More focus on long term: Is there a need to change the Maastricht criteria?

Andrea Montanino*
European Commission and Italian Prime Minister’s Office

Paper prepared for the XVI Villa Mondragone International Economic Seminar
University of Rome “Tor Vergata”, 23-24 June 2004

Preliminary version, do not quote
June 2004

In evaluating each country’s national public finances situation, we need to take into account the individual cyclical and structural framework conditions and to focus on the long term: debt levels, sustainable funding of pension and health commitment; and improving the quality of public finances.

Gordon Brown, Nicolas Sarkozy and Hans Eichel,
Financial Times, 21 May 2004

1 INTRODUCTION

Public debt matters. Both its level and dynamic are a source for concern in a monetary union, for at least three reasons. First, a growing debt can undermine price stability: fiscal policy can be “non-Ricardian”, in the sense that governments do not increase the present value of future primary surpluses to counterbalance increasing outstanding debt (Woodford (1996)). This can easily happen: in fact there is no reason why a government which is not able to control its current debt dynamic will undoubtedly ensure increased primary surpluses in the future. If this is the case, additional government debt is perceived as “wealth” by agents and thus

* I wish to thank colleagues in DG ECFIN of the European Commission for fruitful discussions on the topics of the paper and in particular Servaas Deroose, Elena Flores, Gabriele Giudice, Sven Langedijk, Marko Mirsnk Alessandro Turrini and Peter Wiert. The views and the opinions expressed in this paper are those of the author alone. They do not necessarily represent the views and the opinions of the European Commission or the Italian Prime Minister’s Office. Contact: andrea.montanino@cec.eu.int
private savings do not adjust to anticipate future tax liabilities. This leads to increasing demand at current prices, which have to adjust in order to restore the equilibrium.

Second, a high debt level leads to budget inflexibility, and in particular it reduces the room for devoting additional resources to growth enhancing public expenditures or to reduce employment-unfriendly taxes. Also, there is less room of manoeuvre for counter-cyclical fiscal policy during economic slowdowns (Chouraqui et al., 1986).

Third, high and increasing debt positions can lead to rising interest rates in order to allow governments to attract private savings, crowding out private investment (Tanzi, 2003). A portfolio effect can emerge when the government has to upsurge the rate of return to induce the public to increase its share of governmental bonds in the portfolio. This has an impact on capital formation and therefore on potential growth. A different effect can emerge through higher inflation expectations. If the debt level is high, agents can perceived the need for future monetisation of the debt and this affects inflation expectations and conversely long term interest rates. In addition, as argued by Beetsma (2001), in a context of easily accessible capital markets, the cost of issuing additional debt for one specific country is lower than in the past. This could lead to a higher stock of debt at an aggregate level and therefore to higher interest rates if budgetary policies across countries are uncoordinated.

The Stability and Growth Pact (SGP) was designed to better specify the functioning of the Maastricht Treaty for what concern budgetary multilateral surveillance and co-ordination. In reality, it represents somehow a departure from the Treaty since it puts the main focus on the deficit, while the Treaty concerns both the debt and the deficit. The paper argues that since debt is a major source of concern from a multilateral point of view, a reform of the SGP which comes closer to the Treaty could improve the economic rationale behind EU fiscal rules and increase incentives to run prudent fiscal policies during good times. The paper is therefore about the economic rationale of the EU fiscal framework. It does not tackle the other important issue in the design of fiscal rules, namely how to ensure effective enforcement mechanisms. It is in fact clear that, although more rational rules can help in improving the commitment of the different actors in respecting the framework, it does not ensure per se that the rules will be respected at all times.

The structure of the paper is as follows. The second section briefly reviews the main criticisms to the EU fiscal framework. Section three argues that the 60% debt reference value
of the Maastricht Treaty can be seen as a “prudent” value to pursue, even it cannot be sufficiently low to cater for ageing population in the future. Thus, it is not a floor but rather a ceiling. Section four discusses which are the changes envisaged in the EU fiscal framework to increase the focus on public debt. It is argued that, while the Treaty should not change, there is room to better implement the rules through changes in the Stability and Growth Pact. The fifth section tackles in particular the issue of countries with debt to GDP ratios above the 60% reference value; the sixth section discusses how debt and deficit can be linked in the medium term while the seventh section looks at long term debt sustainability. Section eight concludes.

2 MAIN CRITICISMS TO THE EU FISCAL FRAMEWORK.

During the last three years considerable criticisms arise regarding the EU fiscal framework. A combined mix of factors contributed to it: the persistent low but still positive economic growth in Germany and in the whole EU area, the breach of the 3% limit in Germany, France and Portugal (and recently in the Netherlands, UK and Greece), the need to boost productive expenditure to meet the Lisbon targets, the pressures to more economic activisms during periods of low growth. Against this background, there has been an increasing lack of political commitment to stick with the common rules, which finally led to the decision of the ECOFIN Council to suspend the excessive deficit procedure for France and Germany in November 2003.

In the meanwhile, the debate among economists concentrated on the main weaknesses of the EU fiscal rules. Without aiming at being full-inclusive, table 1 reports a summary of the main criticisms about the EU fiscal framework as resulting from a review of around 30 papers appeared during the last 2 years\(^1\). A relevant strand of literature has underlined the lack of flexibility of the EU fiscal rules (Calmfors and Corsetti, 2003; Buiter, 2003b, Wyplosz, 2002). In particular, it is argued that the current framework does not take into account differences among EU countries on reform needs, initial conditions in economic development, and in particular debt levels. On the latter, many authors suggest that budgetary co-ordination should concentrate more on debt levels to differentiate across EU countries.

Roughly one third of the papers explicitly address the issue of a lack of focus on long term challenges. The EU fiscal framework, and in particular the Stability and Growth Pact is seen as being focussed too much on short-term fiscal behaviours, without taking properly into
account debt sustainability and the impact of ageing population on public finances (see in particular Courè and Pisany-Ferry, 2003; Buiter and Grafe, 2004).

Other concerns regard the little emphasis devoted to the composition of public finances, and in particular on differences between current and capital expenditures, underlining that the latter should be treated differently in budgetary surveillance (Blanchard and Giavazzi, 2003; Monorchio and Verde, 2003; Savona and Viviani, 2003); to the lack of analytical foundations due to the fact that the Maastricht Treaty reference values are arbitrary (Fitoussi and Saraceno, 2003; Brunetta and Tria, 2003); to the weak institutional design (Tabellini, 2002; Alesina and Perotti, 2004). Many authors have also underlined the difficulties in enforcing the framework, due to the fact that enforcement relies on a political decision to be taken by those actors that are under scrutiny in the surveillance process (Eichengreen, 2003; Strauch and von Hagen, 2001).

Table 1 – Main criticisms to the EU fiscal framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak institutional design</td>
<td>2</td>
<td>Alesina and Perotti (2004), Tabellini (2002),</td>
</tr>
</tbody>
</table>

From this brief review, it clearly states that a major concern with the EU fiscal framework is the lack of focus on public debt. It should be taken into account under two perspectives. First, debt development is relevant for long term sustainability and therefore the framework should endorse more explicitly this commitment. Second, a degree of flexibility is needed to

---

1 A review of the main criticisms to the Stability and Growth Pact can be found in Buti et al. (2003) and Giudice and Montanino (2003).
differentiate EU countries by debt levels. The analysis of short to medium term behaviours should be linked to current debt levels and to the impact of these short term policies on the long run. This country-specific approach becomes more relevant in an enlarged Union where countries with debt to GDP ratios below 30% (Luxembourg, Estonia, Latvia, Lithuania, and Slovenia) and countries with debt to GDP ratios above 100% (Greece, Italy, Belgium) stay together.

Despite these criticisms, it has been recognised that the SGP has had an overall positive role in the conducting of budgetary policies. As argued by Tanzi (2003), if the limits of the Treaty and the SGP are set aside, this would imply that past misbehaviour, which resulted in high deficit and/or debt levels, could justify future imbalances, undermining macro stability. The SGP helped to reduce the deficit bias through an increased political pressure to take public finances under control. This pressure worked through a series of instruments as the early warning procedure, the medium term objective of a budget balance “close to balance or in surplus” and the submission of stability and convergence programmes. The programmes made budgetary policies more transparent and co-ordinated across Europe, helping Member States to pursue sound policies, both for the short and the long run.

3 THE 60% REFERENCE VALUE AS A “PRUDENT” DEBT LEVEL

A major problem with public debt is that it does not exist an “optimal” or a “maximum” level of debt which is the same for all countries, ultimately depending on growth conditions, interest rates on government debt and the capacity of government to raise taxes. It is argued that “a moderate debt level is desirable, but moderate cannot be precisely pinned down. We simply have to rely on good judgement” (Wyplosz, 1999).

The Treaty clearly does not refer to the 60% as an “optimal” level, which ensure the most growth enhancing use of resources. It is the value that ensures to finance through debt an amount of public investment equal to 3% of GDP under “normal” economic conditions, but whether a level of public investment equals to 3% of GDP is “optimal” depends on country-specific conditions. The 60% cannot also be referred as the “maximum” level of debt beyond which countries face difficulties in issuing new debt (Blanchard, 1984). Countries with high potential growth and

\[\text{Woods (2004) briefly reports some empirical studies on the criterion for optimal debt but without a clear-cut answer.}\]
relatively low net implicit pension debt or other future implicit liabilities could afford higher levels of deficit and debt\(^3\).

Although in the Treaty the 60% is treated as a ceiling, beyond which a country shall be subject to increased pressure to run it down, in practice, this ceiling is not considered a “maximum” but rather a “prudent” value, beyond which debt vulnerability is supposed to increase. The vulnerability of debt position to external shocks and changed economic conditions is in fact higher, the higher the debt level is. This is particularly true once future liabilities are taken into account. Future streams of public pension expenditures and likely trends of active population will put increasing pressures on public finances during the next decades. The convergence of debt towards prudent values and its stabilisation will result more difficult in high debt countries, putting at risk sustainability if debt to GDP ratios has not been sufficiently reduced to avoid overburdens to future generations.

The fact that higher debt levels expose to risks arising from changes in the economic circumstances can be shown by looking at the simple framework of the so-called “sustainability area”, which helps in depicting why high debt countries are exposed to higher vulnerability if economic circumstances change. The sustainability area is defined by the following inequality (see Pasinetti, 1998):

\[
s \geq (i - y)b \quad [1]
\]

where \(s\) is the primary surplus (as a share of GDP), \(i\) is the implicit interest rate on debt, \(y\) is nominal growth and \(b\) is the current debt to GDP ratio. Graph 1 shows the “sustainability area” (the area above the depicted continuous lines), under different economic conditions. It indicates those positions where the debt-to-GDP ratio remains stable or decreases. Being within the sustainability area in a specific point in time is not a sufficient condition for sustainability, neither in the medium or in the long run. If the economy deteriorates, any debt level could become unsustainable, but this risk clearly increases with the level of debt\(^4\). If a country with an already high debt ratio moves from a sustainable to an unsustainable position,

\(^3\) For a definition of implicit pension debt see Holzmann et al. (2001).

\(^4\) This can be seen with an example based on graph 1, where two stylised countries have the same primary surplus (2.5% of GDP), the same interest rate-growth differential (2) but two different debt to GDP ratios: country A has a debt to GDP ratio equal to 60% while country B has a ratio of 100%. Given these conditions, both economies are into the sustainability area and the debt to GDP ratio decreases. If economic conditions deteriorate, so that the interest rates-growth differential increases up to 3, the relative position of the two countries would change: country A would remain in the sustainability area while country B would find itself into
the transmission effect on its debt is higher than for a low debt country: the impact on interest payments creates a snowball effect on debt to GDP ratios which is more difficult to correct than for a small debt country.

Clearly, sustainability is guaranteed at any debt to GDP ratio, whenever the primary surplus is high enough. However, the primary surplus required to stabilise the debt level increases with the level of debt, under given economic circumstances. But capacity of a government to adapt the primary surplus to changed economic conditions (and/or increasing debt levels) is not without costs. As argued by Blanchard (1984), there is an upper limit of the debt to GDP ratio, above which there is not additional political consensus to rise the primary surplus further. Thus, when this upper bound is reached, the government has to run a drastic policy change, which is costly in terms of consensus. In particular in European countries the capacity to increase taxation from current levels or to rapidly and permanently compress public spending, if significant unbalances raise, appears limited.

Graph 1 - The sustainability area

The analysis above shows that maintaining low debt levels reduces the vulnerability of public finances to economic developments. Although arbitrary, the threshold set by the Maastricht Treaty for debt levels below 60% of GDP is consistent with sound budgetary policy. Being below such threshold would give a reasonable margin for fiscal policy to avoid increasing debt development if economic conditions change, unless they deteriorate considerably and for a long period. By doing so, running budgetary policies consistent with the 60% reduces the a position which requires a change in the primary surplus. Thus, while a given debt level can be considered to be
risk of having to implement drastic policy changes, which could be economically costly and politically difficult. It is worth noting that such changes in economic conditions are far from rare. Looking at the interest rate-growth differential for the euro zone countries from 1993 to 2003, there has been 36 episodes of yearly deteriorations greater than one up to 132 episodes (11 years multiplied by 12 countries). Half of these episodes are concentrated in the post-SGP period (1999-2003). This clearly shows that changes in the short term cannot be ruled out and maintaining prudent debt position helps in avoiding big shifts in the conducting of fiscal policy.

4 KEEP THE TREATY, CHANGE THE REGULATION, IMPROVE THE IMPLEMENTATION

The EU fiscal framework has several tools, with a different degree of enforcement and legislative status. The first and most binding tool is the Maastricht Treaty. Article 104 depicts the role of the different EU institutions in budgetary surveillance: it gives the Commission the role of examining the compliance with budgetary discipline against two reference values for debt and deficit. The Protocol on the excessive deficit procedure annexed to the Treaty fixed the reference values for debt and deficit at, respectively, 60% of GDP and 3% of GDP.

The Treaty gives also the Commission the rights for assessing whether one country does not fulfil the requirements for debt and deficit and to address to the Council an opinion if it considers that an excessive deficit exists or may occur. In assessing so, the Commission should consider whether the debt to GDP ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace, and if the excess over the reference value for the deficit is only exceptional and temporary and the ratio remains close to the reference value.

The Council takes the following decisions with the aim of bringing the situation to an end, including imposing sanctions. Notably, the Treaty does not define any deadline for bringing the debt or the deficit in line with the requirements, but it fixes the principle that the failure in compliance with the Treaty requirements should end within a time-limit.

stable at a given point in time, this may not always be the case at all times.
5 Interest rates are the implicit interest rates on public debt.
6 Clearly, the lower the debt level the more the budgetary strategy is “prudent”. Several countries as the UK or the Netherlands consider a debt to GDP ratio close to 60% not prudent enough and pursue policies which aim at maintaining debt ratios well below the Maastricht Treaty reference value.
The Stability and Growth Pact builds on the Maastricht Treaty, with the aim of better specifying some of its components for budgetary surveillance. First, it defines the excessive deficit procedure, putting deadlines for decisions to be taken by the Council, and for the Member State concerned to take effective actions and to act in compliance with Council decisions. Deadlines are specified also for the correction of the excessive deficit, which should be completed the year after its identification unless there are special circumstances. Second, the SGP defines when the excess of the government deficit should be considered exceptional and temporary. In practice, the exceptional clause cannot be used unless there is a GDP fall of at least 0.75%. Third, it defines the medium term budgetary objective as a position close to balance or in surplus. This should allow some flexibility in the budget (via the automatic stabilisers) to avoid pro-cyclical policies during downturns and at the meantime to respect the 3% reference value for the deficit at all times. Fourth, Member States are committed to submit medium-term programmes to depict the budgetary strategy to reach and maintain the medium-term objective. The Commission and the Council examine the programmes with the aim of preventing the occurrence of excessive deficits.

Comparing the SGP provisions with the Treaty, it emerges that the Pact has reduced the flexibility of the Treaty for what concern the timing of the different steps after the identification of an excessive deficit, by putting specific deadlines. It has also reduced the flexibility in deciding when an excessive deficit is exceptional: by fixing as a minimal requirement a GDP annual fall of 0.75%, it ruled out those cases of low but still positive growth for a prolonged period. In practice, since 1999, there have been only three cases out of 100 (25 EU countries by 4 years) of GDP annual fall higher than 0.75% in the EU-25: one in Latvia in 1999, one in Malta in 2001 and one in Portugal in 2003. The Pact has also focussed almost exclusively on deficit position while the Treaty puts deficit and debt at the same level. The “excessive deficit procedure”, which leads eventually to sanctions, has been depicted in the Pact in the case of a deficit above 3% of GDP, without referring at cases where the debt criterion is not respected.

---

7 As a general rule, a severe downturn is considered exceptional - without the need of further evidence - if “there is an annual fall of real GDP of at least 2%” (article 2(2) of Council Regulation 1467/97). The Member State concerned can demonstrate that even a fall of annual real GDP of less than 2% is “nevertheless exceptional in the light of further supportive evidence, in particular on the abruptness of the downturn or on the accumulated loss of output relative to past trends” (article 2(3)). In the Resolution of the European Council on growth and employment (June 1997), Member States committed not to invoke the exceptional clause if GDP fall is less than 0.75% (point 7 under “The Member States”). However, the call for an “exceptional clause” even if GDP fall is less than 0.75% cannot be totally excluded.
The third main component of the EU fiscal framework is the Code of Conduct on the content and the format of the stability and convergence programmes. It fixes guidelines on the information to be included in the annual updated programmes and the procedures for the submission of programmes. Some information is compulsory while others (as data on long term sustainability of public finances) are submitted on a voluntary basis. The first version of the Code (October 1998) has been revised by the Economic and Financial Committee in July 2001 and it has been endorsed by the Ecofin Council. Although so far the Code has been used to clarify the content of the programmes, it can also be seen as a tool for improvements in the fiscal framework without touching either the Treaty or the Pact.

4.1 Different approaches to increase the focus on long term

In discussing how the EU rules could be revisited, it is important to define which part of the rules might change, either the Treaty, or the Pact or the Code of Conduct. Changes in the Treaty would require a ratification of the new legislative text by National Parliaments, and it may also pass a referendum according to country-specific institutional arrangements. To change the Pact, the Council has to reach a qualified majority for what concern the part of the SGP relative to budgetary co-ordination (Council Regulation 1466/97) and unanimity for changing the excessive deficit procedure (Council regulation 1467/97). In both cases it is not needed a national ratification. The Code is a technical agreement which aims at improving the functioning of the SGP and can be changed at technical level by the Economic and Financial Committee.

Following the indication on the main criticisms on the economic rationale of the EU fiscal framework, and on the basis of the general criteria for an “optimal” fiscal rule, a new set of rules in the EU context which aim at increase the economic rationale of the common framework should answer to the following needs: ensure all countries to move towards “prudent” debt levels; increase flexibility by taking into account country-specific circumstances when assessing the short to medium-term budgetary position; help in preparing in time for ageing population. Clearly, the rules must remain simple, in light of the greater number of countries which now join the EU.

---

To answer to the above mentioned needs, several proposals have been put forward. Beetsma (2001) discusses the advantages of a debt-based Pact. In focusing on debt, the “flexibility” problem on deficit positions can be overcome because a debt-based pact could reward average prudent policies (or punish average imprudent ones) while giving flexibility in the short-run for the deficit conditions if the economic environment turn to be adverse. Public debt also addresses better than deficit the credibility problem: average prudent debt profiles reduce the risk that governments make pressure to the central bank for reducing interest rates.

However, most proposals for reforming the EU rules among these lines are not on a debt-based Pact but rather on a debt-based Maastricht Treaty which implies complex legislative steps. Among others, Courè and Pisany Ferry (2003) propose a “sustainability Pact”, where Member States can opt for a debt target which would take into account also future – implicit and explicit – liabilities. Assessment of budgetary positions would be on long term sustainability of debt rather than on current deficit levels. Calmfors and Corsetti (2003) and Fiorito (2002) propose instead to define the deficit targets according to debt levels. In brief, the lower the debt, the higher the deficit not considered as “excessive”.

A different approach to increase the economic rationale of the EU framework through more focus on public debt is to leave the Treaty and the Protocol unchanged, but improve its implementation and modify other parts of the EU fiscal framework as the Stability and Growth Pact. The Treaty fixes some general principles in budgetary surveillance that allow strengthening the focus on public debt, since it clearly refers to both deficit and debt as the budgetary variables to assess.

A key role is played by the Protocol which fixes the reference values for the debt (60% of GDP) and the deficit (3% of GDP). Whether these numbers have to be changed depends on whether there are better numbers to be used as reference values in a multilateral framework, or whether it would be better not to have reference values at all. Given the fact that there is a spread of “optimal” numerical rules in a Union of 25 countries, and given the institutional difficulties in changing the Protocol, a discussion on different numbers to be replaced as reference values would be fruitless. At the same time, the existence of some numerical rules helps the institutions in charge (the Commission and the Council) to assess budgetary positions. Numerical rules are also perceived as a guideline for the conducting of the economic policy. The experience of the first years of the EMU shows that the 3% reference
value helped in avoiding over excessive deficit, and served the purpose of orienting the national debate.

Flexibility and more focus on debt can be instead achieved through a better implementation of the Treaty and a revision of the SGP, including technical amendments of the Code of Conduct. Revision in the Pact should consider the adjustment path of the excessive deficit, which is a one-size-fits-all rule. Under current rules, a Member State which breaches the 3% deficit to GDP ratio has to correct it “in the year following its identification” (CR 1467/97, art.4) despite growth conditions or debt levels. The Treaty instead says that the Council makes recommendations with a view “to bringing that situation to an end within a given period” (art. 104 (7)), but it does not provide a well defined period as the SGP does. Special circumstances can be advocated to define a different time limit but the fact that these circumstances are considered “special” means that they cannot be used regularly to have cross-countries differentiation in the application of the excessive deficit procedure.

Modification in the SGP can enhance the economic rationale of the EU fiscal rules through more country-specific consideration once a Member State breaches the 3% reference value. This implies that the excessive deficit procedure starts once a country breaches the threshold as depicted in the Treaty\(^\text{10}\) but the adjustment to bring it back below 3% becomes country-specific.

Improvements of the EU fiscal framework should also be achieved simply through a revision of the Code of Conduct. This channel can be used to add information to be provided in the Stability and Convergence Programmes or to make explicit some additional technical tool to be used in the assessment of budgetary policy. For instance, a more country-specific definition of the medium-term objective can be developed there, without changing any legislative text.

The increasing focus on debt positions is a threefold issue. It is first related to those countries which are above the 60% threshold. Second, it regards the assessment of the medium term budgetary positions, to better qualify the budgetary risks behind current deficit to GDP ratios and economic conditions. Third, it regards the likelihood debt profile over the long term, and the issue of long term sustainability of public finances.

\(^{10}\) Unless the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value as foreseen in the Treaty.
The following sections discuss how in practice the debt criterion can be operationalise, debt and deficit can be linked in the medium-term assessment and how long term sustainability of public finances can be monitored and assessed in a multilateral framework, without changing the Treaty criteria, but through a better implementation of the Treaty itself or a revision of the Pact.

5 OPERATIONALISE THE DEBT CRITERION

5.1 The issue

In 2003, 6 countries show a debt to GDP ratio higher than the 60% Maastricht reference value. They are Austria, Belgium, France, Greece, Germany and Italy. Table 2 explores the debt dynamic in these countries through a comparison between the outcomes in 2003 and the targets planned in the Stability and Convergence Programmes four years ago, when the year 2003 was covered for the first time\[sup\]11[/sup]. The aim is to see whether slippages from the targets are mainly due to worse than expected external conditions or if result from government policies. The reasons for slippages are grouped in three broad factors: the primary balance, the external environment (which includes interest payments, GDP deflator and real economic growth) and the stock-flows adjustments.

Table 2 - Difference in the 2003 debt to GDP ratio between planned data in the 2000 updated Stability Programmes and actual data (figures are expressed as % of GDP)

<table>
<thead>
<tr>
<th></th>
<th>AT</th>
<th>BE</th>
<th>DE</th>
<th>EL*</th>
<th>FR</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt ratio (Actual)</td>
<td>65.0</td>
<td>100.5</td>
<td>64.2</td>
<td>103.0</td>
<td>63.0</td>
<td>106.2</td>
</tr>
<tr>
<td>Debt ratio (as planned in USP 1999)</td>
<td>61.2</td>
<td>101.2</td>
<td>58.0</td>
<td>90.5</td>
<td>57.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Difference</td>
<td>3.8</td>
<td>-0.7</td>
<td>6.2</td>
<td>12.5</td>
<td>5.3</td>
<td>6.2</td>
</tr>
</tbody>
</table>

**Contribution to change:**

- **Primary balance**
  - AT: -2.7
  - BE: -1.2
  - DE: 6.2
  - EL*: 9.1
  - FR: 4.3
  - IT: 4.3

- **External environment:**
  - AT: 0.0
  - BE: -0.3
  - DE: 3.6
  - EL*: -0.8
  - FR: 1.8
  - IT: 1.6

- **Interest payments**
  - AT: -0.2
  - BE: -1.1
  - DE: -0.6
  - EL*: 3.2
  - FR: 0.5
  - IT: 1.2

- **GDP deflator**
  - AT: -1.8
  - BE: -2.8
  - DE: 1.4
  - EL*: -5.8
  - FR: -0.6
  - IT: -4.7

- **GDP growth (real)**
  - AT: 2.1
  - BE: 3.6
  - DE: 2.8
  - EL*: 1.8
  - FR: 2.0
  - IT: 5.1

- **Stock-flow adjustment**
  - AT: 3.9
  - BE: 0.8
  - DE: -3.8
  - EL*: 3.6
  - FR: 1.0
  - IT: -0.5

**Difference due to starting position in 1999**

- AT: 2.6
- BE: -0.1
- DE: 0.2
- EL*: 0.6
- FR: -1.8
- IT: 0.8

Source: European Commission
Note: a “minus” indicates a positive contribution (a faster than expected debt reduction), a “plus” indicates the opposite.
* Figures for Greece concern USP 2001 (December 2000)
** Figures replaced by the HCPI (Harmonised Consumer Price Inflation) for Austria

\[sup\]11[/sup] For Greece, the updated programme presented in December 2000 has been used since it is the first one including 2003.
It emerges from table 2 is that the debt to GDP ratio is currently higher than planned (Belgium is an exception). The difference is particularly remarkable for Greece (more than 10 percentage points of GDP), Germany and Italy (6.2 percentage points). Slippages from planned trends are greater than what appears for France due to a revision in the debt to GDP ratio figures for the year 1999\textsuperscript{12}.

Real growth turned to be worse than projected in late 1999, giving a negative contribution to debt reduction. However, the debt dynamic is driven by nominal growth and the contribution of growth conditions to debt dynamics should also take into account the different outcome in terms of GDP deflator. In Italy for instance, the different outcome in the GDP deflator has almost completely offset the worse than expected real growth conditions (cumulative over the period growth is responsible by only 0.5 percentage points of GDP to a different than planned debt development).

Despite the unpleasant trends depicted above, no country has been placed yet under the excessive deficit procedure for an unsatisfactory debt development, considering in particular that three of them (Greece, Italy and Belgium) are far from “prudent” values\textsuperscript{13}. Graph 2 shows the projected debt to GDP ratios in the three very high debt countries under the assumption that the pace of debt reduction in the future will continue as the recent past (1998-2003 average rate of reduction)\textsuperscript{14}. The graph is a simple projection in the future of average past behaviours and do not include additional assumptions on economic growth, interest rates, inflation or age-related expenditure.

Convergence towards 60% results in all three countries since the rate of reduction has been positive on average during the last 6 years, although the speed differs widely across countries.

\textsuperscript{12} This can be read from the difference between the actual debt to GDP ratio for 1999 and the one included in the updated programme (submitted in January 2000, see last line in table 1). According to the French 2000 updated programme, the debt to GDP ratio in 1999 should have been 1.8 percentage points of GDP higher than what it has instead been. It means that the difference between the planned debt reduction (in points of GDP) and the actual one is 7.4 percentage points of GDP, as resulting adding up the contribution of stock flow adjustments, the external environment and the primary balance.

\textsuperscript{13} However, the Economic and Financial Committee has stressed that an excessive deficit exist in 2003 for Greece for not respecting both (deficit and debt) criteria.

\textsuperscript{14} The six-year period covers the whole economic cycle so that it can represent a “structural” rate of reduction, i.e. the one the country can achieve in normal economic conditions. A six-year average allows also not to overweight unusual stock-flow operations. Positive and negative adjustments should compensate each other in this length of time, with the sum of these operations resulting in the “structural” impact of stock-flows on debt dynamic.
The average annual pace of debt reduction (as a percentage of the debt to GDP ratio) has been 3.2% in Belgium, 0.5% in Greece and 1.8% in Italy. If this rate of reduction is projected over time, Belgium will bring its debt to GDP ratio below 60% within the next 15-20 years, Italy would need around 30 years while Greece will not converge to 60% before the end of the century. This means that the current average rate of reduction is clearly not sufficient to bring debt to GDP close to 60% before the impact of ageing takes fully place in Greece and partly also in Italy. The issue is then how budgetary surveillance can be improved to reach the goal of ensuring debt levels close to prudent values for all EU countries in a reasonable length of time.

Graph 2 - The rate of debt reduction in very high debt countries

Source: Commission Services

5.2 Changes in the rules

A first step to increase the focus on debt for high debt countries is simply to operationalise the debt criterion of the Maastricht Treaty. As stated in the Treaty, the budgetary strategy must comply with the requirement for government debt to be “… sufficiently diminishing and

---

15 This section benefits from fruitful discussions with Gabriele Giudice and Sven Langedijk.
approaching the reference value at a satisfactory pace” (art 104.2). According to the Treaty, a minimum rate of reduction should be ensured to fulfil the Treaty or otherwise the Commission should prepare a report as a first step of the excessive deficit procedure (EDP)\textsuperscript{16}. In order to see how it can be done in practice, consider the usual debt dynamic equation:

\[ \dot{b} = -s + (i - y - \pi)b + SF \]  \hspace{1cm} \text{[2]}

where \( b \) is the debt to GDP ratio, dotted \( b \) is the change in the debt to GDP ratio, \( s \) is the primary balance (as a share of GDP), \( i \) is the implicit interest rates on debt, \( y \) is real growth rate, \( \pi \) is inflation rate and \( SF \) are stock-flows operations. So far, no rate of debt reduction is defined and \textit{de facto} any rate has been considered as “sufficient” to respect the debt criterion. Suppose instead to fix \textit{ex-ante} a minimal rate of debt reduction, \( x \), to be respected in order to fulfil the Maastricht criterion, so that the following condition should hold:

\[ \mu = -\frac{\dot{b}}{b} > x \]  \hspace{1cm} \text{[3]}

where \( \mu \) is the rate of debt reduction as a percentage of debt levels. Substituting [3] in [2], the primary balance which allows a sufficient debt reduction to respect the debt criterion becomes:

\[ s > (i - y - \pi)b + SF + \mu b \]  \hspace{1cm} \text{[4]}

Clearly, the higher is \( \mu \), the higher is the required primary surplus given the economic conditions and the amount of stock-flows adjustments. But, how much should \( \mu \) be? In principle, it should not be over demanding, but at the same time it should allow debt to GDP ratios to move towards prudent levels before the impact of ageing takes place. According to long term growth projections provided by the Economic Policy Committee of the EU this will happen for most EU countries within the next 20 years, after which pressures on pension and health care expenditures will lead to increasing debt levels. Clearly, a faster reduction would reduce even more public finance vulnerability. However, running down debt levels too fast can be at cost of growth, since very high primary surpluses would be required in order to achieve this faster pace of debt reduction.

\textsuperscript{16} This would be in line with the ECOFIN Council conclusions in May 2003 where it has been stated that the EDP can be used to favour a faster debt reduction.
Table 3 – The implied primary surplus by a constant rate of debt reduction
(starting point: 100% of government debt to GDP ratio)

<table>
<thead>
<tr>
<th>Annual rate of reduction</th>
<th>Years to reach 60%</th>
<th>Nominal GDP growth</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First 3 years</td>
<td>Last 3 years</td>
<td>First 3 years</td>
<td>Last 3 years</td>
</tr>
<tr>
<td>3%</td>
<td>17</td>
<td>5.8</td>
<td>3.7</td>
<td>4.9</td>
<td>3.1</td>
</tr>
<tr>
<td>4%</td>
<td>13</td>
<td>6.7</td>
<td>4.5</td>
<td>5.8</td>
<td>3.8</td>
</tr>
<tr>
<td>5%</td>
<td>10</td>
<td>7.6</td>
<td>5.0</td>
<td>6.7</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Note: The table shows the implied primary surplus in the first and last three years of a budgetary consolidation process necessary to achieve a constant annual reduction in debt levels as a % of GDP. Implicit interest rates are held constant at 6%.

Table 3 proposes different theoretical rates of debt reduction under different growth conditions. It illustrates the required primary surplus at the beginning and at the end of the adjustment period (e.g. first three years and last three years before reaching 60%) for a country with initial debt to GDP ratio equals to 100%. A reduction in the debt ratio of 3% each year would bring the debt level from 100% to 60% of GDP within 17 years. If nominal GDP growth is assumed at 4%, as it seems reasonable given the EPC long term projections of nominal growth, this would require an average primary surplus of 4.7% of GDP in the first three years of the consolidation process. As debt levels fall over time, a lower primary surplus would be needed to achieve a constant reduction in the debt ratio of 3% each year: in the last three years of the consolidation process, an average primary surplus of 4.1% of GDP would instead be sufficient. A rate of reduction of 4% or even 5% seems excessively demanding in terms of required primary surplus, unless growth is very favourable.

The example shows that, under normal economic conditions which can be expected in the three very high debt countries, a rate of debt reduction of 3% each year seems appropriate. This rate of reduction should be ensured over the cycle, but any specific required rate of reduction should be conditional to country-specific circumstances, such as economic growth and debt levels.

5.3 Translate this commitment in an annual assessment

If the aim is to ensure prudent debt values within a limited time length and the 3% debt reduction (as a percentage of debt level) is considered reasonable and feasible, it is necessary to translate this long term commitment in short term budgetary surveillance. To do so, it is

17 Nominal implicit interest rate is fixed at 6%.
first necessary to define the expected debt reduction in percentage point of GDP under “normal” economic circumstances which corresponds to a reduction of 3% in percentage points of the debt level. Second, calculate the “required” debt reduction (in percentage points of GDP) contingent to growth conditions and debt levels. It can be obtained on the basis of the following relation:

\[ \dot{b}^r = (y - y^p)b + \dot{b}^r \]  

[5]

where \( y \) and \( y^p \) are, respectively, actual and potential nominal growth, \( b \) is the debt to GDP ratio in year \( t \) and \( \dot{b}^r \) is the expected rate of reduction under “normal” economic conditions, expressed by:

\[ \dot{b}^r = (0.03)b \]  

[6]

Third, compare the actual debt reduction with the calculated required value for the debt reduction. In case of non-compliance, before drawing firm conclusions it is necessary to consider past trends, the extent of non-compliance, exceptional events, and the merit of stock-flows operations.

Table 4 illustrates how this approach works in practice for Greece, Italy and Belgium. A positive number in line (8) of table 4 means that the actual reduction has been lower than the required one. During the period 2001-2004 it appears that there is a clear case in Greece of non compliance with a satisfactory pace of debt reduction. The strong nominal growth and the initial high debt level required a debt reduction of 4 p.p. of GDP higher than what delivered in 2003 and 3.2 pp in 2002. In addition, according to estimates for 2004, it appears that Greece will deliver a debt reduction much lower than required. While Belgium is clearly delivering a sufficient rate of debt reduction, Italy is a border case. For 2002 and 2003 the debt reduction has been less than satisfactory, but of a much lower magnitude than Greece. However, the expected reduction in 2004 seems not satisfactory, being the estimated debt to GDP ratio 3.2 p.p. of GDP higher than requested.

---

18 For Greece and Belgium, average annual nominal growth for the next 25 years is projected at 3.8%; for Italy is expected at 3.4%.
### Table 4 – Comparison between required and actual debt reduction for Greece, Italy and Belgium

<table>
<thead>
<tr>
<th></th>
<th>Greece</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
<td>2004</td>
</tr>
<tr>
<td>(1) Debt to GDP</td>
<td>106,9</td>
<td>104,7</td>
<td>103,0</td>
<td>102,8</td>
</tr>
<tr>
<td>(2) actual debt reduction (in p.p. of GDP)</td>
<td>-2,2</td>
<td>-1,8</td>
<td>-0,2</td>
<td></td>
</tr>
<tr>
<td>(3) actual growth (nominal)</td>
<td>7,7</td>
<td>7,9</td>
<td>8,0</td>
<td>8,0</td>
</tr>
<tr>
<td>(4) potential growth (nominal)*</td>
<td>5,2</td>
<td>5,7</td>
<td>5,4</td>
<td>5,3</td>
</tr>
<tr>
<td>(5) difference between actual and potential</td>
<td>2,5</td>
<td>2,1</td>
<td>2,6</td>
<td>2,7</td>
</tr>
<tr>
<td>(6) required debt reduction over the cycle (in p.p of GDP) – benchmark</td>
<td>-3,2</td>
<td>-3,1</td>
<td>-3,1</td>
<td></td>
</tr>
<tr>
<td>(7) conditional to growth required debt reduction (in p.p of GDP)</td>
<td>-5,5</td>
<td>-5,8</td>
<td>-5,9</td>
<td></td>
</tr>
<tr>
<td>(8) difference between actual and required debt reduction (in p.p. of GDP)</td>
<td>3,3</td>
<td>4,0</td>
<td>5,7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Belgium</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
<td>2004</td>
</tr>
<tr>
<td>(1) Debt to GDP</td>
<td>108,1</td>
<td>105,8</td>
<td>100,7</td>
<td>97,6</td>
</tr>
<tr>
<td>(2) actual debt reduction (in p.p. of GDP)</td>
<td>-2,3</td>
<td>-5,1</td>
<td>-3,1</td>
<td></td>
</tr>
<tr>
<td>(3) actual growth (nominal)</td>
<td>2,4</td>
<td>2,4</td>
<td>2,9</td>
<td>3,7</td>
</tr>
<tr>
<td>(4) potential growth (nominal)*</td>
<td>4,0</td>
<td>3,9</td>
<td>3,8</td>
<td>3,9</td>
</tr>
<tr>
<td>(5) difference between actual and potential</td>
<td>-1,5</td>
<td>-1,4</td>
<td>-0,9</td>
<td>-0,2</td>
</tr>
<tr>
<td>(6) required debt reduction over the cycle (in p.p of GDP) – benchmark</td>
<td>-3,2</td>
<td>-3,2</td>
<td>-3,0</td>
<td></td>
</tr>
<tr>
<td>(7) conditional to growth required debt reduction (in p.p of GDP)</td>
<td>-1,7</td>
<td>-2,3</td>
<td>-2,8</td>
<td></td>
</tr>
<tr>
<td>(8) difference between actual and required debt reduction (in p.p. of GDP)</td>
<td>-0,6</td>
<td>-2,8</td>
<td>-0,3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
<td>2004</td>
</tr>
<tr>
<td>(1) Debt to GDP</td>
<td>110,6</td>
<td>108,0</td>
<td>106,2</td>
<td>106,0</td>
</tr>
<tr>
<td>(2) actual debt reduction (in p.p. of GDP)</td>
<td>-2,7</td>
<td>-1,8</td>
<td>-0,2</td>
<td></td>
</tr>
<tr>
<td>(3) actual growth (nominal)</td>
<td>4,5</td>
<td>3,4</td>
<td>3,2</td>
<td>3,6</td>
</tr>
<tr>
<td>(4) potential growth (nominal)*</td>
<td>3,9</td>
<td>3,7</td>
<td>3,5</td>
<td>3,4</td>
</tr>
<tr>
<td>(5) difference between actual and potential</td>
<td>0,5</td>
<td>-0,2</td>
<td>-0,3</td>
<td>0,2</td>
</tr>
<tr>
<td>(6) required debt reduction over the cycle (in p.p of GDP) – benchmark</td>
<td>-3,3</td>
<td>-3,2</td>
<td>-3,2</td>
<td></td>
</tr>
<tr>
<td>(7) conditional to growth required debt reduction (in p.p of GDP)</td>
<td>-3,1</td>
<td>-3,0</td>
<td>-3,4</td>
<td></td>
</tr>
<tr>
<td>(8) difference between actual and required debt reduction (in p.p. of GDP)</td>
<td>0,4</td>
<td>1,2</td>
<td>3,2</td>
<td></td>
</tr>
</tbody>
</table>

*nominal potential growth is equal to real potential growth plus 2% inflation

This approach would not require any change in the Treaty, since it is a simple application of the Treaty itself. Indeed, it will increase the economic rationale of the rules increasing the attention of peer pressure on debt vulnerability and applying a country-specific approach. In principle, it would also not require changes in the SGP, even if the application of the debt criterion can be facilitated though a clarification that the different steps of the excessive
deficit procedure are applied not only for the deficit but also for the debt. A revised Resolution of the European Council on the SGP could make more explicit the political goal of ensuring prudent debt values before the impact of ageing takes fully place, thus reinforcing the application of the debt criterion. The Code of Conduct could instead incorporate explicitly the definition of satisfactory pace of debt reduction. A certain degree of judgement for the Commission and the Council remains necessary in order to avoid a mechanistic application of the criterion.

6 LINK DEBT AND DEFICIT WHEN ASSESSING BUDGETARY POSITIONS

6.1 The issue

The deficit value is at the core of the budgetary surveillance, both in the preventive and dissuasive part of the Stability and Growth Pact. The medium-term strategy is assessed against a budgetary position of close to balance or in surplus while the excessive deficit procedure starts in principle when the deficit is above the 3% reference value. In both cases, there is no clear reference to different conditions in terms of both debt levels and dynamic. In particular, deficit positions are assessed without explicit considerations on whether they are consistent with a stable or decreasing debt over the medium term, i.e. with a reduction of public finances’ vulnerability.

In order to see whether EU budgetary outcomes in terms of budget balance during last years have been coherent with reducing vulnerability, the following relation can be used:

\[ d + yb = 0 \quad [7] \]

where \(d\) is the deficit to GDP ratio, \(y\) is nominal growth and \(b\) is the debt to GDP ratio the previous year. The boundary relation in equation [7] shows that when the sum of budget balance and the nominal growth rate times the debt to GDP ratio is equal to zero, the debt to GDP ratio is stabilised. If it is greater than zero, the country concerned is within a sustainable area, or “over sustainable” in the medium term, while for negative values the country is out of the sustainability zone because the debt to GDP ratio tend to increase. This indicator does not consider possible spillover effects of very high debt levels or difficulties that countries can 19 Unless the deficit above 3% is exceptional, temporary and close to the reference value.
encounter to raise sufficiently the primary surplus in order to stabilise the debt. Thus, any debt level is sustainable in principle if the governments are able to generate adequate surpluses.

Table 5 - Indicators of medium-term debt sustainability

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>3.8</td>
<td>1.3</td>
<td>-1.2</td>
<td>100.5</td>
</tr>
<tr>
<td>DE</td>
<td>-0.8</td>
<td>2.3</td>
<td>-3.4</td>
<td>64.2</td>
</tr>
<tr>
<td>EL</td>
<td>6.4</td>
<td>0.7</td>
<td>-0.2</td>
<td>103.0</td>
</tr>
<tr>
<td>ES</td>
<td>3.2</td>
<td>0.9</td>
<td>1.9</td>
<td>50.8</td>
</tr>
<tr>
<td>FR</td>
<td>-0.3</td>
<td>1.6</td>
<td>-3.0</td>
<td>63.0</td>
</tr>
<tr>
<td>IE</td>
<td>6.7</td>
<td>4.2</td>
<td>-10.5</td>
<td>32.0</td>
</tr>
<tr>
<td>IT</td>
<td>2.3</td>
<td>1.5</td>
<td>-1.2</td>
<td>106.2</td>
</tr>
<tr>
<td>LU</td>
<td>3.9</td>
<td>2.7</td>
<td>-4.2</td>
<td>4.9</td>
</tr>
<tr>
<td>NL</td>
<td>2.7</td>
<td>2.9</td>
<td>-4.9</td>
<td>54.8</td>
</tr>
<tr>
<td>AT</td>
<td>0.9</td>
<td>0.9</td>
<td>0.0</td>
<td>65.0</td>
</tr>
<tr>
<td>PT</td>
<td>0.2</td>
<td>1.1</td>
<td>-3.0</td>
<td>59.4</td>
</tr>
<tr>
<td>FI</td>
<td>6.1</td>
<td>2.7</td>
<td>-2.3</td>
<td>45.3</td>
</tr>
<tr>
<td>EUR-12</td>
<td>1.1</td>
<td>1.6</td>
<td>-1.8</td>
<td>70.4</td>
</tr>
<tr>
<td>CY</td>
<td>0.5</td>
<td>1.8</td>
<td>-1.2</td>
<td>72.2</td>
</tr>
<tr>
<td>CZ</td>
<td>-5.2</td>
<td>4.3</td>
<td>-10.2</td>
<td>37.6</td>
</tr>
<tr>
<td>DK</td>
<td>4.0</td>
<td>1.4</td>
<td>-0.9</td>
<td>45.0</td>
</tr>
<tr>
<td>EE</td>
<td>0.6</td>
<td>2.0</td>
<td>3.1</td>
<td>5.8</td>
</tr>
<tr>
<td>HU</td>
<td>1.8</td>
<td>2.8</td>
<td>-4.0</td>
<td>59.0</td>
</tr>
<tr>
<td>LV</td>
<td>-1.1</td>
<td>1.7</td>
<td>-0.6</td>
<td>15.6</td>
</tr>
<tr>
<td>LT</td>
<td>-1.5</td>
<td>2.3</td>
<td>0.9</td>
<td>21.9</td>
</tr>
<tr>
<td>MT</td>
<td>-4.3</td>
<td>1.9</td>
<td>1.1</td>
<td>72.0</td>
</tr>
<tr>
<td>PL</td>
<td>0.5</td>
<td>2.8</td>
<td>-6.6</td>
<td>45.4</td>
</tr>
<tr>
<td>SE</td>
<td>4.5</td>
<td>2.4</td>
<td>-3.0</td>
<td>51.9</td>
</tr>
<tr>
<td>SK</td>
<td>-2.6</td>
<td>2.5</td>
<td>1.3</td>
<td>42.8</td>
</tr>
<tr>
<td>SI</td>
<td>-3.6</td>
<td>3.0</td>
<td>0.4</td>
<td>27.1</td>
</tr>
<tr>
<td>UK</td>
<td>2.4</td>
<td>2.5</td>
<td>-3.9</td>
<td>39.9</td>
</tr>
<tr>
<td>EU-25</td>
<td>1.5</td>
<td>2.4</td>
<td>-3.6</td>
<td>63.2</td>
</tr>
<tr>
<td>p.m. EU-15</td>
<td>1.5</td>
<td>2.4</td>
<td>-3.5</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Source: Commission Services

Note: The table indicates in column (1) the average distance of current deficit from the deficit level which would stabilise the debt ratio, in column (2) the volatility of such margin calculated through the standard deviation, in column (3) how this distance has changed between 2003 and 1998 and in column (4) the current debt levels. A positive value in column (1) indicates that under the given the external conditions the budget balance leads to a declining debt position.

Table 5 presents the last 5 years average value for EU-25 countries of medium-term sustainability indicators built on the basis of equation [7]. As shown in the first column of the table, among euro-zone countries all but France and Germany have had an average debt decreasing deficit. There are instead 6 non-euro zone countries where average budgetary positions have not been sufficient to stabilise the debt. However, before drawing firm conclusions, it is helpful to better qualify this statement looking at column (2) and (3) of table.
5. Column (2) shows the standard deviation of the indicator: the greater is its value compared with the average, the greater is the volatility of the indicator. As clearly result from the high values of standard deviations (sometimes higher than the average), countries can easily move from a sustainable to an unsustainable position due to deteriorate external environments or changes in budgetary conditions. The third column shows the difference in the value of equation [7] between 2003 and 1998. It appears that most countries are deteriorating their position, moving out of the sustainability zone.

These indicators show that medium term debt sustainability has been mostly ensured over the medium term by most euro zone countries but that country position are much differentiated both in terms of dynamic and levels of debt. It also shows that there is a wide dispersion of the debt sustainability indicator since a sustainable position can easily turn to be unsustainable within short period of time. Finally, it clearly underline that vulnerability is increasing in most countries, in particular in the euro zone.

These considerations should be at the core of the assessment of both the medium term strategy and the adjustment path once a country breaches the 3% reference value: according to the starting level of debt and the economic conditions, the risk of unstable medium-term debt positions differs widely. Different policy recommendations on current budgetary policies which take into account debt level and trends would increase the economic rationale of the EU framework.

6.2 Changes in the rules

No changes in the Treaty are foreseen to increase the economic rationale of the assessment of budgetary positions through a more explicit link with debt. The Treaty is not in contrast with a more country-specific approach and in particular with the idea of looking at both the variables when assessing budgetary positions. Indeed, such an approach comes closer to the Treaty, which clearly considers both the debt and the deficit as the variables to be assessed when looking at budgetary positions in EU countries.

The isolation of one component, as the level of current deficit to GDP, can lead to misleading interpretation. What counts in the EMU is the current and potential effect of budgetary policies on price stability and growth: this means that budgetary position should be assessed jointly with the level of debt, the real growth, the interest rates and the inflation rates in a
medium-term framework. Although this would complicate the current framework for budgetary surveillance, it would improve its economic rationale.

Several approaches can be discussed as a preliminary reflection on how different budgetary and macroeconomic variables can be matched in the assessment of budgetary position without changing the Treaty. Building on the Calmfors and Corsetti (2003) proposal for changing the Treaty, a first approach is simply to define groups of countries according to debt levels: the medium term objective for the budget balance will be less ambitious, the lower the debt to GDP ratio is, while the adjustment path once a country breaches the 3% can become longer for lower debt ratios.

A more explicit link between debt and deficit should not imply changes in the adjustment path for countries with debt to GDP ratios above 60%. The requirement of a satisfactory pace of debt reduction implies that a deficit above 3% should be put to an end as soon as possible because the increasing debt resulting from such a deficit would imply the non-respect of the debt criterion. On the contrary, some leeway can be applied to low debt countries. For instance, in applying the Calmfors-Corsetti proposed groupings to the adjustment path, under normal economic circumstances a country with a starting debt to GDP ratio equals to 40% could run excessive deficit (higher than 3%) for maximum 8 years before approaching the 60% reference value for the debt.

The main advantage is that such an approach will create incentives to run down debt during good times, in order to achieve more room of manoeuvre in bad times. However, as the close-to-balance rule, advantages can be for the following government if the time period includes an election year. It is also very simple and increase country-specific analysis. A main disadvantage is that the different groups have to be negotiated in advance by the Council and it can be difficult to achieve unanimous consensus. In addition, the discontinuity can create incentives for creative accounting in order to achieve a more favourable group where the allowed deficit is higher.

To avoid discontinuity, Fiorito (2002) proposes the following approach to be applied to the 3% reference value:

---

20 Following the Calmfors-Corsetti proposed groups, only those countries with a debt to GDP ratio above 55% should maintain the 3% ceiling, being the other countries allowed to run higher deficit (up to 5% of GDP for those countries with a debt to GDP ratio below 25%).

21 The simulation is run for an interest rates-growth differentials equals to 2.
\[ d = 0.03 - x \cdot (b - 0.6) \] \[ [8] \]

where \( d \) is the maximum allowed deficit to GDP ratio, \( b \) is the current debt to GDP ratio and \( x \) is the “degree of incentive” the rule would put forward in order to create incentives to run down debt. The greater is \( x \), the greater is the flexibility of the rule, i.e. the spread of country-specific ceilings. The application of the rule can be similar of the grouping approach: instead of using it to change the 3% threshold as proposed by Fiorito, it can be applied to define the adjustment path.

Table 6 - Link deficit and debt to define the adjustment path

<table>
<thead>
<tr>
<th>degree of incentive</th>
<th>debt to GDP ratio</th>
<th>maximum allowed deficit to GDP ratio</th>
<th>number of years allowed for the adjustment period</th>
<th>debt to GDP ratio at the end of the adjustment period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>30</td>
<td>3.6</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>3.4</td>
<td>2</td>
<td>45</td>
</tr>
<tr>
<td>3%</td>
<td>30</td>
<td>3.9</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>3.6</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>4%</td>
<td>30</td>
<td>4.2</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>3.8</td>
<td>4</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 6 shows some numerical examples when the approach is applied to define the adjustment path once the country breaches the 3% reference value. To make it operational and for illustrative purposes only, it is assumed that a minimum annual adjustment of 0.2% of GDP in the deficit to GDP ratio is required. Assume the degree of incentive to have low debt to GDP ratio is fixed at 3%: a country with a debt to GDP ratio equals to 30% can run a deficit up to 3.9% of GDP and would have 5 years to bring the deficit below 3% of GDP. If the debt to GDP ratio is instead 40%, the maximum deficit is 3.6% of GDP and it will have only 3 years for the adjustment. The table shows also the debt to GDP ratio at the end of the adjustment path\(^{22}\): clearly, a high deficit implies that the debt to GDP ratio starts increasing under normal economic conditions. Thus, the debt to GDP ratio at the end of the period results higher.

This framework can help the Commission and the Council in defining deadlines for the correction of the excessive deficit. However, there should not be a mechanistic application of

---

\(^{22}\) Under the assumption of nominal growth equal to 4%.
the rule but judgment on potential growth and future liabilities need to be taken into account to avoid excessively long period with deficit above 3%.

The same approach can be followed for defining the medium term target, according to the country-specific debt ratio and a common degree of incentive, which has to be fixed when the rule is established and would remain a value endorsed by the rule. However, this approach increases the risk of breaching the 3% for low debt countries during economic slowdown due to the work of automatic stabilisers. Thus, a country-specific medium term objective can be pursued only if increased flexibility is allowed for low debt countries also in the adjustment path.

Assume the Council decides that the medium term objective should be equals to 0.5% of GDP when the debt to GDP ratio equals the 60% reference value. As shown in table 7, for a very low debt country (30% of GDP), the medium term objective varies between a deficit of 1.7% of GDP to a deficit of 1.1% of GDP, while a high debt country should usually run a surplus. Clearly, the higher the degree of incentive endorsed into the rule, the greater is the spread in the medium term targets. When the degree of incentive equals 4%, the difference between a low debt country and a high debt one is 2.8 percentage points of GDP. In any event, the medium term target remains well below the 3% reference value even if this approach increases the possibility that a low debt country breaches the 3% threshold during economic downturns.

**Table 7 - Link deficit and debt to define the medium-term objective**

<table>
<thead>
<tr>
<th>degree of incentive</th>
<th>debt to GDP ratio</th>
<th>medium-term objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>30</td>
<td>-1,1</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>-0,5</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>0,3</td>
</tr>
<tr>
<td>3%</td>
<td>30</td>
<td>-1,4</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>-0,5</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>0,7</td>
</tr>
<tr>
<td>4%</td>
<td>30</td>
<td>-1,7</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>-0,5</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>1,1</td>
</tr>
</tbody>
</table>
These are just examples on how debt and deficit can be used jointly in defining the medium term objective or the adjustment path once the deficit breaches the 3%. A more country-specific definition of the medium term objective could in principle be achieved with no changes in the Pact but rather the Code of Conduct can be used to define how the Commission and the Council will assess medium-term budgetary position. The Pact refers in fact to a “close to balance or in surplus” budgetary position\(^{23}\) which in practice can be any number between a surplus and a deficit of 3% of GDP.

Changes in the Pact are instead foreseen in the definition of the timing for correcting the excessive deficit if a more country-specific approach is envisaged. The timing is currently depicted in the Council Regulation n. 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure. The Regulation states the timing for the different steps foreseen in art. 104 of the Maastricht Treaty and this is not conditional to growth conditions (unless they are exceptional) or debt dynamic. A strict application of the steps foreseen in the SGP can lead to unsound application of the Treaty because it can ask for pro-cyclical adjustments or create incentive for the recourse to one-off operations in order to stick with deadlines. This can be unsound if debt sustainability is not put at risk or if the low rate of growth justifies a slower required debt reduction as discussed in the previous section.

The simplest way to do so is just to avoid any specification in the timing and only refer to the Maastricht Treaty provision. However, this opens to full discretion to the Council, putting at risk the enforcement of the rules. The SGP should then clarify the criteria to be used when setting up the deadlines for actions and corrections, and provide numerical guidelines for the Commission and the Council. Contrary to the current provision, it should avoid fixing similar deadlines for all countries. The Code of Conduct could better qualify the tools that the Commission and the Council should use in determining the adjustment path.

### 7 Long term sustainability of public finances

#### 7.1 The issue

The third issue after ensuring prudent debt levels for all countries within a reasonable length of time (section 5 and increasing the link between debt and deficit when assessing budgetary positions (section 6) is long term sustainability of public finances, which is a concern in EU countries due to ageing populations. The most recent debt extrapolations conducted by the

\(^{23}\) Art. 3.2 of CR 1466/97.
European Commission show that most countries will face risk of very high debt levels in the future. Risks are associated both to the medium term policies and the impact of ageing population on age-related expenditures. Table 8 presents the results under two scenarios: the so-called “programme” scenario assumes that all countries reach their medium term target (usually fixed in 2007 according to the latest round of stability and convergence programmes), while the “2003 budget” scenario assumes that the target is not reached and in particular that the cyclically adjusted budget remains the same during the programme period, equals to the one in 2003.

Table 8 - Projected evolution of debt levels up to 2050

<table>
<thead>
<tr>
<th></th>
<th>Programme scenario</th>
<th>2003 budget scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2010</td>
</tr>
<tr>
<td>BE</td>
<td>102.3</td>
<td>74.8</td>
</tr>
<tr>
<td>DK</td>
<td>42.7</td>
<td>24.6</td>
</tr>
<tr>
<td>DE</td>
<td>64.0</td>
<td>62.2</td>
</tr>
<tr>
<td>EL</td>
<td>101.7</td>
<td>75.1</td>
</tr>
<tr>
<td>ES</td>
<td>51.8</td>
<td>36.3</td>
</tr>
<tr>
<td>FR</td>
<td>61.4</td>
<td>56.0</td>
</tr>
<tr>
<td>IE</td>
<td>33.1</td>
<td>26.7</td>
</tr>
<tr>
<td>IT</td>
<td>106.0</td>
<td>86.6</td>
</tr>
<tr>
<td>LU</td>
<td>4.9</td>
<td>-0.9</td>
</tr>
<tr>
<td>NL</td>
<td>54.0</td>
<td>49.1</td>
</tr>
<tr>
<td>AT</td>
<td>66.4</td>
<td>53.9</td>
</tr>
<tr>
<td>PT</td>
<td>59.5</td>
<td>48.0</td>
</tr>
<tr>
<td>FI*</td>
<td>-14.6</td>
<td>-33.4</td>
</tr>
<tr>
<td>SE*</td>
<td>33.0</td>
<td>16.4</td>
</tr>
<tr>
<td>UK</td>
<td>39.3</td>
<td>42.5</td>
</tr>
</tbody>
</table>

* Adjusted gross debt.

Source: Commission services.

Findings from the results of the quantitative assessment can be summarised as following:

firstly, even assuming that all Member States achieve their medium term budgetary targets (programme scenario) there is a risk of unsustainable public finances (measured against the 60% of GDP reference value) emerging in at least one third of the EU Member States.

---

26 It is important to recall that the purpose of the debt extrapolation is to signal possible unbalances on the basis of current policies and projected age-related expenditure trends. As a consequence, the projected evolution of debt levels is not a forecast of possible or even likely outcomes and should not be taken at face value. Instead, the indicators are a tool to facilitate policy debate and at best provide an indication of the timing and scale of emerging budgetary challenges that could occur on the basis of “no policy change”. The European Commission builds its assessment of long term sustainability using additional qualitative information, to better qualify the quantitative results.
Secondly, debt developments for most Member States follow a U-shaped pattern. In the coming twenty or twenty-five years, debt levels are projected to decrease due to the effect of maintaining balanced budget positions: however, this trend would start to reverse once the budgetary impact of ageing starts to take hold, with the largest increase in most countries expected between 2030 and 2050. Given the projected increase of debt levels in most of the Member States, it is important to use this window of opportunity and to contain the emerging risks of increasing age-related expenditures and debt levels. Thirdly, the risk of unsustainable public finances increases considerably if the Member States do not achieve the SGP goal of budget positions of ‘close to balance or in surplus’ (2003 budgetary position scenario). This issue is especially relevant for the six euro area countries with highest underlying cyclically adjusted deficits in 2003, i.e. Germany, Greece, France, Italy, Netherlands and Portugal.

7.2 Changes in the rules

The assessment of long-term sustainability of public finances in the context of the Stability and Growth Pact is now a regular feature in the EU budgetary surveillance process (Montanino, 2004). This assessment did not require changes in the Treaty, the Pact or in the Code of Conduct and it has been successful in underpinning a major policy challenge for EU countries as long term sustainability. It required an agreed methodology among Member States and the Commission and some basic information and assumptions on long term budgetary trends.

Moving towards a Pact which explicitly focuses on long term debt sustainability as proposed for instance by Pisany-Ferry (2003) with a “Sustainability Pact” or Buiter and Grafe (2003) through the “Permanent Balance Rule”, is problematic. The assessment of current policies and the possibility to impose sanctions will rely on future liabilities and future economic trends, which are uncertain by definition. On the contrary, the assessment of long term sustainability as conducted now by the European Commission is an additional piece of information but it does not substitute the framework based on numerical rules attached to actual debt and deficit levels. Improvements can be achieved within this framework simply through changes of the Code of Conduct, which could make compulsory for EU Member States the submission of long term budgetary trends and information on the budgetary impact of structural reforms.
8 CONCLUSIONS

The EU fiscal framework, and in particular the Stability and Growth Pact, has been under attack during the last two years. It has been argued that it did not deliver properly during a period of slow growth and that it focussed too much on short term deficit conditions instead of looking at the role of public finances to enhance economic growth.

Despite the criticisms, the rules performed rather well in avoiding over-excessive deficit and at the same time they did not oblige countries to perform strong pro-cyclical policies during slowdowns. However, they miss sometimes the main reason why the fiscal rules exist, notably to ensure each other that prudent fiscal policies do not put at risk macroeconomic stability of the whole area and possibly that they enhance economic growth with beneficial effects for neighbourhood countries.

While major changes in the Maastricht Treaty have been recently discussed, the paper have argued that to increase the economic rationale of the framework is necessary to better incorporate debt analysis and in order to do so, neither the Treaty nor the Protocol should change but rather the Stability and Growth Pact. It is becoming crucial to ensure all EU countries to have a prudent debt level in order to prepare for ageing population. This means that the EU framework should address more directly the issue of the rate of reduction of debt for very high debt countries. Debt levels and trends should then serve the purpose to define country-specific deadlines for the correction of the excessive deficit (above 3%). Also, the medium-term objective of close to balance or in surplus should become more country-specific, to take into account very different debt levels across the 25 EU countries. These amendments of the current approach would increase the incentive to run down debt during good times, in order to have more room of manoeuvre during slowdowns. Finally, the assessment of focus on long-term sustainability of public finances should continue and eventually become more prominent.

In most cases, the proposed increase focus on public debt can be achieved through technical agreements, which should be crucially complemented by political commitments. Specific changes in the SGP are required to define more country-specific deadlines once a country breaches the 3% threshold, incorporating in the analysis debt levels and trends.
REFERENCES


EEAG (2003), *Report*.


