1. INTRODUCTION

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

That fiscal sustainability is crucial has become more evident in the context of the recent crisis. Yet, sustainability of public finances is not a circumstantial concern, it affects essentially intergenerational fairness and it sets forth principles that are useful at all times and to all governments, irrespective of their current leverage. Keeping the 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.

Moreover, limited capacity to extract taxation from the economy, political economy reasons complicating consolidation, as well as evidence that structural reforms are implemented more successfully in countries with healthy initial fiscal positions are reasons for precautionary policies¹.

Against this background, the deterioration in fiscal positions and increases in government debt in the EU since 2008, together with the budgetary pressures posed by, among others, population ageing, compound each other and make fiscal sustainability an acute policy challenge.

Analysing prospective government debt developments and risks to fiscal sustainability is crucial at the current juncture for euro-area countries and for the EU as a whole to be able to formulate appropriate policy responses and restore credibility and confidence. Developments in the recent past, in particular the sovereign debt crisis leading to conditions under which some Member States faced difficulties in accessing the market, have confirmed that fiscal sustainability challenges are not only of a longer-term nature.

In the euro area and the EU the overall fiscal outlook continues to improve², with

the deficit-to-GDP ratio³ projected to decline, respectively, to 1.8% and 2.0% in 2016 and to continue that trend, with this ratio reaching 1.5% in the euro area and 1.6% in the EU in 2018⁴.

With lower deficits, the debt-to-GDP ratio in the euro area and the EU is forecast to continue to decline from its 2014 peak, to reach, respectively, 91.6% and 86.0% in 2016, and, respectively, 89.4% and 83.9% in 2018.

Despite considerable progress in fiscal consolidation, the main causes of fiscal sustainability challenges and the economic and budgetary situations and prospects vary widely across EU countries at the current juncture.

The appropriate combination of policies needed to ensure fiscal sustainability is therefore also idiosyncratic, depending on the challenges faced by each Member State⁵.

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, i.e. it is part of a framework whereby the Commission acts together with Member States.

The remainder of this thematic factsheet is organised as follows: section two outlines the challenges associated with public finance sustainability; section three looks into the policy levers; section four 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 negative growth rate/interest rate shocks. In the absence of a sufficiently high primary surplus, which might be difficult to maintain over time, public debt might be unsustainable even before considering the challenge posed by an ageing population. Hence, a high level of outstanding government debt can put fiscal sustainability at risk even before considering the long-term expenditure trends influenced by population ageing.

In 2016 most EU Member States have a government debt-to-GDP ratio above the 60% of GDP Treaty threshold. However, assuming that the SGP fiscal rules are fully respected, i.e. the SGP scenario, the large majority of countries would be expected to have a lower ratio in 2027 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 2027.

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² See European Commission (2016b), "Autumn 2016 European Economic Forecast"
³ This represents the headline balance, not cyclically-adjusted and not net of one off and other temporary measures.
⁴ For more information on the fiscal position of the euro area and the EU see European Commission (2016a), "Annual Growth Survey 2017".
⁵ Greece, a country implementing an adjustment programme is not covered by this fiche. The macroeconomic and budgetary prospects for 'programme' countries are assessed more frequently than for the other Member States. The time horizon covered by the forecasts for these countries is also different than for the other Member States and assume full implementation of the adjustment programme.
Figure 1 – Gross government debt projections under the SGP scenario vs. the baseline no-fiscal policy change scenario (% of GDP)

SGP Scenario

Baseline no-fiscal policy change scenario

Notes: based on Commission Autumn 2016 forecast data; Gross debt projections under different scenarios are available in the Commission’s assessment of each Members State’s Stability Programme at http://ec.europa.eu/economy_finance/economic_governance/sgp/convergence/index_en.htm

The Commission's multidimensional approach for assessing 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 follows\(^6\):

- **Short-term fiscal challenges** are captured in the **S0 indicator**: as a weighted set of fiscal, financial and competitiveness indicators, the S0 indicator aims at an early detection of fiscal stress stemming from risks within a one-year horizon, making use of the signalling power of its components\(^7\).

- **Medium-term fiscal challenges** are described by the **S1 indicator**: The medium term sustainability indicator S1 shows the upfront adjustment effort required, in terms of a cumulated gradual improvement in the structural primary balance over 5 years (starting from the year after the forecasts, currently 2019), and then sustained, to bring the debt – to-GDP ratio back to 60% in 2031, including financing for any additional expenditure arising from an ageing population\(^8\).

- **Long-term fiscal challenges** are assessed by the **S2 indicator**: this indicator shows the adjustment to the current structural primary balance required to fulfil the infinite horizon inter-temporal budget constraint, including paying for any additional expenditure arising from an ageing population\(^9\).

This battery of indicators is used as part of the Commission evaluation of Member States budgetary plans in the context of the Stability and Growth Pact\(^10\). They enable 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 (of fiscal or structural nature or a combination of the two). In a medium- to long-term perspective, it is necessary to analyse how the sustainability challenge should be addressed. This can be carried out in two steps:

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\(^7\) A whole set of economic variables are weighted in the composite indicator S0. There are fourteen variables in each of the two sub-indexes composing 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, old age dependency ratio 20 years ahead and projected age-related public expenditure (average yearly change over the next 5 years as % GDP); On the macro-financial and 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), plus the leverage of financial corporations, 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.


\(^9\) The adjustment implied by the S2 indicator might lead to debt stabilising at relatively high levels, thus the indicator has to be taken with some caution for high debt countries in view of the SGP requirements.

• Identifying the extent to which there is an important 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 the relative importance of the fiscal positions (current and prospective deficit and debt levels) and of future age-related spending pressures in the EU countries, notably in the fields of pensions, health care and long-term care11.

Fiscal sustainability is assessed separately and non-mechanically over each time horizon. At the level of each horizon additional factors and qualifiers are taken into account in a process involving economic judgement.

Moreover, country-specific situations need to be taken into account.

2.1. Short term fiscal challenges (S0 indicator)

Values of the S0 indicator beyond the threshold indicate potential short-term risks for fiscal stress.

A more precise identification of the specific sources of short-term fiscal risks at country level is made possible by the analysis of the individual variables, and the values they take relative to their own thresholds. Countries with a value for the overall indicator above the threshold (0.46) in 2016 are at risk for 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 (2018) to reach the Treaty’s 60% threshold for government debt fifteen years ahead (by 2031)12 - Figure 3 shows the S1 indicator in the no-policy-change scenario taking the budgetary position in 2018 (the last year of the autumn 2016 Commission forecast) as a starting point.

2.3. The long term fiscal challenges (S2 indicator)

The S2 sustainability indicator provides quantification of the size of current and future budgetary imbalances and, therefore, of the size of the challenge placed on public finances. The higher the values of the S2 sustainability indicator, the greater the fiscal sustainability risk and thus the required fiscal adjustment. 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 the sustainability gap is large due to high ageing costs, structural reforms geared towards curbing the long-term age-related expenditure trends are necessary parts of the policy adjustment. As was the case in the 2012 Sustainability Report, the following indicative thresholds for the S2 indicator have been retained: (i) if the value of S2 is lower than 2, the country is assigned low risk; (ii) if it is between 2 and 6, it is assigned medium risk; and, (iii) if it is greater than 6, it is assigned high risk.

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

• The initial budgetary position (level of debt and initial structural primary balance): some Member States currently have too large a deficit given the level of their debt and long-term growth potential, which would

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12 The fiscal gap is captured by the S1 indicator (S1_2016), where the end-point is set to 60% of GDP in fifteen years' time (by 2031).
imply an explosive debt even without taking into account the impact of ageing:

- The "cost of ageing", i.e. the discounted change in age-related expenditure over the long-term. Here Member States also show large differences: some face much larger increase of expenditure than others, the driving factors being mainly demographics and features of the pensions systems, but also other expenditure categories such as health care 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 Commission Spring 2016 forecast data

Figure 3 – S1 indicator (pps of GDP)

Source: Commission services
Note: based on Commission Autumn 2016 forecast data
Figure 4 shows the initial budgetary position (IBP) on the horizontal axis and the long-term change in the budgetary position (LTC) on the vertical axis. A country positioned to the left has a favourable IBP; if it is below zero, it means that the budgetary position contributes positively to 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 age-related expenditure, such as implementing pension reforms. Countries to the right can improve their fiscal sustainability position by consolidating their public finances.

The further a country is positioned towards the upper-right corner, the higher is the sustainability gap. The diagonal trapezoidal lines indicate the size of the sustainability gap. For example, the EU a whole has a S2 sustainability gap of 1.7 pp. of GDP.

Figure 5 shows in more detail the components of the cost of ageing. For the EU as a whole, the contribution from health care spending and long-term care spending\(^\text{13}\) is larger than that of pension spending. There is however a large variation across countries. In some Member States, the fiscal sustainability challenge is mostly affected by pension spending trends and in others by trends in health care and long-term care spending.

Figure 4 – The S2 sustainability gap decomposed

Source: Commission services.
Note: based on Commission Autumn 2016 forecast data

\(^{13}\) Increases in health care expenditure reflect not only the impact of changes in the demographic structure, but also take account of the fact that health care expenditure tend to rise faster than GDP over time (reflecting e.g. improvements in health care quality).
3. POLICY LEVERS

Several policy responses could be used to address the challenges, 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 budgetary position is the first key element of the sustainability indicators.

Its assessment should not be influenced by temporary factors: therefore a correction for the impact of the business cycle on the general government balance and the impact of any one-off measure is due.

Figure 6 shows the structural primary balances of EU Members States, that is, the cyclically-adjusted primary balance corrected for one-off and temporary measures, both in terms of averages per EU Member State 2008-2012 and the Commission’s forecasts for 2018.

The first step for any country to address challenges of fiscal sustainability is to fully adhere to the EU fiscal rules, the Stability and Growth Pact\textsuperscript{14}.

Measures targeting a broadening of the tax base also help to ensure sound budgetary positions\textsuperscript{15}.

\textsuperscript{14} Fiscal frameworks and fiscal policy are discussed in a separate thematic factsheet elaborating on the challenges addressed in the European Semester and possible policy responses to them.

\textsuperscript{15} In this context see the thematic factsheet on undeclared work.
3.2. A long-term determinant of fiscal sustainability: the cost of ageing and its components

In a longer-term horizon, a key factor for fiscal sustainability is the cost of ageing. In the sustainability assessment, the consideration of the cost of ageing covers a longer time horizon, until 2060.

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 Member States in terms of both current expenditure levels and in terms of projected changes in pension spending, reflecting the different pension systems in place, and importantly, at which stage of the pension reform process countries find themselves in (see Figure 7).

The second largest public expenditure item is expenditure on health care, accounting for about 7% of GDP for the EU as a whole.

In addition to health care, consideration should be given to expenditure on long-term care. Taken together, these items represent almost 9% of GDP in the EU.

As it is the case for pensions, there is considerable variation across Member States in terms of both current expenditure levels and in terms of projected changes in pension spending, reflecting the different health care and long-term care systems and arrangements in place (see Figure 8).

The age-related expenditure items comprise public expenditure on pension, health care, long-term care and education) and unemployment benefits from the 2015 Ageing Report.
Reforms addressing the longer-term drivers of risks to fiscal sustainability include those that try to contain the costs of ageing and their components.

In the area of pensions, potential reform approaches include adjusting the age eligibility for a pension benefit and adjusting the size of the pension benefit.\(^{17}\)

In the first category reforms have a decreasing impact on the coverage rate of pension systems. They commonly concern the abolishment or restriction of early retirement schemes and other early-exit pathways, the increase in statutory retirement ages (also through

\(^{17}\) Pension policy is discussed in a separate thematic factsheet elaborating on the challenges addressed in the European Semester and possible policy responses to them.
introducing automatic links to the largely known changes in longevity over the medium and long term) or the harmonisation of retirement ages between men and women.

The category of reforms adjusting the size of the pension benefit offers an alternative to restrictions in the coverage of a pension system. Such reforms result in a decrease in 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 Member States, this could hint to the fact that a pension system is rather generous. Reducing the benefit ratio, i.e. the generosity of pension entitlements, can thus have a substantial decreasing or at least stabilising impact on public pension expenditure.

In the area of health care and long term care challenges are more Member State specific and solutions to improving cost effectiveness and governance are generally sought on a case-by-case basis.

4. CROSS-EXAMINATION OF THE POLICY STATE OF PLAY

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

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

Amongst the most effective measures to tackle the cost of ageing are mechanisms automatically linking retirement age or/and pension benefits to life expectancy, recommended by the Commission in several Annual Growth Surveys.

Currently, almost half of EU Member States have such a mechanism in place (see Figure 9) and all euro area countries supported this principle in a recent statement adopted on 16 June 2016.

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

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

19 See European Commission (2016a), "Annual Growth Survey 2017".

http://www.consilium.europa.eu/en/press/press-releases/2016/06/16-eurogroup-pension-sustainability/ These principles are the following: i) Safeguard against demographic and macroeconomic risks; ii) Flanking policies; iii) Broader reforms to strengthen growth and employment; iv) Anchoring political and societal support.
### Figure 9 – Measures effective in strengthening pension sustainability

<table>
<thead>
<tr>
<th>Country</th>
<th>Automatic balancing mechanism</th>
<th>Sustainability factor (benefit link to life expectancy)</th>
<th>Retirement age linked to life expectancy</th>
<th>Legislated</th>
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</thead>
<tbody>
<tr>
<td>Italy</td>
<td>X</td>
<td>X</td>
<td></td>
<td>1995 &amp; 2010</td>
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<tr>
<td>Latvia</td>
<td>X</td>
<td>X</td>
<td></td>
<td>1996</td>
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<td>Poland</td>
<td>X</td>
<td>X</td>
<td></td>
<td>1999</td>
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<tr>
<td>Sweden</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2001 &amp; 1998</td>
</tr>
<tr>
<td>France*</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2003</td>
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<tr>
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<td>X</td>
<td></td>
<td>2004</td>
</tr>
<tr>
<td>Finland</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2005 &amp; 2015</td>
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<tr>
<td>Portugal</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2007 &amp; 2013</td>
</tr>
<tr>
<td>Greece</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Denmark**</td>
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<td>X</td>
<td></td>
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<td>2012</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2013 &amp; 2011</td>
</tr>
<tr>
<td>Spain</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Commission services

*Note: subject to parliamentarian decision

Date: 16.12.2016
5. REFERENCES


- European Commission (2016a), "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


