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## Report on Public Finances in EMU

2015

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Directorate-General for Economic and Financial Affairs

# **Report on Public Finances in EMU** 2015

EUROPEAN ECONOMY

Institutional Paper 014

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### EDITORIAL

After a number of difficult years when policy-makers were sometimes faced with the alternative between front-loaded consolidation and the risk of losing market access, we are now starting to see the fruits of years of large fiscal efforts maturing, with the negative short-term impact of the consolidation packages waning and a moderate recovery taking hold in the euro area. On the back of the recovery, the headline budget deficit is projected to continue to decrease through 2016 in the euro area and public debt will, after peaking in 2014 at almost 95% of GDP, keep falling, at a slow pace, even though the fiscal stance is expected to remain broadly neutral.

An economically sound approach to the fiscal stance demands taking into account short-term stabilisation of the economy and long-term sustainability of public finances. This is what we do in Part I of this report. The shift to a broadly neutral fiscal stance for the Euro area as a whole for the period 2015-2016 is appropriate, against the background of historically low interest rates and a large external surplus, pointing to the need for some demand support. Yet sustainability is essential and our rules are designed to improve it by reducing public debt, in particular, when the economy is performing well. Indeed, the economic literature and policy experience indicate that this is the best strategy to rebuild the necessary fiscal buffers and thereby allow for an effective counter-cyclical policy in future downturns. To put it succinctly, we can only make room for counter-cyclical policy in the bad times, also if we apply it consistently in the good times. This is one of the main lessons of the financial crisis: while the crisis was not fiscal in origin, the lack of fiscal buffer, in many countries, prevented an active use of the fiscal instrument when and where it was most needed.

We recognise that the fiscal rules have become very complex. At the same time, the Commission is committed to clarifying the operation of the rules, and increasing transparency in their application. In this respect, Part II of the report provides a comprehensive summary of how the Stability and Growth Pact accommodates cyclical fluctuations and structural reforms following the recent Commission Communication on Flexibility in the SGP. It is also fair to say the depth and smart features of the surveillance framework have allowed it to take into account the unexpected negative inflation shock of recent years in a reasonable manner.

We know that when inflation turns out to be lower than expected, the achievement of budgetary objectives is affected in the short term since, unlike revenues, primary expenditures adjust only partially and with some time lag to an inflation surprise. Part III of the report shows that the budgetary impact of the negative inflation shock of 2014 was relatively sizable and that the fiscal effort measured by the indicators used in surveillance was distorted in different directions as a result this shock. In this regard, the careful analysis of all indicators and all relevant factors led to relevant surveillance decisions. This illustrates the importance of not fully tying our hands in the implementation of surveillance indicators to adapt to an ever-changing reality.

This also applies to recommendations given to Member States in the context of the Excessive Deficit Procedure. Part IV of the report shows that the fiscal effort required by the EU Council, in its recommendations, is determined mostly on the basis of the headline deficit, in line with the original legislation, with some consideration also given to the specific fiscal impact of the economic situation. The 2011 reform of the SGP went in this direction, providing for a better implementation of the surveillance framework.

Marco Buti

Director General Economic and Financial Affairs

### SUMMARY

The economic recovery in the euro area and the EU as a whole has continued this year at a moderate pace. Government deficits continue to fall and debt levels have stabilised. By 2016, most Member States are expected to be outside the EDP.

The aggregate fiscal stance is broadly neutral, which is overall appropriate given the fragile recovery and the risks attached to the economic environment...

... while fiscal challenges related to sustainability remain high and long term risks have to be monitored.

Member States should abide by the preventive arm of the SGP, which aims to secure sound public finances... The recovery continues in line with expectations at a relatively moderate pace. Supported by low oil prices and favourable policy conditions, GDP growth in the euro area is expected to rise to 1.6% in 2015 (EU 1.9%) and 1.8% in 2016 (EU 2.0%). This outlook is subject to risks that are tilted to the downside. While internal demand is already driving the current recovery, the risks related to the global environment imply that growth may depend even more crucially on it. In this improved economic context, the large consolidation efforts of the past that have substantially reduced fiscal deficits are paying off: the debt to GDP ratio is expected to fall in both the euro area and the EU for the first time since the beginning of the crisis, albeit relatively slowly from high levels.

As a consequence, there are now only seven euro area Member States still in the Excessive Deficit Procedure (of which two, Cyprus and Greece, are under an economic adjustment programme), and two other EU Member States.

In the euro area, the aggregate headline budget deficit is expected to decline from 2.6% of GDP in 2014 to 1.8% in 2016, compared to 3.0% and 2.0% for the EU as a whole. However, the aggregate balance in structural terms i.e. adjusted for cyclical factors and excluding one-off measures, is expected to remain broadly unchanged from last year. The structural primary balance, meanwhile, is expected to deteriorate slightly.

The economic appropriateness of the fiscal stance can be assessed against two objectives: the need to stabilise the economy in the short-term and the long-term sustainability of public finances. In terms of stabilisation, the neutral fiscal stance expected in the euro area (as measured by the change in the structural balance) appears broadly appropriate, as it should avoid hampering the recovery. Indeed, the pause in consolidation over 2015 and 2016 takes place at a time when there is considerable slack in the economy and downside risks to the growth outlook. Nominal interest rates at historic lows and the high external surplus suggest the need for some degree of demand support. However, high debt countries face a risk, which will materialize when interest rates begin to normalise again.

As shown in Part I of the report, some very heavily indebted Member States, may find that they may need to increase their efforts in order to secure the medium-term sustainability of their public finances and strengthen their fiscal buffers, once the recovery has gained pace.

The preventive arm of the Stability and Growth Pact provides the framework to improve sustainability, as it encourages budgetary savings to reduce public debt during times of economic strength. The preventive arm of the pact aims to improve underlying budgetary positions by ensuring that government expenditures do not grow faster than potential GDP. Economic studies and past experience show that this is the most effective strategy for rebuilding necessary fiscal buffers and thereby enabling effective counter-cyclical

...while benefitting from the flexibility present in the arm preventive identified the by Commission in its Communication on Flexibility in the SGP of January...

...which is allowed under well-specified conditions.

..... Inflation turning out lower than expected can hinder improvements in budgetary positions... policies. Accordingly, improvements in budgetary positions have to be made in structural terms, i.e. correcting for cyclical fluctuations and excluding measures which only have a one-off impact (see Part II of the Report).

The Commission Communication on flexibility within the SGP, presented in Part II, provides an operationalization of the prescriptions of the preventive arm, by indicating how the convergence path to a sound medium-term budgetary position has to be modulated to take into account cyclical developments. The same Communication also operationalizes the provision of the preventive arm which allows for a temporary deviation from the Medium-Term budgetary Objective, or the adjustment path towards it, to support structural reforms and investments that benefit the sustainability of public finances, including by raising potential growth.

The structural reform clause allows for a temporary deviation only under well-defined conditions. One set of conditions, relates to the nature of the reforms eligible for consideration. Such reforms must be major in scope and plausibly conducive to an improvement in the sustainability of public finances. A second set of conditions, regards the status of the reforms in terms of implementation: a reform must be credibly planned, implemented, or at least adopted by government. Finally, a third set of conditions concerns the situation of the Member State in question with respect to SGP requirements, in order to ensure a safety margin with respect to the 3% of GDP deficit threshold of the Treaty and the convergence towards their MTO.

The unexpected drops in inflation can make it harder for governments to meet their budgetary objectives because it affects revenues and expenditures differently. Chapter III.1 looks into the impact on the budget balance of the unexpected inflation shock of 2014.

The analysis finds that the effect of inflation turning out to be just over 1 pp. less than expected led to a deterioration in the deficit of around 0.1 pps. of GDP in the euro area and almost 0.4 pps of GDP in certain Member States. This is not a small impact especially if compared to the change and not the level of the deficit.

The result is driven by the fact that unlike revenues, primary expenditures adjust only partially and with a lag to an inflation surprise, at least over a two-year horizon. Specifically, while the elasticity of revenues to the negative inflation surprise was an estimated 0.5 in 2014 and almost 0.6 over 2014 and 2015 in the euro area, the corresponding figures for the elasticity of primary expenditures is estimated to have been less than 0.2 in 2014 and to have increased only to 0.3 cumulatively in 2015.

The partial or complete removal of indexation mechanisms, e.g. on wages and rigidities of downward nominal adjustment are important reasons why the elasticities of primary expenditures to price developments were found to be particularly low in 2014. These effects are thus very specific to 2014 because in this year, the negative inflation shock overlapped with an already low-inflation environment and with the suspension of earlier practice, for example concerning wages, which in the past had generated relatively large short-term effects. .....which can distort the indicators of fiscal effort used for surveillance purposes.

A thorough analysis of the EDP recommendations shows that most Member States received at least one EDP recommendation, and...

...overall economic conditions are relevant factors duly taken into account by the Commission and the Council when deciding the recommendations to be given to Member States under the EDP. These results confirm that unexpected price developments can have an influence on whether or not a country meets its fiscal targets. Chapter III.3 sheds more light on the interplay between inflation surprises and fiscal effort, as measured by the top-down and bottom-up metrics used in assessing compliance with the SGP. In particular, it shows that as the structural balance implicitly assumes full adjustment of revenues and expenditures to changes in inflation, inflation surprises result in an underestimation of the fiscal effort delivered by governments when inflation proves lower-than-expected. By contrast, in the same case, bottom-up measures of the fiscal effort will result in an overestimation of the fiscal effort, as they implicitly assume that primary expenditures have zero elasticity with respect to inflation changes relative to the scenario in the fiscal recommendation. The careful analysis of all indicators and all relevant factors is therefore essential in surveillance decisions, as it allows to correctly gauging them. This was the case in 2015.

Compliance with the debt rule is affected by inflation shocks and by low inflation in general. The debt reduction benchmark does not take into account inflation developments. Therefore, negative inflation shocks risk to translate into more demanding efforts related to lower-than-planned outcomes.

Beyond inflation and growth, growth developments also matter for attaining fiscal targets. Part IV of the report looks at the determinants of the fiscal efforts prescribed in Excessive Deficit Procedure recommendations since the inception of the SGP. Between 2003 and 2014, of the EU's 28 Member States, 26 have been concerned by at least one recommendation and 22 Member States received more than one recommendation. This makes for a total of 69 EDP recommendations, analysed in detail in the report. The analysis indicates that fiscal recommendations use the room for manoeuvre existing in the Treaty by allowing differentiated fiscal effort and a progressive adjustment over several years rather than a correction over one year.

The analysis shows that the Commission and the Council do take into consideration the impact of the economic situation in Member States when setting their recommendations. This concerns both the required fiscal effort and the deadline to bring government deficits below the 3% of GDP threshold. In line with the requirements of the Treaty and of the SGP since its inception, the Commission and the Council give prominence to the headline public deficit level but they do differentiate between the structural and cyclical components of the deficit so that recommendations are not mechanically determined on the basis of the headline deficit level. Other considerations, such as the debt-to-GDP ratio, do not seem to play a significant role in determining the efforts recommended by the Council. This, however, could be because the operationalisation of the debt criterion followed the 2011 reform of the SGP and is therefore not adequately reflected in our sample.

## Part I

Current developments and prospects

## 1. CURRENT DEVELOPMENTS AND PROSPECTS

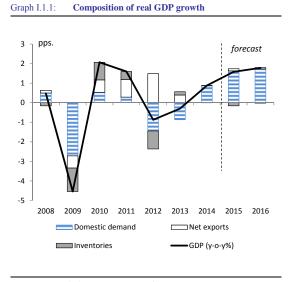
#### 1.1. ECONOMIC DEVELOPMENTS AND PERSPECTIVE ON CONSOLIDATION

The economic recovery that started in the euro area and the EU as a whole in 2013 has continued this year, supported by tailwinds amid more challenging global conditions. Although it has been relatively timid compared with previous recoveries (as is often the case following major financial crises), (1) the recovery has so far proven resilient. It has benefited, in particular, from a conjunction of tailwinds, including low oil prices, a relatively weak external value of the euro and policy support stemming from the ECB's highly accommodative monetary policy and a neutral fiscal stance. On the other hand, economic growth has been muted by several factors, in particular the recent sharp fall in global trade growth in a context of slowdown in emerging market economies, geopolitical tensions, subdued investment activity (especially due to economic and policy uncertainty) and lingering corporate deleveraging pressures in some Member States.

The outlook for moderate but increasing output growth in the Commission's autumn 2015 forecast largely confirms expectations from the spring. It points to further modest recovery, with real GDP growth improving from 1.6 % in 2015 to 1.8 % in 2016 in the euro area and from 1.9 % to 2.0 % in the EU as a whole. For both the euro area and the EU, this is marginally more favourable than expected in the spring forecast for 2015 (as in the first half of the year GDP in the EU grew slightly faster than expected), and marginally less so for 2016.

The aggregate growth figures mask sizeable differences across Member States. While real GDP growth is expected to pick up in most Member States in 2016, it is projected to slow down in six euro area Member States (Ireland, Spain, Malta, Portugal, Slovenia and Slovenia) and five other Member States (Bulgaria, the Czech Republic, Hungary, Sweden and the United Kingdom), though still likely to remain above EU average in most of these countries.

As regards its composition, growth is likely to be driven by stronger domestic demand, while net exports are expected to contribute hardly at all. Private consumption has been stimulated by the favourable impact on purchasing power of low oil prices and a continued rise in nominal income, thus becoming the main driver of economic growth. Investment has been lagging, but is expected to strengthen on the back of a rebound in residential investment, favourable financing conditions, improved profit margins and a brighter demand outlook. Exports are likely to rebound, with world trade growth expected to recover in 2016, underpinning an expansion of EU export markets. However, as the profile of import growth is projected to be similar to that of exports, the contribution of net exports to growth is expected to be broadly neutral (see Graph I.1.1).



Source: Commission's 2015 autumn forecast

The rebalancing from external towards internal demand is in line with a stabilisation of the euro area's current-account surplus. This surplus is set to decline marginally in 2016 after peaking in 2015. In 2015, it is expected to increase by 0.7 pp, to 3.7 % of GDP, as a result of the shrinking oil trade deficit, improvements in the terms of trade and subdued domestic demand. It is then expected to edge down to 3.6 % of GDP in 2016.

Re-launching investment to support domestic demand is one of the Commission's priorities for 2016, especially with the operationalisation

<sup>(&</sup>lt;sup>1</sup>) For comparisons with previous recoveries, see for instance Reinhart and Rogoff (2008), Furceri and Mourougane (2009); Jordà et al. (2013); European Central Bank (2014); European Commission (2015a).

at the beginning of the year of the Investment Plan for Europe. It is aimed at mobilising new investments of over EUR 315 billion to address the investment shortage induced by the crisis. Substantial progress has been made in building financial capacity, with the setting-up of the European Fund for Strategic Investments, and in selecting projects. This needs to be accompanied by dismantling barriers to investment.<sup>(2)</sup> Further steps are needed, not only to complete Banking Union and Capital Markets Union so that the financial sector can focus on lending to the real economy, but also to remove distortions in taxation that impede investment, and invest in human capital and social infrastructure.

The recovery has also benefited from support from monetary policy. The combination of quantitative easing and credit easing by the ECB has reduced financing costs and contributed to a rebound in credit growth.

The outlook is subject to risks that are tilted to the downside, in particular on the external side. World trade could deteriorate further and spillovers from the slowdown in emerging markets could turn out larger than expected, which would increase the need for the euro area to turn from external to domestic sources of growth. An additional external risk relates to a possible increase in volatility on financial markets. On the domestic side, the legacy of the crisis may continue to weigh on investment more heavily than expected. At the same time, the risks relating to the uncertainty in Greece have receded following the political agreement reached in the summer. Upside risks include a stronger-than-expected rebound in global growth and foreign demand and more favourable impacts from structural reforms.

#### 1.2. ASSESSMENT OF SHORT-TERM FISCAL DEVELOPMENTS

#### 1.2.1. Budget deficits

Following large consolidation efforts in 2011-2013, deficits have been substantially reduced. From 2011 to 2013 and (more slowly) in 2014, sizeable consolidation was implemented in the euro area and the EU as a whole (Table I.1.1). This reduced markedly the structural deficit in the EU from 4.6 % of GDP in 2010 to 1.7 % in 2014 and in the euro area from 4.3 % to 1.0 %. In the same period, headline deficit ratios also fell considerably, by around 3.5 % of GDP, to 3.0 % in the EU and 2.6 % in the euro area in 2014. At country level, while only five Member States recorded deficits below the 3 % of GDP reference threshold in 2010, 14 did so in 2014.

Looking ahead, the aggregate headline budget balance is expected to improve further in 2015 and 2016. In the euro area, the deficit is projected to decrease to 2.0 % of GDP in 2015 and 1.8 % in 2016. A slightly faster reduction is expected in the EU as a whole, to 2.5 % in 2015 and 2.0 % in 2016. These falls correspond to average annual improvements (by 0.4 % and 0.5 % of GDP respectively) amounting to half of the average observed in 2011-2013.

This improvement is mainly due to lower interest rates, improved growth and past consolidation efforts, while the aggregate structural balance is expected to remain broadly unchanged and the structural primary balance is expected to deteriorate. Following four years of improvement, the structural balance (i.e. the headline balance corrected for cyclical factors, one-offs and other temporary measures) is projected to edge down to -1.1 % of GDP in 2015 and -1.2 % in 2016 in the euro area and to hover at around -1.7% in the EU as a whole. The difference vis-à-vis the evolution of the headline balance corresponds mainly to the impact of the cycle (which is expected to improve both headline balances by 0.4 pp per year), along with a positive expected impact of one-offs in 2015. Interest expenditure is expected to drop by 0.3 % of GDP in both areas over the same period, but this is expected to be offset by a deterioration in the structural primary balance, cumulatively by roughly the same amount in the EU and by 0.5 % of GDP in the euro area (Table I.1.2).

<sup>(&</sup>lt;sup>2</sup>) See Commission Staff Working Document SWD (2015) 400 final. Available online at: http://ec.europa.eu/europe2020/pdf/2016/ags2016\_challeng es\_ms\_investment\_environments\_en.pdf.

|       | Budget balance                        |       |      |      |      |      | Struc | tural ba | lanaa |      | Structural primary balance |      |      |      |      |
|-------|---------------------------------------|-------|------|------|------|------|-------|----------|-------|------|----------------------------|------|------|------|------|
|       | , , , , , , , , , , , , , , , , , , , |       |      |      | 2012 | 2013 | 2014  | 2015     | 2016  | 2012 | 2013                       | 2014 | 2015 | 2016 |      |
| BE    | -4.1                                  | -2.9  | -3.1 | -2.7 | -2.6 | -3.4 | -2.7  | -2.8     | -2.5  | -2.1 | 0.1                        | 0.6  | 0.3  | 0.4  | 0.7  |
| DE    | -0.1                                  | -0.1  | 0.3  | 0.9  | 0.5  | -0.1 | 0.3   | 0.8      | 0.9   | 0.7  | 2.2                        | 2.3  | 2.6  | 2.4  | 2.1  |
| EE    | -0.3                                  | -0.1  | 0.7  | 0.2  | 0.2  | -0.1 | -0.4  | 0.3      | 0.3   | 0.2  | 0.0                        | -0.3 | 0.4  | 0.4  | 0.3  |
| IE    | -8.0                                  | -5.7  | -3.9 | -2.2 | -1.5 | -6.4 | -4.3  | -3.2     | -3.0  | -2.1 | -2.4                       | 0.0  | 0.8  | 0.3  | 0.9  |
| EL    | -8.8                                  | -12.4 | -3.6 | -4.6 | -3.6 | -0.4 | 2.0   | 0.6      | -1.1  | -0.3 | 4.7                        | 6.0  | 4.5  | 3.2  | 3.8  |
| ES    | -10.4                                 | -6.9  | -5.9 | -4.7 | -3.6 | -3.3 | -1.9  | -1.8     | -2.5  | -2.6 | -0.4                       | 1.5  | 1.6  | 0.6  | 0.3  |
| FR    | -4.8                                  | -4.1  | -3.9 | -3.8 | -3.4 | -4.3 | -3.5  | -2.8     | -2.7  | -2.4 | -1.7                       | -1.3 | -0.6 | -0.7 | -0.3 |
| IT    | -3.0                                  | -2.9  | -3.0 | -2.6 | -2.3 | -1.3 | -0.9  | -1.1     | -1.0  | -1.5 | 3.9                        | 4.0  | 3.6  | 3.3  | 2.6  |
| CY    | -5.8                                  | -4.9  | -8.9 | -0.7 | 0.1  | -5.1 | -1.7  | 2.0      | 0.4   | 0.2  | -2.2                       | 1.4  | 4.9  | 3.2  | 2.7  |
| LV    | -0.8                                  | -0.9  | -1.5 | -1.5 | -1.2 | 0.0  | -0.9  | -1.8     | -2.1  | -1.9 | 1.6                        | 0.5  | -0.3 | -0.8 | -0.6 |
| LT    | -3.1                                  | -2.6  | -0.7 | -1.1 | -1.3 | -2.6 | -2.3  | -1.4     | -1.2  | -1.4 | -0.6                       | -0.5 | 0.2  | 0.4  | 0.1  |
| LU    | 0.2                                   | 0.7   | 1.4  | 0.0  | 0.5  | 2.5  | 2.1   | 2.1      | 0.7   | 0.9  | 3.0                        | 2.5  | 2.5  | 1.1  | 1.3  |
| MT    | -3.6                                  | -2.6  | -2.1 | -1.7 | -1.2 | -3.6 | -2.5  | -2.4     | -2.1  | -1.7 | -0.7                       | 0.4  | 0.5  | 0.6  | 0.8  |
| NL    | -3.9                                  | -2.4  | -2.4 | -2.1 | -1.5 | -2.3 | -0.9  | -0.5     | -1.1  | -1.4 | -0.6                       | 0.6  | 0.9  | 0.3  | -0.2 |
| AT    | -2.2                                  | -1.3  | -2.7 | -1.9 | -1.6 | -1.8 | -1.2  | -0.7     | -0.6  | -1.0 | 0.9                        | 1.4  | 1.8  | 1.8  | 1.2  |
| PT    | -5.7                                  | -4.8  | -7.2 | -3.0 | -2.9 | -3.1 | -2.5  | -1.4     | -1.8  | -2.3 | 1.8                        | 2.3  | 3.5  | 3.1  | 2.2  |
| SI    | -4.1                                  | -15.0 | -5.0 | -2.9 | -2.4 | -2.1 | -2.2  | -2.7     | -2.7  | -2.5 | -0.1                       | 0.4  | 0.4  | 0.3  | 0.4  |
| SK    | -4.2                                  | -2.6  | -2.8 | -2.7 | -2.4 | -3.6 | -1.7  | -2.1     | -2.1  | -2.0 | -1.8                       | 0.2  | -0.1 | -0.5 | -0.5 |
| FI    | -2.1                                  | -2.5  | -3.3 | -3.2 | -2.7 | -1.1 | -1.0  | -1.8     | -1.7  | -1.5 | 0.3                        | 0.3  | -0.5 | -0.6 | -0.4 |
| EA-19 | -3.7                                  | -3.0  | -2.6 | -2.0 | -1.8 | -2.1 | -1.4  | -1.0     | -1.1  | -1.2 | 0.9                        | 1.4  | 1.6  | 1.4  | 1.2  |
| BG    | -0.6                                  | -0.8  | -5.8 | -2.8 | -2.7 | -0.5 | -0.8  | -2.5     | -2.6  | -2.4 | 0.3                        | 0.0  | -1.6 | -1.6 | -1.4 |
| CZ    | -4.0                                  | -1.3  | -1.9 | -1.9 | -1.3 | -1.5 | 0.1   | -0.8     | -2.0  | -1.4 | 0.0                        | 1.4  | 0.5  | -0.8 | -0.2 |
| DK    | -3.6                                  | -1.3  | 1.5  | -3.3 | -2.5 | 0.0  | -0.2  | 0.6      | -2.3  | -1.4 | 1.9                        | 1.6  | 2.1  | -0.8 | -0.1 |
| HR    | -5.3                                  | -5.4  | -5.6 | -4.9 | -4.7 | -4.1 | -3.6  | -3.9     | -3.5  | -3.8 | -0.7                       | -0.1 | -0.4 | 0.1  | -0.2 |
| HU    | -2.3                                  | -2.5  | -2.5 | -2.3 | -2.1 | -1.4 | -1.5  | -2.5     | -2.3  | -2.6 | 3.2                        | 3.1  | 1.5  | 1.2  | 0.7  |
| PL    | -3.7                                  | -4.0  | -3.3 | -2.8 | -2.8 | -4.0 | -3.4  | -2.6     | -3.0  | -2.6 | -1.4                       | -0.9 | -0.7 | -1.2 | -1.0 |
| RO    | -3.2                                  | -2.2  | -1.4 | -1.2 | -2.8 | -2.0 | -1.1  | -0.6     | -0.8  | -2.7 | -0.3                       | 0.7  | 1.0  | 0.8  | -1.2 |
| SE    | -0.9                                  | -1.4  | -1.7 | -1.4 | -1.3 | 0.1  | -0.2  | -0.8     | -1.0  | -1.0 | 1.0                        | 0.6  | -0.1 | -0.4 | -0.3 |
| UK    | -8.3                                  | -5.7  | -5.7 | -4.4 | -3.0 | -6.6 | -4.5  | -5.2     | -4.5  | -3.3 | -3.7                       | -1.7 | -2.5 | -2.0 | -0.9 |
| EU-28 | -4.3                                  | -3.3  | -3.0 | -2.5 | -2.0 | -2.7 | -1.8  | -1.7     | -1.8  | -1.6 | 0.2                        | 0.9  | 0.8  | 0.5  | 0.6  |

| Table I.1.1: | Budget balances in EU Member States (% of GDP) |
|--------------|--|
|--------------|--|

Source: Commission services; figures for 2015 and 2016 are from the Commission's autumn 2015 forecast. Note: The structural budget balance is calculated on the basis of the commonly agreed production function method (European Commission (2004))

**Consolidation efforts varied across Member States in 2014.** The fiscal effort in 2014, as measured by the change in the structural balance, points to a broadly equal number of Member States consolidating or loosening, with large differences across countries. Consolidation ranged from over 3 pp in Cyprus to a loosening of at least 1 pp in Bulgaria, Greece and Hungary. Ireland and Portugal implemented fiscal efforts of slightly above 1 pp. Of the remaining Member States, around half implemented an effort of 0-1 pp and the other half a loosening of 0-1 pp.

Over 2015 and 2016, most Member States are projected to implement no or negative fiscal efforts on average with respect to 2014. Consolidation is expected to take place in only seven countries, with a maximum of 0.9 pp per year (average in the UK) over the two years. In the other consolidating countries (Ireland, Belgium, Malta, France, Slovenia and Finland), the projected average effort is expected to reach 0.5 pp  

 Table I.1.2:
 Euro area – general government budget balance (% of GDP)

|   | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|------|------|------|------|------|------|
| Total revenue (1)                           | 44.9 | 46.1 | 46.6 | 46.8 | 46.6 | 46.2 |
| Total expenditure (2)                       | 49.1 | 49.7 | 49.6 | 49.4 | 48.6 | 48.0 |
| Actual balance (3) = (1) - (2)              | -4.2 | -3.7 | -3.0 | -2.6 | -2.0 | -1.8 |
| Interest (4)                                | 3.0  | 3.0  | 2.8  | 2.7  | 2.4  | 2.3  |
| Primary balance (5) = (3) + (4)             | -1.2 | -0.6 | -0.2 | 0.1  | 0.4  | 0.5  |
| One-offs (6)                                | 0.0  | -0.4 | -0.1 | -0.2 | 0.1  | 0.0  |
| Cyclically adjusted balance (7)             | -3.6 | -2.5 | -1.4 | -1.2 | -1.0 | -1.2 |
| Cyclically adj. prim. balance = (7) + (4)   | -0.6 | 0.5  | 1.4  | 1.4  | 1.4  | 1.1  |
| Structural budget balance = (7) - (6)       | -3.6 | -2.1 | -1.4 | -1.0 | -1.1 | -1.2 |
| Structural primary balance = (7)-(6)+(4)    | -0.6 | 0.9  | 1.4  | 1.6  | 1.4  | 1.2  |
| Change in actual balance:                   |      | 0.5  | 0.7  | 0.4  | 0.6  | 0.2  |
| of which - Cycle                            |      | -0.6 | -0.4 | 0.1  | 0.4  | 0.4  |
| <ul> <li>Interest (reverse sign)</li> </ul> |      | 0.0  | 0.2  | 0.1  | 0.2  | 0.1  |
| - One-offs                                  |      | -0.4 | 0.3  | -0.1 | 0.3  | -0.1 |
| - Structural primary balance                |      | 1.5  | 0.5  | 0.2  | -0.3 | -0.2 |
| Change in cycl. adj. primary balance        |      | 1.2  | 0.8  | 0.1  | 0.0  | -0.3 |
| Change in structural budget balance         |      | 1.5  | 0.7  | 0.3  | -0.1 | -0.1 |

*Source:* Commission services; figures for 2015 and 2016 are from the Commission's autumn 2015 forecast. Note: Differences between the total and the sum of individual items are

due to rounding.

per year at most. The structural balance is expected to remain unchanged in six Member States (Bulgaria, Slovakia, Hungary, Poland, Lithuania and Latvia). It is expected to deteriorate in the remaining 15, with the largest loosening, by 1.1 pp per year, expected in Romania, while in most cases the decline is not expected to exceed 0.5 pp a year. However, in several Member States, these averages conceal significant differences in the fiscal effort between the two years.

#### 1.2.2. Assessing the euro area's fiscal stance

The fiscal stance in the euro area can be assessed against the twin criteria of long-term sustainability of public finances and short-term macroeconomic stabilisation. Long-term sustainability requires that public debt is put and maintained on a sustainable path, taking into account the current level of debt and projected future expenditures relating to population ageing. Macroeconomic stabilisation could be expressed in terms of closing the output gap at an appropriate pace in the short to medium term while, in the current situation, also ensuring a shift from external to domestic sources of growth.<sup>(3)</sup>

Assessed against stabilisation needs, the expected neutral fiscal stance in the euro area, as measured by the change in the structural balance. can be considered broadly appropriate. After substantial fiscal consolidation was achieved from 2011 to 2013, the adjustment effort slowed down in 2014 and is expected to come to a halt in 2015 and 2016, corresponding to a broadly neutral fiscal stance (Graph I.1.2). This is in a context of an output gap that has been negative since 2009 (although it has been narrowing since 2013). For both 2015 and 2016, a broadly unchanged structural balance is expected, with the output gap improving at the same pace. As the output gap is expected still to be negative by the end of 2016 (for the eighth year in a row), such a neutral fiscal stance in both years appears broadly appropriate, in that it is not likely to hinder the projected substantial cumulative narrowing of the output gap (by 1.4 pp), while avoiding procyclicality. It also appears suitable given the historically low interest rates and the high external surplus, which would indicate a need for some degree of demand support. Nevertheless, because they are non-permanent, savings from low interest payments could represent a risk if used to increase government spending or cut taxes permanently.

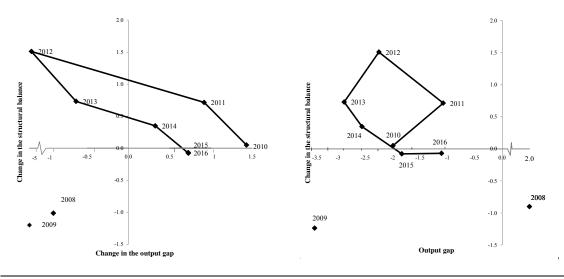
At the same time, further consolidation is needed to address sustainability needs. The euro area still faces considerable challenges as regards the sustainability of public finances. Aggregate general government debt in the euro area remains high, at over 90 % of GDP, and well above that level in certain Member States, and it is decreasing only slowly. This points to a need for further consolidation to bring and keep debt on a sustainable path, also in view of the future increase in expenditures associated with population ageing.

The previous analysis can be refined by referring to the S1 indicator (<sup>4</sup>) for sustainability and to a robustness check for stabilisation. For the sake of transparency, sustainability and stabilisation needs are estimated separately. For this purpose, the fiscal stance has to be expressed in terms of the change in structural primary balance (SPB), i.e. excluding interest payments. This enables us to assess it against sustainability needs as measured on the basis of the S1 indicator, which shows the total change in SPB required from 2016 to 2020 to bring debt to 60 % of GDP by 2030, also taking into account contingent liabilities relating to ageing. For the calculations, it is assumed that 25 % of this total adjustment is implemented in 2016. Stabilisation needs are expressed on the basis of the Keynesian idea that fiscal policy should be countercyclical and can be so with various degrees of ambition, depending in particular on country-specific conditions. Thus the needs are computed in terms of closing the output gap at a more or less rapid pace in 2016, namely by 25 % to 50 %, as compared with its 2015 level. Annex I.1 provides further details on the methodology.

<sup>(&</sup>lt;sup>3</sup>) This is consistent with the concept of responsible fiscal policies as presented in the 2016 Annual Growth Survey (<u>http://ec.europa.eu/europe2020/pdf/2016/ags2016\_annual\_growth\_survey.pdf</u>), i.e. policies that ensure growthfriendly fiscal consolidation.

<sup>(&</sup>lt;sup>4</sup>) The Commission services use the S1 indicator to carry out systematic and harmonised public-debt sustainability analysis for EU Member States. It measures, in structural terms net of interest payments, the fiscal adjustment needed to bring the debt ratio to the reference threshold of 60 % of GDP by 2030.





Source: Commission services

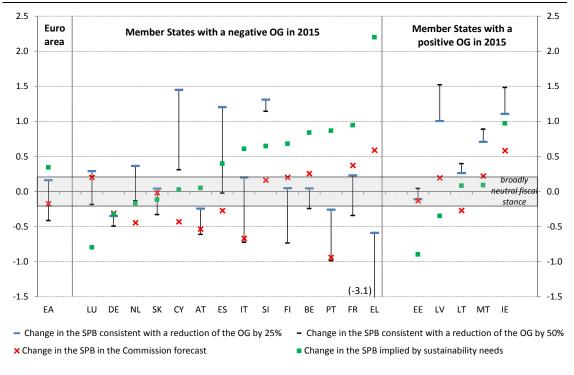
*Note:* In the left-hand chart, the projected fiscal stances for both 2015 and 2016 follow the same plot, as changes in structural balance and in output gap are expected to be the same in both years.

This analytical exercise does neither substitute for the SGP nor is to be seen as supporting fiscal fine-tuning. It should be made clear that the intention is only to provide deeper positive analysis of budgetary developments, not to suggest fiscal fine-tuning or draw normative conclusions. The only relevant legal framework for policy recommendations is strict implementation of the SGP.

**Certain methodological limitations call for prudence in interpretation**. This is a tentative assessment which still has to be refined. In particular, it relies on real-time estimation of the output gap, which is a notoriously difficult exercise; the quantification of sustainability and stabilisation needs is illustrative; the calculations use a single multiplier, irrespective of the country and measures considered; and they do not incorporate any spillover effects across countries. Moreover, the definition of stabilisation needs could be refined to depend on the number of consecutive years that the output gap has already been positive or negative.

Graph I.1.3 presents an assessment of the forecast fiscal stance, in the euro area as a whole and in individual Member States, against sustainability and stabilisation needs. It compares the projected fiscal stance (red crosses) with the changes in SPB that would be necessary to address sustainability needs (green squares) and stabilisation needs (the vertical bars bookended by a blue bar, identifying a 25 % reduction of the output gap, and a black bar, identifying a 50 % reduction).

For the euro area as a whole, this analysis confirms that the projected broadly neutral fiscal stance for 2016 is consistent with moderate stabilisation and less restrictive than implied by sustainability needs. The Commission forecast expects a small deterioration in SPB, by 0.2 pp, in 2016. By comparison, the sustainability needs would point to a need to improve the SPB by 0.3 pp. As regards the stabilisation needs, a consolidation effort of 0.2 pp in terms of change in SPB would be compatible with a reduction of the output gap by 25 %, while a loosening of 0.4 pp would be needed to reduce it by 50 % in one year. Overall, the projected fiscal stance is located towards the middle of the vertical stabilisation bar, indicating that it is consistent with an output gap reduction of more than 25 % and less than 50 %, and it is less restrictive than suggested by sustainability needs. Alternatively, a limited improvement in SPB, by around 0.2 pp, would broadly address sustainability needs while allowing for some reduction of the output gap.



Graph I.1.3: Change in SPB in the Commission forecast and as implied by stabilisation and sustainability needs, euro area

1.2.3. Assessing the fiscal stance in euro area Member States

#### 1.2.3.1 A useful graphical tool

The following paragraphs provide more detailed explanations on how to read Graph I.1.3 for all Member States.

From the point of view of stabilisation needs, Graph I.1.3 shows two groups of euro area Member States, depending on the sign of their expected output gap in 2015. In those in which the output gap is negative (i.e. the majority of euro area Member States), stabilisation involves improving the output gap, and the fiscal stance consistent with a 50 % reduction of the output gap is mechanically more expansionary than that consistent with a reduction of only 25 %. In Graph I.1.3, this means that the black bar (50% reduction) is below the blue bar (25% reduction). By contrast, for countries in which the output gap is positive (Estonia, Latvia Lithuania, Malta and Ireland), narrowing the output gap would mean slowing down economic growth. The reduction would be greater with a more restrictive fiscal stance. For these countries, the black bar is therefore above the blue bar.

The length and position of the vertical bars can be interpreted as follows:

- the *length* of the bars is an indication of the size of the output gap. An output gap close to zero translates into limited stabilisation needs, indicated by a short vertical bar. For instance, in Germany, where the output gap in 2015 is estimated at -0.4 % of GDP, it does not make

Source: Commission services.

Notes.

<sup>(1)</sup> How to read this chart: for the euro area as a whole, the Commission's 2015 autumn forecast expects a deterioration in the SPB by 0.2 pp in 2016 (red cross). By comparison, the sustainability needs would point to a need to improve the SPB by 0.3 pp (green square). As regards stabilisation needs, a consolidation effort of 0.2 pp in terms of change in SPB would be compatible with a 25 % reduction of the output gap (long blue bar), while it would take a loosening of 0.4 pp to reduce the output gap by 50 % in one year (short black bar). Overall, the projected fiscal stance is located on the vertical stabilisation bar, indicating that it is consistent with a reduction of the output gap by more than 25 % and less than 50 %, and it is less restrictive than suggested by sustainability needs.

<sup>(2)</sup> The change in SPB that would be mechanically consistent with the considered changes in the output gap is calculated assuming a (fairly large) fiscal multiplier of 0.8.

<sup>(3)</sup> The calculations take into account the change in output gap entailed in the Commission forecast once it has been corrected for the impact of the projected fiscal stance (i.e. the change in output gap recalculated under a zero-change in the SPB scenario, *ceteris paribus*).
(4) Portugal has not yet submitted budgetary plans for 2016.

much difference to the required level of fiscal adjustment whether it is closed by 25 % or 50 %. Conversely, with Spain's output gap of -3.9 % of GDP in 2015, the implied change in SPB differs substantially depending on whether the output gap is to be reduced by 1 pp or 2 pp. This is shown by a long vertical bar;

- the position of the bars indicates what change in SPB is suggested by the stabilisation needs; this depends on how the output gap is projected to evolve ceteris paribus. The calculations incorporate the evolution of the output gap that is implicit in the Commission forecast on the basis of identical assumptions for variables other than fiscal. Only the fiscal stance is modulated, so as to show what change in SPB would be consistent with a given change in the output gap, via the operation of a given fiscal multiplier. In most cases, including for the euro area as a whole, the forecast already foresees a significant reduction of the output gap, even fiscal policy intervention (see without Annex I.1) and a broadly neutral fiscal stance would be sufficient to reduce the output gap by at least 25 %. If the underlying reduction in the output gap is large enough, some stabilisation can still be achieved even if it is partially offset by procyclical fiscal policy (e.g. in Cyprus, Spain and Slovenia). If, on the other hand, the underlying closure of the output gap is limited or the output gap is expected to widen, active countercyclical policy may be needed.

The effort implied by sustainability needs depends on current and outlook debt levels. In a majority of euro area Member States, debt is projected to remain above 60 % of GDP and further consolidation is needed to reduce it to 60 % by 2030; this is indicated by green squares above the horizontal axis. By contrast, in other countries, debt already stands below 60 % of GDP (Estonia, Latvia, Luxembourg and Slovakia) or is expected to fall below 60 % before 2030 (Germany, the Netherlands) and is combined with a low projected increase in ageing-related expenditure. This implies that, up to a point, debt could still remain at or below 60 % of GDP by 2030 even with some deterioration in SPB. In other words, these Member States have scope for expansionary policies in response to stabilisation needs. In Graph I.1.3, this is shown by green squares below the horizontal axis.

The shaded area indicates a zone where the fiscal stance can be considered broadly neutral. It corresponds to a change in SPB of between -0.2 pp and 0.2 pp. The euro area as a whole, Luxembourg, Slovakia, Slovenia, Finland, Estonia, Latvia and Malta can be considered to have a broadly neutral fiscal stance in 2016 on the basis of the Commission forecast, while Greece's, Ireland's and (to a lesser extent) Belgium's and France's stance can be considered restrictive. An expansionary fiscal stance is projected in the remaining euro area Member States.

#### 1.2.3.2 Main messages

The analysis shows that, in most cases, sustainability and stabilisation needs do not necessarily conflict, but tensions appear when the stabilisation targets are more ambitious. There are no conflicts when the sustainability markers (green squares) are located on the stabilisation bar or below it, as for Luxembourg, Germany, the Netherlands, Slovakia, Cyprus, Spain, Slovenia and all Member States with a positive output gap: in these cases, there is room for fiscal policy to address both needs simultaneously, even if not necessarily with the SGP. This is also the case, to a lesser extent, when stabilisation needs (at least measured by the least ambitious reduction target) point in the same direction as sustainability needs in terms of improving or 'disimproving' the SPB. This is the case for the euro area as a whole, Italy, Finland, Belgium and France: in such cases, both needs may not be fully addressed, but do not conflict, for limited stabilisation targets. However, tensions between stabilisation and sustainability needs appear if the targeted reduction of the output gap is more ambitious. Finally, there are only three cases of conflict: Greece, Portugal and, to a much more limited extent. Austria.

The projected fiscal stance for most Member States in 2016 reflects, at least partly, stabilisation needs in Member States with a negative output gap, in some cases at the expense of sustainability needs. Among the countries with a negative output gap, a deterioration of SPB is expected in seven (Germany, the Netherlands, Cyprus, Austria,

|       |       |       | Gross d | ebt ratio | Change in<br>debt ratio | Cha   | nge in the debt<br>2014-16 due t |                    |                                     |                       |
|-------|-------|-------|---------|-----------|-------------------------|-------|----------------------------------|--------------------|-------------------------------------|-----------------------|
|       | 2011  | 2012  | 2013    | 2014      | 2015                    | 2016  | 2014-16                          | Primary<br>balance | Interest<br>&growth<br>contribution | Stock-flow adjustment |
| BE    | 102.2 | 104.1 | 105.1   | 106.7     | 106.7                   | 107.1 | 0.5                              | -0.4               | 0.8                                 | 0.0                   |
| DE    | 78.4  | 79.7  | 77.4    | 74.9      | 71.4                    | 68.5  | -6.4                             | -4.3               | -2.2                                | 0.0                   |
| EE    | 5.9   | 9.5   | 9.9     | 10.4      | 10.0                    | 9.6   | -0.8                             | -0.6               | -0.6                                | 0.5                   |
| IE    | 109.3 | 120.2 | 120.0   | 107.5     | 99.8                    | 95.4  | -12.0                            | -2.6               | -7.8                                | -1.7                  |
| EL    | 172.0 | 159.4 | 177.0   | 178.6     | 194.8                   | 199.7 | 21.1                             | -0.2               | 14.3                                | 7.0                   |
| ES    | 69.5  | 85.4  | 93.7    | 99.3      | 100.8                   | 101.3 | 2.0                              | 2.2                | -1.0                                | 0.8                   |
| FR    | 85.2  | 89.6  | 92.3    | 95.6      | 96.5                    | 97.1  | 1.5                              | 3.1                | 0.1                                 | -1.7                  |
| IT    | 116.4 | 123.2 | 128.8   | 132.3     | 133.0                   | 132.2 | -0.2                             | -3.5               | 3.6                                 | -0.3                  |
| CY    | 65.8  | 79.3  | 102.5   | 108.2     | 106.7                   | 98.7  | -9.5                             | -4.7               | 3.2                                 | -7.9                  |
| LV    | 42.8  | 41.4  | 39.1    | 40.6      | 38.3                    | 41.1  | 0.5                              | 0.2                | -0.8                                | 1.1                   |
| LT    | 37.2  | 39.8  | 38.8    | 40.7      | 42.9                    | 40.8  | 0.1                              | -0.9               | 1.3                                 | -0.3                  |
| LU    | 19.2  | 22.1  | 23.4    | 23.0      | 22.3                    | 23.9  | 0.9                              | -1.3               | -0.9                                | 3.0                   |
| MT    | 69.8  | 67.6  | 69.6    | 68.3      | 65.9                    | 63.2  | -5.0                             | -2.2               | -3.0                                | 0.2                   |
| NL    | 61.7  | 66.4  | 67.9    | 68.2      | 68.6                    | 67.9  | -0.3                             | 1.0                | -1.8                                | 0.5                   |
| AT    | 82.2  | 81.6  | 80.8    | 84.2      | 86.6                    | 85.7  | 1.5                              | -1.1               | 0.4                                 | 2.2                   |
| PT    | 111.4 | 126.2 | 129.0   | 130.2     | 128.2                   | 124.7 | -5.4                             | -3.5               | 1.8                                 | -3.6                  |
| SI    | 46.4  | 53.7  | 70.8    | 80.8      | 84.2                    | 80.9  | 0.1                              | -0.5               | 0.7                                 | -0.1                  |
| SK    | 43.3  | 51.9  | 54.6    | 53.5      | 52.7                    | 52.6  | -0.9                             | 2.0                | -0.6                                | -2.3                  |
| FI    | 48.5  | 52.9  | 55.6    | 59.3      | 62.5                    | 64.5  | 5.2                              | 3.6                | 0.2                                 | 1.4                   |
| EA-19 | 86.7  | 91.3  | 93.4    | 94.5      | 94.0                    | 92.9  | -1.6                             | -1.0               | -0.5                                | -0.2                  |
| BG    | 15.3  | 17.6  | 18.0    | 27.0      | 31.8                    | 32.8  | 5.8                              | 3.4                | 0.6                                 | 1.8                   |
| CZ    | 39.9  | 44.7  | 45.2    | 42.7      | 41.0                    | 41.0  | -1.7                             | 0.9                | -0.9                                | -1.7                  |
| DK    | 46.4  | 45.6  | 45.0    | 45.1      | 40.2                    | 39.3  | -5.8                             | 3.0                | 0.1                                 | -8.9                  |
| HR    | 63.7  | 69.2  | 80.8    | 85.1      | 89.2                    | 91.7  | 6.6                              | 2.3                | 3.9                                 | 0.4                   |
| HU    | 80.8  | 78.3  | 76.8    | 76.2      | 75.8                    | 74.5  | -1.7                             | -2.4               | 0.1                                 | 0.6                   |
| PL    | 54.4  | 54.0  | 55.9    | 50.4      | 51.4                    | 52.4  | 1.9                              | 2.2                | -0.6                                | 0.3                   |
| RO    | 34.2  | 37.4  | 38.0    | 39.9      | 39.4                    | 40.9  | 1.0                              | 0.8                | -0.7                                | 0.9                   |
| SE    | 36.9  | 37.2  | 39.8    | 44.9      | 44.7                    | 44.0  | -0.9                             | 1.4                | -2.9                                | 0.6                   |
| UK    | 81.8  | 85.3  | 86.2    | 88.2      | 88.3                    | 88.0  | -0.2                             | 2.6                | -1.9                                | -0.9                  |
| EU-28 | 81.6  | 85.2  | 87.3    | 88.6      | 87.8                    | 87.1  | -1.5                             | 0.0                | -2.1                                | 0.6                   |

#### Table I.1.3: Composition of changes in the government debt ratio in EU Member States (% of GDP)

*Source:* Commission services; figures for 2015 and 2016 are from the Commission's autumn 2015 forecast. Note: Differences between the total and the sum of individual items are due to rounding.

Spain, Italy and Portugal), (<sup>5</sup>) in most cases coinciding with a substantial improvement in the output gap. Of these, it is only in Germany and the Netherlands that the fiscal expansion does not come at the expense of sustainability needs; in all the other cases, sustainability issues would suggest instead a need for an improvement in SPB (Spain, Italy and Portugal) or an unchanged SPB (Cyprus and Austria). At the same time, four Member States with a negative output gap are expected to have a broadly neutral fiscal stance. For Luxembourg and Slovakia, this is in line with both sustainability and stabilisation needs; for Finland, this partly addresses both needs; for Slovenia, it would take a more restrictive stance to address both needs. The three remaining countries with a negative output gap are expected to improve their SPB somewhat, which would mitigate both needs given the gap (Belgium and France) or conflict (Greece) between them.

#### 1.3. DEVELOPMENTS IN DEBT

At aggregate level, the debt ratio is set to start declining after having peaked in 2014, thanks to past efforts and a favourable snowball effect. Average debt in the EU peaked at 88.6 % of GDP in 2014 and, after seven years of continued increase, it is expected to edge down to 87.8 % in 2015 and 87.1 % in 2016 (Table I.1.3). Similarly, in the euro area, the debt ratio is projected to decline marginally from its peak of 94.5 % in 2014 to 94.0 % in 2015 and 92.9 % in 2016. In the EU as a whole, the expected decline in the debt ratio in 2015 and 2016 is driven entirely by a smaller snowball effect, which combines the impact of lower interest expenditure and higher nominal GDP growth, partly offset by some stock-flow

<sup>(&</sup>lt;sup>5</sup>) Portugal has not yet submitted budgetary plans for 2016.

adjustments. In the euro area, by contrast, the main driver of the expected reduction in the debt ratio is the projected improvement in the primary surplus, along with a smaller snowball effect and, to a more limited extent, stock-flow adjustments.

Aggregate figures mask considerable variation in the evolution of debt-to-GDP ratios across Member States. Although all Member States' ratios in 2014 were higher than in 2008, in most cases the increase was not continuous but interrupted by reduction episodes, notably in Greece (as a result of debt restructuring). The rise was continuous in 12 Member States: Belgium, Spain, France, Italy, Cyprus, the Netherlands, Portugal, Slovenia, Finland, Croatia, Romania and the UK. In five of these (Belgium, Spain, France, Finland and Croatia) and in Greece, Bulgaria and Poland, debt ratios are expected to increase further in both 2015 and 2016. By contrast, the debt ratios of five Member States are expected to remain on the downward trend initiated in recent years (Hungary in 2012, Germany and Ireland in 2013, Malta and Slovakia in 2014). Reductions are also expected for both 2015 and 2016 in Estonia, Cyprus, Portugal, Denmark and Sweden. In the remaining countries, the debt ratio is projected to increase in one year and decline in the other. Overall, the largest reduction is expected in Ireland (-12.0 pp), followed by Cyprus (-9.5 pp), and the largest increase in Greece (21.1 pp).

Debt levels continue to vary widely across Member States. The debt-to-GDP ratios of six Member States (Belgium, Greece, Spain, Italy, Cyprus and Portugal) are expected to exceed 100 % in 2015. In Greece, the ratio is expected to increase markedly, to close to 200 % by the end of 2016, while in Belgium, Spain and Italy it should broadly stabilise and in Portugal and Cyprus it should decline. In seven Member States (Ireland, France, Austria, Slovenia, Croatia, Hungary and the UK), ratios are projected to remain well above 60 %, but below 100 % (just below in the case of France). Debt in Germany, Malta, the Netherlands and Finland is expected to be between 60 % and 70% of GDP by the end of 2016, with an increasing trend in the case of Finland. In the remaining 11 Member States, debt is expected to remain below the 60 % of GDP threshold.

Primary surpluses, higher nominal growth and lower interest expenditure are set to have a

more favourable impact on debt developments than in previous years. The snowball effect that pushed debt up in highly indebted Member States in recent years is expected to be eroded by lower interest payments, the economic recovery and higher inflation expectations, and may even turn negative in some countries. It remains very large in Greece (14.3 pp in cumulated terms in 2015 and 2016), however, although far below 2011-2012 levels. In addition, the primary surpluses projected for most euro area countries and Hungary are expected to help reduce debt ratios, while primary deficits in Spain, France, the Netherlands, Slovakia, Finland and most non-euro area Member States are expected to weigh on debt dynamics. Finally, debt developments are expected to be affected by some stock-flow adjustment measures, the largest mainly reflecting bank recapitalisation costs in Greece in 2015, privatisation proceeds in Cyprus in 2016 and a temporary change in the financing of public debt in Denmark in 2015.

#### 1.4. COMPOSITION OF THE ADJUSTMENT

Between 2011 and 2014, fiscal consolidation was driven mainly by revenue increases in the euro area, but based on revenue increases and cuts in expenditure in non-euro area Member States on aggregate. In the EU as a whole, the revenue-to-GDP ratio increased until 2013 and stabilised at 45.2 % in 2014, 1.8 pp above its 2010 level (Table I.1.4). At the same time, the expenditure-to-GDP ratio was 1.7 pp lower in 2014 (48.2 %) than in 2010. In the euro area, the rise in revenues to the peak of 2014 was slightly stronger, by 2.5 pp, while the expenditure ratio fell by 1 pp, indicating that consolidation took place primarily on the revenue side.

**For 2015 and 2016, consolidation is expected to be driven by the expenditure side.** The decline in the expenditure ratio is expected to accelerate somewhat, with cumulated drops of 1.6 pp in 2015-2016 in the EU and 1.4 pp in the euro area. This is likely to be partially offset by a decline in the revenue ratio, by 0.6 pp in both areas, thus reversing the increasing trend of previous years.

The reduction in the expenditure ratio in the euro area has been supported by a climate of low interest rates since the end of 2013. Sovereign bond yields in the euro area have fallen

|       |      |      | Reve | enue |      | Expenditure |      |      |      |      |      |      |
|-------|------|------|------|------|------|-------------|------|------|------|------|------|------|
|       | 2011 | 2012 | 2013 | 2014 | 2015 | 2016        | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| BE    | 50.3 | 51.6 | 52.7 | 52.0 | 51.6 | 51.3        | 54.4 | 55.8 | 55.6 | 55.1 | 54.3 | 53.9 |
| DE    | 43.8 | 44.4 | 44.4 | 44.6 | 44.4 | 44.3        | 44.7 | 44.4 | 44.5 | 44.3 | 43.5 | 43.8 |
| EE    | 38.6 | 38.8 | 38.1 | 38.7 | 40.1 | 40.0        | 37.4 | 39.1 | 38.3 | 38.0 | 39.9 | 39.7 |
| IE    | 33.0 | 33.8 | 34.0 | 34.4 | 34.0 | 32.8        | 45.5 | 41.8 | 39.7 | 38.2 | 36.2 | 34.3 |
| EL    | 44.0 | 46.3 | 48.3 | 46.4 | 46.9 | 47.4        | 54.2 | 55.2 | 60.8 | 49.9 | 51.6 | 51.0 |
| ES    | 36.2 | 37.5 | 38.2 | 38.6 | 38.7 | 38.7        | 45.6 | 48.0 | 45.1 | 44.5 | 43.4 | 42.3 |
| FR    | 50.8 | 52.0 | 52.9 | 53.6 | 53.4 | 53.3        | 55.9 | 56.8 | 57.0 | 57.5 | 57.2 | 56.8 |
| IT    | 45.6 | 47.8 | 48.1 | 48.2 | 48.2 | 47.3        | 49.1 | 50.8 | 51.0 | 51.2 | 50.8 | 49.6 |
| CY    | 36.8 | 36.1 | 36.5 | 40.4 | 39.6 | 39.1        | 42.5 | 41.9 | 41.4 | 49.3 | 40.3 | 39.0 |
| LV    | 35.6 | 36.1 | 35.9 | 35.6 | 34.9 | 34.6        | 39.0 | 36.9 | 36.8 | 37.1 | 36.4 | 35.7 |
| LT    | 33.5 | 33.0 | 32.9 | 34.1 | 34.6 | 34.5        | 42.5 | 36.1 | 35.6 | 34.8 | 35.7 | 35.8 |
| LU    | 43.8 | 44.7 | 44.0 | 43.8 | 43.6 | 43.9        | 43.3 | 44.6 | 43.3 | 42.4 | 43.6 | 43.4 |
| MT    | 38.3 | 38.9 | 40.0 | 41.9 | 42.3 | 40.4        | 40.9 | 42.5 | 42.6 | 44.0 | 44.0 | 41.6 |
| NL    | 42.7 | 43.2 | 44.0 | 43.9 | 42.6 | 41.8        | 47.0 | 47.1 | 46.4 | 46.2 | 44.7 | 43.3 |
| AT    | 48.3 | 48.9 | 49.6 | 50.0 | 50.2 | 49.7        | 50.8 | 51.1 | 50.9 | 52.7 | 52.1 | 51.2 |
| PT    | 42.6 | 42.9 | 45.1 | 44.5 | 44.9 | 44.2        | 50.0 | 48.5 | 49.9 | 51.7 | 47.9 | 47.1 |
| SI    | 43.4 | 44.4 | 45.3 | 44.8 | 44.8 | 43.4        | 50.0 | 48.6 | 60.3 | 49.8 | 47.7 | 45.8 |
| SK    | 36.4 | 36.0 | 38.4 | 38.9 | 39.9 | 37.4        | 40.5 | 40.1 | 41.0 | 41.6 | 42.7 | 39.8 |
| FI    | 53.3 | 54.0 | 55.0 | 54.9 | 54.9 | 55.4        | 54.4 | 56.1 | 57.6 | 58.3 | 58.1 | 58.1 |
| EA-19 | 44.9 | 46.1 | 46.6 | 46.8 | 46.6 | 46.2        | 49.1 | 49.7 | 49.6 | 49.4 | 48.6 | 48.0 |
| BG    | 32.1 | 34.0 | 36.9 | 36.3 | 36.7 | 36.2        | 34.1 | 34.7 | 37.6 | 42.1 | 39.5 | 38.9 |
| CZ    | 40.2 | 40.5 | 41.3 | 40.6 | 41.0 | 40.4        | 42.9 | 44.5 | 42.6 | 42.6 | 42.9 | 41.8 |
| DK    | 54.8 | 55.2 | 55.8 | 58.4 | 52.5 | 51.7        | 56.8 | 58.8 | 57.1 | 56.9 | 55.8 | 54.1 |
| HR    | 41.0 | 41.7 | 42.5 | 42.6 | 43.1 | 43.2        | 48.8 | 47.1 | 47.8 | 48.2 | 48.0 | 47.9 |
| HU    | 44.3 | 46.3 | 47.0 | 47.4 | 47.1 | 44.2        | 49.7 | 48.6 | 49.5 | 49.9 | 49.4 | 46.3 |
| PL    | 38.8 | 38.9 | 38.4 | 38.8 | 39.1 | 38.8        | 43.6 | 42.6 | 42.4 | 42.1 | 41.9 | 41.6 |
| RO    | 33.7 | 33.3 | 33.0 | 33.5 | 35.4 | 31.4        | 39.1 | 36.5 | 35.2 | 34.9 | 36.6 | 34.1 |
| SE    | 50.5 | 50.7 | 51.0 | 50.1 | 49.9 | 50.1        | 50.5 | 51.7 | 52.4 | 51.8 | 51.4 | 51.3 |
| UK    | 39.2 | 38.4 | 39.2 | 38.2 | 38.4 | 38.6        | 46.9 | 46.8 | 44.9 | 43.9 | 42.8 | 41.6 |
| EU-28 | 44.0 | 44.8 | 45.3 | 45.2 | 44.9 | 44.6        | 48.6 | 49.0 | 48.6 | 48.2 | 47.4 | 46.6 |

#### Table I.1.4: Government revenue and expenditures (% of GDP)

Source: Commission services; figures for 2015 and 2016 are from the Commission's autumn 2015 forecast.

sharply since the end of 2013 and reached historical lows in the first half of 2015. Despite some increase during the summer months, yields still remain well below long-term averages. As a result, interest expenditure has also fallen, from 2.9 % of GDP in 2012 to 2.3 % in 2015, and is expected to remain unchanged in 2016.

Most of the decline in the revenue ratio appears to be of a structural nature, while this is only partly the case on the expenditure side. The drop in the structural revenue ratio is broadly identical to the change in nominal terms, suggesting that the expected decline mainly reflects the impact of recent reforms in a number of Member States to lower the tax burden on labour income. On the expenditure side, however, only 0.7 pp of the decline in the nominal expenditure ratio in the EU (0.4 pp in the euro area) is estimated to be structural. This reflects the diverse nature of the main factors driving the expenditure ratio, namely the impact of the economic recovery on automatic stabilisers, contained developments in public wages and lower interest expenditure. On the other hand, this reduction could be partly offset by additional budgetary costs associated with the arrival of a substantial number of asylum-seekers in some Member States.

Despite some differences in magnitude, the expenditure ratio is set to decline in a vast majority of Member States, accompanied in most cases by a drop in the revenue ratio. Projected cumulated changes in the revenue ratio in 2015 and 2016 range from a 6.8 pp decline in Denmark to a 1.2 pp increase in Estonia. The expected changes in the expenditure ratio differ even more, ranging from -10.3 pp in Cyprus to 1.7 pp in Germany. Expenditures are, however, projected to decline as a ratio to GDP in all Member States except Estonia, Greece, Lithuania and Luxembourg. In these four countries, as well

as in Denmark and Romania, the budget balance is expected to remain unchanged or to deteriorate in 2016 as compared with 2014. By contrast, of the 22 Member States for which an improvement in the budget balance is foreseen, 17 are expected to see both ratios decline (with the decline in expenditures exceeding that of revenues), while the other five (Spain, Finland, Croatia, Sweden and the UK) are expected to combine a higher revenue ratio with a lower expenditure ratio.

## 2. IMPLEMENTATION OF FISCAL SURVEILLANCE

The EU fiscal framework, as laid down by the Stability and Growth Pact (SGP), aims at ensuring budgetary discipline through two main requirements. First, Member States are required by the Treaty to keep their general government deficit and debt positions not above the reference values of 3% and 60% of GDP respectively, and to prompt their correction if these two criteria are temporarily not fulfilled.  $\binom{6}{7}$  Second, they are required by the preventive arm of the SGP to achieve and maintain their medium-term budgetary objective (MTO), which corresponds to a cyclically-adjusted target for the budget balance, net of one-offs and temporary measures. (<sup>8</sup>) Country-specific MTOs are defined so as to secure the sustainability of public finances and allow the automatic stabilisers to operate without breaching the reference value for the deficit as defined in the Treaty.

#### 2.1. THE EXCESSIVE DEFICIT PROCEDURE

The Excessive Deficit Procedure (EDP) ensures that Member States correct their excessive deficit and debt positions, measured against the reference values of 3% and 60% of GDP, thus operationalising the requirements set in the Treaty. ( $^9$ ) This section focuses on the implementation of the EDP since the last Report on Public Finances was published in December 2014. The country-specific developments are summarised in Tables I.A.2.1-A.2.3 in Annex I.2 ( $^{10}$ )

**Currently, nine Member States are in EDP**, two of which are under an economic adjustment programme (Cyprus and Greece).

#### 2.1.1. Euro area Member States

While no new EDPs were opened in the course of 2015, the EDP was abrogated in the case of Malta and a new recommendation was issued to France. Table I. A.2.1 shows the steps taken under the EDP for euro area countries.

On 27 February 2015, on the basis of its 2015 winter forecast, the Commission adopted Reports in accordance with Article 126(3) of the Treaty for **Belgium**, **Italy** and **Finland**.

In the case of **Belgium**, the Report concluded that the estimated general government deficit of 3.2% of GDP in 2014 was above, but close to 3% of GDP. Moreover, the estimated excess over the reference value, which was notably due to methodological changes related to the introduction of ESA2010 and statistical clarifications, could be qualified as exceptional in the meaning of the SGP and could, in addition, be considered as temporary. On that basis, the Report concluded that the deficit criterion of the Treaty was fulfilled. Belgium was also projected to make insufficient progress

<sup>(&</sup>lt;sup>6</sup>) Article 126 TFEU lays down the Excessive Deficit Procedure, which is further specified in Council Regulation (EC) 1467/97 "on speeding up and clarifying the implementation of the excessive deficit procedure", amended in 2005 and 2011, which represents the corrective arm of the SGP. Relevant legal texts and guidelines can be found at: http://ec.europa.eu/economy\_finance/sgp/legal\_texts/index en htm.

<sup>(&</sup>lt;sup>7</sup>) In particular, a Member State is not compliant with the debt criterion if its general government gross debt is greater than 60% of GDP, and it is not sufficiently diminishing and approaching 60% of GDP at a satisfactory pace.

<sup>(8)</sup> The preventive arm of the SGP is contained in Council Regulation (EC) 1466/97 "on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies", which was amended in 2005 and 2011. Together with the procedure for the avoidance of excessive government deficit laid down in Article 126 TFEU, further specified in Council Regulation (EC) 1467/97, in European Parliament and Council Regulation (EU) No 1175/2011, Council Regulation (EU) No 1177/2011 and Regulation (EU) No 1173/2011 on the effective enforcement of budgetary surveillance in the euro area, form the SGP.

<sup>(&</sup>lt;sup>9</sup>) The concept of "*sufficiently diminishing*" and "*satisfactory pace*" is crucial in the assessment of compliance with the

debt criterion for Member States whose general government gross debt is greater than 60% of GDP. These requirements are specified in Regulation 1467/97 as being fulfilled if "the differential [of the general government gross debt] with respect to the reference value has decreased over the previous three years at an average ½th per year as a benchmark". The Regulation then specified that "the requirement under the debt criterion shall also be considered to be fulfilled if the budgetary forecasts of the Commission indicate that the required reduction in the differential will occur over the three-year period encompassing the two years following the final year for which data are available". It further indicates that "the influence of the cycle on the pace of debt reduction" should be taken into account.

<sup>(&</sup>lt;sup>10</sup>) All the country-specific developments regarding the Excessive Deficit Procedure can be followed up at: <u>http://ec.europa.eu/economy\_finance/economic\_governanc</u> <u>e/sgp/corrective\_arm/index\_en.htm.</u>

towards compliance with the debt reduction benchmark through the Minimum Linear Structural Adjustment (MLSA) during the transition period in 2014 and 2015. (<sup>11</sup>) The analysis presented in the Report suggested that, following the assessment of all the relevant factors, (<sup>12</sup>) the debt criterion should be considered as complied with at that stage.

Similarly, as regards Italy, it appeared that based on both the Draft Budgetary Plan (DBP) for 2015 and the Commission 2015 winter forecast, the required progress towards compliance with the debt reduction benchmark through the MLSA in the transitional period in 2014 and 2015 was neither planned nor foreseen to be fulfilled. The analysis in the Report, which took into consideration all the relevant factors,  $(^{13})$ suggested that the debt criterion should be considered as complied with at that stage.

Finally, as for **Finland**, on the basis of both the DBP for 2015 and the Commission 2015 winter forecast, the general government gross debt was expected to stand above the reference value at 61.2% of GDP in 2015. The conclusions of the Report also suggested that the debt criterion should be considered as complied with at that stage, owing to the fact that the planned/forecast excess of the general government gross debt over 60% of GDP in 2015 was fully explained by the country's financial support to safeguard financial stability in the euro area. (<sup>14</sup>)

On 12 May 2015, on the basis of its 2015 spring forecast, the Commission adopted a new Report for **Finland** in accordance with Article 126(3) of the Treaty, which was triggered by the fact that the preliminary general government deficit had turned out above 3% of GDP at 3.2% of GDP in 2014. Moreover, on the basis of the Stability Programme for 2016 submitted by the authorities on 2 April 2015, which was prepared under a no-policychange assumption pending the formation of a new government, the general government deficit was planned not to be below the reference value over the forecast horizon. Overall, the Report concluded that both the deficit and the debt criteria were not to be considered to be complied with.

Following the 19 April 2015 elections, the new incoming government announced fiscal policy measures to be implemented over 2016-2019 in its Strategic Programme. On that basis, the Commission published on 10 June 2015 an assessment of the announced measures and their budgetary impact, thereby updating its initial assessment. At the time of this assessment, the Commission considered that the DBP for 2016, and the updated Stability Programme for 2016 to be submitted simultaneously, would provide the opportunity to fully assess the fiscal policy measures envisaged by Finland in order to bring the general government deficit below 3% of GDP and to put the general government gross debt ratio on an appropriate downward path. On that grounds, and based on its 2015 autumn forecast, the Commission therefore adopted, on 16 November 2015, a new Report in accordance with Article 126(3) of the Treaty, which indicated that the general government deficit was projected at 3.3% of GDP in 2015, but expected to fall below 3% of GDP in 2016. As a result, the excess over the reference value could be considered as close and temporary, while it could also be qualified as exceptional in the meaning of the SGP in 2014, but not in the period 2014-2016. For this reason, the Report suggested that the deficit criterion was fulfilled. Regarding the general government gross debt, the Report confirmed that the planned breach of the debt criterion was still fully explained by Finland's financial support to safeguard financial

<sup>(&</sup>lt;sup>11</sup>) While the Draft Budgetary Plan of Belgium for 2015 did not contain sufficient information to assess planned compliance with the Minimum Linear Structural Adjustment, the Draft Budgetary Plan for 2015 targeted a recalculated change in the structural balance of 0.7% of GDP, which exceeded the effort recommended by the Council in the Country-specific recommendations to Belgium of 2 June 2014, which was supposed to also ensure compliance with the Minimum Linear Structural Adjustment.

<sup>(&</sup>lt;sup>12</sup>) The set of relevant factors comprised: (i) the unfavourable economic conditions which made the respect of the debt rule particularly demanding at that stage, (ii) the expectation that compliance with the required adjustment towards the medium-term budgetary objective was broadly ensured, and (iii) the expected implementation of ambitious growth-enhancing structural reforms in line with the authorities' commitments, which was expected to contribute to debt reduction in the medium/long term.

 $<sup>\</sup>binom{13}{1}$  Idem.

<sup>(14)</sup> The Report also took into consideration that the level of general government gross debt in Finland had been influenced by (i) large purchases of financial assets by the

Social Security funds, resulting in the accumulation of asses in parallel to the increase of debt, and (ii) the effects of the country's projected cyclical position at that stage.

stability in the euro area in 2015, while this conclusion appeared not to hold in 2016. The Report, which considered all the relevant factors and, in particular, the expectation that compliance with the required adjustment towards the MTO was then broadly ensured, suggested that the debt criterion should also be considered as complied with at that stage.

As regards France, on 10 March 2015, following a Recommendation issued by the Commission in end-February according to which the available evidence - in particular, its 2015 autumn forecast - did not allow to conclude on no effective action, the Council adopted a revised Recommendation with a view to bringing an end to the excessive deficit, thereby setting 2017 as the new deadline for correction. In addition, the Council established the deadline of 10 June 2015 for France to take effective action to comply with the Recommendation and to report in detail on the consolidation strategy that was envisaged to achieve the targets therein. On 1 July 2015, based on a Report submitted by the authorities, the Commission issued a Communication which concluded that the procedure was deemed to be put abeyance as the targets for the general in government deficit were expected to be fulfilled in both 2015 and 2016, even though the fiscal effort, according to all metrics, was projected to fall short of the recommended in those years. However, the Commission considered that the budgetary strategy pursued by France, which relied primarily on the improving cyclical conditions and a continuation of the low-interest environment, would need to be further reinforced in order to ensure a timely and durable correction of the excessive deficit.

Finally, concerning **Malta**, on 19 June 2015, following a Recommendation issued by the Commission in mid-May, the Council adopted a Decision abrogating the EDP, as the correction of the excessive deficit had been achieved in a durable manner and the debt ratio fulfilled the forward-looking element of the debt benchmark.

#### 2.1.2. Non-euro area Member States

While no new EDPs were opened in the course of 2015, the EDP was abrogated in the case of Poland and a new recommendation was issued to the

United Kingdom. Table I.A.2.2 shows the steps taken under the EDP for non-euro area countries.

On 19 June 2015, following a Recommendation issued by the Commission in mid-May, the Council adopted a Decision abrogating the EDP of Poland. Even though its preliminary general government deficit amounted to 3.2% of GDP in 2014, above the reference value of the Treaty, Poland was eligible to the specific provisions regarding systemic pension reforms. (<sup>15</sup>) Although Poland had, in December 2013, reversed a pension reform introduced in 1999, the net costs of this reform continued until the end of July 2014 (<sup>16</sup>) and were estimated at 0.4% of GDP, which was sufficient to explain the excess over the reference value in 2014. Moreover, on the basis of the Commission 2015 spring forecast, the correction of the excessive deficit was deemed to be durable. 19 June 2015, following Also on Recommendation by the Commission issued in mid-May, the Council adopted a Decision establishing that the United Kingdom had not taken effective action in response to the Council Recommendation of 2 December 2009, in the light of a general government deficit of 5.2% of GDP in 2014-15 notified to Eurostat, and non-adherence to the recommended average fiscal effort of 13/4% of GDP over the EDP period. Therefore, on that same date, the Council adopted a new Recommendation

<sup>(&</sup>lt;sup>15</sup>) The provisions regarding systemic pension reforms are laid down in Article 2(7) of Regulation (EC) 1467/97, according to which " [in] the case of Member States where the excess of the deficit over the reference value reflects the implementation of a pension reform introducing a multi-pillar system that includes a mandatory, fully funded pillar, the Council and the Commission shall also consider the cost of the reform when assessing developments of deficit figures in excessive deficit procedures as long as the deficit does not significantly exceed a level that can be considered close to the reference value, and the debt ratio does not exceed the reference value, provided that overall fiscal sustainability is maintained".

According to the "specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of Stability and Convergence Programmes", of 3 September 2012, "[the] net cost of the reform is measured as its direct impact on the general government deficit. This impact stems from the fact that revenue, which used to be recorded as government revenue, is diverted to a pension fund, which is fully-funded and classified in a sector other than general government, and that some pensions and other social benefits, which used to be government expenditure, will be, after the reform, paid by the pension scheme. Thus, net costs do not include interest expenditure that is linked to the higher accumulation of debt due to forgone social contributions or other revenues".

defining 2016-17 as the new deadline for correction of the excessive deficit. In addition, the Council set the deadline of 15 October 2015 for the United Kingdom to take effective action and report in detail the consolidation strategy that was envisaged to achieve the targets. Subsequently, on the basis of a report submitted by the authorities and its 2015 autumn forecast, the Commission adopted a Communication on 16 November 2015, according to which the procedure for the United Kingdom could be put in abeyance since the targets for both the general government deficit and the underlying improvements in the structural balance were projected to be fulfilled over the EDP period.

On 16 November 2015, on the basis of its 2015 autumn forecast, the Commission also adopted Reports in accordance with Article 126(3) of the Treaty for **Bulgaria** and **Denmark**.

In the case of **Bulgaria**, the provisional general government deficit reached 5.8% of GDP in 2014, above and not close to 3% of GDP. The excess over the reference value was assessed as temporary and could be qualified as exceptional in the meaning of the SGP, as it was largely driven by the sizeable support to the financial sector – amounting to about 3% of GDP. Therefore, the Report suggested that the deficit criterion could be considered as complied with.

As for **Denmark**, the general government deficit was planned to reach 3.3% of GDP in 2015, above but close to 3% of GDP. The excess over the reference value was considered as temporary, as the general government deficit was projected to return to below 3% of GDP as of 2016, and exceptional in the meaning of the SGP, given that it resulted from extraordinary and unexpected losses in tax revenue in the period 2013-2015, related to technical errors in an automatic tax collection system. On that basis, the Report suggested that the deficit criterion was fulfilled.

#### 2.2. THE EUROPEAN SEMESTER AND THE FISCAL COUNTRY -SPECIFIC RECOMMENDATIONS

Member States submitted the 2015 Stability or Convergence Programmes (SCPs) in April this year thereby bringing their medium-term fiscal plans up to date.  $(^{17})$ 

In their 2015 programmes, Member States projected growth to strengthen in 2015 and 2016, with SCPs expecting positive real growth in 2015 in all Member States, and with an output gap projected to shrink in 2015 and 2016 in both the euro area and the EU. These projections are in line with the Commission 2015 autumn forecast – with the exception of Greece – which also confirms the relative expansion of internal demand, a positive indication for some tax-richness of growth.

All Member States planned a deficit below the 3% threshold by the end of the programme period while the general government deficit both at the euro area level and the EU was expected to remain below 3% of GDP in 2015. Moreover, debt was set to start decreasing, after a peak in 2015, driven by a reversed snowball effect and the achievement of primary surpluses. The beginning in the decrease of debt ratios in 2015 is confirmed by the Commission 2015 autumn forecast as presented in Chapter I.1.

A significant slowdown in the pace of fiscal consolidation was already planned in the SCPs, with the cumulative improvement in the structural balance over the programme horizon amounting to 0.4% of GDP in the euro area and 1.1% of GDP in the EU. Overall, for 2016, some moderate fiscal consolidation was planned in the 2015 programmes. However, in the euro area, specifically, this was no longer the case on the basis of both the SCPs and the DBPs presented in October (see Section I.2.3 below). Fiscal consolidation was planned to resume at a moderate pace in the period 2017-2018, at around one quarter of GDP per year in both the euro area and the EU.

Overall, the 2015 SCPs planned to reduce revenues by about 1/2 percentage points of GDP over the programmes' period and to reduce expenditures by around 2 percentage points of GDP in both areas, with the composition public finances being slightly less biased against public investment than in the past. However, a substantial part of the expenditure effort projected for both the euro area

 $<sup>(^{17})</sup>$  For an overview of Member States' plans, see European Commission (2015b).

and the EU was expected to stem from reduced interest payments.

The broad picture of structural adjustment at the aggregate level masks considerable differences across Member States, with the programmes of several individual Member States not at their country-specific MTO falling short of the requirements under the SG.

On 14 July 2015, the Council adopted Country-Specific Recommendations (CSRs) and Opinions on economic, employment and fiscal policies planned by Member States, based on the information provided in the 2015 SCPs (and in the National Reform Programmes), thereby formally concluding the annual policy monitoring process entailed by the 2015 European Semester. (<sup>18</sup>) The 2015 CSRs were addressed to 26 of the EU's 28 Member States and to the euro area as a whole. To avoid duplication there were no CSRs for Greece and Cyprus, as these were both still subject to economic adjustment programmes.

In the area of fiscal policy, Member States were invited to comply with the requirements of the The Member States in EDP were SGP. recommended to ensure the timely and durable correction of their excessive deficits by fully implementing, and where necessary reinforcing, the planned budgetary strategies. The Member States in the preventive arm of the SGP were recommended to ensure sufficient progress towards, or stay at, their country-specific MTOs, with each Recommendation providing guidance on the specific structural adjustment to be delivered in 2015-2016. Where available, Member States were also invited to use windfall gains to make further progress towards putting the general government debt-to-GDP ratios on an appropriate downward path. Some general guidelines to achieve these goals included increasing the efficiency and control of public spending, enhancing the efficiency of the tax system and broadening the tax base, increasing the efficiency of tax compliance, revising tax expenditures and cadastral values, improving the coordination across sub-sectors of general government and strengthening mediumterm budgetary frameworks.

All in all, the 2015 CSRs aimed at adapting public finances to make them more supportive to growth, while ensuring that Member States pursue responsible fiscal policies, in line with the requirements of the SGP.

Table I.A2.4 provides an overview of the Countryspecific Opinions and Recommendations in the area of fiscal policy that the Council issued in July.

#### 2.3. CLOSING THE FISCAL SURVEILLANCE CYCLE IN THE EURO AREA: DRAFT BUDGETARY PLANS

This autumn marks the third time that the Commission carried out an assessment of the DBPs for the forthcoming year. This monitoring procedure was introduced by the Two-Pact with the aim of enhancing the surveillance and coordination of budgetary and economic policies within the euro area.

Every year, most euro area Member States are thereby expected to submit their DBPs to the Commission and to the Eurogroup by the statutory deadline of 15 October 2015.  $(^{19}) (^{20})$  However, given that economic adjustment programmes, per se, already imply close fiscal monitoring, **Greece** and **Cyprus** were exempted from submitting DBPs for 2016.  $(^{21})$  All the remaining euro area Member States complied with the requirement, with the exception of **Portugal**, which did not submit a plan as prescribed by the legislation.

The overall picture emerging from the analysis of the sixteen euro area DBPs for 2016 is mixed,

<sup>(&</sup>lt;sup>18</sup>) An overview of the 2015 European Semester can be found at:<u>http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/</u>

 $<sup>(^{19})</sup>$  In respect of the deadline and requirements laid down by Article 6 of Regulation (EU) 473/2013.

<sup>(&</sup>lt;sup>20</sup>) In particular, in view of forthcoming general elections, Spain submitted its Draft Budgetary Plan for 2016 on 11 September 2015, significantly ahead of the deadline of 15 October. Therefore, to underpin its assessment, the Commission prepared an ad-hoc forecast, with a cut-off date of 29 September 2015.

<sup>(&</sup>lt;sup>21</sup>) Regulation (EU) 472/2013 put forward the legal basis ensuring consistency between the fiscal surveillance framework laid down in the Stability and Growth Pact and the programme policy conditionality for euro area Member States under an economic adjustment programme. On that basis, during the programme, the monitoring of compliance with the Stability and Growth Pact takes place within the regular programme surveillance provided for by Article 7(4) of the Regulation and is based on the concerned Member States complying with the specific policy requirements contained in its programme.

in line with Chapter I.1: the plans confirm that the economic recovery is progressing, although subject to a number of downside risks, with GDP projections broadly in line with those of the spring and a continuing decrease in the general government deficit in the euro area to 1.7% of GDP in 2016. This is reflected in a planned neutral fiscal stance, again in line with Member States' projections in the spring.

On the basis of the DBPs themselves, the Commission did not identify any case of 'particularly serious non-compliance' with the provisions of the SGP. (<sup>22</sup>) Notwithstanding, there were some DBPs according to which the planned fiscal efforts is clearly insufficient in view of the existing imbalances. That is why the assessments of the DBPs flagged different degrees of risk and requested, where needed, appropriate action by the Member States in order to ensure compliance with the SGP.

In order to provide benchmarks for the Opinions of the Commission, **DBPs were allocated to three categories, depending on the strength of Member States' compliance with their obligations vis-à-vis the SGP**: (i) 'compliant', (ii) 'broadly compliant' and (iii) 'at risk of noncompliance'. These categories have a different meaning depending on whether the concerned Member State is under the preventive or the corrective arm of the SGP.

Five DBPs were found to be 'compliant' with the provisions of the SGP. These were submitted by the following Member States under the preventive arm – Germany, Estonia, Luxembourg, the Netherlands and Slovakia. For these Member States there was no need to adapt the plans within the national budgetary procedure to ensure compliance with the rules of the SGP.

By the same token, concerning the DBPs submitted by the remaining countries, the Commission considered that the planned fiscal effort risked falling short of what is required by the SGP. As a result, the Commission invited the authorities of the remaining eleven countries to take the necessary measures within their national budgetary processes in order to ensure that the 2016 budgets wold be 'compliant' with the SGP.

In further detail, the DBPs of seven countries were found to be 'broadly compliant' with the SGP. This concerned - Ireland, Slovenia and France – currently under the corrective arm of the SGP -, and Belgium, Latvia, Malta and Finland - under the preventive arm. In the case of France, while the targets for the general government deficit in years 2015 and 2016 were projected to be met on the basis of the Commission 2015 autumn forecast, the fiscal effort was projected to fall significantly short of the recommended level according to all metrics. For the remaining Member States, the Commission considered that the plans might result in some deviation from the required adjustment path towards the respective country-specific MTOs in 2016.

Finally, the DBPs of four countries were found to be 'at risk of non-compliance' with rules of the SGP. This was the case of Spain – under the corrective arm of the SGP-, as well as of Italy, Austria and Lithuania - under the preventive arm. Spain was not expected to ensure compliance targets set in with the the Council Recommendation of 21 June 2013 for the general government deficit and the change in the structural balance in years 2015 and 2016. (<sup>23</sup>) Similarly, the

<sup>(&</sup>lt;sup>22</sup>) The following non-exhaustive list of situations in which particularly serious non-compliance could be found is presented in the "specifications on the implementation of the Two-Pact and guidelines on the format and content of draft budgetary plans, economic partnership programmes and debt issuance reports": "(i) if an obvious breach of the criteria laid down in Article 126(2) of the TFEU would follow from the implementation of the DBP; (ii) for Member States in the preventive arm of the SGP, if the fiscal effort envisaged in the DBP falls clearly short of the fiscal effort recommended by the Council in accordance with existing Council recommendation issued in accordance with Article 121(4) of the TFEU; (iii) for Member States in the corrective arm of the SGP, if the fiscal effort envisaged in the DBP, i.e. the forecast change in the structural balance, falls clearly short of the recommended fiscal effort by the Council in accordance with Article 126(7) or 126(9) of the TFEU; (iv) where the implementation of the initial budgetary plan would put at risk the financial stability of the Member State concerned or risk jeopardizing the proper functioning of the economic and monetary union".

<sup>(&</sup>lt;sup>23</sup>) In light of the compliance risks and the fact that the Draft Budgetary Plan did not include up-to-date and fully specified measures for regional governments, the national authorities were also invited by the Commission to submit an updated plan including fully-specified regional measures, as soon as possible. The new Draft Budgetary Plan should take into account the Commission Opinion of 12 October 2015 in order to fully comply with the Stability and Growth Pact.

DBPs of Italy (<sup>24</sup>), Austria (<sup>25</sup>) and Lithuania might result in a significant deviation from the required adjustment path towards the respective country-specific MTOs.

Tables I.2.1a. and I.2.1b. provide overviews of individual Commission Opinions on the DBPs of Member States currently under the preventive and corrective arm of the SGP, respectively.

<sup>(&</sup>lt;sup>24</sup>) In its Opinion, the Commission conveyed its intention to continue to "closely monitor Italy's compliance with the obligations under the Stability and Growth Pact, notably in connection with the assessment of the next Stability Programme. In the context of the 'overall assessment' of a possible deviation from the adjustment path towards the Medium-term Budgetary Objective, the Commission will take into account the above considerations on Italy's possible eligibility for flexibility under the Stability and Growth Pact. Particular attention will be paid to whether a deviation from the adjustment path is being effectively used for the purposes of increasing investments; to the existence of credible plans for the resumption of the adjustment path towards the Medium-term Budgetary Objective and to progress with the structural reform agenda, taking into account the Council Recommendations".

<sup>(&</sup>lt;sup>25</sup>) However, if the current estimate of the increase in refugeerelated expenditure were excluded, the assessment would point to a risk of some deviation from the Medium-term Budgetary Objective.

#### Table I.2.1a: Overview of individual Commission Opinions on the DBPs – Member States currently under the preventive arm of the SGP

|         | Overall comp<br>Stability and O |   | Progress in in  | plementing the fiscal-structural reforms suggested in 2015 CSRs  |
|---------|---------------------------------|---|---|--|
| Country | Overall<br>conclusion           | Compliance with the preventive arm  | Progress with<br>regard to<br>CSRs related<br>to fiscal<br>governance |  |
| BE*     | Broadly<br>compliant            | 2015: some deviation from the<br>adjustment path towards the MTO<br>2016: some deviation from the<br>adjustment path towards the MTO  | Some progress   | Increase of tax-free allowance, further increase in standard deductible amount for professional expenses. Further increase of the work bonus', tax credit for low income earners. Abolition of the 30% bracket and raising of the threshold for the second highest personal income tax bracket. Further reduction of employee social security contributions for low-income earners. Phased reduction of employer social security contributions, partly through the absorption of existing wage subsidies, partly through additional reductions for low and medium wages. Extension of the exemption of employer social security contributions for first employees hired by SMEs. |
| DE      | Compliant                       | 2015: MTO overachieved;<br>compliance with the debt benchmark<br>2016: MTO overachieved;<br>compliance with the debt benchmark  | Limited<br>progress   | - Increase in the minimum income tax free allowance.<br>- Increase in child allowances.<br>- Adjustment of income tax brackets for fiscal drag.  |
| EE      | Compliant                       | 2015: MTO overachieved<br>2016: MTO overachieved  | n.a.  | - Increase in tax free allowance.<br>- Introduction of an income tax refund for low-wage earners.  |
| IT*     | Risk of non-<br>compliance      | 2015: some deviation from the<br>adjustment path towards the MTO<br>2016: significant deviation from the<br>adjustment path towards the MTO   | Some progress   | <ul> <li>Reduction by 40%, for an overall duration of two years, of employer<br/>social security contributions paid for new permanent employees hired<br/>in the course of 2016. This prolongs a previously enacted full<br/>exemption for three years for new personnel hired under open-ended<br/>contracts in the course of 2015.</li> </ul>  |
| LT      | Risk of non-<br>compliance      | 2015: no deviation from the<br>adjustment path towards the MTO<br>2016: significant deviation from the<br>adjustment path towards the MTO<br>2015: no deviation from the  | Limited   | - Increase in the tax free allowance.<br>- Increase in tax free allowance for parents and disabled people.   |
| LV      | Broadly<br>compliant            | 2015: no deviation from the<br>adjustment path towards the MTO<br>2016: some deviation from the<br>adjustment path towards the MTO  | Some progress   | - Increase in tax free allowance.<br>- Introduction of progressivity in tax free allowance.<br>- Introduction of solidarity tax for high-income earners.   |
| LU      | Compliant                       | 2015: MTO overachieved<br>2016: MTO overachieved  | Limited<br>progress   | No related measures.   |
| MT      | Broadly<br>compliant            | 2015: some deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark<br>2016: some deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark      |   | - Increase in tax free allowance.<br>- Reduction of income tax rate for low-income earners.  |
| NL      | Compliant                       | 2015: no deviation from the MTO;<br>compliance with the debt benchmark<br>2016: no deviation from the MTO;<br>compliance with the debt benchmark  | Some progress   | <ul> <li>Increase in tax credit for employed persons for incomes up to EUR<br/>50.000.</li> <li>Reduction of second and third income tax rates.</li> <li>Raising of threshold for highest income tax bracket.</li> <li>Increase in tax credit for parents.</li> <li>Phasing out of the general tax credit.</li> </ul>  |
| AT**    | Risk of non-<br>compliance      | 2015: no deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark<br>2016: significant deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark | Limited<br>progress   | <ul> <li>Increase in the number of tax brackets, reduction of the entry tax-<br/>rate from 36.5% to 25% up to EUR 18.000 of annual income.</li> <li>Threshold for the 50% tax rate increased from EUR 60.000 to<br/>90.000.</li> <li>A temporary 55% tax rate is envisaged for annual income above<br/>EUR 1 million.</li> <li>The reimbursement of half of social security contributions for very<br/>low income earners.</li> </ul>  |
| SK      | Compliant                       | 2015: no deviation from the<br>adjustment path towards the MTO<br>2016: no deviation from the<br>adjustment path towards the MTO  | Limited   | No related measures.   |
| FI***   | Broadly<br>compliant            | 2015: some deviation from the MTO<br>2016:some deviation from the<br>adjustment path towards the MTO  | Limited<br>progress   | <ul> <li>Adjustment, in 2016, of tax brackets to reflect the rise in earnings<br/>and inflation.</li> <li>The highest income tax bracket in the central government tax scale<br/>(solidarity tax) will remain in effect until 2019 and the threshold from<br/>which it applies is lowered for the years 2016 and 2017.</li> <li>Increase of tax credit for work income.</li> <li>Increase in the unemployment insurance contribution by 1pp.</li> </ul>  |

#### Source:

The Report in accordance Article 126(3) of the TFEU of 27 February 2015 concluded that the debt criterion should be considered as complied with at

that time. \*\*\* In case the current estimate of the budgetary impact of the exceptional inflow of refugees would be excluded from the assessment, the projected deviation from the recommended adjustment path would no longer be significant. \*\*\* As the notified deficit for 2014 and the planned deficit and debt for 2015 were above the Treaty reference values, the Commission issued a Report in accordance with Article 126(3) of the TFEU on 16 November 2015, concluding that both the deficit and the debt criteria should be excented as commission with Article 126(3) of the TFEU on 16 November 2015, concluding that both the deficit and the debt criteria should be considered as complied with.

| 1 | able I.2.1b: | Overview   | of individual Commission opinions  | on the DBPs – Memb  | er States currently under the corrective arm of the SGP   |  |
|---|--------------|--|--|---|---|--|
|   |              | Overall compliance of Draft Budgetary Plan<br>with Stability and Growth Pact     |  | Progress in implementing the fiscal-structural reforms suggested in 2015 CSRs |   |  |
| • |              | Overall<br>conclusion<br>based on the<br>Commission's<br>autumn 2015<br>forecast | Compliance with the Excessive<br>Deficit Procedure in 2015-16  | Progress with regard<br>to CSRs related to<br>fiscal governance               | Main measures in DBP to address tax wedge on labour   |  |
|   | IE*          | Broadly  | 2015: in EDP<br>2016: some deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark  | Some progress   | <ul> <li>Increase in the tax free allowance for the universal social<br/>charge as well as a raising of the threshold for the middle<br/>bracket and a reduction of the rate in the three lowest brackets.</li> </ul>   |  |
|   | ES**         |  | 2015: headline target not met, fiscal<br>effort falls significantly short of the<br>recommended level, putting at risk<br>compliance<br>2016: timely correction by 2016 at<br>risk; fiscal effort falls significantly<br>short of the recommended level,<br>putting at risk compliance | Some progress   | <ul> <li>Reduction of tax rates across the income spectrum and<br/>introduction of exemptions, lowering the effective tax rate of<br/>primarily low-income earners. Introduced in two phases, 1<br/>January and 1 July 2015, respectively.</li> <li>Temporary flat rate in social security contributions until<br/>March 2015. Replaced by temporary exemption from social<br/>security contributions for the first 500 euros per month for<br/>new permanent hires under certain conditions (expires third<br/>quarter 2016).</li> </ul> |  |
|   | FR           | Broadly<br>compliant<br>based on the<br>headline<br>deficit target               | 2015: headline target met, fiscal<br>effort falls significantly short of the<br>recommended level, putting at risk<br>compliance<br>2016: headline target met, fiscal<br>effort falls significantly short of the<br>recommended level, putting at risk<br>compliance                   | Some progress   | <ul> <li>Reduction of employer social security contributions for<br/>wages between 1.6 and 3.5 times the minimum wage.</li> <li>Reduction of personal income tax for low-income<br/>households by a tax rebate ('décote') for low-income<br/>households.</li> </ul>   |  |
|   | PT*          | No DBP<br>submitted yet  |  |   |   |  |
|   | SI*          | Broadly  | 2015: in EDP<br>2016: some deviation from the<br>adjustment path towards the MTO;<br>compliance with the debt benchmark  |   | No related measures.  |  |

Source: Commission services
\* The country is currently under the corrective arm, but could move to the preventive arm from 2016 if a timely and sustainable correction is

achieved. \*\* The Commission adopted an Opinion on Spain's DBP on 12 October. Portugal did not submit a DBP for 2016 by 15 October.

### ANNEX 1. ASSUMPTIONS UNDERLYING THE ASSESSMENT OF FISCAL STANCE

Table I.A1.1:

This annex provides more detailed information on the methodology underlying the assessment of the fiscal stance in the euro area as a whole and in individual euro area Member States that is presented in Chapter I.1.

The calculations are based on the Commission's autumn 2015 forecast.

The projected fiscal stance is assessed against both long-term sustainability needs and short-term macroeconomic stabilisation needs. Long-term sustainability needs are reflected in the fiscal adjustment required to put or maintain public debt on a sustainable path, while macroeconomic stabilisation is defined as the need to ensure that the output gap closes at an appropriate pace. Simple and transparent calculations are used to estimate illustrative changes in the structural primary balance (SPB) implied by each of these two types of needs.

#### A1.1. CALCULATION OF THE INDICATIVE STRUCTURAL PRIMARY EFFORT IMPLIED BY SUSTAINABILITY NEEDS

Long-term sustainability requires that public debt is put and maintained on a sustainable path, taking into account the current level of debt and projected future expenditures related to population ageing. This is measured by the S1 indicator under the socalled "2015 scenario", which indicates what cumulative change in the SPB over the period 2016-2020 would be needed to bring debt to 60% of GDP by 2030, based on the Commission forecast and taking the 2015 structural primary balance as a baseline. Table I.A1.1 reports the value of S1 under this scenario for all the euro area Member States and for the euro area as a whole, as well as the breakdown of S1 as background information.

To compute the indicative the change in the SPB implied by the sustainability needs of the various Member States, a slightly frontloaded adjustment is assumed, with 25% of this total effort (therefore S1 divided by four) to be achieved in 2016. This is reported under "Sustainability needs" in Table I. A1.2.

|    |                      | Due to   |                                   |                     |                 |  |  |
|----|----------------------|--|-----------------------------------|---------------------|-----------------|--|--|
|    | S1                   | Initial budgetary position                               |                                   |                     |                 |  |  |
|    | ("2015<br>scenario") | Gap to the<br>debt-<br>stabilizing<br>primary<br>balance | Cost of<br>delaying<br>adjustment | Debt<br>requirement | Ageing<br>costs |  |  |
| BE | 3.4                  | -0.5   | 0.4                               | 3.2                 | 0.2             |  |  |
| DE | -1.3                 | -2.6   | -0.2                              | 0.7                 | 0.8             |  |  |
| EE | -3.6                 | -0.4   | -0.4                              | -3.3                | 0.5             |  |  |
| IE | 3.9                  | -0.9   | 0.5                               | 2.7                 | 1.6             |  |  |
| EL | 8.8                  | 0.0  | 1.3                               | 8.4                 | -0.9            |  |  |
| ES | 1.6                  | -0.1   | 0.2                               | 2.6                 | -1.1            |  |  |
| FR | 3.8                  | 0.8  | 0.5                               | 2.4                 | 0.0             |  |  |
| IT | 2.4                  | -2.1   | 0.3                               | 4.6                 | -0.3            |  |  |
| CY | 0.1                  | -2.0   | 0.0                               | 2.8                 | -0.7            |  |  |
| LV | -1.4                 | 0.6  | -0.2                              | -1.4                | -0.4            |  |  |
| LT | 0.3                  | -0.1   | 0.0                               | -1.0                | 1.3             |  |  |
| LU | -3.2                 | -1.4   | -0.4                              | -2.8                | 1.4             |  |  |
| MT | 0.4                  | -1.0   | 0.0                               | 0.4                 | 0.9             |  |  |
| NL | -0.7                 | -0.5   | -0.1                              | 0.6                 | -0.7            |  |  |
| AT | 0.2                  | -2.0   | 0.0                               | 1.8                 | 0.4             |  |  |
| PT | 3.5                  | -1.7   | 0.5                               | 4.2                 | 0.5             |  |  |
| SI | 2.6                  | 0.1  | 0.4                               | 1.5                 | 0.6             |  |  |
| SK | -0.5                 | 0.0  | -0.1                              | -0.5                | 0.1             |  |  |
| FI | 2.7                  | 0.5  | 0.4                               | 0.2                 | 1.7             |  |  |
| EA | 1.4                  | -1.1   | 0.2                               | 2.2                 | 0.1             |  |  |

Total fiscal adjustment needed in 2016-2020

Source: Commission services.

#### A1.2. CALCULATION OF THE INDICATIVE STRUCTURAL PRIMARY EFFORT IMPLIED BY STABILISATION NEEDS

Macroeconomic stabilisation is defined as the need to ensure that the output gap closes at an appropriate pace in the short to medium term. For this purpose, a reduction of the output gap by 25% in one year is considered, in line with the assumption that length of an average half cycle is about four years. A more ambitious reduction by 50% is also envisaged, to provide some sensitivity analysis of fiscal policy with respect to stabilisation targets. This is also motivated by the fact that, in the euro area as a whole, the output gap has been negative since 2009.

The change in the SPB implied by these stabilisation needs – i.e. the one that would be needed to reduce the output gap by a certain proportion compared to its level of 2015 – is equal to the change in the SPB projected in the Commission forecast for 2016 ( $\Delta SPB^{baseline}$ ), minus the difference between the considered change in the output gap ( $\Delta OG^*$ ) and the projected change in the output gap ( $\Delta OG^{baseline}$ ) divided by the fiscal multiplier  $\mu$ :

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|    | STABILISAT   | ION NEEDS           | SUSTAINABILITY NEEDS  |  | COMMISSIC  | ON FORECAST  |  |
|----|--|---------------------|---|--|------------|--|--|
|    | Change in the<br>SPB consistent<br>with a<br>reduction of<br>the OG by 25% | with a reduction of | Change in the SPB<br>implied by the<br>sustainability needs | Change in<br>the SPB in<br>2016<br>(ΔSPB <sup>baseline</sup> ) | OG in 2015 | $\Delta OG \text{ in } 2016$<br>( $\Delta OG^{baseline}$ ) | Recalculated<br>ΔOG in 2016<br>with ΔSPB=0<br>(ΔOG°) |
| EA | 0.2  | -0.4                | 0.3   | -0.2   | -1.8       | 0.7  | 0.6  |
| LU | 0.3  | -0.2                | -0.8  | 0.2  | -1.5       | 0.4  | 0.6  |
| DE | -0.4   | -0.5                | -0.3  | -0.3   | -0.4       | 0.1  | -0.2   |
| NL | 0.4  | -0.1                | -0.2  | -0.4   | -1.6       | 1.0  | 0.7  |
| SK | 0.0  | -0.3                | -0.1  | 0.0  | -1.2       | 0.3  | 0.3  |
| CY | 1.4  | 0.3                 | 0.0   | -0.4   | -3.6       | 2.4  | 2.1  |
| AT | -0.2   | -0.6                | 0.1   | -0.5   | -1.2       | 0.5  | 0.1  |
| ES | 1.2  | 0.0                 | 0.4   | -0.3   | -3.9       | 2.2  | 1.9  |
| IT | 0.2  | -0.7                | 0.6   | -0.7   | -2.9       | 1.4  | 0.9  |
| SI | 1.3  | 1.1                 | 0.6   | 0.2  | -0.5       | 1.1  | 1.2  |
| FI | 0.0  | -0.7                | 0.7   | 0.2  | -2.5       | 0.5  | 0.7  |
| BE | 0.0  | -0.2                | 0.8   | 0.3  | -0.9       | 0.1  | 0.3  |
| PT | -0.3   | -1.0                | 0.9   | -0.9   | -2.3       | 1.1  | 0.4  |
| FR | 0.2  | -0.3                | 0.9   | 0.4  | -1.8       | 0.3  | 0.6  |
| EL | -0.6   | -3.1                | 2.2   | 0.6  | -7.9       | 1.0  | 1.5  |
| EE | -0.1   | 0.0                 | -0.9  | -0.1   | 0.5        | -0.1   | -0.2   |
| LV | 1.0  | 1.5                 | -0.3  | 0.2  | 1.7        | 0.2  | 0.4  |
| LT | 0.3  | 0.4                 | 0.1   | -0.3   | 0.4        | 0.3  | 0.1  |
| MT | 0.7  | 0.9                 | 0.1   | 0.2  | 0.6        | 0.2  | 0.4  |
| IE | 1.1  | 1.5                 | 1.0   | 0.6  | 1.2        | 0.1  | 0.6  |

| Table I.A1.2: | Change in the SPB implied by stabilisation and sustainability needs and in the Commission forecast (as % of GDP) |
|---------------|--|
|---------------|--|

Source: Commission services.

Note: For consistency, the Member States are listed in the same order as in Graph I.1.4 of Chapter I.1, i.e. grouped according to the sign of their output gap in 2015 and then sorted by increasing sustainability needs.

 $\Delta SPB^* = \Delta SPB^{baseline} - (\Delta OG^* - \Delta OG^{baseline})/\mu$ 

where  $\mu$  is assumed to be equal to 0.8, which seems reasonable in the current environment.  $\Delta SPB^{baseline}$  and  $\Delta OG^{baseline}$  are reported in Table I.A1.2 under "Commission forecast". Two measures of  $\Delta SPB^*$ , corresponding to reductions by 25% and 50%, are reported in the same table under "Stabilisation needs".

#### A.1.3. AN ALTERNATIVE TARGET FOR STABILISATION NEEDS

An alternative way to envisage stabilisation needs is to compute the change in the SPB that would be needed to further reduce the output gap (by e.g. 25%) *in addition to* the projected change in the output gap if there were no fiscal effort. Indeed, given that macroeconomic policy instruments are currently constrained, with nominal interest rates close to the zero limit in a very low inflation environment, this context places further emphasis on the importance of fiscal policy to stabilise the economy.

The first step is to correct the Commission forecast for the impact of the projected fiscal stance. This requires calculating the change in the output gap under a zero-fiscal-effort scenario – i.e. assuming no change in the SPB – and given a certain value of the fiscal multiplier. All the other assumptions in the forecast remain however unchanged.

Concretely, this is done as follows, taking the example of the euro area. The change in the output gap that is projected in the baseline scenario of the Commission forecast ( $\Delta OG^{baseline} = 0.7\%$  of GDP in 2016) already includes the impact of the projected change in the SPB ( $\Delta SPB^{baseline} = -0.2\%$  of GDP, i.e. a negative effort, which has a positive impact on GDP). To correct for the impact of the fiscal stance, we add back to the projected change in the SPB multiplied

by the fiscal multiplier  $\mu$ . We thus calculate the change in the output gap that would result from no change in the SPB, all other assumptions remaining unchanged:

 $\Delta OG^{\circ} = \Delta OG^{baseline} + \Delta SPB^{baseline} * \mu.$ 

Here,  $\Delta OG^{\circ} = 0.6$ , corresponding to an output gap improving from -1.8% of GDP in 2015 to -1.2% in 2016.  $\Delta OG^{\circ}$  is reported for all Member States in Table AI.2 under "Commission forecast".

The second step is to compute the change in the SPB as defined under the alternative stabilisation scenario. For the euro area, this scenario consists in reducing the output gap by an additional 25% compared to -1.2% of GDP, i.e. to -0.9% of GDP. The corresponding change in the SPB is equal to the output gap in 2016 assuming no fiscal effort (i.e. the output gap in 2015, *OG2015*, plus the change in the output gap assuming no fiscal effort,  $\Delta OG^{\circ}$ ), divided by the fiscal multiplier  $\mu$  and multiplied by the additional correction considered, i.e. 25%:

 $\Delta SPB^{**} = 0.25 (OG2015 + \Delta OG^{\circ})/\mu.$ 

This is found to require a fiscal loosening by 0.4% of GDP in terms of change in the SPB for the euro area as a whole. The computations for all euro area Member States are reported in Table I.A1.3.

| Table I.A1.3: |       |        | d by an alternative<br>ds (as % of GDP) |
|---------------|-------|--------|---|
|               |       |        |   |
|               |       | ∆SPB** |   |
|               | BE    | -0.2   |   |
|               | DE    | -0.2   |   |
|               | EE    | 0.1    |   |
|               | IE    | 0.6    |   |
|               | EL    | -2.0   |   |
|               | ES    | -0.6   |   |
|               | FR    | -0.4   |   |
|               | IT    | -0.6   |   |
|               | CY    | -0.5   |   |
|               | LV    | 0.6    |   |
|               | LT    | 0.2    |   |
|               | LU    | -0.3   |   |
|               | MT    | 0.3    |   |
|               | NL    | -0.3   |   |
|               | AT    | -0.3   |   |
|               | РТ    | -0.6   |   |
|               | SI    | 0.2    |   |
|               | SK    | -0.3   |   |
|               | FI    | -0.6   |   |
|               | EA-19 | -0.4   |   |

Source: Commission services.

Note:  $\Delta$ SPB\*\* is the change in the SPB consistent with a further reduction of the output gap in 2016 by 25% in addition to the implicit change in the output gap assuming zero fiscal effort, as recalculated on the basis of the Commission's autumn 2015 forecast.

| Steps in EDP procedure   | Treaty Art. |            |            |            |            |            |            |            | M          | ember State |            |            |            |            |            |             |            |          |
|--|-------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|-------------|------------|----------|
| ·  |             | IE         | FR         | ES         | LV         | MT         | LT         | BE         | DE         | IT          | NL         | AT         | PT         | SI         | SK         | CY          | FI         | MT       |
| Starting phase   |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Commission adopts EDP-report = start of the procedure  | 126(3)      | 18.02.2009 | 18.02.2009 | 18.02.2009 | 18.02.2009 | 13.05.2009 | 13.05.2009 | 07.10.2009 |            |             | 07.10.2009 |            |            |            |            | 12.05.2010  | 12.05.2010 |          |
| Economic and Financial Committee adopts opinion  | 126(4)      | 27.02.2009 | 27.02.2009 | 27.02.2009 | 27.02.2009 | 29.05.2009 | 29.05.2009 | 27.10.2009 | 27.10.2009 | 27.10.2009  | 27.10.2009 | 27.10.2009 | 27.10.2009 | 27.10.2009 | 27.10.2009 | 27.05.2010  | 27.05.2010 | 21.06.20 |
| Commission adopts:   |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| opinion on existence of excessive deficit  | 126(5)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| recommendation for Council decision on existence of excessive deficit                                    | 126(6)      | 24.03.2009 | 24.03.2009 | 24.03.2009 | 02.07.2009 | 24.06.2009 | 24.06.2009 | 11.11.2009 | 11.11.2009 | 11.11.2009  | 11.11.2009 | 11.11.2009 | 11.11.2009 | 11.11.2009 | 11.11.2009 | 15.06.2010  | 15.06.2010 | 29.05.2  |
| recommendation for Council recommendation to end this situation  | 126(7)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Council adopts:  |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| decision on existence of excessive deficit   | 126(6)      | 27.04.2009 | 27.04.2009 | 27.04.2009 | 07.07.2009 | 07.07.2009 | 07.07.2009 | 02.12.2009 | 02.12.2009 | 02.12.2009  | 02.12.2009 | 02.12.2009 | 02.12.2009 | 02.12.2009 | 02.12.2009 | 13.07.2010  | 13.07.2010 | 21.06.2  |
| recommendation to end this situation   | 126(7)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| deadline for correction of excessive deficit   |             | 2013       | 2012       | 2012       | 2012       | 2010       | 2011       | 2012       | 2013       | 2012        | 2013       | 2013       | 2013       | 2013       | 2013       | 2012        | 2011       | 201      |
| Follow-up  |             |            |            |            | 27.01.2010 |            |            | 45.00.0040 | 45.00.0040 | 45.00.0040  | 45.00.0040 | 15.06.2010 | 15.06.2010 | 15.06.2010 | 45.00.0040 | 07.04.0044  | 07.04.0044 | 15.11.2  |
| Commission adopts communication on action taken  | 400(7)      |            |            |            | 27.01.2010 |            |            | 15.06.2010 | 15.06.2010 | 15.06.2010  | 15.06.2010 | 15.06.2010 | 15.06.2010 | 15.06.2010 | 15.06.2010 | 27.01.2011  | 27.01.2011 | 15.11.2  |
| Commission adopts recommendation for NEW Council recommendation to end<br>situation of excessive deficit | 126(7)      | 11.11.2009 | 11.11.2009 | 11.11.2009 |            | 27.01.2010 | 27.01.2010 |            |            |             | 29.05.2013 |            | 27.09.2012 |            |            |             |            |          |
| Council adopts recommendation for NEW Council recommendation to end                                      | 126(7)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| situation of excessive deficit   | 120(7)      | 02.12.2009 | 02.12.2009 | 02.12.2009 |            | 16.02.2010 | 16.02.2010 |            |            |             | 21.06.2013 |            | 09.10.2012 |            |            |             |            |          |
| new deadline for correction of excessive deficit   |             | 2014       | 2013       | 2013       |            | 2011       | 2012       |            |            |             | 2014       |            | 2014       |            |            |             |            |          |
|  |             | 2014       | 2013       | 2013       |            | 2011       | 2012       |            |            |             | 2014       |            | 2014       |            |            |             |            |          |
| Commission adopts communication on action taken  |             | 15.06.2010 | 15.06.2010 | 15.06.2010 |            | 06.01.2011 | 21.09.2010 | 11.01.2012 |            |             | 15.11.2013 |            |            |            |            | 11.01.2012  |            |          |
| Commission adopts recommendation for Council decision establishing                                       | 126(8)      |            |            |            |            |            |            | 29.05.2013 |            |             |            |            |            |            |            |             |            |          |
| inadequate action  |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Council adopts decision establishing inadequate action   | 126(8)      |            |            |            |            |            |            | 21.06.2013 |            |             |            |            |            |            |            |             |            |          |
| Commission adopts recommendation for a Council decision to give notice                                   | 126(9)      |            |            |            |            |            |            | 29.05.2013 |            |             |            |            |            |            |            |             |            |          |
| Council adopts decision to give notice   | 126(9)      |            |            |            |            |            |            | 21.06.2013 |            |             |            |            |            |            |            |             |            |          |
| Commission adopts recommendation for NEW Council recommendation to end                                   | 126(7)      | 03.12.2010 | 29.05.2013 | 06.07.2012 |            |            |            |            |            |             |            |            | 29.05.2013 | 29.05.2013 |            | 07.05.2013  |            |          |
| situation of excessive deficit<br>Council adopts recommendation for NEW Council recommendation to end    | 400(7)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| situation of excessive deficit   | 126(7)      | 07.12.2010 | 21.06.2013 | 10.07.2012 |            |            |            |            |            |             |            |            | 21.06.2013 | 21.06.2013 |            | 16.05.2013  |            |          |
| new deadline for correction of excessive deficit   |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| new dedunie for correction of excessive denois   |             | 2015       | 2015       | 2014       |            |            |            | 2013       |            |             |            |            | 2015       | 2015       |            | 2016        |            |          |
| Commission adopts communication on action taken  |             | 24.08.2011 | 15.11.2013 | 14.11.2012 |            |            |            | 15.11.2013 |            |             |            |            |            | 15.11.2013 |            | 06.09.2013* |            |          |
| Commission adopts recommendation for NEW Council recommendation to end                                   | 126(7)      |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| situation of excessive deficit   |             |            | 27.02.2015 | 29.05.2013 |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Council adopts recommendation for NEW Council recommendation to end                                      | 126(7)      |            | 10.02.2015 | 21.06.2013 |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| situation of excessive deficit   |             |            | 10.03.2015 | 21.00.2013 |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| new deadline for correction of excessive deficit   |             |            | 2017       | 2016       |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Commission adopts communication on action taken  |             |            | 01.07.2015 | 15.11.2013 |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
|  |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Abrogation   |             |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Commission adopts recommendation for Council decision abrogating existence                               | 126(12)     |            |            |            | 20.05.2012 | 14.11.2012 | 20.05.2012 | 02.06.2014 | 30.05.2012 | 20.05.2012  | 02.06.2014 | 02.06.2014 |            |            | 02.06.2014 |             | 29.06.2011 | 12.05 2  |
| of excessive deficit   | . ,         |            |            |            |            |            |            |            |            |             |            |            |            |            |            |             |            |          |
| Council adopts decision abrogating existence of excessive deficit  | 126(12)     | 1          | 1          | 1          | 21.06.2013 | 04.12.2012 | 21.06.2013 | 20.06.2014 | 22.06.2012 | 21.06.2013  | 20.06.2014 | 20.06.2014 |            |            | 20.06.2014 |             | 12.07.2011 | 19.06.2  |

ANNEX 2. OVERVIEW OF EDP STEPS AND COUNTRY-SPECIFIC FISCAL RECOMMENDATIONS

Table I.A2.1:

Overview EDP steps - Euro area Member States

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Source: Commission services

#### Table I.A2.2: Overview EDP steps - Non-euro area Member States

| Steps in EDP procedure   | Treaty Art.        |                          |                                    |                          | Membe              | er State   |            |            |           |
|--|--------------------|--------------------------|------------------------------------|--------------------------|--------------------|------------|------------|------------|-----------|
| -  |                    | HU                       | UK                                 | PL                       | RO                 | CZ         | BG         | DK         | HR        |
| Starting phase<br>Commission adopts EDP-report = start of the procedure<br>Economic and Financial Committee adopts opinion               | 126(3)<br>126(4)   | 12.05.2004<br>24.05.2004 | 11.06.2008                         | 13.05.2009<br>29.05.2009 | 13.05.2009         | 07.10.2009 | 12.05.2010 | 12.05.2010 | 15.11.201 |
| Commission adopts:<br>opinion on existence of excessive deficit<br>recommendation for Council decision on existence of excessive deficit | 126(5)<br>126(6)   | 24.06.2004               | 02.07.2008                         | 24.06.2009               | 24.06.2009         | 11.11.2009 | 06.07.2010 | 15.06.2010 | 10.12.201 |
| recommendation for Council recommendation to end this situation<br>Council adopts:<br>decision on existence of excessive deficit         | 126(7)             |                          |                                    |                          |                    |            |            |            |           |
| recommendation to end this situation<br>deadline for correction of excessive deficit   | 126(6)<br>126(7)   | 05.07.2004               | 08.07.2008<br>fin. year            | 07.07.2009               | 07.07.2009         | 02.12.2009 | 13.07.2010 | 13.07.2010 | 21.01.201 |
|  |                    | 2008                     | 2009/10                            | 2012                     | 2011               | 2013       | 2011       | 2013       | 2016      |
| Follow-up  |                    |                          |                                    |                          |                    |            |            |            |           |
| Commission adopts communication on action taken<br>Commission adopts recommendations for Council decision establishing                   | 126(8)             | 22.12.2004               | 24.03.2009                         | 03.02.2010               |                    | 15.06.2010 | 27.01.2011 | 27.01.2011 | 02.06.201 |
| inadequate action  |                    |                          |                                    |                          |                    |            |            |            |           |
| Council adopts decision establishing inadequate action<br>Commission adopts recommendation for NEW Council recommendation to             | 126(8)<br>126(7)   | 18.01.2005               | 27.04.2009<br>24.03.2009           |                          | 00.00.0040         |            |            |            |           |
| end excessive deficit situation  | . ,                | 16.02.2005               |                                    |                          | 08.02.2010         |            |            |            |           |
| Council adopts NEW recommendation to end excessive deficit situation<br>new deadline for correction of excessive deficit                 | 126(7)             | 08.03.2005<br>2008       | 27.04.2009<br>fin. year<br>2013/14 |                          | 16.02.2010<br>2012 |            |            |            |           |
| Commission adopts communication on action taken  |                    | 13.07.2005               |                                    | 11.01.2012               | 21.09.2010         |            |            |            |           |
| Commission adopts recommendations for Council decision establishing<br>inadequate action   | 126(8)             | 20.10.2005               |                                    |                          |                    |            |            |            |           |
| Council adopts decision establishing inadequate action   | 126(8)             | 08.11.2005               |                                    |                          |                    |            |            |            |           |
| Commission adopts recommendation for NEW Council recommendation to<br>end excessive deficit situation                                    | 126(7)             | 26.09.2006               | 11.11.2009                         |                          |                    |            |            |            |           |
| Council adopts NEW recommendation to end excessive deficit situation<br>new deadline for correction of excessive deficit                 | 126(7)             | 10.10.2006<br>2009       | 02.12.2009<br>fin. year<br>2014/15 |                          |                    |            |            |            |           |
| Commission adopts communication on action taken  |                    | 13.06.2007               | 06.07.2010                         |                          |                    |            |            |            |           |
| Commission adopts recommendations for Council decision establishing<br>inadequate action   | 126(8)             |                          | 12.05.2015                         |                          |                    |            |            |            |           |
| Council adopts decision establishing inadequate action<br>Commission adopts recommendation for NEW Council recommendation to             | 126(8)<br>126(7)   |                          | 19.06.2015                         |                          |                    |            |            |            |           |
| end excessive deficit situation  | 120(7)             | 24.06.2009               | 12.05.2015                         | 29.05.2013               |                    |            |            |            |           |
| Council adopts NEW recommendation to end excessive deficit situation<br>new deadline for correction of excessive deficit                 | 126(7)             | 07.07.2009<br>2011       | 19.06.2015<br>fin. year<br>2016/17 | 21.06.2013<br>2014       |                    |            |            |            |           |
| Commission adopts communication on action taken  |                    | 27.01.2010               | 16.11.2015                         |                          |                    |            |            |            |           |
| Commission adopts recommendations for Council decision establishing<br>inadequate action   | 126(8)             | 11.01.2012               |                                    | 15.11.2013               |                    |            |            |            |           |
| Council adopts decision establishing inadequate action<br>Commission adopts recommendation for NEW Council recommendation to             | 126(8)             | 24.01.2012               |                                    | 10.12.2013               |                    |            |            |            |           |
| end excessive deficit situation  | 126(7)             | 06.03.2012               |                                    | 15.11.2013               |                    |            |            |            |           |
| Council adopts NEW recommendation to end excessive deficit situation   | 126(7)             | 13.03.2012               |                                    | 10.12.2013               |                    |            |            |            |           |
| new deadline for correction of excessive deficit   |                    | 2012                     |                                    | 2015                     |                    |            |            |            |           |
| Commission adopts communication on action taken  |                    | 30.05.2012               |                                    | 02.06.2014               |                    |            |            |            |           |
| Abrogation   |                    |                          |                                    |                          |                    |            |            |            |           |
| Commission adopts recommendation for Council decision abrogating   | 400(40)            | 29.05.2013               |                                    | 12.05.2015               | 29.05.2013         | 02.06.2014 | 30.05.2012 | 02.06.2014 |           |
| existence of excessive deficit<br>Council adopts decision abrogating existence of excessive deficit                                      | 126(12)<br>126(12) | 21.06.2013               |                                    | 19.06.2015               | 21.06.2013         | 20.06.2014 | 22.06.2012 | 20.06.2014 |           |

Source: Commission services

#### Table I.A2.3: Greece

| Steps in EDP procedure   | Treaty  | Greece     |
|--|---------|------------|
| Starting phase   | Art.    |            |
| Commission adopts EDP-report = start of the procedure  | 126(3)  | 18.02.2009 |
| Economic and Financial Committee adopts opinion  | 126(4)  | 27.02.2009 |
| Commission adopts:   | .20(1)  | 2.102.2000 |
| opinion on existence of excessive deficit  | 126(5)  |            |
| recommendation for Council decision on existence of excessive deficit                            | 126(6)  | 24.03.2009 |
| recommendation for Council recommendation to end this situation                                  | 126(7)  |            |
| Council adopts:  | 120(7)  |            |
| decision on existence of excessive deficit   | 126(6)  |            |
| recommendation to end this situation   | 126(7)  | 27.04.2009 |
| deadline for correction of excessive deficit   | 120(7)  | 2010       |
|  |         | 2010       |
| Follow-up  |         |            |
| Commission adopts recommendations for Council decision establishing                              | 126(8)  | 11.11.2009 |
| inadequate action  | 120(6)  | 11.11.2009 |
|  | (00(0)) |            |
| Council adopts decision establishing inadequate action   | 126(8)  | 02.12.2009 |
| Commission adopts Council recommendation for decision to give notice                             | 126(9)  | 03.02.2010 |
| Council decision to give notice  | 126(9)  | 16.02.2010 |
| new deadline for correction of the excessive deficit   |         | 2012       |
|  |         |            |
| Commission adopts communication on action taken  |         | 09.03.2010 |
| Council adopts conclusions thereon   |         | 16.03.2010 |
| Commission adopts recommendation for NEW Council decision to give notice                         | 126(9)  | 04.05.2010 |
| Council decision to give notice  | 126(9)  | 10.05.2010 |
| new deadline for correction of the excessive deficit   | 120(0)  | 2014       |
|  |         | 2014       |
|  |         |            |
| Follow-up - 1st review   |         |            |
| Commission adopts communication on action taken  |         | 19.08.2010 |
| Commission adopts recommendation for Council decision amending the                               |         |            |
| Council decision to give notice  | 126(9)  | 19.08.2010 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 07.09.2010 |
|  |         |            |
| Follow-up - 2nd review   |         |            |
| Commission adopts communication on action taken  |         | 09.12.2010 |
| Commission adopts recommendation for Council decision amending the                               |         |            |
| Council decision to give notice  | 126(9)  | 09.12.2010 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 20.12.2010 |
|  |         |            |
| Follow-up - 3rd review   |         |            |
| Commission adopts communication on action taken  |         | 24.02.2011 |
| Commission adopts recommendation for Council decision amending the                               |         |            |
| Council decision to give notice  | 126(9)  | 24.02.2011 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 07.03.2011 |
| 5  | - ( - ) |            |
| Follow-up - 4th review   |         |            |
| Commission adopts communication on action taken  |         | 01.07.2011 |
| Commission adopts recommendation for Council decision amending the                               |         | 01.07.2011 |
| Council decision to give notice  | 126(9)  | 05.07.2011 |
| Council decision to give notice<br>Council decision amending the Council decision to give notice | 126(9)  | 12.07.2011 |
| Council accision antenuing the Council accision to give notice                                   | 120(9)  | 12.01.2011 |
| Collow up . Eth roviow   |         |            |
| Follow-up - 5th review   |         | 06 40 0044 |
| Commission adopts communication on action taken  |         | 26.10.2011 |
| Commission adopts recommendation for Council decision amending the                               | 400(0)  | 00 40 0011 |
| Council decision to give notice  | 126(9)  | 26.10.2011 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 08.11.2011 |
| - Hanning Concerned Additionation of December 201  |         |            |
| Follow-up - Second Adjustment Programme  |         | 00.00.0010 |
| Commission adopts communication on action taken  |         | 09.03.2012 |
| Commission adopts recommendation for Council decision amending the                               | 100(-)  |            |
| Council decision to give notice  | 126(9)  | 09.03.2012 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 13.03.2012 |
|  |         |            |
| Follow-up - Second Adjustment Programme  |         |            |
| Commission adopts communication on action taken  |         | 30.11.2012 |
| Commission adopts recommendation for Council decision amending the                               |         |            |
| Council decision to give notice  | 126(9)  | 30.11.2012 |
| Council decision amending the Council decision to give notice                                    | 126(9)  | 04.12.2012 |
| new deadline for correction of the excessive deficit   |         | 2016       |
|  |         |            |

|      |   |  | uncil Country-Specific Recomme  | ndations relating to fiscal pol   | icy  |   |
|------|---|--|---|---|--|---|
| Situ | ation in spring a<br>Applicable<br>provisions of the<br>SGP |  | veillance is concerned<br>CSR on fiscal adjustment  | CSR on fiscal framework   | CSR on taxation  | CSR on pensions and health-<br>care   |
| BE   | Preventive arm     Transition period     debt rule          | • MIO: 0.75%<br>• Debt > 60%   | Achieve a fiscal adjustment of at least 0.6 % of<br>GDP towards the medium-term budgetary<br>objective in 2015 and in 2016. Use windfall gains<br>to put the general government debt ratio on an<br>appropriate downward path.<br>Complement the pension reform by linking the<br>statutoryretirement age to life expectancy.<br>Agree on an enforceable distribution of fiscal<br>targets among all government levels.   |   | Adopt and implement a comprehensive<br>tax reform broadening the tax base,<br>shifting the tax burden avay from labour<br>and removing inefficient tax<br>expenditures.  |   |
| BG   | Preventive arm  | • MTO: -1%<br>• Debt < 60%   | Avoid a structural deterioration in public finances in 2015 and achieve an adjustment of 0.5 % of GDP in 2016.  |   | Take decisive measures to <b>improve</b><br><b>tax</b> collection and address the shadow<br>economy, based on a comprehensive<br>risk analysis and evaluation of past<br>measures.   | Improve the cost-effectiveness<br>of the healthcare system, in<br>particular, by reviewing the<br>pricing of healthcare and<br>strengthening outpatient care<br>and primary care.   |
| cz   | Preventive arm  | • MTO: -1%<br>( overachieved in<br>2015)<br>• Debt < 60%             | Achieve a fiscal adjustment of 0.5% of GDP in<br>2016. Further improve the cost-effectiveness<br>and governance of the healthcare sector  |   | Fight tax evasion, simplify the tax<br>system and implement the anti-<br>corruption plan. Take measures to<br>increase the transparency and<br>efficiency of public procurement, in<br>particular by establishing a central<br>register of public contracts and<br>strengthening guidance and<br>supervision.<br>Reduce the high level of traxation<br>levied on low-income earners, by<br>shifting maxien to other areas. Further<br>improve the availability of affordable<br>childcare. |   |
| DK   | Preventive arm  | • MTO: -0.5%<br>(overachieved in<br>2015 and at MTO<br>in 2016)      | Avoid deviating from the medium-term budgetary objective in 2016.   |   |  |   |
| DE   | Preventive arm  | • MTO: -0.5%<br>• (overachieved in<br>2015 and 2016)<br>• Debt > 60% | Further increase public investment in<br>infrastructure, education and research. To<br>foster private investment, take measures to<br>improve the efficiency of the tax system, in<br>particular by reteiving the local trade tax and<br>corporate taxation and by modernisming the tax<br>administration. Use the congoing review to<br>improve the design of fiscal relations between the<br>deferation. Linder and municipalities,<br>particularly with a view to ensuring adequate<br>public investment at all levels of government.  |   | Increase incentives for later<br>retirement. Take measures to reduce<br>high labour taxes and social security<br>contributions, especially for low-<br>wage earners, and address the impact<br>of fiscal drag. Revise the fiscal<br>treatment of mini-jobs to facilitate the<br>transition to other forms of<br>employment.  |   |
| EE   | Preventive arm  | • MTO: 0%<br>(overachieved in<br>2015)<br>• Debt < 60%               | Avoid deviating from the medium-term<br>budgetary objective in 2015 and 2016.   |   |  |   |
| IE   | Preventive arm  | • MTO: 0%<br>• Debt > 60%  | Ensure a durable correction of the excessive<br>deficit in 2015. Achieve a fiscal adjustment of<br>0,6 % of CDP towards the medium-term<br>budgetary objective in 2016. Use windfall gains<br>from better-thina-expected economics and financial<br>conditions to accelerate the deficit reduction and<br>debt reduction. Limit the existing discretionary<br>powers to change expenditure ceilings beyond<br>specific and predefined contingencies. Broaden<br>the tax base and review tax expenditures,   |   |  | Take measures to increase the<br>cost-effectiveness of the<br>healthcare system, including<br>by reducing spending on<br>patented medicines and<br>gradually implementing<br>adequate prescription practices.<br>Roll out activity-based funding<br>throughout the public hospital<br>system. |
| EL   | To avoid duplication  | with measures set ou   | including on value-added taxes<br>t in the Economic Adjustment Programme, there are   | no additional recommendations for Greece.   |  |   |
| ES   | Corrective arm  | EDP deadline:<br>2016  | Ensure a durable correction of the excessive<br>deficit by 2016 by taking the necessary structural<br>measures in 2015 and 2016 and using windfall<br>gains to accelerate the deficit and debt reduction.<br>Strengthen transparency and accountability of<br>regional public finances. Improve the cost-<br>effective eness of the healthcare sector, and<br>rationalise hospital pharmac exitical spending  |   |  |   |
| FR   | • Corrective arm  | • EDP deadline:  | Ensure effective action under the excessive deficit procedure and a durable correction of<br>the excessive deficit by 2017 by reinforcing the<br>budgetarystructures; taking the necessary measures<br>for all years and using all windfall gains for<br>deficit and debt reduction. Specify the<br>expenditure cuts planned for these years and<br>provide an independent evaluation of the impact<br>of key measures.   | Step up efforts to make the spending<br>review effective, continue public policy<br>evaluations and identify savings<br>opportunities across all sub-sectors of<br>general government, including on social<br>security and local government. Take steps<br>to limit the itse in local authorities'<br>administrative expenditure.   | Simplify and improve the efficiency<br>of the tax system, in particular by<br>removing ine ficient tax expenditure.<br>To promote investment, take action to<br>reduce the taxes on production and the<br>corporate innome statutory rate, while<br>broadening the tax base on<br>consumption. Take measures as from<br>2015 to abolish inefficient taxes that<br>are yielding little or no revenue.   | Take additional measures to<br>bring the pension system into<br>balance, in particular ensuring<br>by March 2016 that the<br>financial situation of<br>complementary pension<br>schemes is sustainable over the<br>long term.   |
| HR   | • Corrective arm  | •EDP deadine:<br>2016  | Ensure a durable correction of the excessive<br>deficit by 2016 by taking the necessary measures<br>in 2013 and reinforcing the budgetary strategy for<br>2016. Publish and implement the findings of the<br>expenditure review. Improve control over<br>expenditure at central and local level, in<br>particular by establishing a sanciboning<br>mechanism for entities breaching budgetary<br>limits. Adopt the Fiscal Responsibility Act and<br>strengthen the capacity and role of the State<br>Audit Office. Introduce a recurrent property<br>tax and improve VAT compliance. Reinforce<br>public debt management, in particular by<br>publishing on an annual basis debt management<br>strategy and ensuring adequate resourcing. | overlap between levels of central and<br>local government by putting forward a<br>new model for functional distribution of<br>competencies and by rationalising the<br>system of state agencies. Increase<br>transparency and accountability in the<br>public corporate sector, in particular as<br>regards managerial appointments and<br>competency requirements. Advance the | Significantly, reduce parafiscal<br>charges and remove excessive<br>barriers for service providers.<br>Identify and implement steps to<br>improve the efficiency and quality of<br>the justice system, in particular<br>commercial courts.   | Discourage early retirement<br>by raising penalties for early<br>exits. Improve the adequacy<br>and efficiency of pension<br>spending by lightening the<br>definition of arduous and<br>harardous professions. Tackle<br>the fiscal risks in healthcare.                                      |

(Continued on the next page)

| Tab | le (continue   | d)   |  |  |   |   |
|-----|--|--|--|--|---|---|
| п   | • Preventive ann<br>Transition period<br>debt rule in 2015<br>and debt rule in<br>2016 | • MTO: 0%<br>• Debt >60%   | Achieve a fiscal adjustment of at least 0,25 % of<br>GDP towards the medium-term budgetary<br>objective in 2015 and 06,1% of GDP in 2016 by<br>taking the necessary structural measures in both<br>2015 and 2016, taking into account the allowed<br>deviation for the implementation of major<br>structural reforms. Ensure that the spending review<br>is an integral part of the budgetary process. Swittly<br>and thoroughly implement the privatisation<br>programme and use windfall gains to make further<br>progress towards putting the general government<br>debt ratio on an appropriate downward path. | Adopt and implement the pending laws<br>aimed at improving the institutional<br>framework and modernising the public<br>administration. Revise the statute of<br>limitations by mid-2015. Ensure that the<br>reforms adopted to improve the efficiency<br>of civil justice help reduce the length of<br>proceedings<br>Implement the simplification agenda for<br>2015-17 to ease the administrative and<br>regulatory burden. Adopt competition-<br>enhancing measures in all the sectors<br>covered by the competition law, and take<br>decisive action to remove remaining<br>barriers. Ensure that local public services<br>contracts not complying with the<br>requirements on in-house awards are<br>rectified by no later than end-2015 | Implement the enabling law for tax<br>reform by September 2015, in<br>particular the revision of tax<br>expenditures and cadastral values and<br>the measures to enhance tax<br>compliance.   |   |
| CY  | To avoid duplication   | n with measures set o  | ut in the Economic Adjustment Programme, there are   | no additional recommendations for Greece.  |   | <b>T</b> 1 <b>( )</b>   |
| LV  | • Preventive arm   | • MTO: -1%<br>• Debt < 60%   | Ensure that the deviation from the medium-<br>term budgetary objective in 2015 and 2016 is<br>limited to the allow ance linked to the systemic<br>pension reform.  |  | Reduce the high tax wedge for low-<br>income earners by shifting the tax<br>burden to other sources less<br>detrimental to growth.  | Take action to improve the<br>accessibility, cost-<br>effectiveness and quality of<br>the healthcare system and link<br>hospital financing to<br>performance mechanisms.  |
| LT  | • Preventive arm   | • MIO: -1%<br>(at MIO in 2015<br>• Debt < 60%                                | Avoid deviating from the medium-term<br>budgetary objective in 2015 and ensure that the<br>deviation in 2016 is limited to the allovance<br>linked to the systemic pension reform. Broaden<br>the tax base and improve tax compliance.   |  |   | Adopt a comprehensive<br>reform of the pension system<br>that also addresses the<br>challenge of achieving pension<br>adequacy.<br>Address the challenge of a<br>shrinking working-age<br>population by improving the<br>about-market relevance of<br>education. increasing<br>attainment in basic skills, and<br>improving the performance of<br>the healthcare system; reduce<br>the healthcare system; reduce<br>the healthcare system; reduce<br>the halph tax wedge for low-<br>income carries by shifting the<br>tax burden to other sources less<br>detrimental to growth. |
| LU  | • Preventive arm   | • MTO: 0.5%<br>(overachieved in<br>2015 and 2016)<br>• Debt < 60%            | Broaden the tax base, in particular on<br>consumption, recurrent property taxation and<br>environmental taxation   |  |   |   |
| HU  | Preventive arm<br>Transition period<br>debt rule in 2015<br>and debt rule in<br>2016   | • MTO: -1.7%<br>• Debt > 60%   | Achieve a fiscal adjustment of 0,5 % of GDP<br>towards the medium-term budgetary objective in<br>2015 and of 0,6 % of GDP in 2016.   |  | Reduce distortive sector-specific<br>corporate taxes, remove the<br>unjustified enzy-barriers in the service<br>sector, including in the retail sector,<br>reduce the tax wedge for low-income<br>earners, including by shifting taxation<br>to areas less distortive to growth;<br>continue to fight tax erasion, reduce<br>compliance costs and improve the<br>efficiency of tax collection.<br>Strengthen structures in public<br>procurement that promote<br>famework the anti-corruption<br>framework the anti-corruption<br>framework |   |
| MT  | Preventive arm     Debt rule in 2015     and 2016                                      | • MTO: 0%<br>• Debt>60%  | Following correction of the excessive deficit,<br>achieve a fiscal adjustment of 0,6 % of GDP<br>towards the medium-term budgetary objective in<br>2015 and 2016   |  |   | To ensure the long-term<br>sustainability of public<br>finances, continue the ongoing<br>pension reform, such as by<br>accelerating the already-enacted<br>increase in the statutory<br>retirement age and by<br>consecutively linking it to<br>changes in life expectancy.   |
| NL  | Preventive arm     Transition period     debt rule in 2015     and 2016                | • MTO: -0.5%<br>(overachieved in<br>2015 and in<br>2016)<br>• Debt>60%       | Shift public expenditure towards supporting<br>investment in R&D and work on framework<br>conditions for improving private R&D<br>expenditure in order to counter the declining<br>trend in public R&D expenditure and increase the<br>potential for economic growth.  |  |   | Reduce the level of<br>contributions to the second<br>pillar of the pension system<br>for those in the early years of<br>working life.  |
| AT  | Preventive arm     Transition period     debt rule in 2015     and 2016                | • MTO:-0.5%<br>(overachieved in<br>2015 and at MTO<br>in 2016)<br>• Debt>60% | Avoid deviating from the medium-term<br>budgetary objective in 2015 and 2016.  | Correct the misalignment between the<br>financing and spending responsibilities of<br>the different levels of government.  | Ensure the budget neutrality of the tax reform aimed at reducing the tax burden on labour.  | Take measures to ensure the<br>long-term sustainability of the<br>pension system, including by<br>earlier harmonisation of the<br>statutory retirement age for men<br>and women, and link the<br>statutory retirement age to life<br>expectancy.  |
| PL  | • Preventive arm   | • M∏O:-1%<br>• Debt ≪60%   | Following the correction of the excessive<br>deficit, achieve a fixed adjustment of 0.5 % of<br>GDP towards the medium-term budgetary<br>objective both in 2015 and 2016.  | E stablish an independent fiscal council.  | Broaden the tax base, in particular by<br>limiting the use of the extensive<br>system of reduced VAT rates.   | Start the process of aligning<br>the pension arrangements for<br>farmers and miners with<br>those for other workers, and<br>adopt a timetable for<br>progressive foll alignment; put<br>in place a system for assessing<br>and recording farmers'<br>incomes.   |
| PT  | Preventive arm     Transition period     debt rule in 2016                             | • MTO:-0.5%<br>• Debt >60%   | Ensure a durable correction of the excessive<br>deficit in 2015 by taking measures as necessary.<br>Achieve a fiscal adjustment of $0,6$ % of GDP<br>towards the medium-term budgetary objective in<br>2016. Use windfall gains to accelerate the deficit<br>and debt reduction. Enforce the commitment<br>control law to better control expenditure   |  | Further improve tax compliance and<br>the efficiency of the tax<br>administration.  | Improve the medium-term<br>sustainability of the pension<br>system.   |
| RO  | • Preventive arm   | • MTO:-1%<br>(at MTO in2015)<br>• Debt >60%                                  | Take all the necessary measures to complete the<br>financial assistance programme.<br>Limit the deviation from the medium-term<br>budgetary objective in 2015 to a maximum of<br>0.25% of GDP as specified under the 2013.15<br>balance-of-payment programme and return to<br>the medium-term budgetary objective in 2016  |  | Implement the comprehensive tax<br>compliance strategy, strengthen<br>verification control systems in order to<br>tackle undeclared work, and push<br>ahead with the equalisation of the<br>pensionable age for men and women   |   |

(Continued on the next page)

Table (continued)

|    | ne (continue   |  |   |  |   |
|----|--|--|---|--|---|
| s  | <ul> <li>Transition period<br/>of the debt rule in<br/>2016</li> <li>Preventive arm</li> </ul> | • MTO: 0.0%<br>• Debt >60%   | Ensure a durable correction of the excessive<br>deficit in 2015, and achieve a fiscal adjustment<br>of 0.6% of GDP towards the medium-term<br>budgetary objective in 2016.  |  | Advance long-term reform of<br>the pension system. By end of<br>2015, ad opt a healthcare and<br>long-term care reform.   |
| sĸ | • Preventive arm   | • MTO:-0.5%<br>• Debt ≪60%   |   | Take measures to increase tax collection | Improve the cost-effectiveness<br>of the healthcare sector,<br>including by improving the<br>management of hospital care<br>and strengthening primary<br>healthcare.  |
| FI | • Preventive arm   | • MTO:-0.5%<br>• Debt <60%   | Achieve a fiscal adjustment of at least 0,1 % of<br>GDP towards the medium-term budgetary<br>objective in 2015 and of 0,5 % of GDP in 2016.<br>Continue efforts to reduce the fiscal<br>sustainability gap and strengthen conditions<br>for growth. |  | Adopt the agreed pension<br>reform and gradually eliminate<br>early exit pathways. Ensure<br>effective design and<br>implementation of the<br>administrathe concerning municipal structure<br>and social and healthcare<br>services, with a view to<br>increasing productivity and<br>cost-effectiveness in the<br>provision of public services,<br>while ensuring their quality. |
| æ  | • Preventive arm   | • MTO:-1%<br>(overachieved in<br>2015 and at MTO<br>in 2016)<br>• Debt<60% |   |  |   |
| UK | • Corrective arm   |  | Ensure effective action under the excessive<br>deficit procedure and endeavour to correct the<br>excessive deficit in a durable manner by 2016-17,<br>in particular by prioritising capital expenditure.  |  |   |

Source: Commission services

# **Part II**

Recent developments in fiscal surveillance

# 1. INTRODUCTION

Member States that exit the Excessive Deficit Procedure automatically fall under the 'preventive arm' of the Stability and Growth Pact (SGP) which requires a convergence towards a sound Medium-Term budgetary Objective (MTO) in order to secure long-term sustainability of public finances. As shown in Part I, a majority of Member States have reduced their government deficit below the 3% threshold and moved to the preventive arm of the SGP in the recent years. The preventive arm aims at making use of periods when the economy is strong to improve sustainability and bring government finances to a situation in which automatic stabilisers have the room to fully play their role without entailing a breach of the 3% threshold. In order to secure this objective, Member States have to improve their structural budget to attain the 'medium-term budgetary objective' or MTO. In addition, since the reform of the Stability and Growth Pact in 2011 Member States have to implement the Treaty requirement that government debt in excess of 60 % of GDP must be reduced.

Subsequent to the 2011 reform, the Commission published a Communication on flexibility within the SGP in January 2015. (<sup>26</sup>) In this Communication, the Commission provided an interpretation on the degree of flexibility in the existing rules of the preventive arm of the SGP. Firstly, the Commission decided that the preventive arm of the SGP needed to take better account of the economic cycle in individual Member States. In that sense, the Commission provided an operationalization of the provision of article 5 of Regulation (EC) No 1466/97, according to which the rate at which the Member State is required to reach its MTO is determined according to its economic situation.

In this Communication, the Commission provided an operationalization of the provision of the structural reform and investment clauses also contained in article 5 of Regulation (EC) No 1466/97. Improving long-term sustainability — the main objective of the preventive arm — indeed requires more than the implementation of sound budgetary policy on a year-by-year basis. Investments and structural reforms are also needed to bring government finances under control and to boost potential growth.

The two clauses are presented in **Chapter II.4** below. These clauses provide incentives for Member States to:

- introduce structural reforms; and
- protect investments that potentially have the same effects as structural reforms in difficult economic times. In this respect Member States are encouraged to make investments linked to national expenditure on projects co-funded by the EU under the Structural and Cohesion policy, including the Youth Employment Initiative, Trans-European Networks and Connecting Europe Facility, and under the new European Fund for Strategic Investments (EFSI).

The structural balance is the main common analytical tool for measuring a country's budgetary situation and the convergence towards the MTO. Both the MTO and the fiscal targets set in Council recommendations relate to the structural balance. Since 2005 the Commission and the Member States have agreed that the structural balance is calculated by deducting the cyclical component, one-off measures and other temporary measures from the deficit ratio. The strengths and weaknesses of the cyclical correction and the usefulness of parallel indicators when assessing fiscal policy measures adopted are discussed in the 2013 Public Finance Report. Chapter **II.3** presents the practice of implementation of the concept of one-off measures.

In 2006, (<sup>27</sup>) the Commission introduced a number of transparent rules for determining whether or not the measures taken by the government should be classified as one-off. In particular:

i) one-off measures have a transitory budgetary effect that does not lead to a sustained change in the budgetary position;

<sup>(&</sup>lt;sup>26</sup>) COM(2015) 12 of 13 January 2015.

<sup>(&</sup>lt;sup>27</sup>) European Commission (2006)

# ii) as a rule, deliberate policy actions that increase the deficit do not qualify as one-offs.

The rationale for removing the impact of one-off measures when assessing a Member State's budgetary position has been to better identify underlying trends and in particular to provide incentives to policymakers to pursue fiscal consolidation on the basis of measures that lead to a sustained improvement of government finances. Chapter II.3 provides a picture of the existing practice on the treatment of one-offs to take into account a decade of case-law and to clarify how this treatment has been adapted to changes to statistical procedures, in particular the introduction of the new ESA2010 national accounting system, which entered into force in autumn 2014. Although decisions still require some degree of judgement, there are a number of guiding principles the Commission applies when assessing the one-off nature of measures. These are presented in Section II.3.2. The following sections explain how the main stylised cases are treated, based on the guiding principles and past decisions.

Although sustainability can be assessed ex ante on the basis of explicit government liabilities, such as government debt, implicit and contingent liabilities are also a major risk to government finances. It is therefore necessary to develop an understanding of the potential losses that government finances could suffer. The 2011 reform introduced a reporting requirement designed to make this possible. (<sup>28</sup>) The implicit liabilities related to population ageing are relatively predictable and can therefore be taken into account when implementing the preventive arm. (29) Other implicit liabilities, which have a very uncertain impact on government finances, cannot, however, be explicitly taken into account in the debt figure. An example of this type of liability is potential government intervention in the banking sector in times of crisis. There are only model-based estimates available for the potential cost to the government sector of implicit liabilities of this kind being realised, and these estimates depend on a large number of assumptions.  $(^{30})$ 

The value of contingent liabilities can be assessed with more precision, even if the likelihood of a particular liability being realised is too difficult to estimate to require Member States to account for these liabilities as government debt. It is, however, necessary to monitor such liabilities, in order to have an accurate picture of the long-term sustainability of government debt. For this reason, the Six-Pack (<sup>31</sup>) imposed reporting obligations on Member States and Eurostat has started collecting data on some liabilities of this type. These include:

- guarantees issued by the government, which can be called if the original borrower is not in a position to repay the debt;
- the financial liabilities of state-controlled entities, the government being potentially liable to cover any potential losses;
- liabilities of off-balance public-private partnerships (PPPs), which can nonetheless represent potential liability for the government; and
- non-performing loans.

**Chapter II.5** presents and reviews the data on liabilities of this type. It also provides the additional information needed in order to be able to interpret this data correctly.

<sup>(&</sup>lt;sup>28</sup>) See Article 14 of Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States (OJ L 306, 23.11.2011, p. 41).

 $<sup>(^{29})</sup>$  The definition of the MTO takes into account projected ageing-related costs (see Box II.2.1).

<sup>(&</sup>lt;sup>30</sup>) See Fiscal Sustainability Report 2012. Available online at: <u>http://ec.europa.eu/economy\_finance/publications/europea</u> <u>n\_economy/2012/pdf/ee-2012-8\_en.pdf</u>.

 $<sup>\</sup>binom{31}{\text{Council Directive 2011/85/EU.}}$ 

### 2. THE FUNCTIONING OF THE PREVENTIVE ARM OF THE SGP: AN OVERVIEW AFTER THE COMMUNICATION ON **FLEXIBILITY**

The preventive arm of the Stability and Growth Pact (SGP) is expected to gain in prominence in the coming years, in terms of both country coverage and procedure. As seen in Part I of this report, majority of Member States have exited or the others are expected to exit the corrective arm of the SGP and come under the preventive arm. In addition, the preventive arm has recently undergone several changes, which have strengthened its role and made its implementation more accurate, but also more complex.

This chapter aims at explaining in detail the functioning of the preventive arm. It provides an overall view of the economic rationale and the legal basis, as well as the practical implementation and the monitoring process, without dwelling at length on the most technical aspects. (32) Two features of the preventive arm, namely the structural reform clause and the investment clause which were operationalised following the January 2015 Commission Communication on Flexibility within the SGP,  $(^{33})$ are presented more specifically in Chapter II.4.

The rationale of the preventive arm is to promote sound public finances in a forwardlooking way. Forward-looking policymaking has clear benefits. For countries exiting the corrective arm, continuing to improve structural balance positions and thereby reducing excessive levels of debt represents a commitment to a prudent forward-looking economic policy planning, rather than a continuation of the correction of past errors. The preventive arm is designed to ensure that when the next downturn arrives, Member States' public finances are in a position that allows them to make use of counter-cyclical fiscal policy -i.e.a fiscal policy that smooths the business cycle

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instead of amplifying it, thus supporting the economy and limiting job losses during difficult economic times.

Sound public finances are a precondition for stabilising the economy and achieving fiscal sustainability. Bringing public finances to a sound position, and maintaining this position, allows fiscal policy to play its counter-cyclical role over the course of the economic cycle, while ensuring that the budget position remains within the boundaries of the 3% of GDP reference threshold. This policy also preserves the sustainability of public finances in the long term, more precisely ensuring that the debt ratio is reduced to the 60% of GDP reference value and kept below this level.

The role of fiscal policy in stabilising the economy can only be effective if Member States are in a sound fiscal position, thus allowing automatic fiscal stabilisers to operate fully. In good economic times, the operation of automatic stabilisers tends to cause general government revenue to increase, as a result of more vigorous economic activity, while expenditure related to unemployment falls. Member States are therefore expected to use these good times to accumulate savings, thus ensuring that automatic stabilisers will be able to work in the opposite direction during downturns. Implementing prudent fiscal policy in good times is essential to avoid the repetition of mistakes made in the years prior to the economic crisis, when the pro-cyclical policies implemented in good times ultimately deprived certain Member States from a margin of manoeuvre to support the economy when this was needed in the recession.

As regards long-term sustainability, the preventive arm is a key means to tackle debt reduction. Illustrative simulations show that for Member States whose debt is above 60% of GDP and that are currently in the preventive arm, adhering strictly to the requirements of the preventive arm in terms of improvement in the structural balance would also ensure that they reduce their debt in compliance with the debt rule

<sup>(&</sup>lt;sup>32</sup>) A more comprehensive description including all technical aspects can be found in the Vade mecum on the Stability and Growth Pact that is available on the European Commission's website: http://ec.europa.eu/economy finance/publications/occasion

al\_paper/2013/pdf/ocp151\_en.pdf

<sup>(&</sup>lt;sup>33</sup>) Making the best use of the flexibility within the existing rules of the Stability and Growth Pact, COM (2015) 12 of Januarv 2015. Available at: online 13 http://ec.europa.eu/economy\_finance/economic\_governanc e/sgp/pdf/2015-01-

- i.e. the debt criterion of the SGP – by 2017, at the very latest.  $(^{34})$ 

The cornerstone of the preventive arm, since its inception, has been the country-specific medium-term budgetary objectives (MTOs) that Member States should aim for, achieve and maintain. The MTO represents a sound budgetary position expressed in structural terms, i.e. corrected for the impact of the economic cycle and net of one-off and temporary measures. It is calculated in such a way as to take into account each individual country's needs to ensure the longterm sustainability of its public finances, including with regard to the impact of ageing populations. It is also defined so as to provide, in the short to medium term, a safety margin with respect to the 3% of GDP reference value, so that excessive deficits are avoided even in bad economic times. Furthermore, the preventive arm lays down requirements for the adjustment path towards the MTO, which is expressed in terms of changes in the structural balance and modulated depending on the country's cyclical conditions and debt level.

Under normal economic circumstances, there is consistency of methodology between the MTO and the debt rule. There is a need, however, to ensure that it is the case in all circumstances. For this reason the October 2015 Commission Communication on Steps towards completing Economic and Monetary Union (<sup>35</sup>) indicated that, when updating the lower limits for the MTOs (see Box II.2.1) that Member States can set, the Commission will ensure the consistency of such values with the respect of the debt rule in the medium term.

(35) Communication from the Commission to the European Parliament, the Council and the European Central Bank, on steps towards Completing Economic and Monetary Union, COM(2015) 600 of 21 October 2015. Available online at: <u>http://ec.europa.eu/priorities/economic-monetary-</u><u>union/docs/single-market-strategy/communication-emusteps\_en.pdf</u> Several reasons have motivated the recent changes to the preventive arm. First, following lessons learned from the economic crisis, the preventive arm has been reinforced by providing tools to make the analysis of budgetary developments accurate more and more comprehensive. Second, the preventive arm faces some methodological issues, related in particular to the estimation of the structural balance in real time, the identification of revenue windfalls and shortfalls and their impact. Lastly, the Commission has provided guidance on the implementation of the preventive arm to make use of the flexibility existing within the rules, by allowing the economic cycle and the budgetary impact of certain types of investment expenditure and structural reforms to be taken into account.

The surveillance process through which the Commission and the Council regularly monitor progress towards the MTO has also been strengthened. As a consequence of the Six-Pack and Two-Pack reforms (see Section II.2.1), fiscal monitoring has been integrated into the annual surveillance cycle, coordinated with the European Semester and aiming at providing guidance to Member States. As part of the surveillance process, Member States' compliance with the preventive arm for any given year is conducted several times, namely ex ante, in-year and ex post. The information to be provided by Member States has been enhanced, with all Member States having to submit in spring detailed multi-annual budgetary in their stability or convergence plans programmes, and euro area Member States submitting in addition in autumn their draft budgetary plans for the following year.

The main challenge for the preventive arm in the coming years will be to avoid repeating past errors. Since the inception of the SGP, policy errors have been made reflecting both weaknesses in the institutional framework and methodological difficulties associated with assessing the situation in real time, but also limited political will to comply with the agreed fiscal rules, especially in good economic times. In the future, it will be crucial not to repeat these errors, both for the credibility of the framework and for fiscal policy to be able to play an effective role. In particular, close monitoring will be necessary to prevent renewed unsustainable trends in public expenditure and pro-cyclical fiscal policies in good times.

<sup>(&</sup>lt;sup>34</sup>) The simulations use the Commission forecast for the first year of the forecast and assume that the adjustment towards the MTO starts in the second year of the forecast. They also assume that the nominal long-term interest rate on newly issued or rolled over government debt converges to 5% by 2025, that the fiscal multiplier is equal to 0.75 over one year, and that both nominal and real GDP growth converge to the pace seen in normal economic circumstances.

Similarly, Member States need to be more prudent than in the past regarding the use of unexpected windfalls, in particular those resulting from reduced interest payments in the current environment of low interest rates.

This chapter is organised as follows. After a reminder of the legal basis of the preventive arm in Section II.2.1, Section II.2.2 describes how the MTO is defined and at what pace Member States are required to progress towards it. The last section deals with the assessment of compliance, presenting both the methodology and the practical implementation of the surveillance process.

#### 2.1. THE LEGAL BASIS FOR THE PREVENTIVE ARM

The legal basis for the preventive arm comes from both primary and secondary legislation. It is based primarily on Article 121 of the Treaty on the Functioning of the European Union (TFEU), which requires Member States to coordinate their economic policies and introduces multilateral surveillance in this regard.  $(^{36})$  The actual implementation of the preventive arm is governed by secondary legislation, specifically Council Regulation (EC) No 1466/97 (37) and its subsequent amendments. This Regulation requires Member States to submit information on their medium-term budgetary plans in April each year, as part of either their stability programmes (in the case of euro area countries) or convergence programmes (in the case of non-euro area countries). The programmes are then assessed by the Commission and the Council. The requirements relating to the stability and convergence programmes (SCPs) are set out in a harmonised framework, namely the Code of Conduct on the SGP.  $(^{38})$ 

Surveillance and coordination under the preventive arm have been strengthened over the last ten years. The Regulation was first amended in 2005, with the introduction of the requirement that each Member State set a country-specific MTO and an adjustment path towards it. (39) A further set of amendments were adopted in 2011, (<sup>40</sup>) as part of the Six-Pack. These introduced sizeable changes such as the European Semester, the expenditure benchmark and the modulation of the adjustment path towards the MTO according to the position in the economic cycle. The Six-Pack also introduced a procedure for correcting significant deviations from the requirements of the preventive arm, along with the possibility of sanctions for euro area countries that repeatedly fail to comply with the recommendations under the preventive arm, (<sup>41</sup>) and set out requirements to reinforce national budgetary frameworks, in particular regarding statistics, forecasts, numerical rules, medium-term fiscal planning and transparency.  $(^{42})$ 

Although formally outside the SGP, the Fiscal Compact and the Two-Pack have also strengthened the fiscal framework in the euro area. The Fiscal Compact is the fiscal part of the Treaty on Stability, Coordination and Governance (TSCG), a public international law treaty which entered into force on 1 January 2013. The Fiscal Compact, which is only binding for euro area countries, enshrines in national legislation the provisions of the Six-Pack. It does not only mirror them but also makes them more stringent in some aspects, in particular by setting a higher minimum requirement for the MTOs. The Two-Pack, which entered into force in May 2013 and is also specific to euro area countries, does not add any new requirements but strengthens surveillance. More

EFC is a committee set up to promote policy coordination on economic and financial matters among Member States. It is composed of senior officials from national administrations and central banks, the ECB and the Commission.

- (<sup>40</sup>) Regulation (EU) No 1175/2011 of the European Parliament and of the Council of 16 November 2011 (OJ L 306, 23.11.2011, p. 12).
- (<sup>41</sup>) Regulation (EU) No 1173/2011 of the European Parliament and of the Council of 16 November 2011 (OJ L 306, 23.11.2011, p. 1), adopted on the basis of Article 136 TFEU.
- (<sup>42</sup>) Council Directive 2011/85/EU.

<sup>(&</sup>lt;sup>36</sup>) All relevant legislation is available at: http://ec.europa.eu/economy\_finance/economic\_governanc e/sgp/legal\_texts/index\_en.htm

<sup>(&</sup>lt;sup>37</sup>) Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies (OJ L 209, 2.8.1997, p. 1).

<sup>(&</sup>lt;sup>38</sup>) The Code of Conduct, whose full title is Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of the stability and convergence programmes, is an opinion of the Economic and Financial Committee (EFC), endorsed by the Ecofin Council, on the technical implementation of the SGP. The

<sup>(&</sup>lt;sup>39</sup>) Council Regulation (EC) No 1055/2005 of 27 June 2005 (OJ L 174, 7.7.2005, p. 1).

precisely, it requires Member States to submit to the Commission and the Eurogroup their draft budgetary plans (DBPs) in October for the forthcoming year. It also gives independent national institutions a key role in preparing or endorsing macroeconomic forecasts, as well as in assessing compliance with numerical fiscal rules.  $(^{43})$ 

#### 2.2. THE MEDIUM-TERM BUDGETARY OBJECTIVE (MTO) AND THE ADJUSTMENT PATH TOWARDS IT

#### 2.2.1. The MTO

**The MTO is at the core of the preventive arm.** It represents a sound budgetary position which ensures strong public finances both in the short and long term. Under the preventive arm, Member States are required to progress towards their MTOs at an appropriate pace and to maintain this position.

The MTO is defined in structural terms. This means that it is based on the general government budget balance corrected for the estimated impact of the economic cycle (the cyclically-adjusted balance), and net of one-off and other temporary measures, as these do not necessarily imply an improvement in a country's inter-temporal budgetary position. This correction therefore allows the underlying budgetary position to be assessed more accurately.

### The MTO presented by each Member State must fulfil the following requirements: (<sup>44</sup>)

(i) It must provide a safety margin with respect to the reference value of 3% of GDP for the deficit.

(ii) It needs to ensure that public finances are sustainable, or are rapidly progressing towards a sustainable position.

Taking these two first conditions into account, the MTO must allow sufficient room for budgetary manoeuvre to let automatic stabilisers operate fully (in particular, to allow welfare spending to increase and tax revenues to decline mechanically during downturns), while keeping the budget balance within the limit of a deficit of 3% of GDP and the debt under control. Only if a country is above its MTO, it has fiscal space for additional discretionary measures.

(iii) In addition, euro area and ERM2 Member States must have an MTO of at least -1% of GDP. Contracting parties to the TSCG have committed themselves to MTOs of at least -0.5% of GDP, unless their debt ratio is significantly below 60% of GDP and the risks for the long-term sustainability of public finances are low (in which case the lower limit may remain at -1% of GDP).

To ensure compliance with these requirements, the Commission regularly estimates countryspecific lower bounds. For each country, the lower bound (the minimum MTO) is determined by taking the most stringent of the three values corresponding to the three requirements set out above. This is done using a commonly agreed methodology that is described in the Code of Conduct and presented here in Box II.2.1. The calculations are updated every three years, following the publication of the Ageing Report, $(^{45})$ thereby incorporating the latest available projections on the budgetary and economic impact of ageing populations.

Each Member State sets its MTO in its stability or convergence programme (SCP). The MTO must be at least in line with the minimum MTO calculated by the Commission, rounded to the most favourable ¼ of a percentage point. Member States are, however, free to set more ambitious MTOs if they feel that circumstances warrant it. They are required to revise their MTOs at least every three years. Additional revisions can also take place on a case-by-case basis, if a country implements a structural reform with a major impact on the sustainability of public finances, such as a major reform of the pension system. The MTOs currently in place range from a deficit of 1.7% of GDP to a surplus of 0.75% of GDP, with most countries'

<sup>(&</sup>lt;sup>43</sup>) Regulation (EU) No 473/2013 of the European Parliament and of the Council of 21 May 2013 on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the Member States in the euro area (OJ L 140, 27.5.2013, p. 11), adopted on the basis of Article 136 TFEU.

<sup>(44)</sup> Council Regulation (EC) 1466/97.

<sup>(&</sup>lt;sup>45</sup>) See European Commission (2014a).

#### Box II.2.1: The calculation of the minimum MTO

In line with the commonly agreed methodology, country-specific minimum MTOs are calculated on the basis of three values which ensure compliance with the requirements defined in the Regulation.

The first value, the minimum benchmark, corresponds to the required safety margin with respect to the 3% of GDP threshold. It reflects the fact that a country that has experienced greater output volatility and a larger budgetary sensitivity to output fluctuations needs a more demanding MTO to ensure that the 3% of GDP threshold is not breached during a normal economic cycle. Being at least at the minimum benchmark therefore allows a country to let fiscal automatic stabilisers operate fully while remaining within the boundaries of the SGP. In practice, for each country, a particularly weak position in the cycle is identified by a representative output gap (ROG), based on past output gaps excluding outliers. In addition, sensitivity to the output gap is reflected by the estimated semi-elasticity ( $\epsilon$ ) of the budget to the output gap. The minimum benchmark (MTOMB) is then calculated as the 3% limit adjusted for the impact of particularly weak economic times on the budget, measured by ROG multiplied by  $\epsilon$ :

#### $MTO^{MB} = -3 - \varepsilon \times ROG$

The second value is the minimum value that ensures sustainability or rapid progress towards it. It reflects future risks to sustainability derived from the debt level as well as the economic and budgetary impact of ageing populations. The minimum value (MTOILD, where ILD stands for "implicit liabilities and debt") that ensures the convergence of the debt ratio towards prudent levels is computed as the sum of 3 terms. The first term, (a), is the budgetary balance that would stabilise the debt ratio at 60% of GDP. (b) is the budgetary adjustment that would cover an agreed fraction ( $\alpha = 33\%$ ) of the present value of the projected increase in age-related expenditure. (c) represents a supplementary debt-reduction effort specific to countries whose general government gross debt is above 60% of GDP.

$$MTO^{ILD} = \underbrace{Balance_{debt-stabilising(60\% of GDP)}}_{(a)} + \underbrace{\alpha^* AgeingCost}_{(b)} + \underbrace{Effort_{debt-reduction}}_{(c)}$$

The third value reflects the lower bound of -1% of GDP for euro area and ERM2 Member States:

$$MTO^{Euro/ERM2} = -1\% \text{ of } GDP$$

The minimum MTO is the maximum of these three values, rounded to the most favourable quarter of a percent. It is thus the lower bound that simultaneously fulfils all three requirements for a given country:

$$MTO^{min} = max (MTO^{MB}, MTO^{ILD}, MTO^{Euro/ERM2})$$

Finally, the minimum MTO is subject to a feasibility check to ensure that it is consistent with a primary balance of less than 5.5% of GDP.

MTOs falling between a deficit of 1% of GDP and a balanced budget.

#### 2.2.2. The adjustment path towards the MTO

Under the SGP, Member States must achieve and maintain the MTO or be on an appropriate adjustment path towards it. A country is assessed to be at its MTO if its structural balance is at least as tight as its MTO. As a matter of convention, the structural balance is considered to be in line with the MTO if the distance to the MTO is within a margin of 0.25% of GDP. This is to account for uncertainty when estimating the output gap in real time. If the Member State is not at its MTO, it must follow an appropriate path towards it, in terms of change in the structural balance.

The appropriate adjustment path depends on each country's situation. Following the 2005 reform, cyclical conditions are taken into account in the implementation of the SGP, making it more

| Table II.2.1: | Matrix for determining the annual fiscal adjustment towards the MTO required under the preventive arm | n |
|---------------|---|---|
|---------------|---|---|

|                         |  | Required annual fiscal adjustment*   |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|
|                         | Condition                              | Debt $\leq$ 60% and low/medium sustainability risks**  | Debt > 60% or high sustainability risks**                        |  |  |  |  |  |
| Exceptionally bad times | Real growth $< 0$ or output gap $< -4$ | No adjust  | ment needed  |  |  |  |  |  |
| Very bad times          | $-4 \le \text{output gap} < -3$        | 0  | 0.25   |  |  |  |  |  |
| Bad times               | $-3 \leq \text{output gap} < -1.5$     | 0 if growth below potential,<br>0.25 if growth above potential                               | 0.25 if growth below potential,<br>0.5 if growth above potential |  |  |  |  |  |
| Normal times            | -1.5 ≤ output gap < 1.5                | 0.5  | > 0.5  |  |  |  |  |  |
| Good times              | Output gap ≥ 1.5                       | <ul><li>&gt;0.5 if growth below potential,</li><li>≥0.75 if growth above potential</li></ul> | ≥0.75 if growth below potential,<br>≥1 if growth above potential |  |  |  |  |  |

Source: European Commission.

\* All figures are in percentage points of GDP.

\*\* Sustainability risks are assessed on the basis of the S1 indicator, which represents the change in the structural primary balance required by 2020 to bring the debt-to-GDP ratio to 60 % by 2030.

demanding in good economic times, while giving more flexibility in bad times. The Commission has detailed more precisely how the required annual adjustment is modulated, by means of a matrix annexed to the 2015 Communication on flexibility within the SGP. The modulation takes into consideration both the economic cycle and the country's debt level and sustainability needs. As a benchmark, euro area and ERM2 Member States should plan to improve their structural balance each year by 0.5% of GDP in what is defined in the matrix as normal times. In good economic times, however, a faster adjustment is required. This also applies to Member States with debt in excess of 60 % of GDP and Member States whose debt has been assessed as being at high risk of not being sustainable. Conversely, the effort may be reduced during bad times and when sustainability risks are limited. In addition, the required effort takes into account the direction into which the economy is moving, i.e. whether the economic situation is improving or deteriorating. This is assessed by looking at whether real GDP growth exceeds or falls short of the country-specific potential growth rate. Overall, the required adjustment ranges between zero and more than one percentage point of GDP. The various cases are presented in the matrix of requirements (Table II.2.1).

The matrix of requirements includes a "waiver" from structural adjustment in exceptionally bad times. The background for the

waiver is the definition (borrowed from the corrective arm of the SGP) of an exceptionally severe economic downturn as "a negative annual GDP volume growth rate or (...) an accumulated loss of output during a protracted period of very low annual GDP volume growth relative to its potential". (<sup>46</sup>) More specifically, it is considered that in years when real GDP growth is negative or when the output gap is lower than -4% of GDP in the Member State in question, the downturn is so severe that the Member State cannot be required to improve its structural balance. (<sup>47</sup>)

The two requirements of the preventive arm – namely achieving the MTO and implementing more consolidation effort in good times and less in bad times – are not always compatible. There is a tension in the spirit of the Regulation in this regard. Within the spirit of the SGP which privileges sustainability, the current Commission in its Communication on flexibility within the SGP (see footnote 2) has increased the prominence of cyclical conditions and the modulation of effort. This can, at times, prevail over the requirement of reaching the MTO within four years. (<sup>48</sup>)

<sup>(&</sup>lt;sup>46</sup>) Regulation (EC) 1467/97, as modified by Regulation (EC) 1056/2005.

<sup>(&</sup>lt;sup>47</sup>) Finland benefitted from the waiver for 2012 and 2014 and so did Italy for 2014 due to negative growth in those years.

<sup>(48)</sup> While the matrix of requirements is in principle compatible with the principle of achieving the MTO within four years, it may lead, in case of a protracted period of bad economic

## 2.2.3. Allowed temporary deviations from the MTO or the adjustment path towards it

The Communication on flexibility within the SGP has presented two clauses allowing temporary deviations from the MTO or the adjustment path towards it. Their aim is to provide the necessary flexibility to support structural reforms and investment, without compromising fiscal responsibility. The structural reform clause allows Member States that implement major structural reforms to deviate temporarily from the MTO or the adjustment path towards it. The idea is to cater for possible shortterm costs of reforms that are expected to have positive budgetary effects in the long-term, including through the expected positive impact on potential output. Under the investment clause, Member States may similarly be allowed temporary deviations from the adjustment path, in this case to finance specific investment expenditure on projects co-funded by the EU that have positive, direct and verifiable long-term effects on growth and on the sustainability of public finances.

Both clauses are subject to specific conditions and are presented in more detail in Chapter II. 4. In particular, the Member State must remain in the preventive arm, it must preserve an appropriate safety margin with respect to the 3% of GDP deficit limit, and the Member State's budgetary position must be expected to return to the MTO within the period of four years covered by the SCP. In addition, for the investment clause to apply, the Member State must be in bad economic times or worse, as defined in the matrix.

In 2011, a 'general escape clause' was included by the legislator in the preventive arm (and in the corrective arm) in order to accommodate exceptional conditions. It reflects the same spirit as the waiver described above, as it allows for a temporary deviation from the adjustment path, providing that this does not endanger fiscal sustainability in the medium term. This clause is, however, of a more general nature. It is applicable in two possible situations: i) a severe economic downturn affecting the euro area or the EU as a whole; (<sup>49</sup>) ii) 'an unusual event outside the control of the Member State concerned which has a major impact on the financial position of the general government'. (<sup>50</sup>) In view of the wide range of situations that could lead to the application of this clause, the Commission and the Council have to assess each case individually, in order to decide whether it qualifies. This clause has so far not been applied. It is indeed meant to remain limited to exceptional, carefully circumscribed situations to minimise the risk of moral hazard. (<sup>51</sup>)(<sup>52</sup>)

# 2.3. ASSESSMENT OF COMPLIANCE UNDER THE PREVENTIVE ARM

#### 2.3.1. The two-pillar approach

Before the adoption of the Six-Pack, progress towards the MTO was only assessed in terms of change in the structural balance. This first pillar of the preventive arm had been introduced in 2005 alongside the MTO and involves assessing the change in the structural balance against the required annual adjustment. Given its close connection with the MTO, the first pillar remains a crucial element of the preventive arm.

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conditions, to requiring an adjustment that may not be sufficient to reach the MTO within this time horizon.

<sup>(&</sup>lt;sup>49</sup>) It is recalled that the waiver referred to in the previous section makes reference to economic conditions in the Member State itself.

<sup>(&</sup>lt;sup>50</sup>) Council Regulation (EC) No1466/97, as amended as part of the Six-Pack.

<sup>(&</sup>lt;sup>51</sup>) It reflects, however, de facto the same logic as the one underpinning the recovery plan in 2008, under which the adjustment paths were redesigned and Member States agreed on a coordinated temporary fiscal stimulus package in response to extraordinary economic conditions, namely the financial crisis and the recession. See the Commission Communication *A European economic recovery plan*, COM (2008) 800 of 26 November 2008. Available online at:<u>http://eur-lex.europa.eu/legal-</u>

<sup>(&</sup>lt;sup>52</sup>) The Commission is willing to use these provisions to accommodate the incremental spending resulting from the exceptional inflow of refugees in certain Member States, as this is considered an unusual event outside the control of government. It will monitor the situation closely on the basis of observed data as provided by the authorities of the Member States concerned to determine eligible amounts. This information will be used when assessing (ex post) possible temporary deviations from the SGP requirements for 2015 and 2016. This means that deviations deriving only and directly from the net extra costs of the refugee crisis will not lead to any stepping up in the procedures. This applies also to the opening of an Excessive Deficit Procedure provided that the general government deficit remains close to 3% of GDP in case of a breach of that threshold.

The Six-Pack has introduced a second pillar to operate in parallel to the structural balance: the expenditure benchmark. (53) Experience has shown that monitoring the structural balance alone is not sufficient to provide an accurate and comprehensive picture of budgetary developments, and two main weaknesses have been identified. First, failure to meet fiscal targets tends to result mainly from the dynamics of expenditure, while revenue tends to follow GDP. Second, as mentioned above, real-time estimates of the structural balance are highly uncertain, especially in periods of large shocks to the economy - on the positive or negative side. (54) This is particularly true for revenue and may result, in times when the economy is strong, in revenue windfalls which Member States tend to spend rather than save to build fiscal buffers. This is also the case for revenue shortfalls in downturns. Controlling expenditure allows Member States to run a more counter-cyclical fiscal policy.

The aim of the expenditure benchmark is to prevent increasing trends in the expenditure-to-GDP ratio which are not properly backed by revenue measures. While government revenues (mainly taxes and social contributions) are largely driven by macroeconomic developments, expenditure depends more directly on government decisions. Keeping expenditure growth under control is therefore essential for steering public finances towards sound positions over the medium term. This is the case if expenditure grows at the same pace as potential GDP, i.e. if the ratio of expenditure to potential GDP remains unchanged. The level of the expenditure-to-GDP ratio itself is, however, not constrained: governments remain free to choose their preferred size of government, as long as increases in expenditure are matched by additional revenues - which must result from measures, not windfalls. It is for this reason that the regulation refers to a *net* growth rate of government expenditure, i.e. a growth rate that is net of discretionary revenue measures and of revenue increases mandated by law.

Operationally, in order to capture only items that are mostly under the control of government, the expenditure aggregate is recalculated. Certain expenditure items are netted out from the aggregate because they are not considered to be discretionary spending: (1) the cyclical component of unemployment benefits, as it depends on cyclical conditions, (2) interest payments, as they are not directly within the government's control, and (3) expenditure matched by EU funds, as it is not funded by general government. Furthermore, public investment is smoothed over four years to avoid the calculation being affected by peaks related to the public investment cycle. This corrected expenditure aggregate is then adjusted for discretionary revenue measures and revenue increases mandated by law. On this basis, the growth of net public expenditure in nominal terms is computed. It is then deflated, using the change in the GDP deflator, to obtain the growth rate in real terms. Similarly, the nominal expenditure figures submitted by Member States in their SCPs are converted into real terms by the Commission to allow comparison with the benchmark.

The real growth of net expenditure is compared to that of potential GDP averaged over ten years – the 'reference rate'. This is a reference medium-term rate of potential GDP growth that is both backward- and forward-looking (covering the years t-5 to t+4) and updated on a yearly basis. It reflects a medium-term time horizon that is long enough to reduce the bias of short-term fluctuations in growth, while being short enough to remain of relevance for policymaking.

The maximum net growth of expenditures allowed depends on the distance to the MTO (and the effort required from the Member State, as explained in Section II.2.2.) Member States that have attained their MTO are required to ensure that expenditure growth does not exceed the reference rate, or that any excess is funded by discretionary measures. (<sup>55</sup>) Over time, this will

<sup>(&</sup>lt;sup>53</sup>) A longer presentation is available in European Commission (2011).

<sup>(&</sup>lt;sup>54</sup>) Indeed the estimate of the structural balance is based on estimates of many unobservable variables, including the output gap, proxies for tax bases and elasticities of tax receipts to the tax bases. In addition to the general uncertainty related to the imperfections of these real-time estimates, the assessment of the structural balance may be affected by unexpected developments in tax revenues which are decoupled from the evolution of standard tax bases For more details, see, European Commission (2013), Part Ш Available online at: http://ec.europa.eu/economy\_finance/publications/europea n economy/2013/pdf/ee-2013-4.pdf

 $<sup>(^{55})</sup>$  Articles 5(1) and 9(1) of Council Regulation (EC) No 1466/97.

result in both government revenue and spending increasing at the same pace, thus keeping the structural balance stable at the MTO. (<sup>56</sup>) By contrast, countries that are not yet at their MTO are required to contain net expenditure growth at a lower rate, below potential GDP growth: thus, expenditure will decline as a ratio to GDP, the structural balance will strengthen and the gap with the MTO will close over time. (<sup>57</sup>) Both the reference rate and the lower rate are revised on a yearly basis. In addition to the constraint on net expenditure growth, any discretionary reduction of government revenue items needs to be matched by cuts in expenditure or by discretionary increases in other government revenue items.

Overall, the expenditure benchmark has enriched the EU fiscal surveillance toolbox. It reduces the uncertainty surrounding the structural budget balance, and it strengthens effectiveness and transparency, as the budgetary aggregates under consideration are observable and under the control of government, and the relationship between the outcome of the assessment and the measures to be taken is direct. The expenditure benchmark is meant to refine the assessment, as an indicator of the fiscal effort that a Member State has effectively implemented, in parallel to the analysis in terms of change in the structural balance. As both pillars are based on different although complementary concepts and variables, elements that are not captured in the structural balance will show in the comparison between the expenditure aggregate and the change in the structural balance with the two indicators giving opposite signals. This comparison is performed in the so-called overall assessment, which is described in more detail below.

#### 2.3.2. The surveillance process

The Commission and the Council assess compliance with the SGP through the surveillance process. In particular, they assess whether Member States converge towards the MTO (or maintain it, for Member States that have already reached it) and comply with the Council recommendations, with the view of possibly deciding whether it is necessary to open a Significant Deviation Procedure (SDP).

#### Timing of the assessment

Budgetary plans and outcomes are regularly assessed against the requirements of the preventive arm within a multilateral surveillance framework. The assessment is carried out by the Commission and the Council on the basis of information provided by Member States and Commission forecasts. Following the adoption of the Six-Pack, the assessment takes place along an annual surveillance cycle, in which Member States are given guidance for the current year, the following year and the medium-term, and procedural steps can be taken in case noncompliance is observed ex post.

Member States are required to submit their budgetary plans for assessment, with additional requests for euro area Member States.(58) Member States must submit their SCPs to the Commission and the Council each year in April. The SCPs provide detailed information on the outturn of year *t*-1 and on budgetary medium-term plans up to year t+3, according to a standardised format and content. This includes in particular the MTO and the planned adjustment path towards it, a range of economic and budgetary data and a quantified description of the envisaged budgetary strategy, especially with regard to the intended policy measures. Since the entry into force of the Two-Pack, euro area Member States have in addition been required to submit their Draft Budgetary Plans (DBPs) for the following year in autumn each year.

In terms of procedure, the most important assessment is the ex post assessment, which is conducted in spring of each year. It consists in

<sup>(&</sup>lt;sup>56</sup>) However, the Code of Conduct states that countries that have overachieved their MTO are allowed to deviate from the expenditure benchmark, as long as the MTO is not jeopardised over the programme period, taking into account the possibility of significant revenue windfalls.

<sup>(&</sup>lt;sup>57</sup>) The difference between the reference rate and the lower rate is referred to as the convergence margin. Its size is country-specific and depends on the size of the public sector (the share of government primary expenditure in GDP) and on the required tightening of the structural balance under the first pillar (a higher adjustment requirement translating into a larger convergence margin).

<sup>(&</sup>lt;sup>58</sup>) Euro area Member States which are under a macroeconomic adjustment programme are, however, not required to submit a stability programme.

assessing whether each Member State complied with the requirements of the preventive arm during the previous year and over the last two years on average, based on outturn data. In case a Member State fails to comply, further analysis establishes whether non-compliance is significant, which would trigger an SDP. An SDP can only be launched on the basis of outturn data, which only becomes available in the spring. This is therefore the only time in the surveillance cycle when an SDP can be initiated (see Sub-section II.2.3.3).

In addition, the ex-ante and in-year assessments are intended to alert Member States of possible risks of deviations from the requirements and thus provide guidance for further adjustments. In this way, guidance is provided to Member States throughout the whole budgetary cycle. In spring of each year, along with the ex-post assessment, compliance is also assessed by the Commission for the current year and over the medium term, (59) on the basis of the SCPs and the Commission's spring forecast. As part of the European Semester, the Council then adopts opinions on the SCPs and issues policy guidance in the form of fiscal country-specific recommendations (CSRs) addressed to Member States, following Commission recommendations. Member States subsequently take the CSRs into account when preparing the budgets for the following year during the second half of the year. For euro area Member States, this is completed in autumn by an ex ante assessment for year t+1, as well as a further in-year assessment for year t, on the basis of both the DBPs and the Commission's autumn forecast. This assessment feeds into the Commission's opinion on the DBPs. If the Commission identifies particularly serious noncompliance in a DBP, it shall request in its opinion a revised DBP on which it will adopt a new opinion.

#### The freezing principle

To ensure the predictability of the ex post assessment and allow Member States to plan ahead the appropriate measures, the requirements are frozen over the assessment cycle. Predictability is crucial in a context where a significant deviation from the requirements will lead to procedural consequences, which eventually include financial sanctions for euro area Member States. Yet, the requirements in terms of structural adjustment and expenditure growth depend on economic conditions forecast in the Member State, in particular its output gap. Given the intrinsic volatility of output gap estimates, these requirements could turn out to change between the ex-ante and ex-post assessments for a given year. In order to keep the outcome of the ex-post assessment predictable and to preserve the guidance spirit of the preventive arm, the requirements are therefore frozen. More precisely, the required adjustment path for a given year is set in the spring of the previous year, and it remains the reference against which developments are assessed in the following years. There are however two cases for which the requirements based on outturn data prevail over the frozen ones. The first case is when the output gap turns out to deteriorate and be larger than -3% of GDP (i.e. the Member State is found to be in very bad times or exceptionally bad times), because the initially required adjustment turns out to be too large. The other case is when the Member State is found to have achieved its MTO, because the required adjustment is no longer necessary.

# In technical terms, several variables are frozen at the level at which they are forecast in the spring of year *t*-1.

- First, the structural balance and therefore the distance from the MTO, both for year *t-1*, are frozen and used to assess whether a country is at its MTO as a starting point – if it is, no adjustment will be required. ( $^{60}$ )

- For the assessment under the first pillar, the freezing regards the debt-to-GDP ratio and the sustainability risk indicator S1, both also for year t-1, as well as real GDP growth and the output gap, both for year t, as these are used to determine where the Member State stands in the matrix of requirements for year t and therefore what change in the structural balance is required. On this basis, the required adjustment for year t is formulated in

<sup>(&</sup>lt;sup>59</sup>) Ex-ante evaluation for year t+1 and qualitative assessment for years t+2 and t+3.

<sup>(&</sup>lt;sup>60</sup>) However, in each forecast round, the structural balance for year *t*-1 as fixed in the spring of year *t*-1 is compared to its level for the same year according to the new forecast, and the more favourable of the two is used to identify the starting point.

*t*-1, and compliance is assessed both in years t and t+1.

- Freezing is applied in a similar way for the assessment against the expenditure benchmark. The reference rate, the applicable convergence margin and the resulting lower rate for year t are communicated in the spring of year t-1 and frozen until the ex post assessment in year t+1. This means that the benchmark for the net growth of expenditure is not affected by the subsequent yearly updates of the reference rate and the convergence margin.

#### The assessment of compliance in practice

The first step of the assessment, whether ex ante, in-year or ex post, regards the distance to the MTO. After checking that the MTO defined by the Member State considered is at least as demanding as the minimum MTO as calculated in Box II.2.1, the Commission assesses whether the MTO has been achieved. This is the case if the Member State has a structural balance at least as tight as its MTO. As a convention, a country is considered to be at its MTO if it is within a margin of tolerance of 0.25 % of GDP, to account for uncertainty in the measurement of the structural balance. Member States which have achieved their MTO are required to maintain this position, and Member States which have overachieved it have some fiscal space available.

**Compliance with the preventive arm is assessed against the required adjustment as defined in the matrix, possibly corrected for the impact of the relevant clauses.** If the conditions are met, the "flexibility" clauses – the structural reform clause and the investment clause – may allow a Member State to temporarily deviate from its MTO or the adjustment path towards it, as described in Chapter II.4. The general escape clause may also apply if it is assessed that the conditions are met.

The assessment of compliance builds on an overall assessment combining the two pillars. Both the structural balance and the expenditure benchmark are taken into account. (<sup>61</sup>) For each

pillar, three outcomes are possible: either the Member State complies with the requirements, or it deviates from them but to a limited extent, or it deviates significantly. A significant deviation from the MTO or the adjustment path towards it is defined, for the first pillar, as a deviation of the structural balance of at least 0.5% of GDP over one year or cumulatively in two consecutive years (i.e. at least 0.25% of GDP on average per year in two consecutive years). Similarly, for the expenditure benchmark, a significant deviation is a deviation in the net expenditure developments that has an impact on the government balance of at least 0.5% of GDP over one year or cumulatively over two consecutive years. (62) The ex post assessment is therefore conducted not only in respect of the year *t*-1 under consideration but also taking into account the preceding year t-2 to check the cumulative deviation over the two years. The aim is to avoid small deviations (below 0.5%) from cumulating year after year and sum up to a large deviation.

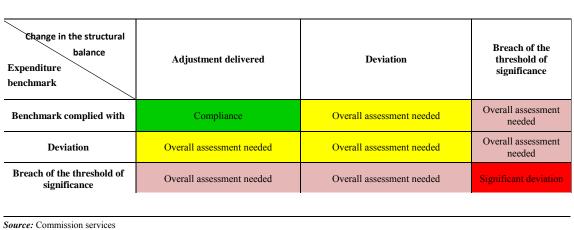
In-depth analysis is needed in case of conflicting signals between the two indicators. As the structural balance and the expenditure benchmark are based on different concepts and variables, they can send out different messages. They each provide a partial evaluation of the situation, meaning that neither can be considered as being the 'right' indicator. The expenditure benchmark is nonetheless, in general, a preferable and less endogenous indicator of fiscal effort, in so far as the bottom-up evaluation of measures is not distorted and 'hidden' non-regulatory government actions are absent. (63) On the other hand, the two indicators are complementary and, taken together they provide a comprehensive picture of a Member State's fiscal position. The overall assessment should therefore systematically analyse the factors explaining the differences between the two pillars, in order to identify which reflects better the specific situation under consideration and conclude accordingly. These factors are presented in Box II.2.2.

The outcome of the overall assessment depends on how the two pillars combine. The Code of

<sup>(&</sup>lt;sup>61</sup>) As stated in Regulation 1466/97. The only exception regards Member States that have overachieved their MTO, in which case only the structural balance is relevant and compliance with the expenditure benchmark does not need to be assessed.

<sup>(&</sup>lt;sup>62</sup>) Articles 6(3) and 10(3) of Council Regulation (EC) No 1466/97.

<sup>(&</sup>lt;sup>63</sup>) A typical case is tolerated tax evasion or elusion, which may be practised by certain governments in certain circumstances.



Note: The column "Deviation" corresponds to some deviation that remains below the threshold to conclude on a significant deviation

Possible outcomes of the overall assessment under the preventive arm of the SGP

Conduct specifies that a deviation is considered significant if indicators point to deviations that reach the threshold for significance, as defined

Table II.2.2:

above. In case the deviation reaches the threshold for significance for only one of the indicators, the deviation is considered significant if the overall assessment also shows some deviation, although below the significance threshold, with respect to the other condition. As a result, several cases are possible, as shown in Table II.2.2. When both indicators show compliance with the required adjustment (green cell) or both indicate a significant deviation from it (red cell), the conclusion of the assessment is straightforward. When the messages provided by the two indicators differ (yellow and pink cells), the conclusion will be based on an in-depth analysis assessing the differences between the two indicators and deciding whether the deviation can be considered significant overall. It is only possible to conclude that there is a significant deviation, and therefore that an SDP should be launched for the Member State in question, if the deviation from at least one indicator has reached the threshold of significance (corresponding to the red and pink cells). By contrast, the cases represented by the yellow cells cannot lead to an SDP.

# 2.3.3. The significant deviation procedure (SDP)

The SDP was introduced as part of the Six-Pack, as a way of making the requirements of the preventive arm more binding. It builds on the lessons learnt from the past, as peer pressure alone proved insufficient to avoid persistent noncompliance with the preventive arm. The general aim of the SDP is to give Member States stronger incentives to make sufficient progress towards the MTO in particular when economic circumstances allow it. Unlike the Excessive Deficit Procedure which is opened on the basis of objective conditions (relating to the evolution of the debt and deficit ratios), the SDP is intended to make sure that the Member State in question complies with the fiscal recommendations issued publicly by the Council during the European Semester. If a euro area Member State repeatedly fails to comply with a recommendation, it may face financial sanctions under the preventive arm.

#### The successive procedural steps start with a warning in the spring and may lead to a financial sanction in November of the same year.

- If a significant deviation is observed in the expost assessment in the spring (conducted on the basis of data for the year t-I), the first step is for the Commission to issue a warning under Article 121(4) TFEU, thus launching an SDP.

- Within one month, the Council adopts a recommendation, based on a Commission recommendation, on the policy measures that the Member State must take to address the deviation.

- At most five months later (or in very severe cases at most three months later), the Member

#### Box II.2.2: The main factors explaining possible differences between the two pillars.

There are four main factors that explain why the change in the structural balance and the change in the expenditure benchmark may provide conflicting messages as to whether a Member State is complying with the requirements of the preventive arm. These factors result from differences in the methodologies used to calculate the two indicators. An in-depth analysis therefore needs to be carried out, examining the two indicators, in order to determine, on a case-by-case basis, which indicator is the most relevant.

To understand the sources of discrepancies between the two indicators, it is useful to recall that the structural balance (SB) is defined as the cyclically adjusted headline balance, net of one-offs and temporary measures, as summarised in the following equation:

$$SB_t = bal_t - oo_t - \left[(\rho_0^r - 1)\frac{R_0}{Y_0} - (\rho_0^g - 1)\frac{G_0}{Y_0}\right]OG_t$$

where  $bal_t$  represents the headline budget balance,  $oo_t$  one-offs and temporary measures,  $R_t$  total revenues,  $G_t$  total expenditure,  $Y_t$  nominal GDP,  $\rho_0^r$  and  $\rho_0^g$  the cyclical revenue and expenditure elasticities and  $OG_t$  the output gap.

The adjusted expenditure aggregate (E) used to calculate the expenditure benchmark is defined as:

$$E_{t} = G_{t} - U_{t}^{c} - I_{t} - EU_{t} - GFKF_{t} + \frac{1}{4}\sum_{i=0}^{3}GFKF_{t-i}$$

where  $U_t^c$  stands for cyclical unemployment expenditure,  $I_t$  interest payments, expenditure on EU programmes that is matched by revenue from EU funds and  $GFKF_t$  public investment (gross fixed capital formation), which is replaced by its four-year average so as to avoid penalising Member States for peaks in investment.

According to the expenditure benchmark, for Member States that have reached their MTO, adjusted expenditure should grow in line with the reference rate unless increases are matched by discretionary revenue measures  $(DRM_t)$ . (<sup>a</sup>) The growth rate of E net of DRM, should therefore not exceed  $(r^* + \pi^*)$ , where  $r^*$  is the reference rate and  $\pi^*$  is the average of the spring and autumn forecasts in the year t-1 for GDP-deflator inflation for year *t*:

$$(1+r^*)(1+\pi^*)E_{t-1} = (E_t - DRM_t)$$

On the basis of these equations, it is possible to identify four main factors that may lead to differences between the two indicators:

- (i) Possible bias in the cyclical adjustment of the budget balance. This may be caused by non-standard behaviour of the elasticities \(\rho\_0^r\) and \(\rho\_0^g\) and, in particular, of tax elasticities, which would result in revenue windfalls or shortfalls. If the observed elasticities differ from the standard ones, it may mean that the cyclical adjustment is attributing a part of the budget that is in fact transitory to the structural balance. So as the revenue shortfalls are artificially lowering the structural balance (or, conversely, that revenue windfalls are artificially increasing it), the expenditure benchmark could therefore provide a more reliable assessment.
- (ii) Presence of one-off or other temporary measures (oot), on either the revenue or the expenditure side. Unlike the structural balance, the expenditure benchmark takes into account all measures without correcting for those of a one-off or temporary nature. The

<sup>(&</sup>lt;sup>a</sup>) For the sake of simplicity, this box does not consider the case of Member States which have not yet reached their MTO and whose net expenditure is expected to grow at a lower rate. The reasoning is, however, the same.

#### Box (continued)

structural balance therefore provides a clearer view of the structural nature of the measures taken.

(iii) Divergences resulting from the difference between annual potential growth and potential GDP growth averaged over a ten-year period. The two indicators use two different potential growth rates: the structural balance uses a one-point, and therefore more volatile, estimate while the expenditure benchmark uses a more stable 10-year moving average. The inaccuracy of the one-point potential growth estimates used to calculate the structural balance will therefore become apparent when this indicator is compared with the expenditure benchmark.

**Divergences resulting from the different expenditure aggregates used when calculating the two indicators.** Certain expenditure items (the cyclical component of unemployment benefits, interest payments and expenditure matched by EU funds) are excluded when calculating the expenditure benchmark. In addition, public gross fixed capital formation is smoothed over four years. This may create differences between the change in this indicator and the change in the structural balance.

State reports on action taken. If the Member State is found to have failed to take appropriate action, the Commission immediately recommends that the Council adopt, by qualified majority voting, a decision establishing that no effective action has been taken. The Commission may also recommend that the Council adopt a revised recommendation on the appropriate measures to be taken.

- If the Council does not adopt the decision on no effective action and the Member State in question persists in not taking appropriate action, the Commission issues a new recommendation for a Council decision on no effective action within one month of the previous one. This new recommendation is subject to reverse simple majority voting in the Council. (<sup>64</sup>)

- In the case of euro area Member States, within 20 days, the Commission recommends to the Council to adopt a decision requiring an interest-bearing deposit of 0.2% of GDP. (<sup>65</sup>)

- Finally, the Council votes on the adoption of this decision by reversed qualified majority voting within 10 days. (<sup>66</sup>)

Given the consecutive steps, this decision would be taken by November of the year in which the SDP was launched.

<sup>(&</sup>lt;sup>64</sup>) This means that the decision is adopted unless a majority of Member States votes against it.

<sup>(&</sup>lt;sup>65</sup>) Regulation (EU) 1173/2011 of the Parliament and the Council, based on Article 136 TFEU.

<sup>(&</sup>lt;sup>66</sup>) The Council may also vote to amend the Commission's recommendation and adopt the amended text as a Council decision, by qualified majority voting.

# **3.** ONE-OFF MEASURE-CLASSIFICATION PRINCIPLES USED IN FISCAL SURVEILLANCE

#### 3.1. INTRODUCTION

Since the 2005 reform of the Stability and Growth Pact (SGP), the concept of 'structural balance', i.e. the cyclically-adjusted balance net of 'one-off and other temporary measures', has become a cornerstone of fiscal surveillance. The rationale for removing the impact of one-off and other temporary measures (referred to here collectively as 'one-off measures') when assessing a Member State's budgetary position has been to better identify underlying trends and in particular to reduce the incentive for national authorities to resort to 'fiscal gimmickry', i.e. improving budgetary results in the short term by means of easy-to-implement measures that do not lead to a sustained improvement of the general government balance. In general terms, one-off measures could therefore be defined as: 'measures having a transitory budgetary effect that does not lead to a sustained change in the budgetary position'.

The ability to correctly identify 'one-off measures', as defined in the SGP, is thus crucial for carrying out fiscal surveillance. The definition provided above can, however, only be a starting point for the actual process of identifying individual such measures. More specific guidance, including an indicative and open list of one-off measures, was developed in the wake of the 2005 SGP reform, and published in the 2006 Report on Public Finance in the EMU. The Commission has since been using this guidance as a point of reference for its surveillance activities.

There are several reasons to review the guidance laid down in the 2006 Report on Public Finance in the EMU. First, it has become apparent that the existing guidance is not always conclusive, often leaving substantial scope for interpretation, in particular in relation to measures not mentioned explicitly in the indicative and open list of measures. Second, the classification of one-off measures has necessarily been a learning process. New cases have appeared that the guidance did not cater for, and principles as to how to treat certain cases have been refined over time. Finally, a number of statistical revisions (in particular the introduction of ESA2010) have made

it necessary to update the indicative and open list contained in the 2006 Report, for example, because some of the transactions included are now regarded as financial transactions (i.e. no longer affect the headline deficit).

These factors illustrate the need for both updated guidance on typical cases, and also further work on the theoretical basis (the 'guiding principles'). A better developed set of guiding principles for classifying transactions as one-offs will make the criteria used by the Commission in its fiscal surveillance more transparent. It will also form a more solid basis for decisions on the one-off nature of future, as yet unknown, cases. The classification of a measure needs to be based on an overall assessment of that measure against the guiding principles presented below. In some cases, a certain degree of judgement may still need to be used, in particular in cases where different guiding principles appear to point to different decisions (for instance when determining the boundary between 'normal economic fluctuations' and the impact of an 'exceptional event').

This chapter develops such guiding principles and examines how they can be used in determining the 'one-off' nature of a measure. It is structured as follows: Section II.3.2 explains the guiding principles used for assessing the oneoff nature of a measure; Section II.3.3 provides examples of frequently occurring one-offs and explains the rationale for their treatment based on the guiding principles set out in the previous section; and Section II.3.4 discusses a number of measures that have 'borderline' characteristics, and explains why they have ultimately, however, not been considered one-off measures.

# 3.2. GUIDING PRINCIPLES FOR THE CLASSIFICATION OF ONE-OFF MEASURES

## 3.2.1. Principle I: One-off measures are intrinsically non-recurrent

One-off measures are transactions that have, by their very nature, only a temporary, nonrecurrent impact on general government revenue or expenditure. For this to be the case, a one-off measure must have an inherent characteristic that makes its impact temporary, i.e. a characteristic that means that it cannot have a sustained impact on the budgetary position. As a rule, a maximum of two years could be considered a reasonable length of time for defining temporariness. Great care needs to be taken, however, in assessing the duration of the effect of a measure. In particular, if similar one-off measures are introduced repeatedly over the course of several years, this does not change the fact that each individual measure has a temporary impact that cannot lead to a sustained improvement in the budgetary position. A government can, for example, sell a series of non-financial assets over a period of time (i.e. repeating a particular type of transaction), but this does not alter the fact that a systematic liquidation of such assets can never become a sustainable source of government financing, as the stock of assets is depleted further with every sale. In such cases, the measures in question should still be considered individually as one-off measures. (67) Ultimately, it is the intrinsic inability of a measure to lead to a sustained change in the budgetary position that determines its oneoff nature.

#### Measures identified as one-offs are very often, although not always, of one of the following types:

a) Measures creating short-term benefits, accompanied by a significant reduction in government assets or a build-up of future liabilities. The implicit reasoning is that systematically running down non-financial assets (such as land or buildings) or building up liabilities can, in principle, never become a permanent source of government financing and should therefore be considered a one-off measure, even in cases where there is a sequence of similar transactions taking place over a period of several years. The impact of such measures would therefore be considered one-off.

# b) Measures entailing a short-term lump-sum benefit at the expense of a recurrent future cost.

In certain situations, policymakers may create a very short-term gain which also creates recurrent costs in the future (either in the form of lower revenue or increased expenditure). A typical example would be a case where the government is systematically substituting for ownership with rental contracts. (68) The future cost is also often somewhat hidden. This is particularly the case when the general government receives a payment in one year, in return for services or entitlements it will provide over a longer period of time. In such cases, the recurrent future cost consists of the loss of revenue that would have been collected had the services or entitlements been granted on an annual basis. In general, the short-term benefits would be produced either through the treatment of the measure in national accounts, or as a result of the behaviour of economic agents. This would be the case, for example, when firms or consumers derive some benefit from early or advanced payments, creating a very short-term peak in government revenue. Irrespective of how the gain is generated, when a lump-sum benefit of this type is created at the expense of a recurrent future cost, the shortterm gain should be considered one-off, as it cannot become a permanent source of government financing. On the other hand, once the measure has been taken, the future costs also created are recurrent, and therefore structural.

c) Measures implying a change in the timing of revenue or expenditure that create a temporary peak (positive or negative) in revenue or expenditure patterns. Changes in the timing of recurrent revenue or expenditure patterns also often create very short-term transitional effects. For example, if a tax administration is able to considerably shorten the period between the occurrence of a taxable transaction and the settlement of the tax, there would be a temporary increase in tax revenue in the year the measure is introduced. A temporary impact of this kind should be considered one-off (any permanent effect of course being structural). The justification for this treatment lies in the transient nature of the peak, it

<sup>(&</sup>lt;sup>67</sup>) For a more detailed discussion on the sale of non-financial assets, see also Section II.3.3.5. An important factor in the classification of this example as a one-off would be the fact that there is a systematic depletion of the stock of assets.

<sup>(&</sup>lt;sup>68</sup>) This example also illustrates that classification of a measure as a one-off does not necessarily imply a judgement on the quality of the measure: substituting ownership with rental contracts may — depending on the contractual arrangements — reflect very sound and cost-saving policies by the government. This does not, however, affect the one-off nature of the budgetary impact of the sale.

being essentially a temporary side effect of a transition from one steady state to another.

d) Measures introduced in direct response to 'exceptional events' and that have a very shortterm impact. Exceptional events are defined for this purpose as: specific occurrences that can be regarded as being beyond the control of the government, and that have an often sudden impact on the revenue/expenditure or assets/liabilities of the general government or of the country, that is temporary by nature and significantly exceeds normal economic fluctuations. The fact that an exceptional event may have occurred unexpectedly and that its impact could not have been foreseen by policymakers when drafting their budgetary plans is not relevant to the assessment of the one-off nature of measures taken in response to it. The critical factor is that the impact of the measure is inherently temporary and does not have the potential to affect the budgetary position in a more permanent manner. It is often, although not always, the case that the one-off budgetary impact of a measure taken in response to an exceptional event results from implicit or even hidden liabilities that have been building up over several years and that materialise as a result of the measure. A typical example would be a court ruling that a tax collected over a number of years is unlawful and needs to be repaid. The classification as one-off is justified by the transient nature of the budgetary impact of the exceptional event. In the example of a court ruling, the entire budgetary impact may be accrued in a single year, even though the tax was collected over many years prior to this. The direct link to the exceptional event needs to be interpreted in a restrictive manner, i.e. only those measures that have been introduced as an inevitable consequence of the event or that are strictly necessary to prevent the event from having an even greater negative impact can be considered one-offs (<sup>69</sup>) (see also Principle IV below).

Furthermore, the occurrence of exceptional events should, as a rule, be evaluated at micro level. The term 'exceptional events' should not be interpreted as covering a general worsening of the economic or environmental conditions throughout the year, but should be understood to mean punctual events, such as the default of a systemic bank, nation-wide flooding caused by a single, unusually severe storm or court decisions with significant budgetary impact.

An additional difficulty may arise due to the fact that exceptional events can have a permanent as well as a temporary effect. In the previous example of a court ruling, the repayment of unjustified taxes would create a very short-term impact, but the court ruling may also have an effect on the future tax base. This would thus be a structural (i.e. not a one-off) effect. Unlike in this example, however, the distinction may not always be immediately clear: while some of the effects of an exceptional event may remain very short term (i.e. not extending beyond the standard two-year period), the impact could ultimately, at least in part, also become recurrent. In such cases, it may be necessary to review the one-off nature ex post and possibly reclassify at least part of the budgetary impact as structural. When the budgetary impact of an exceptional event extends beyond the two-year period, there should be a strong presumption that at least part of the impact is of a structural nature and therefore needs to be deducted from the one-off effect. As a rule, the impact recorded after the end of the two-year period should not be classified as part of the oneoff effect. Such revisions are similar to statistical revisions of the actual deficit figure and should be avoided as much as possible, as they may hinder effective policy surveillance (see also Principle II hereafter).

Where a measure is not of one of the types listed as cases (a) to (d) above, it could still be classified as a 'one-off', but use of this label should nonetheless be restricted. In particular, the attribution of the one-off label should always be based on a careful assessment of: (i) the likelihood of recurrence; (ii) the level of control the government has (see Principle IV below); and (iii) the risk of giving the wrong incentive to policymakers with respect to the transparency and overall soundness and sustainability of public finances. In particular, it is important to avoid

<sup>(&</sup>lt;sup>69</sup>) It should also be noted that all transactions classified as one-offs are considered to be 'fiscal policy measures' – i.e. interventions by the government to change past policy orientations that are specified in sufficient detail, adopted or credibly announced, and that have a direct incremental budgetary impact – even though some of these transactions may not be fully under the control of the government (such as the implementation of court rulings or decisions taken by EU authorities). In other words, for budgetary surveillance purposes these actions are conventionally considered as fiscal policy measures, despite their somewhat less discretionary nature.

creating a situation where the possible recognition of a, potentially sizeable, transaction as a one-off would provide an incentive to policymakers to build up arrears or accumulate losses, or to present specific categories of intrinsically structural expenditure (such as gross fixed capital formation) as one-off expenditure. The exceptional size of the impact of a measure or event is not alone a sufficient condition for classifying it as a one-off measure.

# 3.2.2. Principle II: The one-off nature of a measure cannot be decreed by law or by an autonomous government decision

In order to ensure timely and effective policy surveillance, it should be possible to evaluate the one-off nature of a measure unambiguously upon its announcement. For that reason, the oneoff nature of a measure should not depend on whether the policymaker announces the measure as temporary or permanent. Policy measures announced as temporary often later become permanent (even when their temporary nature is enshrined in legislation), whilst measures announced without an expiration date may be terminated shortly after their entry into force. Making the one-off nature of a measure dependent on the way it is announced would lead to inconsistencies: two otherwise identical measures could be assessed differently purely because of the way they have been announced. This would be neither meaningful nor acceptable. Furthermore, the frequent ex post revision of classifications that would be needed on any occasion where the actual course of events differed from the announcement would make the concept of one-off measures unusable for real-time fiscal surveillance.

For this reason, the one-off nature of a measure cannot depend on the way it has been announced by policymakers. Since it is not practical to wait and see to what extent the impact of a measure really is temporary, the classification as a one-off needs to rely exclusively on the inherent characteristics of the measure (mentioned under Principle I) that prevent it from having a sustained impact on the budgetary position. This is particularly the case for changes in tax or contribution rates or in aggregate expenditure levels that are announced (or legislated) by policy makers to be temporary. Apart from very shortterm transitional effects, as referred to under Principle I(c) above, the impact of changes to tax or contribution rates or to aggregate expenditure levels should always be considered as structural, even if the change is reversed shortly after its initial introduction. In such cases, the reversal of the initial measure also qualifies as a structural measure. A corollary to this principle is that temporariness alone is not a sufficient condition for identifying a one-off measure; many temporary measures are not, in fact, one-off.

# 3.2.3. Principle III: Volatile components of revenue or expenditure should not be considered one-off

The concept of one-offs should not be 'misused' as a way of smoothing the volatility of particular components of government revenue or expenditure. It is clear that the cyclical part of revenue or expenditure (i.e. the part that is correlated to the output gap) should not be considered as a one-off, as its impact is already corrected for via the cyclical adjustment of the general government balance. But even after this cyclical adjustment, revenue or expenditure components may still exhibit a significant degree of volatility. The concept of one-offs is not, however, primarily intended to smooth time series and should therefore not be used to correct for this kind of volatility. Identifying one-offs is, instead, intended to filter out certain transactions that intrinsically cannot lead to a sustained improvement of the government balance. Moreover, the volatility of some components of revenue and expenditure does not even result from a policy measure and also for this reason does not qualify as a one-off measure. Nevertheless, it may not always be easy to distinguish between the intrinsic volatility of revenue and expenditure and measures taken in response to an exceptional event (Principle I(d)).

# 3.2.4. Principle IV: Deliberate policy actions that increase the deficit do not, as a rule, qualify as one-offs

The provisions on one-offs were primarily introduced in order to avoid policy measures that do not lead to a sustained improvement of the budget balance being treated as structural. In order to give policymakers the right incentive to fully recognise the permanent budgetary impact of their actions, there is therefore a strong presumption that deliberate policy actions that increase the deficit are of a structural nature. These measures should only exceptionally be classified as one-offs, in cases where it can be unambiguously demonstrated that they have an intrinsic temporary nature.

As a result, the principles listed above need to be implemented in a restrictive manner for deficit-increasing measures. This holds in particular for deficit-increasing one-off measures introduced in response to 'exceptional events', as described in Principle I(d). Only measures designed to counter the very direct impact of an exceptional event that can be considered to be strictly outside the government's control should be eligible for potentially being classified as one-offs. By contrast, when the government has been building up implicit and/or contingent liabilities, which could reasonably be expected to materialise at some point in time (e.g. by giving guarantees to loss-making public companies), the event triggering the liability should not be considered exceptional and the resulting budgetary impact should also not be considered a one-off. Great care should also be taken to avoid a situation where the concept of one-off measures creates an incentive for policymakers to deliberately accumulate payment arrears or losses in the hope that these could all subsequently be settled simultaneously without affecting the structural balance. Lump-sum upfront expenditure resulting from a deliberate policy action (i.e. unrelated to an exceptional event) aimed at reducing expenditure in the future would, as a rule, also not qualify as a one-off.

# 3.2.5. Principle V: Only measures having a significant impact on the general government balance should be considered one-offs

As a rule, measures worth less than 0.1% (rounded) of GDP should not be considered one-offs. Widening the definition to a larger number of measures would considerably increase the complexity of the task of monitoring government finances. Moreover, smaller measures are also more likely to be part of the day-to-day management of government finances, and use of such measures would therefore mainly contribute to the normal volatility of public finances (see also Principle III).

Nonetheless, one-off measures are not strictly limited to only those worth at least 0.1 % of GDP. First, in cases where a number of similar measures can be logically grouped together (by nature of the measure, or as a result of having similar adoption procedures, e.g. a reform package), and have a combined impact of at least 0.1 % of GDP, the aggregated impact could be classified as a one-off. Second, measures worth less than 0.1 % may be classified as one-offs for reasons of consistency across Member States, in particular when an exceptional event affects several Member States in a similar way. An example of this is major statistical revisions. The impact of the introduction of ESA2010 on Member States' contributions to the EU budget has been treated as a one-off in all Member States, even though the effect was less than 0.1 % of GDP in some Member States. Finally, the impact of some measures may be recorded statistically in two successive years, but the classification of the measure should remain the same. If the measure has the inherent characteristics of a one-off listed in Principle I, it would be sufficient that the measure has an impact of at least 0.1 % of GDP in one year for it to be classified as a one-off for both years (i.e. the budgetary impact attributed to the other year would still be recognised as a one-off, even though it may be less than 0.1 % of GDP in that year).

#### 3.3. AN INDICATIVE LIST OF 'TYPICAL' ONE-OFF MEASURES, WITH JUSTIFICATIONS FOR THE CLASSIFICATION OF EACH

This section presents a list of stylised examples of one-off measures, compiled on the basis of the experience gathered over the last decade in the classification of one-off measures. The list is not designed to be exhaustive, but provides a broad sample of frequently occurring cases, together with the reasoning as to why (or why not) these measures should be considered one-offs, with explicit reference being made to the general principles set out above. These cases should serve as guidance for assessing the measures actually being used by governments. Nevertheless, it should be emphasised that expert judgement is still required, as the characteristics of each individual measure need to be examined carefully on the basis of the general principles listed above.

### 3.3.1. Tax amnesties and other similar arrangements that generate a lumpsum tax revenue

Tax amnesties (and other similar arrangements) often include incentives for taxpayers that may lead to exceptional peaks in government revenue. Measures of this type may therefore qualify as one-offs. Tax amnesties (and other similar arrangements) are understood here to mean any government decision allowing private or corporate taxpayers to regularise their position visà-vis the tax authorities on relatively favourable terms (which may include a temporary reduction of administrative fines or the authorities removing the threat of criminal prosecution). Tax amnesties may involve a significant group of taxpayers being offered an incentive to regularise their position before a given point in time (after which the conditions for a settlement are likely to become considerably less attractive), thereby effectively creating an exceptional peak in revenue just before the arrangement is expected to expire. The incentive for taxpayers to act is usually created by the scheme having a pre-defined expiration date, but it could also result from the high risk (as perceived by the taxpayers) that an existing scheme will be discontinued at a specific point in time. If such an exceptional peak in revenue occurs, it can be classified as a one-off. The treatment as a one-off measure is justified on the basis of Principle I(b).

The above reasoning does not exclude the possibility that some tax amnesties (and other similar arrangements) may also have a permanent impact, or be in themselves of a permanent nature. Successful tax amnesties may in some cases contribute to a permanent increase of the tax base, thereby also generating a permanent increase in tax revenue (in addition to the possible one-off effect). This impact is clearly of a structural nature. Similarly, open-ended tax settlement schemes in which taxpayers can come forward to regularise their position (in exchange for payment of an administrative fine, for example) and which do not have a pre-defined (or generally understood) ending date would also not normally generate exceptional peaks in government revenue. The introduction of an open-ended scheme would qualify as a structural fiscal policy measure and would have a permanent impact from its first year in force. The critical distinguishing feature here is the presence of incentives that lead to an exceptional peak in revenue.

# 3.3.2. Peaks in tax collection triggered by the introduction or expected introduction of new tax rules

In a similar way to tax amnesties with a fixed expiration date, the announcement of new tax rules may also generate significant one-off peaks in tax collection. In some cases, if the tax regime being introduced is considerably less favourable, taxpayers may be allowed to advance their settlements to before the entry into force (or expected entry into force) of the new rules, thereby benefiting from the more favourable regime for a certain number of transactions that would otherwise have come under the new regime. In such cases, the general government balance may profit from some exceptional revenue in the year preceding the year in which the new tax rule is applied. This effect may have been created intentionally or unintentionally by the government, but is usually at the expense of future revenue from after the date on which the new tax regime is actually implemented. If the temporary peak in revenue is significant and clearly observable, the excess revenue can be considered as a one-off. A concrete example would be when the government announces a significant increase in the tax rate paid on reserved profits when a company goes into liquidation. The announcement of this increase may prompt, in particular, owners of microcompanies close to retirement age to advance the liquidation of their company, in order to ensure that they still benefit from the lower tax rate. This would create a peak in the revenue collected from this liquidation tax in the year before the tax increase is introduced. The treatment as a one-off measure is justified on the basis of Principle I(b).

A possible temporary reduction in tax revenue immediately following the introduction of the less favourable tax regime would not normally be classified as a one-off effect. After the introduction of the new, less favourable tax regime, it may be normal for tax revenue to be lower for a certain period, possibly up to several years. This can be understood as the logical counterpart to the one-off peak in tax collection seen prior to the reform. The change in tax revenue after the introduction of the reform is likely to be less pronounced, however, as the loss in revenue may be spread over a longer period of time. The effect of lower tax revenue is deficit-increasing and may also be more difficult to quantify given the uncertainty as to what is the new steady state following the introduction of the new tax regime. For these reasons, the change in revenue is considered part of normal volatility and not a oneoff effect.

Nonetheless, there are many tax reforms that may not generate a peak in tax collection. If no pronounced peak in tax collection can be identified, the measure should not be classified as a one-off. This may be the case where, for example, the announced increase in the tax rate is small (e.g. a marginal increase in VAT) or is part of a wider tax reform, where the impact of different aspects of the reform cannot be clearly distinguished.

# 3.3.3. Permanent changes to the timing of recurrent revenue or expenditure

Permanent changes to the timing of items of recurrent revenue or expenditure may create exceptional peaks that qualify as one-offs. A typical example would be a decision to permanently bring forward the settlement of income tax, which would cause additional revenue to be generated from income tax in the first year following its entry into force. Although the measure is permanent, it creates an exceptional and temporary peak in tax revenue in its first year, which should be recorded as a one-off effect. A similar logic also applies to decisions to permanently delay the timing of certain categories of recurrent expenditure. For example, if the government usually approves a certain investment grant towards the end of the year, it could at some point decide to delay the approval of applications for grants and, from then on, not approve them until the beginning of the following year. If the expenditure were recorded as being at the date of the government's decision to issue the grant, there would be a one-off gain in the first year in which the new schedule is in force. (<sup>70</sup>) The treatment as a one-off measure is justified on the basis of Principle I(c).

When a particular item of expenditure is permanently accelerated, however, the potential temporary effect should not be considered as a one-off. This follows the logic of Principle IV: the measure would be fully under the control of the government and is deficit-increasing. Moreover, it might be difficult to maintain that the increase in expenditure is a temporary effect resulting only from a shift in timing, and to exclude entirely the possibility that it may lead to a permanent increase in the level of expenditure. It is therefore prudent not to consider a measure of this type as a one-off.

# 3.3.4. Exceptional changes to the timing of recurrent revenue or expenditure

Decisions to exceptionally shift the timing of items of recurrent expenditure or revenue also sometimes constitute one-off measures. A typical example would be a decision to exceptionally shift the timing of the payment of an annually recurring investment grant, thus not paying it out one year while paying it twice the following year. If the government subsequently resumes its normal payment structure, a transaction of this type creates a temporary fall in expenditure in the first year, which is fully offset by a symmetrical temporary increase in expenditure the following year. Both the deficit-reducing impact in the first year and the deficit-increasing impact the following year should be classified as one-off effects. The treatment as a one-off measure is justified on the basis of Principle I(c). For the deficit-increasing part, an exception to Principle IV is justified on the basis of the strict symmetry between the deficit-increasing and deficit-reducing effect of the measure.

An important distinction should be made between the cases described above and decisions to shift the timing of *non*-recurrent items of expenditure or revenue, which normally do not create one-off effects. This can be illustrated using the example of a government that is planning to make an investment in a project but then subsequently postpones its plans by one year. The question as to how to treat the postponement of the investment decision depends on how the investment decision was originally recorded (in particular, whether the investment was considered to be a policy measure or part of the no-policy-change baseline projection). If the initial investment decision was considered to be part of the no-policy-change baseline projection

<sup>(&</sup>lt;sup>70</sup>) For many transactions, however, changes in timing of this type may only be visible in cash terms. As a general rule, following the accrual principle, capital transfers in cash should be recorded as occurring at the time the liability is established, regardless of the payment schedule.

(because the investment was not of exceptional size and did not alter the trend projection of investment), then the postponement of the project should also not be considered a fiscal policy measure and *a fortiori* also not a one-off. If, on the other hand, the project was of such magnitude that it would have altered the no-policy-change government investment path, the initial investment decision should be considered as a fiscal policy measure. A decision to delay the investment to the next year would simply lead to the cancellation of the measure in the first year, and the re-introduction of the same measure in the next year, neither of which should be considered one-offs.

#### 3.3.5. Sales of non-financial assets (71)

A common example of a one-off measure is the sale of real estate (e.g. land and buildings). However, it is to be noted that not all real-estate sales have the characteristics of a one-off. In particular, real-estate transactions that are part of the day-to-day management of government assets, in which some buildings may be sold to be replaced by more suitable ones, generally do not qualify as one-offs. The classification of a sale as a one-off should be based on the following two criteria: (i) whether the transaction contributes to a significant aggregate drop in government assets of the same type (i.e. the government is systematically selling off buildings or land in net terms); and/or (ii) whether the measure will lead to higher recurrent costs in the future (for instance because the government is systematically substituting for ownership with rental contracts). For cases such as these, the treatment as a one-off measure is justified on the basis of Principle I(a) or I(b) respectively.

Payments for licences and concessions also often used to be classified as one-offs under ESA95, but their importance as a source of one-off transactions is much reduced under the ESA2010 accounting treatment. Very often, governments issuing licences or concessions for a number of years receive a lump-sum payment at the time when the licence or concession is granted. Under ESA95 accounting rules, the entire payment was recorded as negative expenditure at the time when this transaction took place. Accordingly, the payment was considered to be a one-off. However, the prevalence of such cases has been reduced considerably with the introduction of the ESA2010 accounting standard. In particular, in most cases the proceeds will now be distributed in accrual terms over the lifetime of the license (in most cases recorded as 'Rent', ESA2010 code D.45), even if on cash basis the government receives the payment as a lump-sum. The rent is then a recurrent source of government revenue and is obviously not a one-off. Only in the remaining cases where payments are still recorded as negative expenditure ('Acquisitions less disposals of non-produced non-financial assets, ESA2010 code NP) at the time of the payment, the transaction should be considered one-off. For those cases, the treatment as a one-off measure is justified on the basis of Principle I(b).

The sale of several other types of non-financial asset could also fall under this same general heading. The sale of CO2 emission rights ('Assigned Amounts Units' under the Kyoto Protocol) is one of a number of clear cases in which the government is selling assets, and thus generating one-off revenue at the time of the transaction. Another example would be the sale of non-financial assets that the government has acquired in the context of a bank rescue operation.

3.3.6. Exceptional revenue from the taking over of the assets and liabilities of pension schemes of entities classified as being outside general government

Under ESA95 accounting rules, the takeover of pension funds was a frequent source of one-offs. When a government takes over the assets and liabilities of pension schemes of entities classified as being outside the general government, significant lump-sum payments may be made from that entity to the general government in return for the government covering future pension liabilities. Under ESA95, the transfer of the assets of the fund was recorded in a single year as a deficit-improving capital transfer, which was considered to be a one-off measure.

Changes in the accounting treatment brought in under ESA2010 are likely to mean that transactions of this type are a much less

<sup>(&</sup>lt;sup>71</sup>) This paragraph refers exclusively to non-financial assets (e.g. buildings, land, licences and concessions), as, according to ESA2010 accounting rules, the disposal of financial assets does not affect the general government balance.

**frequent source of one-offs.** Providing the assets transferred to the government and the actuarial value of the pension scheme's future liabilities are balanced, under ESA2010 the lump-sum payment received by the government should now be recorded as a financial transaction that does not have an impact on the general government deficit. In accrual terms, the revenue will, very generally speaking, be distributed over the years in which the liabilities of the scheme materialise. Overall, the general government balance is not affected by a balanced pension fund transfer, and the impact on revenue and expenditure will be recurrent.

In the case of an unbalanced pension fund transfer, however, any assets transferred to the general government in excess of the liabilities would still qualify as a one-off. When the assets of the pension fund are greater than the liabilities, the excess transfer of assets (i.e. the part not matched by liabilities) would be recorded as a deficit-improving capital transfer at the time of the takeover. This would imply that the government was generating lump-sum revenue by drawing on its assets (or those of public companies under its control), and the revenue should therefore be recorded as a one-off. *The treatment as a one-off measure is justified on the basis of Principle I(a).* 

When the assets of the pension scheme are smaller than the liabilities, the resulting capital transfer should not be considered a one-off. This treatment is justified by the fact that the transfer is, in this case, deficit-increasing and fully under the control of the government: not classifying this as a one-off is fully consistent with Principle IV.

3.3.7. Temporary peaks in revenue or expenditure resulting from a ruling issued by a court or another independent authority, or from major statistical revisions

Court rulings (and decisions issued by other independent authorities) may give rise to significant and very short-term positive or negative peaks in government revenue or expenditure, which qualify as one-offs. Court rulings often lead to lump-sum payments, designed to compensate for damages or implicit liabilities that have accumulated over a long period of time (often without the government being aware of them). These rulings can usually be considered to be 'exceptional events', as defined above, and any peak in government revenue or expenditure directly resulting from them can therefore be classified as a one-off. Important issues to consider in assessing the one-off nature are: (i) whether the ruling or decision can be considered as an exceptional event (which may require a certain degree of judgement); and (ii) whether the resulting revenue/expenditure measures were directly prompted by the ruling or decision (the effect of any decision made by the government in excess of what is ordered by the court would normally not qualify as a one-off). Typical examples would be the reimbursement of taxes or subsidies that were found to be unlawful. Any recurrent impact the court ruling may have would also, of course, not qualify as a one-off. A very similar justification could also be given for fines paid following a decision taken by another independent authority (such as the EU). The treatment as a one-off measure is justified on the *basis of Principle I(d).* 

A similar conclusion could be reached for reimbursements from, or additional payments to, the EU budget, made necessary by major statistical revisions or changes in EU legislation. When such reimbursements or additional payments exceed the level of normal fluctuations and are linked to over- or underpayments from several years, there would be clear grounds for qualifying them as one-offs. The major statistical revision or change in EU legislation that triggers the reimbursement/payment could be considered an exceptional event, with budgetary implications that are beyond the control of a single Member State (a circumstance which also justifies the classification as a one-off in the case of deficit-increasing payments). When major statistical revisions of this type affect all Member States simultaneously, the impact of such revisions is classified as one-off for all Member States, for the sake of consistency, even if the 0.1 % of GDP criteria is not met for some countries. The treatment as a one-off measure is justified on the basis of Principle I(d). An exception to Principle V is also justified for reasons of equal treatment.

The one-off nature of reimbursements of or financial corrections to EU funds by Member States, following a decision issued by an EU institution (e.g. in cases where not all conditions attached to the funding have been met), may be more difficult to assess. On the one hand, such reimbursements or corrections may occur quite frequently, as the Commission reviews the eligibility of operational programmes and funded projects, and whether they are meeting the conditions of the funding, on a continuous basis. The reimbursements and corrections may also involve relatively small amounts. In view of this, these payments should be considered a normal recurrent feature of government finances (i.e. part of normal volatility) and do not qualify as oneoffs, according to Principle III. On the other hand, in exceptional cases (in particular towards the end of a programming period), the Commission may undertake a more extensive audit, potentially covering a wide range of projects (e.g. all the projects being carried out under a specific operational programme) and, in particular, a number of successive years. The results of the audit could lead to very short-term reimbursements or corrections of a higher value, connected with irregularities that have been accumulating over a much longer period of time. In such cases, the audit could be considered an exceptional event, in a similar way to a court ruling, and the resulting reimbursements or corrections would therefore qualify as one-off measures. In summary, a reimbursement or correction must meet all of the following criteria simultaneously in order to be classified as a one-off: (i) the reimbursement or correction should be linked to a single exceptional event; (ii) the impact should exceed the level of normal fluctuations; (iii) the reimbursement or correction should relate to irregularities that have accumulated over several years; and (iv) the impact is recorded in at most two successive years in accrual terms. When the above conditions are met, the treatment as a one-off measure is justified on the basis of Principle I(d).

Given, however, the complexity of these cases, the temporary nature of reimbursements of or corrections to EU funding may be difficult to assess *ex ante*. It is conceivable that, for practical reasons (such as the capacity of the audit service to screen a large number of projects in a short period of time), the reimbursements or corrections take place over a longer period of time, which would give grounds for a strong presumption that at least part of the impact has a more structural nature. An *ex post* review of the one-off nature may therefore be required. This could lead to a reclassification or partial reclassification of a measure.

#### 3.3.8. Short-term costs associated with emergency response to major natural disasters or other exceptional events

The short-term cost of emergency measures taken by a government in response to a major natural disaster may be considered as a one-off, even if these measures are deficit-increasing. The classification as a one-off depends on all conditions for an exceptional event being fulfilled. In particular, the exceptional event must: (i) be a specific, punctual occurrence (e.g. an unusual amount of rainfall throughout the year would not normally qualify, whereas a specific storm of exceptional magnitude could); and (ii) have a sudden impact on the revenue/expenditure or assets/liabilities of the general government or the country, exceeding the level of normal fluctuations, meaning that the government is forced to react. Consistent with the general approach to exceptional events, only costs that are directly and immediately caused by the disaster can be considered one-offs, i.e. the cost of the measures needed in order to limit the damage to the government or to the country and to prevent the disaster from having an even more significant impact (e.g. direct medical relief and shelter for victims and the cost of limiting pollution or destruction). As a rule, compensatory payments to households or businesses which are not directly triggered by the exceptional event and for which the government has a larger degree of discretion would not be considered as one-offs. Generally, expenditures that follow with a considerable delay after the exceptional event are less likely to be true emergency costs, even though they may still be linked (indirectly) to the event. The exceptional nature of such costs depends on the size of the country and on country-specific factors. These are therefore the factors which should be considered when deciding whether to classify a measure as a one-off. (For example, a forest fire of a certain magnitude might be considered as an exceptional event if it occurs in a particularly small Member State, but not if it is in a very large Member State). The treatment as a one-off measure is justified on the basis of Principle I(d).

Short-term emergency costs may also relate to events other than natural disasters. A case in

point is a capital transfer by the government to systemic banks to prevent them from collapsing. The potential collapse of a systemic bank can be considered an exceptional event that is beyond the control of the government, and could potentially have a major impact on the economy. Furthermore, the action taken by the government to prevent systemic damage to the financial system and the economy as a whole can be considered as a direct response to this exceptional event, which, as stated, the government could not have avoided. Note, however, that in the wake of the 2008 financial crisis, no explicit distinction was made between government intervention to prevent the collapse of systemic and non-systemic financial institutions: all deficit-increasing capital injections into distressed financial institutions have been treated as one-offs. (<sup>72</sup>) The treatment as a one-off is justified on the basis of Principle I(d).

# 3.4. STANDARD CASES NOT TO BE CONSIDERED ONE-OFFS

This section sets out a number of measures generally not considered to be of a one-off nature. This list should be read in conjunction with the list of measures that are typically oneoffs, provided in the previous section. It contains a variety of measures that have a number of borderline characteristics. This section explains the reasons why, on the basis of the principles listed above and after careful consideration, these measures have not, however, been classified as one-offs.

# 3.4.1. Participation in large-scale military operations

The potentially considerable budgetary cost of participation in large-scale military operations does not generally qualify as a one-off. In particular, international conflicts do not generally qualify as exceptional events as referred to in Principle I, as: (i) the event triggering the intervention does not usually have an immediate and sudden impact on expenditure or on the assets of the government or the country, but instead has an impact in the medium term; (ii) the cost of the intervention is often recurring or spread over several years (despite large-scale operations often being announced as temporary) and Member States often engage in several operations (of varying scale and budgetary impact) simultaneously or in rapid succession, further substantiating the conclusion that this cost is a structural feature of government expenditure; and (iii) given that the measure is deficit-increasing, it should also be taken into consideration that many of these operations are for the most part within the control of the government. *The rejection as a one-off measure is justified on the basis of Principles I and IV*.

# 3.4.2. Large-scale infrastructure works and acquisition of military equipment

In the same way as any other form of government investment, large-scale infrastructure works and expenditure on military equipment are considered a structural component of government expenditure. Even if the budgetary impact of individual transactions is sufficiently sizeable to be considered a deviation from the no-policy-change baseline, and therefore recorded as a fiscal policy measure, such measures are not considered as one-offs, as they are deficitincreasing and fully under the control of the government. *The rejection as a one-off measure is justified on the basis of Principles I and IV*.

### 3.4.3. Exceptional dividends from state-owned enterprises and central banks

Property income (including dividends from state-owned enterprises (SOEs) and central banks) is a regular and structural source of government income. Although property income can show a certain degree of volatility, changes in revenue from property (including dividends) that occur as a result of normal economic fluctuations should not be categorised as one-offs. Such fluctuations are, moreover, not a fiscal policy measure. *The rejection as a one-off measure is justified on the basis of Principle III.* 

Fluctuations in dividends may not be caused only by volatility in the underlying profits, but also by changes in the 'normal' dividend policy. Dividend policies (which the government, as the owner of the company, may have significant

<sup>(&</sup>lt;sup>72</sup>) Also in the opposite case, when following a bank rescue operation the government is recovering part of the injected capital in the form of a capital transfer from the financial corporation, this transaction would be considered one-off.

influence on) could, for example, include a rule that a certain fraction of the entrepreneurial profit is paid out to the company's shareholders. A decision to change the fraction of profits to be paid out, even temporarily, although qualifying as a policy measure, should, however, not be considered as a one-off. The reason for this lies in the general principle that one-offs cannot be decreed by law or by an autonomous government decision. Opening up the possibility to classify cases of this type as one-offs would inevitably lead to multiple ex post revisions, as temporary deviations from the 'normal' policy can be repeated and may eventually replace the 'normal' policy. A similar reasoning would apply to cases where SOEs do not have a 'normal' dividend policy (i.e. where the dividend is fixed every year on an ad hoc basis). Changes made to the dividend of these SOEs would also not qualify as one-offs. The rejection as a one-off measure is justified on the basis of Principle II.

Changes in the profits of corporate or central banks may nonetheless qualify as one-offs if they are the result of an exceptional event. Whereas the 2006 Report on Public Finances in the EMU mentioned 'exceptional dividends of stateowned companies' as part of the 'indicative and open list of one-off measures', the current provisions clarify that normal volatility and changes in dividend policy do not qualify as 'exceptional'. Instead, a dividend being classified as one-off is strictly linked to the existence of an exceptional event, in accordance with Principle I(d). It should, however, be noted that such cases are likely to remain rare, in view of the ESA2010 provisions on 'super dividends'. According to ESA2010, a dividend payment exceeding the 'Entrepreneurial income (ESA2010 code B.4) excluding holding gains' of a state-owned enterprise should be recorded as a financial transaction ('Capital withdrawal', ESA2010 code F.5) not affecting the general government balance. In practice, many 'exceptional' dividends may therefore turn out to be super dividends, thus precluding possible classification as a one-off.

## 3.4.4. Exceptionally high tax revenue not attributable to changes or announced changes to tax rules

Exceptionally high tax revenue that is not the result of changes or announced changes to tax

rules is not a one-off. In some cases, exceptionally high tax revenue (in particular from corporate taxation or wealth taxes) can be attributed to significant fluctuations in the tax base, unrelated to any change or announced change to tax rules or to any other policy measure. This is the case, for example, if taxes are only levied when certain profits are paid out or when certain holding gains materialise. In such cases, profits or holding gains that have accumulated over many years may become taxable in a single year, giving rise to a potentially significant peak in tax revenue. The absence of any change in tax legislation or of a link to a policy measure introduced before or after the peak supports the view that such variations are part of the 'normal' economic fluctuations inherent to the design of the tax system (although they can have a very sizeable temporary impact) and should not be confused with (one-off) fiscal policy measures. The rejection as a one-off measure is justified on the basis of Principle III.

## 3.4.5. Hosting major events, including major sports events

The budgetary impact of hosting major events including major sports events should not be considered a one-off. The organisation of events of this type is fully under the control of the government and therefore does not qualify as a potential one-off. The rejection as a one-off measure is justified on the basis of Principle IV.

#### 3.4.6. Revenue from the exploitation of nonrenewable natural resources

Revenue resulting from the exploitation of nonrenewable natural resources is not considered a one-off. Strictly speaking, it could be argued that revenue resulting from the exploitation of nonrenewable natural resources (such as oil, coal and gas) goes hand-in-hand with a depletion of the stock of these resources, and therefore that it has one of the particular characteristics of a one-off (see Principle I(a) above). Nevertheless, given the typically very long period of time over which it is generated (usually several decades), regular revenue from the exploitation of non-renewable natural resources is considered to be recurrent. *The rejection as a one-off measure is justified on the basis of Principle I*.

#### 3.4.7. Costs related to the EU presidency

Costs related to the EU presidency are not considered to be a one-off, but are viewed as a structural component of EU membership. In particular, costs related to the EU presidency should not be considered exceptional events, as defined in Principle I(d), as the costs are, at least partly, under the control of the government and, in practice, rarely exceed what could be considered normal fluctuations. Moreover, the expenditure is deficit-increasing. An additional consideration is that, in practice, it is very difficult to distinguish costs related to the EU presidency from other administrative costs, which complicates the task of estimating their impact. The rejection as a one-off measure is justified on the basis of Principles I and IV.

#### 3.4.8. Financial support to SOEs including lossmaking SOEs

Providing financial support to loss-making state-owned enterprises is, as a rule, not considered a one-off. This can be explained by considering the statistical treatment of expenditure of this type: whenever the government provides funds while receiving something of equal value in return and expecting to earn a sufficient rate of return, this is recorded as a financial transaction (e.g. loans or the acquisition of equity). Since this does not affect the general government balance, it can also not be considered a one-off. The cases that do not fall into this category are mainly transactions that are recorded as 'Capital transfers' (ESA2010 code D.9), i.e. transactions where the government either: (i) does not receive equal value in exchange; (ii) does not expect a sufficient rate of return; or (iii) provides funds to a corporation that has shown a series of losses in the recent past. In many cases, the loss-making nature of the SOE receiving the transfer is a structural feature, which would preclude qualifying its need for financial support as an exceptional event. In addition, allowing financial support to SOEs to potentially be classified as a one-off measure would actually create an incentive for policymakers to let losses accumulate until the point where they are large enough to be absorbed in the form of a one-off measure. Moreover, the decision to grant support to the SOE under the conditions mentioned above is fully under the control of the government, and clearly deficit-increasing. Overall, these arguments

clearly support a decision not to classify such transactions as one-offs. *The rejection as a one-off measure is justified on the basis of Principles I and IV.* 

One possible exception could be government expenditure directly related to the privatisation or voluntary liquidation of an SOE (termination costs). The aim of this expenditure is very specifically to allow the privatisation of a loss-making SOE or to terminate its operations entirely. In these exceptional cases, the deficitincreasing impact of the underlying transaction(s) could be accepted as a one-off, provided that: (i) the government has entirely renounced control of the company and will have no further financial involvement, or the company itself ceases to exist (therefore precluding a possible recurrence of the transaction); or (ii) the transaction can be unequivocally demonstrated to be beneficial for public finances by virtue of the fact that it permanently cleans up the accounts of the lossmaking SOE (for instance by closing down lossmaking subsidiaries or business units) and permanently halts the recurrent stream of liabilities originating from it.

An additional complication may arise when support to SOEs including loss-making SOEs takes the form of guarantees, which may be called at some point in time. Whilst a guarantee has not been called, it forms a contingent liability for the government. Once it has been called, it creates a capital transfer which is economically very similar to that which occurs when a government provides support to a loss-making SOE by means of a direct capital injection, especially in terms of the expected change in the financial situation of the company and the budgetary impact of the transaction for the government. Differentiating between the two types of transaction in terms of their one-off treatment may therefore lead to regulatory arbitrage, with the method that is subject to less stringent treatment in terms of budgetary surveillance becoming the preferred way to provide financial support to SOEs. Similarly to capital injections into SOEs, including loss-making SOEs, these transactions should thus as a rule not be considered as one-offs. The rejection as a one-off measure is justified on the basis of Principles I and IV.

A call of guarantees could, nonetheless, constitute a one-off if it has been prompted by the occurrence of an exceptional event. As the classification of this measure as a one-off would, however, still depend on: (i) the company being in good financial shape when it received the guarantee (i.e. not loss-making); (ii) the call and the release of the guarantee being connected to an exceptional event, as referred to in Principle I (in particular, an event which is beyond the control of with an impact that the government and significantly exceeds normal economic fluctuations); (iii) government guarantees of this kind being an exceptional practice in the sector or in the economy in general; and (iv) the company not having previously benefited from similar guarantees. Non-compliance with any of these requirements would constitute a strong argument against considering the call as a one-off measure.

# **4.** THE COMMUNICATION ON MAKING THE BEST USE OF FLEXIBILITY WITHIN THE STABILITY AND GROWTH PACT

This chapter presents the rationale behind and the practical implications in the context of the preventive arm of the SGP (see Chapter II.2) of the Commission Communication *Making the best use of flexibility within the existing rules of the Stability and Growth Pact* (<sup>73</sup>), issued on 13 January 2015. The Communication provided new guidance on the implementation of the Stability and Growth Pact (SGP), with the aim of ensuring that best possible use is made of the flexibility that is built into the existing rules of the SGP, rather than changing these rules. As a result, no legislative steps were needed and the Commission was able apply this new guidance immediately. (<sup>74</sup>)

The new guidance is designed to strengthen the link between structural reforms, investment and fiscal responsibility, in order to support jobs and growth. Its three specific aims are: (1) to encourage the effective implementation of structural reforms; (2) to promote investment, also through the new European Fund for Strategic Investment (EFSI)  $(^{75})$  and (3) to better take into account the economic cycle in individual Member States. The last of these three points is discussed in Section II.2.2 of this report. The aim of the first two points is to take into account the short-term budgetary cost of major structural reforms and of certain types of government expenditure on investment, provided that they improve the sustainability of public finances, including through the expected positive impact on potential output. Overall, the new guidance should thus contribute to a more growth-friendly fiscal stance in the euro area.  $(^{76})$ 

(<sup>73</sup>) COM(2015) 12 of 13 January 2015.

(<sup>74</sup>) Some details relating to the implementation have been recently discussed in the Committees. See Section II.4.3.

(<sup>75</sup>) The EFSI, set up jointly by the Commission and the European Investment Bank (EIB), offers a new riskbearing capacity which allows the EIB to invest in equity, subordinated debt and higher risk tranches of senior debt, and to provide credit enhancements to eligible projects.

(<sup>76</sup>) See ECB President Mario Draghi's speech of 22 August 2014: [T]he existing flexibility within the rules could be used to better address the weak recovery and to make room for the cost of needed structural reforms. [...] [I]t may be useful to have a discussion on the overall fiscal stance of the euro area. Unlike in other major advanced economies, our fiscal stance is not based on a single budget voted for by a single parliament, but on the aggregation of eighteen [as of 1 January 2015: 19] national budgets and the EU budget. Stronger coordination This guidance clarifies that equal treatment under the SGP does not mean taking a 'onesize-fits-all' approach. Equal treatment for all Member States and the predictability of the rules are central principles of the SGP. The Commission Communication on flexibility within the SGP is of an interpretative nature  $(^{77})$  as it provides additional guidance without changing or replacing the existing rules. As such, it does not in any way modify the SGP itself, but clarifies that its implementation needs to be combined with an economic assessment of each country's requirements, as determined by the situation in that particular country.

It is also on purpose that some discretion is left, within the agreed rules, for the Commission and the Council to assess the soundness of public finances in the light of country-specific circumstances, in order to recommend the best course of action based on the latest developments and information.

Nonetheless, flexibility is subject to safeguards and conditions. Member States can only take advantage of flexibility if they meet certain conditions in an *ex ante* assessment. In addition, delivery of the planned reforms on the basis of which the Member State has met the *ex-ante* conditions is checked in an *ex post* assessment. Failure to implement announced structural reforms or to co-finance investment projects can result in the revocation of the additional flexibility granted, and ultimately lead to sanctions. This ensures that the credibility and effectiveness of the SGP in upholding fiscal responsibility are preserved.

The degree of flexibility allowed depends on whether a Member State is in the preventive or the corrective arm of the SGP. The aim of the

among the different national fiscal stances should in principle allow us to achieve a more growth-friendly overall fiscal stance for the euro area.

<sup>(&</sup>lt;sup>77</sup>) For another example of an interpretative Communication, see Commission interpretative communication on certain aspects of the provisions on televised advertising in the 'Television without frontiers' Directive, OJ C 101, 28.4.2004, p. 2.

preventive arm, as mentioned in Chapter II.2 of this report, is to ensure that Member States have sound and sustainable public finances, thus allowing fiscal policy to perform its countercyclical role when needed. Given its forwardlooking perspective, the preventive arm can accommodate, under certain conditions, temporary and limited deviations from the medium-term budgetary objective (MTO) or the adjustment path towards it, provided that these deviations are the result of measures that are ultimately expected to strengthen the sustainability of public finances. This is the case for certain types of government expenditure on investment and for certain structural reforms. In contrast, the main purpose of the corrective arm is to ensure the prompt correction of existing excessive deficits. Implementing structural reforms or additional spending on investment cannot therefore be accepted as 'mitigating factors' to excuse a lack of effective action to correct an existing excessive deficit. Structural reforms and contributions to the EFSI can, however, be taken into account as relevant factors at particular stages of the procedure, in particular when deciding whether to open an Excessive Deficit Procedure (EDP), when setting or extending the deadline to correct the excessive deficit, and when closing an EDP.

The remainder of this section focuses on the guidelines on the treatment of structural reforms and investment. It first presents the implementation of the provision of the SGP — which go under the name of the 'structural reform clause' and the 'investment clause' — as proposed by the Commission describing their legal basis, the eligibility conditions and the procedure for their activation, including the various safeguards that apply to this (Sections II.4.1 and II.4.2). Section II.4.3 indicates how flexibility relating to structural reforms and investment expenditure is managed under the corrective arm of the SGP.

#### 4.1. TAKING INTO ACCOUNT STRUCTURAL REFORMS IN THE PREVENTIVE ARM: THE STRUCTURAL REFORM CLAUSE

4.1.1. Legal background and eligibility conditions

The preventive arm provides the flexibility needed to support structural reforms, without

**compromising prudent fiscal policy making.** The SGP allows Member States implementing major structural reforms to deviate temporarily from the MTO or the adjustment path towards it, in recognition of the short-term costs of reforms that will have positive budgetary effects in the long term, including by increasing potential growth. (<sup>78</sup>) The SGP thereby provides a form of budgetary incentive for implementing major structural reforms, thus supporting this process.

The structural reform clause allows a temporary deviation, subject to clearly defined conditions. These are of three types: the first group of conditions relates to the nature of the reforms, in terms of their impact; the second group relates to the status of the reforms, with respect to implementation; and the third group relates to the Member State's compliance with some explicit requirements displayed in the SGP. These conditions are set out in more detail below, and are summarised in Table II.4.1, which also describes the procedure for allowing a deviation and the limits of the deviation itself.

#### Conditions relating to the nature of reforms

**Structural reforms need to meet a number of conditions relating to their impact and in order to be considered eligible.** They must: (i) have a verifiable positive impact on the long-term sustainability of public finances; and (ii) have a major impact.

Whether structural reforms have an impact on the long-term sustainability of public finances is, arguably, difficult to assess. It is neither possible (from a legal or an economic perspective) nor desirable to set up an exhaustive list of structural reforms that qualify for the temporary deviation. Providing some broad guidance can, however, restrict the type of reforms which may be eligible. There are two possible channels through which reforms can affect public finances in the long run. First, some structural reforms may generate a direct budgetary impact, as is the case, for example, for pension reforms, healthcare reforms and reforms to the civil service. In addition, some structural reforms may improve the sustainability of public finances via an indirect

<sup>(&</sup>lt;sup>78</sup>) Article 5 of Council Regulation (EC) No 1466/97.

|   | Structural reform clause  | Investment clause   |  |
|---|---|---|--|
| Eligibility criteria  | - Remain in the preventive arm<br>- Safety margin with respect to the 3% of GDP reference value for the deficit   |   |  |
|   |   |   |  |
|   | - Major structural reform with positive<br>long-term budgetary effects  | <ul> <li>Negative GDP growth or output gap<br/>inferior to -1.5% of GDP</li> <li>Total public investments are not<br/>reduced, i.e. co-financed expenditure<br/>should not substitute for nationally</li> </ul> |  |
|   |   | financed investments  |  |
| Procedure   | - Activation upon request by the Member State concerned   |   |  |
|   | <ul> <li>Relevant information to assess eligibility to be submitted together with the SCP</li> <li>Safeguard: ex post assessment (risk of SDP)</li> </ul>   |   |  |
|   | - A dedicated structural reform plan<br>within the NRP or the CAP, as<br>appropriate, shall also be submitted if<br>the reform is not yet fully implemented |   |  |
| om the MTO or the sought                                      |   |   |  |
| Temporary deviation<br>from the MTO or the<br>adjustment path |   | •   |  |

#### Table II.4.1: Overview of the clauses relevant to the preventive arm

Source: Commission services

effect, as they help to create higher potential output and thus lead to higher future government revenue. At the same time, some structural reforms may also generate budgetary costs, particularly in the short run. A qualitative assessment of a reform's impact on the sustainability of public finances should therefore encompass all these possible budgetary effects.

This assessment is to be conducted by the Commission and the Council on the basis of information provided by Member States. The Code of Conduct of the SGP (79) states that the effects of the reforms over time 'are to be assessed by the Commission and the Council in a prudent way, making due allowance of the margin of uncertainties associated to such an exercise'. In practice, the Commission's assessment builds on the information provided by the Member State on both the costs and savings directly caused by the reform, and on the indirect budgetary impact it may have as a result of its potential effect on output. Annex 1 to the Code of Conduct of the SGP, which details the structure of the stability and convergence programmes (SCPs), stipulates that Member States should include information on the implications of major structural reforms for growth and public finances when submitting their economic and budgetary projections. On the basis of the information provided by the Member State, (<sup>80</sup>) the Commission makes an informed judgement as to whether the reform meets the condition that it must improve the sustainability of public finances.

The second condition is that reforms must have a major impact. The combined effect of a number of reforms can be considered when assessing whether this condition has been met. While some individual reforms, such as pension reforms, may have a major positive impact on growth and the long-term sustainability of public finances, welldesigned and comprehensive packages of reforms addressing structural weaknesses can also be equally effective. This is notably the case when the reforms introduced are mutually reinforcing, thanks to an appropriate policy mix and effective sequencing of their implementation.

<sup>(&</sup>lt;sup>79</sup>) Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of the stability and convergence programmes.

<sup>(&</sup>lt;sup>80</sup>) Member States applying for the use of the structural reform clause are also requested to include in both their SCP and their National Reform Plan a table with a detailed description (including the budgetary impact) of each structural reform.

## Conditions relating to the implementation of reforms

Reforms can only be considered for eligibility for the clause after they have been adopted, and their implementation must be monitored. (<sup>81</sup>) It may, however, take time for the reform to show an effect, and its implementation may be subject to delays and setbacks. Where the reform in question has not yet been fully implemented, the Commission will therefore monitor its implementation. (82) This is to ensure that the reform is being enforced correctly and that it is having the intended effect.

This condition is subject to a safeguard designed to prevent moral hazard. If it is found *ex post* that a Member State has failed to implement the agreed reforms, the allowed deviation from the MTO or the adjustment path towards it will no longer be considered as justified. If, in such cases, there has been a significant deviation from the MTO or the path towards it, the Commission will launch a Significant Deviation Procedure (SDP) (see Chapter II.2, above).

## Conditions relating to the Member State's compliance with the requirements of the SGP

In order to ensure as far as possible that Member States respect the requirement to reach the MTO within the period covered by the SCP, and that they maintain a margin of safety relative to the 3 %-of-GDP threshold, three additional eligibility conditions relating to Member States' budgetary situation are attached to the clause. These conditions place various limits on the headline and structural balances allowed when a Member State deviates from its MTO or the adjustment path towards it. (<sup>83</sup>) The structural reform clause can only be applied if all three of the conditions listed below are met, and continue to be met once the clause is in application:

- the Member State remains in the preventive arm of the SGP;
- the Member State maintains a safety margin relative to the 3 %-of-GDP deficit threshold; (<sup>84</sup>) and
- the budgetary position is expected to return to the MTO within the duration of the programme (i.e. by the year *t*+4 at the latest, with *t* being the year in which the SCP is submitted).

This last condition is considered to be fulfilled if: i) the initial distance from the MTO does not exceed 1.5 % of GDP and the Member State respects its minimum benchmark. (85) To ensure that a Member State returns to the MTO within the four-year period, while allowing a maximum deviation of 0.5 % of GDP, a maximum initial distance that the Member State can be from the MTO at the time of applying for the clause must be set. It is, however, not possible to determine with certainty, four years in advance, in which year a Member State is supposed to reach its MTO. This is because, for each year, the adjustment required from a Member State is set only in the previous year in line with the matrix of requirements. To overcome this uncertainty, the Commission assumes, as a simplification, that the benchmark adjustment — the adjustment required in 'normal times', as explained in Table II.2.2 — will apply, namely an annual adjustment of 0.5 % of GDP. On this basis, the maximum initial distance from the MTO is 1.5 % of GDP in the year that the Member State applies to be allowed to use the clause.

#### In addition, a Member State that has benefited from the structural reform clause will not be

<sup>(&</sup>lt;sup>81</sup>) Code of Conduct of the SGP, p. 7: 'Only adopted reforms should be considered, provided that sufficient, detailed information is provided in the Stability and Convergence Programmes'.

<sup>(&</sup>lt;sup>82</sup>) While the SGP does not provide the means for monitoring the enforcement of structural reforms, the legal framework in which the SGP operates — notably the European Semester exercise and the Excessive Imbalances Procedure (Regulation (EU) No 1176/2011 of the European Parliament and of the Council) — allows the Commission and the Council to assess the challenges and imbalances requiring structural reforms, and to monitor action taken by the Member States.

<sup>(83)</sup> Council Regulation (EC) No 1466/97.

<sup>(&</sup>lt;sup>84</sup>) The Code of Conduct stipulates that this safety margin should be determined so as to take account of past output volatility and budgetary sensitivity to fluctuations in output. This implies that the structural balance should be equal to or above the minimum benchmark (see Chapter II.2 of this report).

<sup>(&</sup>lt;sup>85</sup>) The minimum benchmark is a level of structural balance which takes into account past output volatility and budgetary sensitivity to output fluctuations. With a structural balance at the minimum benchmark, a Member State is likely to still respect the 3% deficit limit in case of economic downturn.

allowed to apply for it again until it has reached its MTO. This restriction maintains the integrity of the MTO as the cornerstone of the preventive arm. If the clause were allowed to be applied multiple times, or more than once concurrently, this could in effect negate the requirement for Member States to achieve their MTOs in the medium term. This conclusion is supported by the record of Member States' success in achieving their MTOs since the inception of the SGP. Several Member States have consistently failed to meet their MTOs.

#### 4.1.2. Activation of the structural reform clause

#### Procedural requirements

The structural reform clause is activated on the request of the Member State concerned, subject to compliance with the eligibility conditions. Member States that wish to apply for the structural reform clause are required to present a detailed medium-term comprehensive and structural reform plan, on the basis of which compliance with the eligibility criteria is assessed ex ante. The plan — which can be included in the National Reform Programme and must be presented in the SCP, together with the request for application of the clause - must include wellspecified measures and must set credible timelines adoption for their and delivery. The implementation of the reforms is then closely monitored as part of the European Semester exercise. If the Member State is subject to an Excessive Imbalances Procedure (EIP) and has submitted a Corrective Action Plan containing the information required, the implementation of the reforms is monitored within the EIP. In both cases, Member States are expected to provide in-depth transparent documentation. and This documentation should quantify the impact of the reforms proposed, both on the medium-term budgetary plans and on potential growth, and should provide details of the timetable for implementation of the reforms.

**Pension reforms are subject to a specific assessment by Eurostat.** Pension reforms that introduce a multi-pillar system including a mandatory, fully-funded pillar constitute a specific case and are therefore subject to slightly different conditions than other structural reforms. For reforms of this type, the allowed deviation is equal to the direct incremental impact of the reform on the general government balance. (<sup>86</sup>) The basis for this is that some contributions and other items of revenue that used to be recorded as government revenue are now being diverted to a pension scheme that is classified as being outside the general government sector, thus causing an immediate increase of the deficit. At the same time, the corresponding outstanding pension obligations and other social benefits, which used to be items of government expenditure, are taken over by the pension scheme. If a Member State wishes to make use of the clause allowing deviation from the MTO or the adjustment path towards it on the grounds of a pension reform, it must liaise with Eurostat to verify the eligibility of the reforms envisaged. It must also include in its SCP the cost incurred in the first year following the introduction of the reform and any annual incremental costs that will be incurred in subsequent years.

#### The allowed deviation

The allowed deviation is effective from the year following the Member State's application for the clause. As indicated in Chapter II.2 of this report, the adjustments required each year, to both the structural balance and the expenditure benchmark, are set on the basis of the previous year's spring forecast. The temporary deviation allowed on the basis of structural reforms included in the update of the SCP submitted in year t is effective from year t+1 onwards.

The Communication on flexibility within the SGP differentiates between pension reforms and other types of structural reforms when determining the size of the deviation allowed. In the case of a pension reform, the allowed deviation from the adjustment path towards the MTO or from the MTO itself is equal to the direct incremental impact of the reform on the general government balance. There is therefore no numerical cap on the magnitude of the allowed deviation. In the case of other structural reforms. however, the allowed deviation cannot exceed 0.5 % of GDP. It is recognised that the costs and benefits of these other types of structural reforms cannot be estimated with certainty, hence the need to put a cap on the allowed deviation. The costs associated with pension reforms are, however,

<sup>(&</sup>lt;sup>86</sup>) In accordance with Council Regulation (EC) No 1466/97.

#### Box II.4.1: The adjustment path under the structural reform clause

The deviation allowed is determined according to the Member State's position with respect to its MTO, in order to ensure that the effect on the debt level of the new adjustment path is equivalent to that of the original adjustment path. Thus, a Member State that is already at its MTO is allowed to depart from it for three years. A Member State that is not initially at its MTO, but would reach it before the end of the four-year adjustment period, would follow a trajectory parallel to its original path, until it reaches the point where its structural balance lies within 0.5 % of GDP of the MTO (i.e. the MTO minus the temporary deviation). The deviation is only allowed for the first three years of the adjustment period covered by the structural reform clause, meaning that the Member State is required to adjust according to normal requirements (as set out in the matrix of requirements) in the fourth year. In the benchmark case of an adjustment of 0.5 % of GDP, this will bring the Member State to its MTO.

Algebraically, where t denotes the year in which the SCPs are submitted, and assuming that t+1 is the year for which the temporary deviation is granted, the new adjustment path towards the MTO for a Member State benefiting from the structural reform clause will be:

$$\begin{split} SB_{t+1} &= SB_t + min[adj\_matrix_{t+1} - deviation, \{(MTO - deviation) - SB_t\}]\\ SB_{t+2} &= SB_{t+1} + min[adj\_matrix_{t+2}, \{(MTO - deviation) - SB_{t+1}\}]\\ SB_{t+3} &= SB_{t+2} + min[adj\_matrix_{t+3}, \{(MTO - deviation) - SB_{t+2}\}]\\ SB_{t+4} &= SB_{t+3} + min[adj\_matrix_{t+4}, \{MTO - SB_{t+3}\}] \end{split}$$

where  $SB_t$  denotes the structural balance as a % of GDP in year *t*;  $adj\_matrix_{t+1}$  the appropriate adjustment towards the MTO in year t+1 as specified in the matrix of requirements; *deviation* the temporarily allowed deviation; and  $\{(MTO - deviation) - SB_t\}$  the distance between the MTO minus the temporarily allowed deviation and the structural balance.

Expressing the above in terms of the adjustment required in year t+1, gives:

 $reform_adj_{t+1} = min\{adj_matrix_{t+1} - deviation, [(MTO - deviation) - SBt)]\}$ 

In addition to allowing the Member State a deviation from the requirements relating to the change in the structural balance, the expenditure benchmark — the second pillar used to assess compliance with the requirements of the preventive arm — is also automatically recalibrated to reflect this deviation.

directly measurable and can be verified by Eurostat.

**Box II.4.1 explains how the adjustment path is determined when the structural reform clause is applied.** If a Member State is at the MTO, it can depart from it for a period of three years by the amount of the allowed deviation. If a Member State is converging towards the MTO, a temporary deviation from the convergence path towards the MTO is allowed between year t+1 and year t+3. (<sup>87</sup>) As from the fourth year, the Member State

cannot deviate anymore from the MTO or the convergence path. In the benchmark case of a 0.5% of GDP adjustment, this mechanism implies a return of the Member State to its MTO, As shown in Box II.4.1, the method described reflects the fact that the allowed deviation is effective from year t+1 and that the Member State concerned is expected to achieve its MTO by the year t+4 at the latest.

<sup>(&</sup>lt;sup>87</sup>) This also implies that a Member State adjusting towards the MTO would be entitled to halt that adjustment if, while

being entitled to the deviation, they reach the point where they are at a distance from their MTO equal to the size of the temporary deviation).

#### 4.2. TAKING INVESTMENT INTO ACCOUNT IN THE PREVENTIVE ARM: THE INVESTMENT CLAUSE

### 4.2.1. Legal background and eligibility conditions

Certain types of investment that increase potential growth are deemed to be equivalent to major structural reforms and may, under certain conditions, justify a deviation from the requirements set out in the preventive arm. In a letter of 3 July 2013 from former Commission Vice-President Olli Rehn to the EU finance ministers, the Commission provided some initial guidance on the application of the provisions allowing this deviation.(88) This guidance, commonly referred to as the 'investment clause', was further refined and formalised in the Commission Communication on flexibility within the SGP. As a result, a temporary deviation from the MTO or the adjustment path towards it may be permitted if it allows a Member State to finance certain specific investments that have positive, direct and verifiable long-term effects on growth and on the sustainability of public finances.

In the same way as the structural reform clause, the investment clause is also subject to certain conditions. These are of three types: the first group of conditions relates to the nature of the investment in question; the second group relates to the Member State's economic situation; and the third group, common to both clauses, relates to the Member State's compliance with compliance with the requirements of the SGP. These conditions are set out in more detail below, and are summarised in Table II.4.1, which also describes the procedure for allowing a deviation and the limits of the deviation itself.

### Conditions relating to the nature of government investment

The deviation must be the result of national expenditure on projects co-funded by the EU. This includes expenditure on projects funded under the Structural and Cohesion policy, (<sup>89</sup>) the Trans-

European-Network and the Connecting Europe Facility, and national co-financing of investment projects also co-financed by the EFSI. EUsponsored government investment relates to projects whose overarching objective is to promote long-term sustainable growth. These projects are expected to have positive, direct and verifiable effects on growth and therefore on the sustainability of public finances.

Moreover, co-financed expenditure should not be being used to substitute for nationally financed investment. This condition is included in order to ensure that total public investment is not reduced, given that the aim of the investment clause is not to deter public investment but, on the contrary, to encourage Member States to pursue productive investment in difficult economic conditions. To assess whether this condition is being met, the Commission checks that there will not have been any decline in gross fixed capital formation over the first year that the clause is applied, on the basis of its economic forecasts.

### Conditions relating to the Member State's economic situation

To be eligible for this clause, a Member State needs to be considered to be in 'bad economic times' or worse. As defined in the matrix used in the SGP for determining the adjustments Member States are required to make, this means that GDP growth is negative or that output is sufficiently below its potential to result in a negative output gap of over 1.5 % of GDP. This condition relates to the year for which the Member State requests application of the clause. ( $^{90}$ )

Conditions relating to the Member State's compliance with the requirements of the SGP

As in the case of the structural reform clause, the Member State's headline and structural balance must remain within certain limits if the investment clause is being applied. The relevant

<sup>(&</sup>lt;sup>88</sup>) In accordance with Article 5(1) of Council Regulation (EC) No 1466/97.

<sup>(&</sup>lt;sup>89</sup>) Including projects co-financed through the Youth Employment Initiative.

<sup>(&</sup>lt;sup>90</sup>) In contrast to the approach described in the guidance previously given on the original investment clause introduced in 2013, the Commission will now apply the clause irrespective of the economic situation in the euro area or in the EU as a whole, thus making it dependent only on the cyclical conditions faced by individual Member States. The countries to have benefited from the investment clause are Bulgaria (2013 and 2014) and Slovakia (2014).

#### Box II.4.2: The adjustment path under the investment clause

The logic presented for the structural reform clause in Box II.4.1 also applies to the investment clause. The only difference regards the incorporation of additional incremental temporary deviations. The formulas describing the adjustment path thus become:

$$\begin{split} SB_{t+1} &= SB_t + \min[adj\_matrix_{t+2} - deviation, \{(MTO - deviation) - SB_t\}]\\ SB_{t+2} &= SB_{t+1} + \min[adj\_matrix_{t+2} - Incr. \ dev._{t+2}, \{(MTO - (deviation + Incr. \ dev._{t+2}) - SB_{t+1}\}]\\ SB_{t+3} &= SB_{t+2} + \min[adj\_matrix_{t+3} - Incr. \ dev._{t+3}, \{(MTO - (deviation + Incr. \ dev._{t+2} + Incr. \ dev._{t+3}) - SB_{t+2}\}]\\ SB_{t+4} &= SB_{t+3} + \min[adj\_matrix_{t+4} - Incr. \ dev._{t+4}, \{MTO - (Incr. \ dev._{t+2} + Incr. \ dev._{t+3}) - SB_{t+3}\}] \end{split}$$

where  $SB_t$  denotes the structural balance in % of GDP in year *t*,  $adj\_matrix_{t+1}$  the appropriate adjustment towards the MTO in year t+1 as defined in the matrix of requirements, *deviation* the temporary allowed deviation, *Incr.dev.*  $_{t+i}$  the positive incremental change with respect to the temporary deviation allowed in the previous year, and  $\{(MTO - deviation) - SB_t\}$  the distance between the MTO minus the temporary allowed deviation and the structural balance.

conditions are identical to those presented in Subsection II.4.1.2.

Furthermore, as was the case for the structural reform clause, a Member State already benefiting from some allowed deviation cannot apply for the investment clause until the MTO has been achieved.

#### 4.2.2. Activation of the investment clause

#### **Procedural requirements**

The investment clause is activated *ex ante*, when a Member State makes a request in its SCP. It is subject to compliance with the eligibility conditions. To be eligible to benefit from the clause in the year t+1, Member States should include the following information in their SCPs for year t: i) the forecast path of national co-financing expenditure; ii) detailed information on the positive, direct and verifiable long-term budgetary effects of the expenditure covered by the clause; and iii) the 'corrected path' that the structural balance would follow were the clause applied. Moreover, in the year following the year during which the clause has applied, the Member State should report on the actual level of co-financing in its SCP.

#### The allowed deviation

The temporary deviation allowed *ex ante* depends on the commitments made from the EU structural funds in favour of the Member

State concerned and on the level of planned cofinancing. The allowed deviation from the MTO or the adjustment path towards it is equal to the total amount of co-financing in the first year of application of the clause. In the following years, given that the national co-financing of EU-funded projects constitutes recurrent expenditure, only positive incremental changes would be added to the temporary deviation originally allowed, provided that the Member State continues to meet the other eligibility criteria. This is intended to give Member States an incentive to increase investment and to take into account the proportion of investment that could potentially be co-funded in eligible Member States. Incremental increases to the temporary deviation allowed are assessed and granted on the same basis as the initial temporary deviation, i.e. Member States need to request an increase in their SCPs the previous year.

As a safeguard, the allowance will be reviewed *ex post* to allow the actual level of co-financing to be taken into account. If the actual level of co-financing, as shown in data available in year t+2, falls short of the projected level, a correction reflecting the difference between the actual and the expected level will be added to the required change in the structural balance. This could potentially lead to the opening of an SDP.

Box IV.4.2 explains how the adjustment path is determined when the investment clause is applied. As for the structural reform clause, the method described reflects the fact that the Member State concerned is expected to converge towards the MTO by the year t+4 at the latest, the allowed deviation having been applied from year t+1.

### 4.3. THE ECOFIN COUNCIL OF 8 DECEMBER 2015

The ECOFIN Council, on 8 December 2015 confirmed a common position on the implementation of flexibility within the SGP on the basis of the draft agreed by the Economic and Financial Committee. (<sup>91</sup>) The commonly agreed position specifies:

- The deviation allowed to Member States benefitting from the investment clause is capped at 0.5% of GDP. The cumulative deviation allowed to Member States benefitting from the investment clause and the structural reform clause is capped at 0.75% of GDP;
- The possibility to request the application of the flexibility clauses also in autumn, after the relevant Country-Specific Recommendation has been set by the Council in the spring, provided that the allowed deviation from the existing budgetary requirement is made explicit through a revised CSR. The Member State can apply for the clauses in its Draft Budgetary Plans, or in ad hoc documents;
- By the end of June 2018, the Commission will carry out a review on the application of the structural reform and investment clauses, taking full account of the economic situation at that time and the achievement of its objectives.
- 4.4. CONSEQUENCES OF THE GUIDANCE GIVEN IN THE COMMISSION COMMUNICATION ON FLEXIBILITY WITHIN THE SGP FOR THE CORRECTIVE ARM

As the main purpose of the corrective arm of the SGP is to ensure the prompt correction of excessive deficits, the room for flexibility is **more limited.** The rules relating to the corrective arm do not include detailed provisions allowing structural reforms or investment to be taken into account when assessing whether a country has taken effective action in response to the Council's recommendations to correct the excessive deficit. Structural reforms are, however, recognised as a relevant factor in the corrective arm when deciding on various steps within the EDP: when opening an EDP, when setting or extending a deadline for the correction of the excessive deficit, and, in the case of systemic pension reform, when closing an EDP.

**First, structural reforms can be relevant factors at the point of deciding whether to open an EDP.** When making this decision, the Commission carefully analyses all the relevant information relating to medium-term economic, budgetary and debt developments. (<sup>92</sup>) These 'relevant factors' may, in certain cases, lead the Commission to decide not to open an EDP. (<sup>93</sup>) The Commission Communication on flexibility within the SGP clarifies that Member States' contributions to the EFSI and the implementation of structural reforms (e.g. in accordance with recommendations from the European Semester or an EIP) fall under the appropriate categories (<sup>94</sup>) and should therefore be considered as relevant factors.

Second, relevant factors are also taken into account when recommending the deadline by which the excessive deficit must be corrected. While an excessive deficit is, as a rule, expected to be corrected within a year of its detection, implementing structural reforms is a factor that can be taken into account when setting the deadline or fixing the length of any extension to that deadline.

Third, when closing an EDP, the Commission considers, where relevant, the direct cost of pension reforms. As is the case under the preventive arm, this relates to reforms introducing

<sup>(&</sup>lt;sup>91</sup>) Council document number 14345/15 available at <u>http://data.consilium.europa.eu/doc/document/ST-14345-2015-INIT/en/pdf</u>

 $<sup>(^{92})</sup>$  This analysis is presented in the report prepared by the Commission under Article 126(3) TFEU.

<sup>(&</sup>lt;sup>93</sup>) According to Council Regulation (EC) No 1467/97 (OJ L 209, 2.8.1997, p. 6), for Member States whose debt stands below 60 % of GDP, the relevant factors are considered irrespective of the level of the deficit. For a Member State with debt above 60 % of GDP, however, the relevant factors are only considered if the breach of the deficit criterion is small and temporary.

<sup>&</sup>lt;sup>(94)</sup> As defined in Council Regulation (EC) No 1467/97 (OJ L 209, 2.8.1997, p. 6).

#### Box II.4.3: Use of the structural reform and investment clauses during the 2015 European Semester (to benefit from a temporary deviation in 2016)

The structural reform and pension reform clause: four Member States requested application of the structural reform clause during the 2015 European Semester. Their requests were based on both pension reforms and other structural reforms.

- Italy applied for use of the structural reform clause and meets the eligibility criteria.

- Lithuania applied for use of the pension reform clause and meets the eligibility criteria, subject to confirmation from Eurostat of the systemic nature of the reform.

- Latvia continues to be eligible for the pension reform clause, but a further deviation cannot be allowed on the grounds of structural reforms as its deficit is not within the required margin of safety relative to the 3 %-of-GDP deficit limit.

- Romania applied for use of both the structural reform and the pension reform clauses but its deficit is not within the required margin of safety relative to the 3 %-of-GDP deficit limit.

The investment clause: Italy has requested to benefit from the Investment Clause in its Draft Budgetary Plan. In its opinion on the Italian Draft Budgetary Plan, the Commission notes that granting at this stage the additional flexibility requested would take place outside the normal European Semester cycle and depart from the process envisaged in its Communication on the flexibility within the SGP.

a multi-pillar system that includes a mandatory fully-funded pillar. Specifically, an EDP can be closed even if the deficit is still larger than 3 % of GDP, provided that: i) the excess is entirely due to the costs of implementing the pension reform; and ii) the deficit has been reduced substantially and continuously, and has reached a level close to the reference value, i.e. 3%.

The Communication on flexibility within the SGP states that structural reforms can be taken into account on an ex ante basis when considering them as relevant factors. The Commission also indicated in the Communication that it would take account of reforms that have not yet been fully implemented. The conditions for taking reforms into account within the corrective arm are similar to those required for the activation of the structural reform clause under the preventive arm. In particular, the reforms need to be clearly specified as part of a structural reform plan already adopted by the government and/or national Parliament and there must be a credible timetable for their implementation. For Member States with macroeconomic imbalances, excessive the Corrective Action Plan would normally serve this purpose.

If a Member State fails to implement the agreed reforms, the Commission will consider this an aggravating factor. This applies both to the Commission's assessment of the action taken by the Member State in response to the EDP recommendation and to the setting of a deadline for the correction of the excessive deficit. Failure to take effective action will lead to a stepping up of the procedure and the possible suspension of European Structural and Investment Funds. (<sup>95</sup>) For euro area Member States, the Commission will also recommend that the Council imposes a fine.

<sup>(&</sup>lt;sup>95</sup>) Article 23 of Regulation (EU) No 1303/2013 of the European Parliament and of the Council (OJ L 347, 20.12.2013, p. 320).

## 5. FISCAL RISKS AND CONTINGENT LIABILITIES

It is not unusual for the general government deficit or debt to be significantly, and unexpectedly, affected by the materialisation of fiscal risks associated with contingent liabilities. Examples of situations in which this can occur include calls being made on guarantees issued by the government or the government stepping in to cover the obligations of a public corporation experiencing financial difficulties. A distinctive feature of such events is that they result from some explicit or implicit obligation that the state has previously established (i.e. a guarantee contract or majority ownership). The extent and the timing of the impact of such events cannot, however, be determined in advance with any degree of certainty. The liabilities leading to these events are called contingent liabilities, as it is only under certain specific conditions that they result in transactions, and they are not recorded in core national accounts. Nevertheless, the potential impact of these liabilities on public deficit and debt means that they cannot be ignored in the management of public finances.

Understanding and mitigating the risks created by contingent liabilities depends, firstly, on having comparable information for different Member States. Eurostat recently published a new time series providing information on Member States' contingent liabilities. It covered, in particular: i) government guarantees; ii) the liabilities related to public-private partnership agreements (PPPs) that are recorded off the government balance sheet: iii) government-controlled the liabilities of institutional units outside the government sector; and iv) non-performing loans issued by the government. The following sections provide a review of the new dataset. They discuss the factors that need to be taken into account when interpreting the data, explore the ways in which contingent liabilities can materialise as actual losses for the government, and give some examples of how the fiscal risks associated with contingent liabilities can be mitigated.

## 5.1. FISCAL RISK AND THE ROLE OF CONTINGENT LIABILITIES

'Fiscal risk' is a broad term that encompasses a variety of reasons why fiscal outcomes may be different from the targeted (or forecast) levels. These reasons are usually associated with either macroeconomic developments that have an impact on fiscal variables or with situations where the government has to make unexpected payments, i.e. payments not included in the budget or in any other *ex-ante* estimate of expenditure.

The overview presented here is limited to a narrower category of fiscal risks - those associated with contingent liabilities. It does not cover fiscal risks that result from changes in macroeconomic variables, but concentrates instead on public liabilities that would, under certain conditions, necessitate a response from the government, which would in turn lead to changes in the expected deficit and debt levels. The degree of discretion the government can exercise in responding to these events varies, but a common feature is the existence of an underlying commitment, which may, or may not, be formalised. Polackova and Mody (2002) develop a 'government fiscal risk matrix', where they distinguish, firstly, between explicit liabilities (government liabilities as recognised by a law or contract, e.g. loans and guarantee agreements) and implicit liabilities (the government's moral obligations, which may reflect pressure from the public or from specific interest groups, e.g. obligations relating to future state pensions or public investment projects), and, secondly, between *direct* liabilities (obligations that exist in any event, e.g. expenditure defined in existing laws) and *contingent* liabilities (obligations that exist only if a particular event occurs, e.g. intervention in the event of a failure of a public or private entity). Implicit and contingent liabilities are thus not mutually exclusive categories but different dimensions of categorisation.

The terminology is also subject to rather diverse interpretations. For example, the definition of contingent liabilities in the 'government fiscal risk matrix' above is macroeconomic in nature, and it differs from definitions used in national accounts (ESA2010, 5.08-5.11) or accounting (IAS 37 / IPSAS 19). In particular, this macroeconomic framework also covers the subset of *implicit contingent* liabilities, for example government interventions in the context of bank failures, to avoid or reduce systemic risk in the banking sector (beyond deposit or unemployment insurance), where no explicit obligation exists for the state and only macroeconomic estimates of their magnitude can be made for a specified set of assumptions. The scope of implicit liabilities is difficult to define, but this does not mean that they can be ignored by policymakers. For example, the approaches to estimating cost of ageing are presented in the 2015 Ageing Report (<sup>96</sup>), while contingent liabilities linked to public support to the banking sector estimated using SYMBOL model were presented in the 2012 Fiscal Sustainability Report (<sup>97</sup>).

The availability of information on potential exposure is the first step in assessing impact of a liability. availability contingent The of information on the extent of potential exposure is the necessary precondition and a starting point for the quantification of the risk. However, even where the potential exposure can be assessed (which can only be done with sufficient degree of certainty for some types of contingent liabilities, as discussed above), quantifying the risk itself also requires an estimate of the probability of the risk materialising. This information cannot usually be easily obtained for individual cases. For certain classes of explicit contingent liabilities that involve large numbers of homogenous contracts (e.g. export guarantees or student loan guarantees), the probability of guarantees being called can, however, be established with a sufficient degree of certainty at the aggregate level. This means that the risk can be quantified and recorded appropriately in statistics on government finance. Under ESA2010, standardised guarantees of this type are recorded by analogy to non-life insurance, with fees treated similarly to insurance premiums and the transaction shown as creating financial assets and liabilities (Eurostat, 2014).

The need for transparency with regard to contingent liabilities is widely recognised, especially as relates to explicit contingent liabilities. (<sup>98</sup>) The IMF's Fiscal Transparency Code (IMF, 2014), for example, includes a separate section on the management of fiscal risks, in which it provides a number of principles for the

disclosure and management of the government's exposure to risks resulting from guarantees and public-private partnerships (PPPs). Likewise, the OECD's Best Practices for Budget Transparency (OECD, 2002) recommends that: (i) all significant contingent liabilities should be disclosed in the budget, in the mid-year report and in the annual financial statements; and (ii) where feasible, the following should be disclosed: a) the total amount of contingent liabilities, together with a breakdown of this total by nature of the liability; b) historical information on the defaults occurring in each of these categories. In cases where contingent liabilities cannot be quantified, they should be listed and described. International Public Sector Accounting Standard (IPSAS) No 19 on provisions, contingent liabilities and contingent assets requires that, unless the possibility of any outflow in settlement is remote, an entity should provide, for each class of contingent liability, a brief description of the nature of the liability and, where practicable, an estimate of its financial effect (IPSASB, 2014). While these internationally agreed standards and guidelines provide a basis for improving the availability of information on contingent liabilities, the requirements remain nonbinding and no precise data specifications exist, thus limiting the potential comparability of data published at national level.

Several countries and international organisations have also started developing ways to mitigate the fiscal risks associated with contingent liabilities. A recent OECD discussion paper (OECD, 2013) suggests that one of the main approaches taken in policy reforms designed to mitigate the risks arising from guarantees is to promote neutrality. This is most often done in one of two ways: i) by ensuring that policymakers have sufficient information to compare the effects of the risks arising from guarantees with the effects of direct budgetary appropriations; and ii) by levying market-based fees that reflect the expected cost of such liabilities for the government. The discussion paper also advocated full and transparent disclosure of the potential costs of these risks. It encouraged governments to reduce the level of implicit liabilities, either by eliminating them in a credible way or by converting them into explicit liabilities.

Some Member States have already introduced reforms in the area of contingent liabilities. In

<sup>(%)</sup>http://ec.europa.eu/economy\_finance/publications/european \_\_\_\_\_economy/2014/pdf/ee8\_en.pdf

<sup>(&</sup>lt;sup>97</sup>)http://ec.europa.eu/economy\_finance/publications/european economy/2012/pdf/ee-2012-8\_en.pdf

<sup>&</sup>lt;sup>(98)</sup> This conclusion is less straightforward in the case of implicit contingent liabilities due to the risk of moral hazard. See, e.g. IMF (2007).

the Netherlands, for example, the approach to the issuance of guarantees has been to make the default position that it is not allowed, i.e. there has to be a specific reason to justify the issuance of guarantees, for example if risk cannot be insured on the market. Where guarantees are issued, they are subject to a premium, which is treated in the budgetary process as a provision for future losses (Hofmans and van de Coevering, 2014). In Sweden, the Budget Act adopted in 2011 contains clearer rules on government guarantees and new provisions relating to government lending that entails credit risk. The rules aim to ensure that these commitments are self-financed in the long run, with fees corresponding to expected costs (Swedish National Debt Office, 2015). In Latvia, the Fiscal Discipline Law provides that a fiscal risk declaration must be prepared annually, and must include a quantification of the fiscal risks. This quantification then determines the size of the fiscal safety reserve set in the budget (Fiscal Discipline Council of Latvia, 2015). In Portugal, a separate unit with specialised expertise has been set up, whose task it is to assess and monitor PPPs and to mitigate the risks arising from these contracts (European Commission, 2014b).

Improvements to the statistics on government finances can also help to mitigate the risks associated with contingent liabilities. The statistical framework is constantly evolving, and a significant number of improvements have been introduced in recent years, notably through ESA2010, which came into force in September 2014. These changes include: qualitative aspects of control, which led to the reclassification of several government-controlled entities such that they are now considered as being within general government; ii) the introduction of a revised approach to standardised guarantees, which takes expected losses into account at inception of the contract; and iii) changes to the rules on determining the economic owner of a PPP asset. As a result of these changes, a number of risks are now captured at an earlier stage. For example, losses incurred by a government-controlled company classified as being inside general government would affect general government net borrowing gradually as they occur, rather than being postponed until some point in the future, at which time a large capital injection would then be needed

#### 5.2. NEW DATA REQUIREMENTS SUPPORTING FISCAL SURVEILLANCE IN THE EU

Analysis and reporting related to contingent liabilities has been considerably strengthened in the EU as a result of the adoption of the Six-Pack in 2011, and subsequently of the Two-Pack for the euro area. These packages of legislation were designed to strengthen economic governance in the EU, and budgetary analysis now includes closer examination of contingent liabilities, in recognition of the risks they entail. The reporting requirements for these liabilities were also made more stringent (see Box II.5.1). In particular, under the corrective arm of the SGP, contingent liabilities are now taken into account when the Commission prepares a report under Article 126(3) of the TFEU. For euro area countries subject to an Excessive Deficit Procedure (EDP), the Commission may now request that the Member State submit additional information, including on the financial risks associated with contingent liabilities that could have a potentially significant impact on the government budget. Under the preventive arm, contingent liabilities are mainly analysed as potential risks to the budgetary targets.

In response to the requirements introduced by Council Directive 2011/85/EU on budgetary frameworks, Eurostat has begun publishing a new data series on contingent liabilities for all EU Member States. The specific requirements relating to the coverage of the data (which Member States are required to submit pursuant to Article 14(3) of the above Directive) and the timing of its publication were agreed between the Member States and the European Commission in 2013, and Member States submitted the first set of time series to Eurostat in late 2014. Eurostat published this information and an accompanying press release (<sup>99</sup>) in February 2015.

#### 5.3. NEW DATASET ON CONTINGENT LIABILITIES IN EUROSTAT'S DATABASE

Eurostat's publication (as referred to above) covers three classes of contingent liabilities, as well as non-performing loans.

<sup>(&</sup>lt;sup>99</sup>)<u>http://ec.europa.eu/eurostat/documents/2995521/6616449/2-10022015-AP-EN.pdf.</u>

#### Box *II.5.1*: Provisions in the EU budgetary framework on the reporting of fiscal risks

Within the EU budgetary surveillance framework, provisions on the reporting of fiscal risks have been significantly extended in recent years, as a result of the adoption of the Six-Pack and Two-Pack packages. The aim of these packages, adopted respectively in 2011 and 2013, is to strengthen economic governance.

Regulation (EU) No 1175/2011 of the European Parliament and of the Council (<sup>1</sup>) (amending the preventive arm of the Stability and Growth Pact) added a requirement that the Member States' stability and convergence programmes must include information on any implicit liabilities, such as public guarantees, that could have a potentially large impact on the general government accounts. Council Regulation (EU) No 1177/2011 (<sup>2</sup>) (amending the corrective arm of the Stability and Growth Pact) added a requirement that the Commission, when preparing its report under Article 126(3) TFEU, must take into account, as appropriate, guarantees, in particular those issued to the financial sector, and any implicit liabilities relating to ageing and private debt, to the extent that they may represent a contingent implicit liability for the government. The Code of Conduct governing the stability and convergence programmes was amended to allow the implementation of this new legislation. In particular, the reporting requirements relating to the long-term sustainability of public finances have been extended and reporting on public guarantees, including those issued to the financial sector, has been added as a compulsory item.

The most notable improvement to the availability of information on contingent liabilities was achieved through Council Directive 2011/85/EU (<sup>3</sup>), which also forms part of the Six-Pack. Article 14(3) of this Directive introduced new transparency requirements for Member States:

For all sub-sectors of general government, Member States shall publish relevant information on contingent liabilities with potentially large impacts on public budgets, including government guarantees, non-performing loans, and liabilities stemming from the operation of public corporations, including the extent thereof. Member States shall also publish information on the participation of general government in the capital of private and public corporations in respect of economically significant amounts.

As subsequently required by Regulation (EU) No 473/2013 of the European Parliament and of the Council (<sup>4</sup>), the financial risks associated with contingent liabilities with potentially large impact on government finances must also be covered in a comprehensive assessment of in-year budgetary execution, to the extent that they may contribute to the existence of an excessive deficit in euro area Member States. These Member States are also encouraged to include data on contingent liabilities that could affect the government's medium-term budgetary planning in the draft budgetary plans submitted to the Commission for monitoring purposes. The Code of Conduct governing the implementation of the Two-Pack reiterated that the Commission can request additional reporting from a Member State subject to an Excessive Deficit Procedure (EDP). It also added a non-compulsory reporting item on government guarantees, including those linked to the financial sector, to the indicators to be included in Member States' draft budgetary plans.

<sup>(&</sup>lt;sup>1</sup>) Regulation (EU) No 1175/2011 of the European Parliament and of the Council of 16 November 2011 amending Council regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies (OJ L 306, 23.11.2011, p. 12).

<sup>(&</sup>lt;sup>2</sup>) Council Regulation (EU) No 1177/2011 of 8 November 2011 amending Council Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure (OJ L 306, 23.11.2011, p. 33).

<sup>(&</sup>lt;sup>3</sup>) Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States (OJ L 306, 23.11.2011, p. 41).

<sup>(&</sup>lt;sup>4</sup>) Regulation (EU) No 473/2013 of the European Parliament and of the Council of 21 May 2013 on common provisions for monitoring and assessing draft budgetary plans and ensuring the correction of excessive deficit of the Member States in the euro area Member States (OJ L 140, 27.5.2013, p. 11).

|  | Sectors*                                     | Years<br>(compulsory)   | Units  |
|--|--|---|--|
| Contingent liabilities   |  |   |  |
| <ol> <li>Guarantees - Total stock of government guarantees</li> <li>A One-off guarantees - Total stock of guarantees, excluding debt assumed by government<br/>of which: guarantees to public corporations</li> <li>Memo item: guarantees to financial corporations</li> <li>B Standardised guarantees - Total stock of government guarantees</li> </ol> | S.13<br>S.1311<br>S.1312<br>S.1313           | T-4, T-3, T-2, T-1<br>(2010-2013)                                   | Millions of<br>national<br>currency;<br>Percent of GDP |
| 2. Adjusted capital value of off-balance private-public partnerships (PPPs)  | S.13<br>S.1311<br>S.1312<br>S.1313           | T-1<br>(2013)   | Millions of<br>national<br>currency;<br>Percent of GDP |
| <ol> <li>Total outstanding liabilities of government controlled entities classified outside general government</li> <li>A Liabilities of units involved in financial activities</li> <li>B Liabilities of units involved in other activities         <ul> <li>of which: liabilities of loss-making non-financial units</li> </ul> </li> </ol>            | S.13<br>S.1311<br>S.1312<br>S.1313<br>S.1314 | T-1 (T-2 if not<br>available)<br>(2013 or 2012 if<br>not available) | Millions of<br>national<br>currency;<br>Percent of GDP |
| Assets that can result in losses   |  |   |  |
| 4. Stock of non-performing loans provided by government  | S.13<br>S.1311<br>S.1312<br>S.1313<br>S.1314 | T-1<br>(2013)   | Millions of<br>national<br>currency;<br>Percent of GDP |

Table II.5.1: Availability of indicators required under Council Directive 2011/85/EU in Eurostat's database (as at the end of 2015)

Source: European Commission

Note: \* S.13 = General government, S.1311 = Central government (excluding social security funds), S.1312 = State government (excluding social security funds), S.1313 = Local government (excluding social security funds), S.1314 = Social security funds

The information provided on contingent liabilities relates to: (i) guarantees; (ii) public-private partnerships recorded off government balance sheet; and (iii) the liabilities of governmentcontrolled entities classified outside general government. These categories are described in further detail below. Eurostat's dataset also includes information on non-performing loans issued by the government. A dedicated webpage (<sup>100</sup>) provides additional information, including the legal basis for the data collection, country-specific footnotes and reports. The summary table below gives an overview of the information currently available in Eurostat's database. In most cases, Member States are required to send the updated annual time series for the previous year(s) to Eurostat before the end of the year. Each additional year is expected to be added to the time series early in the year t+2, e.g. information for 2014 will be sent to Eurostat by the end of 2015 and added to the current time series in early 2016.

The publication of this data at EU level is accompanied by the publication of information at national level. While Eurostat publishes a number of time series that are based on commonly agreed standard definitions. Member States are encouraged to publish more detailed national information, and several Member States are currently doing so. In addition to providing more detail on contingent liabilities, Member States publications also national include other information required by Council Directive 2011/85/EU, notably information on the participation of the general government in the capital of private and public corporations, highfrequency fiscal data produced according to the national public accounting methodology, and the reconciliation table explaining how this highfrequency data is converted into data that is ESAcompliant. The national publications are often tailored to the specific situation of the country and do not easily allow cross-country comparison. Eurostat maintains a list of the national websites where this information is published. (<sup>101</sup>) National publications can improve fiscal transparency at national level, thus contributing to improved oversight of fiscal policy by national monitoring institutions and by society as a whole. Not all Member States have yet made full use of this

<sup>(&</sup>lt;sup>100</sup>) <u>http://ec.europa.eu/eurostat/web/government-finance-</u>statistics/contingent-liabilities.

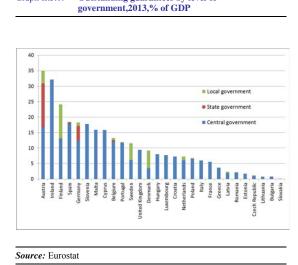
<sup>(&</sup>lt;sup>101</sup>)<u>http://ec.europa.eu/eurostat/documents/1015035/6850409/L</u> isting-of-national-websites.pdf.

opportunity to improve transparency, limiting their publication to the small number of variables on which they are required to report.

#### Government guarantees

Guarantees issued by the government in respect of the liabilities (and sometimes assets) of third parties constitute the most common form of contingent liabilities. Only explicit or formal obligations, set down in the form of a law or a contract, are covered by Eurostat's dataset. (<sup>102</sup>) A debt guarantee, for example, is an arrangement in which a guarantor (in this case, the government) agrees to pay a creditor if a debtor defaults. Guarantees on assets, meanwhile, mean that the government has made a commitment to cover any losses resulting from a decrease in value of the assets. Both public and private corporations and can benefit from government households guarantees. The aim of a government guarantee is usually to allow the beneficiary to borrow at a lower interest rate, in doing so potentially contributing to achieving certain policy objectives. An example of this is a government providing guarantees on student loans in order to improve access to higher education. Government guarantees are also used to improve access to markets, an example of this being the use of export guarantees or guarantees issued to financial institutions in times of financial distress.

**Eurostat's publication includes several subsets** of data, which facilitates analysis. For some subsets, however, the reported data are not complete and/or are not exhaustive. The publication distinguishes between standardised and one-off guarantees (<sup>103</sup>) (see also Table II.5.1



Outstanding guarantees by level of

Graph II.5.1:

above). In most (but not all) Member States, the latter category is by far the more significant one. The separate time series relate, respectively, to guarantees issued to public corporations and to guarantees issued to financial (public and private) corporations. Only guarantees issued to units classified outside general government are covered by the reporting. As can be seen from Graph II.5.1, central governments issue the largest proportion of guarantees, although guarantees issued by state or local government also form a significant part of the total in some countries. The time series currently cover four years, 2010-2013, and are reported at nominal value. They show the total stock of outstanding guarantees, excluding the debt already assumed by the government. There are, however, gaps in the reporting: for example, information on standardised guarantees is missing for Belgium, Croatia and Portugal, and information on guarantees issued by local government has not been provided by France, Croatia or Slovenia. Other notes relating to specific Member States are included under 'Country-specific footnotes'. (104)

**Contingent liabilities associated with guarantees will become actual costs if the guarantees are called.** Guarantees constitute contingent liabilities and are therefore not recorded

<sup>(&</sup>lt;sup>102</sup>) According to the agreed data specifications, data do not include: i) government guarantees issued within the guarantee mechanism created under the European Financial Stability Facility (as these liabilities are predominantly already included in Member States' debt); ii) derivativetype guarantees (providing they meet the definition of a financial derivative and are recorded accordingly in the national accounts); iii) deposit insurance guarantees and compatible schemes (as these are covered by separate frameworks); and iv) guarantees issued on events the occurrence of which is very difficult to cover via commercial insurance (such as earthquakes, large-scale flooding, nuclear accidents, and certain art exhibitions), as a result of the very high degree of uncertainty associated with any estimate of the value of such guarantees.

<sup>(&</sup>lt;sup>103</sup>) As explained in the introductory section, ESA2010 distinguishes between standardised guarantees (which are characterised by frequent repeated transactions with similar

features and a pooling of risks, and for which the average loss can be estimated) and one-off guarantees (which are individual agreements for which it is not possible to provide reliable estimates of the likely losses).

<sup>(&</sup>lt;sup>104</sup>)<u>http://ec.europa.eu/eurostat/documents/1015035/6611302/C</u> ontingent-Liabilities-Footnotes.pdf.

in core national accounts, except in the cases described below. The treatment of a guarantee in government accounting depends on whether it is a one-off or a standardised guarantee. In ESA2010, when a standardised guarantee is granted, a liability should be recorded in government's balance sheet that is equal to the present value of expected calls under the guarantees, net of any recoveries. For one-off guarantee constitute revenue for the government, while in the case of standardised guarantees, fees are recorded as a financial prepayment to cover future losses. ( $^{105}$ )

When the risks materialise and a guarantee is called, a call on a standardised guarantee gives rise to a financial (deficit-neutral) transaction, whereas a partial or full call on a one-off guarantee is recorded as a capital transfer (debt assumption), which worsens the government's budgetary position. Moreover, the rules in place specify that the full amount of an outstanding one-off guarantee must be recorded as a capital transfer after the third partial call on the guarantee. The same treatment, i.e. debt assumption equal to the full amount of the one-off guarantee, applies when the likelihood of a guarantee being called is very high at inception. ( $^{106}$ )

The recent financial crisis had a significant effect on the issuance and calling of government guarantees in several Member States. The stock of outstanding guarantees relating to financial corporations was particularly high in Ireland in 2013 (at 32 % of GDP, thus accounting for almost the whole stock of outstanding guarantees) and also in Spain and Austria. The stock of guarantees issued to the financial sector is, however, now on a clear declining trend. Eurostat's reporting on the financial crisis (<sup>107</sup>) provides some insight into the effect that guarantees have on public finances. It illustrates, for example, the effect that calls on guarantees issued to financial institutions in the

context of the financial crisis have had in recent years on the budgetary position of the governments of Belgium, Denmark, Spain, Latvia and Portugal.

#### Liabilities related to public-private partnerships (PPPs) recorded off government balance sheet

name suggests, public-private As the partnerships (PPPs) involve two partners that belong to different sectors of the economy. These partnerships are long-term contractual arrangements (lasting at least five years and usually significantly longer) between а government unit and a private partner, under which the latter builds or renovates a dedicated fixed asset and uses that asset to deliver services to the government unit or directly to the public, in exchange for a periodic payment from the government. (<sup>108</sup>)

The main issue for national accounts is determining the economic owner of the asset. i.e. determining whether this is the private partner or the government unit. The assets related to the PPP will be recorded on the balance sheet of the economic owner, thus affecting that unit's expenditure (and balance) over the construction period, and its debt. According to ESA2010, the economic owner of an asset is the unit that bears the largest proportion of the risks and is entitled to receive the largest proportion of the rewards related to the use of the asset. The three main risk categories considered for this purpose are: i) construction risk (risk related to the construction process and its costs); ii) availability risk (risk related to the availability of the asset for use after the construction phase); and iii) demand risk (risk related to the demand for the services that the asset contributes to providing). A number of other conditions of the contract are also closely analysed. These include the allocation of the assets at the end of the contract, the compensation and termination clauses, and the existence of government financing and guarantees.

<sup>(&</sup>lt;sup>105</sup>) If government charges no fees, or fees are far from covering present value of expected calls, a capital transfer (deficit-increasing transaction) is recorded for government, reflecting the unrequited nature of the transaction.

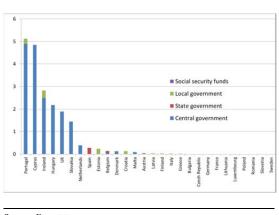
<sup>(&</sup>lt;sup>106</sup>) For a more detailed overview of the recording of guarantees, see the Manual on Government Deficit and Debt (<u>http://ec.europa.eu/eurostat/web/government-finance-statistics/methodology/manuals</u>), Section VII.4.

<sup>(&</sup>lt;sup>107</sup>) <u>http://ec.europa.eu/eurostat/web/government-finance-statistics/excessive-deficit/supplemtary-tables-financial-crisis.</u>

<sup>(&</sup>lt;sup>108</sup>) A distinction is made in national accounts between PPPs and concessions, on the basis of who pays the fees to the partner: the term PPP is used for contracts where the government is paying all or most of the fees associated with the use of the asset to a private partner, whereas in concession agreements, it is the final users that make the majority of payments.

#### While information related to on-balance PPPs is

Graph II.5.2: Off-balance PPPs, the stock of adjusted capital value by level of government, 2013,% of GDP



Source: Eurostat

directly reflected in the general government deficit and debt, this is not the case for offbalance PPPs. However the latter may create potential liabilities for the government. In cases where the government is judged to be the economic owner of the PPP, and the asset is therefore recorded on the government's balance sheet, this will mean that all expenditure, revenue and financial obligations associated with that asset affect the general government deficit and debt directly, throughout the period during which the asset is being constructed or renovated. This is not the case for PPPs where the private partner is deemed to be the economic owner of the asset. In these cases, the impact on the government's deficit and debt would be more gradual, reflecting periodic payments to the partner. Should the private partner fail, however, there is a risk that the government may need to take over the asset during the life of the contract, and this eventuality constitutes a contingent liability for the government.

The dataset published by Eurostat shows that off-balance sheet PPPs do play a role in some countries. As can be seen from Graph II.5.2 the stock of off-balance sheet PPPs only exceeds 1 % of GDP in a small number of Member States, with the highest values recorded in Portugal and Cyprus. These partnerships are almost exclusively concluded by central governments, although in countries that have a federal government structure, state governments do also play a role. Member States were only required to provide data for 2013, and the coverage is generally good, there being only a small number of country-specific gaps. A large majority of countries also reported figures for the years 2010-2012 on a voluntary basis. When interpreting the data, it should be kept in mind that

the figures for each year reflect the current value of the project at that time. They can therefore be understood to represent an estimate of the impact there would be on investment expenditure and on debt were the government to need to take the asset over. The current value increases rapidly during the construction phase of a project, reflecting investments being made, and then subsequently decreases progressively during the exploitation phase, reflecting the economic depreciation of the asset. The current value does not therefore reflect the amount of investment needed to finalise the asset if a project had encountered difficulties already during the construction phase.

#### Liabilities of government-controlled entities

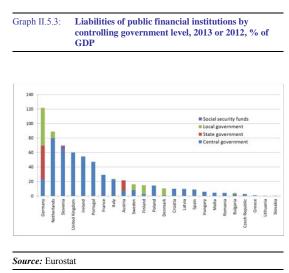
Governments often choose to set up corporations outside the budgetary perimeter. A part of these entities is, nevertheless, classified as being inside general government for the purposes of national accounts. There are a variety of reasons why governments may decide to set up entities outside the budgetary perimeter. These entities may be created with a legal status that is different from traditional budgetary units (e.g. as limited liability companies) and they may combine commercial and public interest objectives. The extent to which governments make use of this approach, i.e. setting up entities outside general government, varies considerably across Member States and no clear generalisations can be made as to the advantages they offer compared to direct procurement of goods and services. Wherever such entities are controlled by the government, (<sup>109</sup>) they belong to the public sector. Whether a public sector unit is classified for statistical purposes as part of general government

<sup>(&</sup>lt;sup>109</sup>) This control may take the form of: i) the right to appoint, veto or remove a majority of the governing board or senior members of staff; ii) ownership of the majority of the voting interest (most commonly ownership of over 50 % of shares); iii) rights given by special shares and options; iv) rights to control the company via contractual arrangements, agreements or permissions to borrow, or via excessive regulation; or v) another form of control.

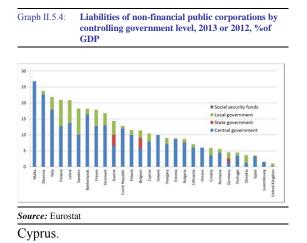
or as part of the public corporations sector depends on the nature of the unit. Units involved in nonmarket activities are classified as part of general government whilst those involved in market activities are classified as public corporations. The term corporation must be understood here in a broad sense, as it may include entities that do not have the legal status of a corporation.

Units classified as being inside general government are covered by regular reporting on government deficit and debt. This is not the case for government-controlled units outside general government, whereas their debt represents a potential liability for the government. If a public sector unit is classified in the general government sector, its revenue, expenditure and debt are added to those of the rest of the government sector and thus affect the government balance and debt directly. As stated above, the same treatment is not, however, applied for public corporations, whether financial or nonfinancial, that are by nature market units and which thus remain outside general government. Participation in the capital of public corporations could, nonetheless, represent a potential liability for the government: when the corporation is experiencing difficulties, the government may need to step in its capacity as a controlling entity or majority owner. This liability is contingent, i.e. it will only lead to actual costs if some specific event occurs. The cost of an intervention, and the likelihood of such action being necessary, cannot, however, in most cases be determined in advance. A government may also decide to intervene for reasons other than financial difficulties. In the case of a planned privatisation of a public company, for example, the government may decide to 'clean' the company's balance sheet by assuming certain obligations, including the obligations relating to an occupational pension scheme. When such interventions take the form of an unrequited payment (i.e. when the government does not receive a payment of an equal value in return and is not expecting to earn a sufficient rate of return on its investment), they will worsen the government's budgetary position. (<sup>110</sup>)

(<sup>110</sup>) The application of 'the capital injection test', including the definition of a sufficient rate of return, is described in Section III.2 of the Manual on Government Deficit and Debt. Eurostat's publication on the liabilities of government-controlled entities classified outside general government is the first of its kind, but the data provided should be interpreted with caution. Eurostat's recent publication is the first step towards developing comparable time series on potential liabilities associated with governmentcontrolled entities classified outside general government. The data, nevertheless, reflects the high degree of variability in the approaches taken by different Member State governments to the role of public corporations, and this should be taken into account when interpreting the information. There are also a number of other considerations that need to be kept in mind. Firstly, the data reflect gross liabilities, i.e. the figures show debt alone, rather than debt offset against assets. Secondly, the reporting is non-consolidated, i.e. part of the debt shown could be debt owed to another unit in the same institutional sector. (For example, if two public corporations have liabilities towards each other, both amounts would be captured in the data, and it will also cover subsidiary's debt towards its holding unit.) Thirdly, there are some gaps in the data submitted by Member States. In particular, the information on the liabilities of financial corporations is missing or incomplete for Belgium, Greece, Spain, Cyprus and Luxembourg, and information on corporations controlled by local government is missing or incomplete for Belgium, Ireland, Greece and



http://ec.europa.eu/eurostat/documents/3859598/5937189/ KS-GQ-14-010-EN.PDF.



Despite these caveats, the information published by Eurostat allows analysing risks associated with the government's participation in financial and non-financial corporations. As shown in Graphs II.5.3 and II.5.4, the gross liabilities of public financial corporations are, as a rule, much higher than those of public nonfinancial corporations. These liabilities must, however, also be interpreted differently in the case of financial and non-financial institutions. The

former tend to have large balance sheets and thus also large gross liabilities, but their obligations are usually balanced by assets of a comparable size. Moreover, financial institutions, both public and private, are covered by specific regulations, such as those on prudential supervision and deposit insurance, which reduce the need for owner intervention. In addition, the database available on Eurostat's website also includes a separate subset of data on the liabilities of loss-making nonfinancial corporations (see Table II.5.1). Given that companies experiencing occasional losses may drop in or out of this data in any given year, any conclusions drawn on the basis of the single set of results that is currently available could be misleading, and this data subset is therefore not presented here. In most cases, it can also be assumed that the government would not go as far as to cover all the liabilities of a corporation in difficulties. The reported liabilities should therefore be understood as the maximum loss theoretically possible, rather than as a likely scenario.

#### Non-performing loans

Although not part of their traditional role, governments do sometimes issue loans. Various government units may decide to provide loans to other economic sectors or to the rest of the world. Their motivations for doing this are, for example: to achieve a particular objective in the area of socioeconomic policy or international relations; or to manage the accumulated assets in a costeffective manner. Eurostat publishes quarterly information on general government financial accounts. In particular, it provides data on the stock of government assets in the form of loans, including by counterpart (i.e. debtor) sector for central government and social security funds. The data shows, for example, that loans account for a relatively high proportion of central government assets in the Nordic countries (and of social security funds' assets in the case of Finland).

The stock of general government assets taking the form of loans can also indicate the presence of non-market financial institutions inside general government. It is not unusual, especially in the aftermath of the recent financial crisis, for public financial institutions to cease performing traditional financial intermediation activities and to subsequently be classified inside general government due to their non-market nature. In some cases, the inclusion of these units is a corollary to the more precise definitions given in ESA2010 for delimitation of the general government sector, compared to the earlier national accounts standards. The institutions to which this could apply include defeasance structures ('bad banks'), asset management companies and special purpose entities, if they are controlled by government and do not place themselves at risk. The inclusion of units of this type in general government will have an effect on the statistics on government assets, as has been seen in recent years for Ireland, Spain, Latvia, the Netherlands, Austria, the UK and a number of other Member States.

The loans issued by the government may become non-performing and in some cases may result in losses for the government. Loans are considered non-performing when: i) interest or principal have not been paid 90 days or more after their due date; ii) interest payments equal to 90 days have been capitalised, refinanced, or delayed by agreement; or iii) there are other good reasons (such as the debtor filing for bankruptcy) to doubt

that the payments due will be made in full. Nonperforming loans may lead to full or partial nonrecoverability of the debt and potentially to losses for the government. These losses can take a number of forms. A debt cancellation agreement in favour of the debtor, for example, would directly worsen the government's balance. A write-off of debts after the debtor unit has been liquidated, meanwhile, would not affect the balance directly, but would imply an indirect increase in the creditor's debt level (as its borrowing needs would be higher than they would have been had the principal and interest been fully repaid). According to Eurostat's publication, at the end of 2013, the total stock of non-performing loans issued by Member State governments was highest in Ireland (at around 11 % of GDP). This was due to the inclusion of the Irish Bank Resolution Corporation in the general government. The second-highest level, of around 3 %, was recorded in Slovenia, where the inclusion of the Bank Assets Management Company had contributed to the stock of non-performing loans. In the majority of Member States, however, the amounts were negligible. When the proportion of non-performing loans is high as a result of defeasance structures being classified as part of general government, the situation is usually expected to change in the medium term, and the amounts tend to decline rapidly as positions are wound down.

The data reported by Member States remains incomplete. Belgium, France, Croatia, Cyprus and Slovakia have not provided any data on nonperforming loans, while Spain, Italy and Finland have only partly met the reporting requirements. Reporting of data on non-performing loans was only compulsory for 2013, but a number of countries also provided information for 2010-2012.

#### 5.4. CONCLUSION

It is through a better understanding of the fiscal risks associated with contingent liabilities that policymakers will be able to improve their countries' performance relative to budgetary targets. Fiscal risk is a broad concept encompassing various reasons why fiscal outcomes can deviate from the targeted or forecast levels. Contingent liabilities are one of the factors creating fiscal risk. They are potential obligations for the state that materialise as actual losses and higher debt only if and when certain events occur. Because of this, it is often very difficult to estimate in advance the potential impact they could have on deficit and debt, and to predict the timing of the events that would cause the potential loss to materialise. Irrespective of these difficulties, contingent liabilities cannot be ignored, as has also been demonstrated by the economic crisis. Making information on contingent liabilities publicly available is an essential first step towards developing a better understanding of contingent liabilities, and mitigating the risks associated with them.

The requirements for reporting on contingent liabilities at EU level have recently been strengthened, with the aim of increasing transparency. As demonstrated by these changes, there is a strong recognition of the importance of developing a better understanding of the fiscal risks associated with contingent liabilities, both for the purpose of EU budgetary surveillance and more generally. The new measures include, in particular, the introduction of new statistical reporting by Eurostat and the publication of more detailed information at national level, in accordance with the requirements of Council Directive 2011/85/EU on budgetary frameworks. These new reporting requirements relate to: i) government guarantees; ii) liabilities related to public-private partnerships (PPPs) recorded off government balance sheet; iii) liabilities of government-controlled entities; and iv) nonperforming loans.

While recognising the country-specific nature of contingent liabilities, the new data series allow some cross-country comparison. They also show that contingent liabilities tend to be high when they relate to the financial sector. The reasons why Member States choose to use contingent liabilities instead of carrying out direct budgetary interventions often reflect historical circumstances and established institutional frameworks, which makes cross-country comparison less straightforward. Nevertheless, as mentioned above, it can be seen that contingent liabilities tend to be higher if they relate to the financial sector. The liabilities of public financial corporations, for example, were above 50 % of GDP in 2013 in some cases, while those of non-financial public corporations reached a maximum of around 25 % of GDP. Guarantees to financial institutions

(public and private) were also as high as 30 % of GDP in 2013 (the most recent year for which data is available). These findings are not surprising, given the considerable impact that the financial stabilisation measures adopted by governments have had on the deficit and debt levels in many countries. Where data series cover more than one year, it can, however, also be seen that the liabilities associated with the financial sector are now on a declining trend. Both contingent liabilities related to off-balance sheet PPPs and the stock of non-performing loans are currently of macroeconomic relevance in only a small number of countries.

The next steps to be taken include improving the coverage and comparability of the data, and finding the best ways to mitigate the fiscal risks associated with contingent liabilities. While the Eurostat publication represents recent а considerable step forward in terms of improving the availability of comparable data in the EU, there continue to be a number of gaps in reporting. Moreover, the length of the time series is still very limited in most cases. Both the quality of data and the length of the time series are expected to improve over time, thanks to the efforts being made by the EU statistical community. The international organisations and the EU Member States have also started working on developing ways to mitigate the fiscal risks associated with contingent liabilities. The most promising avenues involve making such liabilities self-financing or budgetary neutral in the longer run, by charging fees and making provisions that reflect the expected future losses. Strengthening the institutional and statistical frameworks and improving transparency are among the other strategies proposed for mitigating these risks.

## Part III

Negative inflation surprises: how much of a bad thing

## 1. INTRODUCTION

Price developments may affect public finances in a number of ways. Inflation has a direct bearing on tax revenues through consumption, wages, property income, etc. Primary expenditure is also affected as government spending can be formally linked to changes in prices (e.g. through an indexation mechanism) or naturally reflect such changes (e.g. through government purchases of goods and services and public investment). Interest expenditure is directly affected by price developments as well. In turn, the stock of government debt can be influenced both in absolute terms and relative to the size of the economy.

It is generally acknowledged that tax bases, and hence tax revenues, are faster to adjust to price developments than primary expenditure. Indeed, revenues evolve broadly in line with inflation developments but often with some time lag depending on how fast tax bases adjust as well as on tax rules and tax collection. While the effects of inflation on government spending are slower to materialise, it is also less straightforward to capture the precise impact. Some items are often linked to inflation while others are not, at least not in the short run. Most importantly, given that (nominal) expenditure ceilings are often set well ahead of the budget's adoption and actual implementation, changes in the rate of inflation with respect to forecasts may not translate into lower or higher spending.

Unexpected inflation shocks have a different impact on the budget than shocks which are fully anticipated by the government. To the extent that inflation developments are anticipated, and provided that budgetary appropriations are adjusted accordingly, they should be neutral for public finances in the sense that governments can in principle secure the planned fiscal targets. By contrast, as discussed above, unexpected price developments may have a material impact on the government balance in that revenues and expenditures may be affected differently. That said, a protracted period of low inflation, even when fully anticipated, may imply cost savings difficult to implement if revenues are to be continuously offset by ever stricter spending norms, especially if these come at odds with underlying trends e.g. in the areas of healthcare or

age-related expenditure or imply cuts in absolute terms (as opposed to nominal freezes).

In addition, inflation developments can give a biased picture of a government's fiscal policy. In some cases, price developments may help a country meet, or make it more difficult to achieve, fiscal targets. In such cases, the meeting of requirements may be wrongly seen as the country delivering on policy commitments, and vice versa. In that respect, the way inflation developments affect compliance with the rules of the EU's Stability and Growth Pact is a relatively new topic also because most of the latter have been built under the implicit assumption of price stability, evidenced by annual inflation closely fluctuating around 2% since the inception of the SGP.

In this context, Part III looks into the impact of an unexpected inflation shock on the budget balance and the consequences this might have in terms of fiscal surveillance, focusing on the 2014 shock. As is the case for fiscal multipliers, the specific circumstances under which the unexpected inflation shock occurs are relevant for the actual value of the elasticity of the budget balance with respect to inflation. For example, the response of economic variables such as wages to inflation may be different in crisis periods than in boom periods and the same holds for interest rates.

Specifically, Chapter III.2 provides a semiquantitative impact assessment of the 2014 downward inflation surprise on Member States' budgets and their components according to DG ECFIN's desks and an analysis of the reaction of interest expenditure and shows that the budgetary impact of this shock was in many cases of the order of 0.1-0.2% of GDP.

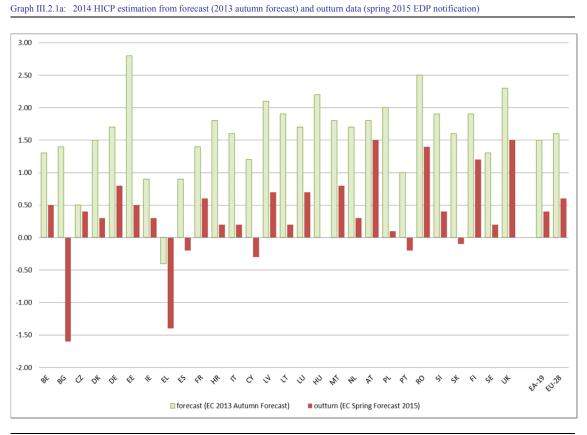
In order to interpret these results it should be considered that, while such an impact of the inflation shock on the overall balance may seem small in size relative to a given deficit *level* (e.g. the 3% of GDP Treaty reference value), it may not be so in terms of the annual *change* in the deficit. Similarly, the impact may be all the more significant when compared with 0.5% of GDP which constitutes the maximum theoretical impact of a 1% inflation shock, whereby revenues adjust one for one to inflation while expenditures remain unchanged. Chapter III.3 sheds more light on the interplay between inflation surprises and fiscal effort as measured by the various metrics that are used when assessing compliance with the rules of the SGP.

# 2. COUNTRY-BY-COUNTRY ANALYSIS OF THE REACTION OF BUDGET TO THE INFLATION SURPRISE OF 2014

In 2014, all EU Member States experienced a negative inflation surprise. Inflation was revised downward for all EU Member States between the forecast prepared at the time of the adoption of national budgets (autumn 2013) and the first estimation of outturn data (spring 2015 EDP notification). The revision of the harmonised index consumer prices (HICP) between of the Commission's 2013 autumn forecast and outturn data for 2014 ranges from -0.1 pp (Czech Republic) to -3.0 pps. (Bulgaria) and the EU average is -1.0 pp. (see Graph III.2.1a and III.2.1b). For 5 Member States (Bulgaria, Spain, Cyprus, Portugal and Slovakia), the revision even led to a change of sign (from positive to negative) in the HICP: according to the 2013 autumn forecast, only one Member State (Greece) was expected to be in deflation in 2014 while outturn data showed that 6 Member States ultimately faced deflationary developments that year.

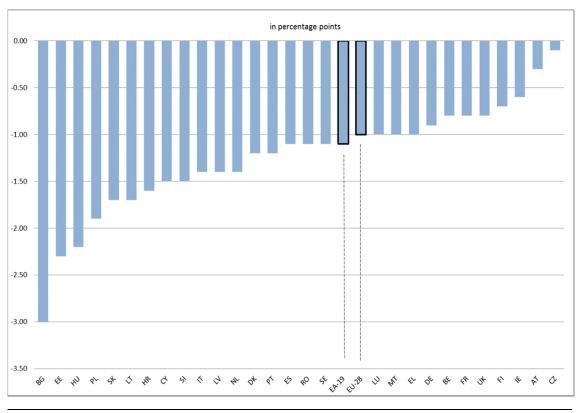
downward inflation surprise on the EU Member States' budgets and their components, based on a tailor-made survey. For this purpose, this Part collects the relevant information from DG ECFIN's country desks and looks at both the expenditure and the revenue side. Our methodology is described in Section 1. Section 2 shows the assessment of DG ECFIN to shed light on the Member States' reaction to an inflation surprise and through which channels this surprise affects revenues and expenditures. Section 3 discusses the particular cases of interest expenditure given their very specific link to inflation.

This chapter aims at analysing the impact of the downward inflation surprise on the EU Member States' budgets and their components, based on a tailor-made survey. For this purpose, this Part collects the relevant information from DG ECFIN's country desks and looks at both the



This chapter aims at analysing the impact of the

Source: Commission services





Source: Commission services

expenditure and the revenue side.

Our methodology is described in Section 1. Section 2 shows the assessment of DG ECFIN to shed light on the Member States' reaction to an inflation surprise and through which channels this surprise affects revenues and expenditures. Section 3 discusses the particular case of interest expenditure given its very specific link to inflation.

#### 2.1. INFLATION ELASTICITIES IN 2014 AND 2015 ACCORDING TO COMMISSION STAFF

Forecasts in DG ECFIN are produced by Commission staff. Their preparation combines a geographically decentralised approach with central guidance and consistency checks. The actual forecast figures are provided by country desks (teams of economists covering each Member State) using expert judgement combined with quantitative analysis which takes country specificities into account. Euro area and EU figures are generated by aggregation. The central forecast team ensures the arithmetic and economic consistency of forecast figures prepared by the country desks and steers the forecast process to ensure convergence between the top-down and bottom-up views. This part collects the information available across desks about the reaction of budgets to inflation.

#### 2.1.1. The coverage

An exhaustive dataset of EU Member States' reaction to the 2014 inflation surprise in 2014 and 2015 was constructed by collecting the relevant information from DG ECFIN's country desks. The existing literature usually focuses on an EU-wide analysis, sometimes complemented by examples mostly from the four largest economies (Germany, France, Italy and Spain). By contrast, in this chapter each Member State is analysed individually. The present analysis of EU level sensitivity to inflation is based on the exhaustive

aggregation for the reactions of the twenty-eight Member States. All of ECFIN country desks were involved in building the dataset through a survey that was fully answered. In addition to a complete coverage of EU Member States, the analyses made by country desks allow for a thorough assessment of the inflation surprise, using both quantitative and qualitative analysis. The survey is split into revenue and expenditure items along the ESA 2010 classification. Seven expenditure categories and four revenue categories are retained (see Table III.2.1a and Table III.2.1b).

For all Member States the three most important revenue items are indirect taxation (taxes on production and imports), current taxes on income and wealth, and social contributions. Depending on the Member State, these items represent between 77% and 91% of total revenues and are the focus of the present study. (<sup>11</sup>)

The main expenditure aggregates are compensation of employees, intermediate consumption and social transfers. Social transfers in kind were in addition distinguished from the rest of the social transfers as their behaviour with respect to inflation is very different. For all Member States these items represent from 69% to 83% of the total expenditures and are the focus of the present study.  $(^{112})$ 

Sales and other current revenue, capital transfers received and other capital expenditure were treated differently, given their small size and different behaviour. These three items have a very specific behaviour and include different categories with heterogeneous economic and cyclical patterns. Thus, the consistency of answers among respondents to the survey could not be ensured. Also, they account for a relatively small share of overall expenditure and revenue. It was then assumed that the behaviour of these items were similar to the one of the other items. Sales and other current revenue, and capital transfers are assumed to follow the average patterns of other revenues. "Other capital expenditures", which represents less than 4% of GDP in all Member

States, was aggregated with subsidies and other current expenditures, for the sake of simplicity.

The sensitivity of interest payments was estimated separately. They were not part of the survey given their very specific behaviour. Interest payments depend strongly on the share of debt sensitive to inflation. Short-term debt, foreign-currency denominated debt and debt with variable interest rates are mechanically very sensitive to inflation while long-term, domestic-currency denominated, non-indexed debt is not. Section 3 sheds more light on the link between inflation and interest payments and provides a quantitative assessment of the likely impact of an inflation shock.

| Type of item  | Name of the item   | Non-weighted average share among<br>Member States in 2014                                |
|---|--|--|
| Expenditure   | compensation of employees  | 23%  |
| Expenditure   | intermediate consumption   | 14%  |
| Expenditure   | social transfers other than in kind  | 32%  |
| Expenditure   | interest payments  | 5%   |
| Expenditure   | social transfers in kind supplied via<br>market producers  | 7%   |
| Expenditure   | gross fixed capital formation  | 8%   |
|   | A 1 1 P 1 P  |  |
| Expenditure<br>ource: Con                             | Subsidies, other current expenditures<br>and other capital expenditures<br>nmission services   | 11%  |
| 10-4  | and other capital expenditures   |  |
| ource: Cor  | and other capital expenditures mmission services b: Decomposition of revenue   | es with the ESA 2010   |
| able III.2.1  | and other capital expenditures nmission services b: Decomposition of revenue classification Name of the item                                 | es with the ESA 2010<br>Non-weighted average share among<br>Member States in 2014        |
| ource: Con<br>able III.2.1<br>Type of item<br>Revenue | and other capital expenditures minission services b: Decomposition of revenu classification Name of the item taxes on production and imports | es with the ESA 2010<br>Non-weighted average share among<br>Member States in 2014<br>33% |
| able III.2.1  | and other capital expenditures nmission services b: Decomposition of revenue classification Name of the item                                 | es with the ESA 2010<br>Non-weighted average share among<br>Member States in 2014        |

#### 2.1.2. Main elements of the survey

The questions of the survey were chosen in order to ensure consistency between Member States while taking into account country specificities. For each item, four main types of questions were asked concerning the influence of inflation on public finances.

The first two questions refer to the impact of the inflation surprise in 2014 respectively in the first year and in the second year. Specifically, the questions consist in asking if the revenue or expenditure item is "very sensitive" to the inflation surprise in 2014 (corresponding to an elasticity

<sup>(&</sup>lt;sup>111</sup>) Shares are based on the Commission's 2015 spring forecast.

<sup>(&</sup>lt;sup>112</sup>) For Cyprus, the effect of bank recapitalisation operations in 2014 (amounting to 8.6% of GDP) has been netted out.

higher than 0.75), "quite sensitive" (corresponding to an elasticity between 0.5 and 0.75), "weakly sensitive" (corresponding to an elasticity between 0.25 and 0.5) or "not sensitive" (corresponding to an elasticity lower than 0.25). The first question bears on the contemporaneous effect in 2014 (assessment of the effect in the first year) while a second question refers to the assessment of the cumulated and total sensitivity at the end of 2015. They correspond to a semi-quantitative assessment of the elasticity of each main expenditure or revenue item to the inflation surprise in 2014 from the perspective of the 2014 and of the cumulated 2015 outcome, respectively.

A second series of questions relate to the mechanisms behind the sensitivity of revenue and expenditure items to inflation. Though multiple, stylised answers were proposed (see Annex III.1), desks were encouraged to provide any possible clarifications, including several specific features such as:

- Symmetry. Elasticity to inflation is often thought as the reaction of a variable to a *rise* in inflation of 1 percentage point. As the inflation surprise in 2014 was actually a downward revision, respondents were asked to provide precisions, if the sensitivity of an item would be symmetric for a downside and upside inflation surprise.
- Indexation. Respondents were asked to indicate the possible existence of an automatic indexation mechanism to inflation. Automatic mechanisms can be legal rules or less formal arrangements and the indexation provided for may be total or partial. Respondents were also invited, when relevant, to indicate the index used for indexation (e.g. annual average CPI growth, year-on-year lagged growth of CPI, etc.)

The last question concerns how indexation mechanisms and thus the sensitivity to inflation has evolved since the 2008-2009 crisis. Since the Great Recession and the subsequent need for fiscal consolidation, many Member States have modified or suspended indexation formulas of social transfers or public wages on the expenditure side, or tax brackets on the revenue side. The goal was to reduce expenditures and increase revenues. Respondents were asked, for each item when relevant, whether the automatic indexation rule was changed recently, in particular whether a former indexation rule was abolished or frozen.

## 2.1.3. Deriving the dataset on inflation surprises from the survey

The survey allows building a dataset which includes both a quantitative and qualitative assessment. First, this dataset contains a semiquantitative assessment of sensitivity to inflation for all twenty-eight Member States for the five expenditure items and the three revenue items considered. The assessment is used to estimate the elasticity of each item for each Member State in the first year and in the second year. To do so, the average of the proposed range of possible values for elasticity is assigned to every answer. For instance, if the respondent answered "weakly sensitive" (elasticity between 0.25 and 0.5) to the first question, the elasticity in the first year of this item of this Member State is considered to be 0.375. This treatment leads to quantitative results, but has some weaknesses as pointed out in the next section. Finally, the dataset also includes a qualitative assessment of the mechanisms and its recent evolution for almost each Member State and each main revenue and expenditure item stemming from comprehensive comments received from respondents. Main results per country are reported in Annex III.2.

#### 2.1.4. Note of caution

The effects of a disinflation surprise are particularly difficult to measure, also given the singularity of the event. The 2014 disinflation shock coincided with low levels of inflation, in some cases even deflation. Inflation levels were already relatively low in 2013, thereby limiting the room for nominal adjustments due to price and wage rigidities as their growth rates approach zero. It is thus challenging to disentangle effects from the disinflation surprise from the effects of low levels of inflation. Moreover, conclusions on the symmetric case of an inflation surprise should be drawn cautiously.

The study is based on expert knowledge rather than direct quantitative measurement. The dataset aggregates the assessment and experience of twenty-eight country desks in a bottom-up

fashion. However, the semi-quantitative nature of the survey leaves some room for interpretation, which leads to a potential issue of consistency among questionnaires. Moreover, the degree of detail provided varies across Member States. As a consequence, the information that can be gathered from the questionnaire's results is asymmetrical between countries. Comparisons between countries can thus not be used for assessing policy implications and are mainly provided to help gauging the level of heterogeneity within Member States. In order to tackle this issue, the methodology was framed and different possible answers were suggested to every question in order to have the highest possible degree of consistency among questionnaires.

The method cannot provide precise estimation of the individual elasticities and involves even greater uncertainties after their aggregation. This is due to the computation of elasticities from semi-quantitative assessments in which we take arbitrarily the median of the proposed interval of possible values. This also raises issues of aggregation when building synthetic indicators. Under the further assumption that the "true" elasticity is uniformly distributed around the average of the interval the aggregation gives a typical interval of possible value of 0.25 around the average elasticity (i.e. a confidence interval of  $\pm 0.125$  around the average). Similarly, at the EU level, elasticity is built by summing the elasticities weighted by the share of Member States' public expenditure in total public expenditure of the European Union. In the following, for the sake of simplicity, only average values are presented but the reader should keep in mind that the interval of possible values is to be considered. To put it differently, in the following, the statement "the elasticity of this item is of x", has to be understood that the elasticity belongs typically to the interval [x - 0.125; x + 0.125].

**Overall, the conclusions derived from the results should be interpreted carefully.** This is a first attempt to estimate the sensitivity of the various expenditure and revenue categories to inflation directly from an exhaustive country-bycountry analysis. The analysis is complementary to other studies and cannot substitute for further quantitative exercises.

#### 2.2. RESULTS ON INFLATION SENSITIVITY

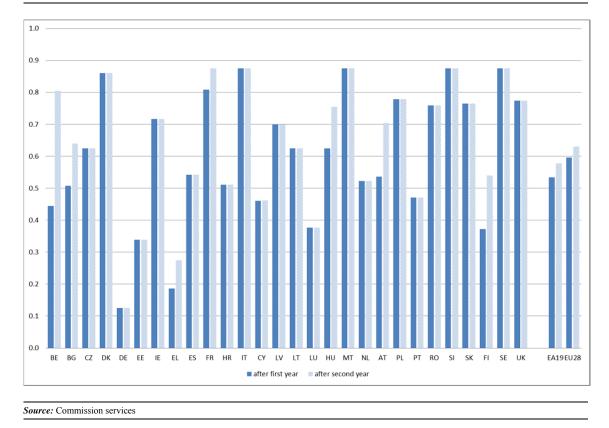
The results at the aggregate level are in line with the economic literature. Concerning the relationship between inflation and public finances, the economic literature tends to focus on the impact of inflation on debt rather than on deficit developments. However, the impact of inflation on the public deficit and its components has been studied by several authors. Aghevli and Khan (1980) is one of the few examples of articles estimating the impact of inflation separately on expenditure and revenue. They found that expenditure adjusts less rapidly than revenue in response to unanticipated inflation. Moreover, in a context of low inflation, sensitivity tends to be lower than in periods of high inflation rate. OECD (2007) and Immervol (2005) have both further reached the conclusion that, even at low inflation rates, the size of revenue effects can be substantial. The results of the following sections are consistent with these findings and bring further precisions and quantification on the size of these effects.

On an item-by-item basis, the results presented here are broadly in line with the literature. Heinemann (2001) studied the impact of low inflation on public finances for OECD countries and found that inflation has not the same impact across categories of revenue and expenditure: indirect taxes (taxes on production and imports) adjust slightly more than total income taxes (including individual and corporate taxes) but both significantly less than social contributions. We depart from this analysis as we find an effect on indirect taxes much larger than other revenue items. Moreover, this analysis brings both quantitative and qualitative evidence of channels through which these mechanisms occur and their recent evolutions.

This section presents first the main results and then describes the more detailed findings by items.

## 2.2.1. Results for aggregate revenue and primary expenditure and on the primary deficit

**Revenues are more sensitive to inflation than primary expenditures.** The contemporaneous sensitivity is, in line with what the literature suggests, significantly higher for revenues than for primary expenditures. This corresponds to the

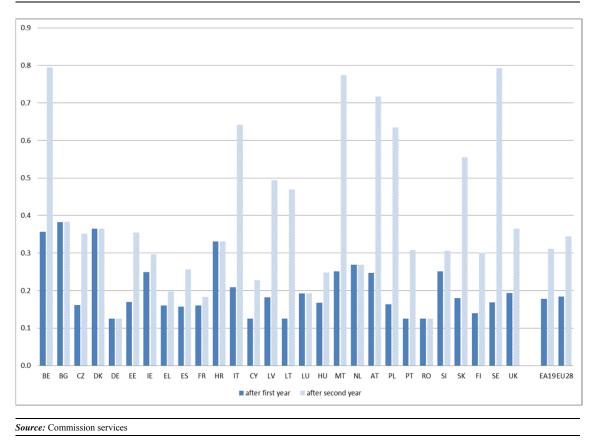


Graph III.2.2: Elasticity of revenues with respect to inflation surprise in 2014 in the EU Member States

economic intuition that tax bases and thereby revenues adjust fast, whereas expenditure policy is set well ahead of the actual execution of the budget. For primary expenditures, the estimated elasticity in the first year ranges from 0.1 to 0.4 among Member States while it ranges from 0.1 to 0.9 for revenues (cf. Graphs III.2.2 and III.2.3). At the EU level, the elasticity of primary expenditure to inflation is 0.2 versus 0.6 for revenues. Member States' elasticities for revenues are thus on average more than three times higher than the ones for primary expenditures. (<sup>113</sup>)

In general, unlike revenues, primary expenditures adjust with a lag. While the elasticity of revenues to inflation does not change significantly between the contemporaneous estimation for 2014 and the following year, the sensitivity of primary expenditures at the end of 2015 is higher for all Member States. On the expenditure side, elasticity to inflation ranges from 0.1 to 0.4 in the first year, and increases to a (cumulated) elasticity of up to 0.8 for some Member States in the second year. The overall elasticity for the EU increases from below 0.2 in the first year and to more than 0.3 in the second year. On the contrary, there is no such difference between estimations in the first year and in the second year when it comes to revenues: the estimated elasticity ranges from 0.1 to 0.9 in both vears and the elasticity at EU level is estimated at 0.6 in both years as well. This means that the gap between revenue and primary expenditure elasticities decreases from the assessment in the first year to the one in the second year. In 2014 the estimation of the EU level revenue elasticity is three times higher than the one for primary expenditures, while this ratio drops to two for the estimation at the end of 2015. The ratio of revenue elasticity to expenditure elasticity ranges from 1 to 6 across Member States in both periods, but it falls in the second year for three Member States out of four.

<sup>(&</sup>lt;sup>113</sup>) Country-specific and EU-wide elasticities were obtained by weighting revenue and expenditure categories with the respective amounts (collected and spent).



Graph III.2.3: Elasticity of primary expenditures with respect to inflation surprise in 2014 in the EU Member States

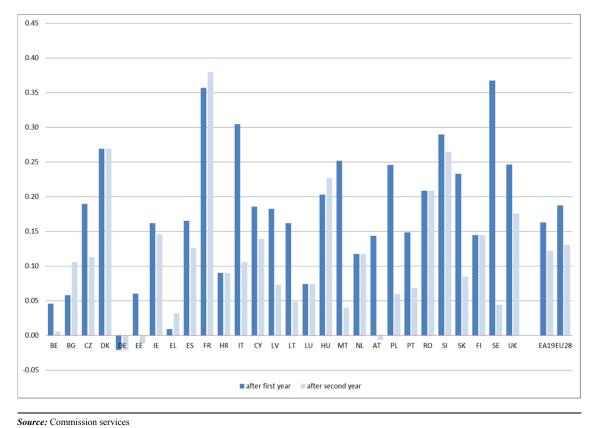
The partial or complete removal of indexation mechanisms and rigidities of a downward adjustment are two main reasons why elasticities of primary expenditures are particularly low in 2014. These two elements will be further detailed item by item.

This general assessment is valid at the country level with little exceptions. Revenues are more sensitive than primary expenditures to inflation for twenty-six Member States for the estimation in the first year and for twenty-three Member States for the estimation in the second year. Moreover, for twenty-six Member States the change in elasticity of revenues is lower than 0.1 point between the two assessments (effects in the first year and in the second year) while for more than half of the Member States the difference between the two assessments on primary expenditures is greater than 0.1. The increase of expenditure elasticity between the two estimations is even very high (>0.5) for five Member States. Graphs III.2.4 and III.2.5 show that a downward inflation surprise of 1 percentage point increased the primary budgetary deficitto GDP ratio by 0.2 percentage point in the first year (2014) and by 0.1 point in the second year (2015). The impact on the primary deficit-to-GDP ratio writes:

$$\varepsilon^{d/\pi} = -\frac{\varepsilon^{R/\pi}\cdot R - \varepsilon^{E/\pi}\cdot E}{GDP}$$

with E and R respectively the level of expenditure and revenues, *d* the primary deficit-to-GDP ratio and  $\pi$  the rate of inflation. As the expenditure elasticity picks up in the second year, the effect on the deficit will be higher in the first year than in the second year.

The effect of the inflation surprise on the deficit in the first year ranges from 0% to 0.4% of GDP. Thirteen Member States show a deficit semielasticity of at least 0.2 in the first year but it is the case for only five of them in the second year.



Graph III.2.5:

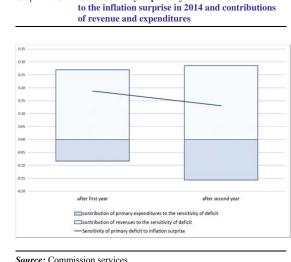
Graph III.2.4: Semi-elasticity of primary balance to inflation surprise in 2014 in the EU Member States

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According to these results the inflation surprise of 1 percentage point in 2014 at the EU level let to an increase in the 2014 headline deficit of 0.2 point. The effect of the 2014 inflation surprise is still expected to be visible in 2015 but should be lower than in 2014 as it would only increase the deficit by 0.1 point.

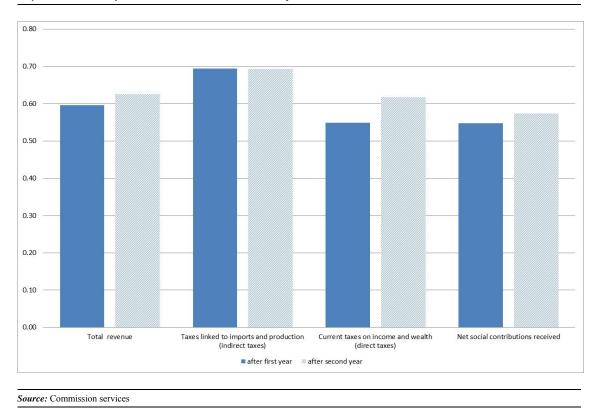
### 2.2.2. Revenues

The sensitivity of income taxes and social contributions is high. The elasticity of both items (current taxes on income and wealth and net received social contributions) was of 0.5 at the EU level in the first year (see Graph III.2.6 below). Social contributions are found in the survey as "not sensitive" for nine Member States, while income taxes are found "not sensitive" for five Member States. Both items are found as "very sensitive" for one-third of the Member States. The elasticity of both items at the EU level in the second year is slightly higher than in the first year (from 0.5 to 0.6). The difference between the two estimations



Semi-elasticity of primary deficit in 2014 and 2015

(in the first year and in the second year) is thus limited and is mainly explained by four Member States, for which the sensitivity shifts from "quite sensitive" or "weakly sensitive" to "very sensitive"



Graph III.2.6: Elasticity of different revenue items to inflation surprise in 2014

for taxes on income and wealth between the first and the second year.

Stickiness of income keeps the sensitivity of income taxes and social contributions below 1 against moderate fiscal drag. Firstly, the crucial question is to which extent wages adjust to an inflation surprise. One would expect productivity and price developments to be the main drivers of nominal wage developments. The survey results support the expectation that wages are sticky downward, in particular in cases when nominal wage increases are already small or zero. The impact of an inflation surprise is further lowered since wages might adjust with a time lag. Also, the wage setting process might be affected by other country specific aspects. Secondly, when the income tax payments are based on previous year's incomes, the impact of lower wages occurs with a lag. Thirdly, the elasticity of income tax to inflation is increased by fiscal drag, i.e. when fixed tax brackets entail an increase in average tax rates linked to inflation even if the real wage remains constant. Fiscal drag is linked to lagged indexation of tax brackets or a non-indexation of tax brackets.

Yet, fiscal drag is rather limited as many Member States have put in place a regular indexation. For instance in the Netherlands the tax framework itself is indexed with inflation, meaning that there is a lower fiscal drag than in other Member States. However, if both wages (and thus income) and tax brackets are sticky downward the fiscal drag has overall a limited role. However, the effects of fiscal drag can be observed with a lag in the second year if tax brackets are frozen and that income tax is based on previous years' income. A freezing of income tax brackets was observed for example in Ireland and in France since the crisis. Still, in the majority of Member States, absence of strong fiscal drag and stickiness of income to a downward revision of inflation also explains why the elasticity of revenues to the 2014 inflation surprise is lower than 1, both in the first year and in the second year.

As expected, the elasticity of indirect taxation to the inflation surprise is higher than the one of overall revenues. At the EU level, the elasticity of taxes on production and imports (including VAT) is 0.7 both in the first year and in the second year. According to our survey this item is "not sensitive" to inflation only in two Member States while it is "very sensitive" for almost half of the Member States. Taxes on production and imports are directly linked to inflation developments, even in case of an inflation surprise. However, the fact that the elasticity as estimated in the survey is below 1 can be explained by two main factors. First, consumers react to a smaller increase in prices by increasing their consumption level (in real term). This effect is stronger in the first year (i.e. before the downward wages adjustment) but can carry on in the second year when wages are sticky with respect to a negative inflation surprise. Secondly part of the taxes on import and production are in fact excise duties. Thus they are affected by inflation only to the extent that the quantity of consumed goods does not compensate the price decrease and the link between volume (and thus product of the tax) and downward inflation surprise is negative. This means that, except when excise duties are being indexed to inflation (which happens only in few cases like Belgium (since 2015) for example, they tend to lower the overall elasticity of the whole item taxes on imports and production. In other words, the elasticity of taxes on imports and production excluding excise duties should be closer to 1.

### 2.2.3. Indexation of public wages and social transfers

Due to the need for fiscal consolidation, the sensitivity of public wages and social transfers has dramatically changed since the financial crisis. The purchasing power of households is directly affected by public employees' compensation and social transfers. That is why in the majority of Member States, these expenditure items are frequently adjusted to inflation, whether through automatic legal mechanism or following ad hoc decisions. However, the need for fiscal adjustments in almost all EU Member States in the aftermath of the economic crisis led Member States to remove partially or totally - though often temporarily - the indexation mechanisms or to freeze the adjustment for several years.

Until recently public wages were automatically or semi-automatically indexed to inflation in around one-third of Member States. In these Member States there was a legal framework of automatic indexation mechanism to inflation for compensation of public employees. For example, in Slovenia compensation of employees was automatically indexed to the national consumption price index (NCPI). In Belgium, the indexation is not periodical but public wages increase by 2% each time the reference index – NCPI excluding tobacco, alcohol and fuels – has increased by 2%.

In other Member States, indexation of public wages is less systematic and takes place nonautomatically through negotiation or ad hoc decisions. For around 20% of the Member States, the sensitivity of public wages to inflation developments comes from a negotiated agreement. Interesting examples are the Netherlands, where trade unions take inflation on board in determining the wage demands, but without automatic indexation. In Italy, the benchmark in the bargaining with Unions is the forecast of the Italian National Institute of Statistics for HICP inflation net of imported energy prices. In the other Member States (slightly less than 50%), reaction of public wages to inflation is based on an ad hoc decision that takes into account inflation developments but for which the link with inflation is somehow less mechanical. For instance in Bulgaria, the evolution of public wages follows ad hoc decisions based on a variety of political and economic factors. In Lithuania, public wages are weakly sensitive to inflation and there is no formal obligation to consider inflation developments.

Social transfers were even more frequently indexed to inflation. In most cases, pensions (that represent the largest share of social transfers) are fully or partially indexed to inflation. In more than 70% of the Member States there is an automatic legal mechanism setting the reaction of pensions to inflation developments. However, in the majority of the cases, pensions are indexed to both inflation and real wage developments. In Slovakia, for instance, pension indexation is based on a combination of wage growth and so-called pensioners' inflation (i.e. inflation reflecting a consumption basket of retired people), even though a gradual transition towards pure indexation to pensioners inflation has been introduced. In Romania, pensions are indexed to a combination of inflation and real wages, but with a lag of two years. In these cases, the link between social transfers and inflation developments strongly varies among Member States and is challenging to quantify as it is both direct and indirect (via the impact of inflation on wages, which depends on the characteristics of the labour market and wage formations in the Member States). Concerning other social transfers, these usually also reflect inflation developments.

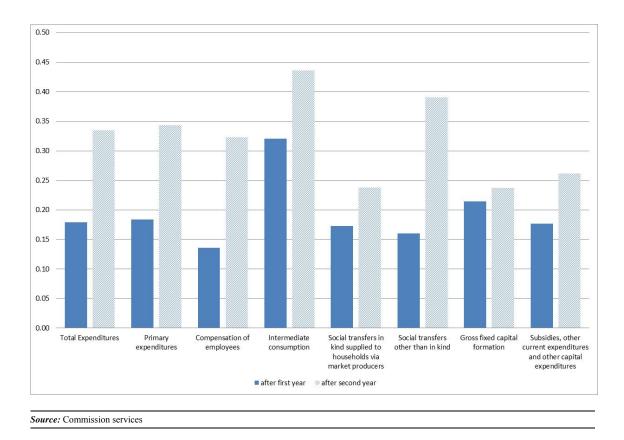
In the case of social transfers in kind, sensitivity to price developments is often limited to the service component in the health sector. Specifically, in some countries components of health benefits are explicitly indexed to prices, and, in general, inputs of the service such as wages of personnel can be linked to inflation. The link between prices for medicines and inflation is often fairly indirect, since the evolution of prices for pharmaceuticals and health services is mostly separated from overall inflation developments. The price setting for medicines is not a pure market outcome and inflation indexation is not common being in general influenced or substituted for by administrative mechanisms. In Hungary, for example, most of the medicines reimbursed by public health insurance are priced on the basis of a form of a reference pricing or a bidding process but prices are not indexed explicitly. In Greece and Romania, inflation does not impact expenditure on pharmaceuticals, as it is capped via a claw-back mechanism. In Belgium, the health care budget is annually adapted to the health index, an adjusted inflation index, leading to higher price sensitivity.

However, only two Member States have not frozen their public wage indexation in recent years. Taking again the example of Slovenia the mechanism was frozen in both 2014 and 2015. This is the case also for pensions, although the indexation mechanism was more stable than for public wages in recent years. Some social benefits have not caught up with inflation in recent years in several Member States such as in Italy where several recent budget laws have limited the indexation of higher pensions, in the Czech Republic where indexation of pensions was temporarily suspended in 2013-2014 or in Spain where the 2013 pension reform reduced the incidence of inflation indexation.

In addition, pensions and public wages tend to be less sensitive to inflation in case of downward surprises, compared with upward revisions. For fourteen Member States, pensions, public wages or both are declared less sensitive in that case. For example in Spain there is a minimum rate of pension increase. This limits the possible reaction to a downward surprise in inflation, since among low inflation and fiscal consolidation pension increases are already close to or at the minimum rate. In Hungary, if inflation turns out to be lower than anticipated at the time of the pension increase, then there is no downward adjustment in the pension increase. On the contrary, if inflation turns out to be higher than anticipated in the budget, then pensioners are compensated during the course of the year. In Latvia, pensions below the average pay are linked to inflation and wages developments, but the indexation is only applied if the value is positive.

These recent evolutions of inflation adjustment decisions and asymmetric indexation explain why the sensitivity of compensation of employees and social transfers is quite low, even in the second year (2015). The estimated elasticity of compensation of employees to inflation is particularly low (the EU average is 0.1 in the first year, see Graph III.2.7). Concerning the estimated effect in the first year, only three desks answered "weakly sensitive", and all the others answered "not sensitive". Social transfers (other than in kind) have a slightly higher elasticity to inflation (only ten desks considered them to be "not sensitive" in the first year while 40% of them assessed them as "weakly sensitive" or "very sensitive") confirming that inflation adjustment has been more preserved than for public wages. However, at the EU level, elasticity of social transfers (other than in kind) stands at 0.2 in the first year. Indeed, the fact that many indexation mechanisms are based on past inflation or forecasts (with possibly an error correction in the following year), inflation surprises cannot be taken into account contemporaneously in most cases. However, elasticities are still quite low in the second year: they stand at 0.3 for public wages and 0.4 for social transfers (other than in kind). In both cases, for more than half of the Member States the item is considered "not sensitive" to inflation in the first year. Still, the diversity of mechanisms - and of recent evolutions of them - leads these results to be particularly diverse among Member States (see more details in Annex III.2, which covers main findings of the survey by country). For both social transfers and compensation of employees, around one-third and one-half of the answers in the respective categories stick to "not sensitive" in the second year, while the rest of the answers is

#### Graph III.2.7: Elasticity of different expenditure items to inflation surprise in 2014



distributed more or less equally over the three other possibilities.

### 2.2.4. Intermediate consumption, investment and other expenditures

Intermediate consumption has a slightly higher elasticity than the rest of the expenditures. The elasticity of intermediate consumption at the EU level is 0.3 in the first year and 0.4 in the second year. This is explained by the fact that intermediate consumption is directly related to price developments. The sensitivity is higher in the second year because part of the dedicated budget for intermediate consumption is fixed in nominal terms on a yearly basis so adjustments to inflation surprises can only be done the year after. Indeed, at the stage of budgetary planning the amount dedicated to intermediate consumption is often linked to the inflation forecast and once the budget is adopted, the expenditure ceilings assigned to specific government entries can rarely be exceeded. However, even in the second year, the sensitivity is rather low. While some longer term service contracts may have an indexation clause, there are many Member States in which no automatic mechanism of compensation for past inflation forecast errors are envisioned in the budgetary process. Downward adjustments of the budget to compensate *past* lower inflation are indeed rarely observed. Finally, lower prices could result in higher volume of purchased goods rather than lower total spending. Moreover, it is difficult, in particular for this item, to distinguish inflation from other factors, which are often judged to be far more important.

Gross fixed capital formation is influenced by inflation but the link is much weaker than for intermediate consumption. The elasticity of this item to inflation at the EU level is estimated at 0.2 for both the first and the second year. As it concerns mainly long-term contracts, the link with inflation is lagged and much weaker. Investments are typically discrete events, where the price is determined on the basis of public procurement. Ex ante (before a supplier is selected) bidders take into account their costs including anticipated inflation. Ex post (once a supplier is selected), the treatment of inflation depends on the actual contract. Unless the project duration is particularly long, inflation risks are likely to be absorbed by the suppliers, but there is no universal rule. Moreover, an important share of gross fixed capital formation (GFCF) is composed of EU funds, in particular for those Member States which acceded to the EU in 2004 or later. As EU funds-related spending is part of a different process, link to inflation developments is quite weak on a year-onyear basis. Finally, a large share of GFCF concerns the construction sector so its evolution could be more linked to construction prices which have their own cycle than to consumption price index. For example, in Italy the price of public procurement for capital goods is usually set in advance. However, according to the Italian Civil Code, the price of public procurement contracts may be subject to revision in case the direct or indirect costs borne by the supplier change (including but not only due to inflation) by more than 10% upwards or downwards, making it more difficult to quantify the impact of an inflation surprise.

#### 2.3. IMPACT OF INFLATION ON INTEREST **EXPENDITURE**

An inflation shock may affect the cost of servicing debt through inflation-linked bonds as well as newly issued and variable rate debt. Interest payments are sensitive to in-year inflation developments to the extent that inflation-linked bonds and newly issued or variable rate debt are affected by price changes. Inflation-linked bonds are directly influenced in that the annual coupon payments or the principal payment, or both, are adjusted in line with movements in the level of prices. Newly issued debt is affected insofar as higher or lower inflation leads to a change in inflation expectations which may in turn affect bond spot rates. This is also the case for variable rate debt. Finally, while in theory interest payments on foreign currency-denominated debt are sensitive to inflation, this depends on the validity both of the Purchasing Power Parity relation - which states that price levels are equalized across countries once account is taken of the Balassa-Samuelson effect - and the validity of the Uncovered Interest Parity relation in financial markets. Thus empirically, in the short term the relationship between inflation and a country's exchange rate and relative interest rate is complex and very difficult to estimate. In what follows it is considered that foreign-denominated debt is not affected by an inflation surprise.

Therefore, the amount of interest payments in year t can be expressed as follows:

$$IP_t = \left[\delta \times i_{t,\delta} + (1-\delta) \times i_{t,1-\delta}\right] \times D_{t-1} \tag{1}$$

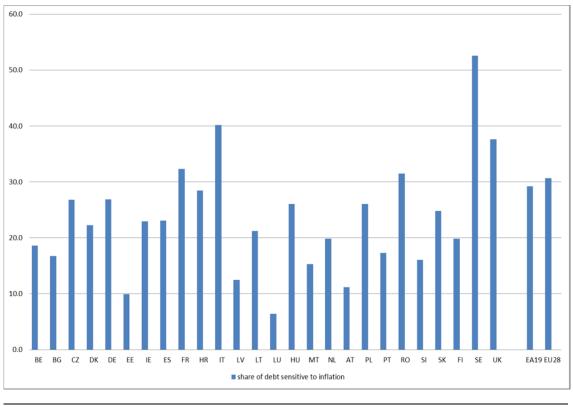
Where  $D_{t-1}$  is the amount of outstanding debt at the end of year t-1,  $\delta$  is the share of in-year inflation sensitive debt (that is, the sum of debt with a residual maturity of less than one year, inflation-linked debt and variable rate debt), it,  $\delta$  is the implicit interest rate on that share and it,  $1-\delta$  is the implicit interest rate on the remaining stock of debt (that is, non-inflation-linked, fixed rate debt with a residual maturity of more than one year). It can be shown from the above that the elasticity of interest expenditure with respect to prices (and hence to an inflation shock) can be approximated by:  $(^{114})$ 

$$\eta_{IP/P} \cong \delta \times \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{1}{i_t}$$

Where it is the aggregate implicit interest rate on debt. A 1 percentage point decrease in inflation will thus lead to a  $0.01 \times \delta \times \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{1}{i_t}$ percent decline in the amount of interest payments. This implies that in case of smaller implicit interest rate, the elasticity will be higher, since the same change in the implicit interest rate relates to a smaller initial level. Note that when inflation expectations are revised in line with inflation surprises, and provided that spot interest rates adjust fully to inflation expectations (the so-called Fisher effect, see below), the elasticity is simply given by:

$$\begin{split} D_{t-1}. \text{ Therefore:} \\ \eta_{IP/P} &= \delta \times \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{D_{t-1}}{IP_t} \times \frac{P_t}{P_{t-1}} = \delta \times \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{1}{i_t} \times (1 + \pi_t) \cong \delta \times \\ &= \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{1}{i_t}. \end{split}$$

 $<sup>\</sup>begin{array}{l} \hline (^{114}) \text{ By definition } & \pi_t = \frac{P_t}{P_{t-1}} - 1 \text{ and } \partial \pi_t = \frac{\partial P_t}{P_{t-1}}. \text{ Therefore:} \\ \eta_{IP/P} \equiv \frac{\partial IP_t}{\partial P_t} \times \frac{P_t}{IP_t} = \frac{\partial IP_t}{\partial \pi_t} \times \frac{1}{P_{t-1}} \times \frac{P_t}{IP_t} \\ \text{ In addition, it follows from equation (1) that } \frac{\partial IP_t}{\partial \pi_t} = \delta \times \frac{\partial i_{t,\delta}}{\partial \pi_t} \times \frac{1}{P_t}. \end{array}$ 



### Graph III.2.8: Share of debt sensitive to inflation in the EU Member States

Source: Commission services

$$\eta_{IP/P}\Big|_{\frac{\partial i_{t,\delta}}{\partial \pi_t}=1} \cong \delta \times \frac{1}{i_t}$$

Annex III.3 provides a disaggregated representation of how inflation impacts upon interest payments.

The portion of debt that is sensitive to inflation can be derived using alternative and/or complementary data sources. Available data sources do not allow for comprehensive and consistent measurement of inflation-sensitive debt across EU Member States. A two-step approach is used here. Eurostat data, which covers all general government sub-sectors and includes both debt securities and loans, are used to compute the proportion of short-term debt. However, the time structure of debt in Eurostat data is computed on the basis of its initial maturity rather than its maturity structure at each moment in time which would be a more adequate figure for the purpose of this analysis. Therefore Bloomberg data are used to assess the proportion of long-term debt that was

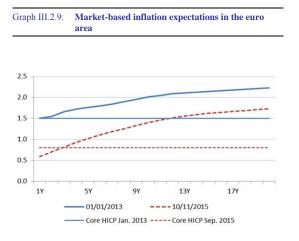
to be rolled over in 2014. (<sup>115</sup>) The shares of inflation-indexed and variable-rate debt are estimated separately using OECD data. (<sup>116</sup>) Altogether this gives a proxy of the share of debt that could be influenced by in-year inflation developments.

The portion of debt that is sensitive to inflation varies significantly from one Member State to another. The share of debt (at the end of 2013) with a residual maturity of less than one year, inflation-linked debt and variable rate debt can be considered at least partly sensitive to inflation and ranges from around 5% to slightly above 50% (see Graph III.2.8). (<sup>117</sup>) The share of debt with less

<sup>(&</sup>lt;sup>115</sup>) Data compiled by Bloomberg cover central government debt and, for some Member States, central governmentguaranteed debt. However, public debt of subnational governments and other entities classified in general government as well as loans are not always covered.

<sup>(&</sup>lt;sup>116</sup>) The relevant OECD database was used, even though it was not updated since 2010, because no alternative comprehensive data source is available.

<sup>(&</sup>lt;sup>117</sup>) Limitations in the data set imply that the mentioned subsets may partly overlap in practice. In addition, Greece and



*Source:* Eurostat, Bloomberg and Commission services calculations. Notes: Curves represent inflation expectations as derived from inflation swap rates over different horizons. Lines represent the y-o-y rate of core inflation.

than one year of remaining maturity ranged from around 5% to slightly less than 35% across Member States, averaging close to 20%. This share was below 10% only in three Member States. The share of inflation-linked bonds exceeds 5% only for a couple of countries. The UK and Sweden show the highest values around 20%. (<sup>118</sup>)

The impact of an inflation shock on interest payments will depend on how much spot interest rates are affected by (actual and forecast) inflation developments. The so-called Fisher effect states that there will be a one-for-one adjustment of the nominal interest rate to the expected inflation rate. The implication of the conjectured constant real rate is that monetary policy will have no effect on the real economy. However, empirical evidence (<sup>119</sup>) suggests that at least in the short run changes in the expected inflation rate do not only have monetary effects but also affect real variables. Thus, the nominal interest rate and the expected inflation rate are

positively correlated but there is not a one-for-one relationship. A Fisher effect of 0.5 was chosen as a baseline assumption in this analysis. As to the relationship between the actual and forecast rate of inflation at the current juncture, the recent movements in inflation swaps (see Graph III.2.9) suggest that medium- and long-term inflation expectations have fallen to a large extent in line with current inflation.

Under the assumptions made, the elasticity of interest payments (see Graph III.2.10) with respect to inflation is found to be significantly larger than 1. Assuming 50% pass-through from inflation (expectations) to interest rates, a 1 percentage point decrease in inflation is estimated to reduce interest payments in the EU as a whole by 3.9% in the first year and 3.5% in the second year (in cumulative terms-). We assume that, on average, debt is rolled uniformly over the year, hence there is a carry-over effect in the following year for the share of debt that comes to renewal. However, the impact is decreasing in the second year as we consider the impact of the 2014 inflation shock, as if the rate of inflation in the second year remained unchanged from the baseline. (<sup>120</sup>) In turn, this implies that spot interest rates in the second year and hence the amount of debt to be redeemed is not affected by the inflation shock. Note that similarly, interest payments on inflation-linked and variable rate debt are left unchanged from the baseline in the second year.

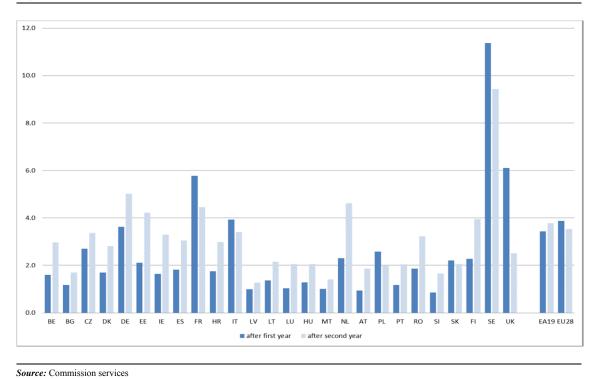
Assuming the Fisher hypothesis in full leads to higher elasticity. Under the assumption that the inflation shock filters into the interest rate one for one, the elasticity of interest expenditure is estimated at 5.9% in the first year and 7.0% in the second year for the EU as a whole. Note that independent of the assumption regarding the Fisher effect, interest payments on inflation-linked bonds are assumed to adjust one-to-one with movements in the level of prices.

Cyprus, the remaining euro area countries under a macroeconomic adjustment programme, are not included in the analysis of the sensitivity of interest rates with respect to inflation. Indeed, interest rate conditions are in these cases subject to a specific agreement and can to a large extent be considered disconnected from inflation developments.

<sup>(&</sup>lt;sup>118</sup>) Missing data points were replaced with EU averages. The composition of debt was thus aligned with EU averages.

<sup>(&</sup>lt;sup>119</sup>) An overview of recent studies can be found in Beyer et al (2009) and in Westerlund (2008). For a review of the literature on the Fisher effect, see Cooray (2002)

<sup>(&</sup>lt;sup>120</sup>) This choice reflects the focus on the impact of lower inflation in 2014 on interest expenditure in 2014 and in 2015 and does not mean that the shock is necessarily temporary. Irrespectively, we assume that the effect of the Fisher effect (partly) holds, as even in the case of a temporary shock interest expenditure would be affected through interest paid on short-term debt. This lends further support to a partial (as opposed to a full) application of the Fisher effect.



Graph III.2.10: Elasticity of interest expenditure to inflation in the EU Member States

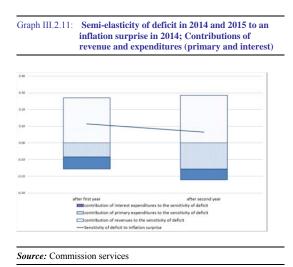
The results vary from one country to another depending on the portion of inflation sensitive debt. The in-year elasticity of interest expenditure is found to vary from very small values in Luxembourg, Malta, Austria and Slovenia to around 11 in Sweden and around six in the UK assuming that the 50% pass-through Fisher effect holds (Graph III.2.10). Sweden and the UK hold significant amounts of inflation or interest indexed debt, leading to a decrease in the elasticity in the second year to around 9 and 2.5. Relatively long maturities for Luxembourg, Malta, Austria and Slovenia debt in combination with low share of indexed bonds lead to fairly low elasticities.

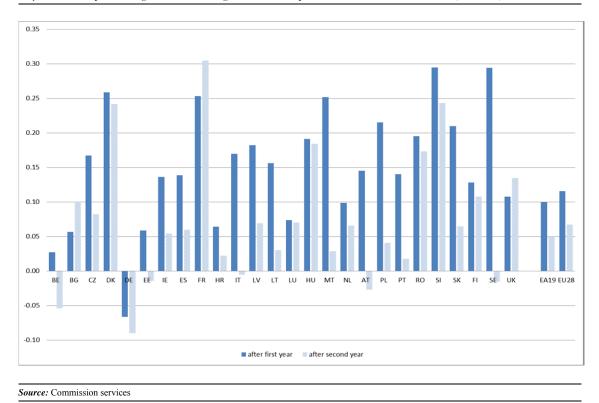
The actual developments in interest expenditure over the last few years in a sub-set of EU Member States is summarised in Box III.2.1.

Savings in interest expenditure cushion the increase in the deficit induced by a downward inflation surprise. Graph III.2.11 shows savings in interest expenditure amount linked to a deflationary surprise of 1 pp. amount to around 0.1% of GDP in the first and the second year. Compared to the analysis in 2.1, the deficit increase is thus reduced to 0.1% of GDP in the

first year and below that in the second year. The deficit is even slightly reduced following the inflation surprise for two countries in the first year and for seven countries in the second year.

Assuming the Fisher hypothesis in full leads to an even smaller aggregate impact of inflation on the headline balance. However, the difference with the baseline scenario is relatively small in size (approximately 0.05% of GDP in the first year





Graph III.2.12: Impact on budget balance of the negative inflation surprise in 2014 in the EU Member States (% of GDP)

and 0.1% in the second year).

The impact of the 2014 inflation surprise on the overall balance varies significantly across Member States. At the country level, the overall impact of a 1 pp. negative inflation shock on the budget balance is comprised between -0.1% of GDP and 0.3% of GDP (see Graph III.2.12), implying that it could have a material impact in terms of the annual change in the headline balance.

This is all the more evident when comparing these estimates with what can be reasonably seen as theoretical maximum impact of a 1 pp. inflation shock, of around 0.4-0.5% of GDP,  $(^{121})$  where by revenues adjust one for one while expenditures remain unchanged. The maximum impact is even slightly smaller when taking into account the likely

fall in interest expenditure. For example, France and Italy are estimated to see their headline balances deteriorate by 0.3% and 0.2% of GDP, respectively, in the first year following a 1 pp. drop in inflation, versus a theoretical impact of up to 0.4% and 0.3% of GDP, respectively.

<sup>(&</sup>lt;sup>121</sup>) Indeed, assuming that revenues evolve strictly in proportion to nominal GDP and that primary expenditure is set by budget law and invariant to real-time movements in inflation, changes in the primary balance will mirror those in the ratio of nominal primary expenditure to nominal GDP. For example, if the primary expenditure ratio is 50%, a pp. fall in inflation will automatically translate into a deterioration of the primary balance of 0.5% of GDP.

#### Part III

### Box III.2.1: The current low interest rate environment

#### **Recent developments**

Euro area sovereign bond yields have fallen sharply since end-2013 and reached historical lows in the first half of 2015, before increasing somewhat during the summer months. However, yields still remain well below their long-term averages, with 10-year rates currently ranging from 0.51% to 1.64% for the four largest Member States in the euro area.

As a result of lower interest rates, total interest payments by the general government have also decreased over the last few years. For the sixteen euro area Member States that submitted their 2016 draft budgetary plans by 15 October (EA-16), interest expenditure fell from 2.9% of GDP in 2012 to 2.3% in 2015, and is expected to remain unchanged this year, according to this year's vintage of DBPs. The largest declines in interest expenditure over 2012-16 can be seen in Ireland (-1.1% of GDP), Italy (-1.0%), Belgium (-0.9%) and Germany (-0.8%) whereas only Slovenia (0.9% of GDP) has seen its interest expenditure increase over the same period, against the background of a sharp increase in general government debt. The Commission's autumn 2015 forecast is broadly in line with Member States' expectations, with the largest differentials for 2016 amounting to 0.1% of GDP.

The steep decline in interest rates and the subsequent decrease in interest payments were to a large extent not anticipated by Member States. Examining the successive vintages of Stability Programmes and the current vintage of DBPs sheds more light on the (unexpected) savings from the current low interest rate environment. At the aggregate EA-16 level, the 2013 vintage of Stability Programmes had projected interest expenditure to increase by 0.1% of GDP over 2012-16. By contrast, the 2014 and 2015 vintages, in gradually integrating the fall in interest rates, had projected interest expenditure to decline over that period, by 0.2% and 0.7% of GDP, respectively. The latter projection is also confirmed by the DBPs. While factors such as debt dynamics, the maturity profile of debt and statistical reclassifications (e.g. the switchover to the ESA 2010 standard of national accounts) may have played a role, it is likely that the successive revisions in interest expenditure projections primarily reflect the unexpected decline in interest rates.

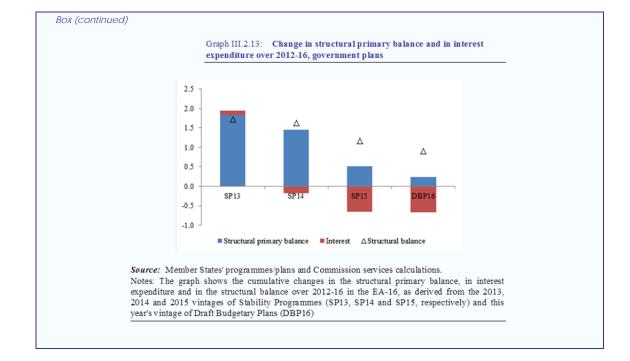
#### **Consequences for public finances**

The gradual fall in interest expenditure has gone along with a much smaller improvement in the mediumterm budgetary position as measured by the structural primary balance. The 2013 SPs had projected the EA-16 structural primary balance to improve by  $1\frac{3}{4}\%$  of GDP over 2012-16 (see Graph III.2.13).

The improvement as derived from the DBPs is actually expected to be <sup>1</sup>/4% of GDP. This suggests that, in the aggregate, the planned reduction of the structural primary deficit has to a large extent not materialised. In turn, this has outweighed the lower-than-expected interest paid by Member States over the same period, implying that the euro area medium-term budgetary position has improved by less than planned initially.

The smaller improvement in the aggregate (primary) structural balance has taken place in the broader context of a protracted period of low inflation and low output growth, which has in turn impacted upon public finances. The fall in interest rates is related to very low nominal GDP growth in the last few years. The latter has affected headline balances negatively through various channels, leading to a fall in revenues much larger than the fall (if any) in primary expenditures. This might not have been fully captured by the standard adjustment of headline balances for the effect of the cycle due, for example, to an abnormal response of revenues to economic growth or to some stickiness in the response of expenditures to price developments. In addition, low nominal GDP growth has had a direct effect on the stock of public debt as a share of GDP. Overall, lower inflation has generated at the same time lower interest expenditure but also has affected negatively nominal GDP growth and the primary balances, notwithstanding the policy action taken by governments.

(Continued on the next page)



# **3.** IMPACT OF AN INFLATION SHOCK ON FISCAL EFFORT UNDER THE SGP

Chapter III.2 showed that revenues evolve broadly in line with inflation developments, possibly with a short time lag depending on how fast tax bases adjust as well as on tax rules and tax collection. By contrast, it is less straightforward to measure the impact on government spending. Indeed, some items are often linked to inflation while others are not, at least not in the short run (e.g. items indexed on the basis of the inflation rate observed in the previous year or on the basis of *expected* inflation). Most importantly, countries implementing nominal expenditure ceilings, pay freezes, cuts in social transfers, etc. as part of (predetermined, multiyear) consolidation packages will find it difficult to adjust plans to take inflation surprises into account.

This chapter sheds more light on the interplay between inflation surprises and fiscal effort as measured by the various metrics that are used when assessing compliance with the rules of the Stability and Growth Pact. Indeed, the way inflation developments affect compliance with the rules is a relatively new topic also because most of the latter have been built under the implicit assumption of price stability, evidenced by annual inflation (almost) continuously around 2% since the inception of the SGP.

In principle, only unanticipated inflation shocks may affect the assessment of compliance with the SGP rules. Indeed, the way fiscal effort is measured for the purposes of EU fiscal surveillance implies that price developments that are not anticipated at the time of policy advice (e.g. a Council recommendation under the excessive deficit procedure) may lead to an overly positive/negative picture of the government's course of action in the subsequent assessments. By contrast, inflation developments should be 'surveillance-neutral' as long as they (and their impact on the budget balance) are anticipated. This said, because revenues and expenditures may not be equally responsive to price developments, a protracted period of low inflation - even if fully anticipated and thus with no impact on measuring fiscal effort - raises the question as to whether or not it is appropriate to take the inflation outlook account when formulating into policy recommendations. This chapter focuses on

*unexpected* inflation shocks, thus leaving the issue of the appropriateness of requirements in a low inflation environment aside.

While not directly observable, the concept of fiscal effort plays a central role in evaluating the extent to which government action impacts upon the budget balance. Traditionally, fiscal effort is gauged by (the change in) the structural budget balance, which can be referred to as a topdown method of measuring the government's influence on the budget balance. An alternative, bottom-up approach, which has been developed more recently, seeks to account separately for the effects of individual policy initiatives on the budget balance. Currently, both approaches are used to assess compliance with the SGP, whether under the preventive or the corrective arm of the SGP.

This chapter shows that inflation surprises affect the top-down and bottom-up techniques in an opposite fashion. In particular, the implications in terms of the (relative) relevance of the different indicators used and hence in terms of policy surveillance depend crucially on how sensitive revenue and expenditure aggregates are to inflation.

A disinflation shock that leads to a worsening in the budget balance will likewise lead to a worsening in the structural balance, thereby showing an overly negative picture of the orientation of fiscal policy. A negative inflation shock will typically impact negatively on the headline government balance, as revenues will decrease more as a result of lower inflation than expenditures will do (see Chapter III.2). The cyclical correction method used to transform the headline balance into a structural balance does not correct for inflation surprises. Therefore, a disinflation shock that affects the headline budget balance will also affect the structural balance and ultimately lead to underestimating the fiscal effort implemented by the country concerned.

By contrast, bottom-up estimates of fiscal effort will likely be inflated following a disinflation shock. A negative inflation surprise will also affect the returns from discretionary fiscal measures. However, the way individual measures are aggregated for the purposes of fiscal surveillance (a truly bottom-up approach on the revenue side, an essentially top-down method regarding expenditures) implies that inflation developments will act differently on revenue measures than on expenditures savings. While the returns from revenue measures will be impacted by lower inflation, this effect will be relatively marginal since it is only a base effect on the additional revenue provided by the measure. This will likely be more than compensated for by the expenditure estimate, since any fall in expenditures due to lower inflation will be assessed on the full expenditure base, rather than a specific measure.

**Compliance with the debt rule can also be affected by inflation shocks.** The debt reduction benchmark specified in the Code of Conduct on the SGP and the methodology for assessing progress during the three-year transition period take account of cyclical conditions as far as the real economy is concerned, but not inflation developments. Negative inflation shocks can therefore translate into higher requirements, if only through a denominator effect, and jeopardise compliance with the debt rule.

The chapter is organised as follows. Sections III.2.1 and III.2.2 look at how inflation shocks affect the assessment of compliance with the preventive and the corrective arm of the SGP, respectively. Section III.2.3 looks into the impact on the debt rule, including during the transition period. More detailed explanations are provided in Annex III.4. Section III.2.4 draws the implications for fiscal surveillance.

### 3.1. THE PREVENTIVE ARM

Structural budget balances play a key role when assessing compliance with the preventive arm of the SGP. They represent cyclicallyadjusted general government budget positions, net of one-off and other temporary measures. They are used to assess whether the country-specific medium-term budgetary objectives (MTOs), also defined in structural terms, are achieved or appropriate progress is made (see Chapter II.1).

The 'structural balance' pillar is complemented by an analysis of the growth rate of

**expenditures net of discretionary revenue measures, through the so-called expenditure benchmark.** This requires that, for countries at their MTO, any excess growth of expenditures over a medium-term reference rate of potential GDP growth be matched by discretionary revenue measures. Countries on their adjustment path must contain their net expenditure growth at a rate lower than medium-term potential GDP growth, again unless matched by discretionary revenue measures.

Based on the results of Chapter III.2, a disinflation shock will likely cause the structural balance to underestimate fiscal effort, whereas the expenditure benchmark will be inflated. The following subsections describe the channels through which inflations shocks impact upon the two indicators used.

### 3.1.1. Impact on structural balance

A negative inflation shock which causes revenues to underperform while expenditures remain on target, or adjust by less than revenues, will lead to a worsening in the headline balance compared to the baseline, where by 'baseline' we mean no inflation shock.

This in turn will lead to a worsening in the structural balance as the cyclical component of the budget balance is not influenced by inflation developments.

This can be summarised as:

```
\begin{array}{ll} \pi \downarrow \rightarrow |\Delta REV| \geq |\Delta EXP| \rightarrow [GGB \downarrow \quad and \quad \Delta OG=0] \rightarrow \\ SB \downarrow \rightarrow \Delta SB \downarrow \end{array}
```

Where  $\pi$  stands for inflation, REV and EXP for general government revenues and expenditures, GGB for general government balance, OG for output gap and SB for structural balance.

The quantitative impact will crucially depend on the relative response or 'elasticity' of revenues and expenditures with respect to inflation. Assuming that revenues adjust fully to inflation while only half of expenditures do so, a rough calculation suggests that a 1 pp surprise in inflation will lead to a 0.2-0.3 pp of GDP worsening in the structural balance compared with the baseline. Therefore, in the likely case where revenues adjust faster and/or to a larger extent than expenditures to a negative inflation shock, the change in the structural balance will tend to underestimate fiscal effort and thus paint an overly negative picture of the government's policy action.

### 3.1.2. Impact on expenditure benchmark

The expenditure benchmark, i.e. the reference rate against which the growth rate of expenditures (net of discretionary revenue measures) is assessed, is frozen ex ante and thus remains unchanged for the in-year and ex post assessments of compliance. For example, a country that is at the MTO and whose medium-term potential GDP growth and GDP deflator for year t are estimated/forecast in year t-1 at 1% and 2%, respectively, should make sure that expenditures grow by not more than 3%. And it is this 3% reference rate that will be used for the in-year and ex-post assessments.

The effect of a negative inflation shock will mainly depend on whether and/or to what extent expenditures adjust to lower inflation, as the impact on discretionary revenue measures is expected in general to be negligible. If the growth rate of expenditures remains unchanged from the baseline, compliance with the expenditure benchmark (the 3% reference rate in the example) will not be affected and the distance to the benchmark, whether positive or negative, will provide an appropriate picture of the underlying fiscal effort.

Conversely, if expenditures adjust, if only slightly, to lower inflation, this will make it 'easier' for the country to comply with the benchmark. In this case, the expenditure benchmark approach will tend to overestimate fiscal effort.

As a consequence, the extent to which compliance with the expenditure benchmark is affected by inflation surprises will crucially depend on the elasticity of expenditures with respect to inflation. Assuming that half of expenditures adjust to inflation while the returns from revenue measures are materially unaffected, a rough calculation suggests that a 1 pp negative surprise in inflation will lead to a 0.2-0.3 pp of GDP improvement in fiscal effort as measured by the expenditure benchmark approach compared with the baseline. This can therefore be summarised as:

 $\pi\downarrow \rightarrow [\Delta EXP=0 \text{ and } \Delta REV \text{measures}=0] \rightarrow DEB \leftrightarrow$ 

 $\rightarrow$  [ $\Delta$ EXP<0 and  $\Delta$ REV measures=0]  $\rightarrow$  DEB $\uparrow$ 

Therefore, in the likely case where expenditures adjust, if only slightly, to lower inflation, the expenditure benchmark approach will tend to overestimate fiscal effort and thus paint an overly positive picture of the government's policy action.

#### 3.2. THE CORRECTIVE ARM

If a Member State that is subject to the excessive deficit procedure is not compliant with the headline deficit targets, an assessment of effective action is undertaken. Similarly to the preventive arm, as a first step the assessment of effective action revolves around the comparison between the required change in the structural balance and the observed change in the structural balance.

The structural balance is complemented by a bottom-up quantification of measures. This is done by quantifying the budgetary impact of the (new) measures the Member State has introduced to raise revenues and to cut spending since the EDP recommendation was issued. The effort on the revenue side is measured by adding up the returns from individual revenue measures. The amount of expenditure savings is estimated as the difference between the outturn growth of expenditures and the growth expected at the time of recommendation, i.e. the change in expenditures if no further measures had been taken.

Conceptually, the two indicators are very similar to those used in the preventive arm and will thus be affected by inflation surprises in a similar fashion. The following subsections describe the channels through which inflations shocks impact upon the indicators used in the corrective arm.

### 3.2.1. Impact on (corrected) structural balance

While conceptually very similar to the structural balance pillar used in the preventive arm, in the corrective arm the observed change in the structural balance is corrected for effects outside the control of government (other than the 'normal' working of the cycle that is captured by the cyclical component of the budget balance). In particular, the change in the structural balance is adjusted to net out the effect of possible revisions to potential GDP growth estimates and unexpected shortfalls/windfalls in revenues relative to the macroeconomic scenario underpinning the EDP recommendation, through the so-called  $\alpha$  and  $\beta$ adjustors.

As already indicated, the (non-adjusted) change in the structural balance will tend to underestimate fiscal effort as long as revenues adjust to inflation to a larger extent than expenditures. In general this effect will not be corrected for by the  $\alpha$  and  $\beta$ adjustors meaning that the adjusted changed in the structural balance used under the corrective arm will be distorted as well. Indeed, the  $\alpha$  adjustor will remain materially unchanged as inflation surprises should not affect potential output growth estimates. The  $\beta$  adjustor will also be unaffected as long as revenues adjust fully to the inflation shock.

The process can therefore be summarised as:

 $\begin{array}{l} \pi \downarrow \rightarrow |\Delta REV| > |\Delta EXP| \rightarrow [GGB \downarrow \text{ and } \Delta OG=0] \\ \rightarrow SB \downarrow \rightarrow [\Delta SB \downarrow \text{ and } \alpha, \beta \leftrightarrow] \rightarrow \Delta SB^* \downarrow \end{array}$ 

A disinflation shock will, as a rule, distort the adjusted change in the structural balance so that the top-down approach will tend to underestimate fiscal effort. This is similar to what happens with the structural balance pillar under the preventive arm.

### 3.2.2. Impact on bottom-up approach

Conceptually, the bottom-up approach is very similar to the expenditure benchmark except that in one case the reference growth rate for expenditures is medium-term potential GDP growth or a lower rate (expenditure benchmark) while in the other the reference rate is the growth rate of expenditures (net of discretionary revenue measures) expected at the time of the EDP recommendation (bottom-up approach).

Therefore, the effect of a negative inflation shock will be very similar -a fall in expenditures due to lower inflation will translate into higher fiscal effort as this will affect the growth differential

between the outturn and the EDP recommendation while the returns from discretionary revenue measures will generally remain unchanged. However, here again any fall in interest payments will not distort the bottom-up approach.

### 3.2.3. The impact of inflation on fiscal effort: the case of France

As part of the normal EU surveillance process, Member States' compliance with the rules of the SGP is assessed after each Commission's forecast and may have procedural consequences. After its 2015 winter forecast, the Commission made a formal assessment of France's compliance with the Council Recommendation of 21 June 2013 under the Excessive Deficit Procedure and recommended that the Council extend the deadline for bringing the deficit below 3% of GDP by two years, to 2017.

In its assessment, the Commission took account of the lower-than-expected inflation observed in 2014, as measured by the deflator of GDP. Indeed, in the baseline scenario underpinning the Council Recommendation of 21 June, the GDP deflator had been forecast to increase by 1.7% in 2014, while the Commission's 2015 winter forecast estimated the increase in the GDP deflator to have been 0.9 pp. lower.

The Commission's assessment showed that the lower-than-expected rate of inflation affected fiscal effort as measured by the corrected change in the structural balance (top-down approach) and the bottom-up approach. Partly as a consequence of this, the two indicators provided diverging signals, thus calling for a careful analysis.

The Commission assessed that the (corrected) structural balance indicator had been strongly affected by the inflation shock, less so the bottomup indicator. The Commission's Report (<sup>122</sup>) showed that the negative inflation shock had an adverse impact on tax bases and led to downward revisions in tax revenues. By comparison, expenditures were found less sensitive to the inflation revision, especially given that public expenditures are partly guided by norms set in

<sup>(&</sup>lt;sup>122</sup>) Available online at:

http://ec.europa.eu/europe2020/pdf/csr2015/cr2015\_france \_en.pdf.

nominal terms. In addition, a number of expenditures, notably public wages and social transfers related to pensions and housing, were frozen in nominal terms in 2014, making the achievement of further savings more difficult. The resulting deterioration in the headline deficit led to a worsening in the structural balance, thus leading to an estimated lower effort according to the topdown assessment. This appears in line with the results of the survey set out in Chapter III.2. Indeed, the elasticity of primary expenditures with respect to the inflation surprise was found to be approximately 0.1 while that of revenues around 0.8, implying that primary expenditures remained virtually unchanged while revenues adjusted almost in proportion with the inflation shock.

By contrast, the bottom-up assessment was found less sensitive to the inflation revision than the topdown assessment. The Commission's report indicated that the direct quantification of the discretionary revenue measures adopted in 2014 had only been marginally impacted by the lowerthan-expected rate of inflation while a large part of expenditures did not adjust to lower inflation as expenditure targets had been set in nominal terms. The overall impact of the downward revision in inflation on the bottom-up effort was found limited. Again, the results of the survey tend to confirm that the bottom-up estimate of fiscal effort was much less affected than the top-down estimate, with primary expenditures virtually unaffected by the inflation shock.

Overall, the gap between the two indicators that could be attributed to the inflation surprise was estimated at 0.6% of GDP. For the reasons indicated above, this 0.6% of GDP difference was found to come almost exclusively from the corrected change in the structural balance being negatively affected by the lower than expected rate of inflation. The bottom-up estimate was thus deemed to provide a broadly accurate picture of the fiscal effort delivered by France in 2014.

### 3.3. THE DEBT RULE

A Member State is non-compliant with the debt criterion if its general government debt is greater than 60% of GDP and is not sufficiently diminishing and approaching 60% of GDP at a satisfactory pace. This means that the gap between the Member State's debt level and the 60% reference threshold needs to be reduced by 1/20th annually (on average over three years). This in turn is translated into a debt reduction benchmark which is set out in the Code of Conduct on the SGP. A breach of the debt criterion is judged by considering the debt reduction benchmark in three configurations: a backward-looking version, a forward-looking one and by taking into account the impact of the economic cycle. Only if a country is in breach of all these conditions is the debt criterion considered breached and an Article 126(3) TFEU report is written.

The debt benchmark takes the cyclical conditions into account as far as the real economy is concerned. By contrast, inflation developments and, in particular, low inflation are not accounted for in this methodology. This also applies to the methodology used for calculating the MLSA, i.e. the minimum linear structural adjustment that ensures – if followed – compliance with the debt rule at the end of the three-year transition period foreseen for those Member States that were in EDP at the time of adoption of the so-called 6-pack piece of legislation.

Negative inflation surprises can therefore translate into a more demanding debt benchmark, mainly through a denominator effect. That is, all things equal, a disinflation shock can make it harder for Member States to comply with the debt rule, both during the transition period and once this is over and the full debt rule is applied.

Whether the impact of an inflation shock on the debt benchmark will be material will crucially depend on the nature and timing of the shock. In particular, in the case of a temporary inflation shock, compliance with the debt benchmark (and the MLSA) will only be affected if the shock occurs during the period covered by the least stringent of the backward-looking, the forwardlooking and the cyclically-adjusted components. To put it differently, given the specification of the debt rule, as long as the shock does not affect the least stringent component of the debt benchmark or, in the case of the least stringent component, it only affects the initial debt position - but not the dynamics underpinning the three-year average -, compliance with the debt benchmark will not be influenced (and the MLSA will remain broadly unchanged).

Another consequence is that the impact on the debt benchmark (and the MLSA) for year t of a shock in year t will be larger than the impact of an equal shock in year t-1.

Also note that here we simply look at the 'denominator' effect, neglecting any possible impact of inflation on the numerator, and in particular on the general government balance. In particular, as already seen, a disinflation shock will likely lead to a worsening in the government balance, which will in turn make compliance with the debt rule (and the MLSA) even more demanding.

### 3.4. CONCLUSION AND IMPLICATIONS FOR FISCAL SURVEILLANCE

The above analysis suggests that the structural balance indicators might in some cases underestimate fiscal effort in the event of a negative inflation surprise. By contrast, the expenditure benchmark and the bottom-up approach will tend to provide an overly positive picture of the government's policy action. However, the extent to which the various the various metrics of fiscal effort are affected will very much depend on the country's specificities. As already discussed, while it can generally be expected that revenues will respond more quickly to a negative inflation shock than expenditures, the extent of this divergence will depend on domestic structures such as the extent and design of indexation arrangements or the use of nominal expenditure ceilings.

In light of the findings from Chapter III.2, both sets of indicators have likely been affected by the lower inflation observed in 2014, calling for an informed economic judgement. The results presented in Chapter III.2 suggest that, for most Member States, the disinflation shock observed in 2014 caused both revenues and expenditures to underperform, though with revenues affected to a slightly larger extent. This in turn implies that both sets of indicators ((corrected) structural balance on the one hand, expenditure benchmark and bottomup approach on the other) were generally affected by a disinflation shock, meaning that none of them should be taken at 'face value' but instead both should be qualified. This should be done through the so-called overall assessment in the preventive arm and the careful analysis in the corrective arm.

The assessment of compliance should also consider whether the inflation shock could have been *anticipated* and, most importantly, the budget (namely expenditure ceilings) adjusted accordingly. From this perspective, only unanticipated shocks should in principle be considered a mitigating factor. In all other cases and all things equal, the structural balance indicators, which implicitly assume that headline balances are unaffected by inflation developments, would remain a valid measure of fiscal effort.

distinction between anticipated The and unanticipated shocks appears relevant also when it comes to compliance with the debt rule. As explained above, low inflation makes it harder for Member States to meet the debt criterion and can lead to requirements which can be prohibitive. While it is true that relevant factors can be taken into account in determining whether a numerical breach of the debt criterion should lead to the opening of an EDP, in the case of inflation, there is the specific difficulty that it remains unclear what should be considered as 'normal inflation'. This implies that the assessment of the role of inflation in the breach of the debt criterion is not possible per se but can only be conducted with respect to inflation surprises.

While the current framework allows dealing with a *temporary* inflation shock that occurs after SGP recommendations are issued, through an informed economic judgement, a *prolonged* period of low inflation or negative inflation may raise the question of the appropriateness of new recommendations. Indeed, because low inflation makes it more difficult to reach a given improvement in the structural balance – in the sense that a larger amount of measures is necessary to reach this under the assumption of downward rigidity of expenditures –, the required levels might need to be downgraded accordingly.

### ANNEX 1. SURVEY

For the main categories of revenue and expenditure, the survey presented the following questions and proposed stylised answers. Desks were invited to specify and substantiate their replies in comment fields.

### 1) Sensitivity of the item to inflation as for 2014

1. Not sensitive (elasticity lower than 0.25)

2. Faintly sensitive (elasticity between 0.25 and 0.5)

3. Quite sensitive (elasticity between 0.5 and 0.75)

4. Very sensitive (elasticity greater than 0.75)

### 2a: revenue) Through which main channels the item is impacted by inflation?

1. Inflation impacts wages that in turn impact the item

2. Inflation impacts household's consumption that in turn impacts the item

3. "Fiscal drag"

4. Automatic legal mechanism

5. Several of the above (precisions in "comments")

6. Other channels (precisions in "comments")

### **2b:** expenditure) Through which main channels the item is impacted by inflation?

1. Inflation impacts wages in the private sector that in turn impact wages in the public sector

- 2. Automatic mechanism of indexation
- 3. Inflation-index bonds (for interests)

4. Several of the above (precisions in "comments")

5. Other channels (precisions in "comments")

### **3**) Are there automatic mechanism driving the effect of inflation on the item?

1. Yes, full or almost full indexation of the item

2.Yes but only partially (precisions in "comments")

3. Other mechanisms (precisions in "comments")

4. No automatic mechanism

### 4) On which indicator the automatic mechanism is based?

1. HICP

2. GDP deflator

3. Other (precisions in "comments")

### 5) Is the indexation symmetric?

1. Yes the indexation is symmetric

2. No the indexation is not symmetric (precision in "comments")

3. Other (precisions in "comments")

4. No indexation

### 6) Is there a lag in the indexation mechanism?

1. No, the item is indexed with current inflation

2. Yes, the item is indexed on the previous year inflation

3. Yes (other lag, precisions in "comments")

4. No indexation

### 7) How the automatic mechanisms have evolved between 2009 and 2014?

1. The mechanism did not change since 2009

2. New measures increased sensitivity to inflation (main measures in "comments")

3. New measures decreased sensitivity to inflation (main measures in "comments")

4. Sensitivity evolved for other reasons (precisions in "comments")

### ANNEX 2. MAIN COUNTRY-SPECIFIC FEATURES CHARACTERIZING THE IMPACT OF INFLATION ON THE BUDGET BALANCE

According to DG ECFIN's analysis, in the vast majority of countries there was hardly any realtime adjustment of primary expenditures to the inflation shock of 2014. At the same time, in nearly two-third of the cases, the in-year sensitivity of revenues was assessed to have been relatively strong. This suggests that in 2014 budget balances were negatively affected by the negative inflation surprise. In 2015, there has been some additional adjustment of primary expenditures but the picture remains broadly unchanged.

As to the channels of transmission, on the expenditure side, a clear link to inflation developments can be seen for social transfers other than in kind, which contain pensions through indexation mechanisms, and for public wages mostly indirectly via private sector wage developments. Government purchases of goods and services are also affected by price developments, but not without differences across countries and often with a time lag. For all other sub-categories of expenditures, the link is less straightforward.

On the revenue side, not surprisingly the main channels are consumption taxes, where the tax base directly reflects price developments (VAT), and taxes affected by wage developments (direct taxes and social contributions). In a number of countries (e.g. BE, HU, CZ, FR, IT, MT, AT, PL, RO and UK), revenues were found to be largely responsive to inflation. In others (e.g. in BG, DE, EE, EL, ES, HR, CY, PT and FI), the impact of the 2014 inflation surprise proved limited, with private sector wages mostly driven by labour market developments. It is noteworthy that in a number of countries (DE, EL, HR and CY) the lower than expected rate of inflation did not affect VAT receipts significantly.

Fiscal drag due to no, or suspended, indexation was reported in DE, IE, ES, CY, LU, PL, SI. In countries with a flat PIT system (i.e. one single rate) such as HU and RO, the issue of fiscal drag is largely avoided.

The main country-specific features characterizing the impact of inflation on the budget balance, and notably on government expenditure, according to DG ECFIN's desks are the following: **BG:** Public sector wages and social benefits are not automatically linked to inflation, with increases decided on an ad hoc basis. Most other expenditure items are also weakly sensitive to inflation developments.

**BE:** Most expenditure categories are very sensitive to inflation developments, though often with a time lag, mainly through automatic indexation mechanisms. Virtually all revenues are also very sensitive to inflation, with wages being the main channel of transmission.

**CZ:** Only social benefits appear sensitive to inflation developments, with legislation providing for an automatic indexation of pensions (together with possible ad hoc adjustments). adjust to a large extent to inflation, through the wage setting process (though no automatic link).

**DK:** Apart from social benefits, expenditures are not sensitive to inflation developments. VAT and income tax receipts react to inflation. $(^{123})$ 

**DE:** According to DG ECFIN, there is no evidence of inflation affecting the fiscal position of the country in the current context of relatively strong increases in real incomes and consumption leading to buoyant direct and indirect tax revenues. Indeed, while inflation can affect the wage setting process both in the public and in the private sector, with knock-on effects on the public wage bill, tax receipts and social benefits (whose indexation is linked to wages), the impact of the current low inflation environment on wages appears to be limited so far.

**EE:** The budget balance is weakly sensitive to inflation. Indeed, there are no indexation mechanisms except for pensions. Any increase in public sector wages is conditional upon budgetary constraints.

**IE:** Most expenditure items are weakly, if at all, sensitive to inflation, not least because of the temporary freeze in public sector wages and social benefits over 2013-16, decided as part of the so-called 'Haddington Road Agreement'.

<sup>(&</sup>lt;sup>123</sup>) It should be noted that in Denmark, social contributions account for a negligible part of total revenues.

**EL:** Public sector wages have been frozen and automatic indexation of social benefits suspended as part of the macroeconomic adjustment programme.

**ES:** In the absence of an automatic mechanism, high unemployment over the last few years together with fiscal consolidation needs have held back wage pressures in the public sector. Pensions are no longer linked automatically to inflation, at least not as long as the system continues to run deficits. On the revenue side, income tax and social contributions have been only partly affected by inflation, with private sector wages also constrained by high unemployment.

**FR:** Public wages have been frozen since 2010. While automatically linked to inflation, pensions were left unchanged in 2014. In 2015, the indexation mechanism would have led to a decrease in social benefits, a possibility that was rejected.

**HR:** The budget balance is weakly, if at all, sensitive to changes in the level of prices, with the exception of VAT receipts. The indexation mechanism for regular pensions was modified leading to smaller increases, whereas special and privileged pension schemes are only adjusted once the growth and deficit outlook improves significantly.

**IT:** Although there is no automatic indexation of public sector wages, forecast inflation is the benchmark in the collective bargaining process. Pensions are adjusted in line with the previous year's inflation but recent budget laws have limited the indexation of higher pensions.

**CY:** Automatic indexation has been suspended until end-2016, both for public sector wages and public sector pensions. Private sector pensions have been frozen as well.

**LV:** Most expenditure categories react only weakly to inflation, in contrast with revenues. Public sector wages are set discretionarily by the government, though with the aim of narrowing the gap with private sector wages to 80%. Pensions below the average pay are linked to inflation and real wage growth, but this cannot result in negative indexation.

**LT:** Public wages and social benefits are only weakly sensitive to price developments, with no formal obligation to consider inflation. Intermediate consumption and gross fixed capital formation are quite sensitive, though with a time lag.

LU: Public (and private) sector wages, pensions and several other types of social benefits are increased each time the reference index increases by at least 2.5%, implying that low inflation postpones such mechanical increases. In turn, this affects receipts from income tax and social contributions.

**HU:** Nominal wage freezes have prevailed since 2008, with only some ad hoc wage increases targeted at specific subsectors. Pensions are indexed to (forecast) inflation, with a subsequent adjustment in case of a higher than expected increase in prices.

**MT:** Most expenditure items are to a large extent sensitive to price developments, often with a time lag, either through an indexation mechanism (wages and social benefits) or through the price of government purchases.

**NL:** In general, government expenditure is weakly sensitive to inflation. Public wages and social benefits are linked to inflation via the gross minimum wage, which is linked to private sector wage developments. In recent years however policy decisions to cap spending growth have engendered a de-linking of public wages from inflation.

**AT:** Public wages and social benefits are indexed to lagged inflation.

**PL:** The largest expenditure items are affected by inflation, though with a lag in case of unexpected shocks. The main channels are (quasi) automatic indexation (wages and social benefits).

**PT:** There is no automatic indexation of public sector wages, automatic indexation of social benefits has been suspended since 2009 and intermediate consumption is only gradually affected by inflation.

**RO:** Recent inflation developments had little effect on government expenditure, either due to the

absence of a direct link or because of lagged indexation (in Romania, pensions are indexed to year T-2 inflation).

**SI:** While there is generally full indexation of public sector wages and social transfers, this has been suspended since 2012.

**SK:** Inflation is one factor among others in pay agreements with public sector trade unions. Pension indexation combines wage growth and inflation measured on a typical basket of goods and services for pensioners. Other expenditure categories are weakly, if at all, sensitive to inflation, in contrast with revenues.

**FI:** (Forecast) inflation is taken into account when building the budget. Pension indexation is also based on inflation, though the government has the right not to apply it in some years (which has been the case in 2015).

**SE:** The budget balance is found to be only temporarily influenced by inflation, in that both expenditures and revenues adjust to price developments, though at a different pace.

**UK:** Apart from social benefits (pensions are subject to a 'triple lock' meaning the higher rate of CPI/earnings/2.5% is applied), expenditure categories are only to a limited extent sensitive to price developments. In particular, as part of the fiscal consolidation plans, public sector wages were frozen from 2010 and increased on average by 1% in later years, with no visible link to inflation.

### ANNEX 3. IMPACT OF AN INLFATION SHOCK ON INTEREST EXPENDITURE

Under the simplifying assumption that only the stock of debt at the end of year t-1 brings interest payments in year t, the amount of interest expenditure in year t can be expressed as follows:

$$IP_t = IP_t^{index} + IP_t^m + IP_t^{nm}$$
(1)

is the interest paid on inflation-linked debt. This item can be rewritten as:

$$IP_t^{index} = \alpha \times i_t^{index} \times D_{t-1}$$

where  $\alpha$  is the share of inflation-linked debt and  $i_t^{index}$  is the (nominal) implicit interest rate on that share.

-  $IP_t^m$  is the interest paid on the fraction of debt not linked to inflation and coming to maturity within year t. This item can be rewritten as:

$$IP_t^m = (1 - \alpha) \times \beta \times i_t^m \times D_{t-1}$$

where  $\beta$  is the share of debt with a residual maturity of less than one year and  $i_t^m$  is the implicit interest rate on that share. Note that, because we assume that changes in spot interest rates will affect newly issued debt and the stock of variable interest rate debt in the same manner,  $\beta$  can be seen as covering both categories.

-  $IP_t^{nm}$  is the interest paid on the remaining fraction of debt, i.e. non-inflation-linked, fixed rate debt with a residual maturity of more than one year. This item can be rewritten as:  $IP_t^{nm} = (1 - \alpha) \times (1 - \beta) \times i_t^{nm} \times D_{t-1}$ 

Therefore,  $IP_t$  can be written as:

$$IP_t = [\alpha \times i_t^{index} + (1 - \alpha) \times \beta \times i_t^m + (1 - \alpha) \times (1 - \beta) \times i_t^{nm}] \times D_{t-1} (2)$$

An inflation shock will impact differently upon these three terms. Note that equation (1) is a simplified representation of equation (2).

### Impact of an inflation shock on IPt

By definition,  $(^{124})$  the interest paid on inflationlinked bonds will adjust fully with movements in

the level of prices: 
$$\frac{\partial IP_t^{index}}{\partial \pi_t} = \alpha \times D_{t-1}$$

### Impact of an inflation shock on $IP_t^m$

Debt which comes to maturity within the current year needs to be refinanced in the current market conditions. Therefore, the interest paid will depend on the extent to which bond spot rates react to inflation:

$$\frac{\partial IP_t^m}{\partial \pi_t} = (1 - \alpha) \times \beta \times \frac{\partial i_t^m}{\partial \pi_t} \times D_{t-1} = (1 - \alpha) \times \beta \times \gamma \times D_{t-1}$$

Where  $\gamma$  is the sensitivity of bond spot rates to inflation, assumed to lie between 0 and 1.

where  $i_t^{nm}$  is the implicit interest rate on this share of debt.

 $<sup>(^{124})</sup>$  Note that, depending on the bond type, the index to which the bond is linked may apply only to the annual coupon, similarly to variable interest instruments, the principle payment, or to both of these. However, whatever the specific design of the bond is, the implicit aim is to hedge the inflation risk. Therefore, the implicit nominal interest rate  $i_t^{index}$  can be expressed as  $i_t^{index} = i_t^{real} + \pi_t$ . In this respect, the ESA 2010 standard of national accounts states that the change in value of the instrument due to the index during an accrual period is treated as interest accruing in this period, in addition to the 'normal' interest accrued over this period.

### Impact of an inflation shock on $IP_t^{nm}$

The interest paid on non-inflation-linked, fixed rate debt with a residual maturity of more than one year is not affected by movements in prices in year

$$\frac{\partial IP_t^{nm}}{\partial \pi_t} = \frac{\partial i_t^{nm}}{\partial \pi_t} = 0$$
  
t:

### Overall effect

Therefore, the overall effect of an inflation shock on the amount of interest expenditure in year t is:

$$\frac{\partial IP_t}{\partial \pi_t} = [\alpha + (1 - \alpha) \times \beta \times \gamma] \times D_{t-1}$$

The sensitivity is 0 if:

- $\alpha = 0$  and  $\beta = 0$ . That is, there is no inflation-linked debt and there is no variable rate debt or debt to be redeemed during the year.
- α = 0 and γ = 0. That is, there is no inflation-linked debt and market rates are not influenced by inflation.

The sensitivity is 1 if:

- $\alpha = 1$ . That is, the whole stock of debt is indexed to inflation.
- β = 0 and γ = 0. That is, the whole stock of debt is to be redeemed during the year (and/or is composed of variable rate instruments) and there is full pass-through from inflation to market rates.

## ANNEX 4. ANALYTICAL DECOMPOSITION OF THE IMPACT OF AN INLFATION SHOCK ON FISCAL EFFORT

#### A4.1. PREVENTIVE ARM OF THE SGP

#### Structural balance

The cyclically-adjusted balance is computed as the difference between the headline balance-to-GDP ratio and an estimated cyclical component. The structural balance is in turn the cyclically-adjusted balance excluding one-off items. In algebraic terms:

$$CAB_{t} = \frac{R_{t} - G_{t}}{Y_{t}} - \varepsilon \times OG_{t} = \frac{R_{t} - G_{t}}{Y_{t}} - \varepsilon \times \frac{Y_{t}^{real} - Y_{t}^{p}}{Y_{t}^{p}}$$
$$SB_{t} = CAB_{t} - one - offs$$

Where *R* and *G* stand for government revenues and expenditures, respectively; *Y*, *Y*<sup>real</sup> and *Y*<sup>p</sup> for nominal GDP, real GDP and potential GDP, respectively; and  $\varepsilon$  is the so-called budgetary semielasticity to the output gap. The output gap (*OG*) is computed in real terms and is therefore not influenced by inflation developments. (<sup>125</sup>)

It follows from the above that any change in the headline balance ratio following an inflation shock  $d\pi_t$  will translate into a one-to-one change in the structural balance:

$$\frac{dSB_t}{d\pi_t} = \frac{\frac{dR_t}{d\pi_t} - \frac{dG_t}{d\pi_t}}{Y_t}$$

(We assume that 
$$\frac{dY_t}{d\pi_t} = 0.$$
) (<sup>126</sup>)

Basically, the less expenditures adjust to lower inflation compared to revenues, the more the headline balance, and hence fiscal effort as measured by the change in the structural balance, will be affected. By contrast, if revenues and expenditures adjust to the same extent following an inflation shock, the headline balance, and hence fiscal effort, will remain unchanged.

Expenditure benchmark

The **expenditure benchmark** to which is compared the change in the expenditure aggregate for year t is computed as follows:  $(^{127})$ 

$$L_t = R - C_t_{(a)}$$

Where L, R and C are respectively the so-called lower rate, reference medium-term rate of potential GDP growth and convergence margin.

The **net expenditure growth rate** for year t is computed as follows:

$$e_t = \frac{E_t - \Delta R_t - E_{t-1}}{E_{t-1}}$$
 (b)

Where e, E, and  $\Delta R$  are respectively the net expenditure growth rate, the *modified* expenditure aggregate and the estimated impact of revenue measures having an incremental effect on revenues.

The net expenditure growth in real terms is computed as follows:

$$e_t^{real} = \frac{1+e_t}{1+\pi_t^*} - 1$$
 (c)

Where  $\pi^*$  is the GDP deflator. This is the average GDP deflator from the Commission's year t-1 spring and autumn forecasts, implying that the reference rate is known with certainty in the autumn of year t-1

It follows from the above that any change in  $E_t$ following an inflation shock will affect the net expenditure growth rate of year t. Note that the impact on  $\Delta R_t$  will generally be negligible. Given that the expenditure benchmark itself (i.e. the medium-term reference rate of potential GDP

<sup>(&</sup>lt;sup>125</sup>) Note that here we do not look at possible effects of inflation on the 'real' economy, which could in turn affect fiscal effort.

<sup>(&</sup>lt;sup>126</sup>) For the sake of simplicity, we also neglect any 'denominator' effects. Indeed, given that the various measures of fiscal effort are expressed as a % of GDP, any revision to the GDP deflator will also affect the denominator. However, the impact will generally be fairly small. For example, assuming an initial effort of 1% of GDP a 1 pp inflation shock will affect this by roughly 1% times 1%, or 0.01% of GDP, through the denominator effect.

<sup>(&</sup>lt;sup>127</sup>) See Chapter II.2 for more details on the different steps of the calculations.

growth or, for countries not yet at the MTO, a lower rate) is frozen in year t-1, any change in inflation developments in year t that affects expenditures will affect compliance with the expenditure benchmark as well.

In algebraic terms, the deviation from the expenditure benchmark can be derived from (a), (b) and (c):

$$DEB_t = (L_t - e_t^{real}) \times \frac{E_{t-1}}{Y_t}$$

Let an inflation shock  $d\pi_t$  in year t. Compliance with the expenditure benchmark will be affected as follows (remember that  $\pi_t^*$  is fixed):

$$\frac{dDEB_t}{d\pi_t} = -\frac{de_t^{real}}{d\pi_t} \times \frac{E_{t-1}}{Y_t} = -\frac{\frac{de_t}{d\pi_t}}{1+\pi_t^*} \times \frac{E_{t-1}}{Y_t}$$

It can be further shown that:

$$\frac{dDEB_t}{d\pi_t}\Big|_{\pi_t = \pi_t^*} = -\frac{\eta_E^{d\pi}}{(1 + \pi_t^*)^2} \times \frac{E_t}{Y_t}$$

With  $\eta_E^{d\pi}$  standing for the elasticity of expenditures with respect to the inflation shock. (<sup>128</sup>)

It follows from the above that the extent to which (compliance with) the expenditure benchmark is affected will crucially depend on the extent to which expenditures are affected by the inflation shock. Indeed:

- If the net expenditure aggregate remains unchanged following a disinflation shock  $(\eta_{E}^{d\pi} = 0)$ , the growth rate of this aggregate

(<sup>128</sup>) By definition  $\pi_t = \frac{P_t}{P_{t-1}} - 1$ . Therefore, and assuming that  $\frac{d\Delta R_t}{d\pi_t} = 0$ :  $\frac{de_t}{dR_t} = 0$ :

$$\frac{du_t}{d\pi_t} = \frac{du_t}{dP_t} \times \frac{r_{t-1}}{E_{t-1}} = \frac{du_t}{dP_t} \times \frac{r_{t-1}}{E_{t-1}} \times \frac{r_t}{E_t} \times \frac{du_t}{P_t} = \eta_E^{d\pi} \times \frac{r_t}{P_t} \times \frac{r_{t-1}}{E_{t-1}}$$

Plugging this in, and rearranging the equation, gives:

$$\begin{split} \frac{dDEB_{t}}{d\pi_{t}} &= -\frac{\eta_{E}^{d\pi}}{1+\pi_{t}^{*}} \times \frac{E_{t}}{P_{t}} \times \frac{P_{t-1}}{E_{t-1}} \times \frac{E_{t-1}}{Y_{t}} = -\frac{\eta_{E}^{d\pi}}{1+\pi_{t}^{*}} \times \frac{1}{1+\pi_{t}} \times \frac{E_{t}}{Y_{t}} \\ \frac{dDEB_{t}}{d\pi_{t}}\Big|_{\pi_{t}=\pi_{t}^{*}} &= -\frac{\eta_{E}^{d\pi}}{(1+\pi_{t}^{*})^{2}} \times \frac{E_{t}}{Y_{t}} \end{split}$$

will be unchanged as well, and  $DEB_t$  will not be affected.

- Alternatively, if expenditures adjust if only slightly to lower inflation  $(0 < \eta_E^{d\pi} \le 1)$ , this will translate into higher  $DEB_t$ , meaning that fiscal effort as measured by the expenditure benchmark will be positively affected. Note that, as already discussed, while the returns from revenue measures will be impacted by lower inflation, this effect will be relatively marginal since it is only a base effect on the additional revenue provided by the measure. This will likely be more than compensated for by the expenditure estimate, since any fall in expenditures due to lower inflation will be assessed on the full expenditure base, rather than a specific measure.

### A4.2. CORRECTIVE ARM OF THE SGP

#### **Top-down** approach

The change in the structural balance is adjusted in the following way:

- The  $\alpha$  adjustor measures the impact of revisions in potential output growth compared to forecast underlying the EDP recommendation. All other things equal, a higher (or a lower) rate of potential output growth in year t would lead to a higher (or a lower) change in the structural balance.
- The  $\beta$  adjustor measures the impact of revisions on the composition of economic growth or of other windfalls/shortfalls on revenues. This captures the fact that the response of revenues (the so-called 'elasticity') can differ from that expected at the time of the EDP recommendation, for reasons outside the control of government.
- The  $\gamma$  adjustor captures the impact of other unexpected events under very unusual and significant circumstances.

Analytically, the  $\alpha$  adjustor corrects for the impact of the potential growth outturns being different from those forecast. It is defined as:

$$\alpha_t = \frac{G_{t-1}^s}{Y_{t-1}^p} \times (\omega_t - E_{t-1}\omega_t)$$

Where  $\frac{G_{t-1}^s}{Y_{t-1}^p}$  stands for the structural expenditure ratio in year t-1 and  $\omega_t$  and  $E_{t-1}\omega_t$  for the outturn and forecast potential growth estimates.

It follows from the above that the  $\alpha$  adjustor is not affected by inflation developments (except for the second-order impact through  $\frac{G_t^s}{Y_t^p}$  on the  $\alpha$  adjustor for year t+1):

$$\frac{d\alpha_t}{d\pi_t} = 0$$

(Remember that here we do not look at possible second-round effects of inflation on the 'real' economy, which could be sizeable and affect fiscal effort.)

The  $\beta$  adjustor corrects for the impact of the response of revenues with respect to nominal GDP being different from that forecast. It is defined as:

$$\beta_t = \frac{(\Delta R_t - DM_t - [y_t + (\eta^R - 1) \times \Delta OG_t] \times R_{t-1})}{Y_t}$$
$$-\frac{(\Delta R_t - DM_t - [y_t + (\eta^R - 1) \times \Delta OG_t] \times R_{t-1})^{rec}}{Y_t}$$

Where *R* and  $\Delta R$  stand for the level of revenues and the annual change in revenues; *DM* for the amount of discretionary revenue measures (incremental effect on revenues in year t); *Y* and *y* for nominal GDP and nominal GDP growth;  $\Delta OG$ for the change in the output gap; and  $\eta^R$  for the standard revenue elasticity used for the computation of cyclically-adjusted balances.

Let an inflation shock  $d\pi_t$  in year t. In algebraic terms, the  $\beta$  adjustor will be affected as follows:

$$\frac{d\beta_t}{d\pi_t} = \frac{d(\Delta R_t - DM_t - [y_t + (\eta^R - 1) \times \Delta OG_t] \times R_{t-1})}{\frac{d\pi_t}{Y_t}}$$
$$= \frac{\frac{dR_t}{d\pi_t} - \frac{dy_t}{d\pi_t} \times R_{t-1}}{Y_t}$$

Assuming that  $\frac{dDM_t}{d\pi_t} = 0$  (as already discussed, while the returns from revenue measures will be

impacted by lower inflation, this effect will be relatively marginal since it is only a base effect on the additional revenue provided by the measure).

It can be further shown that:

$$\frac{d\beta_t}{d\pi_t} \cong \frac{\eta_R^{d\pi} - 1}{1 + \pi_t} \times \frac{R_t}{Y_t}$$

With  $\eta^{\pi}$  standing for the elasticity of revenues with respect to the inflation shock.<sup>(129)</sup>

It follows that as long as revenues adjust fully to the inflation shock ( $\eta_R^{d\pi} = 1$ ), the  $\beta$  parameter will be left (broadly) unchanged.

Note that the impact of a disinflation shock on the *corrected* change in the structural balance will actually be broadly the same whether revenues adjust fully or only partly to the shock. Indeed:

– If revenues adjust fully following a disinflation shock  $(\eta_R^{d\pi} = 1)$ , the headline balance will deteriorate accordingly, and so will the structural balance, the uncorrected change in the structural balance and the corrected change in the structural balance.

-Alternatively, if revenues adjust only partly to lower inflation ( $\eta_R^{d\pi} < 1$ ), the headline balance will deteriorate by less than in the previous case, and so will the structural balance and the uncorrected change in the structural balance. However, in this case  $\frac{d\beta_t}{d\pi_t} < 0$ , implying larger windfalls or smaller shortfalls in revenues, so that the *corrected* change in the structural balance will deteriorate by more than the uncorrected change. All in all, the deterioration in the corrected change will be broadly the same whether  $\eta_R^{d\pi} = 1$  or  $\eta_R^{d\pi} < 1$ .

Plugging this in, and rearranging the equation, gives:  $n_{a}^{d\pi} - \frac{(1 + y_{t}^{real}) \times (1 + \pi_{t}) \times R_{t-1}}{2}$ 

$$\frac{d\beta_t}{d\pi_t} = \frac{Y_K}{1 + \pi_t} \times \frac{R_t}{1 + \pi_t} \times \frac{R_t}{Y_t} \cong \frac{\eta_K^{n-1}}{1 + \pi_t} \times \frac{R_t}{Y_t}$$

### **Bottom-up**

The annual bottom-up fiscal effort is defined as follows:

$$FE_t = \frac{DRM_t}{GDP_t} - \frac{\Delta E_t - \Delta E_t^{baseline}}{GDP_t}$$

Where:

- $DRM_t$  stands for the estimated budgetary impact of the discretionary revenue measures additional to the ones already included in the baseline, as estimated at the time of assessment, net of one-off measures implemented in year t (or under the relevant sub-period of time under scrutiny).
- $\Delta E_t$  stands for the change in total nominal expenditure in year t, net of one-off measures, non-discretionary changes in interest payments, non-discretionary changes in unemployment benefits and public investment matched by EU funds as estimated at the time of assessment as well as other country-specific effects in limited cases.
- $\Delta E_t^{baseline}$  is the change in the total nominal expenditure in year t as forecast in the baseline, corrected for statistical revisions, net of one-off measures, non-discretionary changes in interest payments, non-discretionary changes in unemployment benefits and public investment matched by EU funds as estimated at the time the EDP recommendation was issued as well as other country-specific effects in limited cases.
- GDP<sub>t</sub> stands for nominal GDP in year t as estimated at the time of assessment of effective action.

The resulting total fiscal effort delivered since the recommendation was issued is then compared to the annual amount of discretionary fiscal measures specified in the recitals of the EDP recommendation or notice, on a cumulative basis.

Similarly to the expenditure benchmark approach under the preventive arm, any change in  $\Delta E_t$ *following* an inflation shock will affect the expenditure component one-to-one. As is the case with the expenditure benchmark, the impact on  $DRM_t$  will generally be negligible. In consequence, any change to the inflation outlook since the EDP recommendation that affects expenditures will affect fiscal effort as measured by the bottom-up approach as well.

Let an inflation shock  $d\pi_t$  in year t. In algebraic terms, the bottom-up measure of fiscal effort will be affected as follows:

$$\frac{dFE_t}{d\pi_t} = \frac{\frac{dDRM_t}{d\pi_t} - \frac{d\Delta E_t}{d\pi_t}}{GDP_t} = \frac{-\frac{dE_t}{d\pi_t}}{GDP_t}$$

Assuming that  $\frac{dDRM_t}{d\pi_t} = 0$  (as already discussed, while the returns from revenue measures will be impacted by lower inflation, this effect will be relatively marginal since it is only a base effect on the additional revenue provided by the measure).

It can be further shown that:

$$\frac{dFE_t}{d\pi_t} = -\frac{\eta_E^{d\pi}}{1+\pi_t} \times \frac{E_t}{GDP_t}$$

With  $\eta_E^{d\pi}$  standing for the elasticity of expenditures with respect to the inflation shock. (<sup>130</sup>)

As in the case of the expenditure benchmark, the extent to which fiscal effort as measured by the bottom-up approach is affected will crucially depend on the extent to which expenditures are affected by the inflation shock. Indeed:

- If the expenditure aggregate remains unchanged following a disinflation shock  $(\eta_E^{d\pi} = 0)$ , the growth rate of this aggregate

$$^{(130)} \text{ By definition } \pi_t = \frac{P_t}{P_{t-1}} - 1. \text{ Therefore:}$$

$$\frac{dE_t}{d\pi_t} = \frac{dE_t}{dP_t} \times P_{t-1} = \frac{dE_t}{dP_t} \times P_{t-1} \times \frac{P_t}{E_t} \times \frac{E_t}{P_t} = \eta_E^{d\pi}$$

$$\frac{dy_t}{d\pi_t} = 1 + y_t^{real}$$
Plugging this in, and rearranging the equation, gives:
$$\frac{d\beta_t}{d\pi_t} = \frac{\eta_R^{d\pi} - \frac{(1+y_t^{real}) \times (1+\pi_t) \times R_{t-1}}{1+\pi_t} \times \frac{R_t}{Y_t} \cong \frac{\eta_R^{d\pi} - 1}{1+\pi_t} \times \frac{R_t}{Y_t}$$

will be left unchanged as well, and  $FE_t$  will not be affected.

- Alternatively, if expenditures adjust if only slightly to lower inflation  $(0 < \eta_E^{d\pi} \le 1)$ , this will translate into higher  $FE_t$ , meaning that fiscal effort as measured by the bottom-up approach will be positively affected.

### A4.3. THE DEBT RULE

The **backward-looking component** of the debt reduction benchmark is defined as follows:

$$bb_{t} = 60\% + \frac{0.95}{3} \times (b_{t-1} - 60\%) + \frac{0.95^{2}}{3} \times (b_{t-2} - 60\%) + \frac{0.95^{3}}{3} \times (b_{t-3} - 60\%)$$

Where  $b_t$  stands for the debt-to-GDP ratio in year t.

The gap to the backward-looking component is then:

$$\begin{split} b_t - bb_t &= b_t - 60\% - \frac{0.95}{3} \\ &\times (b_{t-1} - 60\%) - \frac{0.95^2}{3} \\ &\times (b_{t-2} - 60\%) - \frac{0.95^3}{3} \\ &\times (b_{t-3} - 60\%) \end{split}$$

Let an inflation shock  $d\pi_i$  in year *i*. The gap to the backward-looking component will be affected as follows:

$$\frac{d(b_t - bb_t)}{d\pi_i} = \frac{db_t}{d\pi_i} - \frac{0.95}{3} \times \frac{db_{t-1}}{d\pi_i} - \frac{0.95^2}{3} \times \frac{db_{t-2}}{d\pi_i} - \frac{0.95^3}{3} \times \frac{db_{t-3}}{d\pi_i}$$

Assuming that  $d\pi_i$  affects the debt ratio only through the denominator implies that:

$$\frac{db_t}{d\pi_i} \cong \frac{db_{t-1}}{d\pi_i} \cong \ldots \cong \frac{db_i}{d\pi_i} = \frac{db}{d\pi}$$

$$\frac{db_{i-1}}{d\pi_{i-1}} = \frac{db_{i-2}}{d\pi_{i-2}} = \ldots = 0$$

Therefore, an inflation shock will affect the gap to (or compliance with) the backward-looking component of the debt reduction benchmark for year t as follows:

$$\frac{d(b_t - bb_t)}{d\pi_i}$$

$$\cong \begin{cases} \frac{db}{d\pi} & \text{if } i = t \\ \left(1 - \frac{0.95}{3}\right) \times \frac{db}{d\pi} & \text{if } i = t - 1 \\ \left(1 - \frac{0.95}{3} - \frac{0.95^2}{3}\right) \times \frac{db}{d\pi} & \text{if } i = t - 2 \\ \left(1 - \frac{0.95}{3} - \frac{0.95^2}{3} - \frac{0.95^3}{3}\right) \times \frac{db}{d\pi} & \text{if } i \le t - 3 \end{cases}$$

It follows from the above that only inflation shocks in years t, t-1 and t-2 will have a material impact on compliance with the backward-looking component of the debt benchmark for year t, with a shock in year t having a larger impact than a shock in year t-1.

The **forward-looking component** of the debt reduction benchmark is defined as:

$$bb_{t+2} = 60\% + \frac{0.95}{3} \times (b_{t+1} - 60\%) + \frac{0.95^2}{3} \times (b_t - 60\%) + \frac{0.95^3}{3} \times (b_{t-1} - 60\%)$$

The same reasoning as for the backward-looking component applies. It follows that a temporary inflation shock will affect either the backwardlooking component or the forward looking component for year t but not both at the same time, unless the shock occurs in year t.

Finally, the **cyclically-adjusted component** of the debt benchmark is defined as:

$$b_t^{CA} = \frac{B_t + \sum_{j=0}^2 C_{t-j}}{Y_{t-3} \times \prod_{h=0}^2 (1 + y_{t-h}^{pot}) \times (1 + p_{t-h})}$$

Where *B* stands for debt, *Y* for GDP at current prices,  $y^{pot}$  for potential growth, *p* for the price deflator of GDP and *C* for the cyclical part of the budget balance. The equation can be rewritten as:

$$\begin{split} b_t^{CA} &= b_t \times \frac{\prod_{h=0}^2 (1+y_{t-h})}{\prod_{h=0}^2 (1+y_{t-h}^{pot})} \\ &+ \frac{\sum_{j=0}^2 C_{t-j}}{Y_{t-3} \times \prod_{h=0}^2 (1+y_{t-h}^{pot}) \times (1+p_{t-h})} \end{split}$$

⇔

$$b_t^{CA} \equiv \gamma_t \times b_t + \delta_t$$

Where y stands for real growth. The gap to the cyclically-adjusted component is then:

$$\begin{split} b_t^{CA} - bb_t &= \gamma_t \times b_t + \delta_t - 60\% - \frac{0.95}{3} \\ &\times (b_{t-1} - 60\%) - \frac{0.95^2}{3} \\ &\times (b_{t-2} - 60\%) - \frac{0.95^3}{3} \\ &\times (b_{t-3} - 60\%) \end{split}$$

Let an inflation shock  $d\pi_i$  in year *i*. The gap to the cyclically-adjusted component will be affected as follows:

$$\frac{d(b_t^{CA} - bb_t)}{d\pi_i} = \gamma_t \times \frac{db_t}{d\pi_i} + \frac{d\delta_t}{d\pi_i} - \frac{0.95}{3}$$
$$\times \frac{db_{t-1}}{d\pi_i} - \frac{0.95^2}{3} \times \frac{db_{t-2}}{d\pi_i}$$
$$- \frac{0.95^3}{3} \times \frac{db_{t-3}}{d\pi_i}$$

Note that, in general,  $\gamma_t$  is expected to be close to 1 (ratio of two gross growth rates) and  $\frac{d\delta_t}{d\pi_i}$  close to 0. Therefore, an inflation shock will in general affect the gap to the cyclically-adjusted component of the debt benchmark to the same extent as it will affect the gap to the backward-looking component of the benchmark for any year t:

$$\frac{d(b_t^{CA} - bb_t)}{d\pi_i} \cong \frac{d(b_t - bb_t)}{d\pi_i}$$

This is consistent with the very purpose of the cyclically-adjusted component, which is to remove the effect of real growth being different from potential growth – not to correct for inflation developments.

Note that the **MLSA** will be affected in a similar manner. However, given that by definition the MLSA implies that the additional adjustment implemented is frontloaded (in order to ensure compliance with the debt reduction benchmark at the end of the transitional period), the overall adjustment is lower than if it had to be implemented in the last year of the transitional period. To put it differently, back loading fiscal effort necessarily implies a higher stock of debt in any year t.

# **Part IV**

The EU's stylized fiscal reaction function

# 1. THE EU'S STYLIZED FISCAL REACTION FUNCTION

### 1.1 INTRODUCTION

In this section, we will analyse the factors that determined the Council's recommendations in excessive deficit procedures (EDPs) over the past 15 years.

The EDP is one of the two arms of the common European budgetary rules which are defined in the Stability and Growth Pact (SGP). The aim of the EDP is to ensure that Member States correct their 'excessive deficits'. (<sup>131</sup>) Article 126 of the Treaty on the Functioning of the European Union (TFEU) requires that Member States avoid excessive government deficits and requires that the developments of the budgetary situation and of the stock of government debt in the Member States be monitored. In particular the compliance of Member States with budgetary discipline has to be examined on the basis of i) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value  $(^{132})$ and ii) whether the ratio of government debt to gross domestic product exceeds 60%, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

When a Member State's general government deficit and/or debt do not fulfil the criteria in the Treaty, this triggers a procedure with the following main steps: first, the Commission prepares a report on the country's budgetary situation; if the Commission considers that an excessive deficit in a country exists or may occur, it informs the Member State and the Council about it. After that, the Council can, on a proposal from the Commission, and having considered any observations which the Member State concerned may wish to make, decide whether an excessive deficit exists. Finally, in case the Council decides that an excessive deficit exists, it adopts, on a from the recommendation Commission. recommendations addressed to the Member State

concerned with a view to bringing that situation to an end within a given period.  $(^{133})$ 

The recommendations set the fiscal targets that the Member State has to achieve to correct its excessive deficit. The targets are expressed in terms of general government headline deficit. (<sup>134</sup>) There are two reasons for this approach: first, headline deficit is a government's main operational variable. Second, the Treaty threshold for what qualifies as an excessive deficit is defined as the headline deficit-to-GDP ratio, so it is natural that the targets in the recommendations should be given in the same unit of measurement.

Over time, the Council recommendations and the precise requirements have changed in form. The initial version of the SGP focused on Member States attaining the required reduction in the headline deficit ratio within the shortest possible time, whereas successive amendments acknowledged that it was better to take into account economic circumstances and countryspecific characteristics. This was achieved by increasing the use of the structural balance (2005) and by giving Member States more specific intermediate objectives and, since 2011, bringing in a gradual enforcement mechanism identifying the fiscal effort necessary to respond to the Council recommendation. Since 2009, EDP also recommendations are systematically expressed as improvements in the structural balance, which are used as the main indicator of fiscal effort. This makes it possible to give guidance deemed less dependent on economic cycles. Finally, to increase the weight of the recommendations. а gradual enforcement mechanism was introduced in 2011.

In the implementation of the SGP, the Council has allowed Member States where necessary to depart from the one-year rule for bringing deficit below

<sup>(&</sup>lt;sup>131</sup>) The expression 'excessive deficit' is used both to refer to a situation of excessive government borrowing and also to a government debt above 60 % of GDP that is not diminishing at a satisfactory pace.

<sup>(&</sup>lt;sup>132</sup>)"...unless either the ratio has declined substantially and continuously and reached a level that comes close to the reference value, or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value".

<sup>(&</sup>lt;sup>133</sup>) In practice, the Commission recommendations for a Council recommendation are followed by the Council in most cases. Therefore, the recommendations analysed in this Chapter are both the Commission and the Council recommendations. For ease of exposition, we will refer to these as 'Council recommendations' throughout the whole chapter.

<sup>(&</sup>lt;sup>134</sup>) See Article 3(4) of Council Regulation No 1467/97 of 7 July 1997on speeding up and clarifying the implementation of the excessive deficit procedure (OJ L 209, 2.8.1997, p. 6).

the 3 % threshold. This gives the Council some discretion in balancing the need for fast reduction in the excessive deficit against the risk of weakening economic growth or even exacerbating recession during an economic crisis. (<sup>135</sup>)

The EU's fiscal reaction to excessive deficits in the Member States through successive EDPs is complex, taking into account both fiscal and economic factors. There are two approaches that the Council can take when making its EDP recommendations: the 'nominalist' approach and the 'structuralist' approach.

Under the nominalist approach, the Council has to respect the letter and the spirit of the traditional view of the SGP, which puts the emphasis on correcting the 'excessive deficit' in the shortest possible time.

By contrast, the structuralist approach gives a larger role to the country's economic situation when determining the requirements of the EDP recommendations. This approach distinguishes between the structural and the cyclical component of the balance, privileges requirements set as change in the structural balance so as to allow automatic stabilisers to play and modulates requirements depending on the country's economic situation and other relevant factors.

Starting with Bohn's 1998 paper, a large body of literature has been written on 'fiscal reaction functions'. The literature on fiscal reaction functions investigates the behaviour of governments when setting fiscal policy as a function of the fiscal and the macroeconomic situation at the time the fiscal decisions are taken. This is generally obtained by estimating the reaction of government deficits to debt levels, past deficits and economic variables, like cyclical conditions. Studies in this field thus estimate 'expost reaction functions' and use them to calculate a government's fiscal space or to assess debt sustainability. (136) This is assessed by checking whether when a government's debt increases, the government increases the (primary) balance enough to comply with its intertemporal budget constraint, a result almost always borne out in

advanced economies since the original Bohn paper. Recent developments in the literature check for non-linearity in the relationship between the debt and the (primary) balance (<sup>137</sup>) or a lack of stability over time in this relationship, for example against the backdrop of the recent Great Recession (<sup>138</sup>) or the accession to the euro. (<sup>139</sup>)

Unlike the existing literature on the subject, this chapter estimates the reaction function of the Council rather than of the national governments. We will focus on what determined the fiscal requirements the Council issued to Member States over the past 12 years under the EDP. By implication, we will also be looking at the degree to which these rules enable the Council to take account of the economic environment and of country specificities and risks. We will look specifically at the 38 EDPs opened between 2003 and 2014 (of which 11 were still ongoing at the end of 2014), (<sup>140</sup>) focusing on the 69 accompanying EDP recommendations the Council issued. Of the EU's 28 Member States, 26 have been concerned by at least one of these recommendations and 22 Member States were addressed by more than one recommendation over the entire 12-year period.

The use of real-time data — available in past economic forecasts published by the European Commission or in the Council's recommendations and accompanying documents themselves makes it possible to accurately assess the influence of cyclical conditions on the choices made by the Council and the Commission. In general, estimates of fiscal reaction functions are based on ex post observations that are not representative of realtime information available at the time the decisions are taken. This is particularly relevant when cvclicality of the studving the policy decisions: (<sup>141</sup>) indeed, fiscal plans might be significantly different from ex post outcomes. This is because government decisions are based on data

<sup>(&</sup>lt;sup>135</sup>) Article 3(4) quoted sets a minimum annual requirement in structural terms of 0.5 % of GDP as a benchmark.

<sup>(&</sup>lt;sup>136</sup>) See e.g. Gosh *et al.* (2013).

<sup>(&</sup>lt;sup>137</sup>) See e.g. Gosh et al. (2013); Medeiros (2012); Lukkezen and Rojas-Romagosa (2012); Celasun et al. (2007); Fournier and Fall (2015); Legrenzi and Milas (2013); Mauro et al. (2013).

<sup>(&</sup>lt;sup>138</sup>) See e.g. Weichenrieder and Zimmer (2013) and Baldi and Staehr (2015).

<sup>(&</sup>lt;sup>139</sup>) See e.g. Weichenrieder and Zimmer (2013).

<sup>&</sup>lt;sup>(140</sup>) By end 2015 two more Member States have seen their EDP abrogated.

<sup>(&</sup>lt;sup>141</sup>) See e.g. Larch and Salto (2005), Golinelli and Momigliano (2006) and Cimadomo (2012).

available in real-time, which are often considerably revised over time,  $(^{142})$  on forecast data, on estimations of the cyclical position and on the multipliers, which are uncertain by nature. Another important factor is uncertainty over actual implementation, as governments do not have complete control over the implementation of their budgets.

A second major way in which this paper differs from the traditional literature on fiscal reaction functions is that we will analyse fiscal policy recommendations issued before the policy choices are made and before the outcome that they aim to influence. By analysing what determines the *recommended* fiscal effort, as opposed to the implemented fiscal effort that tends to be explored in the existing literature, we do not face the problem of reverse causality between economic conditions and fiscal effort. (<sup>143</sup>)

As an alternative to looking at the reaction function of the recommended fiscal effort, we also performed an analysis of the number of years granted to Member States to correct their excessive deficit. Indeed, the length of the recommendation can be considered as a tool to modulate the recommended annual fiscal effort during the adjustment period.

The results of the analysis indicate that the Council adopts a reaction function which combines both the nominalist and structuralist approaches described above. The reaction function can be considered 'nominalist' in that the recommended average effort tends to be higher both where the initial deficit was structural and permanent or only cyclical and transitory. At the same time, 'structuralist' considerations also seem to matter, as suggested by the finding that cyclical economic conditions do play a role in the recommendations. Specifically, a worse initial fiscal position leads, all things being equal, to higher fiscal effort requirements and a higher probability of a longer deadline. Worse cyclical economic conditions tend to reduce the average recommended effort and to increase the probability of receiving a longer deadline.

No other variables are found to have played a significant role in determining the recommendations. The debt ratio in particular does not seem to have played any role in determining the fiscal effort required, which is interesting considering not only that debt is the centre of focus of the existing literature on the fiscal reaction function but also considering the legislation itself, which states that the medium-term debt position (its dynamics and sustainability) constitutes a factor determining relevant in the recommendation.

The structure of the rest of this chapter is as follows. Section IV.1.2 presents the data, providing an overview of the different EDP episodes, the associated recommendations and the macroeconomic environment faced by the Member States. Section IV.1.3 shows the results of the analysis of the determinants of the required effort. Section IV.1.4 presents an analysis of the deadlines granted to Member States to put an end to their excessive deficits. Section IV.1.5 provides some conclusions.

### 1.2. EDP EPISODES: AN OVERVIEW

In our analysis, we will characterise EDP recommendations by the total improvement in the structural balance recommended by the Council. In the recommendation, this total improvement is by design determined by the recommended headline deficit path and the macroeconomic scenario underlying each recommendation. (<sup>144</sup>) The total recommended change in the structural balance can be broken down into two elements: the recommended average annual effort and the number of years granted to correct the excessive deficit (i.e. the length of the recommendation). These two aspects form the main subject of this study.

 $<sup>(^{142})</sup>$  See e.g. de Castro et al. (2013).

<sup>&</sup>lt;sup>(143)</sup> This problem of endogeneity is also present in the analysis of fiscal multipliers, where only a very limited number of papers distinguish between plans and outcomes; see e.g. Ramey (2011a and 2011b), Mertens and Ravn (2011), Alesina *et al.* (2015). Cugnasca and Rother (2015) use Council recommendations as instruments for the estimation of fiscal multipliers.

<sup>(&</sup>lt;sup>144</sup>) When the Council recommendation is only given in terms of a nominal target or an additional nominal effort relative to the plans included in the budget, as is the case for most pre-2009 recommendations, we carried out a special calculation to translate it into the corresponding change in structural balance. For a precise description of this method see Box IV.1.1.

In total, the dataset comprises 69 EDP recommendations issued by the Council for 38 distinct EDP episodes between the first excessive deficit procedure in 2003 and the final year in the sample, 2014 (for a full list of all the recommendations, see Table IV.A1.1 in Annex IV.1). (145) Slightly less than half of all the recommendations in the sample were new recommendations recommendations, i.e. immediately following the opening of an EDP, while slightly more than half were revised recommendations, revising the length and/or nominal path and structural effort of the original recommendation. (146)

Real-time outturn and forecast data are used as available to the Council when it makes its recommendation. This is important for two reasons. First, there can be significant differences between ex ante forecasts and ex post outturns. Second, the outturn may itself be influenced by the policy action actually implemented, whereas the forecast is based on the assumption that no further policy changes are made ('no-policy-change assumption' henceforth) and on other information available at the time of the recommendation. Therefore, using real-time data allows us to better capture the Council's reaction to fiscal and economic aggregates, even if these aggregates turn out to be different ex post. The real-time data are collected from the relevant Commission and Council documents, which are available on DG ECFIN's website.  $(^{147})$ 

The picture of the EDP recommendations shows that the 'average' recommendation, issued in year Y, follows a headline deficit outturn of 5.5 % of GDP in the preceding year, with projected headline deficits of 6.3 % and 5.7 % of GDP respectively for the years Y and Y+1, based on the no- policychange assumption. The average recommendation asks for a cumulative structural effort of 3.0 % of GDP. The average deadline is set by the Council at between two and three years after the recommendation (2.5 years). Therefore, starting from a structural balance of -5.1 % in the year of recommendation, the average annual the recommended effort is 1.1 % of GDP per year.

Under the legislation, the main determinants of EDP recommendations are expected to be the level of the headline balance and/or its three components i.e. the level of the structural balance, the level of the cyclical component and the level of one-off measures ('one-offs'). Other variables may play a role, reflecting the discretion given to the Council and the relevant factors indicated in the legislation. (<sup>148</sup>) Such variables include:

- the government debt ratio at the time of the recommendation, which captures the initial fiscal risks and conditions;
- the projected GDP growth, which captures the expected economic conditions;
- dummy variables to capture the specific features of recommendations issued before and after the financial crisis or the specificities of revised versus initial recommendations.

The average output gap is estimated to be -2.4 % in year Y and expected to fall to -2.9 % in year Y+1. Therefore, the average cyclical component of the budget balance is -1.1 % of GDP in year Y.

<sup>(&</sup>lt;sup>145</sup>) The EDP recommendation to Germany in 2003 is part of the descriptive analysis but is not taken into account in the analysis (see Box IV.1.1).

<sup>(146)</sup> Revised recommendations are issued when the Member State has failed to achieve the previously recommended targets. This can happen in two scenarios. First, the Council decides that effective action was taken but unexpected adverse economic events with major adverse consequences for government finances prevented the government from reaching the targets. Second, the Council issues a new recommendation, having established that the Member State took inadequate action. In the second scenario, the Council can decide to step up the EDP procedure for euro area Member States, with stricter requirements and also eventually financial sanctions. New recommendations and revised recommendations following unexpected adverse economic events are issued on the basis of Article 126(7) TFEU (previously Article 104(7) TEC). The decision establishing that a Member State has taken inadequate action is based on 126(8) TFEU (previously Article 104(8) TEC). If the Council decides to step up the procedure for euro area Member States, it gives notice to the Member State on the basis of Article 126(9) TFEU (previously Article 104(9) TEC).

<sup>(&</sup>lt;sup>147</sup>) Commission forecasts, which constitute the basis for the technical analysis and the baseline scenarios, are available at

http://ec.europa.eu/economy\_finance/publications/ca tegories/forecasts\_en.htm while legal documents are available at http://ec.europa.eu/economy\_finance/economic\_gov ernance/sgp/corrective\_arm/index\_en.htm.

<sup>(&</sup>lt;sup>148</sup>) See Council Regulation (EC) No. 1467/97, Article 2.

| Characteristics                         | All<br>recommendations | Excluding<br>recommendations<br>issued in the crisis<br>years | Excluding revised recommendations |
|---|------------------------|---|-----------------------------------|
| average length of the<br>recommendation | 2.5                    | 2.3   | 2.3                               |
| average cumulated effort                | 3.0                    | 2.2   | 2.2                               |
| average annual effort                   | 1.1                    | 1.0   | 0.9                               |
| average headline deficit in<br>year Y   | -6.3                   | -4.8  | -5.5                              |
| average structural balance in<br>year Y | -5.1                   | -4.4  | -4.6                              |
| average output gap in year Y            | -2.4                   | -1.8  | -2.1                              |
| average cyclical balance in<br>year Y   | -1.1                   | -0.8  | -1.0                              |
| Average debt/GDP ratio in<br>year Y     | 68.6                   | 73.3  | 61.1                              |

 Table IV.1.1:
 Main characteristics of the EDP recommendations

Average real GDP growth forecast (in year Y for Y+1) is 0.8 % and the debt ratio on average amounts to 68.6 % of GDP in year Y.

An average EDP episode (i.e. from the procedure's opening to its abrogation) lasts between three and four years (the average being 3.3) and often includes revised recommendations. Most EDP recommendations include one revised recommendation before they are abrogated.

Recommendations issued to seven Member States (Greece, Poland, Hungary, France, Malta, Portugal and Spain) account for 48 % of the total number of EDP recommendations and 34 % of the total number of EDP episodes.

The distribution of EDP recommendations across the 12 years covered by the dataset is irregular. About half of all the recommendations were issued in the crisis years of 2009 and 2010 and only three Member States were not concerned by an EDP recommendation in those years. (<sup>149</sup>) If we compare the average EDP recommendations without the crisis years 2009 and 2010 against the average recommendations including the crisis years, we find a number of differences.

First, the initial conditions during the crisis years were clearly worse than during the non-crisis years, as confirmed by the difference in the initial structural balance (-5.1 % of GDP in year Y including crisis years compared with -4.4 % of GDP in year Y excluding the crisis) and the output gap in the year of the recommendation (-2.4%) including the crisis years versus -1.8% excluding the crisis).

As a result, the average cumulated structural effort recommended was significantly larger including the crisis years (3.0 % of GDP) than the average recommendation excluding the crisis years (2.2 % of GDP).

At the same time, the length of the average recommendation including the crisis years was somewhat longer than if we exclude the crisis. Therefore, the recommended average annual structural effort (1.1 and 1.0 percentage points respectively) is not significantly different whether we include or exclude the crisis years. This suggests that although initial conditions were more adverse during the crisis vears. the recommendations were trying to avoid increasing the required effort. Table IV.1.1 sums up the main characteristics of the EDP recommendations.

Finally, there are also some differences between the new and the revised recommendations. In the subsample of initial recommendations (i.e. excluding the revised recommendations, see Table IV.1.1, column 3), the recommended cumulative structural effort is significantly lower than in the full sample that also includes the revised recommendations. Also, both the length of the recommendations and recommended average annual effort are lower in new recommendations than in the full sample suggesting that the revised recommendations tend to be more demanding than the new recommendations. A longer description of the characteristics of the EDP recommendations and their potential determinants is given in Annex IV.1.2.

The following section uses this dataset to estimate the Council's ex ante fiscal recommendation function.

### 1.3. THE DETERMINANTS OF THE AVERAGE EFFORT

This section focuses on the determinants of the average recommended effort over the period covered by an EDP recommendation. Each recommendation is characterised by a (recommended) nominal deficit path, which

 $<sup>(^{\</sup>rm 149})$  The countries concerned were Estonia, Luxembourg and Sweden. Croatia was not yet a Member State.

corresponds to a series of annual fiscal efforts running from the first year of the recommendation the deadline. These fiscal effort targets, to expressed as improvements in the structural balance as a percentage of potential GDP, have been explicitly included in the recommendations since 2009. (<sup>150</sup>) For pre-2009 recommendations, the required structural fiscal effort can be retrieved using a calculation involving the real-time series of output gaps and one-off measures (see Box IV.1.1). The analysis of this section is conducted on the determinants of the average recommended effort, which summarises all the information on the fiscal effort over the timeframe of the recommendation in one variable. As the fiscal effort path recommended in the context of the EDP is usually quite smooth over the whole EDP period, it is possible to focus on the average without losing too much information. The next section will focus on the determinants of the number of years granted for the correction of the excessive deficit.

EDP recommendations are *a priori* based on an assessment of the Member State's need and capacity to reduce its deficit. This means that a recommendation will be determined by both the Member State's fiscal position and its economic conditions. If the effort required depends mostly on the deficit ratio observed at the time of the recommendation, with the aim being to reduce it below 3 % as soon as possible, this reflects the nominalist approach present in the SGP since its inception. If, however, the effort required depends mostly on the economic conditions, this would reflect the structuralist logic introduced into the SGP since the reform of 2005.

Put differently, under the nominalist approach, the recommendation would be purely based on the initial headline balance, without distinguishing whether the starting headline deficit is structural or cyclical. Thereby, the recommended average effort can be expected to react similarly to the initial structural and cyclical deficits. By contrast, under the structuralist approach, economic conditions would be taken into account and therefore, the recommended average effort would react differently depending on whether the initial deficit is structural or cyclical.

The equation we estimate is as follows:

$$\tilde{e} = \alpha + \beta \operatorname{SB}_0 + \gamma(\varepsilon \operatorname{OG}_0) + \varphi \operatorname{OO}_0 + \delta d_0 + \rho g_1 + \epsilon (1)$$

where  $SB_0$  stands for the structural balance at the time of the recommendation. The parameter  $\varepsilon$  denotes the semi-elasticity of the headline balance to the output gap and  $OG_0$  stands for the output gap at the time of the recommendation.

In other words, the term  $\varepsilon OG_0$  is the cyclical component of the balance at the time of the recommendation. One-offs as a ratio of GDP at the time of the recommendation are denoted by  $OO_0$ . In addition to these three components of the headline balance, the equation also includes other potentially relevant factors:  $d_0$  is the debt-to-GDP ratio at the time of the recommendation and  $g_1$  is real GDP growth in the first year of the recommendation.

The model allows for a differentiated reaction of the recommended average annual structural effort to the different components of the headline balance. Theoretically, under a purely or mainly nominalist approach, the recommended average effort can be expected to decrease both in the initial structural balance and in the initial cyclical balance, i.e. the coefficients of these components of the headline balance are negative. In addition, under the purely nominalist approach, the coefficients of the structural balance and the cyclical component would be equal, i.e.  $\beta = \gamma$ , reflecting a situation where the policy-maker does not differentiate between the components of the deficit.

By contrast, where the policy-maker is taking structuralist considerations into account, the average effort can be expected to react stronger to the structural balance than to the cyclical component of the balance, i.e.  $|\beta| \ge |\gamma|$  with  $\beta$ ,  $\gamma \le 0$ . Indeed, such a reaction would suggest that the Council requires the Member State to undertake more structural effort to eliminate the structural deficit than to eliminate the cyclical deficit which would be automatically eliminated once the output gap closes. Moreover, since the cyclical component is a function of the output gap,

<sup>(&</sup>lt;sup>150</sup>) Since 2013, recommendations also contain the corresponding effort as measured in a bottom-up fashion centred on measures to be taken. See European Commission (2013).

#### *Box IV.1.1:* Comparability of pre-2009 and post-2009 recommendations

An EDP recommendation consists of a path of fiscal deficit targets conducive to the achievement of the final budgetary objective within a given deadline. The final budgetary objective is set in most cases at 3 % of GDP unless the debt-reduction benchmark requires a budgetary objective below the 3 % threshold. Regulation (EC) 1467/97 requires the yearly fiscal effort  $e_t$ , expressed as the improvement in the structural balance in terms of potential GDP, to be such that  $e_t \ge 0.5$  for  $e_t$  all  $(e_1, ..., e_n)$ . The recommendation can therefore be summarised by two main parameters:

- the number of years between the first year of the recommendation and the deadline (n in the following);
- the average recommended effort over the EDP period ( $\tilde{e}$  in the following).

The total recommended structural effort *E* over the EDP period is largely determined by the headline deficit at the beginning of the EDP period. There is an implicit constraint on  $\tilde{e}$  and *n* as the combination of the two parameters should allow *E* to be high enough to allow the deficit to come back below the 3 % threshold given the projected economic conditions, assumed multipliers and spontaneous trends in expenditures and revenues. Algebraically:  $\tilde{e} = \frac{\sum_{i=1}^{n} e_t}{n} = \frac{E(n|\theta)}{n}$  where the total cumulative effort is itself a function of the number of years granted and conditional on other parameters denoted by  $\theta$ . In order to ensure the comparability of pre-2009 and post-2009 recommendations, we followed the strategy used by Cugnasca & Rother (2015), which converts the nominal targets into a structural balance path using real-time output gap estimates to retrieve the fiscal effort implicit in the pre-2009 recommendations. This approach is based on the assumptions of zero multipliers (i.e. taking the output gap estimates of the no-policy-change forecast as a given) and no one-offs. In episodes where the pre-2009 recommendations explicitly stated the fiscal path in cyclically-adjusted terms, the value of that fiscal path was used.

Each recommendation can be seen as a path of required efforts resulting in a change in the structural balance  $(e_1, ..., e_n)$ , where n is the length of the recommendation. Therefore  $e_t$  for t=1,...,n corresponds to the recommended change in the structural balance between year t-1 and t.

Similarly to Cugnasca & Rother (2015), for every recommendation j of every country i issued in year  $T_{rec_j}$  the fiscal path is:

| (                    | $\Delta HB_{i,t}^{rec_{j}} - \varepsilon  \Delta OG_{i,t}$ | $if T_{rec_j} < 2009$                   |
|----------------------|--|---|
| $e_{i,t}^{rec_j} = $ | $\Delta CAB_{i,t}^{rec_j}$                                 | if $T_{rec_j} < 2009$ and CAB available |
|                      | $\Delta SB_{i,t}^{rec_j}$                                  | $if T_{rec_j} \ge 2009$                 |

where  $\Delta S B_{l,t}^{rec_j}$  is the structural effort recommended to Member State i for year t,  $\Delta H B_{l,t}^{rec_j}$  is the difference between the nominal target (namely the ratio of government balance to GDP) recommended to Member State i in t and t-1;

 $\varepsilon$  is the semi-elasticity of Member State i, as used in the Commission projections;

 $\Delta OG_{i,t}$  is the real-time estimate of the change in the output gap between t and t-1. In order to retrieve the unspecified structural effort in pre-2009 recommendations lasting three years or longer, the following assumption had to be made: as  $\Delta OG_{i,t}$  is generally not known for  $t \ge 3$ , it is assumed that the output gap closes progressively over the years following the last year of the forecast horizon.

As regards the timing convention, we denote by t=1 the first year of the recommendation defined as the year after the recommendation was issued. In practice, this convention implied that one recommendation had to be dropped from the sample: namely, the recommendation addressed to Germany in 2003, which set

#### Box (continued)

the deadline to bring the deficit below 3 % of GDP for the year in which the recommendation was issued. Therefore, this recommendation was not taken into account in the analysis.

its coefficient also captures the reaction of the policy-maker to the cyclical conditions in the economy. Therefore, the observation that  $|\beta| \ge |\gamma|$  can also capture the intention of policy-makers to require less structural effort when cyclical conditions are worse, in this way avoiding negative feedback loops. Theoretically, in a purely structuralist approach, the coefficient of the cyclical component could even turn positive.

The results of the estimation of model (1) suggest that the recommended effort is based on both nominalist and structuralist considerations. (<sup>151</sup>) On the one hand, we find that both the coefficients of the initial structural balance and of the initial cyclical balance are negative and significant in determining the recommended average structural effort, pointing to a nominalist approach (see Table IV.1.2, column 1). On the other hand, the coefficients of the structural and cyclical components of the headline balance are different. In fact, we find that the recommended average effort reacts more to changes in the initial structural balance than to changes in the cyclical component, pointing to a structural approach.

A one-percentage-point worse initial structural balance increases the average recommended effort by 0.22 percentage points. A one-percentage-point worse initial cyclical component ( $^{152}$ ) increases the average recommended effort by 0.14 points, i.e. 30 % less than the change in the structural balance. The estimates are, however, not very precise, as 95 %-error bands of the coefficients of the structural balance and cyclical component overlap to a large extent (but not at 90 %). This can be caused by the limited number of observations. We must therefore introduce a note of caution when interpreting the results.

The fact that the recommended average structural effort is influenced by the initial cyclical

#### Table IV.1.2: Results of the estimation of Model 1

|                            | Coefficient | Std. error | P> t | 95 % confide | nce interval |
|----------------------------|-------------|------------|------|--------------|--------------|
| Constant                   | -0.08       | 0.22       | 0.72 | -0.51        | 0.36         |
| Structural                 |             |            |      |              |              |
| balance (SB <sub>0</sub> ) | -0.22***    | 0.03       | 0.00 | -0.28        | -0.17        |
| Cyclical                   |             |            |      |              |              |
| component                  |             |            |      |              |              |
| (EOG <sub>0</sub> )        | -0.14**     | 0.06       | 0.02 | -0.26        | -0.02        |
| One-offs                   | 0.05***     | 0.02       | 0.01 | 0.01         | 0.10         |
| Expected                   |             |            |      |              |              |
| growth (g1)                | -0.05*      | 0.03       | 0.06 | -0.10        | 0.00         |
| Public debt-to-            |             |            |      |              |              |
| GDP (d₀)                   | 0.00        | 0.00       | 0.31 | -0.01        | 0.00         |
|                            |             |            |      |              |              |

Source: Commission services

Number of observations: 68. Pseudo R2: 0.43 \* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\*

Significant at 99 % level Note: Given that since 2009 the restriction  $\tilde{e} \ge 0.5$  has been officially

Note: Given that since 2009 the restriction  $e \ge 0.5$  has been ornically imposed by the regulations, a censored regression model has to be used (model II Tobit). See A1.3.

component points to the fact that a higher starting headline deficit systematically leads to more demanding recommendations. At the same time, by reacting less to the cyclical component than to the structural balance when determining the recommended structural adjustment path, the Council acknowledges the role of automatic stabilisers and allows them to take effect, even if only partially.

A drop in the headline balance due to one-off measures (all other things being equal) is, by definition, temporary and its impact on the headline balance fades out in the year after. We find that there is a significant but quantitatively very small positive effect from the one-offs on the recommended structural effort. This points to some overshooting in the average recommended structural effort in the presence of one-off measures.

The model including the total headline balance rather than its components performs more poorly than the previous model (see Table IV.1.3). (<sup>153</sup>) Specifically, model (2) can be considered a restricted form of model (1) where the condition  $\beta = \gamma = \theta$  is imposed. The explanatory power of this model is significantly lower (with a coefficient

 $<sup>(^{151})</sup>$  See Annex IV.1.3 for more details on the method used for the estimation.

<sup>(&</sup>lt;sup>152</sup>) A one-percentage point change in the cyclical component corresponds to a change in the output-gap between 1.6 and 3.6 percentage points, depending on the value of the semielasticity.

 $<sup>(^{153})</sup>$  The estimated equation has the form:

 $<sup>\</sup>tilde{e} = \alpha' + \beta' \operatorname{HB}_0 + \delta' d_0 + \rho' g_{1(2)}$ 

| Table IV.1.3:                            | Result      | s of the estir | nation of <b>N</b> | Model 2      |               |
|--|-------------|----------------|--------------------|--------------|---------------|
| Exogenous<br>variables                   | coefficient | Std. error     | P> z               | 95 % confide | ence interval |
| Constant                                 | 0.78***     | 0.23           | 0.00               | 0.30         | 1.26          |
| Headline<br>balance (HB₀)                | -0.07***    | 0.02           | 0.00               | -0.10        | -0.03         |
| Expected<br>growth (g1)                  | -0.11***    | 0.03           | 0.00               | -0.18        | -0.04         |
| Public debt-<br>to-GDP (d <sub>0</sub> ) | 0.00        | 0.00           | 0.42               | -0.00        | 0.00          |

Source:

Number of observations: 68. Pseudo R2: 0.17 \* Significant at 90 % level; \*\*\* Significant at 95 % level; \*\*\*

Significant at 99 % level

of determination less than half that of the estimation of model (1)). This supports our choice to distinguish the effect of the structural fiscal position from the cyclical component. The value of the coefficient of the headline balance is significant but lower than both the coefficient of the structural balance and the coefficient of the cyclical component in the previous model.

The relatively low value of the headline balance coefficient is likely to be explained by the effect of the one-offs. The one-offs are very volatile and poorly correlated with the two other components of the headline balance in our sample. However, they are strongly correlated with the headline deficit and their positive effect on the average recommended effort possibly causes this low coefficient for the headline balance. We can confirm this result by running an estimation in which we distinguish one-offs from the two other components of the headline balance (see also Annex IV.1.6). The poor performance of this model confirms that the model that distinguishes between the structural and cyclical components is more informative.

#### Other determinants of the average effort

It is important to test whether other variables determine the choice of the average effort recommended by the Council as the legislation gives the Council the discretion to take into account relevant factors, such as the government debt ratio or the growth outlook, when setting the requirements. This analysis also provides a second robustness check of the previous results.

The main outcome is that there is little space for other determinants of the average effort of the recommendations. Specifically, there is some evidence that expected economic conditions play a minor role in determining the recommended effort beyond what we see when we measure the cyclical component of the government balance. The results of the estimation show a negative though very small and little significant effect from the forecast GDP growth: a one point lower GDP growth forecast increases the average recommended effort over the EDP period by 0.05 points. However, the point estimate of the coefficient of expected GDP growth is likely to be imprecise and its degree of significance distorted by multicollinearity through the correlation between the cyclical component and growth itself. (<sup>154</sup>) Therefore we should not over-interpret this result. In addition, the estimation has been tested excluding the growth variable. The results of this estimation showed similar results (see Annex IV.1.6).

We found no evidence that the debt-to-GDP ratio strong influence on the has а EDP recommendation. This can have various explanations: first, all EDP recommendations were issued on the basis of the established existence of excessive deficit. Even if in some cases the debt criterion was breached as well, the main concern behind the recommendation was the excessive deficit. This is in part because the 'debt rule' which makes operational the requirement in the Treaty that the government debt ratio has to be below 60 % or sufficiently decreasing - was only introduced in 2011 and has been applied only once since (to Malta in 2013). It may also reflect the fact that, as already mentioned, the fiscal deficit can be considered as an intermediate target for controlling the debt, meaning that the initial deficit indirectly captures concerns about the debt. Moreover, while a high debt-to-GDP ratio is always a matter of concern, this indicator does not always reflect the sustainability of the debt, which depends on long-term variables such as potential growth, future expected costs of ageing, future interest rates and others. Estimations of other specifications of the model also lead to a nonsignificant debt-to-GDP ratio.

No other characteristics of the Member States' public finances and economy have been found to have a significant effect on the recommended average effort. A series of models which include dummies have been tested (see Annex IV.1.6). However, neither the model including a dummy

 $<sup>(^{154})</sup>$  The correlation between the two variables is 0.39.

for the crisis years, nor the model tested with a dummy variable for the revised recommendations, nor a dummy for Member States under a financial assistance programme suggest that these variables are significant. We also tested the model with a simple ordinary least square (OLS) estimation method, which also gives very similar results.

### 1.4. THE DETERMINANTS OF THE DEADLINE

This section looks at what determines the number of years a Member State is granted to correct the excessive deficit. As already discussed, the legislation requires the excessive deficit to be corrected as fast as possible. Nevertheless, when the Council sets the deadline of the correction, it can also weigh up fiscal and economic considerations.

From a given starting fiscal position, the Council can require a higher average annual effort over a shorter period or smaller average annual effort over a longer period of time. Indeed, the timeframe allowed by the Council can be considered as a tool for controlling the recommended average annual effort and consequently mirrors it. In principle, we would expect the Council to recommend longer deadlines for a very bad starting fiscal position (the nominalist approach) and where there were worse cvclical conditions (the structuralist approach). (<sup>155</sup>) As was the case in the previous estimate, we can detect the structural approach through the difference in the odds ratio of the structural balance and the cyclical balance. Since the coefficient of the cyclical balance captures both the impact of the initial headline balance and the cyclical economic conditions, and better (worse) economic conditions should lead to a shorter (longer) deadline if they are taken into account, the structuralist approach is reflected by a lower odds ratio, or equivalently a larger inverse odds ratio of the cyclical balance than of the structural balance.

While there is a negative relation between the recommended average annual effort and the recommended deadline, there is no perfect mapping between them. Therefore, analysing the length of the recommendations separately may produce complementary results to what we found when we analysed the average recommended effort. This is partly because the length of the recommendation is set in integer years, i.e. a discrete variable; therefore, it cannot serve to precisely fine-tune the recommended average annual effort. Also, the absence of a one-to-one relationship between the recommended average effort and the deadline is due to the fact that the cumulative structural effort required to reach the 3% of GDP headline-deficit threshold is contingent on economic conditions over the duration of the EDP recommendation. Given that the economic outlook is forecast to improve over most EDP episodes, granting an additional year to correct the excessive deficit can reduce the cumulative structural improvement required. Consequently, the additional year more than proportionately reduces the average annual fiscal effort.

A further, different, reason to run this analysis is that it also serves as a check on the previous results. One may suspect the results of the previous section to be driven by the existence of an algebraic relation between the effort required by the Council and the deficit. In fact, this section shows that there is a genuine reaction function of the Council in giving recommendations under the SGP, which goes beyond the algebraic relationship.

In this section, the relative probability that the Council recommends a deadline that is one year longer is modelled as a function of the initial fiscal position and the economic conditions captured by the variables included in the estimation of the recommended average structural effort.  $(^{156})$ 

The results of this estimation show that, as with the results of the previous section, a worse initial structural balance and a worse cyclical component

<sup>(&</sup>lt;sup>155</sup>) Strictly speaking, the fact that the deadline is longer when the initial headline balance is worse could already be considered a structuralist approach because the longer deadline itself contributes to containing the required annual average effort. However, our discussion will abstract from this consideration and stick to the more restrictive definition.

 $<sup>(^{156})</sup>$  By construction, the length of the EDP recommendation (the number of years between the first year of the recommendation and the deadline, *n* in the following) can take only discrete values. This requires the use of a 'multinomial ordinal logistic model' (further details of this model in A1.4).

tend to increase the length of the EDP recommendation (see Table IV.1.4).

Specifically, all other things being equal, a one percentage-point better initial structural balance broadly halves the probability of receiving a one year longer deadline (see odds ratio in Table IV.1.4 column 1); by the same token, a one-percentage-point worse structural balance more than doubles the odds of a longer deadline (see the inverse of the odds ratio in Table IV.1.4 column 2).

Similarly, a one-percentage-point better initial cyclical balance multiplies the odds by 0.38, which means that a one-percentage-point worse cyclical balance (or output gap) multiplies the odds by the inverse, 2.6.

Overall, these results indicate once more that the Council follows a nominalist approach combined with structuralist considerations. The finding that the odds ratios of the headline balance components are found to be significant - and moreover are all in the same ballpark – suggests that the Council primarily determines the deadline on the basis of the initial headline balance. Still, the probability of a longer deadline is somewhat higher for a onepercentage-point worse cyclical balance than for a one-percentage-point worse structural balance. As discussed above, once more the coefficient of the cyclical balance captures both the impact of the initial headline balance and the cyclical economic conditions in these estimates. Therefore, this finding suggests that the Council does give some consideration of the economic conditions beyond the purely nominalist approach. However, as in the case of the average effort estimates, the difference is not significant.

Interestingly, the probability that the Council gives a longer correction deadline for a one percentage point balance-deteriorating one-off is similar to that for a one percentage point worse cyclical balance. This finding is somewhat surprising as the cyclical component can be expected to be more persistent than the one-off, the impact of which dissipates after one year. At the same time, this finding is consistent with the slight overshooting of the average effort in reaction to one-offs (i.e. the finding that where the initial headline deficit is deteriorated by one-offs the average effort required tends to be slightly lower than otherwise). The

#### Table IV.1.4: Results for the estimation of Model 1'

| Exogenous<br>variables                      | Odds ratio | Odds ratio | Std. error | P> z | 95 % confide | ence interval |
|---|------------|------------|------------|------|--------------|---------------|
| Structural<br>balance<br>(SB <sub>0</sub> ) | 0.47***    | 2.13       | 0.07       | 0.00 | 0.35         | 0.63          |
| Cyclical<br>component<br>(ε · OG₀)          | 0.38***    | 2.63       | 0.11       | 0.00 | 0.22         | 0.66          |
| One-offs                                    | 0.37***    | 2.70       | 0.12       | 0.00 | 0.19         | 0.71          |
| Expected<br>growth (g <sub>1</sub> )        | 0.94       | 1.06       | 0.12       | 0.64 | 0.73         | 1.21          |
| Public<br>debt-to-<br>GDP (d <sub>0</sub> ) | 1.00       | 1.00       | 0.01       | 0.84 | 0.98         | 1.01          |

Source: Commission services

Note: Number of observations: 68. Log likelihood: -68.

\* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\* Significant at 99 % level.

The odds ratio (column 1) is interpreted as the relative probability of a longer deadline relative to the shorter deadline for a unit increase in the independent variable. The inverse of the odds ratio (column 2) is interpreted as the relative probability of a longer deadline relative to a shorter deadline for a unit decrease in the independent variable.

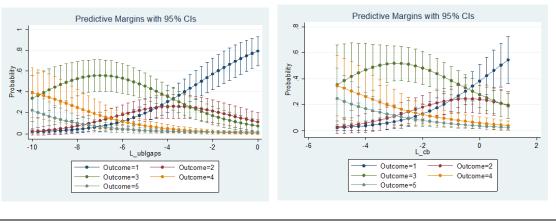
finding could also be interpreted as evidence of some bias towards the nominalist approach suggesting that the Council mostly looks at the headline balance when determining the deadline. At the same time, the fact that the impact on the average effort is very small, in contrast to the reaction in the deadline, could also suggest that the one-offs capture some presumably longer-lasting characteristics which are not captured by the output gap but which are taken into account by the Council. An example could be large capital injections during the crisis years into loss-making financial institutions which were signalling distress in the financial sector and therefore may have been accorded a longer deadline.

The results displayed in Table IV.1.4 are derived using the following equation:  $(^{157})$ 

$$\left(\ln \theta_{j} = \alpha_{j} + \beta \operatorname{SB}_{0} + \gamma(\varepsilon \operatorname{OG}_{0}) + \varphi \cdot \operatorname{OO}_{0} + \delta d_{0} + \rho g_{1} \right)_{j \in [1;4]}$$
(1')

where  $\theta_j$  are the ratios of probability (the odds) that the length of the recommendation would be lower than or equal to a certain value j ( $\theta_j = \frac{P(n>j)}{P(n\le j)}$ ). While  $\alpha_j$  is specific to each value of j, the effect of the other variables on the odds ratio ( $\beta, \gamma, \varphi, \delta$  and  $\rho$ ) does by construction not depend on j. This hypothesis — called the 'proportional

<sup>(&</sup>lt;sup>157</sup>) As indicated in the previous footnote, the technical details are found in Annex IV.1.4.



#### Graph IV.1.1: Probability of recommended deadlines

Source: Commission services

Note: The figures display the probability of recommended deadlines as a function of the initial structural balance (left-hand panel) and the initial cyclical balance (right-hand panel). Outcome=i, i=1,...,5 shows the probability of a deadline of i years. The calculations are based on the estimation results of model (1'). Probabilities are displayed with 95 % confidence intervals.

odds assumption' or the 'parallel odds assumption' — is needed to perform an ordered logit estimation. ( $^{158}$ ) The results of our test of this assumption can be found in Annex IV.1.5.

The results presented in Table IV.1.4 and Table IV.1.5 are expressed in the form of odds ratios (i.e. the exponential function applied to the coefficients): an increase by 1 unit in the value of a variable multiplies the odds by the value of the odds ratio. For instance, an improvement by one point in the structural balance multiplies the odds by  $e^{\beta}$  and an improvement by one point in the cyclical balance multiplies the odds by  $e^{\gamma}$ .

Another way to illustrate these findings is to calculate the probability of the length of the deadline n=1,...,5 for a given structural balance and for a given cyclical balance, all things being equal. These are shown in Graph IV.1.1. The graph indicates that for both the structural balance and the cyclical balance, the better the balance, the higher the probability the Member State will be granted a shorter deadline. The worse the conditions, the higher the probability of longer deadlines. As a result, getting a one-year deadline is the most likely outcome for the range of the initial structural balance between -4 and 0 %. A

three-year deadline becomes dominant over the range of structural balance between -4 and -9.5 %, while a four-year deadline is the most likely only below a -9.5 % starting structural balance. Two-year and the five-year deadlines are never the most likely outcomes over the initial structural balance range of the sample.

Similarly, looking at the initial cyclical balance, getting a one-year deadline is the most likely outcome for the range of -0.5 to 1 %, while a three-year deadline is the most likely over the range of -5 to -0.5 %. The other outcomes are less likely over the range of the cyclical balance in our sample. In addition, the range of the cyclical balance over which the three-year deadline is the most likely outcome is to the right of the range of the structural balance. This also confirms that the Council tends to grant longer deadlines in case of worse economic conditions in addition to reacting to the initial headline balance.

As in the previous section, we also estimated a model (model 2') in which the Member State's fiscal position is represented only by the headline balance (i.e. without distinguishing between structural, cyclical and one-off components). This model can be read as:

$$\left(\ln \theta_{j} = \alpha'_{j} + \beta' \operatorname{HB}_{0} + \delta' d_{0} + \rho' g_{1}\right)_{j \in [1;4]} (2')$$

<sup>(&</sup>lt;sup>158</sup>) Also, the five probabilities cannot be independently identified as  $\sum_{j=1}^{5} P(n=j) = 1 \sum_{j=1}^{5} P(n=j) = 1$ , making it necessary to choose a baseline value for the variable of interest, here n=1.

The likelihood ratio is similar to the one for the estimation of model (1'). Moreover, the odds ratio for the headline balance is of the same order of magnitude as the coefficients of its three components. The odds ratio shows that a one point worse headline balance more than doubles the probability of a longer deadline. This suggests that the above-discussed differences in the coefficients of the various headline balance components are relatively small, and that the structuralist approach is not highly significant.

#### Other determinants of the deadline

The results of the estimations of models 1' and 2' also show that economic growth has no significant effect beyond what is captured by the initial cyclical balance. Indeed, the GDP growth forecast for the year after the recommendation (i.e. the first year of fiscal adjustment) is not significant, neither in the model with the distinction between the three components of the budget balance nor in the model with only the headline balance. This could be due to the correlation between the initial output gap and the expected growth forecast for the first year of the recommendation. As in the previous section, the debt-to-GDP ratio does not seem to have an impact on the length of the recommendation either.

Finally, evidence suggests that recommendations issued in 2010 are more likely to have a longer deadline. The recommendations issued in 2010 (following a breach of the deficit criterion in 2009) are, on average, slightly longer than the others (average length of 2.8 years for the 2010 recommendations compared with 2.4 for the others). When we include in our model a dummy for EDP recommendations issued in 2010, this variable seems to act as a determinant of the deadline (see Annex IV.1.6). Specifically, the odds ratio associated with this variable (0.17) suggests that recommendations issued in 2010 are 83 % more likely to have a longer deadline than other recommendations. Put differently, all other things being equal, deadlines were longer during the This may reflect some more-thancrisis. proportionate reaction of the Council to the substantial economic slack in the crisis years; and / or may also be explained by the Council's consideration of the fact that many Member States simultaneously experienced a downturn, leading to negative spill-over effects during the crisis years.

#### 1.5. CONCLUSIONS

The excessive deficit procedure was introduced more than 20 ago by the Maastricht Treaty. For the first time since then, we analyse the Council recommendations on the basis of an exhaustive dataset of past EDP episodes and provide a quantitative assessment of their main determinants. While the objectives of these recommendations are straightforward i.e. that the Member State put an end to its excessive deficit situation as early as possible, they are based on a much broader assessment than simply looking at the excess of deficit over the 3 % of GDP threshold. That is why it is worth estimating and quantifying the extent to which the Council's EDP recommendations are influenced by the Member States' fiscal positions (both nominal and structural) and macroeconomic environment.

Firstly, the analysis shows that the Council uses the flexibility in the Treaty when making fiscal recommendations. There is flexibility in the number of years allowed as three quarters of the recommended fiscal adjustment path is planned to last two years or more. There is also flexibility in the average recommended effort, which ranges from a recommended annual adjustment of 0.5 % of GDP in 13 recommendations to 2 % of GDP or more in seven recommendations.

Secondly, by characterising the recommendations according to the average structural effort recommended and the deadline granted to the Member State to reduce its excessive deficit, we found the following tentative results:

The Council adopts a reaction function which combines both nominalist and structuralist approaches. The Council's reaction is nominalist in that the recommended average effort tends to be higher both if the initial deficit is structural and permanent or cyclical and transitory only.

Structuralist considerations seem also to matter, as the Council's reaction makes some differentiation between a structural deficit and a cyclical deficit. The recommended average effort reacts less to the cyclical deficit than to the structural deficit. In addition, worse cyclical economic conditions tend to increase the probability of receiving a longer deadline. This shows that, while a worse initial fiscal position implies larger requirements in line

#### Table IV.1.5: Estimation of the results of Model 2'

| Exogenous<br>variables                    | Odds<br>ratio | Odds<br>ratio <sup>-1</sup> | Std. error | P> z | 95 % confide | ence interval |
|---|---------------|-----------------------------|------------|------|--------------|---------------|
| Headline<br>balance<br>(HB <sub>0</sub> ) | 0.45***       | 2.22                        | 0.07       | 0.00 | 0.33         | 0.60          |
| Expected<br>growth (g <sub>1</sub> )      | 0.92          | 1.09                        | 0.11       | 0.50 | 0.73         | 1.17          |
| Public debt-<br>to-GDP (d <sub>0</sub> )  | 1.00          | 1.00                        | 0.01       | 0.92 | 0.98         | 1.02          |

Source: Commission services

Notes: Number of observations: 68. Log likelihood: -69. \* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\* Significant at 99 % level

with the Treaty, the recommendations also take into account the difficulties associated with large and swift fiscal adjustment by giving to the Member State more time to meet the 3 % to GDP threshold. However, because the limited number of observations does not allow for a statistically precise analysis, this result should not be overinterpreted.

Other potentially relevant variables such as expected growth or the debt-to-GDP ratio are not found to play a significant role in determining the Council's recommendations. The debt ratio does not seem to play any role in determining the fiscal effort required. This is interesting, first considering the legislation itself, which states that the mediumterm debt position (its dynamics and sustainability) constitutes a relevant factor when deciding on the recommendation; and second in light of the relevance of debt position when assessing sustainability and the consequent importance of debt in determining the fiscal stance as reflected in the literature.

The 2008 financial crisis and its aftermath led to several EDPs being opened in 2009 and to revised recommendations for Member States already under an EDP, in response to the rapid deterioration of macroeconomic and fiscal conditions that year. However, the specific features of the crisis period do not change the main results presented above. While the particularities of the crisis period significantly increased the recommended deadline for closing the EDP, they did not significantly increase the recommended average effort. This is another confirmation of structuralist considerations in the Council's reaction function.

Even though fiscal governance in the EU has evolved over time, it remains the outcome of decisions based on a nominalist approach that stresses the importance of meeting headline deficit requirements. However, there is also room for a structuralist view that stresses the importance of meeting structural deficit requirements while allowing for automatic stabilisers to operate.

#### A1.1. LIST OF EDP RECOMMENDATIONS USED IN THE ANALYSIS

| 28/01/2003         DE         2003         new EDP         new recommendatio           18/06/2003         FR         2004         new EDP         closing of the EDP           02/06/2004         NL         2005         new EDP         closing of the EDP           05/07/2004         CZ         2008         new EDP         new recommendatio           05/07/2004         EL         2005         new EDP         new recommendatio           05/07/2004         EL         2005         new EDP         new recommendatio           05/07/2004         FL         2007         new EDP         new recommendatio           05/07/2004         FL         2007         new EDP         closing of the EDP           05/07/2004         HU         2008         new EDP         closing of the EDP           06/03/2005         FT         2008         new EDP         closing of the EDP           02/09/2005         FT         2008         new EDP         closing of the EDP           04/03/2006         DE         2007         revised recommendation         closing of the EDP           04/01/2006         UK         2000         revised recommendation         closing of the EDP           04/01/2006         UK  | date of the recommendation | country | deadline | origin of the recommendation | ended with         |
|---|----------------------------|---------|----------|------------------------------|--------------------|
| 25/11/2003         FR         2005         revised recommendation         closing of the EDP           05/07/2004         CY         2005         new EDP         closing of the EDP           05/07/2004         CZ         2005         new EDP         new recommendation           05/07/2004         EL         2005         new EDP         new recommendation           05/07/2004         ML         2006         new EDP         new recommendation           05/07/2004         FL         2007         new EDP         new recommendation           05/07/2004         FL         2006         new EDP         new recommendation           09/02/2005         FT         2008         new EDP         closing of the EDP           20/09/2005         FT         2008         new EDP         closing of the EDP           20/09/2005         FT         2008         new EDP         closing of the EDP           20/02/005         UK         2006         new EDP         closing of the EDP           20/02/005         UK         2006         new EDP         closing of the EDP           06/01/2005         UK         2000         new EDP         new recommendation           06/07/2008         UK         2010   |                            | DE      | 2003     |                              | new recommendation |
| 02/06/2004         NL         2005         new EDP         closing of the EDP           05/07/2004         CY         2005         new EDP         new recommendatio           05/07/2004         EL         2005         new EDP         new recommendatio           05/07/2004         PL         2006         new EDP         new recommendatio           05/07/2004         PL         2007         new EDP         new recommendatio           05/07/2004         PL         2007         new EDP         new recommendatio           09/02/2005         EL         2006         revised recommendation         new recommendatio           09/02/2005         FT         2007         revised recommendation         closing of the EDP           20/09/2005         FT         2007         revised recommendation         closing of the EDP           09/12/2006         HU         2009         revised recommendation         closing of the EDP           09/12/2006         HU         2010         new EDP         new recommendation           06/04/2009         EL         2010         new EDP         new recommendation           06/07/2009         LL         2011         new EDP         new recommendatio           06/07/2009   | 18/06/2003                 | FR      | 2004     | new EDP                      | new recommendation |
| 05/07/2004         CY         2005         new EDP         closing of the EDP           05/07/2004         EL         2005         new EDP         new recommendatio           05/07/2004         MT         2006         new EDP         new recommendatio           05/07/2004         ML         2007         new EDP         new recommendatio           05/07/2004         HU         2008         revised recommendation         closing of the EDP           06/03/2005         HU         2008         revised recommendation         new recommendation           20/09/2005         HT         2007         new EDP         closing of the EDP           20/03/2005         PT         2008         new EDP         closing of the EDP           06/03/2005         DF         2007         revised recommendation         closing of the EDP           06/01/2006         UK         2010         new EDP         new recommendation           06/04/2009         EL         2010         new EDP         new recommendation           06/07/2009         FL         2011         new EDP         new recommendation           06/07/2009         FL         2011         new EDP         new recommendation           06/07/2009         FL<  | 25/11/2003                 | FR      | 2005     | revised recommendation       | closing of the EDP |
| 05/07/2004         CZ         2008         new EDP         new recommendation           05/07/2004         EL         2005         new EDP         new recommendation           05/07/2004         MI         2006         new EDP         new recommendation           05/07/2004         FL         2007         new EDP         new recommendation           09/02/2005         EL         2006         revised recommendation         closing of the EDP           20/09/2005         FT         2007         new EDP         closing of the EDP           20/09/2005         FT         2007         new EDP         closing of the EDP           20/09/2005         FT         2008         new EDP         closing of the EDP           20/09/2005         FT         2007         revised recommendation         closing of the EDP           06/11/2006         HU         2009         revised recommendation         closing of the EDP           06/07/2008         UK         2010         new EDP         new recommendation           06/07/2009         LE         2011         new EDP         new recommendation           06/07/2009         LE         2011         new EDP         new recommendatio           06/07/2009         L  | 02/06/2004                 | NL      | 2005     | new EDP                      | closing of the EDP |
| 05/07/2004         EL         2005         new EDP         new recommendatio           05/07/2004         MT         2006         new EDP         closing of the EDP           05/07/2004         SK         2007         new EDP         new recommendatio           05/07/2004         SK         2007         new EDP         closing of the EDP           06/07/2005         FL         2006         revised recommendation         new recommendatio           09/02/2005         FT         2007         new EDP         closing of the EDP           20/09/2005         PT         2008         new EDP         closing of the EDP           24/01/2006         UK         2007         revised recommendation         closing of the EDP           06/07/2008         UK         2010         new EDP         new recommendation         closing of the EDP           06/04/2009         EL         2010         new EDP         new recommendation         closing of the EDP           06/07/2008         UK         2010         new EDP         new recommendation         closing of the EDP           06/07/2009         LE         2013         new EDP         new recommendation         closing of the EDP           06/07/2009         NT         2011   | 05/07/2004                 | CY      | 2005     | new EDP                      | closing of the EDP |
| 65/07/2004         MT         2006         new EDP         closing of the EDP           05/07/2004         SK         2007         new EDP         new recommendation           05/07/2004         SK         2007         new EDP         new recommendation           05/07/2004         HU         2008         revised recommendation         new recommendation           06/03/2005         HU         2008         new EDP         closing of the EDP           20/09/2005         HU         2006         new EDP         closing of the EDP           24/01/2006         UK         20007         revised recommendation         closing of the EDP           06/11/2007         C2         2008         revised recommendation         closing of the EDP           06/01/2008         UK         2010         new EDP         new recommendation         closing of the EDP           06/04/2009         E2         2012         new EDP         new recommendation         06/07/2009           06/07/2009         LU         2011         new EDP         new recommendation         06/07/2009           06/07/2009         LU         2011         new EDP         new recommendation         06/07/2009           06/07/2009         VU         2012  | 05/07/2004                 | cz      | 2008     | new EDP                      | new recommendation |
| 05/07/2004         PL         2007         new EDP         new recommendatio           05/07/2004         FK         2007         new EDP         colsing of the EDP           07/07/2004         FK         2008         revised recommendation         closing of the EDP           09/02/2005         FL         2008         revised recommendation         closing of the EDP           20/09/2005         FT         2008         new EDP         closing of the EDP           20/09/2005         FT         2008         new EDP         closing of the EDP           20/09/2005         FU         2007         revised recommendation         closing of the EDP           09/10/2006         UK         2007         revised recommendation         closing of the EDP           06/01/2007         FL         2010         new EDP         new recommendation           06/07/2008         UK         2010         new EDP         new recommendation           06/07/2009         FL         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendatio           06/07/2009  | 05/07/2004                 | EL      | 2005     | new EDP                      | new recommendation |
| 05/07/2004         SK         2007         new EDP         closing of the EDP           07/07/2004         HU         2008         revised recommendation         closing of the EDP           08/03/2005         HU         2008         revised recommendation         closing of the EDP           08/03/2005         HU         2008         new EDP         closing of the EDP           20/09/2005         PT         2008         new EDP         closing of the EDP           20/09/2005         PT         2009         revised recommendation         closing of the EDP           09/10/2006         HU         2009         revised recommendation         closing of the EDP           09/10/2006         HU         2009         revised recommendation         closing of the EDP           06/07/2009         EL         2010         new EDP         new recommendation         closing of the EDP           06/07/2009         EL         2011         new EDP         new recommendation         closing of the EDP           06/07/2009         HU         2011         new EDP         new recommendation         closing of the EDP           06/07/2009         HL         2011         new EDP         new recommendation         closing of the EDP           06/0   |                            | MT      |          | new EDP                      |                    |
| 07/07/2004         HU         2008         new EDP         new recommendation           09/02/2005         FL         2008         revised recommendation         new recommendation           20/09/2005         FT         2008         new EDP         closing of the EDP           24/01/2006         UK         2009         revised recommendation         new recommendation           24/01/2006         UK         2009         revised recommendation         closing of the EDP           06/11/2007         CZ         20007         revised recommendation         closing of the EDP           06/01/2008         UK         2010         new EDP         new recommendation           06/04/2009         EL         2011         new EDP         new recommendation           06/04/2009         EL         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         HU         2012         new EDP         new recommendation           06/07/2009         HU         2012         new EDP         new recommendation           06/07/2009         RC         2011         new EDP         new recommendatio           06/07/2009 <td></td> <td></td> <td></td> <td></td> <td>new recommendation</td>  |                            |         |          |                              | new recommendation |
| 09/02/2005         EL         2006         revised recommendation         closing of the EDP           08/03/2005         HT         2007         new EDP         closing of the EDP           20/09/2005         HT         2008         new EDP         closing of the EDP           20/03/2005         HU         2009         revised recommendation         closing of the EDP           09/10/2005         HU         2009         revised recommendation         closing of the EDP           09/11/2005         HU         2007         revised recommendation         closing of the EDP           06/01/2008         HL         2010         new EDP         new recommendatio           06/04/2009         EL         2010         new EDP         new recommendatio           06/07/2009         HU         2011         revised recommendation         new recommendatio           06/07/2009         HU         2011         new EDP         new recommendatio           06/07/2009         HU         2011         new EDP         new recommendatio           06/07/2009         NT         2012         new EDP         new recommendatio           06/07/2009         NT         2013         new EDP         new recommendatio           06/07   |                            |         |          |                              |                    |
| 08/03/2005         HU         2008         revised recommendation         new recommendation           20/09/2005         PT         2008         new EDP         closing of the EDP           20/09/2005         PT         2008         new EDP         closing of the EDP           24/01/2006         UK         2009         revised recommendation         closing of the EDP           09/10/2006         HU         2009         revised recommendation         closing of the EDP           06/01/2007         PL         2007         revised recommendation         closing of the EDP           06/04/2009         EL         2010         new EDP         new recommendatio           06/04/2009         EL         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         MT         2012         new EDP         new recommendatio           06/07/2009         AT         2013         new EDP         closing of the EDP           03/011/2009         AT         2013         new EDP         closing of the EDP           03/011/2009   |                            |         |          |                              |                    |
| 20/09/2005         IT         2007         new EDP         closing of the EDP           24/01/2006         UK         2008         new EDP         closing of the EDP           24/01/2006         DE         2007         revised recommendation         closing of the EDP           09/10/2006         DE         2007         revised recommendation         closing of the EDP           09/10/2006         DE         2007         revised recommendation         closing of the EDP           06/04/2009         EL         2010         new EDP         new recommendatio           06/04/2009         EL         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         NT         2010         new EDP         new recommendatio           06/07/2009         RT         2013         new EDP         new recommendatio           30/11/2009         RZ         2013         new EDP         new recommendatio           30/11/2009         S   |                            |         |          |                              |                    |
| 20/09/2005         PT         2008         new EDP         closing of the EDP           14/03/2006         DE         2007         revised recommendation         closing of the EDP           14/03/2006         DE         2007         revised recommendation         closing of the EDP           09/10/2005         HU         2008         revised recommendation         closing of the EDP           06/07/2009         EL         2010         new EDP         new recommendation           06/07/2009         EL         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         NT         2012         new EDP         new recommendation           06/07/2009         AT         2013         new EDP         new recommendation           06/07/2009         AT         2013         new EDP         closing of the EDP           03/011/2009         AT         2013         new EDP         closing of the EDP          03/011/2009         ED   |                            |         |          |                              |                    |
| 24/03/2006       UK       2006       new EDP       closing of the EDP         14/03/2006       DE       2007       revised recommendation       closing of the EDP         09/10/2006       HU       2009       revised recommendation       closing of the EDP         06/11/2007       CZ       2008       revised recommendation       closing of the EDP         06/04/2009       EL       2010       new EDP       new recommendation         06/04/2009       EL       2011       new EDP       new recommendation         06/07/2009       HU       2011       new EDP       new recommendation         06/07/2009       HU       2012       new EDP       new recommendation         06/07/2009       HU       2011       new EDP       new recommendation         06/07/2009       RO       2011       new EDP       new recommendation         06/07/2009       RO       2011       new EDP       new recommendation         30/11/2009       AT       2013       new EDP       new recommendation         30/11/2009       BE       2013       new EDP       new recommendation         30/11/2009       FE       2013       new EDP       new recommendation         30/11/2009   |                            |         |          |                              |                    |
| 14/03/2006       DE       2007       revised recommendation       closing of the EDP         09/10/2005       HU       2009       revised recommendation       closing of the EDP         06/11/2007       CZ       2008       revised recommendation       closing of the EDP         08/07/2008       UK       2010       new EDP       new recommendation         06/04/2009       EL       2011       new EDP       new recommendation         06/04/2009       LE       2011       new EDP       new recommendation         06/07/2009       LU       2011       new EDP       new recommendation         06/07/2009       LU       2011       new EDP       new recommendation         06/07/2009       LU       2012       new EDP       new recommendation         06/07/2009       NT       2010       new EDP       new recommendation         06/07/2009       RO       2011       new EDP       new recommendation         06/07/2009       RO       2013       new EDP       closing of the EDP         30/11/2009       AT       2013       new EDP       closing of the EDP         30/11/2009       FR       2013       new EDP       new recommendation         30/11/2009   |                            |         |          |                              |                    |
| 09/10/2006         HU         2009         revised recommendation         new recommendation           06/11/2007         CZ         2008         revised recommendation         closing of the EDP           06/07/2008         UK         2010         new EDP         new recommendation           06/07/2009         EL         2010         new EDP         new recommendation           06/04/2009         EL         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         HU         2011         new EDP         new recommendation           06/07/2009         MU         2012         new EDP         new recommendation           06/07/2009         RD         2011         new EDP         new recommendation           03/011/2009         AT         2013         new EDP         new recommendation           03/011/2009         AT         2013         new EDP         new recommendation           03/011/2009         FR         2013         new EDP         new recommendation           03/011/2009         FR   |                            |         |          |                              |                    |
| 23/02/2007         PL         2007         revised recommendation         closing of the EDP           06/11/2007         CZ         2008         revised recommendation         closing of the EDP           08/07/2008         UK         2010         new EDP         new recommendation           06/04/2009         EL         2011         new EDP         new recommendation           06/04/2009         IE         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         MT         2010         new EDP         new recommendation           06/07/2009         MT         2010         new EDP         new recommendation           06/07/2009         RD         2011         new EDP         new recommendation           03/011/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         AT         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR  |                            |         |          |                              |                    |
| Obj         Obj         CZ         2008         revised recommendation         closing of the EDP           08/07/2008         UK         2010         new EDP         new recommendation           06/04/2009         EL         2010         new EDP         new recommendation           06/04/2009         EL         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         LT         2011         new EDP         new recommendation           06/07/2009         NT         2010         new EDP         new recommendation           06/07/2009         RU         2012         new EDP         new recommendation           30/11/2009         RE         2013         new EDP         new recommendation           30/11/2009         DE         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         NL   |                            |         |          |                              |                    |
| 08/07/2008         UK         2010         new EDP         new recommendatio           06/04/2009         EL         2010         new EDP         new recommendatio           06/04/2009         ES         2011         new EDP         new recommendatio           06/04/2009         IE         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         LT         2012         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           06/07/2009         RO         2013         new EDP         new recommendatio           30/11/2009         AC         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP   |                            |         |          |                              |                    |
| Obj(04/2009         EL         2010         new EDP         new recommendatio           06/04/2009         IE         2013         new EDP         new recommendatio           06/07/2009         IL         2011         new EDP         new recommendatio           06/07/2009         ILT         2011         new EDP         new recommendatio           06/07/2009         ILT         2011         new EDP         new recommendatio           06/07/2009         MT         2012         new EDP         new recommendatio           06/07/2009         MT         2011         new EDP         new recommendatio           06/07/2009         RD         2011         new EDP         new recommendatio           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         NL         2013   |                            |         |          |                              |                    |
| 06/04/2009         ES         2012         new EDP         new recommendatio           06/04/2009         HU         2011         revised recommendation         new recommendatio           06/07/2009         HU         2011         revised recommendation         new recommendatio           06/07/2009         LV         2012         new EDP         new recommendatio           06/07/2009         NT         2010         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         NL         20   |                            |         |          |                              |                    |
| Obj(04/2009         IE         2013         new EDP         new recommendation           06/07/2009         LT         2011         revised recommendation         new recommendatio           06/07/2009         LT         2011         new EDP         closing of the EDP           06/07/2009         MT         2010         new EDP         new recommendatio           06/07/2009         MT         2010         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         new recommendatio           30/11/2009         DE         2013         new EDP         new recommendation           30/11/2009         IE         2013         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         NL         2013   |                            |         |          |                              |                    |
| 06/07/2009         HU         2011         revised recommendation         new recommendation           06/07/2009         LV         2012         new EDP         closing of the EDP           06/07/2009         LV         2012         new EDP         closing of the EDP           06/07/2009         PL         2012         new EDP         new recommendation           06/07/2009         PL         2012         new EDP         new recommendation           06/07/2009         RO         2011         new EDP         new recommendation           30/11/2009         RC         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         NL         2013   |                            |         |          |                              |                    |
| 06/07/2009         LT         2011         new EDP         new recommendatio           06/07/2009         MT         2010         new EDP         closing of the EDP           06/07/2009         MT         2010         new EDP         new recommendatio           06/07/2009         PL         2011         new EDP         new recommendatio           06/07/2009         AT         2013         new EDP         new recommendatio           30/11/2009         BE         2012         new EDP         closing of the EDP           30/11/2009         BE         2013         new EDP         closing of the EDP           30/11/2009         BE         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         IE         2013         new EDP         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP         new recommendatio           30/11/2009         SL         2013 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>  |                            |         |          |                              |                    |
| Op/07/2009         LV         2012         new EDP         closing of the EDP           06/07/2009         PL         2012         new EDP         new recommendatio           06/07/2009         PL         2012         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new recommendatio           30/11/2009         RO         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         new recommendatio           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         IE         2013         new EDP         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         <  |                            |         |          |                              |                    |
| Object         MT         2010         new EDP         new recommendatio           Object         RO         2011         new EDP         new recommendatio           Object         RO         2011         new EDP         new recommendatio           30/11/2009         RO         2011         new EDP         closing of the EDP           30/11/2009         BE         2012         new EDP         new recommendatio           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP <td></td> <td></td> <td></td> <td></td> <td></td>   |                            |         |          |                              |                    |
| 06/07/2009         PL         2012         new EDP         new recommendatio           06/07/2009         RO         2011         new EDP         new EDP         new recommendatio           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         BE         2012         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SL         2013         new EDP         new recommendation           30/11/2009         SL         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         ongoing           30/2/2010         EL   |                            |         |          |                              | -                  |
| 06/07/2009         RO         2011         new EDP         new recommendatio           30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         BE         2012         new EDP         new recommendatio           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FR         2013         new EDP         new recommendatio           30/11/2009         FT         2013         new EDP         new recommendatio           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SK         2013         new EDP         new recommendatio           30/11/2009         SK         2013         new EDP         new recommendatio           30/12/2009         UK         2012         revised recommendation         new recommendatio           30/202/2010         LL         2012         <  |                            |         |          |                              |                    |
| 30/11/2009         AT         2013         new EDP         closing of the EDP           30/11/2009         BE         2012         new EDP         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         IE         2014         revised recommendation         new recommendation           30/11/2009         IE         2013         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         SL         2013         new EDP         new recommendation           30/11/2009         SL         2013         new EDP         new recommendation           30/11/2009         SL         2013         new EDP         new recommendation           30/12/2009         UK         2012         revised recommendation         noging           30/12/2010         LL   |                            |         |          |                              |                    |
| 30/11/2009         BE         2012         new EDP         new recommendatio           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         IF         2013         new EDP         new fcommendation           30/11/2009         IF         2013         new EDP         new fcommendation           30/11/2009         IF         2013         new EDP         new recommendation           30/11/2009         SI         2011         revise  |                            |         |          |                              |                    |
| 30/11/2009         CZ         2013         new EDP         closing of the EDP           30/11/2009         ES         2013         new EDP         closing of the EDP           30/11/2009         ES         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         IE         2014         revised recommendation         new recommendation           30/11/2009         II         2012         new EDP         new recommendation           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         SI         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         closing of the EDP           02/02/2010         LT         2012         revised recommendation         closing of the EDP           12/02/2010   |                            |         |          |                              |                    |
| 30/11/2009         DE         2013         new EDP         closing of the EDP           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         FR         2014         revised recommendation         new recommendation           30/11/2009         IT         2012         new EDP         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendation         30/11/2009           30/11/2009         SK         2013         new EDP         new recommendation         30/11/2009           30/11/2009         SK         2013         new EDP         new recommendation         30/30/30/30/30/30/30/30/30/30/30/30/30/3   |                            |         |          |                              |                    |
| 30/11/2009         ES         2013         revised recommendation         new recommendation           30/11/2009         IF         2013         new EDP         new recommendation           30/11/2009         IE         2014         revised recommendation         new recommendation           30/11/2009         II         2012         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         SI         2013         new EDP         new recommendation           03/0/2/2010         LI         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         new recommendation           <   |                            |         |          |                              | -                  |
| 30/11/2009         FR         2013         new EDP         new recommendation           30/11/2009         IE         2014         revised recommendation         new recommendatio           30/11/2009         IT         2012         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         PT         2013         new EDP         new recommendation           30/11/2009         SI         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         new recommendation           03/02/2010         LT         2012         revised recommendation         closing of the EDP           02/02/2010         MT         2011         revised recommendation         closing of the EDP           12/02/2010         RO         2012         new EDP         closing of the EDP           12/02/2010         BG         2011         new EDP         closing of the EDP           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010 <td></td> <td>ES</td> <td></td> <td></td> <td>new recommendation</td>   |                            | ES      |          |                              | new recommendation |
| 30/11/2009         IE         2014         revised recommendation         new recommendation           30/11/2009         IT         2012         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendation           30/11/2009         SI         2013         new EDP         new recommendation           30/11/2009         SI         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         orgoing           03/02/2010         EL         2012         revised recommendation         closing of the EDP           09/02/2010         LT         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         closing of the EDP           09/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2013         new EDP         closing of the EDP           09/07/201   |                            | FR      |          |                              | new recommendation |
| 30/11/2009         IT         2012         new EDP         closing of the EDP           30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         PT         2013         new EDP         new recommendatio           30/11/2009         SI         2013         new EDP         new recommendatio           30/11/2009         SK         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         ongoing           03/02/2010         EL         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           10/05/2010         EL         2012         new EDP         new recommendation           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP           07/12/2010         IE         2014         revised recommendation         ongoing           13/07/2010         FL  | 30/11/2009                 |         |          |                              | new recommendation |
| 30/11/2009         NL         2013         new EDP         new recommendatio           30/11/2009         SI         2013         new EDP         new recommendatio           30/11/2009         SI         2013         new EDP         new recommendatio           30/11/2009         SI         2013         new EDP         new recommendation           30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         ongoing           03/02/2010         LT         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           12/02/2010         RO         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         new EOP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP         13/03/2012         EL         2014         revised recommendation         new recommendation           09/07/2010         BG         2011         new EDP         closing of the EDP         13/03/2012  |                            |         |          |                              |                    |
| 30/11/2009         SI         2013         new EDP         new EDP         closing of the EDP           30/11/2009         UK         2015         revised recommendation         ongoing           03/02/2010         EL         2012         revised recommendation         ongoing           03/02/2010         EL         2012         revised recommendation         closing of the EDP           09/02/2010         LT         2012         revised recommendation         closing of the EDP           10/05/2010         RO         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         closing of the EDP           09/07/2010         DK         2013         new EDP         new recommendation           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2013         new EDP         closing of the EDP           07/12/2010         FE         2011         new EDP         closing of the EDP           07/12/2010         FE         2011         new EDP         closing of the EDP           09/07/2010         DK         2013         revised recommendation         new recommendation </td <td>30/11/2009</td> <td>NL</td> <td>2013</td> <td>new EDP</td> <td>new recommendation</td>            | 30/11/2009                 | NL      | 2013     | new EDP                      | new recommendation |
| 30/11/2009         SK         2013         new EDP         closing of the EDP           02/12/2009         UK         2015         revised recommendation         ongoing           03/02/2010         EL         2012         revised recommendation         ongoing           09/02/2010         LT         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           10/05/2010         EL         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         closing of the EDP           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP           07/12/2010         IE         2015         revised recommendation         ongoing           13/07/2012         EL         2014         revised recommendation         closing of the EDP           09/07/2010         FI         2014         revised recommendation         new recommendation           13/03/2012         EL         2014         revised recommendation         nevercommen   | 30/11/2009                 | PT      | 2013     | new EDP                      | new recommendation |
| 02/12/2009         UK         2015         revised recommendation         ongoing           03/02/2010         EL         2012         revised recommendation         new recommendation           09/02/2010         LT         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           12/02/2010         RO         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         closing of the EDP           06/07/2010         DK         2013         new EDP         new recommendation         officing of the EDP           09/07/2010         DK         2011         new EDP         closing of the EDP         10/07/07/07/07/07/07/07/07/07/07/07/07/07  | 30/11/2009                 | SI      | 2013     | new EDP                      | new recommendation |
| 03/02/2010         EL         2012         revised recommendation         new recommendation           09/02/2010         LT         2012         revised recommendation         closing of the EDP           09/02/2010         MT         2011         revised recommendation         closing of the EDP           12/02/2010         RO         2012         revised recommendation         closing of the EDP           12/02/2010         RO         2012         revised recommendation         new tecommendation           06/07/2010         CY         2012         new EDP         closing of the EDP           09/07/2010         DK         2011         new EDP         closing of the EDP           09/07/2010         DK         2011         new EDP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP           07/12/2010         IE         2015         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           02/09/2012         PT         2014         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing   | 30/11/2009                 | SK      | 2013     | new EDP                      | closing of the EDP |
| 09/02/2010         LT         2012         revised recommendation         closing of the EDP           12/02/2010         RO         2011         revised recommendation         closing of the EDP           12/02/2010         RO         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         new recommendation           06/07/2010         CY         2011         new EDP         new recommendation           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2011         new EDP         closing of the EDP           07/12/2010         FL         2011         new EDP         closing of the EDP           07/12/2010         FL         2014         revised recommendation         new recommendation           09/07/2012         EL         2014         revised recommendation         new recommendation           02/08/2012         PT         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         negoing<   | 02/12/2009                 | UK      | 2015     | revised recommendation       |                    |
| 09/02/2010         MT         2011         revised recommendation         closing of the EDP           12/02/2010         EL         2014         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         new recommendation           06/07/2010         CY         2012         new EDP         new recommendation           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP           07/12/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         FI         2014         revised recommendation         new recommendation           09/07/2012         EL         2014         revised recommendation         new recommendation           09/07/2012         EL         2016         revised recommendation         ongoing           02/09/2012         PT         2014         revised recommendation         ongoing  | 03/02/2010                 | EL      | 2012     | revised recommendation       | new recommendation |
| 12/02/2010         RO         2012         revised recommendation         closing of the EDP           10/05/2010         EL         2014         revised recommendation         new recommendation           06/07/2010         CY         2012         new EDP         new recommendation           06/07/2010         DK         2013         new EDP         closing of the EDP           09/07/2010         DK         2011         new EDP         closing of the EDP           09/07/2010         BG         2011         new EDP         closing of the EDP           07/12/2010         IE         2015         revised recommendation         new recommendation           07/12/2010         IE         2014         revised recommendation         new recommendation           03/03/2012         EL         2014         revised recommendation         new recommendation           02/09/2012         PT         2014         revised recommendation         ongoing           03/05/2013         CY         2016         revised recommendation         new recommendation           04/12/2012         EL         2014         revised recommendation         new recommendation           18/06/2013         NL         2014         revised recommendation         newi   | 09/02/2010                 | LT      | 2012     | revised recommendation       | closing of the EDP |
| 10/05/2010         EL         2014         revised recommendation         new recommendation           06/07/2010         CY         2012         new EDP         new tecommendation           06/07/2010         DK         2013         new EDP         new tecommendation           09/07/2010         BG         2011         new EDP         closing of the EDP           13/07/2010         BI         2011         new EDP         closing of the EDP           09/07/2010         BI         2015         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         EL         2016         revised recommendation         ongoing           09/07/2013         RL         2014         revised recommendation         ongoing           09/07/2013         PL         2014         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing   | 09/02/2010                 | МТ      | 2011     | revised recommendation       | closing of the EDP |
| Obj/O7/2010         CY         2012         new EDP         new recommendation           Obj/O7/2010         DK         2013         new EDP         closing of the EDP           Obj/O7/2010         BG         2011         new EDP         closing of the EDP           13/07/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         FE         2014         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           07/05/2013         NL         2014         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing           18/06/2013   | 12/02/2010                 | RO      | 2012     | revised recommendation       |                    |
| Obj         Obj <thobj< th=""> <thobj< th="">         Obj</thobj<></thobj<>   | 10/05/2010                 | EL      | 2014     | revised recommendation       | new recommendation |
| 09/07/2010         BG         2011         new EDP         closing of the EDP           13/07/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         IE         2011         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           13/03/2012         EL         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           13/06/2013         NL         2014         revised recommendation         ongoing           13/06/2013         NL         2014         revised recommendation         ongoing           13/06/2013         NL         2014         revised recommendation         ongoing           13/06/2013         PL         2014         revised recommendation         ongoing           13/06/2013         SL         2015         revised recommendation         ongoing <t< td=""><td>06/07/2010</td><td>CY</td><td>2012</td><td>new EDP</td><td>new recommendation</td></t<>                 | 06/07/2010                 | CY      | 2012     | new EDP                      | new recommendation |
| 13/07/2010         FI         2011         new EDP         closing of the EDP           07/12/2010         IE         2015         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           13/03/2012         HU         2012         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         NL         2014         revised recommendation         ongoing           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ologing of the EDP  | 06/07/2010                 | DK      | 2013     | new EDP                      |                    |
| 07/12/2010         IE         2015         revised recommendation         ongoing           13/03/2012         EL         2014         revised recommendation         new recommendation           13/03/2012         HU         2012         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         ES         2014         revised recommendation         new recommendation           09/07/2012         EL         2016         revised recommendation         new recommendation           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         new recommendation           18/06/2013         PL         2014         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation <td< td=""><td>09/07/2010</td><td>BG</td><td>2011</td><td>new EDP</td><td>closing of the EDP</td></td<> | 09/07/2010                 | BG      | 2011     | new EDP                      | closing of the EDP |
| 13/03/2012         EL         2014         revised recommendation         new recommendation           13/03/2012         HU         2012         revised recommendation         closing of the EDP           09/07/2012         ES         2014         revised recommendation         new recommendation           02/09/2012         PT         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         ongoing           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing <td>13/07/2010</td> <td>FI</td> <td>2011</td> <td>new EDP</td> <td>closing of the EDP</td>                    | 13/07/2010                 | FI      | 2011     | new EDP                      | closing of the EDP |
| 13/03/2012         HU         2012         revised recommendation         closing of the EDP           09/07/2012         ES         2014         revised recommendation         new recommendation           02/09/2012         PT         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         PL         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2014         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing  | 07/12/2010                 | IE      | 2015     | revised recommendation       | ongoing            |
| 09/07/2012         ES         2014         revised recommendation<br>new recommendation         new recommendation           02/09/2012         PT         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         PL         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing      <  | 13/03/2012                 | EL      | 2014     | revised recommendation       | new recommendation |
| 02/09/2012         PT         2014         revised recommendation         new recommendation           04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         new recommendation           18/06/2013         PL         2014         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           21/06/2   | 13/03/2012                 | HU      | 2012     | revised recommendation       | closing of the EDP |
| 04/12/2012         EL         2016         revised recommendation         ongoing           07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         new recommendation           18/06/2013         PL         2015         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing  |                            |         |          |                              | new recommendation |
| 07/05/2013         CY         2016         revised recommendation         ongoing           18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         new recommendation           18/06/2013         PT         2015         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         SI         2015         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2014         new EDP         ongoing           21/06/2013         FR         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing   |                            |         |          |                              | new recommendation |
| 18/06/2013         NL         2014         revised recommendation         closing of the EDP           18/06/2013         PL         2014         revised recommendation         new recommendation           18/06/2013         PT         2015         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing  |                            |         |          |                              | . 0. 0             |
| 18/06/2013         PL         2014         revised recommendation         new recommendation           18/06/2013         PT         2015         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing  |                            |         |          |                              |                    |
| 18/06/2013         PT         2015         revised recommendation         ongoing           18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2016         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing   |                            |         |          |                              |                    |
| 18/06/2013         SI         2015         revised recommendation         ongoing           20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         FR         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing   |                            |         |          |                              |                    |
| 20/06/2013         ES         2016         revised recommendation         ongoing           21/06/2013         BE         2013         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing   |                            |         |          |                              |                    |
| 21/06/2013         BE         2013         revised recommendation         closing of the EDP           21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing   |                            |         |          |                              |                    |
| 21/06/2013         FR         2015         revised recommendation         ongoing           21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing  |                            |         |          |                              |                    |
| 21/06/2013         MT         2014         new EDP         ongoing           10/12/2013         PL         2015         revised recommendation         ongoing  |                            |         |          |                              |                    |
| 10/12/2013 PL 2015 revised recommendation ongoing   |                            |         |          |                              |                    |
|   |                            |         |          |                              |                    |
|   |                            |         |          |                              |                    |
|   | 21,01,2014                 |         | 2010     |                              | 011201112          |

Source: Commission services

#### A1.2. DESCRIPTION OF THE EDP SAMPLE

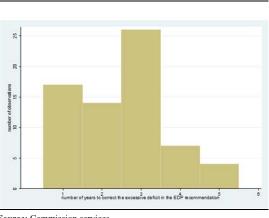
#### A1.2.1. The deadline

The lengths of the recommendations range from one to five years (see Graph IV.A1.1). The average length of a recommendation (regardless of whether it is an initial recommendations, 88 % call on the Member State to correct its excessive deficit in three years or less while only 26 % call for a correction within one year. Interestingly, initial recommendations tend to favour shorter deadlines: the average length of initial recommendations is only 2.3 years, with 53 % of recommendations lasting two years or less; the average length of revised recommendations is 2.6, with 42 % of recommendations lasting two years or less.

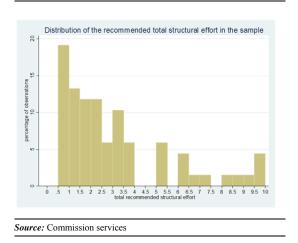
The lengths of the 38 EDP episodes range from one to eight years. The average length is 3.3 years and 58 % of the procedures last between two and four years. 16 % of the procedures were ended within one year.

Although the SGP clearly says that, 'as a rule', the length of the EDP recommendation should be set at one year and a longer deadline should only be set if there are 'special circumstances', only a quarter of all recommendations set the deadline for the year after the recommendation. However, this can be explained by the very large proportion of EDP episodes that were opened in 2008 or 2009 i.e. during the economic crisis. Indeed, almost three quarters of recommendations longer than one year concerned breaches of the deficit threshold in Graph IV.A1.1: Distribution of the length of the EDP

recommendations in the sample



Source: Commission services



Distribution of the recommended cumulative

structural effort in the sample

Graph IV.A1.2:

2008 or 2009, while 60 % of the one-year recommendations were issued before or after the crisis years. Excluding the crisis years, 42 % of the recommendations set the deadline for the year after the recommendation.

#### A1.2.2. The recommended structural effort

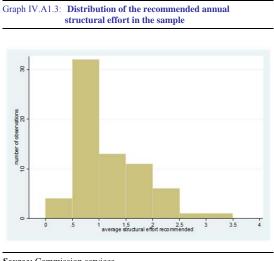
The recommended cumulative fiscal efforts over the adjustment period range from 0.5 % to 11 % of GDP, with an average of 3 %. Of all the recommended cumulative efforts, 28 % are lower than or equal to one percentage point and around one quarter are greater than three percentage points Graph IV.A1.2). The (cf. cumulative recommended effort and the length of the positively recommendation are correlated (correlation of 0.74). The cumulative structural effort is on average 0.8 percentage point when the deadline is fixed for the year after the recommendation was issued (i.e. length of one year), 1.9 when the EDP is planned to last two years and 4.5 when the recommended length is planned to last more than two years.

The annual average structural efforts per recommendation range from 0.3 to 3.2 percentage points. For three observations, the recommended annual average fiscal effort is lower than 0.5: these recommendations were issued before 2009, i.e. before the rule requiring a minimum effort of 0.5 % of GDP per year was introduced. The average of the recommended yearly efforts is 1.1 % of GDP.

Slightly more than half of the recommendations recommended an annual average fiscal effort lower than or equal to 1 % of GDP. The vast majority of these are between 0.5 and 1 % of GDP, with only about one fifth less than or equal to 0.5 % of GDP (see Graph IV.A1.3). 21 % of the recommended average annual efforts are greater than or equal to 1.5 %.

Over the whole sample of recommendations, the average real-time headline deficit for the year when the 3 % threshold ( $^{159}$ ) was breached is 5.3 % of GDP. For the year the recommendation was issued, the average of the real-time nominal deficit forecasts is 6.3 % of GDP, while for the first year of adjustment the average real-time headline deficit forecast based on the assumption that there is no change in policy is 5.6 % of GDP. (<sup>160</sup>) For four recommendations, the headline deficit was lower than 3 % of GDP two years before the first adjustment year, i.e. the year where the 3 % of GDP threshold should be breached so as to lead to the opening of an EDP. This is because for those EDP episodes, the EDP was opened (or the decision taken to revise the recommendation) on the basis of forecast instead of outturn data.

Over the whole sample of recommendations, the



Source: Commission services

average real-time estimate of the structural balance

<sup>(&</sup>lt;sup>159</sup>) Or in the case of revised recommendations, two years before the first year of adjustment.

<sup>(&</sup>lt;sup>160</sup>) At the time of the recommendation, headline deficit forecasts are carried out based on a scenario that assumes that there will be no change in policy.

is -3.8 % of GDP for the forecast of the first year of consolidation and -4.9 % of GDP for the year before. However, there is a very large dispersion around the average value, both for the headline balance and for the structural balance in the first adjustment year.

#### A1.3. MODELS OF EFFORT: TOBIT MODEL

The model determining the average recommended fiscal effort has to take into account the restriction on the annual recommended fiscal effort (and therefore also on the average recommended effort), which should exceed 0.5 % of GDP. This restriction has been imposed only since 2009 but given the size of our sample, we cannot split it into two sub-samples and still maintain a fair explanatory power for the estimations. 70 % of the EDP recommendations in our sample occurred later than 2009.

$$\tilde{e} = \begin{cases} \tilde{e}^* & if \; \tilde{e}^* \ge 0.5 \\ 0.5 & if \; \tilde{e}^* \le 0.5 \end{cases}$$

With  $\tilde{e}^*$  depending on several variables representing nominal or structural fiscal positions, economic conditions, etc.:

1)  $\tilde{e}^* = \alpha + \beta \operatorname{SB}_0 + \gamma \cdot (\varepsilon \cdot \operatorname{OG}_0) + \theta \cdot \operatorname{OO}_0 + \delta d_0 + \rho g_1$ 

2) 
$$\tilde{e}^* = \alpha' + \beta' \operatorname{HB}_0 + \delta' d_0 + \rho' g_1$$

#### A1.4. MULTINOMIAL LOGIT REGRESSION

#### A1.4.1. Ordinal logit

As the length of the EDP recommendation consists of the number of years between the first year of the recommendation and the deadline, n in the following, it can take only discrete values greater than 1, which requires the use of logistic regressions. This model will allow us to assess the impact of the fiscal position and the economic environment on the relative probability for n to take any value greater than 1. For the sake of simplicity we will make the hypothesis that n cannot take values greater than 5. We define a series of odds as follows:

$$\begin{cases} \theta_1 = \frac{P(n > 1)}{P(n = 1)} \\ \theta_2 = \frac{P(n > 2)}{P(n \le 2)} \\ \theta_3 = \frac{P(n > 3)}{P(n \le 3)} \\ \theta_4 = \frac{P(n = 5)}{P(n \le 4)} \end{cases}$$

This ordinal logistic model ('model 1' in the following) then reads as follows:

$$\ln \theta_j = \alpha_j + \beta \, SB_0 + \gamma \, OG_1$$

with  $j \in [1; 4]$  and where  $SB_0$  is the structural deficit of year 0 (the year before the first year of recommended fiscal effort) and  $OG_1$  is the realtime output gap forecast for year 1 (the first year of the recommendation). While  $\alpha_i$  is specific to each group, the effect of the structural balance and the output gap on the odds ratio (resp.  $\beta$  and  $\gamma$ ) are the same for the different groups. Indeed the model requires the assumption that the effect of an exogenous variable does not depend on the logit function (i.e. on *j*). In other words, under this assumption, an improvement in the structural balance by 1 point will have the same impact on the probability that n is lower than 2 as it has on the probability than n is lower than 3. Also, as  $\sum_{1}^{5} P(n = k) = 1$  (due to our assumption that  $n \leq 5$ ), there is no odds ratio associated with n = 5. In other words, the five probabilities cannot be independently identified. The results are usually expressed in the form of odds ratios, respectively

 $e^{\beta}$  and  $e^{\gamma}$  for the sake of simplicity. Model 1 can be rewritten as follows:

$$\theta_j = \mathrm{e}^{\alpha_j} \cdot \left(\mathrm{e}^{\beta}\right)^{SB_0} \cdot (\mathrm{e}^{\gamma})^{OG_1}$$

A 1 point better structural balance multiplies the odds by  $e^{\beta}$ . Similarly, a 1 point better output gap multiplies the odds by  $e^{\gamma}$ .

By their very nature, the odds ratios are, not linear: if the structural balance (respectively the output gap) were to deteriorate by two points, then the odds ratio would be multiplied by 4.5, as  $1.79^2 = 3.20$  (respectively 1.74, as  $1.32^2 = 1.74$ ).

#### A1.4.2. Multinomial non-ordered logit

The parallel odds assumption has not been rejected by the Wald test. However other tests, such as a likelihood ratio or score tests, give more ambiguous results. We also checked the robustness of our model against a generalised multinomial logit model where the parallel odds assumption is not needed. The non-ordered model reads as follows:

$$\begin{cases} \ln P(n_{i} = 1) = \alpha_{2} + \beta_{2}SB_{i} + \gamma_{2}OG_{i} \\ \ln P(n_{i} = 2) = \alpha_{3} + \beta_{3}SB_{i} + \gamma_{3}OG_{i} \\ \ln P(n_{i} = 3) = \alpha_{4} + \beta_{4}SB_{i} + \gamma_{4}OG_{i} \\ \ln P(n_{i} = 4) = \alpha_{5} + \beta_{5}SB_{i} + \gamma_{5}OG_{i} \\ \ln P(n_{i} = 5) = \alpha_{5} + \beta_{5}SB_{i} + \gamma_{5}OG_{i} \end{cases}$$

However  $P(n \in [[1; 5]]) = 1$ SO  $\sum_{1}^{5} P(n_i = k) = 1$ 

These constraints can be taken into account by rewriting this equation by defining  $\mu$  and  $\tilde{\alpha}_k$  such that  $\alpha_k = \mu + \tilde{\alpha}_k$ 

We can then define M such that  $\mu = -\ln(M)$ giving us  $\sum_{1}^{5} P(n_i = k) = \frac{1}{M} \sum_{1}^{5} exp(\alpha_k + \beta_k SB_i + \gamma_k OG_i)$ M can then be chosen such that  $\sum_{1}^{5} P(n_i = k) = 1$ 

by choosing  $M = \frac{1}{\sum_{1}^{5} e\dot{x}p(\alpha_{k} + \beta_{k}SB_{i} + \gamma_{k}OG_{i})}$ 

So for all k in [[1; 5]], we have

$$P(n_i = \mathbf{k}) = \frac{\exp(\alpha_{\mathbf{k}} + \beta_{\mathbf{k}}SB_i + \gamma_{\mathbf{k}}OG_i)}{\sum_{1}^{5}\exp(\alpha_{\mathbf{k}} + \beta_{\mathbf{k}}SB_i + \gamma_{\mathbf{k}}OG_i)}$$

with 
$$\alpha'_k \equiv \widetilde{\alpha}_k - \alpha_1$$
;  $\beta'_k \equiv \beta_k - \beta_1$ ;  $\gamma'_k \equiv \gamma_k - \gamma_1$ ;

$$P(n_{i} = 1) = \frac{1}{1 + \sum_{2}^{5} exp(\alpha'_{k} + \beta'_{k}SB_{i} + \gamma'_{k}OG_{i})}$$

 $P(n_i = 1)$  is entirely determined by the four other equations. Therefore, there are only four independent equations and the model finally reads as:

$$\ln \frac{P(n_i = 2)}{P(n_i = 1)} = \mu + \alpha'_2 + \beta'_2 SB_i + \gamma'_2 OG_i$$
$$\ln \frac{P(n_i = 3)}{P(n_i = 1)} = \mu + \alpha'_3 + \beta'_3 SB_i + \gamma'_3 OG_i$$
$$\ln \frac{P(n_i = 4)}{P(n_i = 1)} = \mu + \alpha'_4 + \beta'_4 SB_i + \gamma'_4 OG_i$$
$$\ln \frac{P(n_i = 5)}{P(n_i = 1)} = \mu + \alpha'_5 + \beta'_5 SB_i + \gamma'_5 OG_i$$

### A1.5. TEST OF THE PROPORTIONAL ODDS ASSUMPTION AND ALTERNATIVE ESTIMATIONS

The main hypothesis underlying an ordered logit is that an change in an exogenous variable by 1 point will have the same impact on the probability ratios

$$\frac{P(n > j)}{P(n \le j - 1)}$$

regardless of the value of j. This hypothesis, which is called the 'proportional odds assumption' or 'parallel odds assumption', is needed to perform ordered logit estimations.

The use of this estimation method is supported by the fact that the proportional odds assumption cannot be rejected by the Wald test (see Table IV.A1.2). In order to test the proportional odds assumption, we used the Wald test. This test takes as a null hypothesis that the relationships between all pairs of the odds ratio are the same. Therefore, the model is valid only if the test shows that the null hypothesis cannot be rejected. Table Table IV.A1.3 shows the results of the Wald test for our model (1').

However, other tests give more ambiguous results. ( $^{161}$ ) We also checked the robustness of our model against a generalised multinomial logit model where the parallel odds assumption is not needed. The downside of this alternative method is that we lose the information that the possible values of *n* are ordered. Moreover, as the method preforms multiple regressions it is not optimal for small samples such as ours.

Nevertheless, this method gives similar results to the first method (see Table IV.A1.3).

| Table IV.A1.2: Result for the Wald | test for Model 1' |
|------------------------------------|-------------------|
| Chi2                               | P>Chi2            |
| 18.92                              | 0.218             |

Source: Commission services

Note: The null hypothesis that the odds are proportional cannot be rejected by the Wald test.

(<sup>161</sup>) See Buis and Williams (2013) for an analysis of the performance of tests for the parallel regressions assumption in ordered logit models.

#### Table IV.A1.3: Results of the estimation of Model 1' using the nonordered multinomial logit method

| n=2           cyclical component e:OG (t=0)         0.21***         0.14         0.02         0.06         0.75           cyclical component e:OG (t=0)         0.11***         0.10         0.02         0.65         0.06         0.75           one-offs (t=0)         0.22         0.24         0.17         0.03         1.88           real growth (t=1)         0.72         0.22         0.28         0.39         1.31           debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           structural balance (t=0)         0.03***         0.03         0.00         0.02         1.05           constant         0.09         0.03         0.01         0.75         0.78         0.68         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.00         0.02         0.37           cyclical component c>OG (t=0)         0.57         0.78         0.68         0.44         8.36           constant  |                                |            |            |      |                |            |
|--|--------------------------------|------------|------------|------|----------------|------------|
| structural balance (t=0)         0.21***         0.14         0.02         0.06         0.75           cyclical component c-OG (t=0)         0.11***         0.10         0.02         0.02         0.65           one-offs (t=0)         0.22         0.24         0.17         0.03         0.88           real growth (t=1)         0.72         0.22         0.24         0.17         0.03         1.88           real growth (t=1)         0.72         0.22         0.28         0.39         1.31           debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           structural balance (t=0)         0.03***         0.03         0.00         0.00         0.21           one-offs (t=0)         0.03***         0.03         0.00         0.00         0.00         0.02           constant         0.07         0.00         0.00         0.00         0.00         0.02           constant         0.00         0.00         0.00         0.00         0.00         0.02         0.37           cyclical component E-OG (t=0)         0.57         0.78         0.68 <th>Exogenous variables</th> <th>Odds ratio</th> <th>Std. error</th> <th>P&gt; z </th> <th>95 % confidenc</th> <th>e interval</th> | Exogenous variables            | Odds ratio | Std. error | P> z | 95 % confidenc | e interval |
| structural balance (t=0)         0.21***         0.14         0.02         0.06         0.75           cyclical component c-OG (t=0)         0.11***         0.10         0.02         0.02         0.65           one-offs (t=0)         0.22         0.24         0.17         0.03         0.88           real growth (t=1)         0.72         0.22         0.24         0.17         0.03         1.88           real growth (t=1)         0.72         0.22         0.28         0.39         1.31           debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           structural balance (t=0)         0.03***         0.03         0.00         0.00         0.21           one-offs (t=0)         0.03***         0.03         0.00         0.00         0.00         0.02           constant         0.07         0.00         0.00         0.00         0.00         0.02           constant         0.00         0.00         0.00         0.00         0.00         0.02         0.37           cyclical component E-OG (t=0)         0.57         0.78         0.68 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  |                                |            |            |      |                |            |
|  |                                | n          | =2         |      |                |            |
| neneoffs (t=0)         0.22         0.24         0.17         0.03         1.88           real growth (t=1)         0.72         0.22         0.28         0.39         1.31           debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           rst           tructural balance (t=0)         0.03***         0.03         0.00         0.21           one offs (t=0)         0.03***         0.03         0.00         0.21           one offs (t=0)         0.03***         0.03         0.00         0.21           one offs (t=0)         0.08***         0.09         0.96         1.05           constant         0.00         0.00         0.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.02         0.37           constant         0.00         0.00         0.00         0.00         0.01         1.05           constant         0.00         0.07         0.00         0.0   | structural balance (t=0)       | 0.21***    | 0.14       | 0.02 | 0.06           | 0.75       |
| real growth (t=1)         0.72         0.22         0.28         0.39         1.31           debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           structural balance (t=0)         0.03***         0.07         0.00         0.03         0.37           cyclical component & OG (t=0)         0.03***         0.03         0.00         0.02         1.48           debt-to-GDP ratio (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         0.09***         0.00         0.00         0.00         0.02           constant         0.00         0.00         0.00         0.00         0.02         0.37           cyclical component & OG (t=0)         0.07*         0.78         0.68         0.44         8.36           one-offs (t=0)         0.09***         0.07         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.31         0.41         0.92         1.04 <tr< td=""><td>cyclical component ε·OG (t=0)</td><td>0.11***</td><td>0.10</td><td>0.02</td><td>0.02</td><td>0.65</td></tr<>          | cyclical component ε·OG (t=0)  | 0.11***    | 0.10       | 0.02 | 0.02           | 0.65       |
| debt-to-GDP ratio (t=0)         1.00         0.02         0.83         0.96         1.05           constant         0.00         0.00         0.03         0.00         0.59           structural balance (t=0)         0.10***         0.07         0.00         0.03         0.37           cyclical component c>OG (t=0)         0.03***         0.03         0.00         0.21           one-offs (t=0)         0.03***         0.09         0.30         0.01         0.75           real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.07*         0.01         0.00         0.01         0.11           ceal growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.33         0.41         0.92         1.04           constant <td< td=""><td>one-offs (t=0)</td><td>0.22</td><td>0.24</td><td>0.17</td><td>0.03</td><td>1.88</td></td<>                                       | one-offs (t=0)                 | 0.22       | 0.24       | 0.17 | 0.03           | 1.88       |
| constant         0.00         0.00         0.03         0.00         0.59           n=3           structural balance (t=0)         0.03***         0.03         0.00         0.03         0.37           cyclical component c OG (t=0)         0.03***         0.03         0.00         0.02         0.00         0.01         0.75           cyclical component c OG (t=0)         0.03***         0.09         0.03         0.01         0.75           cyclical component c OG (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.02         0.37           re4           structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component c OG (t=0)         0.57         0.78         0.68         0.44         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.01         115           debt-to-GDP ratio (t=0)         0.07         0.30         0.41         0.92         1.04           constant </td <td>real growth (t=1)</td> <td>0.72</td> <td>0.22</td> <td>0.28</td> <td>0.39</td> <td>1.31</td>  | real growth (t=1)              | 0.72       | 0.22       | 0.28 | 0.39           | 1.31       |
| n=3         n=3           structural balance (t=0)         0.10****         0.07         0.00         0.03         0.37           cyclical component ±-OG (t=0)         0.03****         0.09         0.03         0.01         0.75           one-offs (t=0)         0.03****         0.09         0.03         0.01         0.75           real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.02         0.37           cyclical component ±-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.09***         0.07         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.00         0.29         -         -           cyclical component t=OG (t=0)         0.00         0.00   | debt-to-GDP ratio (t=0)        | 1.00       | 0.02       | 0.83 | 0.96           | 1.05       |
| structural balance (t=0)         0.10***         0.07         0.00         0.03         0.37           cyclical component ε-OG (t=0)         0.03***         0.03         0.00         0.00         0.21           one-offs (t=0)         0.03***         0.03         0.01         0.75           real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.99***         0.07         0.00         0.02         0.37           cyclical component £-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.00         0.00         0.29         -   | constant                       | 0.00       | 0.00       | 0.03 | 0.00           | 0.59       |
| cyclical component c·OG (t=0)         0.03***         0.03         0.00         0.21           one-offs (t=0)         0.08***         0.09         0.03         0.01         0.75           real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component c-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.01         1.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.00         0.00         0.02         0.00         1.04           constant         0.00         0.00         0.02         0.00         1.04           constant         0.00         0.00         0.99         -         -           cyclical component c·OG -(t=0)   |                                | n          | =3         |      |                |            |
| one-offs (t=0)         0.08***         0.09         0.03         0.01         0.75           real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component ±-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.09**         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.00         0.02         0.19         1.04           constant         0.00         0.00         0.00         0.02         0.01         1.04           constant         0.00         0.00         0.00         0.99         -         - <td>structural balance (t=0)</td> <td>0.10***</td> <td>0.07</td> <td>0.00</td> <td>0.03</td> <td>0.37</td>  | structural balance (t=0)       | 0.10***    | 0.07       | 0.00 | 0.03           | 0.37       |
| real growth (t=1)         0.79         0.25         0.46         0.42         1.48           debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.99***         0.07         0.00         0.02         0.37           one-offs (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.00         0.19           structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component c>GG -(t=0)         0.00         0.00         0.99         -         -           cyclical component c>GG -(t=0)         0.00         0.00         0.99         -         -           cyclical componen   | cyclical component ε·OG (t=0)  | 0.03***    | 0.03       | 0.00 | 0.00           | 0.21       |
| debt-to-GDP ratio (t=0)         1.00         0.02         0.90         0.96         1.05           constant         0.00         0.00         0.00         0.00         0.02           structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component c-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.12         0.29         1.15           structural balance (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.00         0.02         0.00         1.9           structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component c-OG -(t=0)         0.00         0.00         0.99         -         -   | one-offs (t=0)                 | 0.08***    | 0.09       | 0.03 | 0.01           | 0.75       |
| constant         0.00         0.00         0.00         0.00         0.02           n=4           structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component e-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.07*         0.01         0.00         0.01         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.01         0.19           structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component e-OG-(t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           one-offs (t=1)         0.00         0.00         0.99         -         -           colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspan="4">colspa="4">colspa="4"colspan="4">colspa="4"colspan="4"colspan="4"colsp  | real growth (t=1)              | 0.79       | 0.25       | 0.46 | 0.42           | 1.48       |
| n=4         0.07         0.00         0.02         0.37           cyclical component £·OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.00         0.19           rstructural balance (t=0)         0.00         0.00         0.99         -           cyclical component c>GG -(t=0)         0.00         0.00         0.99         -         -           cyclical component treader (t=1)         0.00         0.00         0.99         -         -           cyclical component treader (t=1)         0.00         0.00         0.99         -         -           cyclical component treader (t=1)         0.00         0.38         0.99         -         -           cyclical component treader (t=1)         0.00         0.38         0.99         -         -   | debt-to-GDP ratio (t=0)        | 1.00       | 0.02       | 0.90 | 0.96           | 1.05       |
| structural balance (t=0)         0.09***         0.07         0.00         0.02         0.37           cyclical component ε-OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.011           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.12         0.09         1.04           constant         0.00         0.00         0.02         0.01         1.04           constant         0.00         0.00         0.09         -         -           cyclical component £-OG - (t=0)         0.00         0.00         0.99         -         -           cyclical component £-OG - (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.38         0.99         -         -   | constant                       | 0.00       | 0.00       | 0.00 | 0.00           | 0.02       |
| cyclical component £°OG (t=0)         0.57         0.78         0.68         0.04         8.36           one-offs (t=0)         0.00***         0.01         0.00         0.01         0.11           real growth (t=1)         0.58         0.20         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.00         0.00         0.01         0.00         0.00         0.12           structural balance (t=0)         0.00         0.00         0.09         -         -         -           cyclical component £°OG-(t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           one-offs (t=1)         0.00         0.00         0.99         -         -           odebt-to-GDP ratio (t=1)         0.06         56.70         1.00         -         -  |                                |            | =4         |      |                |            |
| newstrate         0.00***         0.01         0.00         0.00         0.11           real growth (t=1)         0.58         0.20         0.12         0.29         1.15           debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.00         0.19           rst           structural balance (t=0)         0.00         0.00         0.99         -           cyclical component cOG –(t=0)         0.00         0.00         0.99         -           real growth (t=1)         0.00         0.38         0.99         -           celebt-to-GDP ratio (t=0)         1.06         56.70         1.00         -  | structural balance (t=0)       | 0.09***    | 0.07       | 0.00 | 0.02           | 0.37       |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $  | cyclical component ε·OG (t=0)  | 0.57       | 0.78       | 0.68 | 0.04           | 8.36       |
| debt-to-GDP ratio (t=0)         0.97         0.03         0.41         0.92         1.04           constant         0.00         0.00         0.02         0.00         0.19           n=5           structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component ɛ·OG - (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.00         0.99         -         -           debt-to-GDP ratio (t=0)         1.06         56.70         1.00         -   | one-offs (t=0)                 | 0.00***    | 0.01       | 0.00 | 0.00           | 0.11       |
| constant         0.00         0.00         0.02         0.00         0.19           n=5           structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component ɛ·OG –(t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           debt-to-CDP ratio (t=1)         0.00         56.70         1.00         -         -  | real growth (t=1)              | 0.58       | 0.20       | 0.12 | 0.29           | 1.15       |
| n=5           structural balance (t=0)         0.00         0.00         0.99         -           cyclical component e-OG – (t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.38         0.99         -         -           debt-to-GDP ratio (t=0)         1.06         56.70         1.00         -         -  | debt-to-GDP ratio (t=0)        | 0.97       | 0.03       | 0.41 | 0.92           | 1.04       |
| structural balance (t=0)         0.00         0.00         0.99         -         -           cyclical component ɛ·OG – (t=0)         0.00         0.00         0.99         -         -           one-offs (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.00         0.99         -         -           debt-to-GDP ratio (t=0)         1.06         56.70         1.00         -         -  | constant                       | 0.00       | 0.00       | 0.02 | 0.00           | 0.19       |
| cyclical component c·OG - (t=0)         0.00         0.00         0.99         -           one-offs (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.38         0.99         -         -           debt-to-GDP ratio (t=0)         1.06         56.70         1.00         -         -  |                                |            | -          |      |                |            |
| one-offs (t=0)         0.00         0.00         0.99         -         -           real growth (t=1)         0.00         0.38         0.99         -         -           debt-to-GDP ratio (t=0)         1.06         56.70         1.00         -         -   | structural balance (t=0)       | 0.00       | 0.00       | 0.99 | -              | -          |
| real growth (t=1) 0.00 0.38 0.99 debt-to-GDP ratio (t=0) 1.06 56.70 1.00   | cyclical component ε·OG −(t=0) | 0.00       | 0.00       | 0.99 | -              | -          |
| debt-to-GDP ratio (t=0) 1.06 56.70 1.00  | one-offs (t=0)                 | 0.00       | 0.00       | 0.99 | -              | -          |
|  | real growth (t=1)              | 0.00       | 0.38       |      | -              | -          |
| constant 0.00 0.00 0.99  | debt-to-GDP ratio (t=0)        | 1.06       | 56.70      | 1.00 | -              | -          |
|  | constant                       | 0.00       | 0.00       | 0.99 | -              | -          |

Source: Commission services

Note: \* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\* Significant at 99 % level

n=1 is the base outcome. N=68. Likelihood ratio: -49

### A1.6. ROBUSTNESS CHECKS

#### Table IV.A1.4: Other specifications for the determinants of the average effort (with the debt-to-GDP ratio)

| Exogenous<br>variables              |          | (1 bis)  | (2)      | (3)      | (4)      |          | (6)      |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| structural<br>balance<br>(t=0)      | -0.22*** | -0.24*** |          | -0.22*** | -0.22*** | -0.22*** | -0.20*** |
| cyclical<br>component<br>ε·OG (t=0) | -0.14**  | -0.18*** |          | -0.14**  | -0.14**  | -0.14**  | -0.14*** |
| one-offs                            | 0.05**   | 0.06***  |          | 0.05**   | 0.06**   | 0.05**   | 0.05**   |
| nominal<br>balance<br>(t=0)         |          |          | -0.07*** |          |          |          |          |
| real growth<br>(t=1)                | -0.05    |          | -0.11*** | -0.05*   | -0.05*   | -0.04    | -0.04*   |
| debt-to-<br>GDP ratio<br>(t=0)      | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| dummy for<br>crisis years           |          |          |          | 0.02     |          |          |          |
| dummy for<br>programme<br>countries |          |          |          |          | 0.10     |          |          |
| extension                           |          |          |          |          |          | 0.15     |          |
| constant                            | -0.08    | -0.29    | 0.78***  | 0.08     | -0.03    | -0.09    | 0.09     |
| R2                                  | 0.43     | 0.40     | 0.17     | 0.43     | 0.43     | 0.44     | 0.65     |

Source: Commission services \* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\* Significant at 99 % level

The exogenous variable is the average recommended effort of the EDP episode. N=68.

All estimations apart from number (6) are Tobit estimations. In these models, 16 observations have been left-censored as the average effort was less than or equal to 0.5.

# Table IV.A1.5: Other specifications for the determinants of the length of the EDP

| Odds ratio                     | 1       | 2       | 3       | 4       | 5       |
|--------------------------------|---------|---------|---------|---------|---------|
| structural balance (t=0)       | 0.47*** |         | 0.41*** | 0.47*** | 0.46*** |
| cyclical component ε·OG -(t=0) | 0.38*** |         | 0.37*** | 0.38*** | 0.36*** |
| one-offs                       | 0.37*** |         | 0.32*** | 0.37*** | 0.37*** |
| nominal balance (t=0)          |         | 0.45*** |         |         |         |
| real growth (t=1)              | 0.94    | 0.92    | 0.81*   | 0.95    | 0.98    |
| debt-to-GDP ratio (t=0)        | 1.00    | 1.00    | 0.99    | 1.00    | 1.00    |
| dummy for crisis years         |         |         | 0.17**  |         |         |
| dummy for programme countries  |         |         |         | 1.32    |         |
| extension                      |         |         |         |         | 1.93    |
| Log likelihood                 | -68     | -69     | -65     | -68     | -67     |

*Source:* Commission services \* Significant at 90 % level; \*\* Significant at 95 % level; \*\*\* Significant at 99 % level

The exogenous variable is the recommended length of the EDP episode. N=68.



Resources

# **1.** ABBREVIATIONS AND SYMBOLS USED

### **Member States**

| BE | Belgium         |
|----|-----------------|
| BG | Bulgaria        |
| HR | Croatia         |
| CZ | Czech Republic  |
| DK | Denmark         |
| DE | Germany         |
| EE | Estonia         |
| EI | Ireland         |
| EL | Greece          |
| ES | Spain           |
| FR | France          |
| IT | Italy           |
| CY | Cyprus          |
| LV | Latvia          |
| LT | Lithuania       |
| LU | Luxembourg      |
| HU | Hungary         |
| MT | Malta           |
| NL | The Netherlands |
| AT | Austria         |
| PL | Poland          |
| РТ | Portugal        |
| RO | Romania         |
| SI | Slovenia        |
| SK | Slovakia        |

| FI    | Finland  |  |
|-------|--|--|
| SE    | Sweden   |  |
| UK    | United Kingdom   |  |
| EA    | Euro area  |  |
| EU    | European Union   |  |
| EU-28 | European Union, 27 Member States                       |  |
| EA-18 | European Area, 17 Member States                        |  |
| Other |  |  |
| AMEC  | Macro-economic database of the European Commission     |  |
| ATE   | Average treatment effects                              |  |
| AWG   | Ageing Working Group                                   |  |
| CAB   | Cyclically Adjusted Budget Balance                     |  |
| CAPB  | Cyclically-adjusted primary balance                    |  |
| COFOC | Classification of the functions of government          |  |
| COM   | Commission   |  |
| CSR   | Country-Specific Recommendations                       |  |
| DBP   | Draft Budgetary Plan                                   |  |
| DFE   | Discretionary Fiscal Effort                            |  |
| DG EC | TIN Directorate-General Economic and Financial Affairs |  |
| DRM   | Discretionary Revenue Measures                         |  |
| EC    | European Commission                                    |  |
| ECB   | European Central Bank                                  |  |
| ECON  | Council and to the Economic and Financial Committee    |  |
| EDP   | Excessive Deficit Procedure                            |  |
| EERP  | European Economic Recovery Plan                        |  |
| EFC   | Economic and Financial Committee                       |  |
| EFSF  | European Financial Stability Facility                  |  |

| EMU   | Economic and Monetary Union                           |
|-------|---|
| EPC   | Economic Policy Committee                             |
| ESA   | European System of National and Regional Accounts     |
| EA    | Euro Area   |
| EU    | European Union  |
| FBFL  | Federal Budgetary Framework Law                       |
| FE    | Fiscal Effort   |
| FPC   | Fiscal Policy Committees                              |
| GDP   | Gross Domestic Product                                |
| GFKF  | Gross Fixed Capital Formation                         |
| GFCF  | Gross Fixed Capital Formation                         |
| HICP  | Harmonized Index of Consumer Prices                   |
| IFI   | Independent Fiscal Institutions                       |
| IMF   | International Monetary Fund                           |
| ICTU  | Irish Congress of Trade Unions                        |
| MLSA  | Minimum Linear Structural Adjustment                  |
| MTBF  | Medium-Term Budgetary Framework                       |
| MTFS  | Medium-Term Fiscal Strategy                           |
| МТО   | Medium-Term budgetary Objective                       |
| NCPI  | National Consumption Price Index                      |
| NAWRU | Non-accelerating Wage Rate of Unemployment            |
| NRP   | National Reform Programme                             |
| OECD  | Organisation of Economic Co-operation and Development |
| OG    | Output Gap  |
| OGWG  | Output Gap Working Group                              |
| PFR   | Public Finance Report                                 |
| рр    | Percentage Points                                     |

| RA   | Regression-Adjusted estimators                     |
|------|--|
| R&D  | Research and Development                           |
| ROG  | Representative Output Gap                          |
| SB   | Structural Balance                                 |
| SCPs | Stability or Convergence Programmes                |
| SDP  | Significant Deviation Procedure                    |
| SGP  | Stability and Growth Pact                          |
| SOE  | State Owned Enterprise                             |
| SPB  | Structural Primary Balances                        |
| TSCG | Treaty on Stability Coordination and Governance    |
| TFEU | Treaty on the Functioning of European Union (TFEU) |

# 2. GLOSSARY

Asset management company Public or private body aiming at restructuring, recovering or disposing of nonperforming assets.

**Automatic stabilisers** Features of the tax and spending regime which react automatically to the economic cycle and reduce its fluctuations. As a result, the budget balance in percent of GDP tends to improve in years of high growth, and deteriorate during economic slowdowns.

**Budget balance** The balance between total public expenditure and revenue in a specific year, with a positive balance indicating a surplus and a negative balance indicating a deficit. For the monitoring of Member State budgetary positions, the EU uses general government aggregates. See also structural budget balance, primary budget balance, and primary structural balance.

**Budgetary rules** Rules and procedures through which policy-makers decide on the size and the allocation of public expenditure as well as on its financing through taxation and borrowing.

**Budgetary sensitivity** The variation in the budget balance in percentage of GDP brought about by a change in the output gap. In the EU, it is estimated to be 0.5 on average.

**Candidate countries** Countries that wish to accede to the EU. Besides the accession countries, they include Croatia and Turkey.

**Close-to-balance** requirement A requirement contained in the 'old' Stability and Growth Pact, according to which Member States should, over the medium term, achieve an overall budget balance close to balance or in surplus; was replaced by country-specific medium-term budgetary objectives in the reformed Stability and Growth Pact.

**Code of Conduct** Policy document endorsed by the ECOFIN Council of 11 October 2005 setting down the specifications on the implementation of the Stability and Growth Pact and the format and content of the stability and convergence programmes.

**COFOG** (Classification of the Functions of Government) A statistical nomenclature used to

break down general government expenditure into its different functions including general public services, defence, public order and safety, economic affairs, environmental protection, housing and community amenities, health, recreation, culture and religion, education and social protection.

**Convergence programmes** Medium-term budgetary and monetary strategies presented by Member States that have not yet adopted the euro. They are updated annually, according to the provisions of the Stability and Growth Pact. Prior to the third phase of EMU, convergence programmes were issued on a voluntary basis and used by the Commission in its assessment of the progress made in preparing for the euro. See also stability programmes.

**Crowding-out effects** Offsetting effects on output due to changes in interest rates and exchange rates triggered by a loosening or tightening of fiscal policy.

**Cyclical component of budget balance** That part of the change in the budget balance that follows automatically from the cyclical conditions of the economy, due to the reaction of public revenue and expenditure to changes in the output gap. See automatic stabilisers, tax smoothing and structural budget balance.

**Cyclically-adjusted budget balance** See structural budget balance.

**Demand and supply shocks** Disturbances that affect the economy on the demand side (e.g. changes in private consumption or exports) or on the supply side (e.g. changes in commodity prices or technological innovations). They can impact on the economy either on a temporary or permanent basis.

**Deposit Guarantee Schemes** reimburse a limited amount of deposits to depositors whose bank has failed. From the depositors' point of view, this protects a part of their wealth from bank failures. From a financial stability perspective, this promise prevents depositors from making panic withdrawals from their bank, thereby preventing severe economic consequences. Direct fiscal costs (gross, net) of a financial crisis The direct gross costs are the fiscal outlays in support of the financial sector that increase the level of public debt. They encompass, for example, recapitalisation, purchase of troubled bank assets, pay-out to depositors, liquidity support, payment when guarantees are called and subsidies. The direct net costs are the direct gross cost net of recovery payments, such as through the sale of acquired assets or returns on assets. Thus, the net direct fiscal costs reflect the permanent increase in public debt.

**Direct taxes** Taxes that are levied directly on personal or corporate incomes and property.

**Discretionary fiscal policy** Change in the budget balance and in its components under the control of government. It is usually measured as the residual of the change in the balance after the exclusion of the budgetary impact of automatic stabilisers. See also fiscal stance.

**Early-warning mechanism** Part of the preventive elements of the Stability and Growth Pact. It is activated when there is significant divergence from the budgetary targets set down in a stability or convergence programme.

**Economic and Financial Committee (EFC)** Formerly the Monetary Committee, the EFC is a Committee of the Council of the European Union set up by Article 114 of the. Its main task is to prepare and discuss (ECOFIN) Council decisions with regard to economic and financial matters.

**Economic Policy Committee (EPC)** Group of senior government officials whose main task is to prepare discussions of the (ECOFIN) Council on structural policies. It plays an important role in the preparation of the Broad Economic Policy Guidelines, and it is active on policies related to labour markets, methods to calculate cyclically-adjusted budget balances and ageing populations.

**Effective tax rate** The ratio of broad categories of tax revenue (labour income, capital income, consumption) to their respective tax bases.

**Effectiveness** The same concept as efficiency except that it links input to outcomes rather than outputs.

Efficiency Can be defined in several ways, either as the ratio of outputs to inputs or as the distance to a production possibility frontier (see also Free Disposable Hull analysis, Data Envelope analysis, stochastic frontier analysis). Cost efficiency measures the link between monetary inputs (funds) and outputs; technical efficiency measures the link between technical inputs and outputs. Output efficiency indicates by how much the output can be increased for a given input; input efficiency indicates by how much the input can be reduced for a given input.

**Emergency Liquidity Assistance** (equivalent to lender-of-last- resort), the most traditional tool available to a central bank for dealing with financial instability. It includes both the provision of liquidity to the financial system as a whole through market operations, as well as emergency lending to individual banks. Not all liquidity injections aimed at preventing the spread of a liquidity problem relate to a crisis, as central banks routinely offer liquidity against specified collateral requirements in order to support the orderly functioning of markets.

**ESA2010/ESA95** / **ESA79** European accounting standards for the reporting of economic data by the Member States to the EU. As of 2000, ESA95 has replaced the earlier ESA79 standard with regard to the comparison and analysis of national public finance data.

European Financial Stability Facility is a company owned by Euro Area Member States created following the decisions taken in May 2010 by the Council. EFSF is able to issue bonds guaranteed by EAMS for up to € 440 billion for on-lending to EAMS in difficulty, subject to conditions negotiated with the European Commission in liaison with the European Central Bank and International Monetary Fund and to be approved by the Eurogroup. EFSF has been assigned the best possible credit rating; AAA by Standard & Poor's and Fitch Ratings, Aaa by Moody's.

**European semester** European semester New governance architecture approved by the Member States in September 2010. It means that the EU and the euro zone will coordinate ex ante their budgetary and economic policies, in line with both the Stability and Growth Pact and the Europe 2020

strategy. Based on previous discussions on Commission's Annual Growth Survey, each summer, the European Council and the Council of ministers will provide policy advice before Member States finalise their draft budgets.

**Excessive Deficit Procedure (EDP)** A procedure according to which the Commission and the Council monitor the development of national budget balances and public debt in order to assess and/or correct the risk of an excessive deficit in each Member State. Its application has been further clarified in the Stability and Growth Pact. See also stability programmes and Stability and Growth Pact.

**Expenditure rules** A subset of fiscal rules that target (a subset of) public expenditure.

**Fiscal consolidation** An improvement in the budget balance through measures of discretionary fiscal policy, either specified by the amount of the improvement or the period over which the improvement continues.

**Fiscal decentralisation** The transfer of authority and responsibility for public functions from the central government to intermediate and local governments or to the market.

**Fiscal federalism** A subfield of public finance that investigates the fiscal relations across levels of government.

**Fiscal governance** Comprises all rules, regulations and procedures that impact on how the budget and its components are being prepared. The terms fiscal governance and fiscal frameworks are used interchangeably in the report.

**Fiscal impulse** The estimated effect of fiscal policy on GDP. It is not a model-free measure and it is usually calculated by simulating an econometric model. The estimates presented in the present report are obtained by using the Commission services' QUEST model.

**Fiscal rule** A permanent constraint on fiscal policy, expressed in terms of a summary indicator of fiscal performance, such as the government budget deficit, borrowing, debt, or a major component thereof. See also budgetary rule, expenditure rules.

**Fiscal stance** A measure of the effect of discretionary fiscal policy. In this report, it is defined as the change in the structural (or structural primary) budget balance relative to the preceding period. When the change is positive (negative) the fiscal stance is said to be expansionary (restrictive).

**General government** As used by the EU in its process of budgetary surveillance under the Stability and Growth Pact and the excessive deficit procedure, the general government sector covers national government, regional and local government, as well as social security funds. Public enterprises are excluded, as are transfers to and from the EU Budget.

**Government budget constraint** A basic condition applying to the public finances, according to which total public expenditure in any one year must be financed by taxation, government borrowing, or changes in the monetary base. In the context of EMU, the ability of governments to finance spending through money issuance is prohibited. See also stock-flow adjustment, sustainability.

**Government contingent liabilities** Obligations for the government that are subject to the realization of specific uncertain and discrete future events. For instance, the guarantees granted by governments to the debt of private corporations bonds issued by enterprise are contingent liabilities, since the government obligation to pay depend on the non-ability of the original debtor to honour its own obligations.

**Government implicit liabilities** Government obligations that are very likely to arise in the future in spite of the absence of backing contracts or law. The government may have a potential future obligation as a result of legitimate expectations generated by past practice or as a result of the pressure by interest groups. Most implicit liabilities are contingent, i.e., depend upon the occurrence of uncertain future events.

**Growth accounting** A technique based on a production function approach where total GDP (or national income) growth is decomposed into the various production factors and a non-explained part which is the total factor productivity change, also often termed the Solow residual.

**Indirect taxation** Taxes that are levied during the production stage, and not on the income and property arising from economic production processes. Prominent examples of indirect taxation are the value added tax (VAT), excise duties, import levies, energy and other environmental taxes.

**Integrated guidelines** A general policy instrument for coordinating EU-wide and Member States economic structural reforms embedded in the Lisbon strategy and which main aim is to boost economic growth and job creation in the EU.

**Interest burden** General government interest payments on public debt as a share of GDP.

Maastricht reference values for public debt and deficits Respectively, a 60 % general government debt-to-GDP ratio and a 3 % general government deficit-to-GDP ratio. These thresholds are defined in a protocol to the Maastricht Treaty on European Union. See also Excessive Deficit Procedure.

**Maturity structure of public debt** The profile of total debt in terms of when it is due to be paid back. Interest rate changes affect the budget balance directly to the extent that the general government sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the budget balance to changes in the prevailing interest rate. See also public debt.

**Medium-term budgetary objective (MTO)** According to the reformed Stability and Growth Pact, stability programmes and convergence programmes present a medium-term objective for the budgetary position. It is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risks to the sustainability of public finances, and is defined in structural terms (see structural balance).

**Minimum benchmarks** The lowest value of the structural budget balance that provides a safety margin against the risk of breaching the Maastricht reference value for the deficit during normal cyclical fluctuations. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

They are a lower bound for the 'medium-term budgetary objectives (MTO).

**NAIRU** Non-Accelerating Inflation Rate of Unemployment.

**One-off and temporary measures** Government transactions having a transitory budgetary effect that does not lead to a sustained change in the budgetary position. See also structural balance.

**Output gap** The difference between actual output and estimated potential output at any particular point in time. See also cyclical component of budget balance.

**Performance-based budgeting** A budgeting technique that links budget appropriations to performance (outcomes, results) rather than focusing on input controls. In practice, performance-informed budgeting is more common which basis decisions on budgetary allocation on performance information without establishing a formal link.

**Policy-mix** The overall stance of fiscal and monetary policy. The policy-mix may consist of various combinations of expansionary and restrictive policies, with a given fiscal stance being either supported or offset by monetary policy.

**Potential GDP** The level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also production function method and output gap.

**Primary budget balance** The budget balance net of interest payments on general government debt.

**Primary structural budget balance** The structural budget balance net of interest payments.

**Private pension schemes** The insurance contract specifies a schedule of contribution in exchange of which benefits will be paid when the members reach a specific retirement age. The transactions are between the individual and the insurance provider and they are not recorded as government revenues or government expenditure and,

therefore, do not have an impact on government surplus or deficit.

**Pro-cyclical fiscal policy** A fiscal stance which amplifies the economic cycle by increasing the structural primary deficit during an economic upturn, or by decreasing it in a downturn. A neutral fiscal policy keeps the cyclically-adjusted budget balance unchanged over the economic cycle but lets the automatic stabilisers work. See also tax-smoothing.

**Production function approach** A method to estimate the level of potential output of an economy based on available labour inputs, the capital stock and their level of efficiency. Potential output is used to estimate the output gap, a key input in the estimation of cyclical component of the budget.

**Public debt** Consolidated gross debt for the general government sector. It includes the total nominal value of all debt owed by public institutions in the Member State, except that part of the debt which is owed to other public institutions in the same Member State.

**Public investment** The component of total public expenditure through which governments increase and improve the stock of capital employed in the production of the goods and services they provide.

**Public-private partnerships (PPP)** Agreements that transfer investment projects to the private sector that traditionally have been executed or financed by the public sector. To qualify as a PPP, the project should concern a public function, involve the general government as the principal purchaser, be financed from non-public sources and engage a corporation outside the general government as the principal operator that provides significant inputs in the design and conception of the project and bears a relevant amount of the risk.

**Sensitivity analysis** An econometric or statistical simulation designed to test the robustness of an estimated economic relationship or projection, given various changes in the underlying assumptions.

**Significant divergence** A sizeable excess of the budget balance over the targets laid out in the stability or convergence programmes, that triggers

the Early warning procedure of the Stability and Growth Pact.

**Size of the public sector** Typically measured as the ratio of public expenditure to nominal GDP.

**'Snow-ball' effect** The self-reinforcing effect of public debt accumulation or decumulation arising from a positive or negative differential between the interest rate paid on public debt and the growth rate of the national economy. See also government budget constraint.

**Social security contributions (SSC)** Mandatory contributions paid by employers and employees to a social insurance scheme to cover for pension, health care and other welfare provisions.

**Sovereign bond spread** The difference between risk premiums imposed by financial markets on sovereign bonds for different states. Higher risk premiums can largely stem from (i) the debt service ratio, also reflecting the countries' ability to raise their taxes for a given level of GDP, (ii) the fiscal track record, (iii) expected future deficits, and (iv) the degree of risk aversion.

**Stability and Growth Pact (SGP)** Approved in 1997 and reformed in 2005, the SGP clarifies the provisions of the Maastricht Treaty regarding the surveillance of Member State budgetary policies and the monitoring of budget deficits during the third phase of EMU. The SGP consists of two Council Regulations setting out legally binding provisions to be followed by the European Institutions and the Member States and two Resolutions of the European Council in Amsterdam (June 1997). See also Excessive Deficit Procedure.

**Stability programmes** Medium-term budgetary strategies presented by those Member States that have already adopted the euro. They are updated annually, according to the provisions of the Stability and Growth Pact. See also Convergence programmes.

**Stock-flow adjustment** The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between the net borrowing (flow) and the variation in the stock of gross debt. It includes the accumulation of financial assets, changes in the value of debt

denominated in foreign currency, and remaining statistical adjustments.

**Structural budget balance** The actual budget balance net of the cyclical component and one-off and other temporary measures. The structural balance gives a measure of the underlying trend in the budget balance. See also primary structural budget balance.

**Sustainability** A combination of budget deficits and debt that ensure that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

**Tax elasticity** A parameter measuring the relative change in tax revenues with respect to a relative change in GDP. The tax elasticity is an input to the budgetary sensitivity.

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# **4.** USEFUL INTERNET LINKS

European Union

| European Commission                                    | ec.europa.eu                              |
|--|---|
| Directorate-General for Economic and Financial Affairs | ec.europa.eu/economy_finance/index_en.htm |
| Eurostat   | epp.eurostat.ec.europa.eu                 |
| European Council                                       | consilium.europa.eu                       |
| European Parliament                                    | www.europarl.europa.eu                    |

# **Economics and Finance Ministries**

| Belgium        | www.treasury.fgov.be/interthes | Ministère des Finances -<br>Ministerie van Financen |
|----------------|--------------------------------|---|
| Bulgaria       | www.minfin.bg                  | Ministry of Finance                                 |
| Croatia        | www.mfin.hr                    | Ministry of Finance                                 |
| Czech Republic | www.mfcr.cz                    | Ministry of Finance                                 |
| Denmark        | www.fm.dk                      | Ministry of Finance                                 |
| Germany        | www.bundesfinanzministerium.de | Bundesministerium der Finanzen                      |
| Estonia        | www.fin.ee                     | Ministry of Finance                                 |
| Ireland        | www.irlgov.ie/finance          | Department of Finance                               |
| Greece         | www.mnec.gr/en/                | Ministry of Economy and Finance                     |
| Spain          | www.mineco.es/                 | Ministerio de Economía y<br>Hacienda                |
| France         | www.finances.gouv.fr           | Ministère Économie, Finances et<br>l'Industrie      |
| Italy          | www.tesoro.it                  | Ministero dell'Economia e delle<br>Finanze          |
| Cyprus         | www.mof.gov.cy                 | Ministry of Finance                                 |
| Latvia         | www.fm.gov.lv                  | Ministry of Finance                                 |
| Lithuania      | www.finmin.lt                  | Ministry of Finance                                 |

| Luxembourg      | www.etat.lu/FI         | Ministère des Finances                   |
|-----------------|------------------------|--|
| Hungary         | www.p-m.hu             | Ministry of Finance                      |
| Malta           | finance.gov.mt         | Ministry of Finance and Economic Affairs |
| Netherlands     | www.minfin.nl          | Ministerie van Financien                 |
| Austria         | www.bmf.gv.at          | Bundesministerium für Finanzen           |
| Poland          | www.mofnet.gov.pl      | Ministry of Finance                      |
| Portugal        | www.min-financas.pt    | Ministério das Finanças                  |
| Romania         | www.mfinante.ro        | Ministry of Finance                      |
| Slovenia        | www.gov.si/mf          | Ministry of Finance                      |
| Slovak Republic | www.finance.gov.sk     | Ministry of Finance                      |
| Finland         | www.vn.fi/vm           | Ministry of Finance                      |
| Sweden          | finans.regeringen.se   | Finansdepartementet                      |
| United Kingdom  | www.hm-treasury.gov.uk | Her Majesty's Treasury                   |

### EU fiscal surveillance framework

Stability and Growth Pact:

http://ec.europa.eu/economy\_finance/economic\_governance/sgp/index\_en.htm

Excessive deficit procedure:

http://ec.europa.eu/economy\_finance/economic\_governance/sgp/corrective\_arm/index\_en.htm Stability and convergence programmes:

http://ec.europa.eu/economy\_finance/economic\_governance/sgp/convergence/index\_en.htm Sustainability of public finances:

http://ec.europa.eu/economy\_finance/articles/eu\_economic\_situation/article15994\_en.htm

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- <u>http://ec.europa.eu/economy\_finance/publications/occasional\_paper/index\_en.htm</u> (the Occasional Papers)
- <u>http://ec.europa.eu/economy\_finance/publications/qr\_euro\_area/index\_en.htm</u> (the Quarterly Reports on the Euro Area)

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