



EUROPEAN SEMESTER THEMATIC FACTSHEET

SUSTAINABILITY OF PUBLIC FINANCES

1. INTRODUCTION

The **sustainability of public finances** also referred to as **fiscal sustainability**, is the ability of a government to sustain its current spending, tax and other-related policies in the long run without threatening its solvency or defaulting on some of its liabilities or promised expenditures.

The recent crisis has shown how crucial fiscal sustainability is. Yet, sustainability of public finances is not a circumstantial concern. It affects intergenerational fairness and it embodies principles that apply at all times and to all governments, regardless of their current indebtedness. Keeping government debt in check and maintaining the ability to issue debt when needed is essential for the smooth functioning of the economy. Member States need to be able to adjust to unforeseen circumstances beyond the control of the government, such as large swings in the business cycle or economic crises. Limited capacity to extract taxation from the economy, political economy aspects that complicate consolidation, as well as evidence that structural reforms are more successful in countries with healthy initial fiscal positions are also reasons for precaution¹.

Against this backdrop, the deterioration in fiscal positions and increases in government debt in the EU since 2008, together with the budgetary pressures arising from population ageing, compound each other and make fiscal sustainability an acute policy challenge. Since 2014, public debt ratios have started to decline at the EU aggregate level. However, crisis legacies imply that public debt burdens remain high in several EU countries.

Analysing prospective government debt developments and fiscal sustainability risks is therefore crucial for euro area countries and for the EU as a whole to be able to formulate appropriate policy responses aimed at strengthening fiscal solvency where needed. Recent developments, in particular the sovereign debt crisis, which made it difficult for some EU countries to access the market, have confirmed that fiscal sustainability challenges are not only long-term. Re-building fiscal buffers in time to absorb new shocks when they come, not least a foreseeable rise in interest rates, is essential.

monetary and economic studies, Bank of Japan, Discussion Paper No. 2013-E-8, Fournier, M, and Fall (2015) Government Debt and Fiscal Frameworks *OECD Working Paper*, ECO/CPE/WP1(2015)7/ANN2; Eyraud, L and Wu, T (2015), Playing by the Rules: Reforming Fiscal Governance in Europe IMF Working Paper WP/15/67.

¹ Obstfeld, M. (2013), On Keeping Your Powder Dry: Fiscal Foundations of Financial and Price Stability, IMES institute for

In the euro area and the EU the overall fiscal outlook continues to improve² with the deficit-to-GDP ratio³ projected to decline to 1.1% in the euro area and to 1.2% in the EU in 2017 and to continue that trend, with the deficit-to-GDP ratio reaching 0.8% in the euro area and 0.9% in the EU in 2019⁴. With lower deficits and favourable snow-ball effects, the debt-to-GDP ratio in the euro area and the EU has been on a declining path since 2014. It is expected to reach 89.3% in the euro area and 83.5% in the EU in 2017, and to continue falling to 85.2% and 79.8%, respectively, in 2019. Such improved outlook of public sector deleveraging is supported by nominal GDP growth and historically low interest rates. However, current and future economic and budgetary situations vary widely across EU countries. The appropriate combination of policies needed to ensure fiscal sustainability is therefore also idiosyncratic, depending on the challenges faced by each country⁵.

Finally, the sustainability of public finances in the EU is closely linked to principles enshrined in the Treaties, to the Stability and Growth Pact (SGP), and to the process of multilateral surveillance carried out through the European Semester, as part of a framework under which the Commission acts together with Member States.

The remainder of this factsheet is organised as follows: section 2 outlines the challenges associated with public finance sustainability; section 3 looks at the policy levers; section 4 examines the policy state of play.

2. CHALLENGES

When assessing fiscal sustainability, due attention needs to be paid to the current and prospective level of outstanding government debt. High-debt countries are more vulnerable to economic downturns and interest rate shocks. Without a sufficiently high primary surplus, which might be difficult to maintain over time, public debt might be unsustainable even without an ageing population. A high level of outstanding government debt can therefore put fiscal sustainability at risk regardless of long-term ageing-related expenditure.

In 2017 more than half of EU countries have a government debt-to-GDP ratio above the 60% of GDP Treaty threshold. However, if they fully respected the SGP fiscal rules, i.e. the SGP scenario, basically all countries would be expected to have a lower debt ratio in 2028 compared to a no-fiscal-policy-change scenario (Figure 1). Moreover, assuming full respect of the SGP fiscal rules, no Member State would have an increasing debt-to-GDP ratio by 2028.

² European Commission (2017), 'Autumn 2017 European Economic Forecast'.

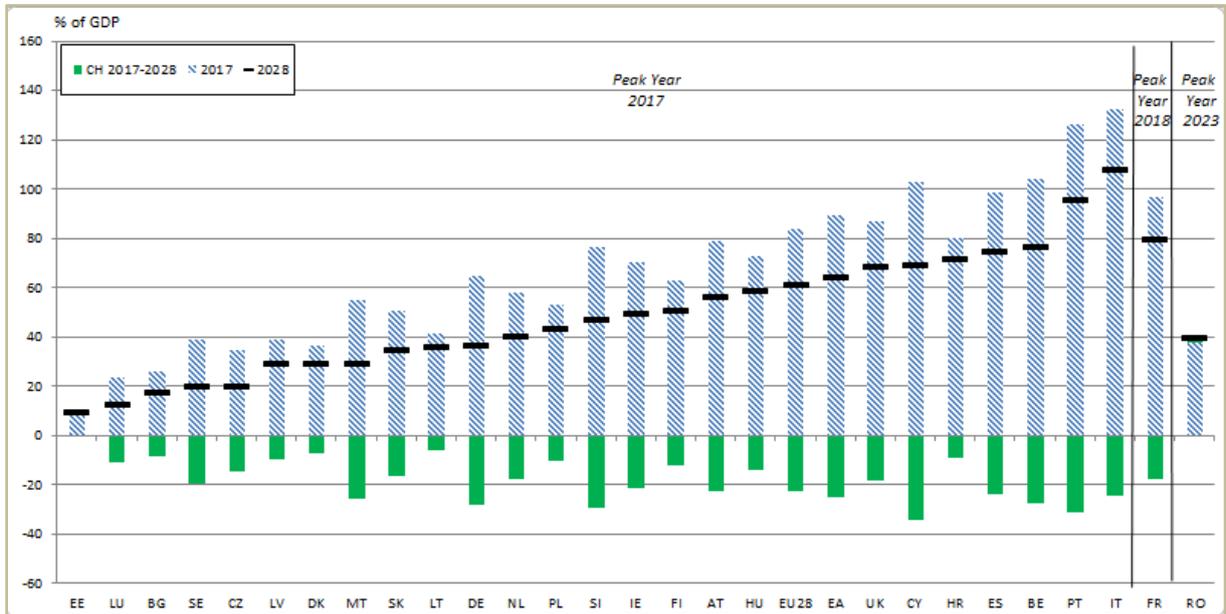
³ This represents the headline budget balance.

⁴ For more information on the fiscal position of the euro area and the EU see European Commission (2016), 'Annual Growth Survey 2017'.

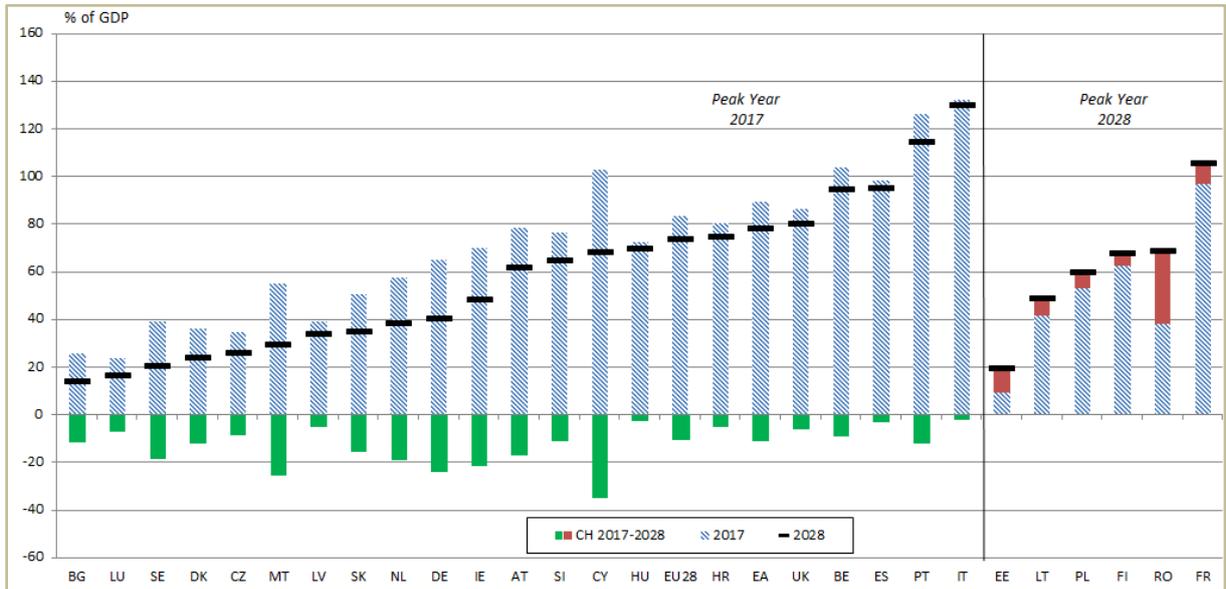
⁵ This factsheet does not cover Greece, a country implementing an adjustment programme. The macroeconomic and budgetary prospects for 'programme' countries are assessed more frequently than for the other Member States. The timeframe the forecasts for these countries covers is also different than the one for the other Member States and assumes full implementation of the adjustment programme.

Figure 1 – Gross government debt projections under the SGP scenario v the baseline no-fiscal-policy-change-scenario (% of GDP)

SGP Scenario



Baseline no-fiscal-policy-change-scenario



Source: Commission services

Notes: based on autumn Commission 2017 forecast data; Gross debt projections under different scenarios are available in the Commission assessment of each country's Stability Programme at http://ec.europa.eu/economy_finance/economic_governance/sqp/convergence/index_en.htm.

The Commission's multidimensional approach to assess fiscal sustainability integrates the longer term with an assessment of more immediate challenges and risks; both long- and short-term analysis are underpinned by appropriate indicators which can point to the scale and the scope of the sustainability challenges, as follows⁶:

- **Short-term fiscal challenges** are analysed using the **S0 indicator**: through a weighted set of fiscal, financial and macro-competitiveness indicators, the S0 indicator uses the signalling power of its components⁷

⁶ The below indicators are described in more technical detail in the most recent Debt Sustainability Monitor and in the Fiscal Sustainability Report of the European Commission: see European Commission (2017), 'Debt Sustainability Monitor 2016' Directorate-General for Economic and Financial Affairs (DG ECFIN), *European Economy*, Institutional Paper 063| 2017 https://ec.europa.eu/info/publications/economy-finance/debt-sustainability-monitor-2016_en and European Commission (2016), 'Fiscal Sustainability Report 2015', DG ECFIN, *European Economy* Institutional Paper 018/2016 http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf.

⁷ A whole set of economic variables are weighted in the composite indicator S0. The variables used are: *On the fiscal side*: budget balance, primary budget balance, cyclically adjusted budget balance, stabilising primary budget balance, government gross debt (level and change), government short term debt, government net debt, gross financing needs, change in government expenditure, change in government final consumption expenditure (all as % GDP) plus the differential between the interest rate and growth rate; *On the financial and macro-competitiveness side*: net international investment position, net savings of households, private sector debt, private sector credit flow, short term debt of non-financial corporations, short term debt households, current account 3-year backward moving average (all as % GDP), construction (as % of value added), real effective exchange rate vs. 35 trading partners and based on the exports deflator (% change over 3 years), nominal unit labour cost (% change over 3 years), yield curve, real GDP growth, and GDP per capita in PPP as % of US level.

to detect fiscal stress and give an early warning of risks within a one-year timeframe.

- **Medium-term fiscal challenges** are measured through the **S1 indicator**⁸: the medium-term sustainability gap indicator S1 shows the upfront fiscal effort required to bring the debt-to-GDP ratio to 60% by 2032, including any additional expenditure such as the cost of ageing^{9 10}.
- **Long-term fiscal challenges** are assessed using the **S2 indicator**: this long-term sustainability gap indicator shows the upfront and permanent fiscal adjustment required to stabilise the debt-to GDP ratio over an infinite period, including the costs of ageing¹¹.

This set of indicators is used as part of the Commission evaluation of EU countries' budgetary plans in the context of the Stability and Growth Pact¹². They

⁸ The assessment of medium-term fiscal challenges also relies on the European Commission Debt Sustainability Analysis (see Fiscal Sustainability Report 2015 quoted in footnote 6).

⁹ This fiscal effort is measured as the improvement in the structural primary balance (SPB) cumulated over the five years after the forecast and then sustained for a decade. The SPB is a country's budget balance before interest payments and corrected for circumstantial dynamics such as factors related to the business cycle, one-off or temporary measures.

¹⁰ On the latest estimates of the fiscal costs of ageing, see European Commission (2015), 'The 2015 Ageing Report. Economic and budgetary projections for the EU 28 Member States (2013-2060)', DG ECFIN, *European Economy* 3/2015.

¹¹ The adjustment implied by the S2 indicator might lead to debt stabilising at relatively high levels. It must therefore be taken with some caution for high debt countries in view of the SGP requirements.

¹² See European Commission's assessment of Stability or Convergence Programmes – DG ECFIN Staff Working Documents on http://ec.europa.eu/economy_finance/economic_governance/sgp/convergence/index_en.htm.

make it possible to assess the extent to which there is a need for large policy adjustment now or in the future and the kind of policy adjustment required (fiscal or structural or a combination of both). It is necessary to analyse how the sustainability challenge should be addressed in the medium to long term. This analysis is carried out in two steps:

- identifying the extent to which there is a significant fiscal sustainability challenge;
- establishing the nature of the challenge so as to devise appropriate policies to remedy the situation. This is done by looking at relative current and prospective deficit and debt levels) and future ageing-related spending pressures in the EU, especially pensions, healthcare and long-term care¹³.

Fiscal sustainability is assessed separately and non-mechanically over each time span taking additional factors and qualifiers into account, including country-specific ones.

2.1. Short-term fiscal challenges (S0 indicator)

Values of the S0 indicator above the threshold indicate potential short-term fiscal risks. A more precise identification of country-specific short-term fiscal risks is made possible by the analysis of the individual variables, and their values relative to their own thresholds. Countries with a value for the overall indicator above the threshold (0.46) in 2017 are at risk of fiscal stress in the year ahead (Figure 2).

2.2. Medium-term fiscal challenges (S1 indicator)

As regards the medium-term challenges – quantifying the required steady fiscal adjustment over the five years after the

period covered by the forecast (2019) to reach the Treaty's 60% threshold for government debt fifteen years ahead (by 2032)¹⁴. The thresholds for S1 are 0 and 2.5, between which S1 indicates medium risk. If S1 is below 0 or above 2.5, it indicates low or high risk, respectively. Figure 3 shows the S1 indicator in the no-policy-change scenario taking the budgetary position in 2019 (the last year of the autumn 2017 Commission forecast) as a starting point.

2.3. Long-term fiscal challenges (S2 indicator)

The S2 sustainability indicator quantifies the size of current and future budgetary imbalances and, therefore, the pressure placed on public finances. The higher the values of the S2 sustainability indicator are, the greater the fiscal sustainability risk and thus the required fiscal adjustment. If S2 is above 6, the risk it indicates is high; if it is below 2, the risk is low. History provides several examples of periods when a lasting improvement in the fiscal position (primary balance) of up to 2 percentage points of GDP has occurred. However, there have been very few periods of lasting improvements of 6 percentage points or more. In cases where high ageing costs make for a wide sustainability gap, structural reforms to curb long-term ageing-related expenditure trends are necessary parts of the policy adjustment.

The results for the S2 sustainability indicator or sustainability gap can be broken down into two parts:

- the initial budgetary position (level of debt and initial structural primary balance): some EU countries currently have too large a deficit given the level of their debt and their long-term growth potential, which would imply an explosive debt even without taking into account the impact of ageing;

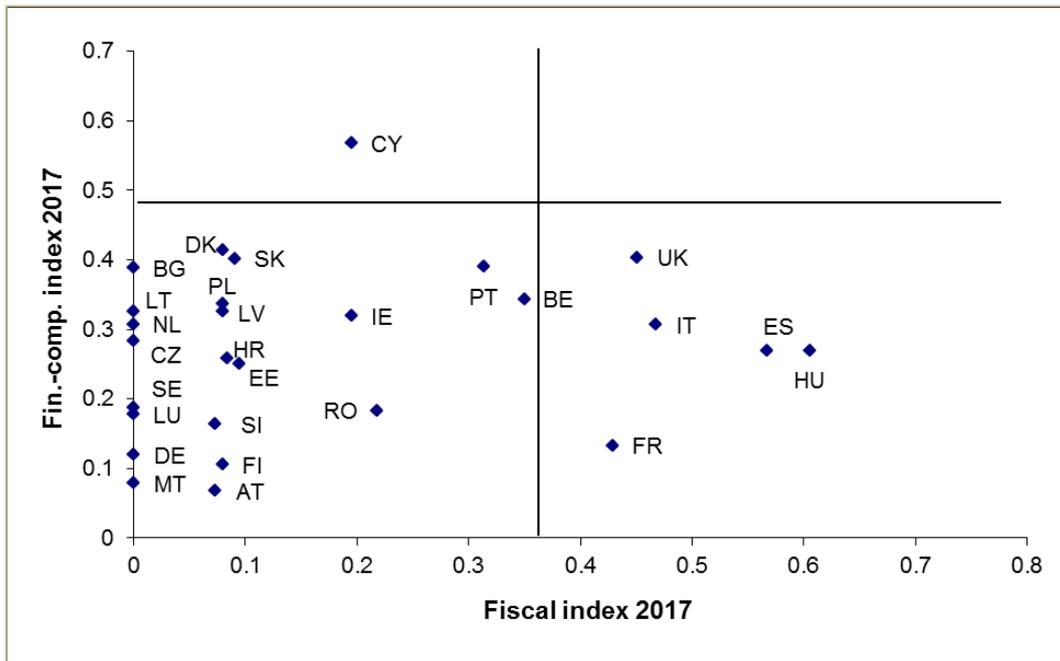
¹³ See European Commission (2014), 'Identifying fiscal sustainability challenges in the areas of pension, healthcare and long-term care policies' *European Economy*, Occasional Papers No 201|2014.

¹⁴ The fiscal gap is captured by the S1 indicator ($S1_{2032}^{60\%}$), where the end-point is set to 60% of GDP in fifteen years' time (by 2032).

- the 'cost of ageing', i.e. the discounted change in long-term ageing-related expenditure. Here EU countries also differ a lot: some face a much larger increase in expenditure than others,

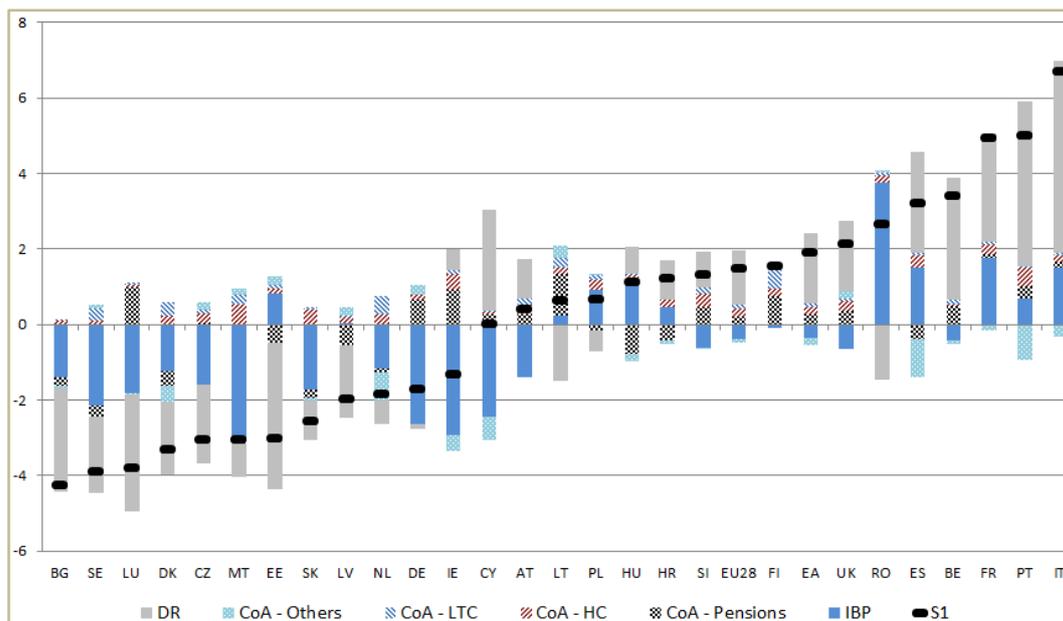
mainly due to demographics and features of their pension systems, but also other expenditure categories such as healthcare and long-term care.

Figure 2 – S0 indicator split into its two sub-indexes: the fiscal index and the financial-competitiveness index



Source: Commission services.
Note: based on autumn Commission 2017 forecast data.

Figure 3 – S1 indicator and its components (pps of GDP)



Source: Commission services.
Note: based on autumn Commission 2017 forecast data. DR stands for debt requirement; CoA stands for costs of ageing, split between long-term care (LTC), healthcare (HC), pensions and others. IBP stands for initial budgetary position.

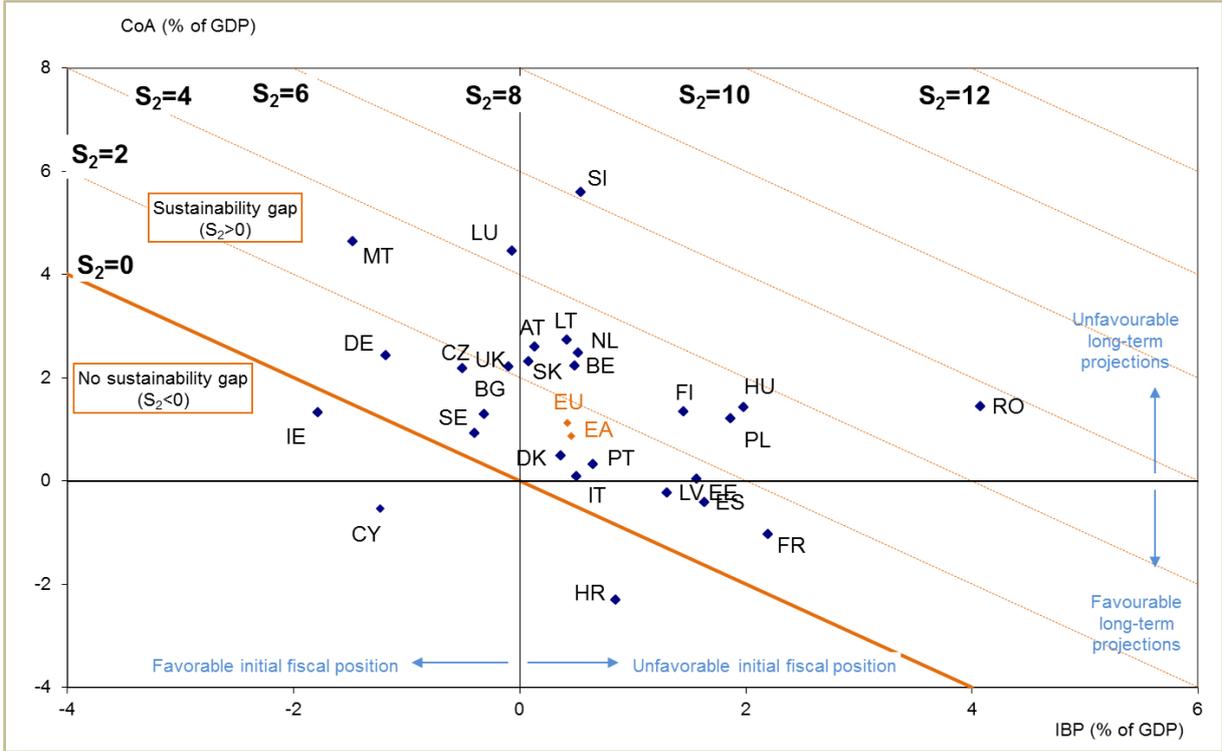
Figure 4 shows the initial budgetary position (IBP) on the horizontal axis and the long-term component (LTC) on the vertical axis (or costs of ageing). A country positioned to the left has a favourable IBP; if it is below zero, it means that the budgetary position helps fiscal sustainability. A country positioned towards the bottom of the axis has a low long-term cost of ageing.

Countries in the upper area can improve their fiscal sustainability position by curbing the projected increase in ageing-related expenditure, such as implementing pension reforms. Countries to the right can improve their fiscal sustainability position by consolidating their public finances. The

closer a country is to the upper-right corner, the higher its sustainability gap. The diagonal lines indicate the size of the sustainability gap. For example, the EU as a whole has a sustainability gap of 1.5 pps of GDP.

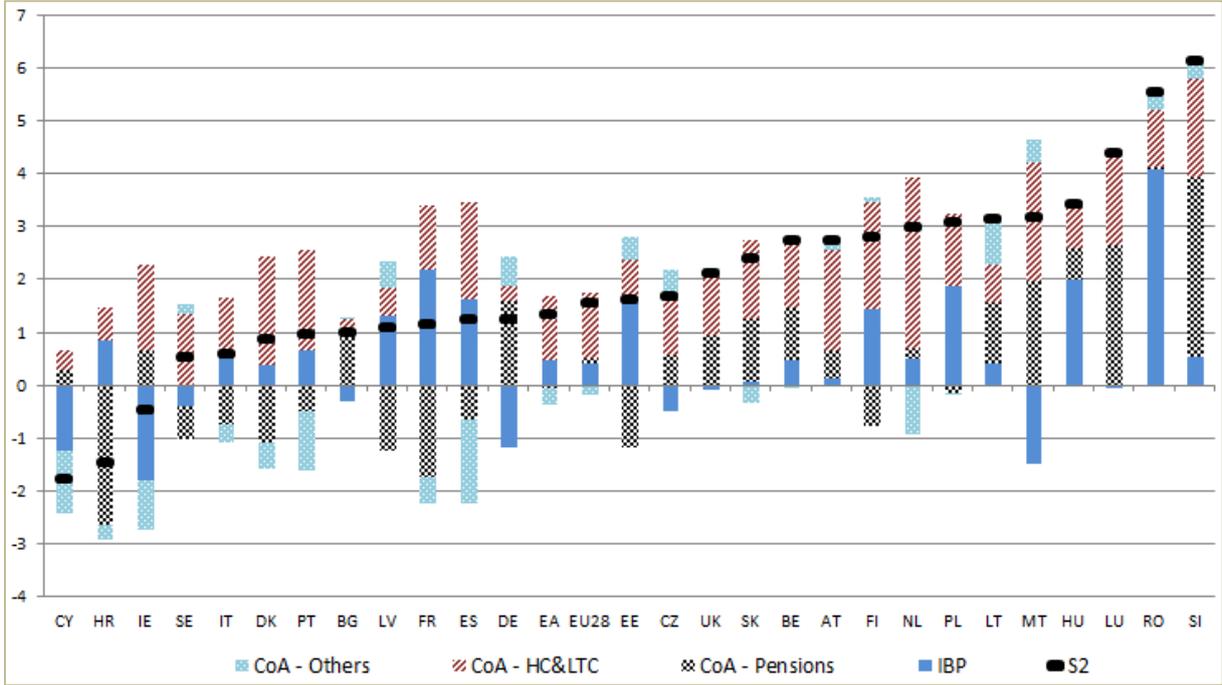
Figure 5 shows in more detail the components of the cost of ageing. For the EU as a whole, the contribution from healthcare and long-term care spending play a large part, whereas the part of pension spending appears negligible. There is however a large variation across countries. In some countries, the fiscal sustainability challenge is mostly affected by pension spending whereas in others it is mostly affected by healthcare and long-term care spending trends.

Figure 4 – The S2 sustainability gap broken down



Source: Commission services.
 Note: based on autumn Commission 2017 forecast data.

Figure 5 – S2 indicator and its components: initial budgetary position (IBP) and cost of ageing (CoA) (pps of GDP)



Source: Commission services.
 Note: based on autumn Commission 2017 forecast data.

3. POLICY LEVERS

There are several possible policy responses including fiscal consolidation and/or structural reforms, especially those to curb the long-term budgetary costs of ageing.

3.1. The starting point: the government's budgetary position

The government's budgetary position is the first key element of the sustainability indicators. Its assessment should not be influenced by temporary factors. This is why it is necessary to make a correction for the impact of the business cycle on the general government balance and the impact of any one-off measure.

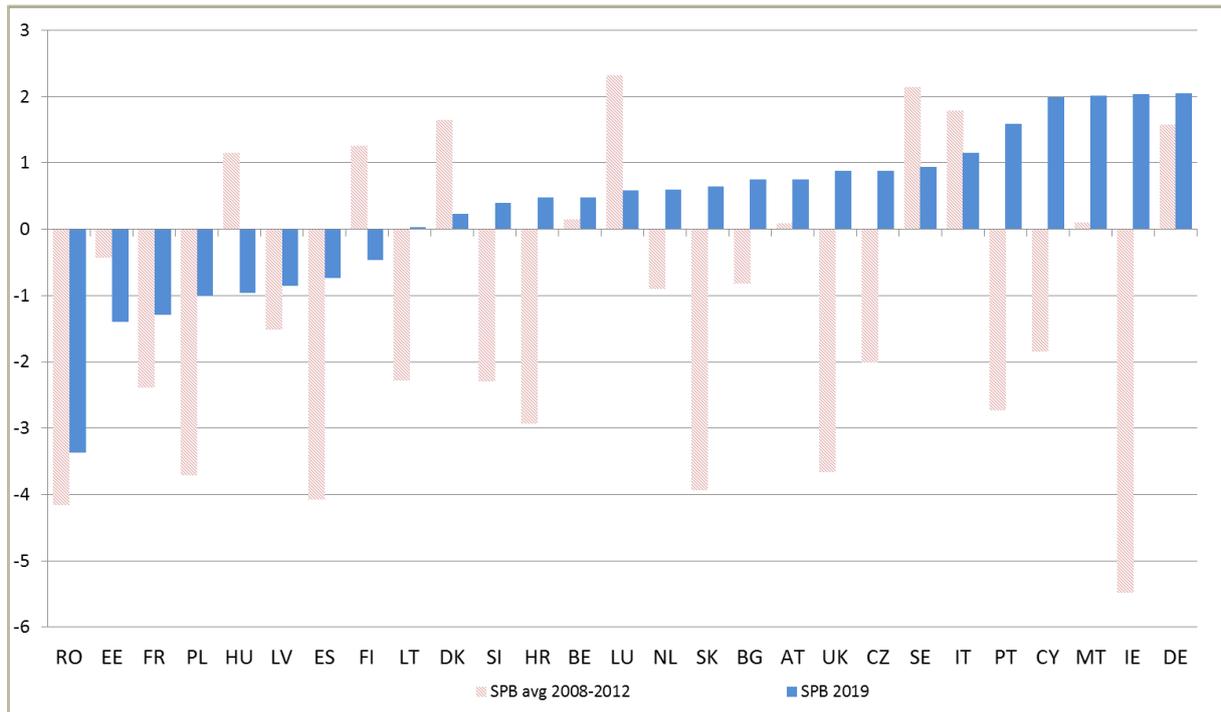
This corrected measure is the structural primary balances (SPB). Figure 6 shows the structural primary balances of EU countries, both in terms of averages per country from 2008 to 2012 and the Commission's forecasts for 2019.

The first step for any country, in addressing fiscal sustainability challenges is to fully adhere to the EU fiscal rules, the Stability and Growth Pact¹⁵. Measures to broaden the tax base also help ensure sound budgetary positions¹⁶.

¹⁵ Fiscal frameworks and fiscal policy are discussed in a separate factsheet elaborating on the challenges addressed in the European Semester and possible policy responses to them.

¹⁶ In this context see the factsheet on undeclared work.

Figure 6 – Structural primary balance (% of GDP, 2019 v average over 2008-2012)



Source: Commission services.

Note: based on autumn Commission 2017 forecast data.

3.2. A long-term determinant of fiscal sustainability: the cost of ageing and its components

A key long-term fiscal sustainability factor is the cost of ageing. In the sustainability assessment, the consideration of the cost of ageing covers a longer period, until 2060¹⁷.

The largest expenditure item of these is public pension spending, accounting for about 11% of GDP in the EU as a whole. There is considerable variation across countries in terms of both current expenditure levels and projected changes in pension spending, reflecting the different pension

systems and what stage of the pension reform process countries are at (Figure 7).

The second largest public expenditure item is healthcare, accounting for about 7% of GDP for the EU as a whole. In addition to healthcare, consideration should be given to expenditure on long-term care. Taken together, these two represent almost 9% of EU GDP.

As is the case for pensions, there is considerable variation across countries reflecting different healthcare and long-term care systems and arrangements in place (Figure 8).

¹⁷ The ageing-related expenditure items comprise public pension expenditure, healthcare, long-term care and education) and unemployment benefits (2015 Ageing Report).

Figure 7 – Public pension expenditure (% of GDP, 2019 vs 2060)

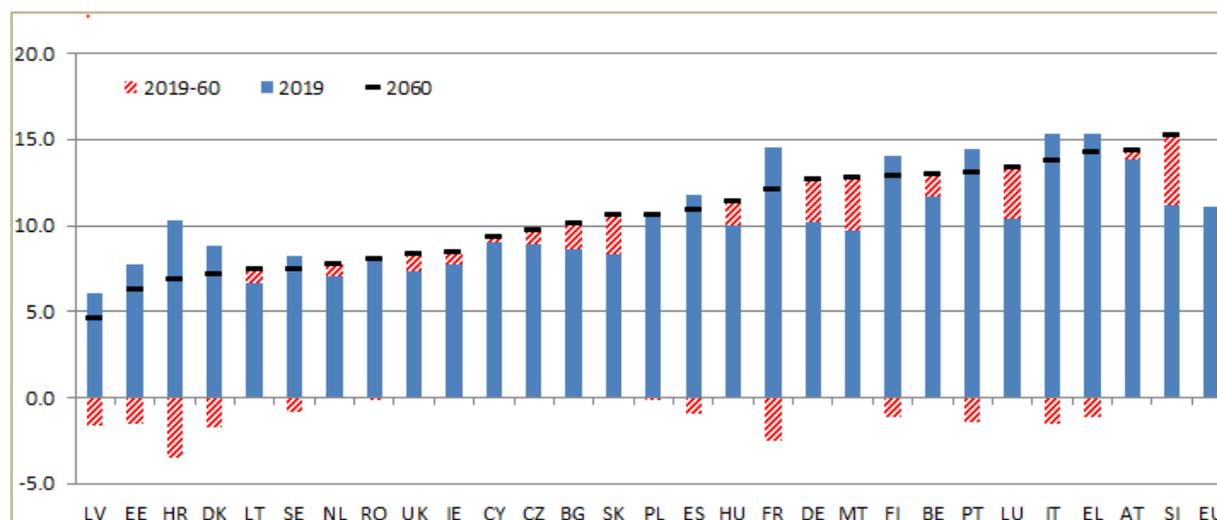
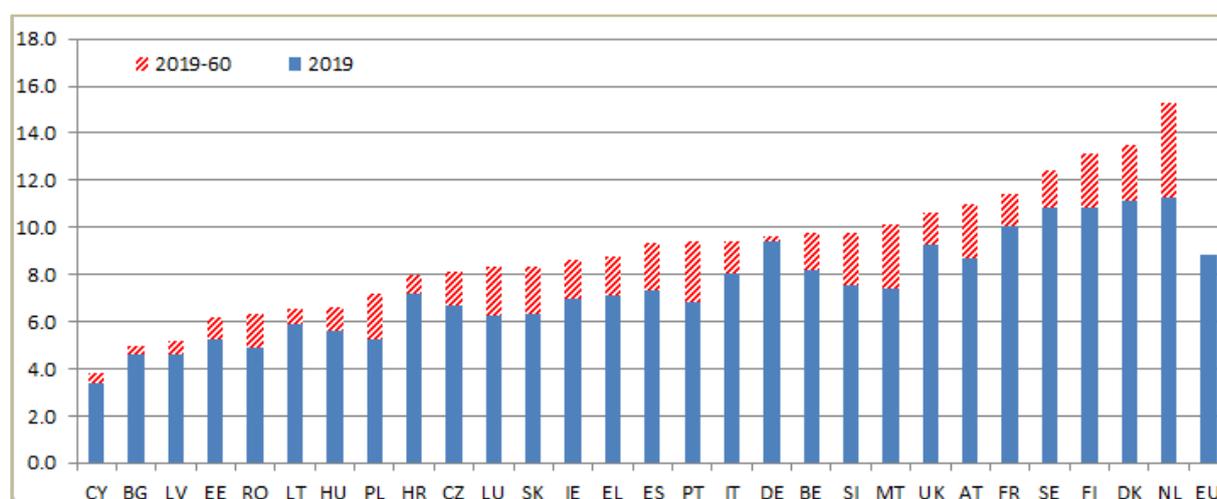


Figure 8 –Public healthcare and long-term care expenditure (% of GDP, 2018 vs 2060)



Source: Commission services.

Note: based on autumn Commission 2017 forecast data.

Reforms addressing the long-term causes of fiscal sustainability risks include those that try to contain the costs of ageing and their components.

Pension reform includes adjusting the age eligibility for a pension benefit and adjusting the size of the pension benefit¹⁸.

¹⁸ Pension policy is discussed in a separate factsheet elaborating on the challenges addressed in the European Semester and possible policy responses to them.

The first category of reforms has a decreasing impact on the coverage rate of pension systems. They usually involve abolishing or restricting early retirement schemes and other early-exit pathways, increasing statutory retirement ages (also done by introducing automatic links to changes in medium- and long-term life expectancy) or harmonising retirement ages between men and women.

The second category of reforms offers an alternative to restrictions in the coverage of a pension system by decreasing the pension benefit ratio (defined as the average pension as a

share of the average economy-wide wage). If benefit ratios are very high both in comparison to the reference wage and in comparison to other EU countries, this could mean that a pension system is too generous. Making pension entitlements less generous can thus significantly decrease, or at least stabilise, public pension expenditure.

Healthcare and long-term care challenges are more country-specific. This means that cost-effectiveness and governance are generally improved on a case-by-case basis¹⁹.

4. POLICIES: STATE OF PLAY

Graphics in this factsheet have so far provided a cross-country perspective of both the challenges and policy levers.

Population ageing puts upward pressure on public spending, with large differences across the EU. Countries have become increasingly aware of these risks and taken policy action and made visible progress in terms of the projected increase in ageing-related expenditure, in particular pension expenditure. As two subsequent Ageing Reports published in 2012 and 2015 show, total ageing-related expenditure has decreased from one projection to the next, meaning that reforms in these areas actually bear fruit.

Amongst the most effective measures to tackle the cost of ageing are mechanisms automatically linking the retirement age and/or pension benefits to life expectancy, recommended by the Commission in several Annual Growth Surveys²⁰. Currently, almost half of EU countries have such a mechanism in place (Figure 9) and the Eurogroup has supported this principle

and agreed to benchmark pension sustainability in the course of 2018²¹.

This reflects the double dividend paid by these mechanisms – automatic links strengthen pension system sustainability at the same time as they improve its adequacy. By accumulating higher contributions throughout extended working lives people secure higher pensions.

¹⁹ Healthcare policy is discussed in a separate factsheet.

²⁰ See European Commission (2016), 'Annual Growth Survey 2017'.

²¹ Eurogroup 2017 'Structural reform agenda -thematic discussions on growth and jobs: benchmarking pension sustainability', 144/17, 20.3.2017 and Eurogroup 2016 'Common principles for strengthening pension sustainability' 16 June 2016.

<http://www.consilium.europa.eu/en/press/press-releases/2016/06/16-eurogroup-pension-sustainability/>

Figure 9 – Measures effective in strengthening pension sustainability

Country	Automatic balancing mechanism	Sustainability factor (benefit link to life expectancy)	Retirement age linked to life expectancy	Legislated
Italy		X	X	1995 & 2010
Latvia		X		1996
Sweden	X	X		1998 & 2001
Poland		X		1999
France*		X		2003
Germany	X			2004
Finland		X	X	2005 & 2015
Portugal**		X	X	2007 & 2013
Greece***			X	2010
Denmark****			X	2011
Spain	X	X		2011 & 2013
Netherlands			X	2012
Cyprus			X	2012
Slovak Republic			X	2012
Lithuania	X			2016

Note: In all the NDC system the benefit is linked to life expectancy through the annuity factor.

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

** Only two thirds of the increase in life expectancy is reflected in the retirement age.

*** An automatic balancing mechanism is applied in auxiliary pension system.

**** Subject to parliamentary decision.

Source: Commission services.

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5. REFERENCES

- Eyraud, L., and Wu, T., (2015), 'Playing by the rules: Reforming fiscal governance in Europe', *IMF Working Paper* No 15/67
- Eurogroup (2017) 'Structural reform agenda -thematic discussions on growth and jobs: benchmarking pension sustainability', 144/17, 20.3.2017
<http://www.consilium.europa.eu/sk/press/press-releases/2017/03/20/eurogroup-statement-structural-reform-agenda/>
- Eurogroup (2016), 'Common principles for strengthening pension sustainability', Statement of 16 June 2016
<http://www.consilium.europa.eu/en/press/press-releases/2016/06/16-eurogroup-pension-sustainability/>
- European Commission (2017), 'Autumn 2017 European Economic Forecast', Directorate-General for Economic and Financial Affairs, *European Economy*, Institutional Paper 047/2017
- European Commission (2017), 'Debt Sustainability Monitor 2016', Directorate-General for Economic and Financial Affairs, *European Economy*, Institutional Paper 063/2017
https://ec.europa.eu/info/publications/economy-finance/debt-sustainability-monitor-2016_en
- European Commission (2016), 'Annual Growth Survey 2017', Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, Brussels, 16.11.2016 COM(2016) 725
<http://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/annual-growth-survey-2017>
- European Commission (2016), 'Fiscal Sustainability Report 2015', Directorate-General for Economic and Financial Affairs, *European Economy*, Institutional Paper 018/2016
- European Commission (2015), 'The 2015 Ageing Report. Economic and budgetary projections for the EU 28 Member States (2013-2060)', Directorate-General for Economic and Financial Affairs, *European Economy* 3/2015
- European Commission (2014), 'Identifying fiscal sustainability challenges in the areas of pension, health care and long-term care policies', Directorate-General for Economic and Financial Affairs, *European Economy*, Occasional Papers No 201/2014
- European Commission (2012), 'The 2012 Ageing Report. Economic and budgetary projections for the EU 28 Member States (2013-2060)', Directorate-General for Economic and Financial Affairs, *European Economy* 2/2012
http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-2_en.pdf
- Fournier, J. M., and Fall, F. (2015), 'Government debt and fiscal frameworks, Annex 2 The government debt limit', *OECD Working Paper*, ECO/CPE/WP1(2015)7/ANN2
- Obstfeld, M. (2013), 'On keeping your powder dry: Fiscal foundations of financial and price stability', *IMES institute for monetary and economic studies, Bank of Japan Discussion Paper* No 2013-E-8