities, and the inability to preserve purchasing power. The first two factors are addressed in turn below, drawing heavily on the work of the SCA. The third factor is intentionally left out of our analysis. It is studied in the EC's Pension Adequacy Report, which also covers supplementary pensions, another topic that falls outside the scope of this article.

3.1 Risk of poverty

Concept

In this section, we follow the approach adopted in the SCA's annual reports which analyse social sustainability primarily through the lens of the risk of poverty among pensioners. The risk of poverty is measured by the percentage of persons whose disposable income is below 60 % of the median disposable income. It is therefore a relative concept, not an absolute one : the poverty threshold refers to an income level that is likely to change

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17 The SCA uses the same long-term productivity growth projections as the EC in its 2021 Ageing Report. In addition, the 2021 Ageing Report includes both a "higher productivity growth" scenario and a "productivity risk" scenario but dropped the 2018 Ageing Report's "lower productivity growth" scenario.
18 The SCA provides projections for employment data based on the labour force survey up to 2030.

over time and to vary from one country to another. Furthermore, we are referring here to "equivalent disposable income", a concept that is adjusted based on household composition.

Change over time

Like the SCA, we track changes in the risk of poverty among pensioners based on the results of the EU Survey on Income and Living Conditions (EU-SILC). This survey gathers data on income, poverty and social exclusion from all EU countries. In Belgium, around 7,000 households are surveyed each year. We took into consideration the period preceding the pandemic, so as to avoid the influence of this factor. Moreover, as the 2019 results were collected during the 2020 survey wave, they could be biased by the repercussions of the pandemic, according to the FPB. For this reason, we limited our analysis to 2018.

Since 2014, the risk of poverty in Belgium has been close to the average for the euro area. In 2018, just over 13 % of pensioners were at risk of poverty. In concrete terms, that year, around one in seven to eight pensioners was at risk of poverty due to having disposable income below 60 % of the median equivalent disposable income. This percentage was lower in France and the Netherlands but higher in Germany.

At this stage, it should be pointed out that this measure of the risk of poverty, which refers to disposable income, neglects the level of wealth of individuals. We know that the net wealth of Belgian households is comparatively high. This is the case for financial assets, including capital paid into second- or third-pillar pensions. When it comes to property, many pensioners own their own home, without a mortgage. If we add to their disposable income the rent they would have to pay if they were tenants (known as "imputed rent"), the risk of poverty is significantly reduced, according to SCA calculations. However, this indicator does not exist
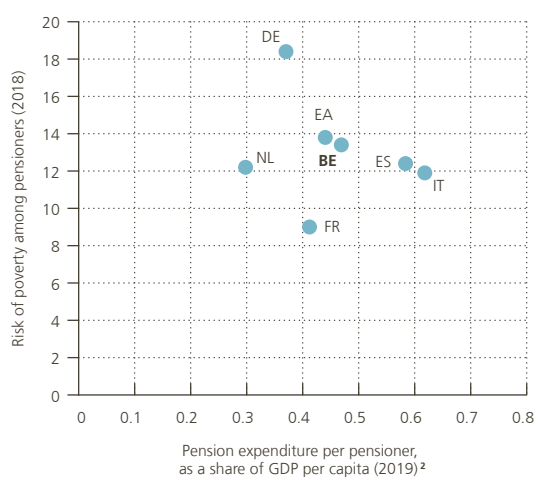
Figure 12

Higher pension expenditure in Belgium does not necessarily lead to a lower poverty risk than in neighbouring countries

The risk of poverty among pensioners in Belgium was recently close to the euro area average
(% of pensioners)
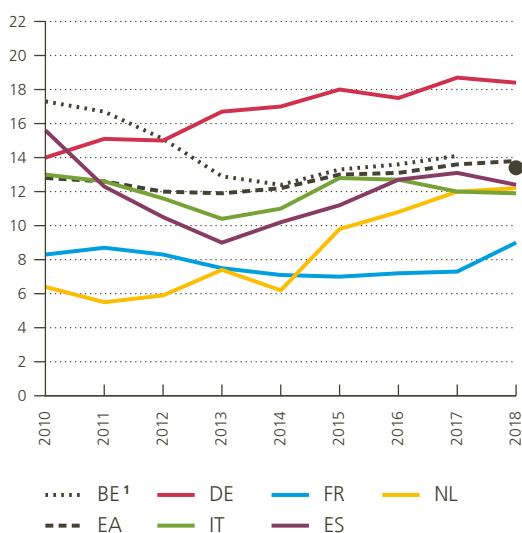
There is a weak link between pension expenditure and the risk of poverty among pensioners

Sources : EC (Eurostat, SILC), NBB.
1 The 2018 figures for Belgium are not fully comparable with earlier figures as the methodology was changed to align it to European requirements.
2 As regards average pension expenditure, comparable figures are not available until 2019 ; however, this ratio is rather stable over time, especially from one year to the next.

for the other countries in our analysis. Nevertheless, an alternative measure that factors in the risk of material deprivation (a basket of goods which may or may not be purchased), called AROPE (see the 2021 EC Pension Adequacy Report, Figure 2), indicates the same ranking for Belgium and neighbouring countries.

The weak link between the risk of poverty and the level of public spending on pensions is noteworthy. While Belgium allocates a relatively large average budget per pensioner (given its GDP per capita), its pensioners do not have the lowest risk of poverty. In other words, high spending does not necessarily guarantee a reduced risk of poverty. It is highly likely that other factors come into play : private pension schemes (second or third pillar) as well as housing policy, redistribution policy (through taxes and social benefits), etc. These other factors fall outside the scope of this article.

Projections

The SCA projects changes in the risk of poverty up to 2070 using a dynamic microsimulation model developed by the FPB, called MIDAS. This tool is used to assess the effects of policy measures and socioeconomic changes on the adequacy of pensions. The model produces long-term projections of the risk of poverty and inequality in the distribution of income among pensioners. Certain types of income are not taken into account in the model's definition of income and, consequently, in the pension adequacy indicators analysed below. For example, income from assets and second- or third- pillar pensions are not modelled. Transfers between households (such as spousal and child maintenance payments) are also ignored.

The model predicts a reduction in the risk of poverty among the elderly (aged 67 and over) until the mid-2040s. This favourable outlook is made possible by higher pensions for women, who benefit from a rising employment rate and longer careers, as well as a rise in pensions that outstrips wage growth. It should be noted that the "employment" factor automatically reduces the risk of poverty without any change to the rules for the calculation of pensions. Thereafter, as from the mid-2050s, the risk of poverty is projected to increase due to a higher percentage of immigrants, who enjoy shorter careers and lower wages. This increase is expected to be reinforced by a lower percentage of widows, who enjoy relative protection from poverty due to a survivor's pension, among elderly women.

3.2 Income inequality

Concept

Inequality can also affect the social sustainability of the pension system. The measure used here is the ratio between the disposable income of the quintile with the highest income and that of the quintile with the lowest income. This is an alternative to another frequently used inequality indicator, the Gini index. Once again, it is based on disposable income adjusted for household size.

Change over time

Using the SILC results, the EC has compiled this inequality indicator for the population aged 65 and over in the EU. In Belgium, the ratio is close to three, meaning the income of the highest quintile is three times higher than that of the lowest quintile. Of the countries studied, this multiple is at the lower end of the range, suggesting comparatively low income inequality. It should be noted that the same caveat applies here as for the risk of poverty : income is only one facet of inequality between individuals while wealth is another, one that is barely touched on in this article.

Income inequality among the elderly is relatively low in Belgium

(S80/S20 disposable income quintile share ratio, 65 years and over)
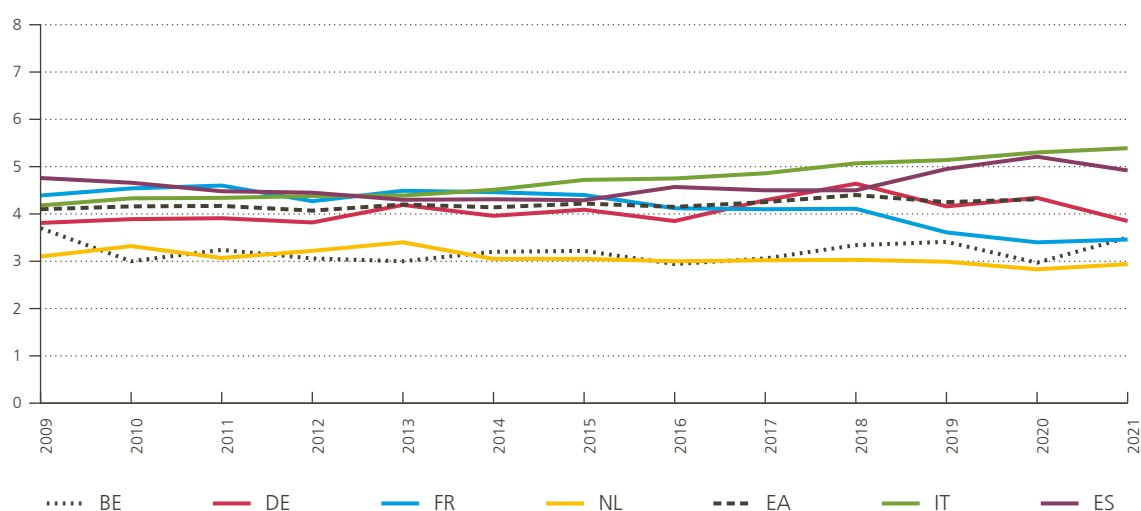
Source : EU (Eurostat, SILC).

Projections

Looking ahead, the SCA expects income inequality among pensioners in Belgium to remain relatively stable until 2070. This outlook is also based on the FPB's MIDAS model. Closer examination reveals that inequality is set to fall continuously until the 2050s, after which time it is projected to rise again. The rise in income inequality in the second half of the century can be explained by an increasing share of immigrants among retirees. Immigrants by definition have shorter careers in Belgium, and, as also discussed in the next section, career length is a key explanatory factor for the differences observed in pension benefits.

Differences between pension schemes

Regarding inequality, it is interesting to take a closer look at the distribution of public pensions in Belgium. In Figure 14, the top set of charts shows the distribution by decile of the amounts paid to new pensioners in all three schemes: employees, the self-employed and civil servants.

Unsurprisingly, these schemes appear to be a major source of inequality among pensioners. Civil servants receive the highest pensions. For the top deciles, the gross pensions of civil servants are around twice as generous as those awarded after a career in the private sector. The differences between employees and the self-employed are less substantial and, as a result of recent reforms, should diminish over time. It should be recalled here that civil servants, unlike employees and the self-employed, have little access to a second-pillar (or private supplementary) pension. This argument is often used to justify high pensions for civil servants. However, in reality, for the lion share of employees and the self-employed the pension capital under the second pillar is limited. Moreover, building up second-pillar pension reserves entails giving up a share of one's current salary in exchange for future income.

Figure 14

Across pension schemes, civil servant pensions stand out; within pension schemes, career length is an important driver of disparities
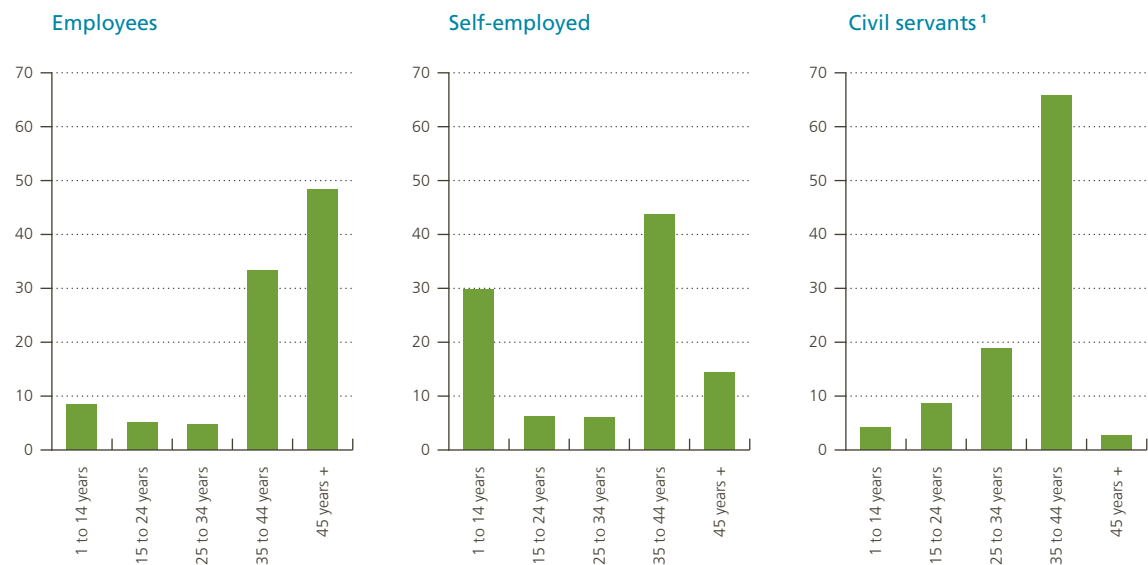
Distribution of pensions by decile
(new pensioners, monthly amount in €, 2021)

Employees

Self-employed

Civil servants[1]

Distribution of pensioners by career length
(new pensioners, by career length, 2021, in %)

Employees

Self-employed

Civil servants[1]

Sources: CEC, FPB, SCA.
1 For civil servants, mixed careers are included.

It should be noted that, in all three cases, the minimum pension for a full career is similar. However, there are significant differences in the percentage of pensioners reaching this threshold. In the case of employees, 50 % of beneficiaries (fifth decile) are below the effective minimum for a full career. For the self-employed, this percentage rises to 80 % of beneficiaries (eighth decile). For civil servants, just under 30 % (third decile) receive

less than the applicable minimum pension. These percentages, which vary widely from one scheme to another, can be explained by the share of incomplete careers in each, as shown in the bottom set of charts in Figure 14. In 2021, only 14 % of newly retired self-employed people had a complete career of 45 years. That same year, almost half of retiring employees met this condition.

Conclusion

In Belgium, public spending on pensions is set to continue to rise in the coming decades, from 11.5 % of GDP in 2023 to 13.5 % of GDP in 2070 according to the Study Committee on Ageing's projections. Pension expenditure thus poses a significant risk to the sustainability of Belgian public finances in the medium and long term.

To contain this risk and curb the rise of the debt ratio, the budget deficit should be brought to below 3 % of GDP. Given the current high structural deficit, the projected increase in total ageing costs (including healthcare) by more than 4 % of GDP in the coming decades, the challenges raised by the climate transition, rising interest rates on public debt, and the high tax burden, this task appears impossible without significantly curtailing the projected increase in pension expenditure as a share of GDP. Moreover, pension spending is one of the least productive items of government expenditure.

In recent years, the Belgian pensions-to-GDP ratio has been close to the euro area average, but nonetheless remains much higher than in the Netherlands and Germany. In these two countries, people remain in work longer on average, the average pension is relatively lower, and the active population is larger. In Spain and Italy, other high-debt reference countries, people also remain in work until a more advanced age on average. Of the reference countries, only France has a lower average labour market exit age.

By 2070, the European Commission projects that pension spending will be higher in Belgium than in the Netherlands, Germany and France as well as in Spain and Italy, both high-debt countries. This is not attributable to a more pronounced greying of the population in Belgium. The ratio of the average pension to the average compensation of workers is set to be higher in Belgium than in neighbouring countries, Spain and the euro area on average. In addition, employment is predicted to lag further behind neighbouring countries and the euro area average. With regard to the latter factor, it should be noted that the EC's estimates for Belgium are much more conservative than recent ones by the Study Committee on Ageing. On the other hand, in its 2021 Ageing Report, the EC did not take into account the expected additional budgetary cost resulting from pension reforms adopted in late 2020, which were curtailed by more recent reforms decided on in July 2023.

With regard to the social sustainability of the pension system, it appears that higher expenditure per pensioner in Belgium compared with neighbouring countries does not necessarily imply a lower risk of poverty for the elderly. In any case, an analysis of the link between public spending on pensions and the risk of poverty is subject to significant limitations, given that the latter is influenced by an array of factors, including policies that impact the wealth of older people as well as access to private supplementary pensions.

Technical simulations show that it is possible to substantially lower (the increase in) the pension spending ratio through a combination of policy options, in order to steer the ratio's underlying factors in the direction of those of the reference countries. Admittedly, this will require incisive measures.

The most welfare-enhancing policy entails increasing the employment rate among seniors, as this will simultaneously reduce pension expenditure, increase GDP and lower the risk of pensioner poverty. Policies that serve to raise GDP, by boosting either employment or productivity, have the advantage of reducing not only the pension spending ratio but also the general government expenditure ratio. That being said, higher productivity

will only lead to a lower pension spending ratio if the pensions of current pensioners are not raised to the same extent. Finally, any trimming of (the increase in) the average public pension should preferably be at the expense of the highest pensions, so as not to exacerbate the risk of poverty.

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Conventional signs

%   per cent

List of abbreviations

Countries or regions

BE   Belgium
DE   Germany
EA   Euro area
ES   Spain
FR   France
NL   The Netherlands
IT   Italy

Abbreviations

AWG   Ageing Working Group

CEC   Central Economic Council
COFOG   Classification of the functions of government

EC   European Commission

FPB   Federal Planning Bureau

GDP   Gross domestic product

MIDAS   Microsimulation for the Development of Adequacy and Sustainability

NBB   National Bank of Belgium

SCA   Study Committee on Ageing
SILC   Survey on Income and Living Conditions