

# EUROPEAN ECONOMY

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**Public finances in EMU**  
**2007**



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**European Commission**

# **EUROPEAN ECONOMY**

**Directorate-General for Economic and Financial Affairs**

**2007**

**No 3**



# **Public finances in EMU — 2007**

## Abbreviations and symbols used

### Member States

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
EUR-13	European Union Member States having adopted the single currency by 1 January 2007 (BE, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, SI, FI), i.e. countries participating in the economic and monetary union
EU-25	European Union, 25 Member States (excluding BG and RO)
EU-27	European Union, 27 Member States
EU-15	European Union, 15 Member States before 1 May 2004
EU-10	European Union, 10 Member States that joined the EU on 1 May 2004 (CZ, EE, CY, LV, LT, HU, MT, PL, SI, SK)

## **Currencies**

EUR	euro
ECU	European currency unit
BGL	Bulgarian lev
CYP	Cypriot pound
CZK	Czech koruna
DKK	Danish krone
EEK	Estonian kroon
GBP	pound sterling
HUF	Hungarian forint
LTL	Lithuanian litas
LVL	Latvian lats
MTL	Maltese lira
PLN	Polish zloty
RON	Romanian leu
SEK	Swedish krona
SKK	Slovak koruna
CAD	Canadian dollar
CHF	Swiss franc
JPY	Japanese yen
RUB	Russian rouble
USD	US dollar

## **Other**

ECB	European Central Bank
EFC	The Economic Financial Committee is a Council committee set up by Article 114 of the Treaty within the framework of multilateral surveillance under Article 99 of the Treaty which examines, together with the Commission, the budgetary targets presented by the Member States in the stability and convergence programmes.
EPC	The Economic Policy Committee is a committee set up by Council Decision 74/122/EEC of 18 February 1974, revised in 2003 (2003/475/EC). The aim of the EPC is to contribute to the preparation of the work of the Council (Ecofin) in coordinating the economic policies of the Member States and the Community, and to provide advice to the Commission and the Council. The focus is on structural policies for improving growth potential and employment in the Community in line with the Lisbon strategy.
SCPs	Stability and convergence programmes





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# Summary and main conclusions

## Recent budgetary developments

Public finances in the euro area and the EU posted a significant improvement in 2006. In the group of 13 countries adopting the single currency the headline deficit declined to 1.6 % of GDP, down from 2.5 % of GDP in 2005. Progress was slightly lower but still significant in the EU as a whole, including the two new Member States Bulgaria and Romania. Taken at face value the improvement of the headline deficit was matched by an identical change in the budget net of cyclical factors and one-off and other temporary measures suggesting that the improvement was completely structural. However, the estimates of the structural deficit are likely to be affected by specific features of the prevailing economic and fiscal conditions. In 2006, the improvement of government budget balances took place against the background of a broad-based economic recovery over the course of which the inflow of tax revenues went clearly beyond normal rates. Since the buoyancy of tax revenues may reflect both temporary and permanent elements, the verdict is still out on the actual determinants of the estimated improvement of the structural budget balance and an additional degree of caution is warranted in reading the available estimates.

The projections for 2007 and 2008 remain favourable. The euro area deficit is expected to drop to 1 % of GDP this year and, based on the customary no-policy-change assumption, to post a further slight decline the year after. A similar though slightly flatter profile is projected in the EU as a whole. Taking into account that economic conditions in 2007 are forecast to remain favourable the estimated budgetary adjustment in structural terms of 0.3 % of GDP in the euro area and of 0.2 % of GDP in the EU as a whole falls short of the provisions of the reformed Stability and Growth Pact which asks Member States to do more than the 0.5 % of GDP benchmark during economic 'good times'.

Since spring 2006, the Commission and the Council took action on eight Member States concerning the excessive deficit procedure. The Commission and the Council considered that Cyprus, France, Germany, Greece and Malta

had corrected their excessive deficits. The excessive deficit procedure for Cyprus was abrogated in July 2006, for France in January 2007, and for Germany, Greece and Malta in May 2007, respectively. Furthermore, the Commission and the Council considered that Poland had not respected the recommendations formulated in line with the recommendation under Article 104(7) of the Treaty. As Poland is a Member State with derogation, the Council issued another recommendation based on Article 104(7) in February 2007. Similarly, in May 2007 the Commission recommended the Council to decide that the Czech Republic had not taken adequate actions in response to the Council recommendation under Article 104(7) of the Treaty and to address a new recommendation under the same article. Having already decided that Hungary had not respected its recommendations in 2005, the Council addressed the third recommendation under Article 104(7) to Hungary in October 2006. Currently, seven EU countries are still subject to an excessive deficit procedure: two euro area Member States — Italy and Portugal — the United Kingdom, and four new Member States — the Czech Republic, Hungary, Poland and Slovakia. Based on the Commission services' spring 2007 forecast and the April 2007 notification by the government, Romania plans a deficit of slightly above 3 % in 2007 and 2008. Developments are being monitored and the Commission will take appropriate measures in the coming weeks.

In the context of the EU budgetary surveillance, the Commission assessed the 2006/07 updates of the stability and convergence programmes submitted by the 27 Member States and proposed Council opinions on these documents. The picture emerging from the Commission assessment and Council opinion highlights two distinct trends. The first and encouraging trend relates to the budgetary plans of countries currently in excessive deficit. If they are fully implemented all but two countries currently in excessive deficit will have a budgetary position breaching the 3 % of GDP threshold of the Treaty by 2008. The second and less encouraging trend refers to Member States where the deficit is below the 3 % of GDP threshold. They do not seem to fully seize the opportunity pro-

vided by the favourable economic outlook. The overall adjustment effort targeted in 2006–09 is somewhat back-loaded with larger adjustments planned for the outer years. In 2007, countries already at the medium-term budgetary objective are estimated to loosen their fiscal stance by on average  $\frac{3}{4}$  of a percentage point. In the same year, while planning a fiscal adjustment, Member States which are not yet at the medium-term objective are on average estimated to target an improvement in the structural budget balance of less than the 0.5 % of GDP benchmark indicated by the reformed Stability and Growth Pact.

In the coming decades, ageing populations are projected to have a significant budgetary impact on public finances in the EU challenging the long-term sustainability of public finances. The assessment of the 2006/07 updates of the stability and convergence programmes coupled with the common long-term budgetary projections show that the fiscal efforts made by a number of Member States are bearing fruit; the improved structural budgetary position in 2006 in the EU as a whole contributes to a reduction in the sustainability gap. Nevertheless, a significant sustainability gap remains in the euro area and the EU structural budget balance would have to be permanently improved by 3 % of GDP so as to ensure the sustainability of public finances in the long term. For a large majority of countries, achieving the budgetary targets set down in the 2006/07 updates of the stability and convergence programmes would significantly reduce yet not close the sustainability gap. Hence, to ensure progress towards more sustainable public finances, structural reform measures, notably in the field of pensions and healthcare are required. As regards the degree of risks to public finance sustainability by country, the assessment of the 2006/07 updates of the stability and convergence programmes confirms the findings of the previous year. Six Member States (the Czech Republic, Greece, Cyprus, Hungary, Portugal and Slovenia), face a high risk with regard to the long-term sustainability of public finances in view of the budgetary impact of ageing populations. Ten Member States (Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, Malta, Slovakia and the United Kingdom) are at medium risk and another nine countries (Denmark, Estonia, Latvia, Lithuania, the Netherlands, Austria, Poland, Finland and Sweden) are at low risk.

### **Evolving budgetary surveillance**

Following years in which budgetary surveillance largely focused attention on the correction of excessive deficits, public finances in the EU are clearly improving. On the back of both a broad-based economic recovery and adjustments of the underlying budgetary positions, the upward

trend of the government debt ratio has been reversed and, based on current plans, most excessive deficits are going to be corrected in the coming years.

In spite of these encouraging developments, recent experience also highlights a number of issues that need to be addressed in order to secure current accomplishments and in particular to make sure that Member States make rapid progress towards achieving sustainable budgetary positions in order to be prepared for the budgetary impact of ageing populations. In a number of countries the decline of the structural budget deficit recorded in 2006 significantly benefited from better-than-expected tax revenues, which were partly used to offset slippages on the expenditure side of the budget. Hence, revenue windfalls have not been fully used for budgetary adjustment; a part has been spent. A similar pattern is projected to prevail in 2007, when as mentioned before the projected improvement in the structural budget balance for the euro area and the EU as a whole falls short of the benchmark of 0.5 % of GDP required by the reformed Stability and Growth Pact.

With a view to avoiding mistakes of the past, the challenge ahead is to ensure an effective functioning of the preventive arm of the Stability and Growth Pact. As regards coordination, one important element consists in discussing and assessing at an early stage national fiscal policy intentions at the EU level so as to possibly shape the national debate before budget plans are fixed. One way to make progress towards this objective is to strengthen the mid-term budgetary review along the lines indicated by the Eurogroup in November 2006. The idea is to transform the mid-term budgetary review, which takes place each year after the presentation of the updated stability and convergence programmes ahead of the next round of budgetary planning, into a more effective strategic policy debate. The main innovations of the ongoing revamp refer to the timing of the procedure and the level of commitment by the Member States. The review is redesigned to better fit the national budgetary calendars and Member States are invited to forward any information on their main plans for fiscal policy in the coming year. With a view to strengthening the results and the impact of the review, the Eurogroup also plans to endorse policy conclusions which should serve as guidance for the national fiscal policymaking.

A second major avenue to be pursued in the future consists in strengthening national budgetary procedures and to better link them to the EU budgetary surveillance framework. The focus on budgetary procedures complements the work on national fiscal rules and institutions which was at the centre of last year's Public Finance Report and which echoed the



Council report of March 2005 underpinning the reformed Stability and Growth Pact stating that ‘domestic governance arrangements should complement the EU framework’. Based on past experience, the failure to achieve medium-term budgetary objectives can also be related to weak arrangements ensuring the effective preparation, legislation and the implementation of budgetary targets that go beyond the annual budget cycle. The range of national practices is very broad. In some countries, developed national medium-term frameworks were introduced in the past and are working well; in others the ‘only’ instrument placing fiscal policy into a multiannual context is the stability and convergence programme, where the latter is not necessarily well integrated with national procedures. In a bid to highlight the importance of the quality of budgetary procedures for the functioning of the preventive arm of the Pact this year’s report attempts a first panoramic overview of the prevailing landscape of budgetary procedures in the EU Member States. It also touches upon some specific elements such as medium-term budgetary frameworks showing that well-defined arrangements embedding budgetary planning in a multiannual context are a promising way forward to ensure compliance with medium-term budgetary targets.

One of the distinctive features of the reformed Stability and Growth Pact is its enhanced economic rationale. In the preventive arm of the Pact this is reflected in requirements for fiscal adjustment that explicitly take into account economic conditions as well as other factors. In the past two years, work was carried out to find operational definitions of a number of concepts such as economic ‘good times’ and one-off measures that play a key role in the EU budgetary surveillance. On top of this, the current juncture underlines the scope for improving the current toolset for measuring the underlying fiscal position of Member States. In many EU Member States the present economic recovery goes along with higher-than-expected revenue inflows and calls for improved indicators that allow for a clearer view about which part of the budget balances can be considered purely temporary and whether higher tax-to-GDP ratios are purely temporary or more permanent. The structural budget balance, i.e. the budget balance net of cyclical factors and one-off and other temporary measures, which is the main indicator to assess the underlying budgetary position in the EU budgetary framework, has proved its usefulness over the years but needs to be upgraded or complemented to safeguard its effectiveness also in specific economic circumstances. Two interlinked issues are of particular importance: the appraisal of cyclical conditions in real time and the assessment of tax revenues. Work is ongoing on both issues and possible ways to overcome current limitations on both counts have been

identified. The next step consists in translating current findings and insights in practical improvements of the current toolset used in the EU budgetary surveillance.

The benefits of sound fiscal policy could be better communicated if fiscal surveillance was placed into a broader economic perspective, including the context of the renewed Lisbon strategy for growth and jobs. The assessment of fiscal policy developments could notably take greater account of the overall macroeconomic situation in the Member States. Particular attention could be given to internal and external imbalances which may mask potential risks to sustainable economic development and in turn to sustainable public finances.

Giving more attention in the surveillance of budgetary positions to debt and long-term sustainability of public finances was one of the main areas for improvement identified in the 2005 Council report underpinning the reform of the Stability and Growth Pact. Since then a number of important steps have been taken. The work on common long-term budgetary projections carried out jointly by the Member States and the Commission services and, based on those projections, the first sustainability report adopted by the Commission at the end of 2006 are cases in point. The next major update of the common long-term projections and in turn of the sustainability report is planned for 2009. In that context, a number of potential improvements are envisaged so as to provide further insight in the budgetary impact of ageing.

## **Analytical sections**

### **How to stick to medium-term budgetary plans**

One of the key goals of the Stability and Growth Pact is to place fiscal policy into a multiannual framework by requiring Member States to aim for a sound budgetary position in the medium term. So far the track record of a number of Member States in achieving medium-term targets has been mixed. In many cases, medium-term plans rather than acting as a point of reference across years turned into moving targets. Slippages from short-term objectives were followed by a revision of the entire adjustment path, in particular of the year in which the medium-term objective was expected to be achieved. The issue of why Member States conspicuously missed their medium-term objectives in the past has been addressed from many different angles, especially ahead of the reform of the Stability and Growth Pact in March 2005. The debate is gaining renewed importance because, as mentioned before, the focus is shifting from the corrective to the preventive arm of the Pact. After the correction of most excessive deficits,

the main challenge for fiscal policy in the EU now consists in ensuring a rapid and consistent progress towards sound budgetary positions in the medium term.

Part III of this report focuses on the question of why some EU Member States were more successful in achieving medium-term budgetary targets than others. The main aim is to identify the elements in the set up of national fiscal policymaking that allow Member States to stick to a predefined course of action over a number of years. Particular attention is given to the role played by well-defined medium-term budgetary frameworks. The basis of the analysis is a comprehensive review of past experience, which highlights the reasons for the difficulties to respect medium-term budgetary targets. The comparison of plans versus outcomes points to a number of revealing patterns. The typical adjustment path laid out in the stability and convergence programmes was expenditure based on top of an improvement of the budget balance which aimed at reducing the revenue-to-GDP ratio. In about two thirds of the cases, the planned improvement in the budget balance was missed mostly because of expenditure overruns, and to a lesser extent due to negative growth surprises. As regards the factors explaining the size of the expenditure overruns the main results of the analysis refer to the institutions for medium-term budgetary planning. In particular, the capacity to achieve multiannual expenditure targets turns out to be systematically linked to the quality of such institutions.

In the light of these findings the implementation or strengthening of adequate medium-term budgetary frameworks in the EU Member States seems to be a promising avenue towards a better compliance with medium-term budgetary targets. As a sort of guidance, the key conditions for the effectiveness of medium-term budgetary framework are discussed, notably cautious macroeconomic assumptions and the credibility of budgetary objectives.

### **Lessons from successful fiscal consolidations**

The correction of strained fiscal positions is a recurring feature of public finances, where, by experience, some types of adjustment give rise to a more lasting correction than others. The second analytical section of this report presents the results of a comprehensive review of the episode of fiscal consolidation carried out in the EU since 1970. The main aim of the review is to re-examine the factors that lead to a more lasting improvement of the underlying budgetary position.

The findings established in the literature have so far been relatively clear: expenditure-based adjustments, in particular those involving cuts in the government wage bill, were

found to be more likely to be successful than corrections relying on higher revenues or cuts in investment expenditure. Our analysis substantiates this 'received wisdom' for the entire sample period 1970 and 2006, but points to some qualifications as regards the 1990s and beyond. In the latter period, cutting primary expenditure is still found to have had a positive impact on the likelihood of success however the link has grown weaker. Successful corrections were increasingly characterised by across-the-board savings of primary expenditure while unsuccessful episodes became somewhat more expenditure based than in the 1970s and 1980s. As a result, the likelihood of success was somewhat less determined by the composition of adjustment *per se*. Other factors that helped safeguard expenditure cuts or revenue increases are likely to have gained importance.

Two prominent examples of such other factors are fiscal governance and structural reforms. Starting with fiscal governance, our analysis indicates that the likelihood of success significantly increases with the strength and coverage of fiscal rules; the same holds for the effectiveness of budgetary procedures. While the exact mechanisms still need to be determined, the link between fiscal governance and lasting fiscal corrections is likely to work via at least two different channels. Firstly, comprehensive and strong fiscal rules favour discipline-oriented budgets. They provide incentives to draw up adjustments that stand a larger chance to be sustainable, not least in view of the possible costs associated with the risk of running afoul of the rules. Secondly, effective budgetary procedures favour good planning, a balanced composition and an effective implementation of consolidation measures as opposed to a situation in which measures are planned over a short period of time and in an uncoordinated way.

The EU experience also supports the conclusion that the success of fiscal consolidation increases significantly if they are coupled with structural reforms. We find a significant link for different types of reforms including those focusing on product and labour markets. This result corroborates potential complementarities between the Stability and Growth Pact and the Lisbon process for growth and jobs. Our analysis does not detail the precise channels through which structural reforms help fiscal consolidation. Further work is needed to clarify the relationship. However, the favourable impact of structural reforms on the success rate of fiscal consolidation, especially of labour market reforms, does not come as a complete surprise. The empirical literature on fiscal consolidation includes many references to potentially beneficial feedback mechanisms between reforms that contribute to wage moderation and fiscal adjustment.

# Part I

## Current developments and prospects

# Summary

In 2006, the budgetary position in the euro area and the EU improved significantly compared to the previous year. The headline deficit declined to 1.6 % of GDP in the euro area, down from 2.5 % of GDP, and to 1.7 % of GDP in the EU as a whole, down from 2.4 % of GDP. The budgetary improvement took place against better-than-expected economic growth performance and higher-than-expected revenues.

Taken at face value, the improvement in the headline deficit was matched by an equal improvement in the budget balance net of cyclical factors and one-off and other temporary measures suggesting that the improvement was completely structural.

However, the estimates of the structural deficit are likely to be affected by the exceptionally high tax content of economic activity. In 2006, the current tax burden posted the strongest annual increase in 10 years in both the euro area and the EU. Since the buoyancy of tax revenues may reflect both permanent and temporary factors, the verdict is still out on the actual determinants of the estimated improvement of the structural budget balance in 2006.

In the euro area, the largest improvements in both, nominal and structural terms were recorded in Germany, Greece and Portugal. The headline deficit increased in Italy, mainly on the back of temporary effects. Net of one-offs the deficit remains on a downward path. Outside the euro area three out of six excessive deficit countries, notably the Czech Republic, Malta and the UK brought the budget deficits below the 3 % of GDP reference value of the Treaty. In the case of the Czech Republic the decline is forecast to be only temporary.

According to the Commission services' spring 2007 forecast, the deficit of the euro area and EU is expected to decline further in 2007 and, based on the no-policy-change assumption, also in 2008. Compared to 2006, the composition of adjustment is projected to shift from the revenue to the expenditure side of the budget. In 2007,

the estimated improvement of the structural balance falls short of the 0.5 % of GDP benchmark of the reformed SGP. As regards the countries in excessive deficit, Italy and Slovakia are forecast to bring the headline deficit below the 3 % of GDP reference value in 2007. In the same year, the nominal deficit is expected to return above the 3 % of GDP reference value in the Czech Republic, and to stay above the reference value in 2008, unless further measures are taken. The deficit is forecast to decline but to stay above 3 % of GDP in Hungary and Poland. Additional measures will be needed to correct the excessive deficit in Portugal by 2008.

Among the euro-area countries with relatively high structural deficits, improvements are expected in Greece, France and Portugal over the forecast period. Outside the euro area, most of the countries are expected to see a worsening or no changes in the structural balance. The most significant worsening is expected in the Czech Republic and Romania. The countries where the structural balance is expected to improve over the forecast period are Cyprus, Latvia, Lithuania, Hungary, Poland and Slovakia.

In 2006, the debt-to-GDP ratio in the euro area and the EU returned to a declining path. Further reductions are expected in 2007 and 2008 on the back of sustained economic growth and projected improvement in the primary budget balance. The debt ratio of the euro area is expected to fall from 69.0 % of GDP in 2006 to 65.0 % of GDP in 2008. In the EU as a whole, the debt-to-GDP ratio is expected to fall from 61.7 % of GDP in 2006 to 58.3 % of GDP in 2008. As regards the high debt countries, the GDP debt ratio is expected to decline but to remain well above 60 % of GDP in Belgium, Greece, and in Italy. As of 2008, Italy is projected to be the only Member State with a debt-to-GDP ratio above 100 % of GDP. In Austria, the debt ratio is forecast to fall below the 60 % of GDP reference in 2008.

Since spring 2006, the Commission and the Council took action on eight Member States concerning the excessive

deficit procedure (EDP). The Commission and the Council considered that Cyprus, France, Germany, Greece and Malta had corrected their excessive deficits. The excessive deficit procedure for Cyprus was abrogated in July 2006, for France in January 2007, and for Germany, Greece and Malta in June 2007, respectively. Furthermore, the Commission and the Council considered that Poland had not respected the recommendations formulated in line with the recommendation under Article 104(7) and issued another recommendation based on the same article of the Treaty in February 2007. Similarly, in May 2007 the Commission recommended the Council to decide that the Czech Republic had not taken adequate actions in response to the Council recommendation under Article 104(7) of the Treaty and to address a new recommendation under the same article. Having already decided that Hungary had not respected its recommendations in 2005, the Council addressed the third recommendation based on Article 104(7) to Hungary in October 2006. Currently, seven EU countries are subject to an excessive deficit procedure: two euro area Member States — Italy and Portugal — the United Kingdom, and four recently acceded Member States — the Czech Republic, Hungary, Poland and Slovakia. Following information that Romania is planning a deficit of more than 3 % of GDP in 2007 and beyond, the Commission will take the appropriate steps in the coming weeks.

In the context of the EU budgetary surveillance, the Commission assessed the 2006/07 updates of the stability and convergence programmes submitted by the 27 Member States and proposed Council opinions on these documents. The picture emerging from the Commission assessment and Council opinion highlights two distinct trends. The first and encouraging trend relates to the budgetary plans of countries the deficit of which still exceeds the 3 % of GDP threshold of the Treaty. If budgetary targets are fully implemented, all but the Czech Republic and Hungary will have corrected excessive deficit by 2008.

The second and less encouraging trend refers to countries with deficits below the 3 % of GDP threshold, which do not seem to seize the opportunity provided by the currently favourable economic outlook. The overall adjustment effort targeted in 2006–09 is somewhat back-loaded with larger adjustments planned in the outer years. In 2007, countries already at the medium-term budgetary objective are projected to loosen their fiscal stance by on average  $\frac{3}{4}$  of a percentage point. In the same year, while planning a fiscal adjustment, Member States which are not yet at the medium-term budgetary objective are on average estimated to target an improvement in the structural

budget balance of less than the 0.5 % of GDP benchmark indicated by the reformed Stability and Growth Pact.

Compared to the previous rounds of programme updates, according to the 2006/07 vintage, most Member States plan faster reduction in government debt-to-GDP ratio over the programme period. A number of countries plan their debt ratios to decline below the 60 % of GDP reference value over the programme period: in the euro area, France and Austria and, outside the euro area, Cyprus and Malta. In Belgium, Germany, Greece, Italy, Hungary and Portugal the debt ratios are expected to stay above the 60 % of GDP reference value. In Hungary, the debt ratio is planned to be above its current level at the end of the programme period.

In the coming decades, ageing populations will have a significant budgetary impact on public finances in the EU, challenging the long-term sustainability of public finances. The assessment of the 2006/07 updates of the stability and convergence programmes coupled with the long-term budgetary projections produced jointly by the Commission and the Economic Policy Committee of the Council show that the fiscal efforts made by a number of Member States are bearing fruit. The improved structural budgetary position in 2006 in the EU as a whole contributes to a reduction in the sustainability gap. Nevertheless, a significant sustainability gap remains. In the euro area and the EU the structural budget balance would have to be permanently improved by 3 % of GDP to ensure the sustainability of public finances in the long term. For a large majority of countries, achieving the budgetary targets set in the 2006/07 updates of the stability and convergence programmes would significantly reduce but not close the sustainability gap. Hence, to ensure progress towards more sustainable public finances, structural reform measures, notably in the field of pensions and healthcare are required. As regards the degree of risks to public finance sustainability by country, the assessment of the 2006/07 updates of the stability and convergence programmes confirms the findings of the previous year. Six Member States (the Czech Republic, Greece, Cyprus, Hungary, Portugal and Slovenia), face a high risk with regard to the long-term sustainability of public finances in view of the budgetary impact of ageing populations. Ten Member States (Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, Malta, Slovakia and the UK) are at medium risk and another nine countries (Denmark, Estonia, Latvia, Lithuania, the Netherlands, Austria, Poland, Finland and Sweden) are at low risk.

# 1. Budgetary developments in the euro area and the EU Member States

## 1.1. Short-term developments and prospects for the budget balance and public debt

In 2006, the budgetary position of the euro area improved for the third year running, recording a particularly significant progress compared to 2005. The nominal deficit reached 1.6 % of GDP, down from 2.5 % of GDP in 2005. A slightly more moderate, but still sizeable improvement took place in the EU as a whole, where the headline deficit declined by 0.7 percentage point reaching 1.7 % of GDP in 2006.

In both the euro area and the EU the improvement in the headline deficit was matched by an equal improvement of the structural budget balance, i.e. the budget balance net of cyclical factors and one-off and other temporary measures. Taken at face value this result would seem to suggest that the improvement in the headline deficit was fully structural or permanent. However, at the current juncture the estimates of the structural budget balance are likely to be affected by the exceptional buoyancy of tax revenues. In 2006, the current tax burden measuring the incidence of current taxes on GDP was 0.8 percentage point higher than in the year before in both the euro area and the EU, posting the strongest annual increase in 10 years. The increase in the tax burden in 2006 surpassed the readings observed at the end of the 1990s when tax revenues benefited from a number of positive developments such as strong consumption growth and an asset price boom. In the light of this, and taking into account that few countries implemented discretionary revenue increasing measures in the 2006 budget, it is likely that at least part of the estimated structural improvement is temporary.

The decline of the headline deficit in the euro area in 2006 reflects a broad-based trend across countries. All Member States recorded a more or less significant improvement in the budget balance. Starting with countries where the

budget balance is in the red, progress was particularly sizeable in Greece, where the deficit fell by 2.9 percentage points including 0.6 percentage point of one-off measures, as well as in Portugal and Germany. Greece and Germany succeeded in bringing the deficit below the 3 % of GDP reference value of the Treaty in 2006 and joined France which had achieved it the year before.

In Belgium, Luxembourg and the Netherlands, the deficit turned into a small surplus. In the case of Belgium this was achieved thanks to sizeable temporary measures. The only euro-area country with a government deficit where the budgetary situation worsened is Italy. However, excluding the impact of deficit-increasing one-offs worth around 1.2 percentage points of GDP the deficit remained on a downward path.

The three euro-area members with a surplus in 2005, notably Ireland, Spain and Finland, managed to further improve the budget position in 2006.

Favourable growth conditions coupled with buoyant tax revenues had a positive impact also outside the euro area. Relative to 2005, the budgetary position weakened in just four out of 14 Member States that did not adopt the single currency. The most serious deterioration was recorded in Hungary where the deficit widened from 7.8 % of GDP in 2005 to 9.2 % of GDP in 2006. In Slovakia, the deficit returned above the 3 % of GDP threshold of the Treaty in 2006 after it had edged below the threshold the year before. By contrast, there are three non-euro-area countries, the Czech Republic, Malta and the United Kingdom, where the budget deficit dropped below the 3 % of GDP reference value. In the case of the Czech Republic the progress is expected to be temporary.

Looking ahead to 2007 and 2008, public finance developments in the euro area and the EU are expected to fall in a period of marginally slowing but still sustained economic growth. The Commission services' spring 2007

forecast projects real GDP to expand by 2.6 % in 2007, compared to 2.7 % in 2006, and to stage a further increase of 2.5 % in 2008.

Against this favourable backdrop, the public finance situation in the euro area is expected to further improve this year and the next, yet at a slower pace compared to 2006. The aggregate deficit of the 13 Member States adopting the single currency is expected to reach 1.0 % of GDP in 2007, 0.6 percentage point lower than the year before. Based on the customary no-policy-change assumption a further rather marginal improvement to 0.8 % of GDP is projected in 2008. Broadly the same profile is projected for the EU as a whole. The deficit is forecast to decline to 1.2 % of GDP in 2007, from 2.4 % in 2006, and to 1.0 % of GDP in 2008.

In structural terms, i.e. net of cyclical factors and one-off and other temporary measures, the projected improvement in both the euro area and the EU in 2007 is somewhat lower than that of the headline figure in view of the expected narrowing of the output gap. In particular, the structural balance is estimated to improve by only 0.3 % of GDP in the euro area and by 0.2 % of GDP in the EU as a whole. This is less than the 0.5 % of GDP benchmark required by the reformed Stability and Growth Pact.

As regards individual euro-area countries, Italy is forecast to reduce the headline deficit below the 3 % of GDP reference value in 2007, whereas further measures are required to achieve the same results by 2008 in Portugal.

A relatively mixed pattern is forecast for the other euro-area countries. Further significant progress is expected in Germany where the deficit is likely to decline to 0.6 % of GDP in 2007, and, at unchanged policies, to 0.3 % of GDP in 2008. A significantly flatter downward trend is projected in France. The budgetary position is expected to weaken somewhat in Belgium, where the balance is forecast to move back into the red, as well as in Ireland, Spain and Finland which are forecast to reduce their budgetary surplus.

The group of euro-area countries that have already achieved their medium-term budgetary objective (MTO), notably Ireland, Spain, Luxembourg, the Netherlands and Finland, is expected to remain unchanged over the period covered by the Commission services spring 2007 forecast.

Among the Member States outside the euro area, the nominal deficit is projected to stay or return above the 3 % of GDP reference value in Hungary, the Czech Republic and Poland. The budget deficit in Hungary is projected to improve over the forecast horizon but to stay well above the 3 % of GDP threshold by the end of 2008. Similarly, in Poland, the deficit is forecast to ease from 3.9 % of GDP in 2006 to 3.3 % of GDP in 2008. Following an improvement in 2006, the deficit in the Czech Republic is expected to return above the 3 % of GDP reference value throughout the forecast period. Slovakia is the only non-euro-area country with an excessive deficit where the budget balance is expected to drop just below the 3 % of GDP reference value in 2007 and to essen-

*Table I.1.1*

**Euro area — The general government budget balance (% of GDP)**

	2004	2005	2006	2007	2008
Total revenue (1)	44.8	45.1	45.7	45.5	45.4
Total expenditure (2)	47.6	47.6	47.3	46.5	46.2
Actual balance (3) = (1) – (2)	-2.8	-2.5	-1.6	-1.0	-0.8
Interest (4)	3.1	2.9	2.9	2.9	2.8
Primary balance (5) = (3) + (4)	0.3	0.5	1.3	1.9	2.0
One-offs (6)	0.3	0.2	-0.1	0.0	0.0
Cyclically adjusted balance (7)	-2.4	-1.8	-1.2	-0.8	-0.7
Cyclically adj. prim. balance = (7) + (4)	0.7	1.1	1.7	2.1	2.2
Structural budget balance = (7) – (6)	-2.8	-2.0	-1.1	-0.8	-0.7
Change in actual balance:	0.2	0.3	0.9	0.6	0.2
— Cycle	-0.1	-0.3	0.3	0.2	0.1
— Interest	0.2	0.2	0.0	0.0	0.1
— Cycl. adj. prim. balance	0.1	0.4	0.6	0.4	0.1
— One-offs	-0.1	-0.1	-0.3	0.1	0.0
— Structural budget balance	0.3	0.8	0.9	0.3	0.1

NB: Differences between totals and sum of individual items are due to rounding.

Source: Commission services' spring 2007 forecast.

tially stabilise, at unchanged policies, in 2008. Based on the information available at the cut-off date of this report, Romania is forecast to breach the 3 % of GDP deficit threshold in 2007 and 2008.

Among the remaining Member States outside the euro area, relatively comfortable surpluses are expected to be maintained throughout the forecast period in Bulgaria, Denmark, Estonia, Latvia and Sweden. As regards the position vis-à-vis the MTOs the Commission services' spring 2007 forecast implies no change in the number of non-euro-area countries in 2007.

Bulgaria, Denmark, Latvia, Lithuania and Sweden are all expected to keep their budgetary positions in line with or above the MTO, in some cases despite a projected

deterioration in the structural balance. Unless further measures are taken, the compliance with the MTOs is likely to remain unchanged also in 2008.

Turning to government debt, in the euro area the ratio with respect to GDP declined to 69.0 % in 2006. According to the Commission services' spring 2007 forecasts, the debt ratio is projected to decline to 65.0 % of GDP in 2008. Primary surpluses coupled with a positive contribution from interest expenditure and economic growth are expected to more than offset the effect of debt-increasing stock-flow adjustment.

In the EU as a whole, the debt ratio stood at 61.7 % of GDP in 2006 and is projected to decline to 58.3 % of

Table I.1.2

**Budget balances in EU Member States (% of GDP)**

	Budget balance				Structural balance				Structural primary balance			
	2005	2006	2007	2008	2005	2006	2007	2008	2005	2006	2007	2008
BE	-2.3	0.2	-0.1	-0.2	0.2	-0.4	-0.1	0.1	4.5	3.7	3.8	3.9
DE	-3.2	-1.7	-0.6	-0.3	-2.4	-1.5	-0.8	-0.7	0.3	1.3	2.0	2.0
IE	1.0	2.9	1.5	1.0	0.8	3.0	1.8	1.6	1.9	4.0	2.9	2.6
EL	-5.5	-2.6	-2.4	-2.7	-6.1	-3.9	-3.6	-3.4	-1.2	0.6	0.8	0.8
ES	1.1	1.8	1.4	1.2	1.6	2.3	1.8	1.7	3.4	3.9	3.4	3.2
FR	-3.0	-2.5	-2.4	-1.9	-3.2	-2.3	-2.1	-1.5	-0.6	0.2	0.5	1.0
IT	-4.2	-4.4	-2.1	-2.2	-3.9	-2.6	-1.6	-1.8	0.6	2.0	3.1	2.9
LU	-0.3	0.1	0.4	0.6	1.0	0.5	0.6	0.8	1.2	0.6	0.8	1.0
NL	-0.3	0.6	-0.7	0.0	0.7	1.1	-0.4	0.1	3.1	3.4	1.7	2.1
AT	-1.6	-1.1	-0.9	-0.8	-1.1	-1.0	-1.1	-1.2	1.8	1.7	1.5	1.4
PT	-6.1	-3.9	-3.5	-3.2	-5.0	-2.9	-2.7	-2.6	-2.3	-0.1	0.2	0.3
SI	-1.5	-1.4	-1.5	-1.5	-1.1	-1.5	-1.7	-1.7	0.6	0.0	-0.3	-0.3
FI	2.7	3.9	3.7	3.6	3.6	3.7	3.5	3.6	5.1	5.1	4.9	5.0
<b>EU-13</b>	<b>-2.5</b>	<b>-1.6</b>	<b>-1.0</b>	<b>-0.8</b>	<b>-2.0</b>	<b>-1.1</b>	<b>-0.8</b>	<b>-0.7</b>	<b>1.0</b>	<b>1.8</b>	<b>2.1</b>	<b>2.2</b>
BG	1.9	3.3	2.0	2.0	1.3	2.8	1.6	1.8	2.9	4.1	2.8	2.9
CZ	-3.5	-2.9	-3.9	-3.6	-2.0	-2.8	-4.1	-3.8	-0.9	-1.7	-3.0	-2.8
DK	4.7	4.2	3.7	3.6	4.8	3.7	3.3	3.8	6.6	5.3	4.7	5.0
EE	2.3	3.8	3.7	3.5	2.4	3.3	3.5	3.8	2.6	3.4	3.6	3.9
CY	-2.3	-1.5	-1.4	-1.4	-2.8	-1.2	-1.1	-1.1	0.7	2.1	2.1	2.0
LV	-0.2	0.4	0.2	0.1	-0.2	0.0	0.0	0.4	0.4	0.5	0.4	0.8
LT	-0.5	-0.3	-0.4	-1.0	-0.9	-0.6	-0.6	-1.0	-0.1	-0.2	0.1	-0.2
HU	-7.8	-9.2	-6.8	-4.9	-8.4	-9.4	-6.1	-4.6	-4.3	-5.5	-1.9	-0.7
MT	-3.1	-2.6	-2.1	-1.6	-3.8	-2.7	-2.6	-1.6	0.0	1.0	0.8	1.7
PL	-4.3	-3.9	-3.4	-3.3	-4.2	-4.0	-3.6	-3.3	-1.4	-1.5	-1.0	-0.7
RO	-1.4	-1.9	-3.2	-3.2	-1.2	-2.2	-3.5	-3.3	-0.1	-1.4	-2.8	-2.5
SK	-2.8	-3.4	-2.9	-2.8	-1.2	-3.3	-3.4	-3.3	0.4	-1.9	-2.0	-2.0
SE	2.1	2.2	2.2	2.4	2.1	2.1	1.9	1.9	3.8	3.8	3.7	3.6
UK	-3.1	-2.8	-2.6	-2.4	-3.2	-2.6	-2.5	-2.1	-1.1	-0.6	-0.4	0.0
<b>EU-27</b>	<b>-2.4</b>	<b>-1.7</b>	<b>-1.2</b>	<b>-1.0</b>	<b>-2.0</b>	<b>-1.3</b>	<b>-1.1</b>	<b>-0.9</b>	<b>0.7</b>	<b>1.3</b>	<b>1.5</b>	<b>1.7</b>

NB: The structural budget balance is calculated on the basis of the commonly agreed production function method (see European Commission, 2004).

Source: Commission services' spring 2007 forecast.



GDP in 2008. As in the case of the euro area, the overall positive contribution from the primary balance and the contribution from interest expenditure and economic growth will more than offset the effect of debt-increasing stock-flow adjustments.

Aggregate figures tend to mask diverging developments at the country level. In 2006, Greece and Italy continued to have debt ratios above 100 % of GDP, however by 2008 Greece is expected to reduce its debt ratio to below that value. In Belgium the government debt remained on a steady downward path. It fell below 90 % of GDP in 2006 and is expected to be at 82 % of GDP by 2008. Among the

other countries with debt ratios above the 60 % of GDP threshold, notably Germany, France, Cyprus, Hungary, Malta, Austria and Portugal, only Cyprus and Austria are forecast to reduce their debt ratios below the reference value of the Treaty by 2008 without additional measures. In Hungary and Portugal the debt ratio is projected on an upward path over the forecast period.

## 1.2. Government revenue and expenditure

In 2006, the observed improvement in budgetary positions was chiefly the result of higher revenues. The overall

*Table I.1.3*

### Composition of changes in the government debt ratio in EU Member States (% of GDP)

	Gross debt				Change in gross debt	Change in 2006–08 due to		
	2005	2006	2007	2008	2006–08	Primary balance	Interest and growth contribution	Stock-flow adjustment
BE	93.2	89.1	85.6	82.6	-6.5	-7.3	0.4	0.5
DE	67.9	67.9	65.4	63.6	-4.3	-4.7	0.7	-0.3
IE	27.4	24.9	23.0	21.7	-3.2	-4.5	-1.3	2.6
EL	107.5	104.6	100.9	97.6	-7.1	-3.5	-4.9	1.4
ES	43.2	39.9	37.0	34.6	-5.2	-5.7	-1.7	2.2
FR	66.2	63.9	62.9	61.9	-2.0	-0.6	-0.2	-1.2
IT	106.2	106.8	105.0	103.1	-3.7	-5.2	1.3	0.1
LU	6.1	6.8	6.7	6.0	-0.8	-1.4	-0.8	1.3
NL	52.7	48.7	47.7	45.9	-2.8	-3.6	-0.1	0.8
AT	63.5	62.2	60.6	59.2	-3.0	-3.5	-0.1	0.6
PT	63.6	64.7	65.4	65.8	1.0	0.8	0.2	0.0
SI	28.4	27.8	27.5	27.2	-0.6	0.2	-0.9	0.1
FI	41.4	39.1	37.0	35.2	-4.0	-10.0	-0.6	6.7
<b>EU-13</b>	<b>70.5</b>	<b>69.0</b>	<b>66.9</b>	<b>65.0</b>	<b>-3.9</b>	<b>-4.0</b>	<b>-0.2</b>	<b>0.3</b>
BG	29.2	22.8	20.9	19.0	-3.8	-6.2	-1.9	4.3
CZ	30.4	30.4	30.6	30.9	0.6	5.5	-2.1	-2.8
DK	36.3	30.2	25.0	20.0	-10.2	-9.8	-0.2	-0.3
EE	4.4	4.1	2.7	2.3	-1.8	-7.5	-0.8	6.4
CY	69.2	65.3	61.5	54.8	-10.5	-3.5	-1.2	-5.8
LV	12.0	10.0	8.0	6.7	-3.3	-1.0	-2.3	0.0
LT	18.6	18.2	18.6	19.9	1.7	0.1	-2.5	4.2
HU	61.7	66.0	67.1	68.1	2.1	3.7	-1.1	-0.5
MT	72.4	66.5	65.9	64.3	-2.2	-2.9	0.0	0.7
PL	47.1	47.8	48.4	49.1	1.3	1.6	-2.2	1.9
RO	15.8	12.4	12.8	13.1	0.6	4.9	-2.0	-2.3
SK	34.5	30.7	29.7	29.4	-1.3	3.1	-3.1	-1.3
SE	52.2	46.9	42.1	37.7	-9.2	-8.1	-1.4	0.3
UK	42.2	43.5	44.0	44.5	1.0	0.8	0.0	0.3
<b>EU-27</b>	<b>62.9</b>	<b>61.7</b>	<b>59.9</b>	<b>58.3</b>	<b>-3.4</b>	<b>-3.0</b>	<b>-0.8</b>	<b>0.4</b>

NB: Differences between the sum and the total of individual items are due to rounding.

Source: Commission services' spring 2007 forecast.

decline in the headline deficit of 0.9 % of GDP in the euro area and of 0.7 % in the EU as a whole was two-thirds revenue and only one-third expenditure based (see Table I.1.4). At the level of individual revenue items, the single most important contribution came from taxes on income and wealth which compared to 2005 increased by 0.6 % of GDP in both the euro area and the EU, thanks to a particularly buoyant inflow of corporate income taxes. The decline in the expenditure ratio was due to slightly lower social transfers other than in kind and collective consumption.

According to the Commission services' spring 2007 forecast, the composition of adjustment is expected to shift towards the expenditure side of the budget in 2007–08. In the euro area, a projected decline in the revenue ratio of 0.3 percentage points of GDP is forecast to be more than offset by a reduction in the expenditure ratio of more than one percentage point of GDP. The brunt of the adjustment is expected to be borne by collective consumption and social transfers other than in kind, while other expenditure items are foreseen to remain broadly unchanged in per cent of GDP.

At the level of the Member States, the patterns are generally similar. Only in Belgium, Ireland, and, outside the euro area, in the UK, expenditure ratios are projected to increase in 2007–08.

Conversely, large declines are expected in Italy, Luxembourg, Hungary, Poland, Slovenia and Sweden. The rev-

enue ratios are set to increase in 2007–08 in Italy, and, outside the euro area, in Cyprus, Lithuania, Hungary, Romania and the UK, whereas important reductions are foreseen in Belgium, Denmark, Luxembourg, Slovenia, Finland and Sweden.

In the euro area, as well as in the EU, the projected decrease in social contributions and other resources is expected to be offset by a decline in expenditure on collective consumption, social benefits in kind and transfers other than in kind. These plans seem to reflect lessons from the past according to which tax cuts should be accompanied by expenditure restraints to avoid the worsening of the general government balances.

The projected budgetary adjustment in the euro area and the EU does not seem to weigh on growth enhancing spending items such as public investment, education and R & D. Gross fixed capital formation in the euro area is projected broadly stable at around 2½ % of GDP, while in the EU as a whole a slight increase is expected. The reduction in interest expenditure that has contributed to a better allocation of available resources in past years will slowly continue.

### 1.2.1. The fiscal stance and policy mix in the euro area

An appropriate policy mix can be defined as a combination of monetary and fiscal policies that ensures price

Table I.1.4

#### Euro area — Government revenue and expenditures (% of GDP)

	2005	2006	2007	2008
Total revenue	45.1	45.7	45.5	45.4
Taxes on imports and production (indirect)	13.4	13.6	13.7	13.7
Current taxes on income and wealth	11.6	12.2	12.2	12.3
Social contributions	15.5	15.6	15.3	15.3
of which actual social contributions	14.4	14.5	14.3	14.2
Other revenue	4.5	4.3	4.2	4.1
<b>Total expenditure</b>	<b>47.6</b>	<b>47.3</b>	<b>46.5</b>	<b>46.2</b>
Collective consumption	8.1	8.0	7.9	7.9
Social benefits in kind	12.3	12.4	12.2	12.2
Social transfers other than in kind	16.6	16.4	16.2	16.0
Interest	2.9	2.9	2.9	2.8
Subsidies	1.2	1.2	1.2	1.2
Gross fixed capital formation	2.5	2.5	2.6	2.6
Other expenditures	3.8	3.9	3.6	3.5

NB: Differences between the sum and the total of individual items are due to rounding.

Source: Commission services' spring 2007 forecast.

stability and keeps economic activity close to its potential level. In the euro area, given that monetary policy is centralised and fiscal policies decentralised, it is of a particular importance to assess both the aggregate fiscal stance at the euro area level and national fiscal stances. Namely, the aggregate fiscal stance affects the policy mix at the euro area level and is, therefore, one of the elements to be considered by the monetary policy authority.

Graph I.1.1 displays the fiscal stance approximated by the change in the cyclically adjusted primary budget balance ( $\Delta$  CAPB) in comparison with the change in the cyclical conditions estimated by the output gap <sup>(1)</sup>. In this graph, fiscal behaviour in accordance with the SGP would be represented by movements along the horizontal axis. In other words, countries would achieve and maintain broadly balanced budgets over the economic cycle. However, as long as a Member State has not yet reached the medium-term budgetary objective in line with provisions of the SGP, a restrictive fiscal stance, that is a positive change in the CAPB, would be needed.

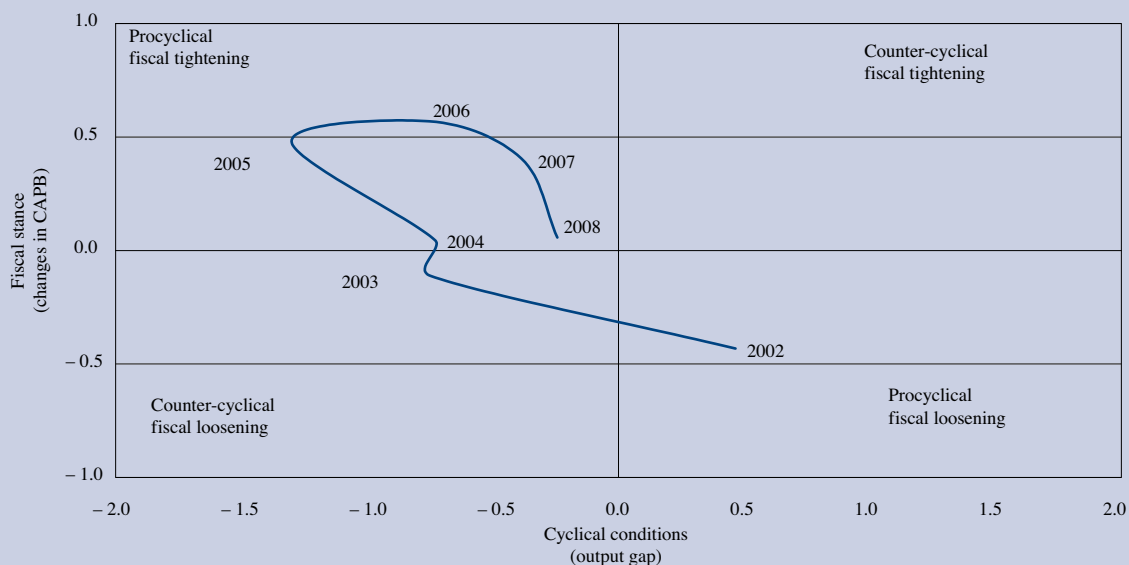
On the face of it, in 2006 the fiscal stance in the euro area would seem to have been clearly procyclical as the budget balance net of cyclical factors markedly improved against a background of an output gap that is estimated to have been still negative. This conclusion needs to be qualified in two respects. Firstly, and not surprisingly the fiscal tightening largely reflects the fiscal adjustment undertaken in countries with an excessive deficit. Secondly, although negative, the output gap narrowed significantly in 2006 reflecting the ongoing brisk economic recovery (see Graph I.1.2) <sup>(2)</sup>. Taking into account the lessons from the past, it is crucial not to relax adjustment efforts when growth prospects are favourable.

Looking ahead, a further yet somewhat milder fiscal tightening is expected in 2007 when cyclical conditions are expected to continue improving. In 2008, the no-policy-change assumption underlying the Commission services' forecast implies a broadly neutral fiscal stance when actual output is estimated to approach potential.

<sup>(1)</sup> In line with the Council agreement, the output gap in this section is computed with the production function method. It should be noted, however, that changes in the output gap are equally relevant for the judgement of the stance in relation to cyclical conditions.

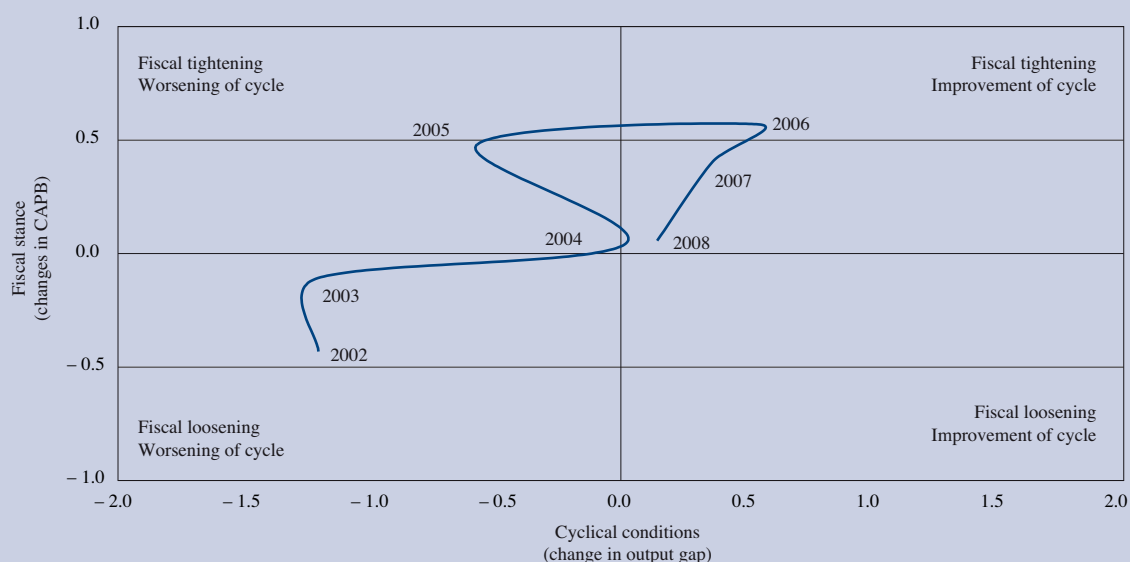
<sup>(2)</sup> Complementing the level with the change of the output gap when assessing the fiscal stance is key in view of the relatively large uncertainty attached to real time estimates of the output gap. This is also acknowledged in the code of conduct on the specifications on the implementation of the Stability and Growth Pact. For details see [http://ec.europa.eu/economy\\_finance/about/activities/sgp/codeofconduct\\_en.pdf](http://ec.europa.eu/economy_finance/about/activities/sgp/codeofconduct_en.pdf)

**Graph I.1.1: Euro area fiscal stance and cyclical conditions**



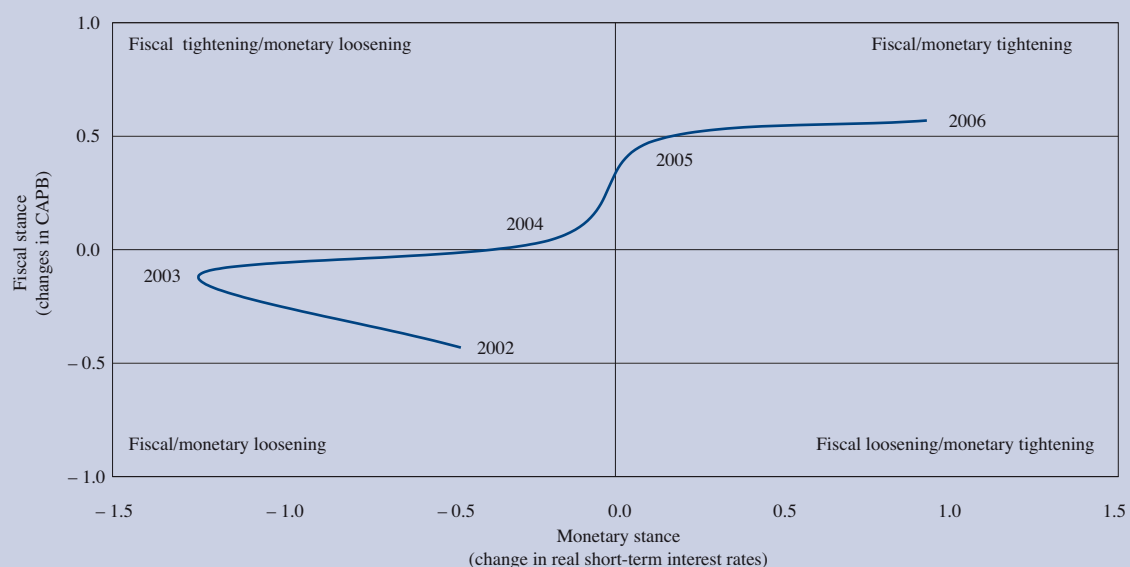
Source: Commission services' spring 2007 forecast.

Graph I.1.2: Euro area fiscal stance and cyclical conditions



Source: Commission services' spring 2007 forecast.

Graph I.1.3: Policy mix in the euro area



Source: Commission services' spring 2007 forecast.

Graph I.1.3 illustrates the euro area policy mix, by plotting the fiscal stance on the vertical axis and the monetary stance (approximated by the change in the short-term real interest rates) on the horizontal axis. Against the background of brisk economic growth and fiscal tightening the monetary stance remained broadly neutral

in 2006. In 2007, the gradual increases in the ECB's policy rate at the end of 2006 and at the beginning of this year plus those assumed in the Commission services' spring 2007 forecast are expected to give rise to a policy mix where both monetary and fiscal instruments bridle aggregate demand.

## 2. Implementing the Stability and Growth Pact

### 2.1. Introduction

The fiscal framework of EMU aims at ensuring budgetary discipline through two main requirements: the Treaty requirement to avoid excessive deficit positions, measured against reference values for deficits and debt of 3 % and 60 % of GDP respectively, and the requirement for Member States to achieve and maintain their medium-term budgetary objective (MTO). Compliance with the MTO secures fiscal discipline and the sustainability of public finances, and thus contributes to maintaining an economic environment in which monetary policy can effectively pursue price stability. It also provides the necessary room for manoeuvre to allow the automatic stabilisers to play freely without breaching the 3 % of GDP reference value of the Treaty.

The rules-based framework of the Treaty and Stability and Growth Pact (SGP) consists of both preventive and dissuasive elements, both of which are backed up with enforcement procedures. Box I.2.1 contains a brief description of these procedures. In 2006 and the early part of 2007, the Commission and Council applied the various enforcement mechanisms of the SGP to several Member States. This section reviews the implementation of these mechanisms since spring 2006.

### 2.2. The excessive deficit procedure

Since spring 2006, the Commission and the Council took action on eight Member States subject to an excessive deficit procedure (EDP). The Commission and the Council considered that Cyprus, France, Germany, Greece and Malta had corrected their excessive deficits. The Council decided to abrogate the excessive deficit procedure for Cyprus in July 2006, for France in January 2007, and for Germany, Greece and Malta in June 2007, respectively. Furthermore, in November 2006 the Com-

mission and the Council considered that Poland had not respected the recommendations formulated under Article 104(7) of the Treaty. As Poland is a Member State with derogation the Council issued another recommendation based on Article 104(7) in February 2007 <sup>(1)</sup>. Similarly, on 30 May 2007 the Commission recommended the Council to decide that the Czech Republic had not taken adequate actions in response to the Council recommendation under Article 104(7) of the Treaty and to address a new recommendation under the same article. Having already decided that Hungary had not respected its recommendations in 2005, the Council addressed the third recommendation based on Article 104(7) to Hungary in October 2006.

Currently, seven EU countries are still subject to an excessive deficit procedure: two euro-area Member States, namely Italy and Portugal, the UK and four recently acceded Member States, namely the Czech Republic, Hungary, Poland and Slovakia <sup>(2)</sup>.

#### 2.2.1. The surveillance mechanisms in the euro-area countries

*Germany and France: summary of past events*

Following evidence of government deficits above 3 % of GDP in 2002, the Council decided in spring 2003 that excessive deficits existed in Germany and in France and adopted recommendations under Article 104(7) with a view to bringing this situation to an end by 2004. In autumn 2003, the Commission

<sup>(1)</sup> Recently acceded Member States went straight into Stage III of EMU, with the status of 'Member State with a derogation' within the meaning of Article 122 EC. Currently, the Member States with derogation are Bulgaria, Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia and Sweden.

<sup>(2)</sup> For documents concerning EDP procedures, see the section on fiscal surveillance on the website of the Economic and Financial Affairs DG: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/fiscal\\_policy554\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/fiscal_policy554_en.htm)

considered that the actions implemented were inadequate and recommended the Council to adopt decisions giving notice to these two countries to correct the excessive deficit by 2005.

On 25 November 2003, the Council voted on the recommended decisions but did not achieve the required majority. Instead the Council adopted conclusions addressing recommendations to Germany and France for the correction of the excessive deficit by 2005 and stating that the excessive deficit procedure was held in abeyance. The Commission brought the case before the Court of Justice of the European Communities. On 13 July 2004, the Court annulled the Council conclusions in so far as they aimed at formally suspending the procedure and modifying the existing recommendations.

On 14 December 2004, the Commission adopted a communication clarifying the situation of Germany and France in relation to the excessive deficit procedure. The Commission recognised that the actions of the two Member States concerned taken in the aftermath of the Council conclusions of 25 November 2003 and up to their annulment by the Court on 13 July 2004 were based on the notion that the deadline for the correction of the deficit had been effectively moved to 2005. The Commission considered that the assessment of the actions taken to correct the excessive deficit situation should refer to 2005 as the relevant deadline. In the communication, the Commission stated that the actions taken by the German and French authorities were broadly consistent with a correction of the excessive deficit by 2005 and that no further steps were necessary under the excessive deficit procedure. The Council agreed with this position.

#### *Germany*

The German statistics office announced on 22 February 2006 that the public deficit in 2005 was 3.3 % of GDP, following 3.7 % of GDP in 2004. In addition, the deficit was expected by the German authorities to remain above the 3 % of GDP threshold in 2006. On 1 March 2006, the Commission recommended to the Council to give notice to Germany, according to Article 104(9) of the Treaty, to correct its excessive deficit by 2007. Such a notice was adopted by the Council on 14 March 2006. In this notice, the Council acknowledged that the German Government had adopted a comprehensive budgetary consolidation strategy in a context of still fragile economic recovery to bring the deficit below the 3 % reference value by 2007.

The Council recommended in the notice that Germany corrects the excessive deficit by 2007 at the latest and ensures that the budget balance in structural terms improves by at least one percentage point cumulatively in 2006 and 2007. The Council decided that Germany had to submit, by 14 July 2006 at the latest, a report outlining the measures taken to comply with the notice.

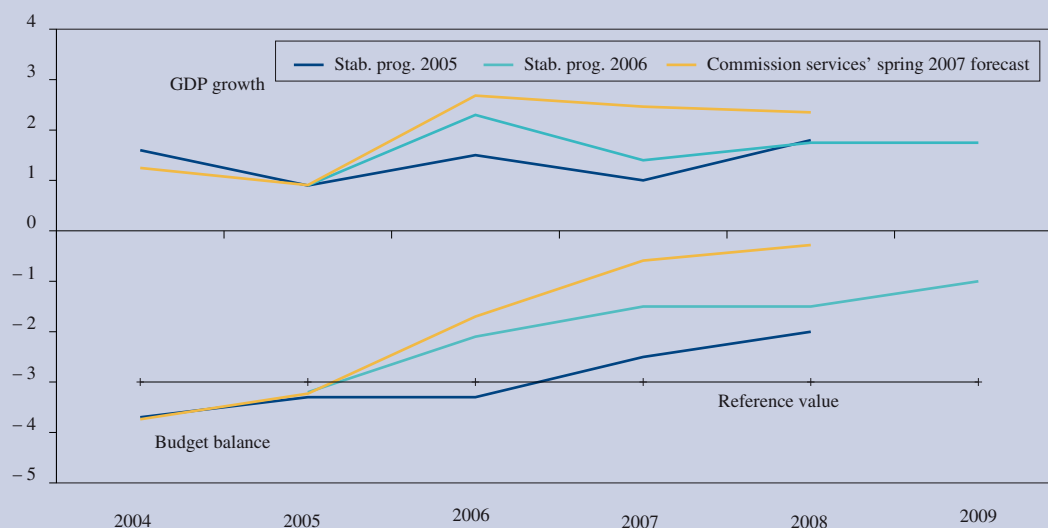
Based on the German implementation report submitted on 5 July 2006, the action taken by Germany to correct its excessive deficit was assessed in the Commission communication of 19 July 2006. The Commission considered that Germany was on track to correct its excessive deficit by 2007 at the latest, as requested by the Council, provided it fully implemented the 2006 and 2007 budgets. The Commission considered that no further steps were needed at present under the excessive deficit procedure. On 10 October 2006, the Council agreed with this position welcoming the commitment of the German authorities to address the budget deficit on a structural basis.

In 2006, the German deficit was reduced to 1.7 % of GDP, well below the reference value of the Treaty, one year earlier than recommended by the Council. The Commission services' spring 2007 forecast shows a further reduction of the deficit to 0.6 % of GDP in 2007 and, on a no-policy change basis, to about 0.3 % in 2008. The cumulative structural improvement in 2006–07 is estimated to be some 1½ percentage points of GDP. With the correction of the excessive deficit confirmed, the Council, following a recommendation of the Commission, abrogated the EDP for Germany in June 2007.

#### *France*

The French deficit was reduced to 2.9 % of GDP in 2005 from 3.7 % in 2004, partly thanks to substantial one-off revenues. The structural adjustment (i.e. the improvement in the cyclically adjusted balance net of one-off and other temporary measures) in 2005 amounted to 0.6 % of GDP. In autumn 2006, both the French authorities and the Commission expected the deficit to fall further, to 2.7 % of GDP in 2006, 2.6 % in 2007 and about 2 % by 2008, with the recourse to one-offs limited in 2006 (¼ % of GDP) and negligible or non-existent thereafter. As this deficit reduction was expected to be driven by a better expenditure control at the State and healthcare sector levels, the improvement in the structural balance was estimated at 0.5 %, 0.3 % and 0.6 % of GDP in 2006, 2007 and 2008, respectively. This suggested that the def-

**Graph I.2.1: Budgetary plans, forecasts and outcomes in Germany**



Source: Commission services and stability programmes.

icit has been brought below the Treaty reference value in a credible and sustainable manner. According to the Commission services' 2006 autumn forecast, the debt increase trend has also been inverted.

Based on these projections, the Commission concluded that the excessive deficit situation in France has been corrected and recommended on 29 November 2006 to the Council to abrogate its decisions under paragraph 6 of Article 104 of the Treaty. On 30 January 2007, the Council abrogated its decision on the existence of an excessive deficit in France.

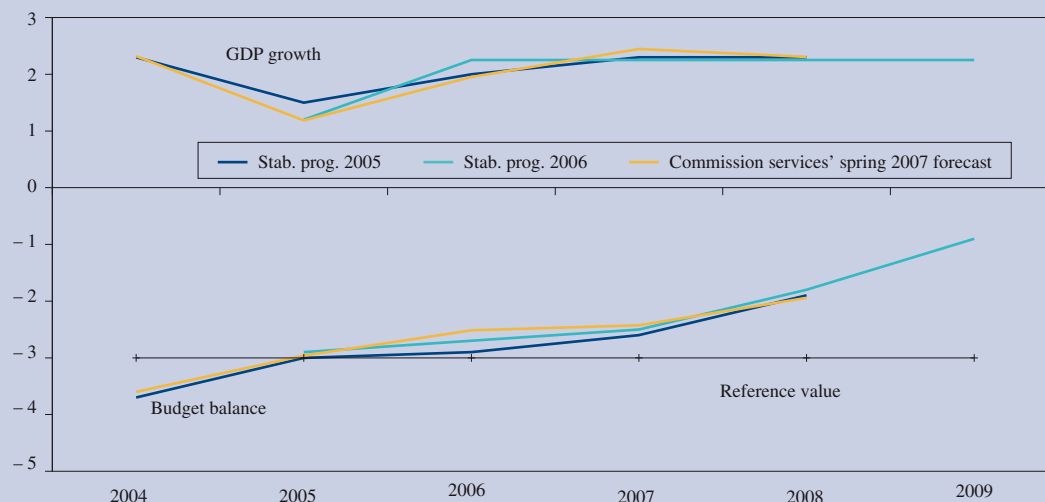
### Portugal

The update of the stability programme submitted on 9 June 2005 by the Portuguese authorities revealed the plans for a general government deficit in excess of the 3 % of GDP reference value of the Treaty for the years from 2005 to 2007. More specifically, after a reported deficit outturn of 2.9 % of GDP in 2004, Portugal planned a government deficit of 6.2 % of GDP for 2005, 4.8 % in 2006, 3.9 % in 2007 and 2.8 % of GDP in 2008. Over the same years, the debt-to-GDP ratio was projected to increase from 61.9 % in 2004 to a peak of 67.8 % of GDP in 2007. On this basis, the Council decided on 20 September 2005 that Portugal has an excessive deficit.

On the same date, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2008. Specifically, Portugal was recommended to limit the deterioration of the fiscal position in 2005 and to ensure a narrowing of the structural deficit of 1.5 % of GDP in 2006 from 2005, followed by a further decrease of, at least,  $\frac{3}{4}$  % of GDP in each of the two subsequent years. At the same time, Portugal was invited to implement reforms rapidly to contain and reduce expenditure and to stand ready to adopt the additional measures which may be necessary to achieve the correction of the excessive deficit by 2008. In addition, the Portuguese authorities were recommended to ensure that the government gross debt ratio is brought onto a downward path also by avoiding debt-increasing financial transactions, and by considering carefully the possible impact on debt of major public investment projects.

The Council established the deadline of 19 March 2006 for the Portuguese Government to take effective action in order to achieve the 2006 deficit target. The Commission communication of 21 June 2006 considered that the action taken by Portugal in response to the Council recommendation represented adequate progress towards the correction of the excessive deficit within the set time limit. In particular, Portugal (i) achieved a 2005 deficit in line with plans; (ii) adopted a comprehensive package of corrective measures which, if fully implemented and

Graph I.2.2: Budgetary plans, forecasts and outcomes in France



Source: Commission services and stability programmes.

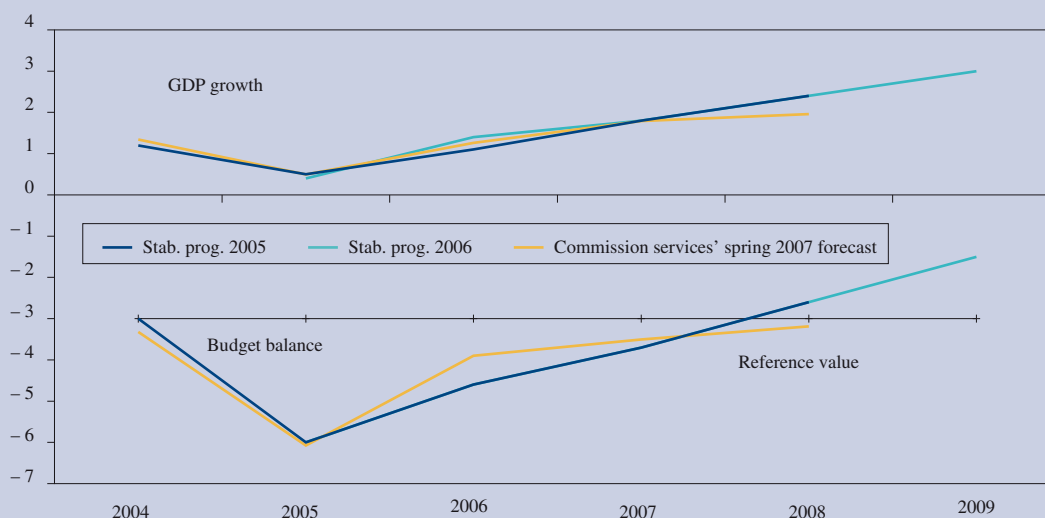
effective should deliver the required structural adjustment in 2006; (iii) confirmed the deficit target for 2008 below 3 % of GDP and a structural adjustment path in line with the Council recommendation; (iv) implemented or initiated expenditure-containing measures and kept fiscal targets in spite of a more cautious re-assessment of GDP growth prospects; (v) planned to return

government debt to a declining path as from 2008; and (vi) has taken action to improve statistics.

#### Greece

On 4 May 2004, the Greek authorities submitted a revised EDP notification showing a 2003 deficit of

Graph I.2.3: Budgetary plans, forecasts and outcomes in Portugal



Source: Commission services and stability programmes.



3.2 % of GDP. The Council, also taking into account developments in the debt ratio, decided that an excessive deficit existed in Greece and addressed on 5 July 2004 a recommendation under Article 104(7) to Greece with a view to bringing the excessive deficit situation to an end by 2005. The Council established the deadline of 5 November 2004 for Greece to take appropriate measures to this end.

Based on the Commission services' 2004 autumn forecast incorporating the data revisions of the September 2004 notification and projecting the 2005 deficit at 3.6 % of GDP, on 22 December 2004 the Commission recommended to the Council to decide under Article 104(8) that no effective action had been taken in response to its recommendation under Article 104(7). The Council decided accordingly on 18 January 2005. On 9 February 2005, the Commission recommended to the Council to give notice to Greece, in accordance with Article 104(9), to take the necessary measures to remedy its excessive deficit situation. The Commission recommended extending the deadline for correcting the excessive deficit by one year to 2006. When taking this decision, the Commission took into account the fact that the 2004 deficit would likely be substantially higher than expected, due to statistical revisions and to expenditure overruns associated notably with the organisation of the Olympic Games. In addition, the Commission considered that economic growth prospects for 2005 and 2006 had become less favourable, making the reduction of the deficit more difficult.

On 17 February 2005, the Council adopted a decision giving notice to Greece, in accordance with Article 104(9), to take measures to remedy the situation of excessive deficit as rapidly as possible and at the latest by 2006 through (i) a rigorous implementation of the 2005 budget as approved by the parliament; (ii) implementing in 2006 adjustment measures of a permanent nature leading to a correction in the deficit of at least 0.6 percentage point of GDP <sup>(1)</sup>. The Council decided that Greece had to submit, by 21 March 2005 at the latest, a report outlining the decisions to respect these recommendations.

<sup>(1)</sup> The Council also recommended Greece to (iii) further pursue the efforts to identify and control factors other than net borrowing, which contribute to the change in debt levels, with a view to ensuring that the government gross debt ratio diminishes sufficiently and approaches the reference value at a satisfactory pace in line with the correction of the excessive deficit, and (iv) to further pursue the efforts to improve the collection and processing of general government data.

Following the submission of the report, the Commission concluded in its communication of 6 April 2005 that the Greek Government had taken effective action so that no further steps under the EDP were needed at that stage.

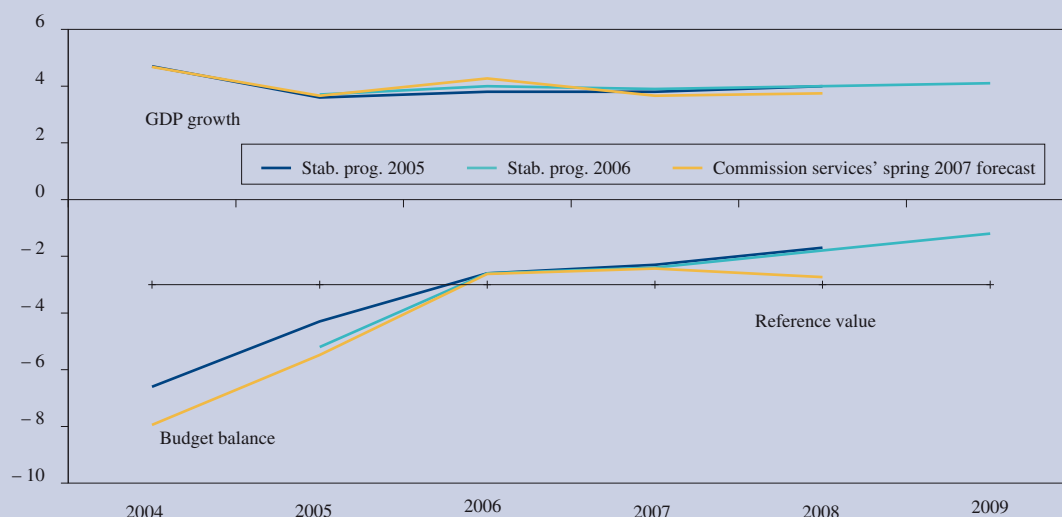
In 2006, the deficit fell below the reference value, to 2.6 % of GDP, inter alia thanks to one-off measures worth around 0.6 % of GDP. Including the impact of recently announced new measures, the Commission services' spring 2007 forecast projects the deficit to narrow slightly to 2.4 % of GDP in 2007; excluding one-offs, it would be 2.9 % of GDP. On a no-policy change basis and without further one-offs, the deficit would increase to 2.7 % of GDP in 2008. The fiscal effort, measured by the improvement in the structural budget balance, is estimated at more than 2 percentage points of GDP in both 2005 and 2006. The projected evolution of the debt ratio, which stood at 108½ % of GDP in 2004 and should fall below 100 % of GDP in 2008, can be considered to be in line with the Council's recommendations. The spring forecast thus supports the conclusion that the deficit has been brought below the reference value in sustainable manner and, on this basis, the Council, following a recommendation of the Commission, abrogated the excessive deficit procedure for Greece in June 2007.

#### *Italy*

On 23 May 2005, Eurostat released revised figures on Italian Government data, showing a general government deficit of 3.1 % of GDP in both 2003 and 2004. Over the same two years, the debt-to-GDP ratio was reported to have remained broadly stable at around 106–107 % of GDP. On 24 May the Italian Institute of Statistics (ISTAT) released new public finances data for the period 2000–04. The deficit was reported at 3.2 % of GDP in 2003 and 2004. Given that the deficit ratio had been above but close to 3 % of GDP in 2003 and 2004 and that the breach of the reference value could not be considered temporary because the Commission projected the deficit to exceed 3 % in 2005 and 2006, and taking into account developments in the debt ratio, the Council decided that Italy had an excessive deficit on 28 July 2005. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2007.

In particular, Italy was recommended to implement with rigour the 2005 budget; reduce the structural deficit by a

Graph I.2.4: Budgetary plans, forecasts and outcomes in Greece



Source: Commission services and stability programmes.

minimum 1.6 % of GDP by 2007 relative to its level in 2005, with at least half of this correction taking place in 2006 and ensure that the debt-to-GDP ratio diminishes and approaches the reference value at a satisfactory pace.

On 22 February 2006, the Commission adopted a communication concluding that the actions taken by Italy, if fully implemented and effective, would be consistent with the Council recommendation. The Commission communication highlighted that implementation uncertainties persisted, requiring continuous monitoring. On 14 March 2006, the Council agreed with this analysis, stressing the utmost importance of the execution of the 2006 budget and the likely need to identify and implement substantial additional corrective measures for 2007.

### 2.2.2. The surveillance mechanisms in the non-euro-area Member States

#### *United Kingdom*

According to the data notified by the United Kingdom in August 2005, the general government deficit amounted to 3.2 % of GDP in the 2004/05 financial year <sup>(1)</sup>. The Commission services' 2005 autumn forecasts projected that on the basis of unchanged policies the general gov-

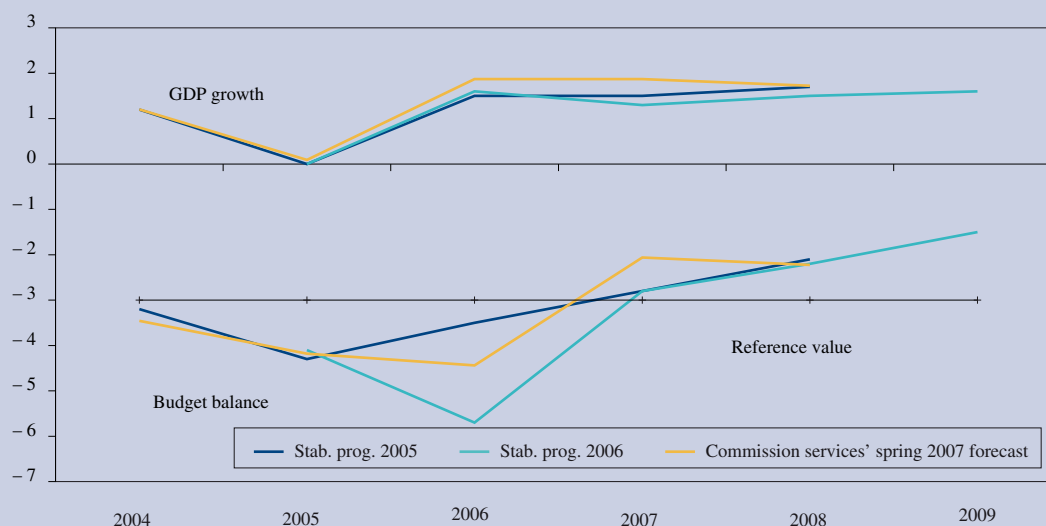
ernment deficit would rise further in the financial 2005/06 to 3.4 % of GDP, before declining to 3.2 % in 2006/07 and 3.0 % in 2007/08. Output in the Commission services' 2005 autumn forecasts was projected to be strengthening from late 2005, with approximately trend-level growth from 2006. Based on these projections, the excess over the reference value could not be considered exceptional or temporary within the meaning of the Treaty and the Stability and Growth Pact although the deficit was close to the reference value.

After the Commission services' 2005 autumn forecasts had been published, the United Kingdom announced policy decisions in the pre-budget report presented to parliament on 5 December. In net terms, these measures represented an easing of policy by 0.1 % of GDP in the 2005/06 financial year and a tightening of policy by 0.1 % of GDP in 2006/07. Compared to an unchanged policy scenario, the pre-budget report foresaw a tightening of 0.2 % of GDP in 2007/08. Taking into consideration these measures, the Commission's assessment nevertheless remained that the deficit through to 2006/07 was expected to exceed 3 % of GDP. On this basis, the Council decided on 24 January 2006 that the UK had an excessive deficit.

At the same time, the Council addressed a recommendation under Article 104(7) specifying that the United Kingdom authorities should put an end to the excessive

<sup>(1)</sup> The EDP applies to the UK on a financial year basis. The UK financial year runs from April to March.

Graph I.2.5: Budgetary plans, forecasts and outcomes in Italy



Source: Commission services and stability programmes.

deficit situation as soon as possible and by the financial year 2006/07 at the latest. To bring the general government deficit below 3 % of GDP in a credible and sustainable manner the United Kingdom was required to ensure an improvement of the structural balance by at least 0.5 percentage point of GDP between the 2005/06 and 2006/07 financial years.

On 20 September 2006, the Commission adopted a communication concluding that the United Kingdom was just on track to correct its excessive deficit by the end of

the 2006/07 financial year. According to the Commission, fiscal consolidation was supported by better GDP growth than originally envisaged and the tax base was strengthened by good performance of the financial sector and oil prices. Nevertheless, the Commission communication noted that the deficit correction remained vulnerable to negative surprises, given the lack of a safety margin against exceeding the 3 % reference value again and the likely shortfall of the structural improvement recommended under Article 104(7). On 10 October 2006, the Council agreed with this view.

#### Box I.2.1: EU budgetary surveillance

This section provides a description of the enforcement mechanisms of the EU budgetary surveillance under the provisions of the Stability and Growth Pact. It explains the different steps of the excessive deficit procedure, which is codified in Article 104 of the Treaty and Council Regulation (EC) No 1467/97, and when these steps need to be activated. A short description of the mechanism of early warning is also provided. This mechanism is codified in Article 99(4) of the Treaty and Articles 6(2) and 10(2) of Council Regulation (EC) No 1466/97, as amended by Council Regulation (EC) No 1056/2005.

##### The excessive deficit procedure

Article 104 of the Treaty states that Member States shall avoid excessive government deficits. In particular Member States shall comply with budgetary discipline by respecting two criteria specified in the Protocol on the excessive deficit procedures annexed to the Treaty: a deficit ratio and a debt ratio not exceeding reference values of respectively 3 % and 60 % of GDP. Article 104 also sets out the procedure to be followed to identify and correct situations of excessive deficit, and voting modalities in the course of the procedure. Regulation (EC) No 1467/97 as amended by Council Regulation (EC) No 1056/2005, clarifies the procedure.

(Continued on the next page)

*Box 1.2.1 (continued)*

The first four steps of the procedure, corresponding to provisions of paragraphs 3 to 6 of Article 104, concern the identification of situations of excessive deficit. The excessive deficit procedure is triggered if the deficit of a Member State exceeds 3 % of GDP <sup>(1)</sup>. In such a situation, the Commission adopts a report, in accordance with Article 104(3), reviewing in detail the economic and budgetary situation the Member State considered. As foreseen in Article 104(4) and Regulation (EC) No 1467/97, the Economic and Financial Committee formulates an opinion on this report within two weeks. The Commission takes this opinion into account and, if it considers that an excessive deficit exists, addresses an opinion under Article 104(5) to the Council. On the basis of the Commission opinion, the Council decides on the existence of an excessive deficit under Article 104(6).

The subsequent steps of the procedure are dedicated to the correction of excessive deficits. When it decides that an excessive deficit exists, the Council addresses a recommendation to the Member State concerned in accordance with Article 104(7). In this recommendation, the Council sets a deadline for the Member State to correct the excessive deficit and a fiscal effort to be achieved by the Member States concerned to this end (at least 0.5 % of GDP as a benchmark). Regulation (EC) No 1467(97) specifies that the deadline for the correction of the excessive deficit shall be set taking into account an overall assessment of the factors mentioned in the Article 104(3) of the Treaty.

Where action by the Member State concerned leads to the correction of the excessive deficit, the Council shall decide, in accordance with Article 104(12), to abrogate its decisions under the excessive deficit procedure. In other words, the procedure is closed. In the event that the Council considers that effective action has not been taken, it may decide, as stated in Article 104(8) of the Treaty, to make public its recommendation according to Article 104(7). Where effective action has been taken but events outside the control of the government with large adverse consequences on the budget prevent the correction of the excessive deficit within the time limits set by the Council, the possibility exists to revise the deadline for the correction of the excessive deficit in a new Article 104(7) recommendation.

The steps described above apply to all EU countries. The further steps of the procedure depend on whether the Member State is a euro-area Member State.

The excessive deficit procedure applies in full to euro-area Member States. For these countries, Article 104(9) stipulates that, provided the Council adopts a decision under Article 104(8), it may decide to give notice to the Member State concerned to take the necessary measures to reduce the deficit. The recommendations under Article 104(9) of the Treaty shall include a deadline for the correction of the excessive deficit and a fiscal effort to be achieved by the Member States concerned to this end (at least 0.5 % of GDP as a benchmark).

This step constitutes a move towards even closer surveillance, and is the ultimate step before the possible imposition of sanctions. If the Member State fails to comply with the recommendations, the Council may decide to impose sanctions no later than two months after notice has been given. In case of compliance with the recommendations formulated in the notice under Article 104(9), the decisions taken under Articles 104(6) to 104(9) are abrogated with a Council decision in accordance with Article 104(12), and the procedure is closed. Where effective action has been taken but events outside the control of the government with large adverse consequences on the budget prevent the correction of the excessive deficit within the time limits set by the Council, the possibility exists to revise the deadline for the correction of the excessive deficit in a new Article 104(9) notice.

As mentioned above, non-euro-area Member States are not exempt from the obligation to avoid excessive deficits, but the later steps of the EDP do not apply for them. When a Member State outside the euro area in a situation of an excessive deficit fails to respect the recommendations addressed under Article 104(7), it cannot be submitted to the

<sup>(1)</sup> Article 104(2) of the Treaty states that a deficit in excess of the 3 % reference value that is only exceptional and temporary may not be considered excessive where the deficit remains close to the reference value. A deficit above 3 % of GDP may also not be considered excessive if it has declined substantially and reached a level that comes close to the reference value. The same article provides an exception for countries having a debt ratio above 60 %, if this ratio diminishes sufficiently and approaches the value of 60 % of GDP at a satisfactory pace.

*(Continued on the next page)*

*Box I.2.1 (continued)*

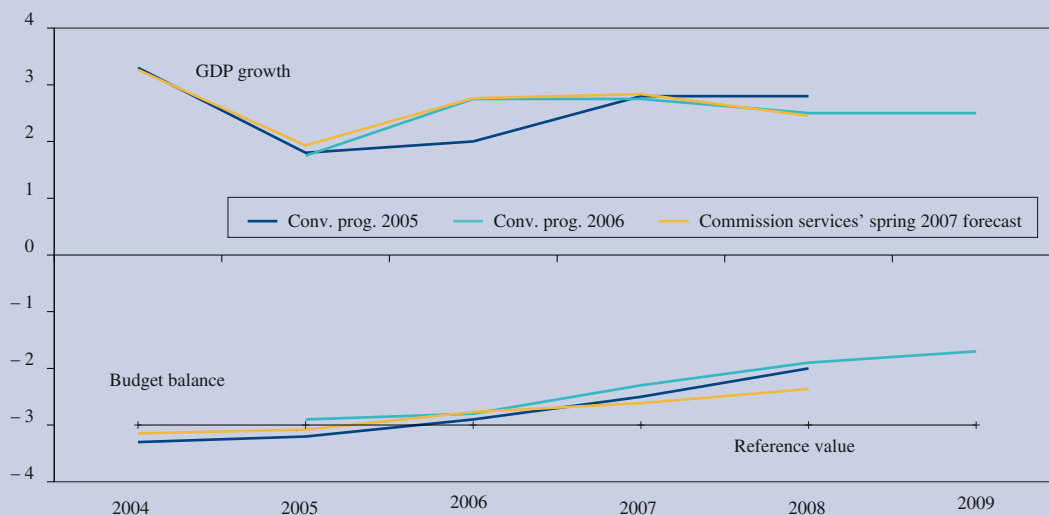
last two steps of the excessive deficit procedure, namely notice foreseen in Article 104(9) and the imposition of sanctions foreseen in Article 104(11) <sup>(1)</sup>. Non-compliance with a recommendation under Article 104(7) may lead to a renewed recommendation according to Article 104(7), following a decision according to Article 104(8).

**The early warning mechanism**

In complement to the excessive deficit procedure, the Treaty foresees in its Article 99(4) the possibility for the Council to make recommendations to Member States in case their economic policies 'are not consistent with the broad guidelines or risk jeopardising the proper functioning of EMU'. Based on this article, Regulation (EC) No 1466/97 as amended by Council Regulation (EC) No 1055/2005, which codifies the preventive arm of the SGP, provides the Council with the possibility to issue 'early warnings' to Member States in order to prevent the occurrence of an excessive deficit.

<sup>(1)</sup> These Member States have no voting right on decisions provided for under the two paragraphs.

**Graph I.2.6: Budgetary plans, forecasts and outcomes in the United Kingdom**



Source: Commission services and convergence programmes.

**Hungary**

According to the fiscal notification of March 2004, Hungary had a general government deficit above the 3 % of GDP reference value. On the basis of these notifications and following a recommendation by the Commission the Council decided that an excessive deficit existed in Hungary and addressed a recommendation under Article 104(7) to Hungary on 5 July 2004. The recommendation invited the Hungarian authorities to imple-

ment the measures envisaged in the May 2004 convergence programme aiming at a correction of the excessive deficit by 2008. The Hungarian authorities were recommended to stand ready to introduce additional measures, if necessary, with a view to achieving the deficit targets for 2004 and 2005.

On 18 January 2005, in accordance with Article 104(8) the Council considered that Hungary had not taken effec-

tive action in response to its recommendation. Since Hungary is a Member State with derogation, the Council issued on 8 March 2005 another recommendation based on Article 104(7), taking into account the information of Hungary's convergence programme update submitted in December 2004 <sup>(1)</sup>. The Council recommended the Hungarian authorities to 'take action in a medium-term framework in order to bring the deficit below 3 % of GDP by 2008 in a credible and sustainable manner, in accordance with the path for deficit reduction as specified in the Council opinion of 8 March 2005 on the convergence programme update submitted in December 2004.

In light of a substantial deterioration of the budgetary outlook in Hungary, based on a Commission recommendation the Council decided on 8 November 2005 acting pursuant to Article 104(8) for the second time that Hungary did not comply with the new recommendations under 104(7).

The Council addressed a third recommendation under Article 104(7) to Hungary on 10 October 2006, postpon-

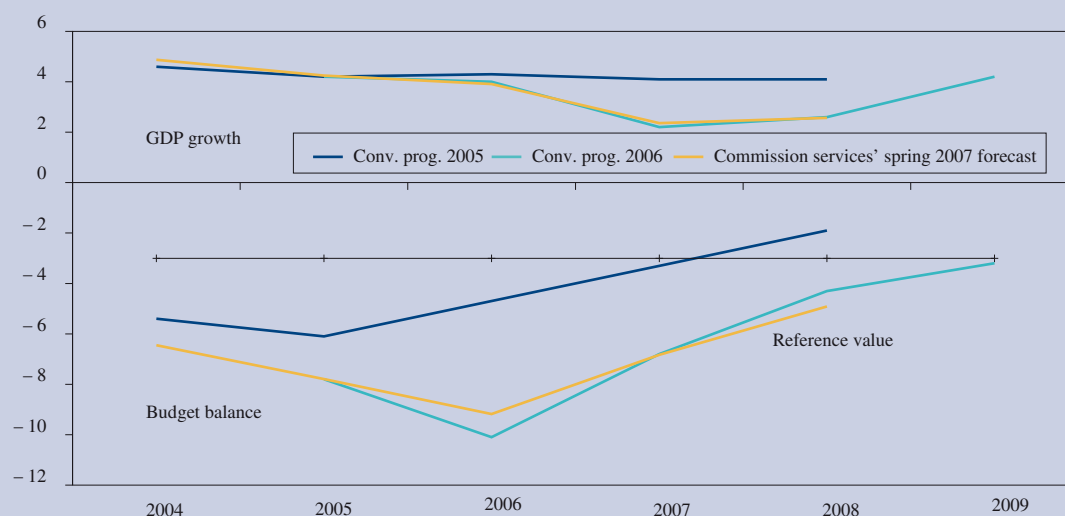
ing the deadline for the correction of the excessive deficit by one year, to 2009. The Hungarian authorities were recommended to limit the deterioration of the fiscal position in 2006, which was estimated as a deficit of 10 % of GDP (including pension reform costs) <sup>(2)</sup>, ensure a frontloaded and sustained substantial correction of the structural deficit and adopt and implement wide-ranging structural reforms aimed at containing public expenditure. Furthermore, Hungary was requested to stand ready to improve expenditure control and ensure the gross debt ratio is brought onto a firm downward trajectory, preferably before 2009.

The Council established the deadline of 10 April 2007 for Hungary to take effective action in order to achieve the deficit targets for 2006 and 2007, and welcomed the commitment of the Hungarian authorities to submit reports on a six-monthly basis to the Commission and the Council examining progress made in complying with the Council recommendation.

<sup>(1)</sup> Member States with a derogation are to avoid excessive deficits but in the event of inadequate action established under Articles 104(8) further recommendations can be addressed only on the basis of Article 104(7) as Article 104(9) and Article(11) do not apply to them.

<sup>(2)</sup> Compare Box I.2.2. While Hungary availed itself of the transition period in the October 2006 EDP notification, it included the pension reform costs in its September 2006 adjusted update of the convergence programme, which the Council took into account when formulating its recommendations under Article 104(7) in October 2006.

Graph I.2.7: Budgetary plans, forecasts and outcomes in Hungary



Source: Commission services and stability programmes.

### Czech Republic

On 5 July 2004 the Council decided that the Czech Republic had an excessive deficit. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2008 in a credible and sustainable manner. In particular, the Czech Republic was recommended to take effective action regarding the measures envisaged to achieve the 2005 deficit target by the deadline of 5 November 2004 and to implement with vigour the measures envisaged in the May 2004 convergence programme, in particular to cut the wage bill of central government and to reduce spending of individual ministries. Furthermore, the Czech Republic was invited to allocate higher-than-budgeted revenues to deficit reduction, to introduce fiscal targeting based on medium-term expenditure ceilings, to design effective rules to reduce the risk of increasing indebtedness of regions and municipalities, to undertake the reform of the pension and healthcare systems so as to improve the long-term sustainability of the public finances and to minimise the negative budgetary impact of the operations of the Czech Consolidation Agency.

On 22 December 2004, the Commission concluded that the Czech Government had taken effective action regarding the measures envisaged to achieve the 2005 deficit target in response to the Council recommenda-

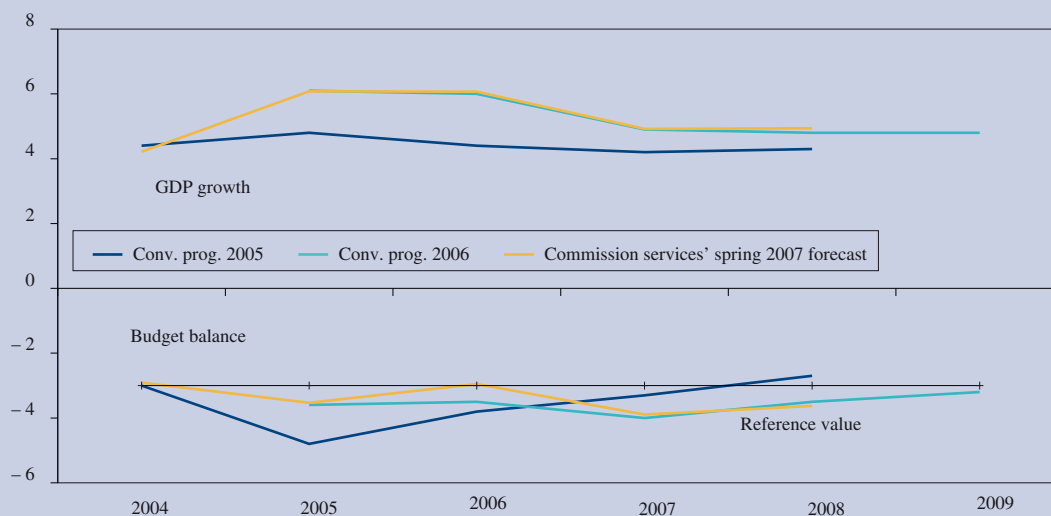
tion, and that no further steps were necessary under the excessive deficit procedure.

In 2006, the deficit fell just below the reference value of the Treaty, to 2.9 % of GDP, in spite of some deficit-increasing one-off measures. The Commission services' spring 2007 forecast projects the deficit to widen significantly in 2007 to close to 4 % of GDP, on the back of higher social spending. Under the no-policy-change assumption, it would decline to 3.6 % of GDP in 2008. The structural position is estimated to have widened in both 2005 and 2006 and to widen even more significantly in 2007. Accordingly, on 30 May the Commission recommended to the Council to decide that the Czech Republic has not taken adequate action in response to the Council recommendation under Article 104(7) and to address a new recommendation under the same article.

### Cyprus

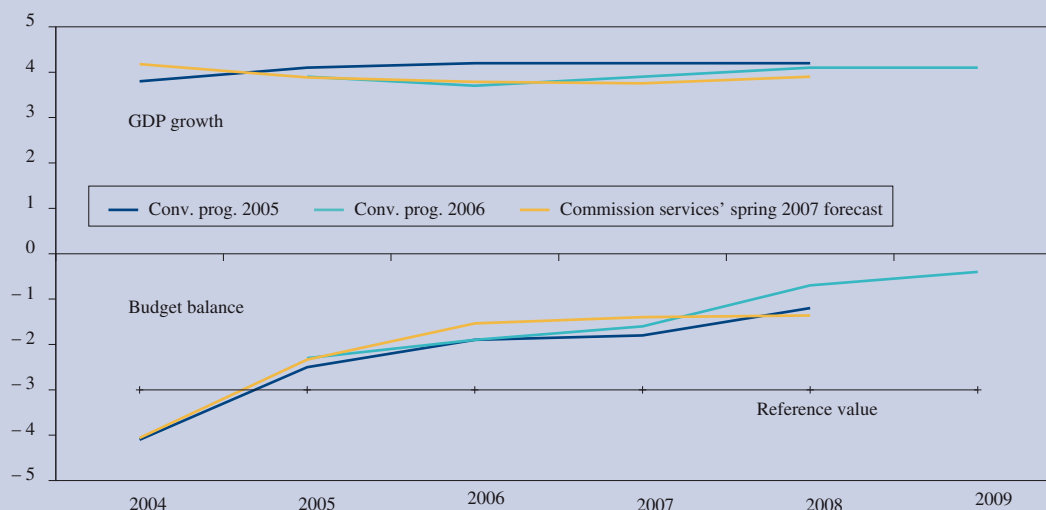
On 5 July 2004, the Council decided that an excessive deficit existed in Cyprus. At the same time, the Council addressed a recommendation to Cyprus under Article 104(7), requesting Cyprus to take effective action by 5 November 2004 in order to bring the deficit below 3 % of GDP by 2005 in a credible and sustainable manner and to implement with vigour the measures envisaged in the May 2004 programme. Cyprus was also requested to ensure that the rise in the debt ratio was brought to a halt

**Graph I.2.8: Budgetary plans, forecasts and outcomes in the Czech Republic**



Source: Commission services and convergence programmes.

Graph I.2.9: Budgetary plans, forecasts and outcomes in Cyprus



Source: Commission services and convergence programmes.

in 2004 and reversed thereafter as specified in the Council opinion on the convergence programme.

A Commission communication of 22 December 2004 concluded that, on then available information and on the basis of the measures detailed in the 2005 budget, it appeared that the Cypriot Government had taken effective action to achieve the 2005 deficit target, in compliance with the Council recommendation under Article 104(7). Accordingly, the Commission concluded that no further steps were necessary at that point under the excessive deficit procedure.

On 21 June 2006, the Commission recommended that the Council abrogate the excessive deficit procedure for Cyprus. The deficit had fallen to 2.4 % of GDP in 2005 and the government debt-to-GDP ratio had also decreased. According to the Commission services' spring 2006 forecast, the deficit was expected to fall further in 2006 and 2007, thus staying well below the 3 % reference value, while the debt ratio would diminish sufficiently towards the 60 % of GDP reference value. Although some one-off measures helped reduce the deficit in 2005, the budgetary consolidation in Cyprus was achieved mainly through structural measures. The structural deficit fell to 3 % of GDP, compared to almost 5 % and 8 % of GDP in 2004 and 2003 respectively. On this basis, the Council abrogated its decision on the existence of an excessive deficit in Cyprus on 11 July 2006.

#### Malta

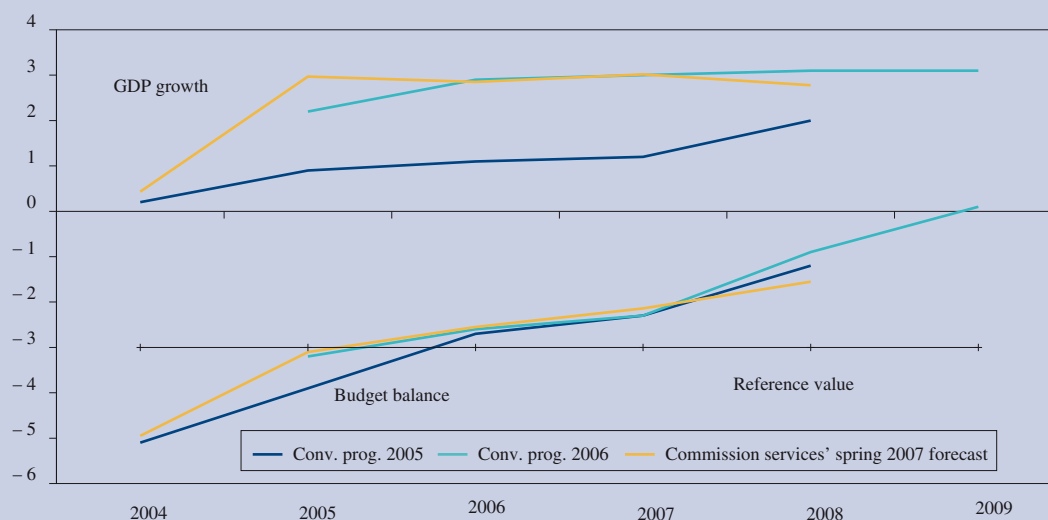
On 5 July 2004 the Council decided that Malta had an excessive deficit. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2006. Malta was recommended to implement with vigour measures, particularly those of a structural nature, aimed at rationalising and reducing expenditure. The Council also recommended that the rise in the debt ratio is brought to a halt in 2005 and reversed thereafter.

The Commission communication to the Council of 22 December 2004 concluded that, on the basis of the measures contained in the 2005 budget, Malta appeared to have taken effective action regarding the measures to achieve the deficit targets for 2005, by the deadline of 5 November, in response to the Council recommendation under Article 104(7). The communication concluded that no further steps were necessary at that point under the excessive deficit procedure.

In 2006, the deficit declined to 2.6 % of GDP, owing to a significant deficit-reducing one-off; excluding temporary measures the deficit would be somewhat above the 3 % of GDP reference value of the Treaty. The Commission services' spring 2007 forecast projects the deficit to narrow to 2.1 % of GDP (2.7 % of GDP net of one-off measures) in 2007. On a no-policy-change basis and without further one-off measures, the deficit would decline to 1.6 % of



Graph I.2.10: Budgetary plans, forecasts and outcomes in Malta



Source: Commission services and convergence programmes.

GDP in 2008. This supports the conclusions that the deficit has been brought below the reference value of the Treaty in a sustainable manner. The fiscal effort, measured by the improvement in the structural balance, is estimated at 1½ percentage points of GDP between 2004 and 2006, followed by a further 1 percentage point of GDP improvement in 2006–08. Against this backdrop, the Council, following a recommendation by the Commission, abrogated the EDP for Malta in June 2007.

#### Poland

On 5 July 2004, the Council decided that Poland had an excessive deficit. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2007. In particular, Poland was recommended to implement with vigour the measures envisaged in the convergence programme, in particular those contained in the so-called Hausner plan. This plan was proposed in 2003 and aimed at reducing public expenditure on social protection, public administration and State aid. The Polish authorities were recommended to take effective action by 5 November 2004 regarding the measures envisaged to achieve the 2005 deficit target. In addition, the Council invited the Polish authorities to allocate possible extra revenues to decrease the general government deficit.

After the expiry of the deadline of 5 November 2004 set in the Council recommendation under Article 104(7), the

Commission concluded, in its communication to the Council of 22 December 2004, that no further steps were necessary under the excessive deficit procedure for Poland as the Polish Government had taken effective action regarding the measures envisaged to achieve the 2005 deficit target.

On 14 November 2006, the Commission recommended the Council to decide that Poland had not taken adequate action in response to the July 2004 Council recommendation. Despite lower deficit outcomes in the period 2004 to 2006 than endorsed in the Council recommendation of 5 July 2004, the 2007 deficit target was revised to 1.7 % of GDP (excluding pension reform costs) in the draft budget for 2007, above the target of 1.5 % of GDP foreseen in the recommendation. These figures reflected the classification of contributions to second-pillar funded pension schemes as government revenues, possible by way of transitional arrangement, until end-March 2007<sup>(1)</sup>. From April 2007, the inclusion of the pension reform cost leads to a 2007 deficit target of around 3.7 % of GDP. The Commission services' autumn 2006 forecast projected the 2007 deficit to somewhat exceed the target.

On 28 November 2006, the Council decided, on the basis of the Commission recommendation, in accordance with Article 104(8) stating that the action taken by Poland in

<sup>(1)</sup> See Box I.2.2.

response to the Council recommendation of 5 July 2004 is proving to be inadequate to correct the excessive deficit within the deadline fixed by the recommendation.

Since Poland is a Member State with derogation, the Council issued on 27 February 2007 a new recommendation based on Article 104(7), taking into account the information of Poland's convergence programme update submitted in December 2006. The Council recommended the Polish authorities to 'take effective action by 27 August 2007 regarding additional measures, as far as possible of a structural nature, in order to achieve the deficit target for 2007 as set in the updated convergence programme'.

#### Slovakia

On 5 July 2004 the Council decided that an excessive deficit existed in Slovakia. At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2007. Slovakia was recommended to take effective action by 5 November 2004 to achieve the 2005 deficit target, to implement with vigour the measures envisaged in the May 2004 programme, in particular those related to the proposed further healthcare reforms and further public sector rationalisation. Furthermore Slovakia was invited to accelerate the fiscal adjustment if the implemented structural

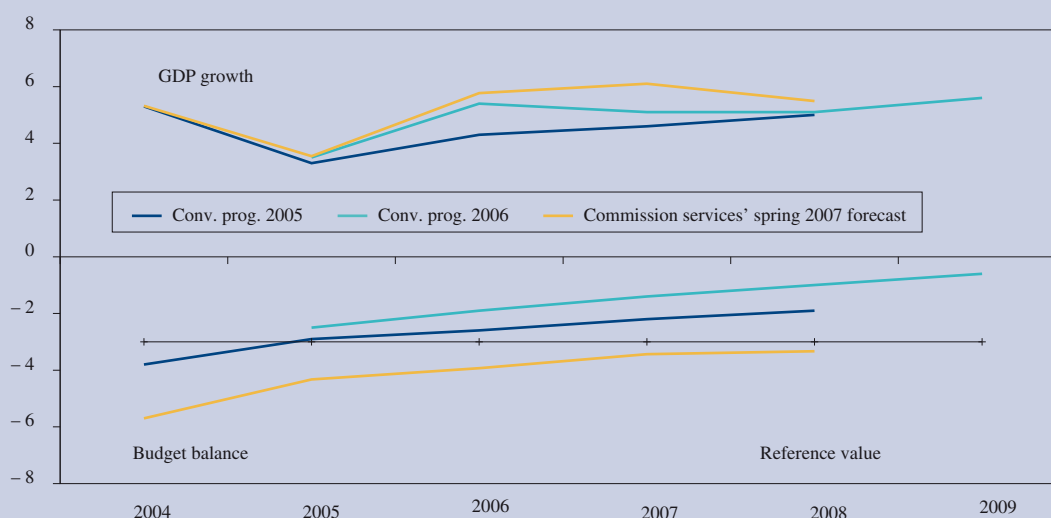
reforms resulted in higher growth than expected in the programme, in particular by dedicating any higher-than-budgeted revenues primarily to faster deficit reduction.

The Commission communication of 22 December 2004 concluded that, based on the then available information and the measures detailed in the 2005 budget, it appeared that the Slovak Government had taken effective action to achieve the 2005 deficit target, by the deadline of 5 November, in response to the Council recommendation under Article 104(7). The communication concluded that no further steps were necessary at that point under the excessive deficit procedure.

Revised data show that the deficit was below the reference value in 2003–05 and exceeded it in 2006, when it reached 3.4 % of GDP <sup>(1)</sup>. The widening of the deficit in 2006 corresponds with a large deterioration in the structural balance by some 2 percentage points of GDP, part of which can be explained by factors outside the control of the authorities.

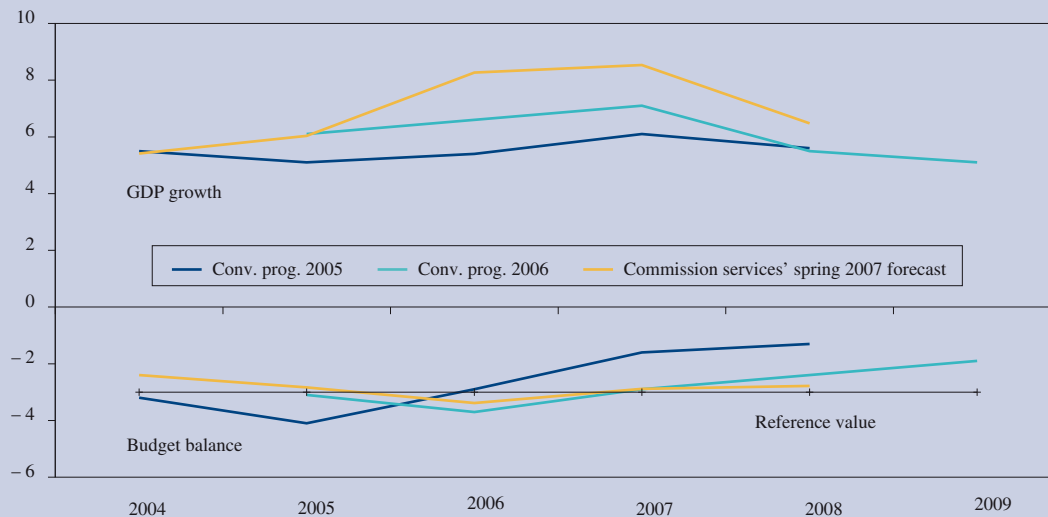
(1) The revisions were mainly due to a change in the methodology for recording of taxes and social contributions in national accounts, partially compensated in 2004 by a decrease in the surplus of other central government bodies. See Eurostat news release No 55/2007 of 23 April 2007.

Graph I.2.11: Budgetary plans, forecasts and outcomes in Poland



Source: Commission services and convergence programmes.

**Graph I.2.12: Budgetary plans, forecasts and outcomes in Slovakia**



Source: Commission services and convergence programmes.

### **Box I.2.2: Classification of pension schemes**

According to ESA95 rules and the Eurostat decision of 2 March 2004, funded defined-contribution (DC) pension schemes should be classified in the financial sector and not in government. The decision followed the reasoning that pensions paid by such schemes (i) depend primarily on financial markets performance (i.e. not under government control) and (ii) are financed by reserves that are not economically owned by government. Even if they are mandatory or if they are managed by government (for example, managed by the same government agency in charge of the pay-as-you-go pillar) or if there is some guarantee of a minimum pension, funded DC schemes should not be classified within government <sup>(1)</sup>.

Therefore when a government creates a new funded DC pension scheme and shifts to this new scheme a share of the social contributions that were previously collected by social security, government revenue falls. On the other hand, the pensions that will be paid by the new pension scheme will not count as government expenditure. This usually leads to a medium-term deterioration in the government deficit (often known as the pension reform cost) to be offset by an improvement in the future.

This Eurostat decision on the sectoral classification of pension schemes was to be implemented by all Member States until the end of a transitory period which ended in April 2007 (first EDP notification in 2007). Initially, Denmark, Hungary, Poland, Slovakia and Sweden benefited from this transitory period. By April 2007, the government deficits (surpluses) and debts in these countries were revised upwards (downwards). Accordingly, pension reform costs have to be included when assessing the compliance with the recommended deficit targets according to Article 104(7).

<sup>(1)</sup> Eurostat news release No 30/2004 of 2 March 2004.

Table I.2.1

Overview EDP — Steps since spring 2006 — EU-15 Member States (planned dates in italics)

	DE	FR	EL	IT	PT	UK
<b>Commission</b> adopts EDP report (Art. 104.3) = start of the procedure	19.11.2002	2.4.2003	19.5.2004	7.6.2005	22.6.2005	21.9.2005
<b>Economic and Financial Committee</b> adopts opinion (Art. 104.4)	29.11.2002	13.4.2003	2.6.2004	20.6.2005	4.7.2005	30.9.2005
<b>Commission</b> adopts:	8.1.2003	7.5.2003	24.6.2004	29.6.2005	20.7.2005	11.1.2006
— opinion on existence of excessive deficit (Art. 104.5)						
— recommendation for Council decision on existence of excessive deficit (Art. 104.6)						
— recommendation for Council recommendation to end this situation (Art. 104.7)						
<b>Council</b> adopts:	21.1.2003	3.6.2003	5.7.2004	28.7.2005 <sup>(1)</sup>	20.9.2005 <sup>(2)</sup>	24.1.2006
— decision on existence of excessive deficit (Art. 104.6)						
— recommendation to end this situation (Art. 104.7)						
— <b>deadline for taking effective action</b>	21.5.2003	3.10.2003	5.11.2004	12.1.2006	19.3.2006	24.7.2006
— <b>deadline for correction of excessive deficit</b>	<b>2004</b>	<b>2004</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>	<b>fin.yr 2006/07</b>
<b>Follow-up of the 104.7 Council recommendation</b>						
<b>Commission</b> adopts recommendations for:						
— Council decision establishing no effective action (Art. 104.8)		8.10.2003	22.12.2004			
— Council decision to give notice (Art. 104.9)	18.11.2003	21.10.2003	9.2.2005			
<b>Council</b> adopts conclusions (instead of Commission recommendations for 104.8 and 104.9)	25.11.2003	25.11.2003				
<b>New deadline for correction of excessive deficit</b>	<b>2005</b>	<b>2005</b>				
(NB: conclusions annulled by European Court of Justice on 13.7.2004)						
<b>Commission</b> adopts communication on budgetary situation	14.12.2004	14.12.2004				
<b>Council</b> adopts conclusions thereon	18.1.2005	18.1.2005				
<b>Council</b> adopts:						
— decision establishing no effective action (Art. 104.8)			18.1.2005			
— decision to give notice (Art. 104.9)			17.2.2005			
<b>Deadline for first report to be submitted</b>			21.3.2005			
<b>New deadline for correction of excessive deficit</b>			<b>2006</b>			
<b>Commission</b> adopts communication on action taken				22.2.2006	21.6.2006	20.9.2006
<b>Council</b> adopts conclusions thereon				14.3.2006	11.7.2006	10.10.2006
<b>Commission</b> adopts NEW recommendation for:						
— Council decision to give notice (Art. 104.9)	1.3.2006					
<b>Council</b> adopts:	14.3.2006					
— decision to give notice (Art. 104.9)						
<b>Deadline for first report to be submitted</b>	14.7.2006					
<b>New deadline for correction of excessive deficit</b>	<b>2007</b>					
<b>Follow-up of the 104.9 Council notice</b>						
<b>Commission</b> adopts communication on action taken	19.7.2006		6.4.2005			
<b>Council</b> adopts conclusions thereon	10.10.2006 <sup>(3)</sup>		12.4.2005			
<b>Abrogation of the EDP</b>						
<b>Commission</b> adopts recommendation for Council decision abrogating existence of excessive deficit (Art. 104.12)	16.5.2007	29.11.2006	16.5.2007			
<b>Council</b> adopts decision abrogating existence of excessive deficit (Art. 104.12)	5.6.2007	30.1.2007	5.6.2007			

<sup>(1)</sup> Date of political agreement: 12 July (Ecofin). Actual adoption on 28 July (written procedure).

<sup>(2)</sup> Date of political agreement: 9/10 September (informal Ecofin). Actual adoption on 20 September (Agriculture/Fisheries Council).

<sup>(3)</sup> Date of political agreement (in the form of Presidency conclusions after the informal Ecofin Council): 8/9 September.

*Continued from Table I.2.1*

**Overview EDP — Steps since spring 2006 — Recently acceded Member States (planned dates in italics)**

	<b>CZ</b>	<b>CY</b>	<b>HU</b>	<b>MT</b>	<b>PL</b>	<b>SK</b>
<b>Commission</b> adopts EDP report (Art. 104.3) = start of the procedure	12.5.2004	12.5.2004	12.5.2004	12.5.2004	12.5.2004	12.5.2004
<b>Economic and Financial Committee</b> adopts opinion (Art. 104.4)	24.5.2004	24.5.2004	24.5.2004	24.5.2004	24.5.2004	24.5.2004
<b>Commission</b> adopts:	24.6.2004	24.5.2004	24.5.2004	24.6.2004	24.6.2004	24.6.2004
— opinion on existence of excessive deficit (Art. 104.5)						
— recommendation for Council decision on existence of excessive deficit (Art.104.6)						
— recommendation for Council recommendation to end this situation (Art. 104.7)						
<b>Council</b> adopts:	5.7.2004	5.7.2004	5.7.2004	5.7.2004	5.7.2004	5.7.2004
— decision on existence of excessive deficit (Art. 104.6)						
— recommendation to end this situation (Art. 104.7)						
— <b>deadline for taking effective action</b>	5.11.2004	5.11.2004	5.11.2004	5.11.2004	5.11.2004	5.11.2004
— <b>deadline for correction of excessive deficit</b>	<b>2008</b>	<b>2005</b>	<b>2008</b>	<b>2006</b>	<b>2007</b>	<b>2007</b>
<b>Follow-up of the 104.7 Council recommendation</b>						
<b>Commission</b> adopts communication on action taken	22.12.2004	22.12.2004		22.12.2004	22.12.2004	22.12.2004
<b>Council</b> adopts conclusions thereon	18.1.2005	18.1.2005		18.1.2005	18.1.2005	18.1.2005
<b>Commission</b> adopts recommendation for Council decision establishing no effective action (Art. 104.8)	30.5.2007		22.12.2004		14.11.2006	
<b>Council</b> adopts decision establishing no effective action (Art. 104.8)			18.1.2005		28.11.2006	
<b>Commission</b> adopts recommendation for <b>new</b> Council recommendation to end excessive deficit situation (Art. 104.7)	30.5.2007		16.2.2005		7.2.2007	
<b>Council</b> adopts <b>new</b> recommendation to end excessive deficit situation (Art. 104.7):			8.3.2005		27.2.2007	
— <b>deadline for taking effective action</b>						
— <b>new deadline for correction of excessive deficit</b>			8.7.2005		27.8.2007	
			<b>2008</b>			
<b>Follow-up of the NEW 104.7 Council recommendation</b>						
<b>Commission</b> adopts communication on action taken			13.7.2005			
<b>Council</b> adopts conclusions thereon			—			
<b>Commission</b> adopts recommendation for Council decision establishing inadequate action (Art. 104.8)			20.10.2005			
<b>Council</b> adopts decision establishing inadequate action (Art. 104.8)			8.11.2005			
<b>Commission</b> adopts recommendation for <b>new</b> Council recommendation to end excessive deficit situation (Art. 104.7)			26.9.2006			
<b>Council</b> adopts <b>new</b> recommendation to end excessive deficit situation (Art. 104.7)			10.10.2006			
<b>Deadline for taking effective action</b>			10.4.2007			
<b>Progress report submitted</b>			26.4.2007			
<b>New deadline for correction of excessive deficit</b>			<b>2009</b>			
<b>Follow-up of the NEW 104.7 Council recommendation</b>						
<b>Commission</b> adopts communication on action taken			13.6.2007			
<b>Abrogation of the EDP</b>						
<b>Commission</b> adopts recommendation for Council decision abrogating existence of excessive deficit (Art. 104.12)		21.6.2006		16.5.2007		
<b>Council</b> adopts decision abrogating existence of excessive deficit (Art. 104.12)		11.7.2006		5.6.2007		

## 3. Overview of the 2006/07 updates of the stability and convergence programmes

### 3.1. Introduction

The 2006/07 assessment round of stability and convergence programmes (SCPs) was the first to include all 27 Member States of the enlarged EU and the second implementing the reformed Stability and Growth Pact (SGP). A schematic overview by country of the main points included in the Council opinions on the SCPs is provided in Table I.3.7 and Table I.3.8 at the end of this section.

There are at least three positive elements emerging from the latest assessment round. Firstly, countries in the excessive deficit procedure (EDP) plan significant fiscal corrections. If plans are fully implemented all but two countries will correct the excessive deficit by 2008. Secondly, apart from a few exceptions, the macroeconomic assumptions underlying the budgetary projections are generally plausible. Thirdly, the recourse to one-off and other temporary measures plays a less important role than in the past.

Less encouraging are the budgetary plans of the non-EDP countries and those relating to the period after the correction of an excessive deficit. On the face of a favourable economic outlook, the projected progress towards the country-specific medium-term objectives (MTO) is comparatively slow.

As in past years, the assessment process was delayed as a considerable number of SCPs was submitted after the deadline of 1 December set in the code of conduct<sup>(1)</sup>. Of the 27 Member States, 10 respected the official deadline, while some submissions took place with delays of sev-

eral weeks. Only in a few cases delayed submissions were due to objective political constraints (e.g. formation of new governments in Austria, the Czech Republic and Latvia). Portugal and the United Kingdom availed themselves of their respective derogations as defined in the code of conduct. The deadline of 1 December was not applicable to Bulgaria and Romania, as they joined the EU on 1 January 2007.

### 3.2. Country-specific medium-term budgetary objectives

Following the 2005 reform of the SGP, which made MTOs country-specific, Member States presented their respective targets for the first time in the 2005/06 updates of the SCPs. In some cases, the MTOs were not explicitly indicated but could be inferred from the programmes. Only the United Kingdom did not specify a quantitative MTO.

In the 2006/07 updates, two countries, Finland and Hungary, modified their MTO making it more ambitious. In the case of Finland, the MTO inferred from the previous programme, and confirmed by the Finnish authorities, was a structural surplus of 1.5 % of GDP. The 2006/07 update explicitly indicates a structural surplus of 2 % of GDP. As regards Hungary, the MTO was set as a range of – 0.5 % to – 1 % of GDP in the previous programme, while the 2006/07 update sets a deficit of 0.5 % of GDP<sup>(2)</sup>.

<sup>(1)</sup> Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes. The full document is available at: [http://ec.europa.eu/economy\\_finance/about/activities/sgp/codeofconduct\\_en.pdf](http://ec.europa.eu/economy_finance/about/activities/sgp/codeofconduct_en.pdf)

<sup>(2)</sup> For Denmark, the MTO, expressed as a range between ½ and 1½ % of GDP is in substance unchanged compared to the previous update, when it was expressed as a range between 1½ % and 2½ % of GDP as the difference corresponds to the impact of the Eurostat decision on the accounting of second pillar funded pension systems. Similarly, the Swedish MTO is in substance unchanged taking into account the Eurostat decision and it is set as 1 % of GDP (previously expressed as 2 % of GDP).

As regards the two recently acceded Member States, the MTO put forward by Romania in its convergence programme is a structural deficit of 0.9 % of GDP, while Bulgaria set a balanced budget in structural terms. Based on the criteria set out in the code of conduct and in the agreement of the Economic and Financial Committee, the MTO of Romania is appropriate taking into account the debt ratio and average potential growth in the long-run <sup>(1)</sup>. The MTO set by Bulgaria is above the range warranted by the debt ratio and potential GDP growth.

### 3.3. The adjustment path over the programme period

The nominal deficit in the euro area and in the EU as a whole is projected to decline from about 2 % of GDP in 2006 to 0.5 % of GDP in 2009. Compared to the 2005/06 updates, the planned adjustment of the headline deficit benefits from a better-than-expected initial position in 2006 and a more favourable economic growth outlook.

In 2006, the improvement in the underlying situation of government finances has not always been satisfactory in spite of robust economic growth coupled with buoyant tax receipts. The 2006/07 updates of SCPs show that the average improvement in the structural balance did not exceed 0.4 % of GDP in the euro area and the EU, and hence fell short of the 0.5 % of GDP benchmark of the reformed SGP. While countries in EDP have in general taken sizeable adjustment measures, non-EDP countries have on average experienced a deterioration of their structural balance.

Based on the figures of the programmes and using the commonly agreed method, the structural budget balance in the euro area and in the EU is estimated to improve from respectively -1.6 % and -1.7 % of GDP in 2006 to -0.4 % and -0.5 % of GDP in 2009. The overall adjustment is however somewhat back-loaded. In 2007, the estimated improvement of the structural balance does not exceed 0.4 % of GDP. Larger improvements are planned in the outer years of the programme period.

<sup>(1)</sup> In September 2005 the EFC reiterated the provisions of the code of conduct concerning the MTOs and concluded that Member States with a low debt ratio would have an MTO in a range from -1.0 % of GDP to -0.5 % of GDP, and that Member States with a very high debt ratio would have an MTO in balance or surplus. Within this range, the MTOs would be set taking into account average potential growth as projected by the Economic Policy Committee.

Taking into account the favourable economic outlook, this time profile is not consistent with the provisions of the reformed SGP. Euro-area countries or Member States participating in ERM-II should pursue an annual structural adjustment of 0.5 % of GDP as a benchmark and are expected to step up the adjustment effort in economic 'good times'.

#### Countries at MTO

Countries already at the MTO are estimated to loosen their structural balance in 2007 by on average  $\frac{3}{4}$  percentage point of GDP. In the euro area, the average deterioration of the structural budget balance in the same

Table I.3.1

#### MTO, minimum benchmark, debt and potential growth

	MTO	Minimum benchmark	Debt ratio (2006)	Potential growth (average 2005-50)
	(% of GDP)			%
SE	2.0	-0.6	46.9	2.2
FI	2.0	-1.1	39.1	1.7
DK	1.0	-0.5	30.2	1.6
BE	0.5	-1.1	89.1	1.7
DE	0.0	-1.8	67.9	1.4
IE	0.0	-1.3	24.9	2.8
EL	0.0	-1.3	104.6	1.4
ES	0.0	-1.2	39.9	1.5
FR	0.0	-1.4	63.9	1.8
IT	0.0	-1.5	106.8	1.3
AT	0.0	-1.5	62.2	1.5
EE	0.0	-2.0	4.1	2.6
MT	0.0	-1.8	66.5	2.4
BG	0.0	-1.3	22.8	n.a.
PT	-0.5	-1.1	64.7	1.5
CY	-0.5	-1.9	65.3	2.9
HU	-0.5	-2.0	66.0	2.0
NL	-0.8	-1.0	48.7	1.7
LU	-0.8	-0.8	6.8	3.1
SK	-0.9	-2.2	30.7	2.3
RO	-0.9	-1.8	12.4	n.a.
CZ	-1.0	-1.6	30.4	1.9
LV	-1.0	-2.1	10.0	2.8
LT	-1.0	-1.8	18.2	2.7
PL	-1.0	-1.6	47.8	2.4
SI	-1.0	-1.9	27.8	2.0
UK	n.a.	-1.4	43.5	1.9

Source: Commission services.

Table I.3.2

Nominal budget balances in the 2006/07 stability and convergence programme updates and the Commission services' autumn 2006 and spring 2007 forecasts (% of GDP)

	2006/07 updates					Commission services' autumn 2006 forecast			Commission services' spring 2007 forecast		
	2005	2006	2007	2008	2009	2006	2007	2008	2006	2007	2008
BE <sup>(1)</sup>	-2.3	0.0	0.3	0.5	0.7	-0.2	-0.5	-0.5	0.2	-0.1	-0.2
DE	-3.2	-2.1	-1½	-1½	-1.0	-2.3	-1.6	-1.2	-1.7	-0.6	-0.3
IE	1.1	2.3	1.2	0.9	0.6	1.2	0.9	0.4	2.9	1.5	1.0
EL	-5.2	-2.6	-2.4	-1.8	-1.2	-2.6	-2.6	-2.4	-2.6	-2.4	-2.7
ES	1.1	1.4	1.0	0.9	0.9	1.5	1.1	0.9	1.8	1.4	1.2
FR <sup>(2)</sup>	-2.9	-2.7	-2.5	-1.8	-0.9	-2.7	-2.6	-2.2	-2.5	-2.4	-1.9
IT	-4.1	-5.7	-2.8	-2.2	-1.5	-4.7	-2.9	-3.1	-4.4	-2.1	-2.2
LU	-1.0	-1.5	-0.9	-0.4	0.1	-1.5	-0.5	-0.3	0.1	0.4	0.6
NL	-0.3	0.0	0.2	0.3	0.9	0.0	0.1	0.3	0.6	-0.7	0.0
AT	-1.5	-1.1	-0.9	-0.7	-0.2	-1.3	-1.2	-1.0	-1.1	-0.9	-0.8
PT	-6.0	-4.6	-3.7	-2.6	-1.5	-4.6	-4.0	-3.9	-3.9	-3.5	-3.2
SI	-1.4	-1.6	-1.5	-1.6	-1.0	-1.6	-1.6	-1.5	-1.4	-1.5	-1.5
FI	2.5	2.9	2.8	2.7	2.7	2.9	2.9	2.9	3.9	3.7	3.6
EU-13	-2.4	-2.1	-1.4	-1.1	-0.5	-2.0	-1.5	-1.3	-1.6	-1.0	-0.8
BG	2.4	3.2	0.8	1.5	1.5	3.3	1.8	1.7	3.3	2.0	2.0
CZ	-3.6	-3.5	-4.0	-3.5	-3.2	-3.5	-3.6	-3.2	-2.9	-3.9	-3.6
DK <sup>(4)</sup>	4.0	3.1	2.8	2.5	1.8	3.2	3.3	3.2	4.2	3.7	3.6
EE	2.3	2.6	1.2	1.3	1.6	2.5	1.6	1.3	3.8	3.7	3.5
CY	-2.3	-1.9	-1.6	-0.7	-0.4	-1.9	-1.7	-1.7	-1.5	-1.4	-1.4
LV	0.1	-0.4	-1.3	-0.9	-0.4	-1.0	-1.2	-1.2	0.4	0.2	0.1
LT	-0.5	-1.2	-0.9	-0.5	0.0	-1.0	-1.2	-1.3	-0.3	-0.4	-1.0
HU	-7.8	-10.1	-6.8	-4.3	-3.2	-10.1	-7.4	-5.6	-9.2	-6.8	-4.9
MT	-3.2	-2.6	-2.3	-0.9	0.1	-2.9	-2.7	-2.9	-2.6	-2.1	-1.6
PL <sup>(4)</sup>	-2.5	-1.9	-1.4	-1.0	-0.6	-2.2	-2.0	-1.8	-3.9	-3.4	-3.3
RO	-1.5	-2.3	-2.7	-2.6	-2.0	-1.4	-2.6	-2.6	-1.9	-3.2	-3.2
SK	-3.1	-3.7	-2.9	-2.4	-1.9	-3.4	-3.0	-2.9	-1.4	-1.5	-1.5
SE <sup>(4)</sup>	3.0	3.0	2.4	2.7	3.1	2.8	2.4	2.5	2.2	2.2	2.4
UK <sup>(5)</sup>	-2.9	-2.8	-2.3	-1.9	-1.7	-2.9	-2.8	-2.5	-2.8	-2.6	-2.4
EU-27 <sup>(5)</sup>	-2.3	-2.0	-1.4	-1.1	-0.6	-2.0	-1.6	-1.4	-1.7	-1.2	-1.0

<sup>(1)</sup> The 2005 outcome follows the Eurostat decision to amend the deficit and debt data notified by Belgium for 2005 in relation to the assumption by government (FIF — Fonds de l'infrastructure ferroviaire) of EUR 7 400 million (2.5% of GDP) of the debt of the railway company SNCB in 2005.

<sup>(2)</sup> For France, the low-growth scenario has been taken into account.

<sup>(3)</sup> Data from the autumn forecast have been used for the missing countries for the calculation of the aggregates.

<sup>(4)</sup> The budgetary projections include the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes.

<sup>(5)</sup> Financial years ending in following March. Adjusted by Commission services to bring treatment of UMTS receipts in line with EDP definition.

Source: Commission services.

category of countries reaches ½ percentage point of GDP, and is particularly large in Ireland and the Netherlands, respectively 1.1 % of GDP and 0.5 % of GDP. Outside the euro area, a particularly large deterioration is estimated to take place in Bulgaria (2.2 % of GDP), Estonia (1 % of GDP), Sweden and Latvia (both 0.8 % of GDP).

In Bulgaria and Latvia, the deterioration of the structural budget balance in 2007 is likely to be lower than implied

by the 2006/07 convergence programme thanks to additional measures announced after the submission of the programme <sup>(1)</sup>.

<sup>(1)</sup> According to the anti-inflation plan released on 6 March 2007, Latvia plans to achieve a balanced budget in 2007; the target in the convergence programme was -1.3 % of GDP. Bulgaria announced that it would aim for a surplus of 2.0 % of GDP in 2007 as compared to 0.8 % of GDP indicated in the convergence programme.



Overall, the estimated fiscal loosening of the fiscal stance is not warranted against the backdrop of the favourable economic growth prospects and impending budgetary effects of ageing population. In some countries the fiscal loosening entails the risk of running procyclical policies. This risk was explicitly mentioned in the Council opinions on the SCPs of Bulgaria, Ireland, Estonia, the Netherlands and Sweden.

**Countries not yet at the MTO**

The adjustment planned by Member States with a deficit below 3 % of GDP but not yet at MTO continues to fall short of the 0.5 % benchmark in 2007. This is also the case when considering only the euro-area countries of the same category. While none of the currently concerned euro-area countries is estimated to loosen the fiscal stance, the planned improvement, where there is one, is modest. Based on the figures of the updated programmes and using the commonly agreed method, in 2007 the estimated improvement of the structural budget balance in France, for which the low-growth scenario was considered, is 0.3 % of GDP, while the structural balance is estimated to remain almost unchanged in Slovenia and Austria. Belgium and Luxembourg are the only euro-area economies where the estimated structural adjustment does not fall short of the 0.5 % of GDP benchmark of the reformed Pact. However, in the case of

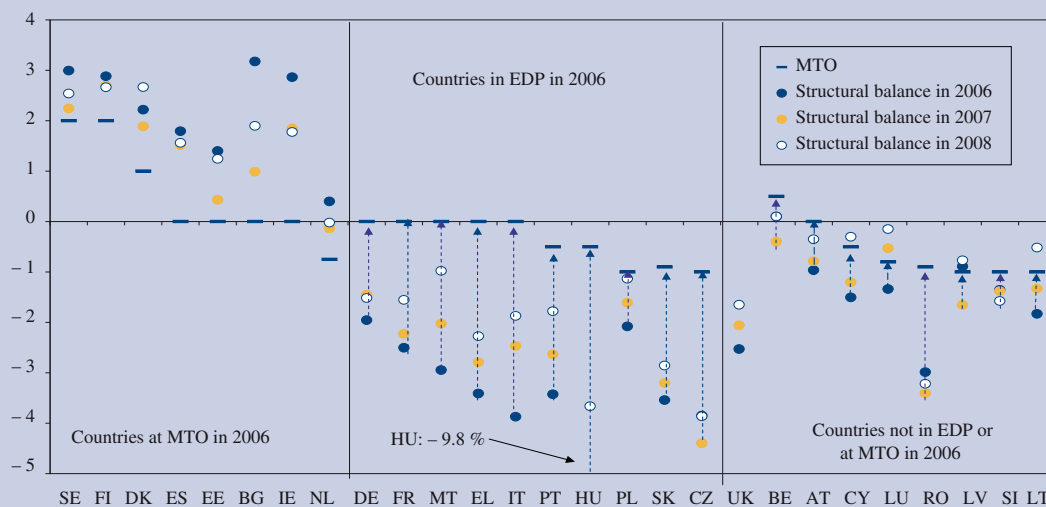
Belgium the Council in its opinion on the 2006/07 updated stability programme observed that the adjustment towards the MTO may fall short of the 0.5 % of GDP benchmark in 2007 and slow down thereafter. It invited Belgium to ensure that the budget target for 2007 is met. As regards the time profile of the structural adjustment over the entire programme period, the planned improvement in France, Austria and Slovenia is clearly back-loaded. In France and Austria, the bulk of the adjustment is estimated to take place from 2008 onwards, while in Slovenia only from 2009 onwards. Given the currently favourable economic conditions, the three countries were invited by the Council to bring forward their fiscal adjustment.

With the exception of Romania, the structural adjustment in non-euro area countries that have not yet reached the MTO is estimated to be somewhat larger on average over the programme period. In Romania, a deterioration of the structural budget balance is expected in 2007 and the bulk of the overall adjustment effort for the entire programme period is back-loaded to 2009.

**Excessive deficit countries**

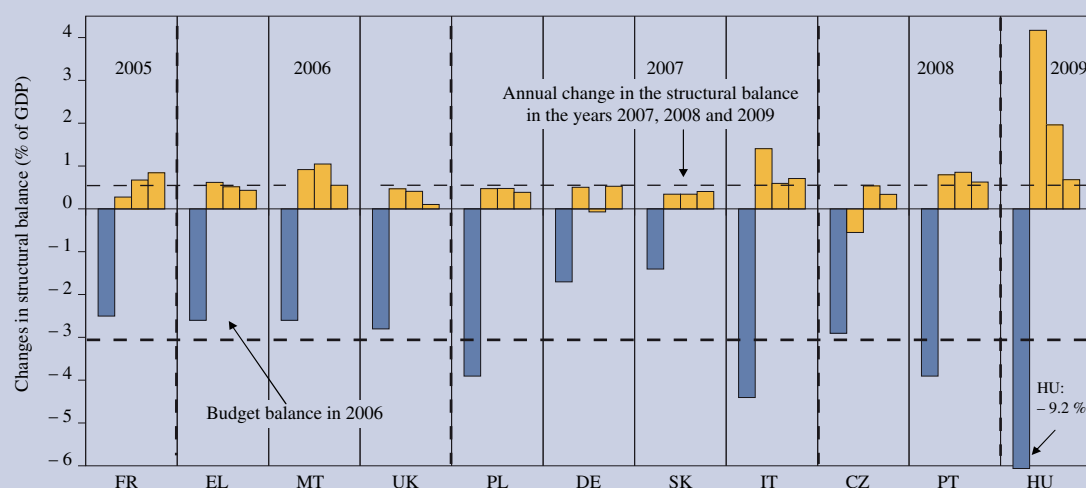
Countries in EDP are estimated to make headway to correct the excessive deficits. According to the budgetary

**Graph I.3.1: Structural budget balances in the EU Member States and planned changes 2006–08 (% of GDP)**



Source: Commission services.

Graph I.3.2: Structural balances and planned changes in Member States in EDP end 2006 with deadlines for their correction



Source: Commission services.

plans in the 2006/07 SCP updates, Hungary and the Czech Republic would be the only EU Member States with a deficit of more than 3 % of GDP after 2008.

In Greece, after an improvement of 0.6 % of GDP in 2007, the planned adjustment effort over the rest of the programme period, meets the 0.5 % of GDP benchmark. In Italy and Portugal, the planned improvement in the structural balance throughout the programme period significantly exceeds the 0.5 % of GDP benchmark each year (e.g. in 2007, respectively 1.4 % and 0.8 % of GDP) and reflects the aim of the two countries to comply with the respective Council recommendations under Article 104(7).

Outside the euro area, compared to last year's plans when the projected annual fiscal adjustment in the recently acceded Member States in EDP was estimated to fall short of the 0.5 % benchmark, projections have been upgraded in the new convergence programmes. In Hungary, for instance, the improvement of the structural balance is estimated to be particularly large (6.8 % of GDP over 2006–09) aiming to correct the excessive deficit by 2009. In Malta, an adjustment of 2.5 % of GDP is planned over the same period. Despite a relatively high structural deficit, the planned adjustment in 2006–09 is rather small in the Czech Republic with only 0.4 % of GDP.

In some of the countries that are expected to correct the excessive deficit shortly, the adjustment effort seems to

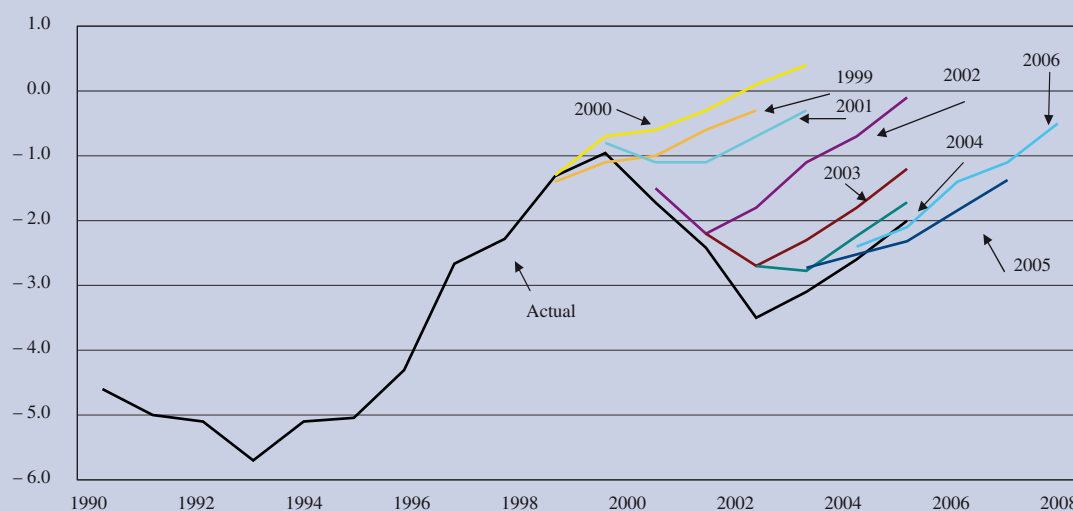
grow weaker once the deficit is projected to fall below 3 % of the GDP threshold. On the basis of the commonly agreed method using the data of the SCPs, the projected reduction of the structural budget balance falls significantly short of the 0.5 % benchmark, in at least one of the years following the correction of their excessive deficit. For instance, Germany plans no improvement in 2008 and little improvement is planned in the United Kingdom in 2008 and 2009. Similarly, Slovakia, an ERM II country, which is expected to correct its excessive deficit by the 2007 deadline set by the Council plans an improvement in the structural balance of only 1 % of GDP over the entire programme period 2006–09.

### 3.3.1. Composition of the planned adjustments

The 2006/07 updates of the SCPs project a decline in both the revenue and expenditure ratios over the programme period. In the euro area, total revenues are expected to fall by 0.4 percentage points, to 45 % of GDP in 2009. The decline in revenues as a share of GDP is planned to be more than offset by a sizeable reduction of the expenditure ratio of around 1½ % of GDP. A similar composition of the adjustment is planned for the EU as a whole.

A decomposition of the planned reduction of the government balance-to-GDP ratio reported in Table I.3.3 and Table I.3.4 highlights a number of interesting elements. Firstly, the projected decline in the expenditure-to-GDP

Graph I.3.3: **Headline deficit of the euro area; projections in the successive updates of the stability programmes (% of GDP)**



Source: Commission services.

ratio is the combined effect of an increase in expenditure levels that stays behind the projected increase in the overall level of economic activity. In the euro area total expenditures are planned to increase on average by slightly less than 3 % per year in 2006–09. This compares with an average annual increase of nominal GDP of around 4 % per year, which is slightly above the average growth rate of the past 10 years and roughly corresponds to the current estimate of real potential GDP growth for the euro area plus the ECB's 2 % reference value for inflation. Secondly, the average annual increase in total revenues is expected to be slightly lower than nominal GDP growth and in line with the performance over the past 10 years.

A similar picture emerges for the EU as a whole. The planned fiscal adjustment is expected to be obtained by keeping average expenditure growth below the projected growth rate of total revenues, which in turn are expected to grow less than nominal GDP growth.

Most of the Member States that have been under the excessive deficit procedure plan to improve their budgetary position chiefly via cuts in primary current expenditures in % of GDP, or combine it with an increase in revenues (Greece, Hungary, Italy). In some cases (e.g. Italy and Poland), the planned budgetary adjustment involves a decline in public investments.

In some recently acceded Member States, a significant increase in public investment is planned, especially in Romania and the Baltic countries, reflecting the need to build up and expand infrastructures. Declining investment expenditures are planned in Malta, Slovakia and Slovenia.

Finally, Hungary, Italy, Luxembourg and Portugal expect an increase in interest expenditure in % of GDP over the programme period in view of rising market rates. By contrast, significant savings on interest expenditures are expected in Member States with currently relatively high, but rapidly declining debt ratios (Belgium, Greece, Cyprus, Malta) although in some other countries with debt levels below 30 % of GDP (Denmark, Romania, Slovenia) non-negligible savings are planned too.

### 3.3.2. One-off and other temporary measures

Over the programme period, one-off and other temporary measures are planned to be negligible in both the euro area and EU. They are expected to amount to less than 0.05 % of GDP in 2007, following an already low amount in 2006. The impact of one-off and other temporary measures is expected to decline further in 2008 and 2009<sup>(1)</sup>. By country, relatively large one-offs are expected in 2007 in Hungary and to a lesser extent in Belgium, Denmark, Estonia, Italy and Malta. In the light of its past track

<sup>(1)</sup> Countries for which the programme either does not provide any information on one-offs or plans zero one-offs are not shown.

Table I.3.3

**Euro area — Decomposition of the planned change in government balance-to-GDP ratio**

	2006		2009		Difference (2006–09)				p.m. past performance
	% of GDP	EUR billion	% of GDP	EUR billion	p.p. of GDP	EUR billion	% change	Annual average % change	Annual average % change
Total revenue	45.4	3 838.3	45.0	4 278.7	– 0.4	440.4	11.5	3.8	3.7 (1996–2005)
Total expenditure	47.3	3 997.5	45.7	4 343.6	– 1.6	346.1	8.7	2.9	3.2 (1996–2005)
Budget balance	– 1.9	– 159.3	– 0.7	– 64.9	1.2	94.3			
GDP		8 458.7		9 507.7		1 049.1	12.4	4.1	3.9 (1995–2005)

Source: Commission services on the basis of the 2006/07 updates of the stability and convergence programmes.

Table I.3.4

**EU — Decomposition of the planned change in government balance-to-GDP ratio**

	2006		2009		Difference (2006–09)				p.m. past performance
	% of GDP	EUR billion	% of GDP	EUR billion	p.p. of GDP	EUR billion	% change	Annual average % change	Annual average % change
Total revenue	44.5	5 146.4	44.2	5 832.3	– 0.3	685.9	13.3	4.4	4.6 (2001–05)
Total expenditure	46.4	5 362.2	45.0	5 933.9	– 1.4	571.8	10.7	3.6	3.2 (2001–05)
Budget balance	– 1.9	– 215.8	– 0.8	– 101.7	1.1	114.1			
GDP		11 559.0		13 195.1		1 636.0	14.2	4.7	4.5 (1995–2005)

Source: Commission services on the basis of the 2006/07 updates of the stability and convergence programmes.

record, Belgium was invited by the Council to reduce its recourse to one-off measures when strengthening the pace of adjustment towards the MTO.

### 3.4. Debt projections

In 2006, the gross debt-to-GDP ratio in the euro area declined to 69 % of GDP in 2006 and in the EU as a whole to 61.7 % of GDP. The reduction of the debt ratio is planned to accelerate significantly over the period covered by the programmes, mainly due to higher primary surpluses and favourable economic growth prospects. In 2009, the debt-to-GDP ratio would be 64.6 % of GDP in the euro area, while the EU aggregate is planned to be below the reference value of 60 % of GDP, at 57.6 % of GDP.

Although all six euro area Member States with debt levels currently above the 60 % of GDP ceiling (Belgium, Germany, Greece, France, Italy and Portugal) plan to

reduce their debt levels over the programme period, only France and Austria expect to bring it below the reference value of the Treaty in 2010.

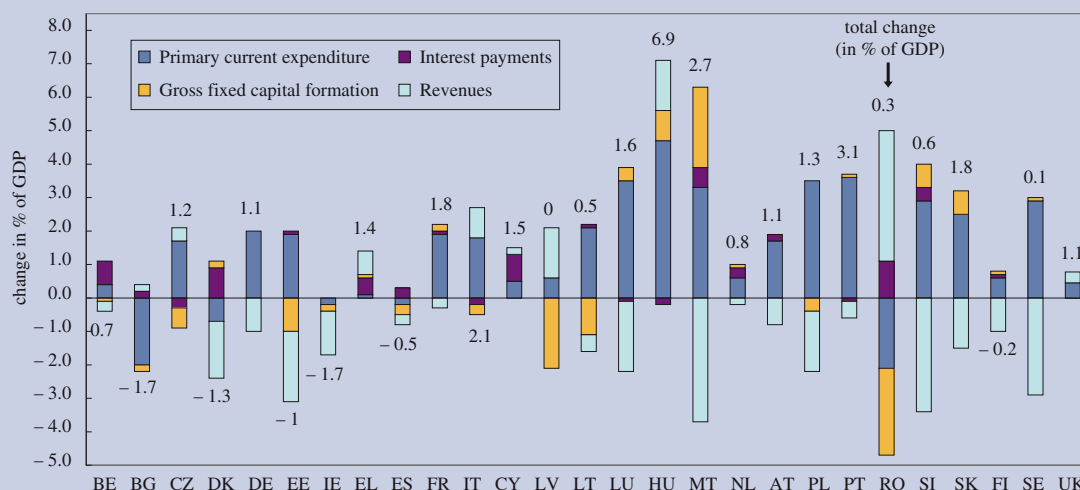
In the Member States outside the euro area, where the debt ratio is on average lower, all countries, except Hungary and the United Kingdom, are expected to reduce the debt levels in per cent of GDP between now and 2009. By the end of the programme period the only country with a debt ratio above the 60 % of GDP reference value of the Treaty would be Hungary. A rapid decline to just below 60 % of GDP is projected in Malta.

### 3.5. Macroeconomic assumptions and risks to the budgetary projections

#### 3.5.1. Risks to the budgetary projections

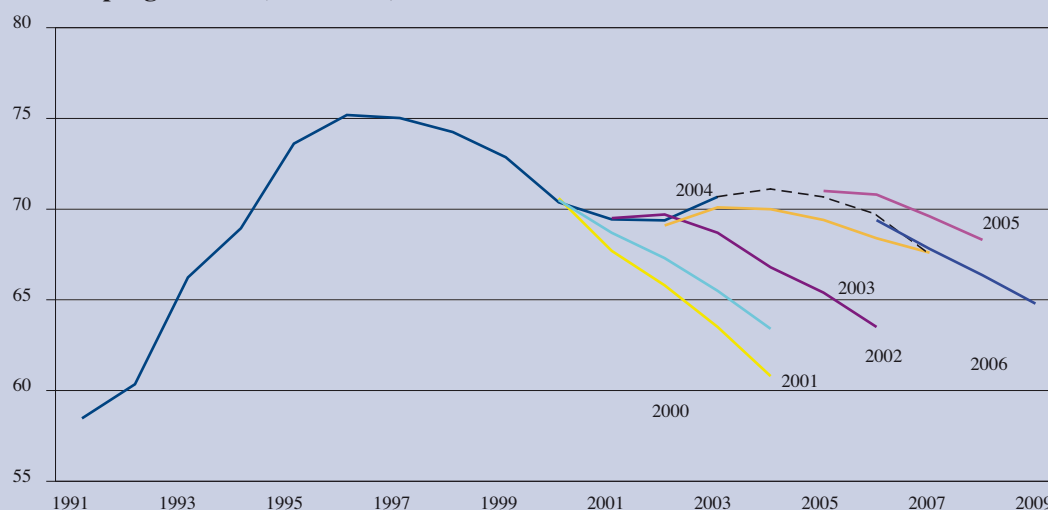
In the past, significant deviations from the budgetary plans set out by Member States in their SCPs were

Graph I.3.4: Composition in the variation of the budget position 2006–09 (% of GDP)



Source: Commission services.

Graph I.3.5: Debt-to-GDP ratio of the euro area: projections in successive updates of stability programmes (% of GDP)



Source: Commission services.

observed (see Graph I.3.3). The main reasons for the deviations were (i) optimistic macroeconomic projections, (ii) slippages of government expenditures, despite favourable developments in interest payments reflecting the decline in market rates <sup>(1)</sup>.

<sup>(1)</sup> Part III of this report provides a detailed analysis of the differences between plans and outcomes over the period 1998-2006.

In line with established practice, the Commission and the Council assessed the risks to the budgetary projections presented in the 2006/07 updates of the SCPs. The conclusion was drawn that budgetary developments could be ‘worse than projected’ in 2007 in four Member States, while for 2008 and 2009, the number is significantly higher, 11 and 13, respectively. In several cases the assessment of the risks to the adjustment path is complicated by the fact that the budgetary measures

required to achieve the targets are not or not sufficiently specified, especially in the outer years of the programme period.

### 3.5.2. More cautious macroeconomic assumptions

According to the 2006/07 updates of the SCPs, relatively sound economic growth prospects are expected in the euro area and EU as a whole throughout the programme period. Average real GDP growth is expected to be close to or at the current estimate of potential growth of 2¼ % in the euro area and of 2½ % in the EU. As a result, the output gap calculated with the commonly agreed method is projected to remain roughly stable at around – ½ percentage point of GDP in both the euro area and the EU.

The growth projections in the 2006/07 updates were in line with the Commission services' autumn 2006 forecast, which serves as benchmark for the assessment, and have been considered as plausible in most of the assessments. This constitutes a clear improvement compared to the recent past when medium-term budgetary projections were typically based on optimistic macroeconomic assumptions.

Nevertheless, in some cases macroeconomic projections were considered favourable (or mildly favourable) throughout the programme period (Malta) or in the outer years of the programme (Poland, Portugal, Greece, Hungary and Germany).

Table I.3.5

### Projections of real growth (% change on the previous year)

	2006/07 updates of stability and convergence programmes					Commission services' autumn 2006 forecast			Commission services' spring 2007 forecast		
	2005	2006	2007	2008	2009	2006	2007	2008	2006	2007	2008
BE	1.2	2.7	2.2	2.1	2.2	2.7	2.3	2.2	3.1	2.3	2.2
DE	0.9	2.3	1.4	1.8	1.8	2.4	1.2	2.0	2.7	2.5	2.4
IE	5.5	5.4	5.3	4.6	4.1	5.3	5.3	4.3	6.0	5.0	4.0
EL	3.7	4.0	3.9	4.0	4.1	3.8	3.7	3.7	4.3	3.7	3.7
ES	3.5	3.8	3.4	3.3	3.3	3.8	3.4	3.3	3.9	3.7	3.4
FR	1.2	2.3	2.3	2.3	2.3	2.2	2.3	2.1	2.0	2.4	2.3
IT	0.0	1.6	1.3	1.5	1.6	1.7	1.4	1.4	1.9	1.9	1.7
LU	4.0	5.5	4.0	5.0	4.0	5.5	4.5	4.2	6.2	5.0	4.7
NL	1.5	3.8	3.0	1.8	1.8	3.0	2.9	2.6	2.9	2.8	2.6
AT	2.0	3.1	2.7	2.3	2.5	3.1	2.6	2.1	3.1	2.9	2.5
PT	0.4	1.4	1.8	2.4	3.0	1.2	1.5	1.7	1.3	1.8	2.0
SI	4.0	4.7	4.3	4.2	4.1	4.8	4.2	4.5	5.2	4.3	4.0
FI	2.9	4.5	3.0	2.9	2.6	4.9	3.0	2.6	5.5	3.1	2.7
EU-13	1.4	2.6	2.2	2.2	2.2	2.6	2.1	2.2	2.7	2.6	2.5
BG	5.5	5.9	5.9	6.2	6.1	6.0	6.0	6.2	6.1	6.1	6.2
CZ	6.1	6.0	4.9	4.8	4.8	6.0	5.1	4.7	6.1	4.9	4.9
DK	3.6	2.7	2.0	0.7	0.7	3.0	2.3	2.2	3.2	2.3	2.0
EE	10.5	11.0	8.3	7.7	7.6	10.9	9.5	8.4	11.4	8.7	8.2
CY	3.9	3.7	3.9	4.1	4.1	3.8	3.8	3.9	3.8	3.8	3.9
LV	10.2	11.5	9.0	7.5	7.5	11.0	8.9	8.0	11.9	9.6	7.9
LT	7.6	7.8	6.3	5.3	4.5	7.8	7.0	6.5	7.5	7.3	6.3
HU	4.2	4.0	2.2	2.6	4.2	4.0	2.4	2.7	3.9	2.4	2.6
MT	2.2	2.9	3.0	3.1	3.1	2.3	2.1	2.2	2.9	3.0	2.8
PL	3.5	5.4	5.1	5.1	5.6	5.2	4.7	4.8	6.1	6.1	5.5
RO		8.0	6.5	6.3	5.9	7.2	5.8	5.6	7.7	6.7	6.3
SK	6.1	6.6	7.1	5.5	5.1	6.7	7.2	5.7	8.3	8.5	6.5
SE	2.7	4.0	3.3	3.1	2.7	4.0	3.3	3.1	4.4	3.8	3.3
UK	1.8	2.8	3.0	2.5	2.5	2.7	2.6	2.4	2.8	2.8	2.5
EU-27	1.7	2.9	2.5	2.4	2.5	2.8	2.4	2.4	3.0	2.9	2.7

Source: Commission services.

Table I.3.6

**General government gross debt (% of GDP)**

	2006/07 updates of stability and convergence programmes					Commission services' autumn 2006 forecast			Commission services' spring 2007 forecast		
	2005	2006	2007	2008	2009	2006	2007	2008	2006	2007	2008
BE	93.2	89.4	85.6	82.1	78.3	89.4	86.3	83.2	89.1	85.6	82.6
DE	67.9	67.9	67.0	66.5	65.5	67.8	67.7	67.3	67.9	65.4	63.6
IE	27.4	25.1	23.0	22.4	21.9	25.8	24.4	23.6	24.9	23.0	21.7
EL	107.5	104.1	100.1	95.9	91.3	104.8	101.0	96.4	104.6	100.9	97.6
ES	43.1	39.7	36.6	34.3	32.2	39.7	37.0	34.7	39.9	37.0	34.6
FR	66.6	64.6	63.6	62.6	60.7	64.7	63.9	63.3	63.9	62.9	61.9
IT	106.6	107.6	106.9	105.4	103.5	107.2	105.9	105.7	106.8	105.0	103.1
LU	6.1	7.5	8.2	8.5	8.5	7.4	7.3	7.1	6.8	6.7	6.0
NL	52.7	50.2	47.9	46.3	44.2	50.5	47.8	45.4	48.7	47.7	45.9
AT	63.4	62.2	61.2	59.9	58.5	62.1	60.9	59.8	62.2	60.6	59.2
PT	64.0	67.4	68.0	67.3	65.2	67.4	69.4	70.7	64.7	65.4	65.8
SI	28.0	28.5	28.2	28.3	27.7	28.4	28.0	27.6	27.8	27.5	27.2
FI	41.3	39.1	37.7	36.2	35.0	38.8	37.3	35.8	39.1	37.0	35.2
<b>EU-13</b>	<b>70.6</b>	<b>69.4</b>	<b>67.8</b>	<b>66.4</b>	<b>64.6</b>	<b>69.4</b>	<b>68.0</b>	<b>66.9</b>	<b>69.0</b>	<b>66.9</b>	<b>65.0</b>
BG	29.8	25.3	22.7	22.3	21.1	25.8	21.8	17.9	22.8	20.9	19.0
CZ	30.4	30.6	30.5	31.3	32.0	30.9	30.8	31.0	30.4	30.6	30.9
DK <sup>(1)</sup>	36.2	29.8	25.8	22.7	20.5	29.7	25.7	23.2	30.2	25.0	20.0
EE	4.5	3.7	2.6	2.3	2.1	4.0	2.7	2.1	4.1	2.7	2.3
CY	69.2	64.7	60.5	52.5	49.0	64.8	62.2	59.6	65.3	61.5	54.8
LV	12.1	10.7	10.5	10.6	9.4	11.1	10.6	10.3	10.0	8.0	6.7
LT	18.7	18.4	19.2	19.0	17.7	18.9	19.6	19.8	18.2	18.6	19.9
HU	61.7	67.5	70.1	71.3	69.3	67.6	70.9	72.7	66.0	67.1	68.1
MT	74.2	68.3	66.7	63.2	59.4	69.6	69.0	68.6	66.5	65.9	64.3
PL <sup>(2)</sup>	41.9	42.0	42.1	41.4	40.6	42.4	43.1	42.7	47.8	48.4	49.1
RO	15.9	12.8	13.5	12.6	11.7	13.7	13.9	14.4	12.4	12.8	13.1
SK	34.5	33.1	31.8	31.0	29.7	33.0	31.6	31.0	30.7	29.7	29.4
SE <sup>(2)</sup>	50.3	46.5	41.5	37.4	33.0	46.7	42.6	38.7	46.9	42.1	37.7
UK <sup>(3)</sup>	42.7	43.7	44.1	44.2	44.2	43.2	44.1	44.7	43.5	44.0	44.5
<b>EU-27</b>	<b>63.0</b>	<b>61.8</b>	<b>60.4</b>	<b>59.1</b>	<b>57.6</b>	<b>61.7</b>	<b>60.6</b>	<b>59.6</b>	<b>61.7</b>	<b>59.9</b>	<b>58.3</b>

<sup>(1)</sup> The projections include the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes.

<sup>(2)</sup> The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification (see Box I.2.2).

<sup>(3)</sup> Financial years ending in following March.

Source: Commission services.

Table I.3.7

Council examinations of the 2006/07 updates of stability and convergence programmes

	Macro outlook	MTO (% of GDP) (target year)	Risks to budget targets	Consistent with EDP correction (deadline)?	Safety margin provided?	MTO achieved?	Fiscal stance <sup>(4)</sup>	Debt ratio sufficiently diminishing?	Long-term sustainability risk
BE 2006–10	Plausible	0.5 % (2008 — assuming that one-offs are lower than 0.4 % of GDP)	Worse than targeted esp. in 2007	Not in EDP	Throughout programme period	Not in 2008	Should be strengthened especially in 2007	Yes	Medium
BG 2006–09	Plausible	0 % (whole period)	Better than projected in 2007, broadly balanced thereafter	Not in EDP	Throughout programme period	Throughout programme period	Not fully in line: expansionary fiscal stance in 2007 and risk of procyclicality in good times	Debt ratio < 60 %	Cannot be assessed but significant impact of ageing on expenditures can be expected
CZ 2006–09 <sup>(2)</sup>	Plausible	– 1 % (2013)	Broadly balanced	No (2008)	[Not within programme period] <sup>(1)</sup>	[Not within programme period] <sup>(1)</sup>	Should be strengthened; risk of procyclicality in 2007	Debt ratio < 60 %	High
DK 2006–10	Markedly cautious, esp. for 2008–10	(+0.5)–(+1.5) % (on average through the whole period to 2010)	Better than targeted (esp. 2008–10)	Not in EDP	Throughout programme period	Throughout programme period	Fully in line	Debt ratio < 60 %	Low
DE 2006–10	Plausible until 2008; mildly favourable thereafter	0 % (not within programme period)	Broadly balanced in 2007, worse than targeted thereafter	Yes, already in 2006 (2007)	From 2007 (but risks)	Not within programme period	Should be strengthened (especially in 2008)	No	Medium
EE 2006–10	Cautious	0 % (whole period)	Broadly balanced	Not in EDP	Throughout programme period	Throughout programme period	Not fully in line: procyclicality in good times in 2007	Debt ratio < 60 %	Low
IE 2006–09	Plausible	0 % (whole period)	Broadly balanced	Not in EDP	Throughout programme period	Throughout programme period	In line for 2008 and 2009. Risk of procyclicality in 2007	Debt ratio < 60 %	Medium
EL 2006–09	Plausible for 2007; favourable thereafter	0 % (not within the programme period)	Broadly balanced in 2007; worse than targeted thereafter	Yes (2006)	Not within programme period	[Not within programme period] <sup>(1)</sup>	Should be strengthened (esp. after 2007)	Yes	High
ES 2006–09	Plausible	0 % (whole period)	Broadly balanced	Not in EDP	Throughout programme period	Throughout programme period	In line	Debt ratio < 60 %	Medium
FR 2006–10	Plausible from 2007 (NB: low growth scenario)	0 % (2010)	Broadly balanced until 2008; worse than targeted thereafter	Not in EDP (from January 2007)	Probably from 2009	Possibly not within programme period	Broadly in line except for 2007	Yes	Medium
IT 2006–11	Plausible	0 % (2011)	Better than targeted in 2006; broadly balanced in 2007; worse than targeted thereafter	Conditionally yes 2007	Possibly only from 2010	Possibly not within programme period	Broadly in line	No	Medium
CY 2006–10	Plausible	– 0.5 % (2008)	Broadly balanced	Not in EDP	Throughout programme period	From 2008	In line, both before and after achieving the MTO	Yes (below 60 % from 2008)	High

(Continued on the next page)



Table I.3.7 (continued)

LV 2006–09 <sup>(2)</sup>	Plausible but risk of less favourable outlook in view of the external imbalances	– 1.0 % (2008)	Broadly balanced in 2007; worse than targeted from 2008	Not in EDP	Throughout programme period	Not in 2008	Broadly in line except for 2007	Debt ratio < 60 %	Low
LT 2006–09	Cautious from 2007	– 1.0 % (2008)	Broadly balanced in 2007; worse than targeted thereafter	Not in EDP	Throughout programme period	Possibly not in 2008	Should be strengthened by backing up with measures	Debt ratio < 60 %	Low

<sup>(1)</sup> Points are not explicitly made in the Council opinion.

<sup>(2)</sup> Commission recommendation.

<sup>(3)</sup> Admissible temporary deviation from LV due to the implementation of a pension reform. However, the fiscal adjustment is still not in line with the Pact.

<sup>(4)</sup> Namely: for countries that are in MTO, whether procyclical fiscal policies are avoided in good times, and for countries that are not yet in MTO, whether the adjustment (towards the MTO) is appropriate (of 0.5 % of GDP benchmark for euro area and ERM II countries) and higher in good times; for countries in EDP, the assessment on the fiscal stance is carried out only for the period following the correction of the excessive deficit.

Table I.3.8

### Council examinations of the 2006/07 updates of stability and convergence programmes

	Macro outlook	MTO (% of GDP) (+ target year)	Risks to budget targets	Consistent with EDP correction (+ deadline)?	Safety margin provided?	MTO achieved?	Fiscal Stance <sup>(3)</sup>	Debt ratio sufficiently diminishing?	Long-term sustainability risk
LU 2006–09	Plausible	– 0.8 % (2007)	Better than targeted	Not in EDP	Possibly from 2007	Possibly From 2007	Fully in line (before and after achieving the MTO)	Debt ratio < 60 %	Medium
HU 2006–10	Plausible to slightly cautious until 2008; rather favourable thereafter	– 0.5 % (not within programme period)	Worse than targeted, esp. from 2008	Conditional yes (2009)	[Not within programme period] <sup>(1)</sup>	[Not within programme period] <sup>(1)</sup>	Should be strengthened	Not sufficiently diminishing	High
MT 2006–09	Favourable for 2007; markedly favourable thereafter	0 % (not within programme period)	Broadly balanced in 2007; worse than targeted thereafter	Yes (2006)	From 2008	[Not within programme period] <sup>(1)</sup>	Broadly in line	Yes	Medium
NL 2006–09	Plausible until 2007; cautious thereafter	(– 1.0) – (– 0.5) % (whole period)	Broadly balanced from 2007	Not in EDP	Throughout programme period	Throughout programme period	Risk of procyclicality in good times in 2007	Debt ratio < 60 %	Low
AT 2006–10 <sup>(2)</sup>	Cautious until 2008; plausible thereafter	0 % (nearly reached in 2009)	Broadly balanced until 2008; worse than targeted thereafter	Not in EDP	Throughout programme period	Not in 2010	Insufficient and should be strengthened in 2007 and 2008	Yes	Low
PL 2006–09	Cautious until 2007; rather favourable thereafter	– 1.0 % (not within programme period)	Worse than targeted in particular in the outer years of the programme	No (2007)	Not within programme period	Not in 2010	Should be strengthened	Debt ratio < 60 %	Low
PT 2006–10	Favourable for 2008; and for the outer years	– 0.5 % (2010)	Worse than targeted	Conditional yes (2008)	Not within programme period	Not within programme period	Possible reinforced measures could be required to be in line	Yes at end of programme period	High

(Continued on the next page)

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Table I.3.8 (continued)

RO 2006–09	Plausible	– 0.9 % (2011)	Broadly balanced in 2007; worse than targeted thereafter	Not in EDP	Not within programme period	Not within programme period	Insufficient and should be strengthened significantly	Debt ratio < 60 %	Cannot be assessed; but significant impact of ageing on expenditures can be expected
SI 2006–09	Plausible	– 1.0 % (2009)	Broadly balanced until 2008; worse than targeted in 2009	Not in EDP	Throughout programme period	Not within programme period	Insufficient and should be strengthened	Debt ratio < 60 %	High
SK 2006–09	Plausible from 2007	– 0.9 % ('deficit of just below 1 %' (2010))	Broadly balanced	Yes but adjustment should be strengthened	Not within programme period	Not within programme period	Should be strengthened	Debt ratio < 60 %	Medium
FI 2006–10	Plausible in 2007–09; cautious thereafter	+ 2.0 % (whole period)	Broadly balanced	Not in EDP	Throughout programme period	Throughout programme period	Fully in line	Debt ratio < 60 %	Low
SE 2006–09	Plausible	+ 2.0 % (whole period)	Broadly balanced	Not in EDP	Throughout programme period	Throughout programme period	Risk of procyclicality in 2007	Debt ratio < 60 %	Low
UK 2006/07–2011–12	Plausible (NB: low growth scenario)	Not specified	Broadly balanced until 2007/08; worse than targeted thereafter	Yes (2006/07)	From 2009/10	Cannot be assessed	Should be strengthened	Debt ratio < 60 %	Medium

(1) Points are not explicitly made in the Council opinion.

(2) Commission recommendation.

(3) Namely: for countries that are in MTO, procyclical fiscal policies are avoided in good times, and for countries that are not yet in MTO, whether the adjustment (towards the MTO) is appropriate (of 0.5 % of GDP benchmark for euro area and ERM II countries) and higher in good times; for countries in EDP, the assessment on the fiscal stance is carried out only for the period following the correction of the excessive deficit.

# 4. The long-term sustainability of public finances based on the 2006/07 updates of the stability and convergence programmes

## 4.1. Introduction

In response to the increased emphasis put on long-term sustainability by the Council in the context of the 2005 reform of the Stability and Growth Pact (SGP), the Commission released a comprehensive assessment on the long-term sustainability of public finances in the EU, the first Sustainability Report, in October 2006.

The assessment round of the 2006/07 vintage of stability and convergence programmes (SCPs) provides the basis for the first update of this comprehensive assessment. In particular, it gives the possibility to take account of (i) the most recent economic and fiscal developments and projections as outlined in the programmes, and (ii) recent structural reforms measures undertaken by the Member States with an impact on the long-term budgetary trends.

To arrive at an overall assessment of the budgetary challenges posed by ageing populations, the assessment of the long-term sustainability of public finances carried out by the Commission and the Council on the basis of the information provided in the SCPs uses both quantitative indicators and qualitative information. A detailed description of the methodology used to assess long-term sustainability of public finances in the EU is given in the Commission services Sustainability Report (SR), in agreement with the Member States<sup>(1)</sup>. The estimated impact included in the SCPs of recent pension reforms in some Member States

<sup>(1)</sup> The Ecofin Council and the Economic Policy Committee considered that the sustainability report should be the basis for the annual examination of the stability and convergence programmes. See draft Council conclusions on the long-term sustainability of public finances in the EU, UEM 150, 14615/06, Brussels, 30 October 2006 and opinion by the Economic Policy Committee (EPC) on the Commission's report on the long-term sustainability of public finances in the EU (2006), ECFIN/EPC(2006)REP/56232 final, Brussels, 25 October 2006.

was not incorporated in the baseline calculation of the sustainability indicators and debt projections, but was considered in the overall assessment.

## 4.2. The update of the long-term sustainability analysis

In agreement with the opinion by the Council and the EPC<sup>(2)</sup>, the assessment of the long-term sustainability of public finances on the basis of the information provided in the latest SCP updates relies on the common long-term budgetary projections prepared jointly by the Commission services and the EPC<sup>(3)</sup>.

The most salient figures of the common projections of age-related expenditure are summarised in Table I.4.1. With a few exceptions (see Section 4.2.2 below), the latest SCP updates presented by Member States use these common projections when discussing long-term sustainability of public finances.

### 4.2.1. The quantitative indicators

Compared with the Sustainability Report of October 2006, the main change in the present assessment is that the initial budgetary position shifts by one year. In the Sustainability Report, the starting point was the structural (primary) balances and the debt-to-GDP ratio of 2005. In the assessment round of the 2006/07 vintage of SCPs, the starting point is the structural (primary) balances and the debt-to-GDP ratio of 2006, referred to as '2006 scenario'.

<sup>(2)</sup> See previous footnote.

<sup>(3)</sup> The common projections were released in February 2006; see Economic Policy Committee and the European Commission (2006).

Table I.4.2 compares the change in the starting position in terms of both the structural balance and the primary structural balance. In general, and reflecting consolidation efforts, a majority of countries improved the underlying budgetary position in 2006. An improvement of more than one percentage point of GDP was recorded in Germany, Greece, Cyprus and Portugal. However, in some countries the structural balance deteriorated by ½ percentage point of GDP or more; this was the case in Belgium, the Czech Republic, Denmark, Latvia, Lithuania, Hungary, the Netherlands and Slovakia.

Table I.4.3 presents the results of the quantitative sustainability indicators S1 and S2, calculated on the basis of the information provided in the 2006/07 updates of the SCPs using the commonly agreed methodology and the common projections of age-related expenditure up until 2050. S1 measures the size of the permanent budgetary adjustment necessary for the debt to reach 60 % of GDP in 2050. By contrast, S2 gives the size of the permanent budgetary adjustment necessary to fulfil the inter-temporal budget constraint <sup>(1)</sup>.

The sustainability indicators are broken down into different components to determine the extent to which the sustainability gaps can be attributed to (i) the relative position of the current primary budget balance (IBP) compared to the primary balance that stabilises the debt as a share of GDP and/or to (ii) the increase in age-related expenditure in the future (LTC). The component denoted as GRD is specific to S1 and relates to the initial level of debt vis-à-vis the 60 % of GDP threshold of the Treaty <sup>(2)</sup>.

In the EU as a whole and in the euro area, the sustainability gap is about 2 % of GDP according to the S1 indicator and about 3 % of GDP according to the S2 indicator. This implies a slight improvement compared with the results of the 2006 Sustainability Report. The position has improved by almost ½ percentage point of GDP, reflecting the better structural fiscal position in 2006. Abstracting from the impact of age-related expenditure, the initial level of the primary balance is in fact close to the one stabilising the debt ratio. The long-term budgetary impact of ageing continues to explain the lion's share of the overall sustainability gap. The EU aggregates mask significant differences across countries. The

majority of Member States have sustainability gaps: 16 according to the S1 indicator and 19 according to the S2 indicator. In those countries, based on the current budgetary position and with no changes in policies, an adjustment is necessary to place public finances on a sustainable footing.

#### *The impact of the initial budgetary position*

According to the S2 sustainability indicator, in about half of the Member States public finances are on an unsustainable path even before considering the long-term budgetary impact of ageing populations <sup>(3)</sup>.

In the Czech Republic, Hungary, Poland, Romania and Slovakia an adjustment of the structural primary balance of more than 2 % of GDP would be required to avoid an unsustainable path in the medium term <sup>(4)</sup>. In another five — Italy, Lithuania, Luxembourg, Portugal and the United Kingdom — an adjustment of between 1 % and 2 % of GDP would be required. For these countries the initial budgetary position poses a significant risk to the sustainability of the public finances.

Finally, in 11 countries — Belgium, Bulgaria, Denmark, Estonia, Ireland, Spain, Cyprus, the Netherlands, Austria, Finland and Sweden — the current fiscal position would be consistent with sustainable public finances if there was no impact of ageing on public finances. It can thus contribute to cover part of the budgetary impact of ageing over the long-term by reducing public debt and/or accumulating assets in the next decades.

#### *The long-term budgetary impact of ageing*

As regards the pure budgetary impact of ageing, as measured by the component denoted as LTC, the update of the assessment on the basis of the information provided in the 2006/07 vintage of SCPs give rise to small differences compared to the 2006 Sustainability Report. This is because the last year of the programme period for all Member States, when the long-term budgetary impact of ageing is assumed to begin, is close to 2010, which was used in the SR.

<sup>(1)</sup> For a more a detailed description see Box I.4.1

<sup>(2)</sup> A more detailed description is provided in Box I.4.1.

<sup>(3)</sup> The contributions of the IBP to the sustainability gap are of similar size for both indicators S1 and S2. In the following paragraphs the results of the S2 indicator are referred to.

<sup>(4)</sup> Poland is however in a very specific position. The projected decrease in age-related expenditure as a share of GDP results in a negative long-term budgetary impact of ageing. This almost exactly offsets the weak initial budgetary position.

Table I.4.1

**Projected changes according to the common projections in age-related public expenditure between 2004 and 2030–50 (% of GDP)**

	Pensions			Healthcare			Long-term care			Unemployment benefits			Education			Total age-related expenditure		
	Level	Change from 2004 to:		Level	Change from 2004 to:		Level	Change from 2004 to:		Level	Change from 2004 to:		Level	Change from 2004 to:		Change from 2004 to:		
	2004	2030	2050	2004	2030	2050	2004	2030	2050	2004	2030	2050	2004	2030	2050	2030	2050	
BE	10.4	4.3	5.1	6.2	0.9	1.4	0.9	0.4	1.0	2.3	-0.5	-0.5	5.6	-0.6	-0.7	4.5	6.3	BE
CZ	8.5	1.1	5.6	6.4	1.4	2.0	0.3	0.2	0.4	0.2	-0.0	-0.0	3.8	-0.9	-0.7	1.8	7.2	CZ
DK	9.5	3.3	3.3	6.9	0.8	1.0	1.1	0.6	1.1	1.5	-0.3	-0.3	7.8	-0.4	-0.3	4.0	4.8	DK
DE	11.4	0.9	1.7	6.0	0.9	1.2	1.0	0.4	1.0	1.3	-0.4	-0.4	4.0	-0.8	-0.9	1.0	2.7	DE
EE	6.7	-1.9	-2.5	5.4	0.8	1.1	0.3	0.1	0.3	0.1	-0.0	-0.0	5.0	-1.1	-1.3	-2.2	-2.5	EE
IE	4.7	3.1	6.4	5.3	1.2	2.0	0.6	0.1	0.6	0.7	-0.2	-0.2	4.1	-0.9	-1.0	3.3	7.8	IE
EL (*)				5.1	0.8	1.7				0.3	-0.1	-0.1	3.5	-0.5	-0.4			EL (*)
ES	8.6	3.3	7.1	6.1	1.2	2.2	0.5	0.0	0.2	1.1	-0.4	-0.4	3.7	-0.7	-0.6	3.3	8.5	ES
FR	12.8	1.5	2.0	7.7	1.2	1.8	0.3	0.1	0.2	1.2	-0.3	-0.3	5.0	-0.5	-0.5	2.0	3.2	FR
IT	14.2	0.8	0.4	5.8	0.9	1.3	1.5	0.2	0.7	0.4	-0.1	-0.1	4.3	-0.8	-0.6	1.0	1.7	IT
CY	6.9	5.3	12.9	2.9	0.7	1.1				0.4	-0.0	-0.0	6.3	-1.9	-2.2	4.1	11.8	CY
LV	6.8	-1.2	-1.2	5.1	0.8	1.1	0.4	0.1	0.3	0.3	-0.1	-0.1	4.9	-1.2	-1.4	-1.5	-1.3	LV
LT	6.7	1.2	1.8	3.7	0.7	0.9	0.5	0.2	0.4	0.1	-0.1	-0.1	5.0	-1.6	-1.6	0.3	1.4	LT
LU	10.0	5.0	7.4	5.1	0.8	1.2	0.9	0.2	0.6	0.3	-0.0	-0.1	3.3	-0.5	-0.9	5.4	8.2	LU
HU	10.4	3.1	6.7	5.5	0.8	1.0	0.6	0.3	0.6	0.2	-0.0	-0.0	4.5	-1.0	-0.7	3.1	7.6	HU
MT	7.4	1.7	-0.4	4.2	1.3	1.8	0.9	0.2	0.2	1.2	-0.2	-0.2	4.4	-1.2	-1.2	1.8	0.3	MT
NL	7.7	2.9	3.5	6.1	1.0	1.3	0.5	0.3	0.6	1.8	-0.2	-0.2	4.8	-0.2	-0.2	3.8	5.0	NL
AT	13.4	0.6	-1.2	5.3	1.0	1.6	0.6	0.4	0.9	0.8	-0.1	-0.1	5.1	-0.9	-1.0	0.9	0.2	AT
PL	13.9	-4.7	-5.9	4.1	1.0	1.4	0.1	0.0	0.1	0.5	-0.4	-0.4	5.0	-2.0	-1.9	-6.1	-6.7	PL
PT	11.1	4.9	9.7	6.7	-0.1	0.5	0.5	0.1	0.4	1.0	-0.1	-0.1	5.1	-0.6	-0.4	4.3	10.1	PT
SI	11.0	3.4	7.3	6.4	1.2	1.6	0.9	0.5	1.2	0.5	-0.1	-0.1	5.3	-0.7	-0.4	4.4	9.7	SI
SK	7.2	0.5	1.8	4.4	1.3	1.9	0.7	0.2	0.6	0.3	-0.2	-0.2	3.7	-1.5	-1.3	0.3	2.9	SK
FI	10.7	3.3	3.1	5.6	1.1	1.4	1.7	1.2	1.8	1.5	-0.4	-0.4	6.0	-0.6	-0.7	4.7	5.2	FI
SE	10.6	0.4	0.6	6.7	0.7	1.0	3.8	1.1	1.7	1.1	-0.2	-0.2	7.3	-0.7	-0.9	1.3	2.2	SE
UK	6.6	1.3	2.0	7.0	1.1	1.9	1.0	0.3	0.8	0.4	-0.0	-0.0	4.6	-0.5	-0.6	2.2	4.0	UK
EU-25	10.6	1.3	2.2	6.4	1.0	1.6	0.9	0.3	0.7	0.9	-0.3	-0.3	4.6	-0.7	-0.6	1.6	3.4	EU-25
EU-15	10.6	1.5	2.3	6.4	1.0	1.6	0.9	0.3	0.7	0.9	-0.2	-0.2	4.6	-0.6	-0.6	1.9	3.7	EU-15
EU-12	11.5	1.6	2.6	6.3	1.0	1.5	0.8	0.2	0.6	1.0	-0.3	-0.3	4.4	-0.7	-0.6	1.9	3.8	EU-12
EU-10	10.9	-1.0	0.3	4.9	0.9	1.3	0.4	0.1	0.3	0.4	-0.2	-0.2	4.7	-1.5	-1.3	-1.7	0.3	EU-10

(\*) Total expenditure for pensions does not include Greece. For long-term care, there are no projections available for Greece and Cyprus. Since the release of the Ageing Report, FR, PT, EE and HU have provided the data required to conduct the projections for long-term care for these countries. Table 1 includes these projections. The projection results for public spending on long-term care for Germany does not reflect current legislation where benefit levels are fixed. A scenario which comes closer to the current setting of legislation projects that public spending would remain constant as a share of GDP over the projection period. These figures refer to the baseline projections for social security spending on pensions, education and unemployment transfers. For healthcare and long-term care, the projections refer to 'AWG reference scenarios'.

Sources: EPC and European Commission (2006a) and European Commission (2006b).

The cross-country differences remain large reflecting in particular the diversity in public pension arrangements, in their degree of maturity and the effects of pension reforms enacted so far. Differences in other age-related expenditure items projections are smaller. Only in two countries — Estonia and Poland — age-related expenditures are

projected to bring relief to the budgetary position in the long-run. In all other countries age-related expenditures are projected to require more or less large additional budgetary adjustments to secure the long-term sustainability of public finances. The largest additional adjustment of more than 8 % of GDP is projected for Cyprus.

Table I.4.2

Government balances in 2005 and 2006 compared (% of GDP)

	Structural balance		Structural primary balance		Structural primary balance	
	Sustainability Report 2005	SCP 2006	Sustainability Report 2005	SCP 2006	in last year of programme	last year of programme
BE	0.1	-0.4	4.5	3.7	4.0	2010
CZ	-1.4	-3.9	-0.2	-2.8	-1.9	2009
DK (*)	5.2 (4.3)	3.1 (2.2)	7.1 (6.2)	4.7 (3.8)	4.3 (3.3)	2010
DE	-3.1	-2.0	-0.3	0.8	2.2	2010
EE	1.5	1.4	1.7	1.6	1.8	2010
IE	1.9	2.7	3.1	3.7	2.6	2009
EL	-5.3	-3.4	-0.3	1.2	2.3	2009
ES	1.3	1.8	3.1	3.4	2.9	2009
FR	-3.1	-2.5	-0.5	0.1	2.7	2010
IT	-3.9	-3.9	0.6	0.9	5.2	2011
CY	-2.9	-1.5	0.5	1.8	2.6	2010
LV	-0.1	-0.9	0.5	-0.3	0.7	2009
LT	-1.1	-1.8	-0.3	-1.0	1.3	2009
LU	-1.3	-1.3	-1.2	-1.1	1.1	2009
HU	-7.7	-9.8	-3.6	-5.9	0.9	2010
MT	-3.1	-2.9	0.9	0.8	2.7	2009
NL	1.0	0.4	3.6	2.7	2.4	2009
AT	-1.0	-0.9	1.7	2.1	3.1	2010
PL (*)	-2.6 (-4.5)	-2.1 (-3.9)	-0.2 (-1.7)	0.3 (-1.3)	1.6 (-0.1)	2009
PT	-5.2	-3.4	-2.5	-0.5	2.4	2010
SI	-1.5	-1.4	0.2	0.3	0.2	2009
SK	-2.2	-3.5	-0.4	-1.7	-0.8	2009
FI	3.2	2.9	4.7	4.5	4.1	2010
SE (*)	2.6 (1.6)	3.0 (2.0)	4.2 (3.2)	4.5 (3.5)	4.5 (3.4)	2009
UK	-3.3	-2.5	-1.1	-0.3	0.8	2011

(\*) For countries that had not yet applied the Eurostat decision on the classification of pension schemes (DK, PL, SE), the balances are given including revenue to the funded part of the mandatory pension scheme; data without such revenue are given in brackets.

Sources: 2006/07 updates stability and convergence programmes, Commission services' calculations.

A number of countries — Belgium, Denmark, Hungary, Malta, Portugal and the United Kingdom — have undertaken structural reforms with an estimated impact on the age-related expenditure ratio over the long-term. The impacts of such reforms are however not taken account of in the calculations reported in Table I.4.3. They are discussed in Section 4.2.2 below.

For Bulgaria and Romania, which recently joined the EU, long-term projections for the five expenditure items covered by the common projections exercise (shown in Table I.4.1) were not available on a comparable basis and the European aggregates are therefore calculated without these countries. However, a significant impact of ageing on government expenditure cannot be excluded given the current and projected demographic structure.

### The required balance

One way to cope with the budgetary implications of ageing is to consolidate public finances over the medium term, i.e. to frontload the necessary budgetary adjustment. This can be illustrated by the required primary balance (RPB), the structural primary budgetary position over the medium term that is consistent with sustainable public finances as measured by the S2 indicator. The RPB as well as the structural primary balances in 2006 are shown in Table I.4.4 <sup>(1)</sup>

<sup>(1)</sup> The structural primary balances of 2006 include the revenue-reducing impact of Eurostat's decision regarding the classification of funded defined contribution pension schemes, which is fully in place from April 2007. See Eurostat (2004) and Part II.2.3 of this report.

Table I.4.3

**Sustainability gaps in the '2006 scenario' (% GDP)**

	S1				S1 in Sustainability Report		S2		S2 in Sustainability Report
	Total	IBP (*)	DR (*)	LTC (*)	Total	Total	IBP (*)	LTC (*)	Total
BE	1.3	-2.7	0.3	3.7	0.4	2.7	-2.6	5.3	1.8
CZ	5.2	3.2	-0.5	2.5	2.5	8.0	3.3	4.7	5.5
DK	-1.4	-3.6	-0.8	3.0	-4.2	0.3	-3.6	3.9	-2.2
DE	2.2	0.4	0.1	1.7	3.5	3.3	0.4	2.8	4.4
EE	-4.2	-1.6	-1.1	-1.5	-4.4	-3.2	-1.6	-1.7	-3.4
IE	-1.2	-3.7	-1.0	3.5	-0.8	2.4	-3.6	6.0	2.9
EL (**)	1.2	0.3	0.5	0.3	3.2	1.3	0.4	0.8	3.0
ES	-0.2	-3.0	-0.5	3.3	0.2	2.8	-2.9	5.7	3.2
FR	2.3	0.6	-0.1	1.8	3.2	3.2	0.6	2.6	4.0
IT	3.4	1.0	0.9	1.5	3.4	3.0	1.0	2.0	3.1
CY	2.3	-1.7	-0.3	4.3	4.0	7.0	-1.3	8.3	8.5
LV	-0.1	0.4	-0.9	0.4	-0.6	1.2	0.4	0.8	0.8
LT	1.0	1.1	-0.7	0.5	0.3	2.4	1.3	1.1	1.8
LU	4.3	1.1	-1.7	4.9	4.6	9.3	1.1	8.2	9.5
HU	10.5	6.9	0.6	3.1	7.9	12.3	7.2	5.1	9.8
MT	0.4	-0.4	0.1	0.8	0.4	-0.1	-0.1	0.1	-0.3
NL	0.8	-2.1	-0.3	3.3	-0.2	2.4	-2.2	4.5	1.3
AT	-0.2	-1.2	0.0	1.0	0.1	-0.1	-1.1	1.1	0.3
PL	-1.6	1.7	-0.1	-3.1	-0.4	-1.4	2.1	-3.4	-0.2
PT	5.6	1.4	0.1	4.1	7.9	8.3	1.6	6.7	10.5
SI	3.6	0.0	-0.6	4.2	3.9	7.0	0.1	7.0	7.3
SK	2.4	1.9	-0.5	1.0	1.3	4.1	2.2	2.0	3.0
FI	-3.1	-4.8	-1.6	3.3	-3.3	-0.7	-4.9	4.2	-0.9
SE	-3.1	-3.4	-1.0	1.3	-2.7	-1.5	-3.4	1.9	-1.1
UK	2.6	0.8	-0.2	2.0	3.4	4.2	1.0	3.2	4.9
EU-13 (**)	1.9	-0.4	0.0	2.2	2.3	3.0	-0.3	3.3	3.5
EU-27 (**)	1.8	-0.2	-0.1	2.0	2.1	3.0	-0.1	3.1	3.4

(\*) IBP = the initial budgetary position, DR = the debt requirement in 2050, LTC = the long-term changes in the primary balance. A positive value of S1 and S2 indicates that a budgetary improvement would close the gap, while a negative value indicates that a budgetary weakening would close the gap. In the '2006 scenario', it is assumed that the structural primary balance will remain unchanged from 2006 throughout the programme period, usually until 2010. Debt projections in this scenario start in 2007.

(\*\*) No pension projections were available for Greece and the rise in age-related expenditure is therefore underestimated. Pension expenditure was projected to rise between 2005 and 2050 by 10.2 % in the 2002 update of the Greek stability programme. The aggregate results for the euro area (EU-13) exclude Greece and for the European Union (EU-27) additionally exclude Romania and Bulgaria.

Source: Commission services.

For a number of countries, the RPB is a large structural surplus significantly more than 2 % of GDP, and hence well above the current medium-term budgetary objectives (MTOs) chosen by the Member States; the country with the highest MTO is Finland, which targets a structural surplus of 2 % of GDP. Unless MTOs are revised considerably, Table I.4.4 makes clear that long-term sustainability is unlikely to be achieved by complying with the budgetary requirements of the reformed SGP. It also underscores the importance of making progress with the

other two pillars of the three-pronged strategy to ensure sustainable public finances, agreed by the European Council in March 2001, namely by: (i) reforming pension and healthcare systems; and, (ii) increasing employment rates and enhancing productivity. In particular, countries with very high RPBs would need to supplement ambitious fiscal policies with structural reforms that contribute to curb the long-term budgetary impact of ageing in order to progress towards more sustainable public finances.

Table I.4.4

Required primary balance (% of GDP)

	Structural primary balance	Required primary balance	Increase in age-related expenditure
	2006		Between 2010 and 2050
BE	3.7	6.2	6.6
CZ	- 2.8	5.3	7.7
DK	3.8	3.6	4.5
DE	0.8	4.3	4.0
EE	1.6	- 1.0	- 1.8
IE	3.7	5.7	7.8
EL (*)	1.2	2.5	1.4
ES	3.4	6.4	8.9
FR	0.1	3.2	3.2
IT	0.9	3.9	2.4
CY	1.8	8.8	11.7
LV	- 0.3	1.6	1.6
LT	- 1.0	1.8	2.1
LU	- 1.1	8.0	8.4
HU	- 5.9	6.3	7.1
MT	0.8	0.2	- 0.6
NL	2.7	4.6	5.2
AT	2.1	2.3	1.1
PL	- 1.3	- 0.9	- 3.2
PT	- 0.5	7.5	9.7
SI	0.3	7.3	9.9
SK	- 1.7	2.8	3.7
FI	4.5	3.4	5.0
SE	3.5	2.1	2.4
UK	- 0.3	3.8	4.2

NB: The required primary balance is given as an average over the period covering the first five years after the last year covered by the programme.

(\*) No pension projections were available for Greece and the rise in age-related expenditure is therefore underestimated. Pension expenditure was projected to rise between 2005 and 2050 by 10.2 % in the 2002 update of the Greek stability programme.

Source: Commission services.

*Achieving the plans in the SCPs*

The sustainability challenge would be significantly reduced if Member States reached the budgetary targets outlined in the 2006/07 updates of the SCPs. The impact on the sustainability indicators of implementing the plans in the programmes is given in Table I.4.5. For the EU as a whole, the sustainability gap would be reduced by some 1½ percentage points of GDP, that is about half of the distance between current and sustainable budgetary positions.

The planned consolidation in France, Italy, Lithuania, Luxembourg, Hungary, and Portugal would result in a reduction of the S2 sustainability gap by 2 percentage points of GDP or more.

*Debt developments*

Given the improved structural budgetary position in 2006, the debt-to-GDP ratio is projected to fall below the 60 % of GDP reference value in the '2006 scenario' over the coming decade for the EU as a whole. However, in the early 2020s it is projected to start rising again and reach around 160 % of GDP in 2050, revealing that on current policies the public finances are on an unsustainable path.

Compared with the results in the 2006 Sustainability Report, this is an improvement for the EU as a whole, as debt was projected to reach around 180 % of GDP in 2050. For the countries that significantly improved their structural balance in 2006 compared with 2005, for example Germany, Cyprus and Portugal, a considerable improvement in the projected debt position over the projection period up to 2050 is to be noted.

If the medium-term budgetary targets in the stability and convergence programmes are implemented in full, the debt-to-GDP ratio will decline more markedly up to the early 2030s. This trend will, however, start to reverse once the budgetary impact of ageing starts to take hold more firmly and the debt-to-GDP ratio will again start rising thereafter and it would be higher than 60 % of GDP in 2050 (see Graph I.4.1 and Table I.4.6). Consolidating the public finances over the medium term enables the debt-to-GDP ratio to be reduced in the coming decades, a reduction which absorbs part of the long-term budgetary impact of an ageing population.

**4.2.2. The qualitative considerations**

In order to interpret the quantitative sustainability indicators, it is necessary to take into account other factors so as to identify the main reasons behind the sustainability risks in the formulation of an overall assessment of the long-term sustainability of public finances.

The current level of the debt-to-GDP ratio is an important item in terms of risks to public finance sustainability. High-debt countries may have to sustain high primary surpluses, which might be difficult to maintain over time. Moreover, high-debt countries are more vulnerable to negative growth rate or interest rate shocks.



**Box I.4.1: Sustainability indicators**

The **sustainability gap indicator S1** shows the permanent budgetary adjustment required to reach a debt ratio in 2050 of 60 % of GDP.

The **sustainability gap indicator S2** shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government <sup>(1)</sup>. S2 is estimated by assuming that the revenue and expenditure ratios (age-related and non-age-related) do not change after 2050.

While the sustainability gap indicators (S1, S2) are usually defined in terms of revenue ratios, there are several ways to ensure sustainability. Governments typically choose a combination of (i) budgetary measures (either expenditure reduction and/or tax hikes) and (ii) structural reforms aiming at curbing long-term public spending (e.g. pension reforms).

The sustainability indicators can be decomposed into the: (i) **initial budgetary position (IBP)**; (ii) **long-term change in the primary balance (LTC)**; and, (iii) **debt requirement in 2050 (GRD)**.

In addition, the **required primary balance (RPB)** can be derived from the S2 indicator. It measures the average primary balance over the first five years following the last year period covered by the SCPs (in the case of the 2006/07 updates of the SCPs the five-year period is 2011–15) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

**Summarising the sustainability indicators**

Impact of					
	Initial budgetary position		Debt requirement in 2050		Long-term changes in the primary balance
<b>S1 =</b>	Gap to the debt-stabilising primary balance	+	Additional adjustment required to reach a debt target of 60 % of GDP in 2050	+	Additional adjustment required to finance the increase in public expenditure up to 2050
<b>S2 =</b>	Gap to the debt-stabilising primary balance	+	0	+	Additional adjustment required to finance the increase in public expenditure over an infinite horizon

<sup>(1)</sup> Formally, the intertemporal budget constraint of the government entails that the discounted value of all future structural primary balances should equal the current level of debt. It can be expressed as  $D_{t_0} - \sum_{t=t_0+1}^{\infty} \frac{PB_t}{(1+r)^{t-t_0}} = 0$ , where:  $D$  is the debt ratio,  $PB$  is the structural primary balance,  $1+r$  is the interest-growth rate differential, i.e.  $1+r = \frac{1+R}{1+G}$  where  $R$  and  $G$  are the nominal interest rate and the nominal GDP growth rate, respectively.

NB: For a complete description of the sustainability indicators, see European Commission (2006), Annex I.

Since the current level of gross debt has a rather limited impact on the sustainability indicators, it requires special attention in the assessment <sup>(1)</sup>. These considerations

notably apply to countries like Belgium, Greece and Italy. They also apply symmetrically to Luxembourg, being a low-debt country.

<sup>(1)</sup> The contribution of the debt to the S2 sustainability indicator for a country with a debt-to-GDP ratio of 100 % and an interest/growth rate differential of 1.5 % is in fact 1.5 % of GDP (debt times the interest/growth rate differential).

When relevant, structural reforms are also taken into account in the assessment. Some of them have a positive impact on the long-term budgetary trends and/or the economic variables underlying such trends but their impact

Table I.4.5

Sustainability gaps of the 'programme scenario'  
(% GDP)

	S1				S2		
	Total	IBP (*)	DR (*)	LTC (*)	Total	IBP (*)	LTC (*)
BE	1.0	-3.0	0.3	3.7	2.4	-3.0	5.3
CZ	4.3	2.3	-0.5	2.5	7.1	2.4	4.7
DK	-0.9	-3.1	-0.8	3.0	0.8	-3.1	3.9
DE	0.7	-1.1	0.1	1.7	1.8	-1.1	2.8
EE	-4.4	-1.8	-1.1	-1.5	-3.4	-1.8	-1.7
IE	0.0	-2.6	-0.9	3.5	3.6	-2.5	6.0
EL (**)	0.1	-0.8	0.5	0.3	0.1	-0.7	0.8
ES	0.4	-2.4	-0.5	3.3	3.3	-2.4	5.7
FR	-0.5	-2.1	-0.2	1.8	0.6	-2.0	2.6
IT	-1.4	-3.5	0.7	1.5	-1.5	-3.5	2.0
CY	1.5	-2.5	-0.3	4.3	6.2	-2.1	8.3
LV	-1.1	-0.7	-0.9	0.4	0.2	-0.6	0.8
LT	-1.4	-1.2	-0.8	0.5	0.1	-1.1	1.1
LU	2.0	-1.1	-1.8	4.9	7.1	-1.1	8.2
HU	3.0	-0.2	0.1	3.1	5.2	0.1	5.1
MT	-1.6	-2.4	0.0	0.8	-2.0	-2.1	0.1
NL	1.2	-1.8	-0.3	3.3	2.7	-1.8	4.5
AT	-1.3	-2.2	-0.1	1.0	-1.1	-2.2	1.1
PL	-2.8	0.5	-0.2	-3.1	-2.6	0.8	-3.4
PT	2.5	-1.6	0.0	4.1	5.3	-1.4	6.7
SI	3.7	0.1	-0.6	4.2	7.2	0.2	7.0
SK	1.5	1.0	-0.5	1.0	3.2	1.2	2.0
FI	-2.6	-4.4	-1.6	3.3	-0.2	-4.5	4.2
SE	-3.0	-3.3	-1.0	1.3	-1.4	-3.3	1.9
UK	1.4	-0.3	-0.3	2.0	3.0	-0.2	3.2
EU-13 (**)	0.0	-2.2	0.0	2.2	1.2	-2.1	3.3
EU-27 (**)	0.1	-1.8	-0.1	2.0	1.4	-1.7	3.1

(\*) IBP = the initial budgetary position, DR = the debt requirement in 2050, LTC = the long-term changes in the primary balance. A positive value of S1 and S2 indicates that a budgetary improvement would close the gap, while a negative value indicates that a budgetary weakening would close the gap.

(\*\*) No pension projections were available for Greece and the rise in age-related expenditure is therefore underestimated. Pension expenditure was projected to rise between 2005 and 2050 by 10.2 % in the 2002 update of the Greek stability programme. The aggregate results for the euro area (EU-13) exclude Greece and for the European Union (EU-27) additionally exclude Romania and Bulgaria. In the 'programme scenario', it is assumed that the macroeconomic and budgetary plans throughout the programme period will be fully respected.

Source: Commission services.

is uncertain and/or has not been quantified in the programmes and is therefore not incorporated in the quantitative indicators. This is particularly the case for recent pension reforms, which have been or are in the process of being implemented in a number of Member States. For example, Belgium, Denmark, Hungary and Portugal

Table I.4.6

Projected debt developments in the EU Member States (% of GDP)

	Gross debt	'2006 scenario'			'Programme scenario'		
		2006	2010	2030	2050	2010	2030
BE	89.4	75.0	54.0	131.0	74.0	45.0	113.0
CZ	30.6	36.0	112.0	370.0	34.0	91.0	315.0
DK	28.6	18.0	-25.0	-13.0	19.0	-12.0	15.0
DE	67.9	68.0	89.0	188.0	64.0	51.0	99.0
EE	3.7	1.0	-58.0	-166.0	2.0	-61.0	-176.0
IE	25.1	15.0	-23.0	12.0	19.0	3.0	72.0
EL (*)	104.1	93.0	94.0	137.0	90.0	64.0	64.0
ES	39.7	28.0	-22.0	53.0	29.0	-8.0	87.0
FR	64.6	60.0	95.0	191.0	55.0	29.0	45.0
IT	107.6	111.0	140.0	256.0	101.0	27.0	-19.0
CY	64.7	48.0	38.0	171.0	46.0	20.0	131.0
LV	10.7	9.0	12.0	53.0	8.0	-10.0	-4.0
LT	18.4	22.0	39.0	114.0	16.0	-15.0	-20.0
LU	7.5	13.0	86.0	261.0	7.0	35.0	167.0
HU	67.5	91.0	251.0	638.0	68.0	81.0	226.0
MT	68.3	63.0	74.0	79.0	57.0	29.0	-18.0
NL	50.2	41.0	36.0	106.0	42.0	45.0	125.0
AT	62.2	59.0	37.0	46.0	57.0	11.0	-15.0
PL	42	52.0	18.0	-30.0	49.0	-9.0	-102.0
PT	67.4	70.0	136.0	394.0	62.0	63.0	210.0
SI	28.5	26.0	63.0	265.0	27.0	66.0	273.0
SK	33.1	32.0	65.0	205.0	30.0	44.0	149.0
FI	39.1	32.0	-14.0	-7.0	34.0	-3.0	17.0
SE	46.5	29.0	-34.0	-66.0	30.0	-30.0	-59.0
UK	43.7	47.0	80.0	194.0	44.0	53.0	131.0
EU-13 (**)	66.5	63.0	72.0	165.0	59.0	30.0	66.0
EU-27 (**)	61.6	59.0	69.0	160.0	55.0	31.0	71.0

(\*) No pension projections were available for Greece and the rise in age-related expenditure is therefore underestimated. Pension expenditure was projected to rise between 2005 and 2050 by 10.2 % in the 2002 update of the Greek stability programme.

(\*\*) The aggregate results for the euro area (EU-13) exclude Greece and for the European Union (EU-27) additionally exclude Romania and Bulgaria.

Source: Commission services.

have implemented structural reforms that according to the information provided in the SCPs are estimated to reduce the projected increase in the pension expenditure ratio, notably so in the case of Portugal.

Malta and the United Kingdom have also introduced reforms to their public pension systems aiming at ensuring adequate pensions in the future while at the same time safeguarding fiscal sustainability to the greatest extent possible. In these latter cases, pension expenditure

is estimated in the programme updates to involve a higher increase in the pension expenditure ratio, being more limited in the case of the UK.

In accordance with the opinion of the EPC, the estimated impact included in the SCPs of these recent reforms was not included in the baseline calculation of the sustainability indicators and the debt projections above <sup>(1)</sup>. The estimated reform impact was however considered in qualitative terms and hence is included in the overall assessment of long-term sustainability.

The reliability of projections may play a role, particularly when long-term assumptions/projections are considerably different from the common budgetary projections in the Ageing Report <sup>(2)</sup>, suggesting that the indicators may be over/underestimated. This applies to the new Member States Bulgaria and Romania, for which long-term projections were not included in the Ageing Report. In fact, the lack of comparable and comprehensive long-term projections for these countries prevents the Commission services from reaching an overall assessment. Nonetheless, a

significant impact of ageing on government expenditure cannot be excluded given the current and projected demographic structure. Moreover, missing projections for Greece (pension and long-term care) and Cyprus (long-term care) result in an underestimation of the long-term budgetary impact of ageing. Greece was in fact invited by the Council to produce pension projections as soon as possible (see Table I.4.9 below).

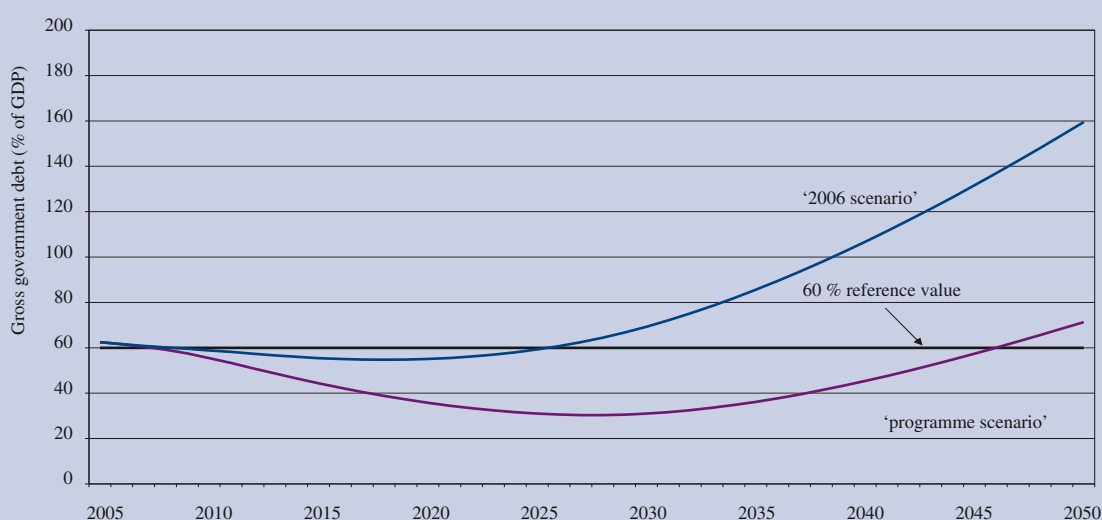
The tax ratio could also play a role. Indeed, it may be more difficult for high tax-ratio countries to increase taxes further limiting the possibilities to deal with the budgetary impact of ageing population. This could be the case for high-tax countries such as Sweden and Denmark, should the need arise.

Other long-term budgetary changes in revenue may be taken into account in the qualitative assessment. To ensure full comparability across countries, the quantitative sustainability indicators are calculated for a predefined set of budgetary items decided at EPC level. But when changes of other items are clearly explained and if the size of their impact seems reasonable, they would be taken into account in the overall assessment. This is the case for Denmark, the Netherlands, Finland and Sweden. For example, an increase in taxes related to pensions is projected in Denmark, the Netherlands and Sweden, which would limit the budgetary impact of ageing. By

<sup>(1)</sup> See Economic Policy Committee (2007). According to the EPC opinion, new long-term projections resulting from major pension reforms should be subject to a peer review in the working group on ageing of the EPC before being used in the calculations of the baseline sustainability indicators in order to ensure comparability and transparency of the long-term projections used in the assessments of the Commission and the Council.

<sup>(2)</sup> See *European Economy* (2006).

**Graph I.4.1: Debt developments in the EU, 2005–50**



Source: Commission services.

contrast, government property income ('returns on assets') could be reduced as a share of GDP over the long-term under the assumption of no stock-flow adjustment and assuming that the rate of return on assets held by government is the same as the interest rate on government debt (3 % real) <sup>(1)</sup>.

The evolution of the benefit ratio (i.e. the average pension in relation to GDP per worker) is strongly driven by the pensions reforms enacted (or lack thereof) in recent years (see Chapter IV.2 in European Commission, 2006). A decrease in the public benefit ratio can lead to further risks to public finances, notably if it leads to (i) a substantial increase in the poverty rate of older people; (ii) a large increase in contributions of private occupational/supplementary schemes over the long-term, which may affect public revenue; and (iii) if there are obstacles limiting the job activity of older workers that prevent them from accumulating additional pension rights or if prolonging substantially their working lives does not result in a substantial increase in pensions. Data availability is not currently sufficient to fully assess each of these risks. However, the evolution of the benefit ratio can better qualify the assessment, notably when the decrease in the benefit ratio is coupled with a strong increase in the employment rates of older workers. In that case, increasing the participation rates of older workers would improve workers pension rights in the future and therefore reduce the sustainability risks.

#### 4.3. Overall assessment of the sustainability challenge in the Member States

The budgetary impact of ageing populations is a concern for all EU Member States. There is however a large variation in the degree of risks that they are facing and in the contributory factors. As indicated in Table I.4.7, on the basis of the information provided in the 2006/07 updates of the SCPs six countries were assessed to be at high risk, 10 at medium risk and nine at low risk. This overall assessment is the same as in the 2006 Sustainability Report. Graph I.4.2 shows that the size of the S2 sustainability gap

<sup>(1)</sup> The assumption of no stock-flow adjustments implies that property income (returns from financial assets) is constant in nominal terms rather than as a share of GDP. In particular, property income is fully used to reduce debt and not to buy new assets and when a bond matures, it is replaced by a bond with the same nominal value. Hence, since the value of assets is constant in nominal terms, the nominal returns are also constant since the rate of return is assumed to be constant. See European Commission (2006a), Chapter IV.3.3.

Table I.4.7

#### Overall classification of risks to the sustainability of public finances

Risk category	Country
Low	DK, EE, LV, LT, NL, AT, PL, FI, SE
Medium	BE, DE, ES, IE, FR, IT, LU, MT, SK, UK
High	CZ, EL, CY, HU, PT, SI

Source: Commission services.

in general corresponds closely to the overall risk categorisation. The assessment by the Commission was confirmed in the Council opinion on the updated SCPs.

The underlying reasons for the challenges to long-term sustainability of public finance differ across Member States. As shown above, it is possible to decompose the sustainability indicators (S1, S2) so that the impact of the current budgetary position and the future change (deterioration) is separated.

#### High-risk countries

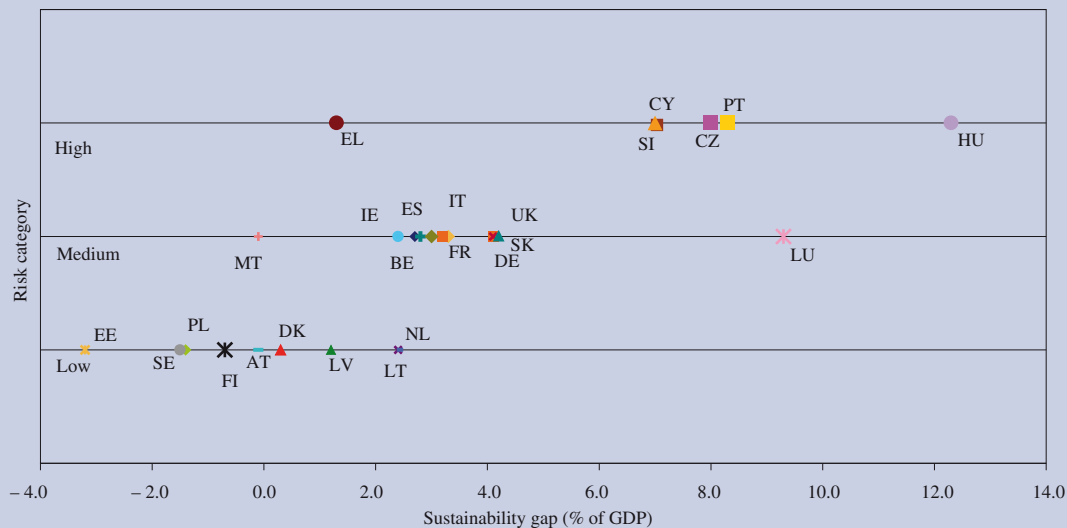
The high risk group of countries is characterised by a very significant rise in age-related expenditure over the long term, underlining that measures aimed at curbing them will prove necessary. Moreover, the Czech Republic, Greece, Cyprus, Hungary and Portugal have large deficits and in some cases also a high level of debt, in particular in Greece.

Budgetary consolidation is therefore necessary and urgent in order to reduce risks to public finance sustainability. It should be noted that the Portuguese programme update estimates a significant expenditure-reducing impact of the recent pension reform, which would reduce the long-term impact of ageing.

#### Medium-risk countries

The intermediate group includes Member States with very different characteristics but a relatively clear-cut distinction can be made between two subsets of countries. The first relates to countries with a significant cost of ageing and where measures might be needed to curb these costs, but which currently have relatively strong budgetary positions (Ireland, Spain and Luxembourg). The second subset refers to countries that need to consolidate, though to different degrees, their public finances over the medium term but for which the costs of ageing are less of a concern, usually as a result of enacted reforms to their pension systems (Ger-

Graph I.4.2: Overall risk classification and the sustainability gap (S2 in the '2006 scenario')



Source: Commission services.

many, France, Italy, Malta, Slovakia and the United Kingdom). In Italy rapid budgetary consolidation is required to ensure a steady reduction of the currently very high level of debt. The situation in Belgium is also distinctive in that it needs to maintain a strong budget balance to reduce its very high level of government debt. However, the current high primary surplus, even if it is maintained for a long period of time, is not sufficient to fully cover the high cost of ageing populations over the long term and measures aiming at curbing the projected increases in pension expenditure would undoubtedly contribute to reduce the risks to sustainability. It should be noted that the pension reforms in Malta and the United Kingdom are estimated to result in an increase in the pension expenditure ratio, which means that the long-term impact of ageing would be higher.

#### Low-risk countries

The low risk countries have in general come furthest in coping with ageing, which implies either a strong budgetary position (running large surpluses, reducing debt and/or accumulating assets) and/or comprehensive pension reforms, sometimes including a shift towards private pension schemes. This does not mean that in these countries there are no risks regarding the long-term sustainability of public finances. In fact, their situation (assessment) relies on the successful implementation of the far-reaching reforms, which have reduced significantly the long-term budgetary impact of ageing (Estonia, Latvia, Lithuania, Austria, Poland and Sweden) and maintaining the budget-

ary position, and in some cases strengthening it. Other countries with a relatively high projected cost of ageing, notably on pensions, may also need to consider structural reforms aimed at modifying the projected long-term budgetary trends at some point (the Netherlands and Finland). It should be noted that when considering the estimated expenditure-reducing impact of the reform package in Denmark, including reforms of the pension system, the long-term impact of ageing would be even smaller.

#### Policy invitations and conclusions

On the basis of the analysis and assessments of the updated SCPs made by the Commission, policy invitations were given to a number of countries in view of ensuring progress towards sustainable public finances. These invitations are summarised in Table I.4.8 below. In particular, an invitation for policy action was given in cases where achieving (or even having already achieved) the MTO as planned in the programme would not be sufficient to avoid significant risks to fiscal sustainability, in the light of the long-term expenditure pressures beyond the programme horizon. This reflects the increased importance assigned to longer-term concerns by the Commission and by the Council.

Table I.4.9 presents the conclusions regarding long-term sustainability of public finances reached by the Ecofin Council in its opinions on the 2006/07 updates of the SCPs on the basis of the Commission's assessments.

Table I.4.8

**Policy invitations by the Council on the sustainability of public finances on the 2006/07 SCPs**

<b>Policy invitation by the Council</b>	
<b>BE</b>	In view of the high level of debt and the projected increase in age-related expenditure, the Council invites Belgium to better address the long-term sustainability of public finances by at least achieving the MTO as well as by implementing reforms.
<b>CZ<sup>(1)</sup></b>	In view of the projected increase in age-related expenditures, improve the long-term sustainability of public finances by implementing the necessary pension and healthcare reforms.
<b>DE</b>	In view of the level of debt and the projected increase in age-related spending, improve long-term sustainability of public finances by achieving the MTO and by implementing reforms, particularly in the healthcare system.
<b>IE</b>	In view of, in particular, the projected increase in age-related expenditure, continue to implement measures to improve the long-term sustainability of its public finances and to avoid procyclical policies in the years ahead.
<b>EL</b>	In view of the very high level of debt and the projected increase in age-related expenditure, improve the long-term sustainability of public finances by achieving the MTO, controlling public pension and healthcare expenditures and resolutely implementing ambitious reforms; and produce as soon as possible long-term projections for age-related expenditure.
<b>ES</b>	In view of the above assessment and in particular the projected increase in age-related expenditure, further improve the long-term sustainability of public finances with additional measures to contain the future impact of ageing on spending programmes.
<b>FR</b>	Exploit the robust growth prospects and the positive base effect from a stronger than previously expected 2006 outturn to frontload the adjustment towards the MTO and pursue an ambitious structural adjustment in the coming years with a view to achieving the MTO by 2010 as planned, thereby reducing the level of the debt and improving the long-term sustainability of public finances.
<b>IT</b>	In view of the very high level of debt, fully implement the adopted pension reforms including the planned periodical actuarial adjustment in line with life expectancy so as to avoid significant increases in age-related spending.
<b>CY</b>	In view of, in particular, the level of debt and the projected increase in age-related spending: (i) control public pension expenditure and implement further reforms in the areas of pensions and healthcare in order to improve the long-term sustainability of public finances; (ii) implement the fiscal consolidation path as foreseen in the programme.
<b>LU</b>	In view of the projected increase in age-related expenditure, improve the long-term sustainability of public finances by implementing structural reform measures (especially in the area of pensions).
<b>HU</b>	In view of the level of debt and the increase in age-related expenditure, improve the long-term sustainability of public finances by making adequate progress towards the MTO and taking additional pension reform measures as announced.
<b>MT</b>	In view of the level of debt and the projected increase in age-related expenditure, improve the long-term sustainability of public finances by achieving the MTO and making further progress in the design and implementation of the healthcare reform.
<b>PL</b>	Safeguard the results of the pension reform.
<b>PT</b>	In view of the level of debt and the projected increase in age-related expenditure, improve the long-term sustainability of public finances by achieving the MTO and by securing and possibly enhancing the benefits of the adopted pension reforms.
<b>RO</b>	In view of the above assessment, exploit the good times to significantly strengthen the pace of adjustment towards the MTO by aiming for more demanding budgetary targets in 2007 and subsequent years. Improving the structural budgetary position over the medium term would contribute to containing risks to the sustainability of public finances.
<b>SI</b>	In view of the projected increase in age-related expenditure, improve the long-term sustainability of public finances, in particular by strengthening the ongoing pension reform with additional measures, geared especially to increasing labour participation of older workers and encouraging the move towards a greater reliance on private pension saving schemes.
<b>UK</b>	Pursue budgetary consolidation over the programme period, especially by implementing the projected reduction in expenditure growth after 2007/08, and strengthen further its fiscal position in order to address the risks to long-term sustainability of public finances.

<sup>(1)</sup> For CZ, the Commission services' text is given.

Sources: Council opinions on the 2006/07 updated stability and convergence programmes on the basis of the Commission's assessment.

Table I.4.9

**Policy conclusions by the Council on the sustainability of public finances on the 2006/07 SCPs**

	<b>Risk category</b>	<b>What are the main issues?</b>	<b>Has risk category changed?</b>
<b>BE</b>	Medium	The long-term budgetary impact of ageing in Belgium is above the EU average, influenced notably by a large increase in pension expenditure as a share of GDP over the coming decades. The initial budgetary position with a high primary surplus, albeit weaker compared with 2005, contributes to easing the projected long-term budgetary impact of an ageing population, but it is not sufficient to fully cover the substantial increase in expenditure. Moreover, the current level of gross debt, while declining, remains well above the Treaty reference value. The steady reduction of the debt ratio requires sustaining high primary surpluses for a long period of time, which would contribute to reducing risks to the sustainability of public finances.	No
<b>BG</b>		In the absence of the long-term projections of age-related expenditures, based on the common macroeconomic assumptions as carried out by the EPC/Commission, it is not possible to assess the impact of population ageing in Bulgaria on a comparable and robust basis as it is currently done for the other Member States, for which the projections on this basis are available. However, a significant impact of ageing on expenditures cannot be excluded given the current demographic structure. The initial budgetary position, with a large structural surplus, contributes significantly to stabilise debt before considering the long-term budgetary impact of ageing. Maintaining high primary surpluses over the medium term would contribute to containing risks to the sustainability of public finances.	
<b>CZ (1)</b>	High	The long-term budgetary impact of ageing in the Czech Republic is well above the EU average, influenced notably by a substantial increase in pension expenditure as a share of GDP as well as a significant increase in healthcare expenditure. Implementation of structural reform measures notably in the field of pensions and healthcare aimed at containing the significant increase in age-related expenditures would contribute to reducing risks to the sustainability of public finances. The budgetary position expected at the end of the programme period, which has worsened compared with previous exercises, constitutes a risk to sustainable public finances even before the long-term budgetary impact of an ageing population is considered. Consolidating public finances further than currently planned would contribute to reducing risks to the sustainability of public finances.	No
<b>DK</b>	Low	The long-term budgetary impact of ageing in Denmark is projected to be higher than on average in the EU, influenced notably by a relatively high increase in pension expenditure as a share of GDP over the coming decades. However, the comprehensive reform package adopted in June 2006, the 'Agreement on future prosperity, welfare and investments in the future' or simply Welfare Agreement, aims at delaying retirement. Both the general pension age and the early retirement age will be gradually increased by two years followed later by an indexation of the age thresholds to changes in life expectancy. Therefore, the Welfare Agreement contributes to curb the long-term expenditure trends and thus improves public finance sustainability. Moreover, the initial budgetary position with a large structural surplus contributes significantly to ease the long-term budgetary impact of ageing. Maintaining high primary surpluses over the medium term will contribute to reducing risks to the sustainability of public finances.	No
<b>DE</b>	Medium	The long-term budgetary impact of ageing in Germany is close to the EU average, though with pension expenditure showing a somewhat smaller increase than in many other countries, as a result of the pension reforms already enacted. A draft law has been adopted to raise the statutory retirement age in steps to 67 years, from 2012 onwards. Although exemptions to the higher age limit are being granted, the move will enhance the long-term sustainability of public finances. In addition, developing further private pension arrangements would contribute positively to retirement incomes. The initial budgetary position constitutes a risk to sustainable public finances even before the long-term budgetary impact of ageing populations is considered. Moreover, the current level of gross debt is above the Treaty reference value.	No
<b>EE</b>	Low	The long-term budgetary impact of ageing in Estonia is among the lowest in the EU, with age-related expenditure projected to fall as a share of GDP over the coming decades, influenced by the considerable expenditure-reducing impact of the reform of the pension system. The current level of gross debt is very low in Estonia and maintaining sound government finances, in line with the budgetary plans over the programme period, would contribute to containing the risks to the long-term sustainability of public finances.	No

*(Continued on the next page)*

Table I.4.9 (continued)

IE	Medium	The long-term budgetary impact of ageing in Ireland is well above the EU average, mainly as a result of a relatively younger population and consequently a higher increase in pension expenditure as a share of GDP over the coming decades, influenced in part by the maturing of the pension system. The initial budgetary position, improved compared with 2005, contributes significantly to easing the projected long-term budgetary impact of ageing populations, but is not sufficient to fully cover the substantial increase in expenditure due to the ageing of the population. Maintaining high primary surpluses over the medium term and implementing measures aimed at curbing the significant increase in age-related expenditures would, as recognised in the programme, contribute to reducing risks to the sustainability of public finances.	No
EL	High	The long-term budgetary impact of ageing in Greece is uncertain as long-term projections of pension expenditure are not available; however, it is very likely to be well above the EU average; according to the latest available information from the 2002 updated Greek stability programme, a significant increase in pension expenditure as a share of GDP is projected over the long term. The initial budgetary position, albeit improved compared with 2005, constitutes a significant risk to sustainable public finances even before considering the long-term budgetary impact of an ageing population. Moreover, the current level of gross debt is well above the Treaty reference value and reducing it requires achieving high primary surpluses for a long period of time. Consolidating the public finances as planned, together with urgent reform measures aimed at containing the likely significant increase in age-related expenditures, would contribute to reducing risks to the long-term sustainability of public finances. The availability of long-term projections of pension expenditure would improve the assessment of long term budgetary sustainability.	No
ES	Medium	The long-term budgetary impact of ageing in Spain is well above the EU average, mainly as a result of a relatively high increase in pension expenditure as a share of GDP over the coming decades. The initial budgetary position, improved compared with 2005, contributes to easing the projected long-term budgetary impact of ageing populations, but is not sufficient to fully cover the substantial increase in expenditure due to the ageing of the population. Maintaining high primary surpluses over the medium term and implementing further measures aimed at curbing the significant increase in age-related expenditures would contribute to reducing risks to the sustainability of public finances.	No
FR	Medium	The long-term budgetary impact of ageing in France is slightly lower than the EU average, with pension expenditure showing a somewhat more limited increase than in many other countries, as a result of the pension reforms already enacted. The initial budgetary position, albeit improved compared with 2005, still constitutes a risk to sustainable public finances even before the long-term budgetary impact of an ageing population is considered. Moreover, the current level of gross debt is above the Treaty reference value. Further budgetary consolidation would contribute to reducing risks to the sustainability of public finances, which would also benefit from preserving and possibly enhancing the benefits of the pension reform.	No
IT	Medium	The long-term budgetary impact of ageing in Italy is lower than the EU average, with pension expenditure showing a more limited increase than on average in the EU, thanks to the pension reforms adopted, assuming they are fully implemented, notably including the planned periodical actuarial adjustment in line with life expectancy. Increasing the employment rate, notably of older workers, would improve workers' pensions in the future and contribute to the success of the pension reforms. The initial budgetary position, albeit slightly improved compared with 2005, constitutes a risk to sustainable public finances even before the long-term budgetary impact of an ageing population is considered. Moreover, the current level of gross debt is well above the Treaty reference value and reducing it will require high primary surpluses to be achieved and maintained over a long period.	No
CY	High	The long-term budgetary impact of ageing in Cyprus is among the highest in the EU, influenced notably by a very large increase in pension expenditure as a share of GDP. The initial budgetary position contributes to easing part of the projected considerable long-term budgetary impact of an ageing population, but it is not sufficient to cover it. Moreover, the current level of gross debt is above the Treaty reference value. Continuing the consolidation of the public finances simultaneously with adopting pension reform measures aimed at containing the significant increase in age-related expenditures would contribute, as recognised by the authorities, to reducing risks to the sustainability of public finances.	No
LV	Low	The long-term budgetary impact of ageing in Latvia is lower than the EU average, with age-related expenditure projected to fall as a share of GDP over the coming decades, influenced by the expenditure-reducing impact of the reform of the pension system. The current level of gross debt is very low in Latvia and improving the structural budgetary position as planned in the convergence programme update would contribute to containing the risks to the long-term sustainability of public finances.	No
LT	Low	The long-term budgetary impact of ageing in Lithuania is lower than the EU average, with a limited increase in pension expenditure over the coming decades, influenced by the pension reforms enacted. The current level of gross debt is very low in Lithuania and improving the budgetary position as planned in the convergence programme update would contribute to containing the risks to the long-term sustainability of public finances.	No

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Table I.4.9 (continued)

LU	Medium	The long-term budgetary impact of ageing in Luxembourg is among the highest in the EU, influenced notably by a very considerable increase in pension expenditure, by 7½ percentage points of GDP, and in total age-related public spending, by 8¼ points, from 2004 to 2050 (compared with EU average increases of 2¼ and 3½ percentage points of GDP, respectively). The current level of gross debt is very low and considerable assets have been accumulated by the social security system. However, while the current size of these assets (estimated at around 25 % of GDP) contributes significantly to public finance sustainability, it will not be sufficient to offset the impact on the debt ratio in the long term resulting from the sizeable increase in age-related expenditure. Therefore, while keeping a strong budgetary position will help to alleviate part of the cost of ageing, as recognised by the authorities, some changes to the pension scheme are necessary so as to contain the future increase in public expenditure and reduce the risks to the long-term sustainability of public finances.	No
HU	High	The long-term budgetary impact of ageing in Hungary is well above the EU average, notably as a result of the high increase in pension expenditure as a share of GDP over the long term. While first important steps have been taken, full implementation of further reform measures aimed at containing the significant increase in age-related expenditures as planned in the programme would contribute to reducing risks to the sustainability of public finances. Moreover, and importantly, the weak initial budgetary position, having deteriorated substantially compared with 2005, constitutes a risk to sustainable public finances even before the long-term budgetary impact of an ageing population is considered. In addition, the current level of gross debt is above the Treaty reference value. Further budgetary consolidation as planned would contribute to reducing risks to the sustainability of public finances.	No
MT	Medium	Malta has recently enacted a pension reform aimed at increasing the effective retirement age, while raising the level of pensions. As a result estimates in the programme suggest that pension expenditures will be higher, leading to a higher increase in age-related expenditure, close to the EU average. Although at a somewhat slower pace than historical trends, projections for healthcare spending show an increase of around 1¼ percentage points of GDP in the long term, if current trends persist. The current budgetary position would not ensure a steady reduction of debt to below the Treaty reference value. Therefore, improving the budgetary position, as projected in the programme, would contribute to reducing the risks to the sustainability of public finances.	No
NL (²)	Low	The long-term budgetary impact of ageing in the Netherlands is higher than the EU average, influenced notably by a relatively high increase in pension expenditure as a share of GDP over the coming decades. The initial budgetary position, albeit not as strong as in 2005, contributes to easing the projected long-term budgetary impact of an ageing population, but it is not sufficient to fully cover it. The projected future rise of revenues as a share of GDP, mainly due to deferred taxation of pensions, would partly compensate for the increase in public expenditure over the long term. Ensuring high primary surpluses over the medium term and/or implementing reform measures that curb the projected increase in age-related expenditure would contribute to containing risks to the sustainability of public finances.	Yes
AT (¹)	Low	The long-term budgetary impact of ageing in Austria is well below the EU average, with pension expenditure projected to decrease as a share of GDP over the long term, as a consequence of the significant expenditure containment expected from the 2004 pension reform. The initial budgetary position, with a structural primary surplus, contributes to easing the long-term budgetary impact of ageing. Increasing primary surpluses over the medium term, as announced in the programme, as well as an increase in the employment rate of older workers, would contribute towards containing risks to the sustainability of public finances.	No
PL	Low	The long-term budgetary impact of ageing in Poland is the lowest in the EU, with age-related expenditure projected to fall, partly as a result of the considerable expenditure-reducing impact of the reform of the pension system — assuming that the pension reforms are fully implemented. The initial budgetary position, although improved compared with 2005, still constitutes a risk to sustainable public finances before the long-term budgetary impact of an ageing population is considered and further budgetary consolidation envisaged in the programme would contribute to containing risks to the sustainability of public finances.	No
PT	High	Portugal has recently enacted pension reforms aimed at strengthening the sustainability of public finances. Estimates in the programme suggest that the overall increase in age-related expenditure over the coming decades would be significantly lower as a result of the reform, though remaining sizeable. The initial budgetary position, albeit markedly improved compared with 2005, still constitutes a risk to sustainable public finances even before the long-term budgetary impact of an ageing population is considered. Moreover, the current level of gross debt is above the Treaty reference value. The planned budgetary consolidation coupled with the expected containment of the age-related expenditure, arising from ongoing reforms, would significantly contribute to reducing such risks.	No but recent reform measures indicate clear progress.

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Table I.4.9 (continued)

<b>RO</b>		In the absence of the long-term projections of age-related expenditures, based on the common macroeconomic assumptions as carried out by the EPC/Commission, it is not possible to assess the impact of population ageing in Romania on a comparable and robust basis as it is currently done for the other Member States, for which the projections on this basis are available. However, a significant impact of ageing on expenditure cannot be excluded given the current demographic structure. The initial budgetary position, with a large structural deficit, is not sufficient to stabilise debt even before considering the long-term budgetary impact of ageing. Improving the structural budgetary position over the medium term would contribute to containing risks to the sustainability of public finances.	
<b>SI</b>	High	The long-term budgetary impact of ageing in Slovenia is among the largest in the EU, influenced notably by a considerable increase in pension expenditure as a share of GDP. While some action is being taken, stronger fiscal consolidation and implementation of further reform measures aimed at containing the substantial increase in age-related expenditures would contribute to reducing risks to the sustainability of public finances. Although the initial budgetary position contributes to stabilising the debt ratio over the medium term, the low structural improvement over the programme period will not be sufficient to contain the expected budgetary impact of ageing in the long term.	No
<b>SK<sup>(?)</sup></b>	Medium	The long-term budgetary impact of ageing in Slovakia is lower than the EU average, with pension expenditure influenced by the recent pension reform showing a more limited increase than in many other countries. The initial budgetary position constitutes a risk to sustainable public finances even before considering the long-term budgetary impact of an ageing population. Consolidating the public finances would therefore contribute to reducing risks to the sustainability of public finances.	Yes
<b>FI</b>	Low	The long-term budgetary impact of ageing in Finland is higher than on average in the EU, although enacted pension reform measures have helped to contain the increase in pension expenditure to close to the EU average as a share of GDP over the coming decades. The initial budgetary position, with a large structural surplus, contributes significantly to easing the long-term budgetary impact of ageing. Moreover, the large assets accumulated in the public pension fund will finance part of the increase in pension expenditure. However, maintaining high primary surpluses over the medium term would contribute towards containing risks to the sustainability of public finances.	No
<b>SE</b>	Low	The long-term budgetary impact of ageing in Sweden is lower than the EU average, with pension expenditure projected to remain relatively stable as a share of GDP over the long term, influenced by the considerable expenditure-reducing impact of the reform of the pension system. The initial budgetary position with a high primary surplus contributes to the reduction of gross debt and the accumulation of assets. Maintaining sound government finances with continued surpluses as planned would contribute to limiting risks to the sustainability of public finances.	No
<b>UK</b>	Medium	The long-term budgetary impact of ageing in the UK is close to the EU average, with pension expenditure showing a somewhat more limited increase than on average in the EU, in part as a result of the UK's historically relying relatively more on private pension arrangements than have other EU countries. The proposed reforms to pension provision address the concern of potentially inadequate provision in the future, by strengthening the incentives for private savings for retirement and by increasing provision of public pensions, thus involving a slightly higher increase in public pension expenditure than previously projected; the reform also incorporates a planned gradual increase in the statutory State pension age. The initial budgetary position, though improved compared with 2005, would still constitute a risk to sustainable public finances if no significant reduction in the deficit occurs in the medium term, even before the long-term budgetary impact of an ageing population is considered. Consolidating the public finances by strengthening the budgetary position further than planned in the convergence programme would thus contribute to reducing risks to the long-term sustainability of public finances.	No

<sup>(1)</sup> For AT and CZ, the Commission services' text is given.

<sup>(2)</sup> For the Netherlands, the Commission's assessment was 'low' risk in the previous assessment, while the Council changed it to 'medium' risk.

<sup>(3)</sup> For Slovakia, the Commission's assessment was 'medium' risk in the previous assessment, while the Council changed it to 'low' risk.

Sources: Council opinions on the 2006/07 updated stability and convergence programmes on the basis of the Commission's assessment.

# Part II

## Evolving budgetary surveillance



# Summary

In the second year since its inception, the current track record of the reformed Stability and Growth Pact (SGP) is positive. Most of the provisions of the revised Pact have been deployed, implemented and tried out in practice giving rise to encouraging results. Compared to a couple of years ago, the overall conditions of public finances are significantly improving in the euro area and the EU as a whole on the back of both a broad-based economic recovery and significant improvements in the underlying budgetary positions, especially thanks to the efforts put in place by Member States currently in excessive deficit procedure. Based on current plans outlined in the 2006/07 stability and convergence programmes (SCPs) all but two countries currently in excessive deficit will have brought the deficit below the 3 % of GDP threshold of the Treaty by 2008.

In the face of an overall positive performance, the recent experience also highlights a number of issues that need to be tackled in order to safeguard current accomplishments and in particular to make sure that Member States make rapid progress towards achieving sustainable budgetary positions in order to be prepared for the budgetary impact of ageing population.

## **Ensuring the effectiveness of the preventive arm of the Pact**

Firstly, and most importantly, the improvement in the underlying budgetary position posted in 2006 masks an inconvenient pattern. In a number of countries the reduction of the structural deficit was mainly achieved thanks to significantly better-than-expected tax revenues which actually offset slippages on the expenditure side. Revenue windfalls have not been fully used for budgetary adjustment; a part has been spent. A similar pattern is projected to prevail in 2007, when, based on the Commission services' spring 2007 forecast, the projected improvement in the structural budget balance for the euro area and the EU as a whole are likely to fall short of the benchmark of 0.5 % of GDP required by the

reformed SGP in spite of favourable economic conditions.

With a view to avoiding mistakes of the past, the challenge ahead is to ensure a more effective functioning of the preventive arm of the SGP. The aim is twofold: using the opportunity offered by the current favourable cyclical conditions to move towards sustainable fiscal positions; and ensuring a better coordination of national fiscal policies in the euro area.

Past experience has shown that slippages from budgetary targets are to some extent the result of negative growth surprises. With a view to better assess the macroeconomic assumptions underpinning budgetary projections and to highlight risks the Commission services are moving towards a broader economic appraisal of stability and convergence programmes. The assessment of the macroeconomic outlook underpinning the medium-term budgetary projections of the Member States is more detailed and particular attention is paid to the assessment of cyclical conditions so as to better identify economic good times.

Another way of reducing the gaps between budgetary plans and outcomes is to strengthen the link between national budgets and SCPs. In many cases, SCPs still have a weak impact on the national budgetary process. Possible ways to enhance the role of SCPs in the national context range from relatively simple and straightforward changes in the national budgetary process aimed at increasing the coordination among the entities that draw up the budgetary planning documents to a greater involvement of national parliaments in the discussion and formulation of the medium-term fiscal targets submitted for examination at the EU level.

A third avenue relates to the question of whether and how the annual budget is embedded in a medium-term policy plan. The range of national practices is very broad. In some countries, developed national medium-

term frameworks were introduced in the past and are working well; in others the only instrument placing fiscal policy into a multiannual context is the stability and convergence programme.

To discuss most recent budgetary developments and to ensure a proper coordination of national fiscal policies in the euro area, a mid-term budgetary review (MTBR) is carried out before the summer. It takes place after the assessment of the updated SCPs and ahead of the next round of budgetary planning. With a view to strengthen the MTBR, in November 2006 the Eurogroup decided to adapt its content and format. The main innovations compared to past practice are that the review is re-designed to better fit the national budgetary calendars and that Member States are invited to forward any information on their policy intentions for the coming year. In combination with the assessment of ongoing budgetary developments, a discussion and assessment of such intentions at the EU level can be conducive to shape the national debate and ensure a better coordination of policies in the euro area.

The currently used reference values for the country-specific medium-term budgetary objectives (MTOs) are provisional. In accordance with the 2005 Council report underpinning the reform of the Pact, work on how to account for implicit liabilities, i.e. impending expenditure increases due to ageing populations, is ongoing and a number of options have been produced. Two of them build upon synthetic sustainability indicators. The third approach is less mechanistic. On top of purely quantitative indicators, it incorporates other qualitative elements considered to be important in view of public finance sustainability.

The benefits of sound fiscal policy could be better communicated if fiscal surveillance was placed into a broader economic perspective, including the context of the renewed strategy of Lisbon for growth and jobs. The assessment of fiscal policy developments could notably take greater account of the overall macroeconomic situation of the Member States. Particular attention could be given to internal and external imbalances which may mask potential risks to sustainable economic development and in turn to sustainable public finances.

#### **Progress and issues in the measurement of budgetary positions**

The increased economic rationale of the revised SGP has broadened the assessment of economic and fiscal per-

formance. Economic conditions play an increasingly important role in defining and assessing the appropriateness of a country's fiscal performance vis-à-vis the provisions of the Pact.

A wider and more complex assessment goes along with stricter requirements in terms of timely and reliable data as well as reliable economic and fiscal indicators. The current economic juncture is a particularly evident case in point where the assessment of the underlying budgetary position is complicated by exceptionally high inflows of tax revenues. Currently available methods for measuring both potential output and tax elasticities need to be improved in order to better distinguish between purely temporary and more permanent fluctuations in tax revenues with respect to GDP.

One of the main aims of the country-specific MTOs introduced with the revised Pact is to safeguard against the risk of breaching the 3 % of GDP deficit threshold of the Treaty under normal cyclical conditions. In practice, this requirement is made operational via the so-called minimum benchmark, country specific indicators which are recurrently updated. The latest update of the minimum benchmarks, including a revision of the methodology, was carried out at the end of 2006 and the new estimates have been used for the assessment of the latest round of stability and convergence programmes.

In view of ageing population, increasing attention is focused on pensions systems also in the field of national accounting. In the ongoing discussion on the revision of national accounts one important aspect relates to the issue of how to record government commitments in relation to future pensions. Under current practice pensions accruing in the future in unfunded schemes are not recorded as liabilities while contributions are recorded as deficit decreasing. The final verdict is still out on how to adapt national accounts so as to include pension liabilities, but the search for solutions has narrowed; potential implications are clearer.

The data that are relevant for deciding whether a country is fulfilling the requirements of the SGP are the annual deficit and debt ratios, compiled according to the ESA95 accounting rules. On top of the annual data, national and statistical offices in collaboration with Eurostat have put considerable effort in collecting and compiling quarterly public finance data. Quarterly government accounts may give a relevant contribution to the quality of fiscal surveillance. In particular, these infra-annual data can give

early signals on the course of fiscal policy, thus allowing policymakers to take measures in case fiscal policy was found to be off track. Although a large majority of Member States releases quarterly government accounts compiled according to ESA95 rules, some additional challenges are to be faced.

#### **Improving the assessment of long-term budgetary sustainability**

Giving more attention in the surveillance of budgetary positions to debt and sustainability was one of the main areas for improvement identified in the 2005 Council report underpinning the reform of the SGP. Since then a number of important steps towards a more comprehensive and enhanced assessment of the long-term sustainability have been taken. The work on common long-term budgetary projections carried out jointly by the Member States and the Commission services and the first Sustainability Report adopted by the Commission at the end of 2006 are cases in point. The next major update of the common long-term projections and of the sustainability report is planned for 2009. In that context a number of potential improvements, such as the modelling of tax revenues, are envisaged so as to provide further insight in the budgetary impact of ageing.

#### **Systemic pension reforms in the reformed SGP**

In order to enhance the growth-oriented nature of the Pact, the 2005 Council report states that structural reforms should be taken into account when assessing the

fiscal performance of a country with respect to the fiscal requirements of the Pact. The Council regulations that codify the revised SGP contain specific provisions for pension reforms, not least because unlike most other structural reforms they produce a significant impact on the budget in the short term. Those legal provisions aim to avoid the SGP discouraging structural reforms addressing longer-term sustainability issues while not affecting the overall provision of the SGP.

#### **Procedures for the preparation, legislation and execution of the budget**

The Council report of March 2005, which forms the basis of the reformed SGP, highlights the importance of domestic fiscal governance arrangements as complements to the EU framework. Against this background a great deal of attention has been focused over the past years on the way fiscal rules and fiscal councils impact on the fiscal performance of EU Member States. Less attention has been given so far to another important dimension of fiscal governance, namely budgetary procedures. In a bid to get a first and systematic overview of existing procedures in the EU Member States, Commission services ploughed through the stock of available information. Unsurprisingly, the results of the analysis reveal a wide spectrum of different arrangements. Nevertheless, a cursory analysis of the data shows that countries that rank high in terms of the quality of budgetary procedures tend to be among the group of fiscally virtuous countries and vice versa.

# 1. Ensuring the effectiveness of the preventive arm of the Stability and Growth Pact

## 1.1. Introduction

Two years ago, the reform of the Stability and Growth Pact (SGP) confirmed the consensus among the EU Member States for sound fiscal policies. Its main objective was to address effectively the challenges to make progress towards sustainable fiscal positions. The reform confirmed the fundamental rules and principles of the Treaty and, at the same time, increased the flexibility and economic rationale of the SGP. Notably the revised SGP requests Member States to target the attainment of country-specific medium-term budgetary objectives (MTOs) and includes sound fiscal policy principles guiding the adjustment towards these objectives. In June 2006, the Commission made an early assessment on the functioning of the revised SGP, one year after its inception. The Commission concluded that the experience with the revised SGP was rather positive. It welcomed the smooth and consistent implementation of the excessive deficit procedure, which applies to Member States with deficits in excess of 3 % of GDP, and the improvement in the overall budgetary situation. Concerns were however expressed regarding the implementation of the preventive arm of the Pact.

The discussion on recent budgetary developments and current plans for the coming years in Part I of this report largely confirms last year's assessment: the corrective arm of the SGP works better but, in spite of the ongoing improvement in the budgetary situation, deviations from the sound principles of the revised SGP have been identified in countries that have not reached the MTO yet. In a context where most of the EU Member States have just corrected their excessive deficits, or are about to do so, the challenge ahead is to ensure a

more effective functioning of the preventive arm. The aim is twofold: using the opportunity offered by the current favourable cyclical conditions to move towards sustainable fiscal positions; and improving the coordination of fiscal policies.

This section of the report reviews various ways to ensure a better operation of the preventive arm of the SGP. Firstly, it assesses the link between the preparation of the stability and convergence programmes (SCPs) and national budgetary procedures. Some proposals are formulated so as to strengthen the interplay between domestic budgetary procedures and the EU fiscal surveillance framework. Secondly, it describes the recent agreement on the strengthening of the mid-term review of fiscal policies. The Eurogroup decided to transform this exercise, which takes place every year before the summer and aims at ensuring a proper coordination of national fiscal policies in the euro area, into a real strategic policy debate, organised just before the crucial decisions on the budgetary plans for the following year are taken in the Member States. Thirdly, this section of the report presents the recent steps towards complementing and strengthening the technical analysis of SCPs by the Commission services, with a view to placing the analysis of the budgetary targets into a broader economic assessment. Fourthly, it reviews the revised SGP provisions related to the Commission policy advice, and examines the possible role of this instrument in the context of other instruments of the EU budgetary surveillance framework. Finally, this section presents the progress made in the last 12 months by Commission services in identifying broad possible options for taking into account implicit liabilities in the formulation of country-specific MTOs.



## **1.2. Strengthening the link between the stability and convergence programmes and national budgetary plans**

### **1.2.1. Introduction**

While the EU budgetary surveillance framework has contributed positively to reinforce the link between fiscal governance at the national and the EU level, past experience suggests that further efforts in this direction are still required.

The need for a strong link between the domestic conduct of fiscal policy and the EU fiscal framework can be motivated on different grounds in the context of the economic and monetary union (EMU). For instance, Member States should pay due attention not only to the knock-on effects of their fiscal plans in the partner countries forming the single currency area, but also in the EMU as a whole, specifically by internalising potential spillovers of domestic budgetary policies on the policy mix of the euro area. Additionally, national budgetary plans need to be consistent with the provisions of the SGP, which also calls for a tighter relationship between the domestic and EU dimension.

In order to strengthen the link between national and EU budgetary policymaking, it is necessary to first analyse to what extent the main fiscal policy instruments of the domestic and EU fiscal framework, namely national budgets on the one hand and the stability and convergence programmes (SCPs) on the other, are connected.

This subsection aims at providing some food for thought on this issue and at preparing the ground for further analyses. On the basis of a survey launched recently by the Commission services on budgetary procedures in EU countries, it takes a closer look at the current ties between national budgets and the SCPs. The analysis focuses on three different dimensions. Firstly, it compares calendars for the release and adoption of national budgets and SCPs. Secondly, the role of national parliaments in the preparation and approval of the SCPs is also considered. Next, a number of elements regarding the preparation of the national budgets and the SCPs is described so as to analyse the connection between these two budgetary policy documents and their consistency in terms of fiscal policymaking. Finally, some ways forward to strengthen the links between national budgets and SCPs are presented.

### **1.2.2. Calendars for budget and SCPs preparation**

Table II.1.1 contains the calendars for the national budgets and SCPs in the EU Member States, showing the key stages related to their preparation and adoption.

The overall picture emerging from these calendars is that SCPs are in a large majority of cases approved by the national executive in November, once the draft budget has previously been endorsed by the government and submitted to parliament between September and October.

Arguably, the release of the programmes after the governmental approval of the draft budget and its submission to parliament should ensure that the outcome of the domestic budgetary process is better reflected in the SCPs. This appears plausible according to the dates provided by Member States in the survey, especially taking into account that draft budgets are usually very close to the final budgets approved by the parliaments, at least in terms of the targeted balance <sup>(1)</sup>.

However, this calendar implies a unidirectional relationship from domestic budgets to SCPs and avoids a parallel discussion at national and EU level on fiscal policy issues. In practical terms, programmes are examined by the Commission and the Council only after national budgets have definitively been passed by national authorities. As a result, Council opinions, which are often released long after the relevant domestic debate in parliament has taken place, cannot be taken into account in the preparation of the budget law. This also entails the risk that the assessments as well as the Council opinions become quickly outdated, reducing their value as policy guidelines. This situation undermines the effectiveness of the whole peer review process and weakens the preventive arm of the SGP <sup>(2)</sup>.

In principle, there are several options to address this situation. For instance, some changes in the previously described calendar could be envisaged in order to submit the programmes before the start of the annual budgetary

<sup>(1)</sup> Additionally, a significant number of Member States generally submit the SCP to the Commission only after 1 December, which is the deadline established by the code of conduct (except for Austria, Portugal and the United Kingdom, for which the deadline is extended to mid-December).

<sup>(2)</sup> Arguably, since both the SCPs and the Council opinions are multiannual, their lack of influence on the budget preparation for year  $t+1$  should not prevent them from influencing the budget of  $t+2$ . However, past experience shows that the medium-term fiscal objectives included in the SCPs are often significantly revised in the subsequent programmes according to current budgetary developments and the objectives considered in the next annual budget.

process. If SCPs were presented during the first half of the year, they could influence the budget preparation of year  $t+1$ . Such a change could reinforce the commitment of national authorities to the main budgetary objectives included in the SCPs, while providing room for the budgetary concerns expressed at EU level to be considered in the preparation of national budgets.

However, less drastic changes based on the reinforcement of existing coordination mechanisms in the EU fiscal surveillance framework may also prove instrumental in exploiting the potential benefits of peer support and pressure. For example, SCPs could continue to be submitted (in year  $t$ ) between mid-October and end-November as specified in the code of conduct. As usual, the assessments of the programmes and their Council opinions would be released during the next three or four months. In the following year  $t+1$ , an appropriate coordination mechanism among Member States could monitor whether budgetary developments in  $t+1$  and budgetary plans for  $t+2$  are consistent with the envisaged fiscal outcomes included in the latest SCP. This coordination exercise should take place at the beginning of the annual budget preparation (i.e. around April in most EU Member States) in order to incorporate policy recommendations and invitations raised at EU level in the domestic fiscal plans. In this scenario, the so-called mid-term budgetary review (MTBR) may play a crucial role while reinforcing the preventive arm of the SGP (see Section II.3 of this report).

### **1.2.3. The role of national parliaments**

One indicator to assess to what extent the domestic conduct of budgetary policy heeds the EU fiscal dimension is the degree of involvement of national institutions in the preparation of the SCPs, and in particular the role played by national parliaments. One would expect that the greater the importance attached domestically to the budgetary implications of the EU fiscal framework, the larger the interest of national parliaments in the SCPs as a key element for the conduct of fiscal policy at national level.

Whilst governments interact directly with parliament during the annual budget process, they generally operate with a large degree of discretion in relation to the medium-term fiscal targets and commitments contained in the SCPs. At present, most national parliaments in EU countries are not formally involved in the preparation and endorsement of the SCPs. In approximately three quarters of the Member States, the programmes are

either presented but not voted or not even submitted to national parliaments (see Part III of this report). This may result in a lack of domestic checks and balances to ensure consistency between annual budgetary plans and fiscal commitments at EU level.

However, in a reduced number of countries a form of indirect parliamentary endorsement of the programmes exists as the SCPs mirror documents that have already been discussed and/or approved by parliament. These documents generally relate to the existing medium-term budgetary frameworks in some Member States such as the Netherlands and Sweden (see Part III for further details about medium-term budgetary frameworks).

Like for the SCPs, the role of national parliaments in relation to the Council opinions on the programmes is rather limited. In a large majority of EU countries Council opinions are neither presented nor discussed in parliament.

Finally, according to the survey conducted among EU Member States, national parliaments hardly examine the implementation of the latest SCPs and the achievement of their fiscal objectives <sup>(1)</sup>.

On the whole, the degree of national commitment associated with the fiscal objectives included in the SCPs appears rather weak in terms of parliamentary involvement. As a result, this generally leads to an insufficient domestic debate about the consistency of domestic budgetary plans vis-à-vis the existing constraints in the context of the EMU.

### **1.2.4. Some comparative features of the SCPs and national budgets**

Information provided by the survey also gives some interesting comparative features related to the preparation and content of the SCPs and national budgets. These elements allow to some extent an assessment of the current link and coherence of both documents <sup>(2)</sup>.

<sup>(1)</sup> In most Member States, the implementation assessment is only carried out in the successive SCPs.

<sup>(2)</sup> Ideally, this link and coherence between SCPs and national budgets ought to establish a clear influence from the former to the latter. Specifically, SCPs should establish the main budgetary objectives and policy guidelines for the annual budgets, and ensure that fiscal commitments at EU level are translated into the national yearly budgetary discussion. Certainly, this would also require that medium-term fiscal plans included in the SCPs are not annually revised according to yearly budgetary decisions.

*Departments in charge of the budget and the SCP preparation*

The fact that the national budget and the SCPs are prepared by the same or by different departments may be an important element in ensuring an appropriate consistency between both documents. According to the survey only in one third of the Member States both documents are prepared by the same department, mainly the budget department or directorate of the Ministry of Finance (see Graph II.1.1). In the remaining EU countries, the budget department continues to be the relevant body in charge of the budget preparation, while several other departments may be involved in the draft of the SCPs (e.g. the Treasury, fiscal policy directorate, tax policy department, economic analysis and forecasting units etc.). In these cases, the extent to which an appropriate coordination among different departments exists to ensure consistency between the budget and the SCP would require a more detailed analysis on a country-by-country basis. Interestingly, among the large EU economies only in the UK are the budget and the SCP produced by one single department.

*Accounting rules used for the preparation of the budget and the SCP*

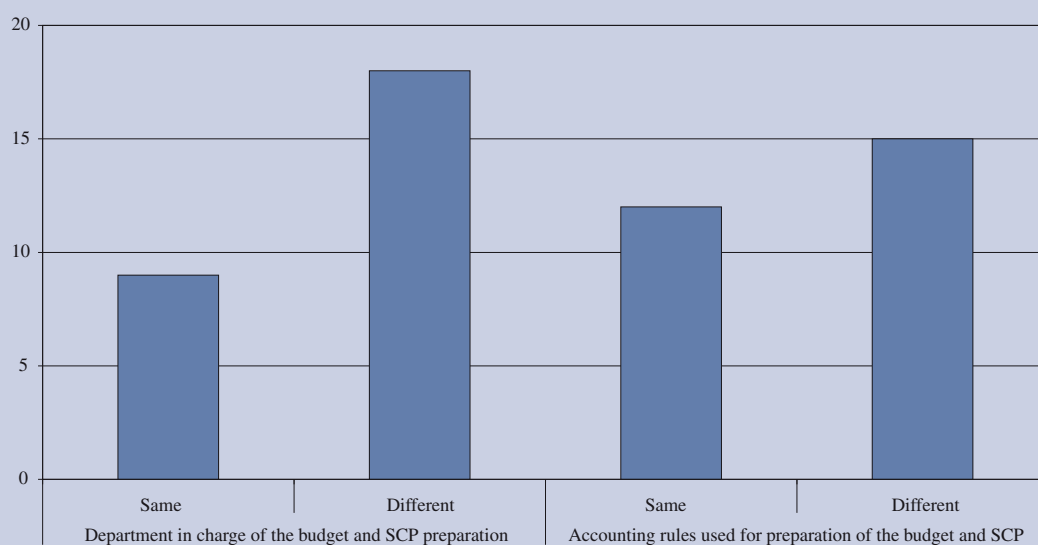
An additional element that can also influence the consistency between fiscal targets included in the budget

and in the SPCs refers to the accounting rules applied in both documents (see Graph II.1.2). More than half of the Member States declare they apply different accounting rules, namely budgetary accounting for budget law and ESA 95 figures for the SCP. While the use of different accounting rules may be justified by the different nature of both documents (i.e. annual expenditures and revenues versus medium-term fiscal plans), ensuring a full and transparent consistency between both set of figures is of utmost importance. Interestingly, some of those countries using different accounting systems also report systematic adjustment procedures to convert budgetary figures into national accounts values (e.g. Spain and France). This should in principle ensure an adequate comparability between the objectives included in the budget and the SCP, and may represent an example of best practices to be followed by other Member States.

*Information on the SCP included in the draft budget law*

One of the questions included in the survey was about whether the SCP or a preliminary version of it (e.g. medium-term macroeconomic projections and budgetary projections on which the SCP will be based) is annexed to the draft budget law submitted to parliament. In principle, a positive answer might imply a stronger link between both documents, and would allow considering

**Graph II.1.1: Department in charge of budget and stability and convergence programmes' preparation and accounting rules**



Source: Commission services.

the EU fiscal dimension in the national debate about domestic budgetary policy. According to the answers provided (see Graph II.1.2), nearly 20 EU Member States declare including neither the SCP nor a preliminary version in the draft budget law. Nonetheless, some of these negative answers should be somewhat qualified. In some of the countries that declare not to annex information about multiannual targets and projections in the draft budget, national parliaments have already discussed and/or approved fiscal objectives included in their medium-term budgetary frameworks (e.g. the Netherlands, Finland and Sweden), which in turn form the basis of the SCP targets. Despite these notable exceptions, the results of the survey point to an overall rather weak link between budget laws and medium-term objectives presented in the SCPs.

*Fiscal targets for year t and t+1 in the draft budget and the SCP*

Finally, the comparison between fiscal targets for years t and t+1 included in the draft budget and the programme may show to some extent the degree of compatibility between both policy instruments. A large majority of Member States declared to consider the same budgetary objectives for the current and the next year in both documents (see Graph II.1.2). However, this apparent overlap between budgets and SCPs is, as mentioned in Section II.2.2 rather unidirectional, in the sense that the SCP simply adopts the figures indicated in the budget. Thus,

identical targets do not presuppose that fiscal policy considerations at EU level have been taken into account in the conduct of domestic budgetary policy.

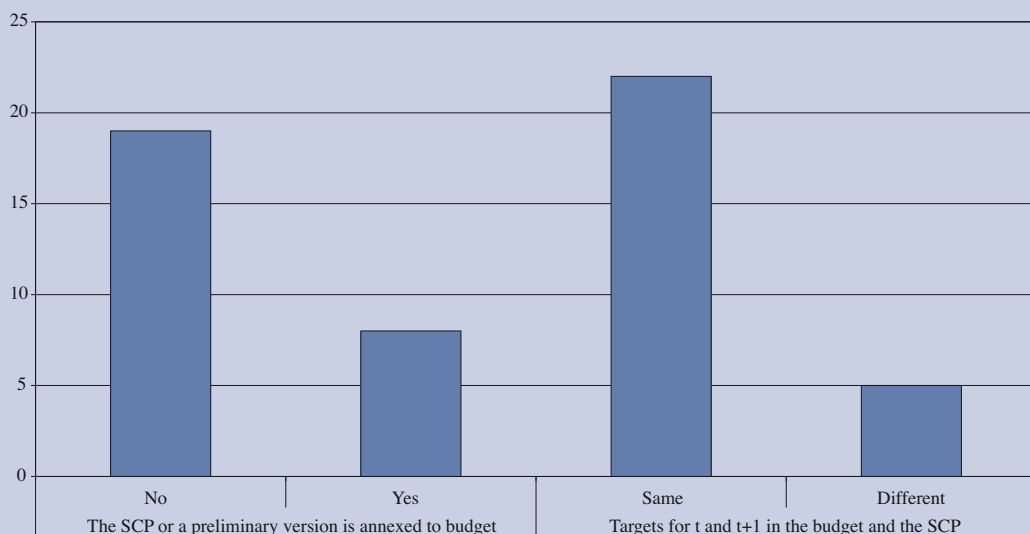
**1.2.5. Proposals to improve the current interaction between national and European fiscal procedures**

The results of our survey give rise to some tentative proposals for strengthening the link between the domestic budget process and the EU fiscal surveillance framework. The potential improvements can be summarised as follows.

In a number of Member States the link between the annual budget and the EU fiscal framework is weak. Past policy experience shows that this may result in sizeable gaps between plans set out in the SCPs and actual budgetary outcomes. The interaction between national budgets and the EU dimension could be significantly reinforced in the annual mid-term budgetary review (MTBR), which assesses the envisaged budgetary strategies of EU countries for the following year (see Section II.1.3) <sup>(1)</sup>. In the context of this peer

<sup>(1)</sup> In 2007, the mid-term budgetary review was to take place in April, when according to Table II.1.1 most national budgets started to be prepared.

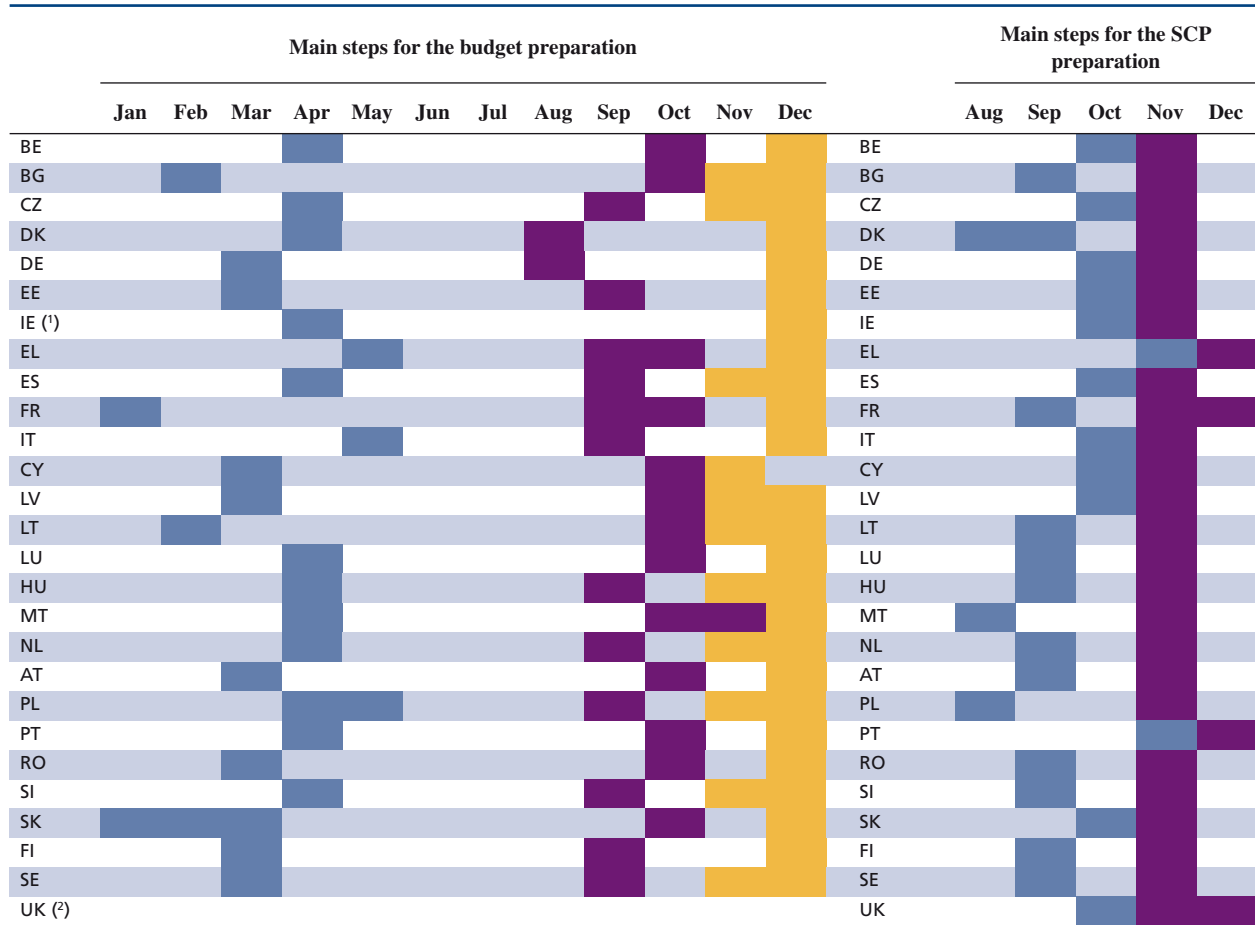
**Graph II.1.2: Stability and convergence programmes annexed to the budgets and targets for t+1**



Source: Commission services.

Table II.1.1

Calendar for the preparation of national budgets and stability and convergence programmes (SCP) in Member States



Legend and notes:  
 Start  
 Approval by government and submission to parliament  
 Approval by parliament  
 Start  
 Approval by government

(1) In Ireland, the budget is debated but not voted following its presentation in the parliament. Instead, changes are introduced through the Social Welfare Bill and the Finance Bill in December and February respectively.  
 (2) The UK has a different fiscal year that does not fit properly in this table. An important event is the release of the autumn pre-budget report after which the SCP has to be approved.

Source: Commission services.

review exercise among Member States, the consistency between the most recent SCP updates and the preparation of next year's budget could be better evaluated. Significant deviations of current budgetary developments from the adjustment path included in the latest SCP should be justified and corrective measures provided in the up-coming budget. Overall, this would give Member States the chance to jointly determine *ex*

*ante* the appropriate fiscal policy stance for the euro area in the subsequent year, and to ensure that their national budgetary plans are consistent with the euro area-wide policy objectives.

- As suggested by some country experiences, the link between the SCPs and the annual budget laws could be strengthened through the implementation

of well-defined medium-term budgetary frameworks (see Section III.2). Such frameworks should form the basis upon which both the national budgets and the SCPs are prepared. In a number of Member States (e.g. Denmark, the Netherlands, and Finland), a strong connection between medium-term objectives and yearly budgetary plans is assured by means of fixed medium-term expenditure paths that are not systematically revised on a yearly basis. Obviously, the SCPs could also play the role of medium-term budgetary frameworks. However, country policy experiences suggest that medium-term expenditure frameworks may be more effective, which can be partly explained by the fact that spending is the part of the budget most directly controlled by fiscal authorities.

- In line with the 2005 reform of the SGP that recommended a higher involvement of national institutions in the preparation of the updated programmes, the role of parliaments in discussing the SCPs and the Council opinions could be enhanced. This would allow for a richer domestic debate about budgetary issues and their EU dimension.
- Ensuring a strong coordination among departments in charge of the preparation of the budget and the SCP may be relevant for some Member States. As previously mentioned, only in one third of the EU countries one single department is responsible for both the budget and the SCP.
- Given that generally national budgets and SCPs are not based on the same accounting rules, clear and comprehensive adjustment procedures to convert budgetary values into national accounts figures should be available to secure consistency and comparability.

Finally, strengthened fiscal coordination among general government tiers when setting the multiannual fiscal targets in the SCPs would help facilitate a more effective commitment of all actors involved in the conduct of fiscal policy at national level. Belgium and Spain may provide positive examples in this respect.

### **1.3. A stronger role for the mid-term budgetary review in the euro area**

The Council report of March 2005 underpinning the 2005 reform of the SGP states that the Eurogroup should discuss, at least once a year before the summer, 'a horizontal assessment of national budgetary developments

and their implications for the euro area as a whole'. This mid-term budgetary review (MTBR) was conceived as a strategic policy debate, to be held just before crucial decisions on the budgetary plans for the following year are taken in the Member States. At its meeting of 24 November 2006, the Eurogroup considered that the MTBR discussion had not fully lived up to expectations and that it should be improved so as to become a genuine *ex ante* political debate on the fiscal stance both in the euro area as a whole and the individual Member States. Ministers considered notably that the MTBR should better focus on the implications for the euro area of policy intentions of Member States and that the forward-looking dimension of the discussion should be developed. The Eurogroup invited the Commission to work on ways to improve the MTBR and to strengthen it, so as to transform it into a real political discussion of Member States' intentions for the following year's budget. On the basis of Commission proposals, the Eurogroup took a number of decisions to strengthen the MTBR, which are summarised below.

#### **1.3.1. Specification of the purpose of the MTBR**

The Eurogroup agreed that the purpose of the MTBR is twofold: (i) to ensure a proper coordination of national fiscal policies in the euro area; and (ii) to provide sufficient peer support and pressure for sound fiscal policies at national level, through an informed and frank discussion of the national fiscal strategies. This means that the discussion should focus not only on problematic countries. Rather, the discussion should examine developments in the Member States which may have an impact on economic developments in other Member States and in the euro area as a whole.

#### **1.3.2. Provision of information by the Member States**

In the past, the MTBR was typically based on the macroeconomic and budgetary projections included in the spring Commission forecast, which for the year  $t+1$  is prepared on the basis of the customary 'no-policy-change assumption clause'. This assumption implies that, for the year  $t+1$ , the Commission services' spring forecast only reflects measures that are publicly announced and known in sufficient detail. Hence, mere policy intentions expressed by the governments are not taken into account. To enrich the MTBR discussions, the Eurogroup decided that Member States could, if they consider it expedient, provide updated information on their fiscal policy intentions for the year  $t+1$ . Member States were invited to for-

ward any information that they would find relevant. This information will be taken into account by the Commission services in the preparation of the document preparing the MTBR discussion. This improvement will potentially allow a stronger peer support from the Eurogroup for adequate national policy intentions, which may be helpful in the national fiscal policy debate. Moreover, by agreeing to forward new information, Member States show their intention to really transform the MTBR into a strategic policy debate.

### **1.3.3. Change in the calendar of the MTBR**

As detailed in Section II.1.2, one of the difficulties faced in the coordination of fiscal policies in the euro area is that there are important differences in the national budgetary calendars. The most frequent situation is that the budget for the year  $t+1$  is prepared in the course of the summer of year  $t$  by the government, adopted by the government in September or October and then submitted to the vote of the national parliament, which generally intervenes in the latest weeks of year  $t$  or in the first weeks of year  $t+1$ . Two euro area Member States have a significantly different budgetary calendar, as major decisions are taken relatively early in the year in which the budget for year  $t+1$  is prepared.

- In Germany, the preparation of the budget for year  $t+1$  starts in December of year  $t-1$  with the letters to the line ministries. Until March of year  $t$ , negotiations take place between the Ministry of Finance and the line ministries, at the working level. Budget negotiations at ministerial level generally start in June of year  $t$ , and Cabinet decision on the budget plan and financial plan takes place already by end-June or early July, which is much earlier than in most other euro-area countries. In August of year  $t$ , the government draft budget is presented to the Bundestag and the Bundesrat. In September, the first reading of the draft budget takes place in the Bundestag. The budget law is generally adopted in the course of December of year  $t$ .
- In the Netherlands, the Cabinet decision on the (draft) budget of year  $t+1$  (as well as on the update of the budget of year  $t$ ) takes place in the spring of year  $t$ . The preparation of the budget for year  $t+1$  takes as a basis the real medium-term expenditure ceilings agreed in the context of the medium term budgetary framework. The spring economic forecast of the Netherlands Bureau for Economic Policy Analysis (CPB) determines the room for manoeuvre

in the preparation of the new budget and is used to transform the real ceilings into nominal ceilings. The budget is generally presented to parliament in September of year  $t$ .

As one of the main aims of the MTBR discussion is to influence national fiscal policy decisions to ensure an appropriate fiscal stance at the euro area level, Ministers decided to split the MTBR discussion in two main steps. A first discussion will take place in April, e.g. immediately after the assessment of the medium-term budgetary plans formulated by Member States in their stability and convergence programmes. The main horizontal discussion on the appropriate fiscal stance in the euro area will take place in that meeting. The cases of Member States with an advanced budgetary calendar (Germany, the Netherlands) will also be examined in this meeting. A second Eurogroup meeting, in June, will assess the situation of the other Member States, in the light of previous horizontal and country-specific discussions. Such a calendar will allow at the same time to base discussions on up-to-date information and to have them at a moment when fiscal policy decisions can still be influenced.

### **1.3.4. Adoption of horizontal and country-specific conclusions**

The final element going in the direction of a strengthening of the MTBR exercise is that a concrete output will come out of the Eurogroup discussions. Ministers concurred that the Eurogroup would agree on conclusions that would cover both horizontal and country-specific issues. All countries will be covered by the conclusions. The Eurogroup will formally agree on both horizontal and country-specific conclusions. The horizontal part will be made public; the country-specific sections will remain confidential. The fact that the Eurogroup will agree on a written text of reference summarising the main conclusions of the MTBR discussion, and to which ministers could refer in the subsequent steps of budgetary surveillance and coordination, will contribute to enhancing peer support and peer pressure for sound fiscal policies. The written text can also be used in the national debate.

## **1.4. Putting the assessment of stability and convergence programmes into a broader economic perspective**

Under the preventive arm of the Stability and Growth Pact (SGP) each year Member States are required to

submit to the Council and the Commission stability and convergence programmes (SCPs). These programmes indicate for the current and at least the three following years budgetary targets for the general government balances and the projected path for the debt ratio together with information on how the targets are expected to be achieved. These programmes are at the core of the Council's surveillance of budgetary positions and its surveillance, as well as the coordination of economic policies.

The examination of the SCPs by the Council is based on a recommendation by the Commission which in turn reflects a comprehensive and detailed technical analysis carried out by the Commission services. Over the years this technical analysis has evolved and broadened reflecting both the evolution of the SGP and its implementation as well as the evolutions in fiscal measurement.

The most recent extension of the technical analysis was put in place for the assessment of the 2006/07 vintage of SCPs. It puts the analysis of the budgetary targets and of the strategy presented in the programmes into a broader economic assessment with a view to providing a more comprehensive and coherent framework for fiscal and economic surveillance.

This section briefly presents the background to this recent step towards complementing and strengthening the technical analysis carried out by the Commission services and outlines the main structure and purpose of the enhanced exercise.

#### **1.4.1. Background**

In line with the provisions of the preventive arm of the Pact as laid out in Council Regulation (EC) No 1466/97, the assessment process of the SCPs passes through different stages involving the Commission and the Council. The starting point and basis of the assessment process is a technical analysis carried out by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the Commission. The results of that analysis are presented in a working document which since 2003 is also made available to the general public <sup>(1)</sup>. The main conclusions of the working document are distilled and reflected in the Commission recommendation for a Council opinion on the SCPs.

<sup>(1)</sup> The working documents, organised by Member States, can be found at the following Internet address: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/fiscal_policy528_en.htm)

The technical analysis of the Commission services typically focuses attention on points that are directly linked to the requirements of the SGP. The complete list of these points, based on the provisions of the reformed Pact, is presented in Box II.1.1.

On several occasions in the past, when assessing the Commission recommendations for a Council opinion on the SCPs, the Economic and Financial Committee (EFC) <sup>(2)</sup> expressed the view that a strict focus on the requirements of the Pact would be an incomplete basis for an effective multilateral surveillance aimed at ensuring closer coordination of economic policies in the EU. Moreover, the links with the renewed Lisbon strategy for growth and jobs were also felt to deserve additional attention.

The scope for broadening the assessment of the SCPs beyond the strict requirements of the Pact also emerges from the Council report of March 2005 underpinning the reform of the Pact. One of the main aims of the reform was to put greater emphasis on country-specific economic developments. This holds true for both the preventive and the corrective arm of the Pact <sup>(3)</sup>.

A fair and effective application of these provisions calls for a more comprehensive appraisal of the economic and budgetary situation of a country in the various stages of EU budgetary surveillance. It is against this backdrop that the Commission services reviewed and extended the scope of its technical assessment.

#### **1.4.2. The structure and content of the broadened economic assessment**

Up until 2005, the assessment of a country's economic outlook was an integral, but not prominent element in the technical analysis of SCPs carried out by the Commission services. Consideration was mainly given to the macroeconomic outlook underpinning the budgetary targets presented by the Member States and to the question

<sup>(2)</sup> The EFC is a Council committee set up by Article 114 of the Treaty based on the preventive arm of the SGP, and within the framework of multilateral surveillance under Article 99 of the Treaty, which together with the Commission examines the budgetary targets presented by the Member States in the stability and convergence programmes.

<sup>(3)</sup> Under the preventive arm of the Pact, the adjustment effort towards the country-specific medium-term budgetary objectives can be modulated in function of the prevailing cyclical conditions. Under the corrective arm of the Pact, the assessment of so called other relevant factors which include the medium-term economic position play a role when launching the excessive deficit procedure as well as in all successive procedural steps once a country is found to have an excessive deficit.



of whether projections of real GDP growth were more or less realistic. The assessed degree of realism would then play a role in the risk assessment of the budgetary projections.

The technical analysis carried out in the assessment round of the 2006/07 updates of the SCPs has significantly broadened the review of economic developments. Firstly, the assessment of the macroeconomic outlook presented in the programmes is more detailed and particular attention is paid to the assessment of cyclical conditions so as to better identify economic 'good times' and hence the appropriateness of the planned fiscal adjustment.

Secondly and more importantly, the analysis starts with a comprehensive review of economic and fiscal trends over the past 10 years. It thus sets the scene for the assessment proper of both the economic and budgetary projections presented in the programme.

#### **1.4.3. The backward-looking analysis and the medium and long-term economic policy challenges**

Apart from putting the economic and budgetary projections presented in the SCPs into perspective, the chief objective of the retrospective part is to diagnose the main medium and long-term economic policy challenges of the Member States that have implications for public finances. As a rule, these challenges can serve as reference when assessing the budgetary strategy presented in the SCPs, beyond the strict requirements of the SGP. Where relevant, attention is given to the economic and fiscal challenges of a country on the one hand and the reform efforts under the renewed Lisbon strategy for growth and jobs on the other.

The medium and long-term challenges are grouped around three headings that capture the different dimensions of fiscal policy or more generally of public finances: (i) stabilisation versus adjustment, (ii) efficiency and (iii) sustainability. Not all countries will necessarily have challenges under all three headings. The presentation is expected to reflect the relative importance of the issues within and across countries.

The first heading stabilisation versus adjustment comprises challenges linked to the traditional fiscal policy aim of smoothing cyclical variations in output. They typically refer to a prevailing mismatch between fiscal stance and cyclical conditions. Concrete examples are

procyclical fiscal policy and, more specifically, the risk of overheating. The risk of overheating is of particular interest because it is not necessarily covered by the requirements of the Pact. In particular, a country could be in line with the requirements of the EU surveillance framework, i.e. have already achieved its medium-term objective or be on track towards it, but still show signs of economic tension, such as large and increasing current account imbalances or high inflation, that risk jeopardising stability in the short or medium term. As regards procyclical fiscal policy a review of the past can help understand differences between plans and outcomes and hence clarify the fiscal performance of a country and possibly provide lessons for the future.

Challenges under the heading of efficiency refer to a potentially broad range of issues typically linked to structural problems emerging from the economic analysis and generally or potentially addressed in the national reform programmes under the renewed Lisbon strategy for growth and jobs. Two possible subheadings are of interest: (i) the composition of government expenditure and (ii) the level and composition of direct/indirect taxation as well as incentives or disincentives of the pensions system. For instance, in an economy with below average economic growth with origins mainly in weak total factor productivity a comparatively low share of public expenditures on education, R & D and infrastructure would signal a challenge of composition. Similarly, if the economic analysis revealed low labour market participation and a high rate of unemployment a high tax wedge on labour could possibly indicate a challenge on the tax side of the budget.

The presentation of sustainability challenges in the context of the broadened economic appraisal is mainly done for the sake of completeness. The basis for the assessment of the long-term sustainability of public finances is provided by the commonly agreed methodology underlying the Sustainability Report of the Commission, which, on the basis of long-term projections, groups countries into three different risk categories: low, medium and high <sup>(1)</sup>. On top of the standardised assessment, the value added of the discussion of sustainability

<sup>(1)</sup> The sustainability report was a response to an invitation of the Council in February 2006 to undertake a comprehensive assessment on the long-term public finance situation in the EU and in the individual Member States. The sustainability report is available at: [http://ec.europa.eu/economy\\_finance/publications/publication\\_summary7907\\_en.htm](http://ec.europa.eu/economy_finance/publications/publication_summary7907_en.htm)  
Advances in the assessment of the long-term sustainability of public finances are discussed in Section II.4 of this report.

challenges in the broadened technical analysis of the SCPs consists in highlighting country-specific issues.

#### 1.4.4. The assessment of the macroeconomic projections underpinning the budgetary targets

Against the backdrop of the retrospective part, the economic appraisal proceeds with a structured assessment of the macroeconomic projections presented in the SCPs. The overall aim is to identify significant breaks vis-à-vis past trends, to judge the internal consistency of the macroeconomic scenario and to make out upside or downside risks with significant budgetary implications. The benchmark for the assessment is the latest Commission services' autumn forecast complemented by more recent information, in particular, if available, the spring interim forecast <sup>(1)</sup>.

The assessment covers the various dimensions of the macroeconomic scenario, such as the external assumptions, economic activity, the labour market, costs and

prices and balances of institutional sectors. In contrast to past practice, the focus has been widened. It looks beyond the question of whether projected real GDP growth is (markedly) cautious or favourable so as to judge the possible repercussions on the budgetary targets. Recent experience has clearly shown that there are many other factors besides movements in aggregate activity that have an impact on the budget. Specifically, for a given rate of real GDP growth the composition of aggregate demand or the composition of primary income distribution can make a sizeable difference in terms of tax revenues <sup>(2)</sup>. In the light of this, attention is also given to the projected link between major tax bases and the level of overall economic activity.

<sup>(1)</sup> In between the biannual fully-fledged forecast rounds the Commission services produce interim forecasts (for DE, ES, FR, IT, NL, PL, UK) which update projections for real GDP growth and inflation of the current year.

<sup>(2)</sup> A more detailed discussion of related issues is presented in Section II.2.1.

#### **Box II.1.1: Main points covered by the Commission services technical analysis of stability and convergence programmes**

As required by Article 5(1) (for stability programmes) and Article 9(1) (for convergence programmes) of Council Regulation (EC) No 1466/97, the assessment covers the following points:

- whether the economic assumptions on which the programme is based are plausible. The plausibility of the programme's macroeconomic assumptions is assessed by reference to the latest Commission services autumn forecast;
- the medium-term budgetary objective (MTO) presented by the Member State and whether the adjustment path towards it is appropriate;
- whether measures being taken and/or proposed to respect that adjustment path are sufficient to achieve the MTO over the cycle;
- when assessing the adjustment path towards the MTO, whether a higher adjustment effort is made in economic good times, whereas the effort may be more limited in economic bad times, and, for euro area and ERM II Member States, whether the Member State pursues an annual improvement of the cyclically adjusted balance, net of one-off and other temporary measures, of 0.5 % of GDP as a benchmark to meet its MTO;
- when defining the adjustment path to the MTO (for Member States that have not yet reached it) or allowing a temporary deviation from the MTO (for Member States that have), the implementation of major structural reforms which have direct long-term cost-saving effects (including by raising potential growth) and therefore a verifiable impact on the long-term sustainability of public finances (subject to the condition that an appropriate safety margin with respect to the 3 % of GDP reference value is preserved and that the budgetary position is expected to return to the MTO within the programme period), with special attention for pension reforms introducing a multi-pillar system that includes a mandatory, fully-funded pillar;
- whether the economic policies of the Member State are consistent with the broad economic policy guidelines in the area of public finances.

*(Continued on the next page)*

*Box II.1.1 (continued)*

The assessment also examines:

- the evolution of the debt ratio and the outlook for the long-term sustainability of the public finances, which should be given ‘sufficient attention in the surveillance of budgetary positions’ according to the Council report of 20 March 2005 on improving the implementation of the Stability and Growth Pact. A Commission communication of 12 October 2006 sets out the approach to the assessment of long-term sustainability <sup>(1)</sup>;
- the degree of integration with the national reform programme, submitted by Member States in the context of the Lisbon strategy for growth and jobs. In its cover note of 7 June 2005 to the European Council on the broad economic policy guidelines for the period 2005–08, the Ecofin Council stated that the national reform programmes should be consistent with the stability and convergence programmes;
- compliance with the code of conduct <sup>(2)</sup>, which inter alia prescribes a common structure and set of data tables for the stability and convergence programmes.

<sup>(1)</sup> Communication from the Commission to the Council and the European Parliament, ‘The long-term sustainability of public finances in the EU’, 12.10.2006, COM(2006) 574 final and European Commission, Directorate-General for Economic and Financial Affairs (2006), ‘The long-term sustainability of public finances in the European Union’, *European Economy* No 4/2006.

<sup>(2)</sup> ‘Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes’, endorsed by the Ecofin Council of 11 October 2005.

As a final step, the overall judgement on the plausibility of the macroeconomic scenario is followed by considerations about whether economic conditions over the programme period can be characterised as economic ‘good’ or ‘bad times’. This is crucial to assess the appropriateness of the planned annual fiscal adjustment. In line with the specifications on the implementation of the SGP, the so-called code of conduct, the main criteria for assessing cyclical conditions is the output gap, where a period in which actual output exceeds its potential level should be defined as ‘good times’ <sup>(1)</sup>. However, in view of the notorious uncertainty surrounding real-time estimates of the output gap a novel and more comprehensive approach is being examined. The real-time output gap estimates are complemented by a battery of indicators that are available in real time and are generally expected to reflect cyclical conditions. Potential candidates are the rate of inflation, the change in the rate of unemployment, the real effective exchange rate, the economy’s external balance and the rate of capacity utilisation in the manufacturing industry. If, by way of illustration, the output gap estimate of a given country was close to zero, while all other indicators pointed to favourable economic conditions the broader assessment could be that the econ-

omy in question is enjoying economic good times. Clearly, the wider battery of indicators needs to be interpreted with the necessary degree of judgement inter alia because some of the indicators may rather reflect structural as opposed to cyclical factors. Nevertheless, broader assessment may prove to be useful to get a better view as compared to traditional indicators of the cyclical stance.

### **1.5. The Commission policy advice**

The Council report of 20 March 2005, which summarises the political agreement on the SGP reform, introduced the possibility for the Commission to issue direct — i.e. without involvement of the Council — policy advice to a Member State. The reference to the policy advice comes in the section of the report related to the adjustment path to the medium-term budgetary objective (MTO). In the SGP reform debate, the introduction of the Commission policy advice was also motivated by the consideration that a more symmetrical approach to fiscal policy over the cycle should be achieved, through enhanced budgetary discipline in periods of economic recovery. This section examines the possible role of this instrument in relation to instruments of the EU budgetary framework (opinions on SCPs, Council early warning) and discusses the circumstances in which it could be activated.

<sup>(1)</sup> The full document is available at: [http://ec.europa.eu/economy\\_finance/about/activities/sgp/codeofconduct\\_en.pdf](http://ec.europa.eu/economy_finance/about/activities/sgp/codeofconduct_en.pdf)

### **1.5.1. Policy advice versus other available instruments**

The use of the Commission policy advice should be seen in the context of the other instruments available in the preventive arm of the SGP, in particular the Council recommendations under Article 99 of the Treaty (e.g. the early warning mechanism) and the Council opinion on the stability and convergence programme.

#### *Policy advice versus recommendation under Article 99 of the Treaty*

The Council may issue a recommendation under Article 99(4) of the Treaty when policies of a Member State are not consistent with the broad economic policy guidelines (BEPGs) or risk jeopardising the proper functioning of the economic and monetary union (EMU). This covers a broad range of situations. In practice, however, recommendations under Article 99 were generally used to send early warnings to Member States. These early warnings are a special case of recommendation under Article 99 for which the conditions have been codified in Regulation (EC) No 1466/97. Articles 6(2) and 10(2) of Regulation (EC) No 1466/97 specify that ‘in the event that the Council identifies significant divergence of the budgetary position from the medium-term budgetary objective, or the adjustment path towards it, it shall, with a view to giving early warning in order to prevent the occurrence of an excessive deficit, address, in accordance with Article 99(4), a recommendation to the Member State concerned to take the necessary adjustment measures’.

The Commission policy advice differs from the early warning in three respects. Firstly, the policy advice reflects only the views of the Commission, as it is issued without involvement of the Council. Secondly, for a policy advice there is not necessarily a need to have identified a divergence from the MTO or the adjustment path towards it and there is no relation to the possible occurrence of an excessive deficit. Thirdly, even more than the Council early warnings (which were in the past activated at a relatively late stage, in part because of the need to see a divergence from plans), the policy advice is a forward-looking instrument which could be activated at a time when it can still influence policy decisions.

#### *Policy advice versus policy invitations formulated in Council opinions on stability and convergence programmes*

In some cases, the Council formulates policy invitations to the Member State concerned in the context of its opin-

ions on the stability and convergence programmes. The policy advices and policy invitations formulated in Council opinions both address non-binding recommendations to the country concerned. The policy advice has three specific features compared to the Council opinion. Firstly, it reflects the views of the Commission and is issued without involvement of the Council. Secondly, it could generally have a more short-term orientation focusing on the discussion of envisaged measures while the opinions on stability and convergence programmes relate more to medium-term planning. Thirdly, the policy advice can be sent at any time in the year.

#### *Policy advice versus non-formal instruments*

The main purpose of the Commission policy advice is to send a public signal to a country which should take some policy measures to keep its fiscal situation and plans in line with the principles of the preventive arm of the SGP. Such signal could also be conveyed through less formal channels, e.g. in the context of Commission communications on public finances or of regular fiscal surveillance exercises at EU level (discussion on the mid-term budgetary review for euro area countries, fiscal policy discussions in the Council based on Commission economic forecasts, etc.). Compared to these instruments, the policy advice would however be more flexible in terms of timing and the message would be politically stronger, in the sense that policy advice has to be adopted by the Commission.

### **1.5.2. When to send policy advice?**

To be effective, policy advice should be issued timely wherever possible, at a moment when it is still realistic to influence policy decisions in the Member State concerned. Policy advice after adoption of undesired measures would likely be considered as punitive rather than preventive. The credibility and effectiveness of the new instrument in influencing the national debate would benefit from basing it primarily on economic rationale and argumentation rather than on legalistic and normative considerations. Even considering the challenges that flexibility could pose as regards equal treatment, preserving the flexibility and room for judgement in the use of the policy advice seems preferable to defining the precise conditions of when to use and when not to use it.

One of the main advantages of the new instrument is that it would allow the Commission to take the initiative in influencing national policy decisions *ex ante* while they are being discussed. Basing the issuance of policy advice

on economic judgement implies that some margin for interpretation should be considered. To avoid controversies, policy advice could, for instance, be addressed when plans or envisaged measures are in very clear contradiction with agreed principles under the Pact (0.5 % of GDP annual adjustment for countries of the euro area or participating to ERM-II, strengthened consolidation in good times, avoid procyclical policies) or where envisaged measures could lead to clearly inappropriate policies e.g. procyclical fiscal stance in 'good times'.

Overall, the flexibility of the instrument allows considering it on a case-by-case basis as circumstances call for it. Still, a non-exhaustive number of possible cases that could justify the activation of the policy advice are listed below.

- To influence the debate in Member States on policies which are not in line with the provisions of the SGP on the adjustment path towards the MTO or on the conduct of fiscal policy in good times. A policy advice could, for instance, be issued where there is a political debate in a Member State that would likely lead to the implementation of policies that are in clear contradiction with the principles of the SGP.
- To advise on policy in case of a risk of overheating in a Member State. The activation of the instrument could be considered where a Member State faces clear risks of overheating, which may put at risk the macroeconomic stability in the country concerned or in the euro area. The Commission could envisage, at an early stage and in a preventive spirit, the formulation of policy advice.
- To prevent and signal clear non-respect of policy invitations previously formulated by the Council. The Commission could consider issuing a policy advice when a Member State envisages policy measures that are in clear contradiction with the policy invitations formulated earlier by the Council in its Council opinion on the stability or convergence programme.

The early policy advice should however not be used as a systematic follow-up to, for example, non-respect of policy invitations in Council opinions; nor should *ex ante* criteria be identified which would trigger it. Rather, to ensure effectiveness of the instrument, its possible use should be carefully contemplated on a case-by-case basis assessing the severity of economic issues.

## **1.6. Implicit government liabilities and medium-term budgetary objectives**

### **1.6.1. Introduction**

According to the Council report of March 2005 which forms the basis of the reformed Stability and Growth Pact (SGP) EU Member States are required to achieve medium-term budgetary objectives (MTOs) that pursue a triple aim: (i) provide a safety margin with respect to the 3 % of GDP deficit limit of the Treaty; (ii) ensure rapid progress towards sustainability; and (iii) taking this into account, allow room for budgetary manoeuvre. The MTOs are defined in structural terms, i.e. net of cyclical and one-off and other temporary factors.

The Council report also indicates that the MTOs should be differentiated for individual Member States so as to account for the diversity of economic and budgetary positions and developments as well as the diversity of risks to the sustainability of public finances <sup>(1)</sup>.

The safety margin safeguarding against the risk of breaching the 3 % of GDP reference value is measured by the so-called minimum benchmark. The most recent update of the minimum benchmark was carried out in autumn 2006. The corresponding results and a detailed description of the method is provided in Section II.2.2 of this report.

As regards the second aim of the MTOs, the reference values of the country-specific structural budget balance that ensure rapid progress towards the long-run sustainability of public finances should be based on a comprehensive assessment of implicit liabilities, i.e. impending expenditure increases in the light of ageing populations. Since such an assessment requires the clarification of a number of conceptual and possibly methodological issues, the Council concluded that until criteria and modalities for taking into account implicit liabilities are appropriately established and agreed by the Council the country-specific MTOs are set on the basis of the current government debt ratio and potential growth, while preserving a sufficient safety margin against the risk of breaching the 3 % of GDP reference value.

In the transition period Council Regulation (EC) No 1466/97 as amended by Regulation (EC) No 1055/2005,

<sup>(1)</sup> See Council of the European Union, Presidency conclusions, 7615/1/05 REV 1, ANNEX II, 23 March 2005.

which codifies the preventive arm of the reformed SGP, stipulates that the country-specific MTOs of euro area and ERM II Member States shall be within a defined range between  $-1\%$  of GDP and balance or surplus, in cyclically adjusted terms, net of one-off and temporary measures.

This section reflects the progress report submitted to the Council in December 2006 and the envisaged way forward <sup>(1)</sup>. In particular, it takes a closer look at how implicit liabilities are measured in the EU budgetary surveillance framework. It then examines alternative strategies to address the increase in age-related expenditures and their implications for the MTOs. It finally presents broad possible options for taking implicit liabilities into account in the formulation of MTOs.

#### **1.6.2. Implicit liabilities in the analysis of the long-term sustainability of public finances**

Implicit liabilities already play an important role in the EU's multilateral budgetary surveillance framework. An assessment by the Commission of the long-term sustainability of public finances in the EU based on the 2006 common long-term budgetary projections conducted by the EPC and the Commission was released on 12 October 2006 <sup>(2)</sup>. It provides an assessment of risks to public finance sustainability on a comparable basis in the EU Member States and where the risks mainly stem from. In its conclusions of 7 November 2006 <sup>(3)</sup>, the Council considered that the sustainability report by the Commission should be the basis for the annual examination of the stability and convergence programmes.

The analysis of public finance sustainability made by the Commission and the Council in the context of budgetary surveillance considers a relatively broad definition of net implicit liabilities. Age-related expenditures stemming from government commitments relating to pensions, health and long-term care, unemployment benefits and education are projected on the basis of the criteria agreed within the EPC/AWG. As agreed in the revised code of conduct, the common projections 'provide the basis for the assessment by the Commission and the Council of

sustainability of the Member States' public finances within the context of the SGP' <sup>(4)</sup>.

In the Commission's practice for assessing long-term sustainability, different synthetic indicators providing a flow measure of the impact of implicit liabilities are constructed. The main indicator used in the sustainability assessment is a synthetic sustainability gap indicator (called the S2 indicator). This indicator provides a measure of the permanent improvement in the unchanged-policy structural primary balance necessary to guarantee that the intertemporal budget constraint of the government is satisfied. In order to give a clear indication of the medium-term budgetary policy implications of achieving sustainable public finance over an infinite horizon, the sustainability gap indicator can be expressed as a required primary balance (the RPB). This is the unchanged-policy structural primary balance which would allow the respect of the government intertemporal budget constraint. In practice, it is constructed as the sum of the sustainability gap indicator and the average of the structural primary balance over the first five years of the projection period after the end of the stability or convergence programme.

It needs to be stressed that quantitative measures of net implicit liabilities share some common limitations: (i) their value is sensitive to the assumptions used to project government revenues and expenditures. The reliability of debt projections and synthetic sustainability indicators depends crucially on the quality and availability of age-related expenditure projections and assumptions on growth and interest rates. Moreover, debt projections and the S2 indicator depend crucially on the starting budgetary conditions; (ii) there are aspects that are relevant in an overall assessment of public finance sustainability that are not captured by the quantitative indicators.

In order to take into account these limitations, the quantitative sustainability analysis made by the Commission services is complemented by a qualitative assessment which covers elements such as the current debt-to-GDP ratio, estimates of changes in the revenue/GDP ratio over time.

The information used in the regular sustainability analysis for the purpose of estimating implicit liabilities could

<sup>(1)</sup> See Implicit government liabilities and medium-term budgetary objectives: Progress report, note to the attention of the Economic and Financial Committee, ECFIN-C2-REP-57606, Brussels, 15.12.2006. The three broad options presented in this section were outlined in Part II.2.2.2 of the 2006 public finance report, see European Commission (2006b).

<sup>(2)</sup> See European Commission (2006b).

<sup>(3)</sup> See Council of the European Union (2006).

<sup>(4)</sup> See European Commission (2005a).

fruitfully be used for constructing MTOs taking into account implicit liabilities for several reasons: (i) the data on implicit liabilities come from a comprehensive projection exercise, with common budgetary projections conducted jointly by the Commission and the Economic Policy Committee, based on commonly agreed criteria and using a large amount of information from national sources (especially concerning pension expenditure projections); (ii) the methodology for computing synthetic sustainability indicators is discussed and agreed with the Member States; (iii) it would ensure consistency between the approach to sustainability analysis implicit in the determination of the MTO with that used in the assessment of stability and convergence programmes, both aimed at ensuring sound fiscal positions over the long-term within the context of budgetary surveillance under the Stability and Growth Pact.

### **1.6.3. MTOs and strategies to deal with the impact of ageing**

By targeting appropriate MTOs over the medium run, and by sticking to them, Member States would create room in their budgets to face the looming budgetary impact of ageing.

The specific size of the appropriate MTO accounting for implicit liabilities depends on at least two key policy choices. The first choice faced by countries in setting a strategy to deal with public finances sustainability is whether to create room in government budgets to accommodate rising age-related expenditure or carry out structural reforms in such a way to contain the age-related expenditure. In the first case, the strategy consists in rising taxes or cutting expenditure with a view to offsetting the deterioration of the budget associated with rising age-related expenditure. In the second case, the idea is to directly contain the impact of ageing. Consequently, major structural reforms will generally reduce the MTO that safeguards long-term sustainability of public finances. This aspect is captured by the 2005 Council report according to which MTOs could be revised when a major reform is implemented. However, the report indicates relatively strict conditions for invoking structural reforms. Only 'major' reforms with a direct long-term cost-saving effect are considered. Their impact on the long-term sustainability has to be verifiable specifically in term of a detailed cost-benefit analysis.

A second choice that countries have to make is between carrying out ambitious budgetary adjustments at once or undertaking a gradual consolidation protracted over

time. In the first case, the adjustment necessary to make public finances sustainable would be frontloaded, and no further substantial adjustment would be required in the future. In the second case, the initial budgetary effort is less ambitious but an effort to accommodate rising age-related expenditures needs to be made over a prolonged period. The first strategy may be politically more costly. However, a given budgetary adjustment is more costly to the budget if implemented gradually because of a higher present value of the government debt and in turn higher interest expenditures. Moreover, a strong commitment is required towards a protracted budgetary adjustment not only by the incumbent government but also by future governments.

In order for the MTOs to be useful targets for budgetary policies, it is necessary that they are attainable and achieved over the medium term. A majority of the Member States had in 2005 a structural deficit above their current MTOs as defined in the stability and convergence programmes. These countries plan to consolidate the public finances over the medium term and achieving their current MTOs without further delay should be given priority. Indeed, achieving the current MTOs over the medium term would imply a significant contribution towards sustainable public finances for the EU.

Keeping the current MTOs for a period of time would allow focusing the discussion and efforts to the attainment of the MTOs. It would also have some advantages: (i) the current MTOs have been specified by the Member States and have been integrated in their medium-term budgetary planning and, in most cases, appear to be appropriate for the next four years; (ii) the assessment of three rounds of SCPs would be made by reference to the same MTOs, which would allow a better analysis of the consistency between budgetary plans and outcomes; (iii) the current approach to calculate MTOs on the basis of current debt and potential growth would be consolidated; allowing to better build the additional step (taking into account implicit liabilities) on the current principles. The current principles attach more importance to the current debt rather than to future debt developments. This is an important feature, as reducing current debt is crucial to improve fiscal sustainability.

However, while the current MTOs would stabilise the debt ratio for most Member States, they would not be sufficiently ambitious to cope with the projected costs of ageing in all countries. Therefore, more ambitious MTOs would contribute to more sustainable public finances.

#### 1.6.4. Taking into account implicit liabilities in the determination of MTOs: possible alternatives

On the basis of the available measures of implicit liabilities and taking into account the considerations above concerning the alternative strategies three broad operational approaches for linking MTOs with implicit liabilities can be distinguished. Two approaches build fully upon synthetic sustainability indicators. The third approach also allows for qualitative elements affecting long-term sustainability.

##### (i) *Frontloading of the adjustment*

This approach consists of setting the country-specific MTO equal to the (structural) balance required to achieve sustainability, i.e., the structural balance improved by the sustainability gap.

Since the MTO needs to define a safety margin against the risk of breaching the 3 % of GDP reference value of the Treaty for the overall budget balance, the MTO needs to be gross of interest expenditures, i.e., the required primary balance needs to be translated into a required balance which includes interest expenditures.

This method permits to construct MTOs representing the budgetary position that, if respected over the years, would at unchanged policies keep public finances under control also when the impact of ageing will show up. If countries attain MTOs defined in this way neither structural reforms nor further budgetary efforts (i.e., tax increases or cuts in non-age-related expenditures) would be strictly necessary to ensure sustainability.

MTOs defined in this way have the advantage of being based on a quantitative indicator based on the government's intertemporal budget constraint. As mentioned above they could be revised as a result of major structural reforms. Reforms would give rise to new projections for age-related expenditures which in turn imply a new required balance. There are also disadvantages. Firstly, the method may in some cases be judged as yielding excessively ambitious budgetary targets for those countries that intend to rely intensively on structural reforms to face the impact of ageing or that have a preference for gradual budgetary adjustment strategies. In other cases, it may lead to less ambitious budgetary targets for countries with a low increase in age-related expenditures, due to reforms, even if the current level of government debt is high. Secondly, qualitative factors

that may be relevant in the assessment of sustainability are not considered.

##### (ii) *Gradual adjustment*

With this method the value of the MTO does not assume an immediate adjustment to the required balance. Sustainability in this case requires a gradual but continuous budgetary adjustment and structural reforms.

In practice, the method would consist of defining MTOs as the sum of an appropriately chosen reference point for the structural balance plus a fraction of the difference between the required balance and this reference point. This fraction captures the extent of the desired frontloading.

Regarding the choice of the reference point one possibility would be to use the lower limit of – 1 % of GDP for MTOs of ERM-II and euro area members indicated in the Council regulation that codifies the preventive arm of the reformed SGP <sup>(1)</sup>. A common reference point for all Member States of – 1 % of GDP would generally be consistent with the respect of a safety margin against the 3 % of GDP deficit threshold (the minimum benchmarks, as recently computed by the Commission and agreed by the EFC, are generally less stringent than – 1 % of GDP; see Section II.2.2). The drawback with such a reference point is an obvious element of arbitrariness. A different possibility would be to use the current principles for determining the MTOs. With this approach, the current stock of government debt and possibly potential GDP growth could be taken into account in the determination of the MTO, thus recognising the different characteristics of the EU Member States. Another possibility would be to set the reference point equal to the debt-stabilising structural primary balance.

This gradual adjustment has the advantage of avoiding possibly overly ambitious MTOs in some cases. However, to ensure long-term sustainability countries would need to adjust their budgets to create room for rising age-related expenditures and carry out structural reforms. Moreover, the gradual approach implies a cost compared to frontloading option, as a sharper rise in the debt-to-GDP ratio would lead to a higher present value of interest expenditure.

<sup>(1)</sup> See Council Regulation (EC) No 1055/2005 of 27 June 2005 amending Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies, OJ L 174, 7.7.2005.



*(iii) Sustainability margins*

Both approaches described above are fully based on synthetic quantitative sustainability indicators. A different less mechanistic approach for the determination of MTOs could be envisaged. The simplest method to pursue this objective would be that of adding a sustainability margin to a reference point mentioned before (e.g. a deficit of 1 % of GDP). Such margins would take into account not only the results of quantitative sustainability indicators but would also incorporate other qualitative elements considered to be important in view of public finance sustainability.

Groups of countries would be identified on the basis of a comprehensive risk assessment taking into account the factors that are considered in the sustainability assessment, notably the long-term cost of ageing derived from the synthetic sustainability gap indicators and also qualitative elements (e.g. the current debt-to-GDP ratio and possibly changes in the government revenue-to-GDP

ratio). Sustainability margins would be higher the higher the projected cost of ageing. The MTOs could also in this option be revised to reflect the projected impact on fiscal sustainability of major reforms.

In this approach, the MTO ranges that were defined when setting the current MTOs could be extended. For example, it could be envisaged to extend the number of groups used for the current MTOs (– 1 % of GDP to – 0.5 % of GDP, – 0.5 % of GDP to 0 % of GDP, and ‘balance or surplus’) to also include some ‘surplus groups’.

The main drawback with this approach is a degree of arbitrariness in defining the size of sustainability margins and the corresponding MTOs, as is the case with the second option described above. However, there are clear advantages. It would permit to take into account other information than just the sustainability indicators, which would be more in line with the current sustainability assessment.

## 2. Measurement and statistical issues

### 2.1. The assessment of tax revenues in the EU fiscal surveillance framework

In recent years, the volatility and/or unusual strength of tax revenues in some EU Member States has attracted increasing attention, as it affects the assessment of the underlying budgetary position and the fiscal stance. This section takes a closer look at the assessment of tax revenues in the EU fiscal surveillance framework. It outlines the current methodological approach and highlights a number of issues linked to the experience of the recent past, when the assessment of budgetary developments in the EU has been complicated by relatively large swings in tax revenues. Such swings went clearly beyond available estimates of the cyclical sensitivity of tax revenues with respect to economic activity and sometimes gave rise to misleading interpretations or unwarranted policy decisions.

In some EU countries strong revenue inflows in the late 1990s were used to reduce taxes or to increase expenditures on the assumption they would be permanent. Hind-sight proved this assessment wrong giving way to weaker than expected underlying budgetary positions and the need for significant and taxing fiscal consolidation during the protracted economic slowdown following the abrupt end of the IT-boom in 2000–01. The strong rebound of tax revenues in most recent years carries the risk of repeating the mistakes of the past and calls for a better understanding of the underlying mechanisms.

#### 2.1.1. Tax revenues in the cyclical adjustment of the budget balance

The government's actual budget balance reflects the influence of both transitory and non-transitory factors. The transitory component largely refers to variations ensuing from cyclical movements of GDP. Conversely, the non-transitory elements refer to the budgetary com-

ponents, which are likely to be observed if the economy was operating at its potential level of economic activity. Disentangling transitory elements of the budget from permanent ones is crucial to gauge the medium-term orientation of fiscal policy and constitutes relevant information for policymaking.

In level terms, the sensitivity of the budget with respect to the economic cycle mainly originates on the revenue side as taxes are linked to the level of economic activity. In the EU-25, current taxes account on average for around 90 % of total revenues. There are also cyclically sensitive expenditure items notably unemployment-related expenditure, but they tend to be relatively small in size; they generally account for less than 5 % of total expenditure. For most expenditure components no automatic link with short-term variations in the level of economic activity can be assumed.

In the EU budgetary surveillance framework the cyclical adjustment of the budget balance involves (i) a measure of the cyclical position of the economy and (ii) a measure of the link between the cycle and the components of the budget. As for (i), the cyclical position is generally measured by the output gap, the distance between actual and potential output<sup>(1)</sup>. Concerning (ii), the link between the economic cycle and the budget balance is summarised by elasticity parameters representing the percentage change in the budget with respect to the percentage changes in the level of economic activity. A brief description of the cyclical adjustment method is included in Box II.2.1.

On the revenue side the adjustment is done for four major tax categories: private income taxes, corporate income taxes, indirect taxes and social contributions. Table II.2.1 displays the estimates of the respective elasticities cur-

<sup>(1)</sup> The reference method for calculating potential output and the output gap is based on a production function approach which is described in detail in Part VI of this report.

rently used in the EU fiscal surveillance framework and calculated according to a methodology agreed at the EU level <sup>(1)</sup>. A comprehensive discussion of the estimates was provided in European Commission (2005).

The clear advantage of the cyclical adjustment of the budget balance used in the EU fiscal surveillance framework is its simplicity as compared to alternative approaches as well as the possibility to apply it uniformly across countries. Moreover, the underlying

formula is very popular among fiscal experts. It is commonly used to do back-of-the-envelope calculations in order to have a quick assessment of the impact of economic growth on the budget. However, the method has two important limitations. Firstly, tax elasticities are taken to be constant over time. They measure the average relationship between tax revenues and economic activity; year-to-year fluctuations, which by experience can be relatively big, are not captured. The use of constant estimates is linked to the forward-looking nature of the surveillance exercise: the best predictor for tax elasticities in future years is the average of the past. In practice, this approach can have unwelcome implications for fiscal policy analysis.

<sup>(1)</sup> The methodology was developed by the OECD and the Commission services within the framework of the working group on output gaps of the Economic Policy Committee. The committee endorsed the method in 2005. A detailed description of the approach is in Girouard and André (2005).

*Table II.2.1*

**Tax elasticities of EU Member States**

	Personal tax	Corporate tax	Social contributions	Indirect taxes	Elasticity of total revenues
BE	1.09	1.57	0.80	1.00	1.00
BG	4.90	1.40	0.70	1.00	1.40
CZ	1.19	1.39	0.80	1.00	0.99
DK	0.96	1.65	0.72	1.00	1.00
DE	1.61	1.53	0.57	1.00	0.97
EE	0.80	1.40	0.70	1.00	0.88
IE	1.44	1.30	0.88	1.00	1.14
EL	1.80	1.08	0.85	1.00	1.07
ES	1.92	1.15	0.68	1.00	1.09
FR	1.18	1.59	0.79	1.00	0.98
IT	1.75	1.12	0.86	1.00	1.17
CY	2.10	1.50	0.70	1.00	1.14
LV	0.90	1.30	0.70	1.00	0.89
LT	0.90	1.40	0.70	1.00	0.90
LU	1.50	1.75	0.76	1.00	1.14
HU	1.70	1.44	0.63	1.00	1.02
MT	2.20	1.40	0.40	1.00	1.04
NL	1.69	1.52	0.56	1.00	1.01
AT	1.31	1.69	0.58	1.00	0.96
PL	1.00	1.39	0.69	1.00	0.91
PT	1.53	1.17	0.92	1.00	1.08
RO	1.90	1.60	0.70	1.00	1.10
SI	1.40	1.50	0.70	1.00	0.96
SK	0.70	1.32	0.70	1.00	0.88
FI	0.91	1.64	0.62	1.00	0.92
SE	0.92	1.78	0.72	1.00	0.94
UK	1.18	1.66	0.91	1.00	1.10
Euro area	1.48	1.43	0.74	1.00	1.04
EU-15	1.39	1.48	0.75	1.00	1.04
EU-10	1.29	1.40	0.67	1.00	0.96
EU-25	1.35	1.45	0.72	1.00	1.01
EU-27	1.50	1.45	0.72	1.00	1.02

Sources: OECD and Commission services.

Secondly, the assessment of the cyclical conditions in real time are surrounded by a considerable degree of uncertainty. In particular, the perceived position in the cycle crucially depends on the prevailing outlook for medium-term growth which is subsequently revised as data for later years arrive <sup>(1)</sup>. The fundamental problem in assessing the cycle in real time and, hence, the underlying budgetary position, consists in estimating the level of potential output. Potential output is the anchor that determines the structural level of revenues and in turn the sustainable level of expenditure. Where medium-term growth prospects and linked to them potential output estimates are too optimistic, revenues that are thought to be structural will turn out to be temporary. Discretionary policy measures that are based on such a misperception of potential output and the cycle will *ex post* lead to a deterioration of the budget.

### 2.1.2. Assessment and fiscal policy issues of the recent past

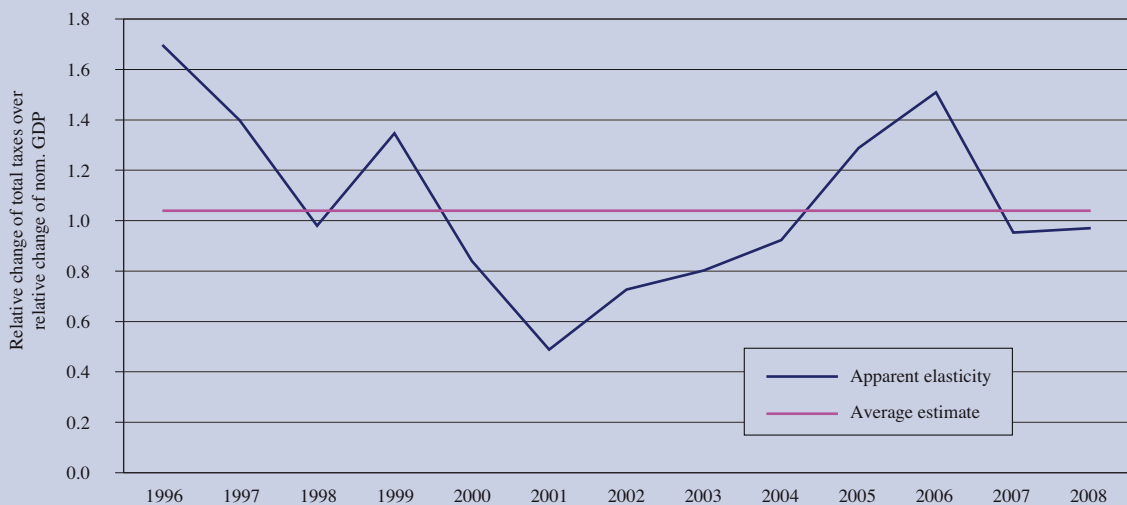
Graph II.2.1 shows the evolution of the apparent tax elasticity of the euro area as a whole, defined as the observed relative change of current taxes with respect to

the observed relative change of nominal GDP, with the estimate currently used in the EU fiscal surveillance. As apparent elasticities also include the effect of discretionary policy measures, such as an increase or a cut of tax rates, the comparison of the two series is not straightforward. Nevertheless, the graph provides a useful indication of the degree of volatility involved. While overall taxes appear to be proportional to GDP on average (the estimate of the tax elasticity is marginally above 1) the link between taxes and economic activity is subject to significant changes.

In the late 1990s, against the backdrop of a strong ITC-boom, apparent tax elasticities had climbed well above the average estimate reaching a peak of 1.3, i.e. the yield of national tax systems had on average increased by 30 % compared with 'normal' times. In some countries the significant windfall of taxes was either used to reduce the tax burden or to increase expenditure or both. At the time, such measures did not seem to be particularly unwarranted. The underlying budgetary position as measured by the approach outlined above signalled a very sound and in some cases maybe even too strict fiscal stance. Such an assessment turned out to be skewed for two reasons. Firstly, the real-time estimates of the cycle did not point to particularly favourable economic conditions. As medium-term growth prospects were generally assessed to be very bright the prevailing economic

<sup>(1)</sup> The issue was first highlighted and empirically explored in connection with US monetary policy-making by Orphanides (2003) and Orphanides and van Norden (2002). Similar work in the field of fiscal policy in the OECD countries was carried out by Forni and Momigliano (2004).

Graph II.2.1: Euro-area tax elasticity with respect to GDP



Source: Commission services.

conditions were taken to be average or normal. Secondly, the windfall of government revenues, with tax elasticities well above normal levels, was considered to be permanent and hence at the disposal for fiscal policy-making without affecting the sustainability of public finances. This misapprehension was also due to a shortcoming in the current method of cyclical adjustment (see Box II.2.1).

The misinterpretation of the nature of tax revenues became apparent during the protracted economic slowdown in the first half of the 2000s. As evidenced by the strong revision of the output gap estimates for the year 2000 displayed in Graphs II.2.2, medium-term growth prospects did not materialise. The high rates of economic growth observed over those years turned out to be mainly temporary, and with them tax revenues.

In autumn 2000, the underlying deficit in Germany, France and Italy for that year was estimated at around 1–1.5 % of GDP. In the following years the successive revisions of the output gap implied a consistent deterioration of the cyclically adjusted budget balance (see Graph II.2.3). Based on today's assessment of the cycle, the cyclically adjusted budget balance for the year

2000 would have been around 2–2.5 % of GDP or higher. A very similar pattern holds for the year 2001.

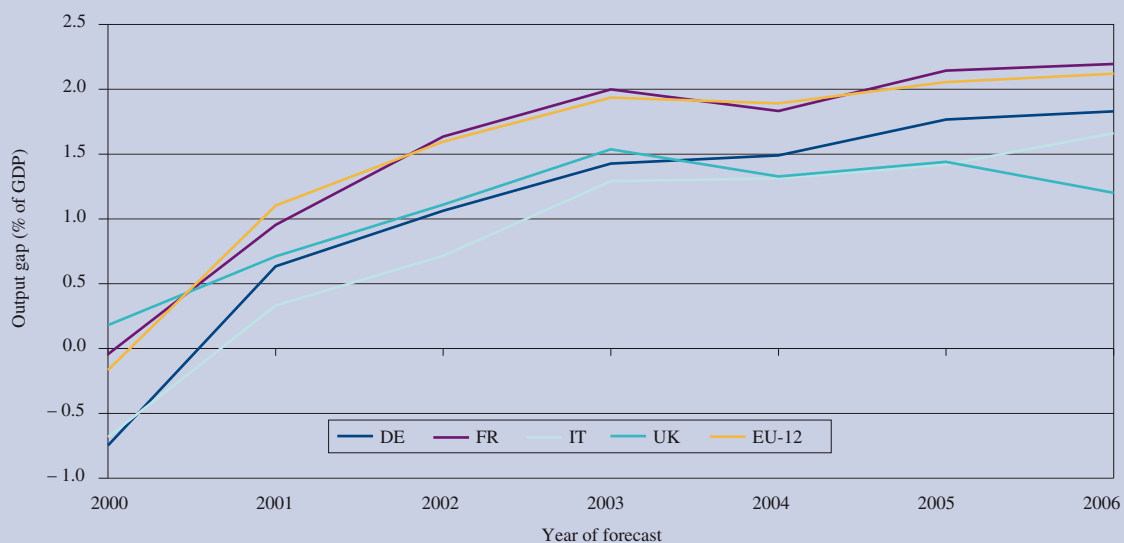
On top of lower-than-expected potential growth at the beginning of the decade, the yield of national tax systems fell significantly short of normal levels. The apparent tax elasticity in the euro area average dropped to 0.5 in 2001 and recovered only gradually in subsequent years. In 2005 and 2006 it staged a novel rebound to values well above the estimated average, against the backdrop of a moderate economic recovery. The expected return to normal levels in 2007 and 2008 depicted in Graph II.2.1 essentially reflects the abovementioned fact that revenue forecasts are typically based on normal or average elasticities.

### 2.1.3. Ways of improving the assessment of tax revenues

The two key elements in the assessment of structural revenues are (i) potential output and the output gap and (ii) tax elasticities.

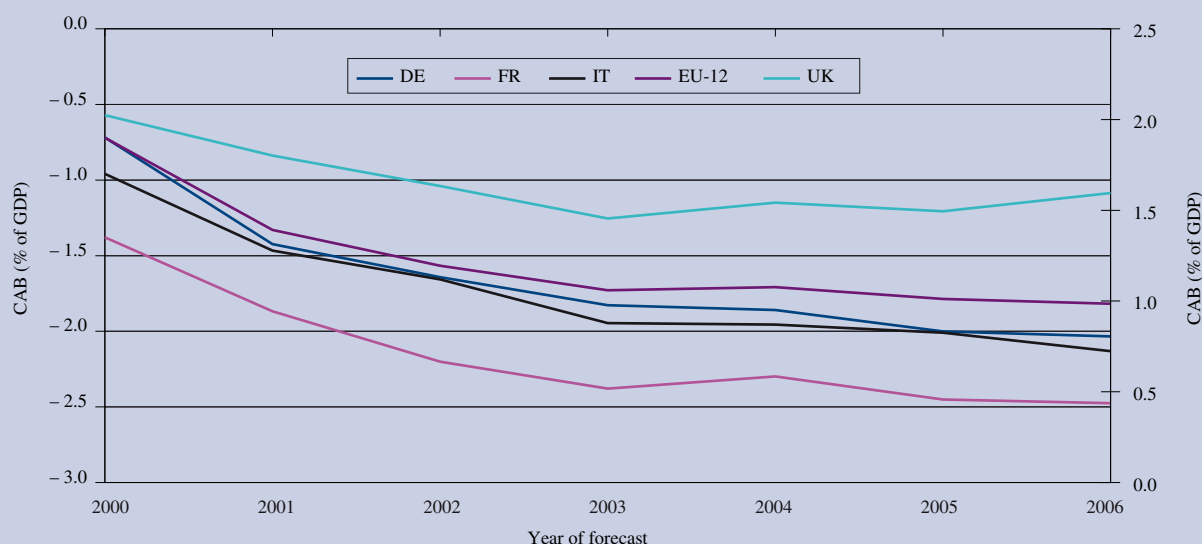
As mentioned above, the significant degree of uncertainty of real-time output gap estimates can be interpreted as a forecasting problem.

**Graph II.2.2: Revisions of the output gap estimate for 2000 in successive Commission services forecasts**



Source: Commission services.

Graph II.2.3: Revisions of the cyclically adjusted budget balance (CAB) for 2000 following revisions of the output gap estimates of successive Commission services' forecasts



Source: Commission services.

The estimates are derived from expectations about future economic growth, which typically and inevitably deviate from the actual outcome<sup>(1)</sup>. To the extent that if such forecast errors were purely random they would have to be accepted as the price of genuine uncertainty surrounding the future course of the economy. The main issue is to avoid systematic mistakes, especially systematic mistakes towards optimism. In a rules-based fiscal framework that sets limits on the budget balance, it is generally easier to cope with positive growth surprises as they increase the distance vis-à-vis the threshold, whereas negative growth surprises will require a downward adjustment of expenditure plans.

As regards the official forecasts of Member States there is evidence in the literature of a statistically significant degree of optimism in a number of euro area countries<sup>(2)</sup>. The experience of the early years of the 2000s, when budgetary plans of a number of Member States were successively built on the relatively sanguine assumption that medium-term growth would return to the high rates observed towards the end of the 1990s, is a particularly interesting case in point. As actual growth consistently stayed behind expectations, the assessment of structural revenues had to be adjusted downwards and with them structural expenditures.

In the light of this experience, two main conclusions are warranted; both are reflected in the agreement of March 2005 on the reform of the Stability and Growth Pact. First, budgetary plans should be built on economic growth projections which possibly err on the side of caution. Second, budgetary projections and the assessment thereof should highlight and possibly quantify the budgetary implications of alternative growth scenarios so as to have a complete view of the range of possible fiscal outcomes.

<sup>(1)</sup> The estimate of potential output in year  $t$  estimated in the current year  $T$ , generally involves a centred and symmetric function of actual GDP  $y$  or parts of actual GDP:  $y_{t|T}^p = b_0 + \sum_{j=0}^{\infty} b_j y_{t-j} + \sum_{j=i}^{\infty} b_j y_{t+j}$ . For estimates of potential output in year  $T$  or beyond this involves the use of forecasts i.e.  $y_{T+i|T} = b_0 + \sum_{j=0}^{\infty} b_j y_{T+i-j} + \sum_{j=i}^{\infty} b_j E y_{T+i+j|T}$ . Taking the difference between the 'final' estimate of potential output, the one obtained after the arrival of new data, and the forecast yields  $y_{T+i|T+i} - y_{T+i|T} = b_0 + \sum_{j=i}^{\infty} b_j (y_{T+i+j} - E y_{T+i+j|T})$  which means that the revision of potential output and the output gap estimate reflects the forecast errors for real GDP.

<sup>(2)</sup> See Jonung and Larch (2006) and Strauch et al. (2004).

**Box II.2.1: The cyclical adjustment of the budget balances in the EU budgetary surveillances: caveats linked to the assessment of tax revenues**

In the EU budgetary surveillance framework, the cyclical adjustment of the budget balance is performed with the following expression

$$(1) \quad cab_t = \frac{B_t}{Y_t} - cc_t = \frac{B_t}{Y_t} - \bar{\varepsilon} \cdot OG_t = \frac{B_t}{Y_t} - \left( \left( \sum_i \eta_{R,i} \frac{R_{t,i}}{R} \right) \frac{R_t}{Y_t} - \eta_G \frac{G_t}{Y_t} \right) \cdot OG_t$$

where  $B_t$  is the nominal budget balance,  $Y_t$  nominal GDP,  $R_t$  total current taxes and  $G_t$  current primary expenditures,  $OG_t$  the output gap defined as the distance between actual and potential GDP, expressed as a share of potential output. The parameter  $\bar{\varepsilon}$  denotes the average budgetary sensitivity which in turn is a function of the revenue and expenditure elasticities  $\eta_{R,i}$  and  $\eta_G$ . A more detailed description of the cyclical adjustment method applied in the framework of the EU fiscal surveillance can be found in European Commission (2004).

Assuming, for simplicity, that the relation between taxes and GDP is linear we have

$$(2) \quad \frac{B_t}{Y_t} = cab_t^* + cc_t = \frac{\varepsilon_t \cdot Y_t^*}{Y_t^*} - \frac{G_t}{Y_t} + \frac{\varepsilon_t \cdot (Y_t - Y_t^*)}{Y_t^*} = \frac{(\bar{\varepsilon} - \Delta\varepsilon_t) \cdot Y_t^*}{Y_t^*} \frac{G_t}{Y_t} + (\bar{\varepsilon} + \Delta\varepsilon_t) \cdot \frac{(Y_t - Y_t^*)}{Y_t^*}$$

where  $cab_t^*$  denotes the structural budget balance,  $Y_t^*$  potential GDP,  $Y_t$  actual GDP,  $G_t$  total expenditure,  $\varepsilon_t$  is the sensitivity of the budget balance with respect to GDP in year t,  $\bar{\varepsilon}$  is the normal or average sensitivity of the budget and  $\Delta\varepsilon_t$  is the temporary deviation of the sensitivity from its normal or average value. Total expenditure is assumed to be cyclically insensitive.

The overall budget balance-to-GDP ratio is the sum of a structural component and a cyclical component. Both components can be represented as the product of the budgetary sensitivity  $\varepsilon_t = \bar{\varepsilon} + \Delta\varepsilon_t$  and GDP: for the structural component the

base is potential output  $Y_t^*$ , for the cyclical component it is the output gap  $\frac{Y_t - Y_t^*}{Y_t^*}$ . Hence, a temporary increase of the

sensitivity will lead to an overall improvement of the budget balance, which in that case will include two transitory components: the purely cyclical component  $\bar{\varepsilon} \cdot \frac{(Y_t - Y_t^*)}{Y_t^*}$  and the component linked to the temporary increase in the budgetary

sensitivity  $\Delta\varepsilon_t \cdot \frac{Y_t}{Y_t^*}$ . To obtain the structural balance one would have to subtract both transitory components from the

actual budget balance. Re-arranging terms in the equation (2) above yields

$$(3) \quad cab_t^* = cab_t - \Delta\varepsilon_t \frac{Y_t}{Y_t^*} = \frac{B_t}{Y_t} - \bar{\varepsilon} \cdot \frac{(Y_t - Y_t^*)}{Y_t^*} - \Delta\varepsilon_t \frac{Y_t}{Y_t^*}$$

This equation essentially shows that the current method for cyclical adjustment overestimates (underestimates) the underlying budgetary position when the tax elasticity with respect to GDP increases (decreases) as compared with normal values.

Based on the data of successive vintages of stability and convergence programmes, Graph II.2.4 displays the growth projection of real GDP growth of the euro area of the last year of the programme period. The focus is on the last year because it is particularly indicative for the assumed medium-term growth prospects. It is four years ahead of the current period, when growth can generally be expected to have returned to its 'cruising speed'; i.e. the prevailing view about potential output growth. The two most recent vintages of stability and convergence programmes (2005/06 and 2006/07) seem to point to a shift towards more cautious growth assumptions, especially as regards the medium term. While the sample period is clearly too short to extract solid trends, such a change will certainly be conducive to help improve the transparency of budgetary policy and possibly in turn fiscal performance.

As regards the surveillance of budgetary positions under the preventive arm of the Pact via the assessment of stability and convergence programmes, a number of steps have been taken to better evaluate the official macroeconomic projections presented by Member States. Firstly, the assessment of the official macroeconomic scenario presented in the stability and convergence programmes is preceded by a broader discussion of past economic developments so as to identify trends and challenges so

as to better evaluate the degree of realism of the medium-term growth projections (see Section II.1.4. for a detailed presentation of the broadened economic appraisal). Secondly, the assessment of the macroeconomic scenario proper has been extended to include a specific section focusing on cyclical conditions with a view to better evaluating the position in the cycle and in turn the underlying growth momentum. Thirdly, the Commission services' forecasts, which serve as benchmark for the assessment of fiscal developments in the Member States, are recurrently examined with respect to their statistical accuracy.

Turning to tax elasticities, the main challenge consists in finding ways to better track and assess short-term fluctuations of tax elasticities in real time <sup>(1)</sup>.

From a conceptual point of view, there is a relatively good understanding of why the link between tax revenues and aggregate level of economic activity is not stable over time. What is lacking are workable methods to gauge the short-term fluctuations of the tax elasticity with respect to GDP.

<sup>(1)</sup> In the formal framework presented in Box II.2.1, the short-term variations of the tax elasticity are indicated as  $\Delta \epsilon_t$ .

Graph II.2.4: Euro area projections of real GDP growth of the last year of stability programme period



Source: Commission services.



The factors driving the short-term variability of tax elasticities can be subsumed under the general heading of composition effects. The aggregate level of economic activity as measured by GDP, both in terms of expenditure and primary distribution of income, consists of individual components that are subject to different tax regimes and hence give rise to different tax yields. Consequently, any change in the composition of GDP will go along with a change in its tax content. The standard example used to illustrate the point is a decline in the overall tax elasticity on the back of an export-led recovery. Exports of goods and services are exempt of value added taxes and hence do not generate the same amount of government revenues as final private consumption. Similarly, compensations of employees are generally more tax intensive than their complement in GDP, namely the gross operating surplus. Depending on the relative increase (or decline) of the two components a given growth rate of GDP will give rise to higher or lower change of income taxes.

Less apparent or less frequently considered composition effects are related to asset price cycles which will have a direct impact on capital gain taxes. These taxes are generally recorded as part of personal or corporate income taxes. The literature that examines the interaction between asset prices and fiscal policy provides evidence that asset cycles are generally not synchronised with the economic cycle and hence, will trigger short-term changes in the overall tax elasticity with respect to GDP <sup>(1)</sup>.

An additional, potentially significant composition effect that has reached some prominence over the last couple of years, are oil price developments. Large shifts in the price of oil are particularly, though not exclusively relevant for EU countries where oil and/or gas production is important such as Denmark, the Netherlands and the UK. They generally boost corporate income of the respective industry and can also lead to an increase in revenues from VAT on energy products. Indirect effects via the terms-of-trade and linked to that an increase in real income may also play a role <sup>(2)</sup>.

Finally, short-term variations of the tax elasticity with respect to GDP can arise as a result of time lags especially on the revenue side of the budget. For instance, a non-negligible part of government revenues accruing

from income taxes is not collected in a withholding fashion. It is generally assessed and collected only after the end of the year the income is generated. Consequently, revenues in any given year  $t$  may also depend on the economic conditions of previous periods.

The current setup of cyclical adjustment described above provides only limited scope for capturing composition effects. To start with, the composition of real GDP with respect to its expenditure and primary income components is held constant. This limitation could in principle be overcome by choosing a disaggregated approach in which taxes are not linked to cyclical fluctuations of GDP but to fluctuations of their respective tax base. The ECB uses such an approach <sup>(3)</sup>. However, the benefit of allowing for changes in the composition of major demand or income components comes at a price. In particular, the issue of separating the trend from the cycle proliferates: what are the reference models, equivalent to a production function approach used for GDP, that would make it possible to estimate the trend of private consumption, the gross operating surplus or compensations of employees? Moreover, there would no longer be a clear link between the fiscal stance and the economic cycle because individual tax bases are not necessarily synchronised with the fluctuations of overall GDP; e.g. a specific tax base could for instance perform particularly well in economically difficult times. A further issue related to the disaggregated approach refers to the degree of detail. Even a breakdown into four major tax categories may not be sufficiently comprehensive. There can be significant shifts within individual categories such as personal income taxes due to a higher or lower increase of capital income as compared with labour income. To the extent that capital gains are taxed at different rates such a shift could give rise to a change in the tax elasticity with respect to GDP even if asset prices are synchronised with GDP developments.

A second limitation of the current framework is that it does not provide for a full coverage of taxable income or expenditure. For instance, the tax base of indirect taxation is approximated by private consumption only, which means that VAT paid on new residential housing (classified as private investment expenditure) is not captured. In general, this approximation works quite well but can give rise to relatively large leakages in the event of a housing boom. This has for instance been the case in

<sup>(1)</sup> See for instance Eschenbach and Schuknecht (2002), Girouard and Price (2004) and Jaeger and Schuknecht (2004).

<sup>(2)</sup> See Turner (2006).

<sup>(3)</sup> See Bouthevillan et al. (2001).

Spain, where standard elasticities for indirect taxation did not capture the revenues linked to the booming residential housing market observed over the past several years. In such a case, the 'extra revenue' would seem to be non-cyclical.

From a practical point of view, the assessment of tax revenues in real time is complicated by the fact that short-term fluctuations of the tax elasticity with respect to GDP cannot be observed directly. As mentioned at the beginning of this section the apparent elasticity may include both temporary deviations of the tax elasticity and the effect of discretionary measures. In principle, there are two ways to separate the two. The first would require estimates of the budgetary impact of discretionary fiscal policy measures. On the basis of such estimates the actual tax elasticity with respect to GDP could be obtained by difference <sup>(1)</sup>. The second method takes the alternative route and tries to track fluctuations of the tax elasticity directly as a function of a number of variables that trigger the various composition effects discussed before. Both methods have their pros and cons and are worth exploring.

#### 2.1.4. Conclusions

The measurement of the general government budget balance, net of cyclical and other temporary factors is a pivotal element of fiscal policy analysis. It is crucial to gauge the medium-term orientation of fiscal policy and constitutes relevant information for the assessment and conduct of fiscal policy in general and in the EU fiscal surveillance framework in particular. In recent years, particularly volatile and/or buoyant tax revenues have blurred the view of the structural level of general government revenues.

The distortion has two different sources: (i) the estimation of potential output in real time and (ii) the measurement of year-to-year changes in the tax elasticity with respect to GDP. The uncertainty surrounding real-time

potential output and output gap estimates is a well-known issue. Its implications for budgetary surveillance and fiscal policy as recognised in the Council report can be best addressed by building budgetary plans on cautious growth forecasts. Taking into account the degree of uncertainty already into the planning phase of the budget may also help to highlight risks. As regards the uncertainty linked to tax elasticities, the conceptual issues are relatively well understood but workable methods for tackling them in practice need to be developed or improved.

## 2.2. New methodology for computing minimum benchmarks

### 2.2.1. Background information

Under the provisions of the reformed Stability and Growth Pact (SGP) Member States are required to achieve and safeguard a medium-term budgetary objective (MTO), which should ensure, inter alia, a sufficient safety margin against the risk of breaching the 3 % of GDP threshold of the Treaty.

This implies that the country-specific MTO should be set above a threshold value, the minimum benchmark, which ensures the respect of the 3 % reference value under normal cyclical conditions. In the EU budgetary surveillance framework, the minimum benchmark provides a lower bound for the determination of the country-specific MTO.

The country-specific minimum benchmark is calculated on the basis of two indicators <sup>(2)</sup>:

- the budgetary sensitivity, which measures the impact of cyclical fluctuations on the general government balance;
- an estimate of a representative output gap (ROG) capturing very negative, but still likely cyclical conditions.

Minimum benchmarks were updated in October 2005, to take into account the new and updated values for budgetary sensitivities <sup>(3)</sup>. Member States agreed on the new

<sup>(1)</sup> The observed change in tax revenues expressed as ratio of GDP results from the relative change in the overall level of economic activity and discretionary changes:  $\frac{\Delta R_t}{Y_t} = \varepsilon_t + \frac{\Delta Y_t}{Y_t} \cdot \frac{\Delta D_t}{Y_t}$ . If estimates for the effect of

discretionary measures were available the actual sensitivity  $\varepsilon_t$  is obtained as  $\frac{\Delta R_t - \Delta D_t}{\Delta Y_t}$ . The link between sensitivity and elasticity

is:  $\varepsilon_t = \eta_t \frac{R_t}{Y_t} = \left( \left( \sum_i \eta_{R,i} \frac{R_{t,i}}{R} \right) \frac{R_t}{Y_t} \right)$ .

<sup>(2)</sup>  $MB = -3 - \varepsilon \cdot ROG$  where MB stands for the minimum benchmark,  $\varepsilon$  the sensitivity of the budget to the output gap and the representative output gap (ROG).

<sup>(3)</sup> In June 2005, the budgetary sensitivities were updated for the EU-15 and broadened to include estimates for the recently acceded Member States (see European Commission, 2006a).

set of minimum benchmarks computed by the Commission services but invited the Economic Policy Committee (EPC) to carry out further work to explore possible methodological improvements compared with the current method and in September 2006, a new method to calculate the representative output gap was agreed.

### 2.2.2. The concept of minimum benchmark

Budget balances are affected by cyclical fluctuations of aggregate economic activity through the effect of the so-called automatic stabilisers. The strength of the automatic stabilisers depends mainly on the size of government, the degree of progression of the tax system and the generosity of unemployment benefits. Under the provisions of the SGP automatic stabilisers are allowed to operate freely as long as the headline deficit respects the 3 % of GDP reference value of the Treaty; with the possible exception of ‘severe downturns’ in which case ‘exceptional circumstances’ foreseen by the excessive deficit procedure can be invoked <sup>(1)</sup>.

With a view to providing Member States with an indication of the minimum structural budgetary position con-

sistent with a sufficient safety margin against breaching the 3 % of GDP reference value of the Treaty, the Commission introduced in 2000 the concept of the ‘minimum benchmark’ <sup>(2)</sup>.

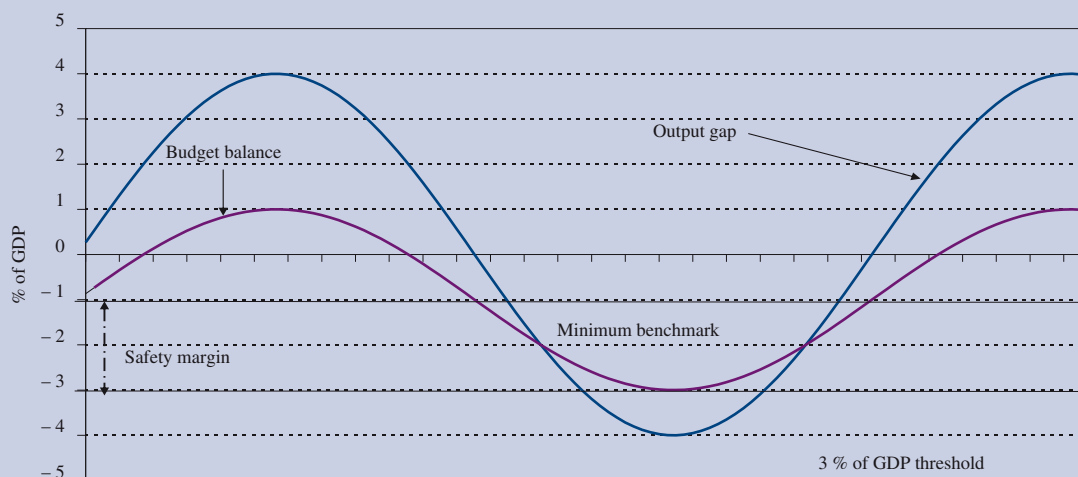
Graph II.2.5 illustrates in a stylised way the role and functioning of the minimum benchmark. The blue line represents the output gap, while the purple line indicates the general government balance expressed in nominal terms. The structural deficit is assumed to be at the minimum benchmark (dotted bold horizontal line). In this case, the headline deficit oscillates in line with the output gap around the minimum benchmark. Taking into account the sensitivity of the budget with respect to cyclical fluctuations and the variability of the cycle, the minimum benchmark is chosen in such a way as to guarantee that the headline deficit stays below the 3 % of GDP reference value even when the output gap reaches very negative but still reasonably likely values.

The minimum benchmark is used for two different purposes in the assessment of the budgetary plans that Member States present in the updates of their stability and convergence programmes. First, they are used to assess whether the MTO set by the country is consistent

<sup>(1)</sup> See Article 2(2) of Council Regulation (EC) No 1467/97 as amended by Regulation (EC) No 1056/2005. For further details see Section I.B. of ‘Specifications on the implementation of the Stability and Growth Pact’. [http://ec.europa.eu/economy\\_finance/about/activities/sgp/codeofconduct\\_en.pdf](http://ec.europa.eu/economy_finance/about/activities/sgp/codeofconduct_en.pdf)

<sup>(2)</sup> See European Commission (2000) and (2002) for a detailed description of the original method.

**Graph II.2.5: Minimum benchmarks: an illustration**



Source: Commission services.

with the general aim of safeguarding against the risk of breaching the 3 % of GDP reference value of the Treaty. Secondly, for countries that have not yet reached the MTO, the minimum benchmark is also used to check whether in any given year the budgetary projections presented in the stability and convergence programmes ensure a sufficient safety margin with respect to the 3 % of GDP threshold.

### 2.2.3. Updating the methodology to estimate the minimum benchmarks

Minimum benchmarks were updated in 2005 but Member States invited the EPC to carry out further methodological work (see European Commission, 2006a). On 29 September 2006, Member States agreed on a new methodology for computing the representative output gap, one of the two components of the minimum benchmarks.

The new methodology computes the representative output gap as a weighted average of the 5 % percentile of the country specific output gap series and of the 5 % percentile of output gap data for all countries <sup>(1)</sup>. The weights are set proportional to the amount of country-specific data available: the longer the available time series, the higher the weight given to the country-specific component.

(II.2.1)

$$ROG = \frac{N_i}{25 + N_t} P_{5\%}(\text{country}) + \frac{25}{25 + N_t} P_{5\%}(EU25)$$

(<sup>2</sup>)

The logic of this approach is that of using the simplest and most direct statistical indicator which captures the idea of the representative output gap, i.e. a particularly low value of the output gap likely to be observed with a probability of 5 %.

<sup>(1)</sup> The variation across countries of minimum values for output gaps highlights the need of eliminating possible 'outliers' from the sample, i.e. output gap estimates exhibiting exceptionally high or low values that correspond to particular events unlikely to repeat themselves in the future. The sample of output gaps used to calculate the representative output gap was therefore redefined to exclude all observations below, and above, respectively, the 2.5 % and the 97.5 % percentiles of the distribution for the sample including all Member States.

<sup>(2)</sup>  $N_i$  is the number of output gaps observed for country  $i$  over the last 25 years (i.e. between 1981 and 2005). Outliers which have been deleted from the sample are not considered as observations.

The representative output gap is computed on the basis both of country-specific series and of information on the whole set of observations. While capturing country-specific features, it limits the risks that the output gap observations over the past decades are for some countries not fully representative of future fluctuations. For example, limited output gap fluctuations do not guarantee that the volatility will not be higher in the future, particularly if time series are relatively short. Complementing country-specific information with information embedded in series of other EU Member States may overcome part of the problem, on the ground that there are common elements in the cycle across countries.

The method takes into account all available country-specific information and uses the same algorithm for every country. The relative weights of the common and country-specific component are different today among countries, especially for the recently acceded Member States due to the limited availability of data before 1995. However, the weights will automatically converge to the same value when the length of the time series increases over time reaching and exceeding 25 years. The choice of using moving samples has the advantage of not taking into account very distant years in which the volatility of the cycle may have followed different patterns inter alia due to a different economic policy framework.

### 2.2.4. New minimum benchmarks

Table II.2 reports the updated minimum benchmarks based on the new methodology for computing the representative output gap. They were applied for the first time in the assessment round of the 2006/07 updates of the stability and convergence programmes. The new estimates have a negative sign for all countries, meaning that a moderate structural deficit would be compatible without incurring the risk of breaching the 3 % deficit ceiling under normal cyclical fluctuations. The simple average of the minimum benchmarks across the EU-15 Member States is – 1.3 % of GDP, close to the previous minimum benchmark of – 1.2 % of GDP. Minimum benchmarks for the recently acceded Member States are in general less strict than those of EU-15 Member States. This is essentially due to smaller budgetary sensitivities (0.36 for new Member States compared to 0.49 for EU-15) and somewhat less volatile output gaps over the sample period. Following sharp adjustments in the early 1990s, for which generally no data are available, the recently acceded Member States have since enjoyed a comparatively smooth economic development.

Table II.2.2

**New minimum benchmarks**

	Number of country specific observations	Weight given to the country specific component (%)	Overall 5 % percentile	5 % percentile of country specific data	ROG	Budgetary sensitivity	Minimum benchmark
	(i)	(ii)=(i)/(i + 25)	(iii)	(iv)	(v)=(ii)*(iv) + (1 - (ii))*(iii)	(vi)	(vii)= - 3 - (vi)*(v)
BE	25	50	- 3.7	- 2.4	- 3.1	0.54	- 1.3
BG	9	26	- 3.7	- 3.1	- 3.6	0.48	- 1.3
CZ	9	26	- 3.7	- 3.8	- 3.7	0.37	- 1.6
DK	25	50	- 3.7	- 3.8	- 3.8	0.65	- 0.5
DE	15	38	- 3.7	- 1.3	- 2.8	0.51	- 1.6
EE	9	26	- 3.7	- 3.0	- 3.5	0.30	- 1.9
IE	22	47	- 3.7	- 4.0	- 3.8	0.40	- 1.5
EL	25	50	- 3.7	- 3.5	- 3.6	0.43	- 1.4
ES	25	50	- 3.7	- 4.8	- 4.3	0.43	- 1.2
FR	25	50	- 3.7	- 2.1	- 2.9	0.49	- 1.6
IT	25	50	- 3.7	- 2.6	- 3.1	0.50	- 1.4
CY	11	31	- 3.7	- 1.6	- 3.1	0.39	- 1.8
LV	11	31	- 3.7	- 2.8	- 3.4	0.28	- 2.0
LT	9	26	- 3.7	- 4.5	- 3.9	0.27	- 1.9
LU	18	42	- 3.7	- 4.5	- 4.1	0.49	- 1.0
HU	11	31	- 3.7	- 1.2	- 2.9	0.46	- 1.6
MT	10	29	- 3.7	- 3.3	- 3.6	0.37	- 1.7
NL	25	50	- 3.7	- 3.1	- 3.4	0.55	- 1.1
AT	25	50	- 3.7	- 2.1	- 2.9	0.47	- 1.6
PL	11	31	- 3.7	- 3.9	- 3.8	0.40	- 1.5
PT	20	44	- 3.7	- 3.0	- 3.4	0.45	- 1.5
RO	7	22	- 3.7	- 4.3	- 3.8	0.32	- 1.8
SI	9	26	- 3.7	- 1.4	- 3.1	0.44	- 1.6
SK	10	29	- 3.7	- 2.4	- 3.3	0.29	- 2.0
FI	21	46	- 3.7	- 3.4	- 3.6	0.50	- 1.2
SE	24	49	- 3.7	- 3.2	- 3.5	0.58	- 1.0
UK	24	49	- 3.7	- 4.1	- 3.9	0.42	- 1.4
EU-15	23	48	- 3.7	- 3.2	- 3.5	0.49	- 1.3
EU-12	10	28	- 3.7	- 2.9	- 3.5	0.36	- 1.7
EU-27	17	39	- 3.7	- 3.1	- 3.5	0.44	- 1.5

NB: The budgetary sensitivities were adopted in 2005; the representative output gaps were adopted in autumn 2006. Estimates for RO and BG, which joined the EU in 2007, were calculated on the basis of the commonly agreed methodology.

Source: Commission services.

## 2.3. Accounting for pension-related liabilities

### 2.3.1. The review of the system of national accounts

The worldwide statistical community has been discussing the revision of national accounting rules for some years (1). The aim is to have an updated system of national accounts (SNA rev.1) adopted by the UN Statis-

tical Commission by March 2008. The European system of national and regional accounts (ESA) is expected to

(1) The update of SNA was initiated by the UN Statistical Commission in 2003, 'to bring the accounts into line with the new economic environment, advance in methodological research, and needs of users'. The UN Statistical Commission website <http://unstats.un.org/unsd/nationalaccount/snarev1.asp> contains information on the whole process and on each of the 44 topics under review.

be subsequently revised, so as to remain in line with the SNA. As far as government accounts are concerned, a broad range of issues are being discussed <sup>(1)</sup>. The most important topic under review concerns the recording of pension-related transactions and the recognition of government commitments with pensions as liabilities <sup>(2)</sup>.

#### *Extending the notion of liabilities*

In the present versions of SNA and ESA, government liabilities consist of securities and loans, as well as currency, deposits and accounts payable, which finance the government deficits and accumulation of assets <sup>(3)</sup>.

Government liabilities in the SNA and ESA do not cover all commitments of future payments undertaken by the government. In particular, government liabilities in SNA and ESA do not include social benefits to be paid although the events vesting rights in specific individuals have already occurred. This is typically the case of accrued-to-date pension liabilities, i.e. the pension entitlements that members of pension schemes (workers and pensioners) have accumulated so far.

The revised version of the SNA will widen the scope of liabilities to include accrued-to-date liabilities of pension schemes (or narrow implicit liabilities, see Box II.2.2) although the specific recording and measurement are still under discussion. The attention given to pension liabilities in the SNA review is explained by the size and the economic relevance of the pension commitments in a context of ageing populations and related expenditure pressure. It was also felt that the current treatment in SNA hampered the comparability of figures across countries, as pension liabilities of funded schemes were already recorded in national accounts <sup>(4)</sup>.

Yet, the revised version of the SNA will not provide a complete view of government liabilities. State guarantees, which may lead to future disbursements, depending on a

number of contingencies <sup>(5)</sup>, government liabilities related to social benefits other than old-age pensions, such as healthcare, disability or unemployment benefits <sup>(6)</sup> will not be recognised in the SNA balance sheets.

#### *Two competing views*

The recording of pension-related transactions has been one of the most controversial issues discussed in the context of the SNA review and revealed major differences of opinion among the statistical community worldwide. During the deliberations, two main positions emerged.

The first viewpoint was that the government commitments in relation to pensions to be paid to civil servants should be recognised in the government accounts as liabilities <sup>(7)</sup>. In this way, government accounts would align themselves with corporate accounting whereby pension commitments are recognised in balance sheets as liabilities <sup>(8)</sup>. However, the pensions to be paid by social security to the population at large would not be recognised as liabilities. According to this viewpoint, the rationale for a different treatment between employer schemes and social security was that pensions provided by employers, and therefore by the general government to the civil servants, have a contractual nature and correspond to deferred compensation of employees, while social security pensions do not have that nature. Moreover, it was felt that in some countries, notably outside the EU, the strength of the commitment to pay old-age pensions to civil servants and to the population at large was not the same.

The second view, mainly supported within the EU, was that a distinction in the accounting treatment of pensions to be paid to civil servants and of pensions to be paid to the population at large was not warranted <sup>(9)</sup>. In most EU countries, the pension schemes for civil servants and for the rest of the population are very similar, or even identical. As a consequence, either the revised SNA/ESA recognised all government obligations to pay pensions as

<sup>(1)</sup> It includes notably public-private partnerships, military expenditure, contracts, leases and licences, government transactions with public enterprises (earning from equity investment and capital injections), tax revenue, uncollectable taxes and tax credits, and public-private-government delineation.

<sup>(2)</sup> The recording of pension-related transactions is also relevant for the corporate sector. However, this section focuses on public pension systems only.

<sup>(3)</sup> On the factors other than the deficit that explain the evolution of the government debt, see, Section II.2.2 ('The dynamics of government debt: decomposing the stock-flow adjustment') in European Commission (2005a). For the most recent data, see Eurostat (2007).

<sup>(4)</sup> On the reasons for the review of the current SNA/ESA rules, see for instance Lequiller and Rougemont (2004).

<sup>(5)</sup> See Box II.3 ('Accounting for financial guarantees and for debt assumptions in the ESA 95') in European Commission (2004).

<sup>(6)</sup> Old-age and healthcare benefits have natures which may justify different accounting treatments. With old-age benefits, pension scheme members pay contributions with the aim of acquiring the right to receive pensions in the future. With healthcare benefits, there is less of an accumulation of entitlements over the years.

<sup>(7)</sup> See for example, Rougemont (2003).

<sup>(8)</sup> According to international accounting standards (IAS 19 and 26, see Commission Regulation (EC) No 1725/2003 OJ L 261, 13.10.2003), employee benefits should be recognised in the period in which the benefit is earned by the employee, rather than when they are paid or payable.

<sup>(9)</sup> On this second view, see e.g. Mink and Walton (2005).

**Box II.2.2: Narrow and broad definitions of implicit liabilities**

There is not a unanimous definition of implicit liabilities; the term does not appear in statistical manuals and is often surrounded by confusion in the policy debate. A clear distinction must be established between narrow and broader definitions of implicit liabilities <sup>(1)</sup>.

A narrow definition of implicit liabilities of the government would refer to the commitments of future payments that the government entered into, but that are not recognised as debt alongside the loans, bonds and bills issued in the financial markets. The best example of these narrowly defined implicit liabilities refers to the accrued-to-date pension obligations. Accrued-to-date means that the actions that are necessary to vest rights on specific individuals (for example to be affiliated to a pension scheme, to have paid contributions, to have worked for the government, or in some cases simply to have been a resident in a given country) are already behind us. The accrued-to-date pension obligations of the government differ in several ways from the financial debt e.g. in terms of uncertainty of amounts, redemption timing or tradability. Moreover, the liable entity (the government) can change the pension-related rights and obligations (see e.g. Balassone and Franco, 2000; Franco et al., 2006 and Blanchet and Ouvrard, 2006). However, the distinction between debt and this narrow definition of implicit liabilities is often a matter of convention rather than of substance. Some government obligations in relation to partnerships with the private sector, e.g. regular payments to private enterprises managing infrastructure, such as motorways, could also be considered in this narrow definition of implicit liabilities. This narrow definition is backward looking. This fits well in the generic definition of liabilities in use by the accounting profession as present obligations arising from past events (IFAC, 2005).

A broader definition of implicit liabilities refers to future government expenditures which have not yet been funded, even when these future expenditures are not backed by law or contract, but are simply grounded in strong expectations of the public. This broader definition is thus more consistent with the concept of sustainability as discussed in the economic literature <sup>(2)</sup>. In the area of pensions, this broad definition takes into consideration the present value of all future pensions to be paid by government, including in relation to individuals that are not yet in the labour market or not even born, assuming that the criteria to the attribution of social benefits will be kept unchanged. Therefore, in this broader sense, implicit liabilities correspond to the present value of future government expenditure in all areas of government activity, wages, procurement, transfers, investment, etc., assuming that the government will keep distributing transfers and providing services according to the same criteria currently in use. To be meaningful for analysis, these broader implicit liabilities should be assessed net of future revenue assuming that the government will keep collecting taxes and non-tax revenue at rates comparable to current levels. Therefore, the broader concept of implicit liabilities corresponds to the net present value of future deficits and surpluses (*ex ante* implicit liabilities). Its measurement depends on long-term demographic and macroeconomic projections, is subject to very large margins of error and is extremely sensitive to a number of assumptions, notably on the discount rate, the long-term growth rate and the initial budgetary position. Moreover, as it corresponds to the discounted sum of balances projected to the infinity, data are of difficult interpretation. As a result, data on the broader definition of implicit liabilities are rarely published as such. In practice, information on implicit liabilities are often, and preferably, shown as the projected developments of debt (or *ex post* explicit liabilities) or as sustainability gaps.

<sup>(1)</sup> This box draws extensively on Buti and Nogueira Martins (2006b).

<sup>(2)</sup> For example Blanchard et al. (1990) and European Commission (2006). This is also the concept of implicit liabilities that appears in the Council (2005) report on the reform of the Stability and Growth Pact.

liabilities, or the current rules had to remain unchanged. A different recording for pension obligations vis-à-vis civil servants relative to those vis-à-vis the general population would be neither economically nor institutionally suitable. Moreover, it was felt that the recognition of unfunded pension liabilities in the government accounts would fundamentally change the nature of the accounts. For example, it would reduce the reliability of figures.

Crucial variables (government saving, balance and debt, etc.) would dramatically change <sup>(1)</sup>.

<sup>(1)</sup> Moreover it could have potentially important implications for the implementation of the budgetary framework of the European Union, especially as regards the Treaty thresholds related to the deficit- and debt-to-GDP ratios.

### *A compromise solution*

A compromise has been reached between those two camps. It involves flexibility in the recognition of pension entitlements in the accounts. The updated SNA will allow recording only some pension entitlements in the core accounts (i.e. in the traditional sequence of accounts) depending on the specificity and institutional arrangements of each country or geographic area. However, there will be a new supplementary table which will measure the pension liabilities of all pension systems, public and private, funded and unfunded, for specific categories and for the whole population. Data in this supplementary table will enable users to compute themselves harmonised and comparable figures across the world.

In the European context, all indications are that a revised ESA will keep unchanged the accounting rules on pension-related transactions in the traditional sequence of government accounts, and will not result in changes to general government deficit and debt data used for the purposes of the excessive deficit procedure<sup>(1)</sup>. This means that the unfunded government commitments on pensions will not be recognised as debt; social contributions will remain recorded as deficit-decreasing revenue, while pensions paid increase the deficit. The only, yet crucial, innovation would be the supplementary table.

A supplementary table on pensions in the new SNA/ESA would thus contain information on the estimated value of government's accrued-to-date liabilities on pensions and the respective households' entitlements. This would allow analysis on how such a value evolves with time, the relative level of the pension benefits, the impact of reforms and of changes in the underlying assumptions.

EU statisticians continue to discuss the practical application of the agreed compromise, with a view to developing rules that ensure comparability<sup>(2)</sup>.

<sup>(1)</sup> The status of ESA is different from SNA and many other statistical manuals, since it is a legal act (Council Regulation (EC) No 2223/96). The amendment of ESA will have to be adopted by the European Parliament and the Council on the basis of a Commission proposal.

<sup>(2)</sup> Eurostat and the ECB have set up a task force on the measurement of implicit liabilities of pension schemes. It involves representatives of a number of European statistical offices and central banks, of the OECD, the ECB, the European Commission (Eurostat, Economic and Financial Affairs DG), the IMF and the SNA editor. It aims notably at designing the new supplementary table to be included in the revised version of the ESA, and discussing methodological issues and compilation methods.

### **2.3.2. Link between sustainability analysis and accrued-to-date liabilities**

Measures of accrued-to-date pension liabilities will be useful for economic analyses. They will essentially provide an estimate of the cost of a hypothetical dismantling of the pension system without renegeing on accrued entitlements. As measures of the households' implicit wealth, they are also useful to understand changes and differences in the saving and consumption behaviour of the private sector. Those estimates may help assessing pension reforms involving the setting up of a new system for new contributions or new contributors, while maintaining the current system for already accrued entitlements<sup>(3)</sup>.

However, the accrued-to-date pension liabilities are not indicators of long-term sustainability of pension systems or of public finance. Large pension liabilities do not imply unsustainable systems, and small pension liabilities do not mean that pension systems are sustainable. The following examples show that what is relevant in the sustainability analyses is not the level of payments or of pension entitlements, but their dynamics, linked notably to demographic and socioeconomic changes<sup>(4)</sup>.

In a mature pay-as-you-go (PAYG) scheme where the average pension evolves in line with the average wage in the economy and the age and entitlement structure is constant, total pension expenditure increases in line with total wages, in turn assumed to be a constant share of GDP. Maintaining the contribution rate at its current level is sufficient to ensure that contributions exactly match the pensions of retirees, today and in the foreseeable future. The system is therefore sustainable. Yet, the ratio-to-GDP of accrued-to-date liabilities can be very large, above 200 % or 300 % of the yearly GDP<sup>(5)</sup>.

Assume that a country establishes a new unfunded pension scheme, financed by transfers from the government budget. Citizens accumulate pension entitlements according to the length of their working life since the scheme is

<sup>(3)</sup> On the usefulness of estimates of pension liabilities, see Holzmann et al. (2004).

<sup>(4)</sup> See Franco (1995) for a discussion on how pension liabilities are inappropriate to assess sustainability and may often be misleading. Blanchet and Ouvrard (2006) also show with the help of numerical simulations in realistic circumstances that accrued-to-date pension liabilities may even decline at the same time sustainability problems loom on the horizon.

<sup>(5)</sup> In a country with a mature PAYG system and a stable demographic structure, where retirees receive a pension for 20 years after they retired and where pensions paid amount to 10.5 % of GDP, the stock of accrued-to-date liabilities is 250 % of GDP if the discount rate is 1.5 % above growth rate and 320 % of GDP if the discount rate is equal to the growth rate of the economy.



established. In the first years after the scheme is created, workers have accumulated very small entitlements. Statisticians would, therefore, record hardly any pension liabilities. However, as citizens accumulate more and more pension rights with time, the accrued-to-date pension entitlements and the effective pension payments will increase substantially. To finance those payments, the general government may have to increase taxes, to reduce other expenditure or issue debt. The scheme may quickly become unsustainable, though the accrued-to-date pension liabilities are initially very small.

Graph II.2.6 illustrates how the accrued-to-date pension liabilities are a component of a broader definition of implicit liabilities (see Box II.2.2) and represent a fraction of pensions to be paid in the future. The upper solid line shows a projection for pension expenditure. In a pure scenario of ageing (with only demographic and economic factors taken into account), pension expenditure is projected to increase from an illustrative 10 % of GDP in 2000 to above 16 % of GDP by 2070. Those payments can be divided in four groups. For each year, the line A corresponds to the pensions to be paid to people already retired today. Given the mortality of pensioners, this group of payments is expected to progressively decline in importance and will become zero when the last people already retired today die. The distance between lines A and B corresponds to pensions to be paid in the future to people working today, in relation to the entitlement they have

already acquired until now. This share of payments will increase for several years, as people currently working will progressively retire; it will then decrease according to mortality. The distance from B to C corresponds to pensions to be paid to people already in the labour market, in relation to the entitlements they will accumulate from now on until their retirement. Finally, the distance from C to the solid D line in the top right of the graph corresponds to pensions to be paid in the far future to people that are not yet in the labour market, some of them not even born <sup>(1)</sup>.

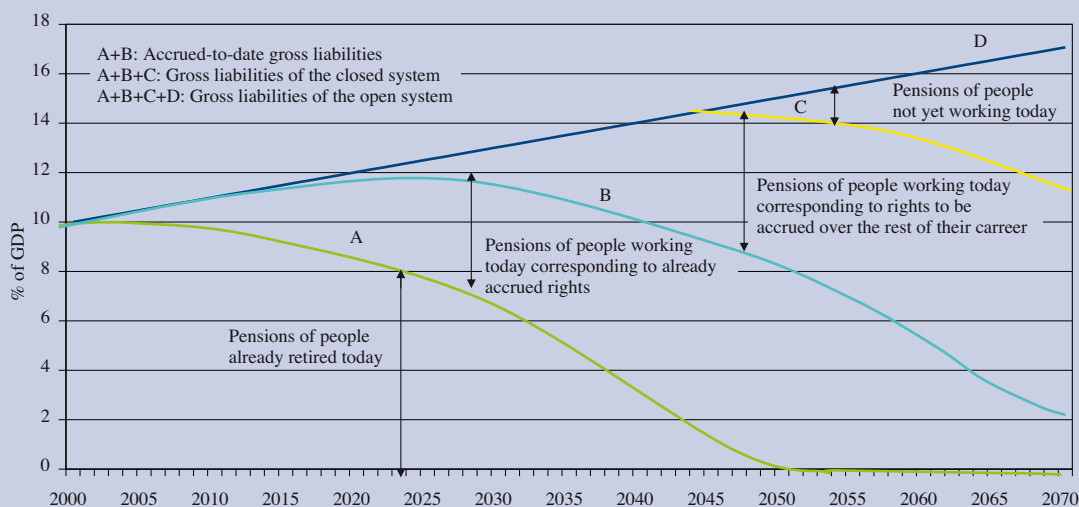
The pension liabilities/entitlements that will be measured by the statisticians correspond to the integral below line B, taking into account an appropriate discount rate. In contrast, the concept that is relevant for assessing sustainability corresponds to the integral of the area below the solid line D, together with the related revenues, also taking into account a discount rate.

### 2.3.3. Measuring accrued-to-date liabilities

Accrued-to-date liabilities are a backward-looking concept. The accumulation of pension entitlements results

(1) The area below the solid line C is often characterised as 'closed-group'. It corresponds to pensions to be paid to current members of pension schemes (retirees and workers) under the assumption that the rules of the pension schemes are unchanged, but that there will be no new entrants in the scheme.

Graph II.2.6: Alternative definitions of implicit liabilities



Source: Commission services.

from past events: having been affiliated to a pension scheme, having paid contributions, having worked for the government, or simply having resided in some countries. Accrued-to-date pension liabilities thus appear, at first glance, unrelated to what can happen in the future. However, the measurement of these liabilities is not a trivial exercise; it raises a number of challenges and, paradoxically, the measurement of accrued-to-date liabilities does require a number of assumptions and projections over many years in the future.

#### *Assumptions and projections for accrued-to-date liabilities*

Accrued-to-date pension liabilities are the present value of the future flow of pension payments in relation to rights accumulated until now. Their measurement depends notably on the discount rate used <sup>(1)</sup>, on the projected effective retirement age (which, given the employment rates of older workers, may significantly differ from the statutory retirement age) and on future mortality, both pre-retirement mortality and post-retirement longevity, including projected developments in mortality rates. The need to project the future in order to measure a backward-looking indicator results from the fact that the amount of pensions to be paid is contingent on a number of future events which cannot be anticipated with certainty <sup>(2)</sup>. Even when the first monthly pension to be paid is known (e.g. somebody retiring today), indexation rules require the projection of future inflation, wages or some other indexes <sup>(3)</sup>.

<sup>(1)</sup> The choice of an appropriate discount rate is not straightforward. Though this section will not elaborate on this issue, market yields are not necessarily the only option. For a discussion on the discount rate in very long-term analyses, see Ewijk et al. (2006).

<sup>(2)</sup> Pension liabilities have neither a nominal nor a market price, which can be observed and used by statisticians, as for other liabilities. Pension schemes exchange, transfer, sell and buy pension commitments among themselves, and rarely with the scheme members. This occurs, for example when people emigrate or change from one industry to another, or when employees have the possibility of receiving a lump sum in exchange for renouncing future pensions. These transfers may convey useful information for statisticians. However, payments in exchange for the transfer of pension entitlement do not always have the nature of a market price. For example, the no-arbitrage condition (or law of one price) would normally not hold.

<sup>(3)</sup> In some cases, the indexation rules may be particularly complex. For example, Germany runs a points system. Workers accumulate pension points during their working life and pensions to be paid are calculated as the number of points of each individual times the value of the point. The value of each point is calculated and indexed on gross earnings, but also takes into consideration sustainability and contribution factors, which depend on the dependency ratio and the evolution of the contribution rate necessary to balance the pension scheme. In Portugal, after the 2006 reform, the pension indexation will depend on a number of elements, including the real GDP growth rate. Therefore, the valuation of accrued-to-date pension liabilities may require economic, demographic and labour market projections.

The fact that statisticians will have to estimate accrued-to-date pension liabilities on the basis of a number of long-term projections raises the question of what to do when those projections turn out to be wrong. Should the resulting change in pension liabilities be recorded in the period during which the projections appear to be wrong or assumptions are revised, as a revaluation? Or should the change in liabilities imply revisions in time series? There is an ongoing discussion on what to do in those cases. A backward revision of series might best serve the interest of data users, notably to assess the dynamic of implicit liabilities over a long period, but raises technical difficulties.

#### *Distributing pension entitlements over the working life*

Measuring the pension entitlements of somebody on the eve of his/her retirement or during retirement becomes a relatively simple exercise, if assumptions on the discount rate, mortality and indexation are available. Calculating pension entitlements in the case of defined-contribution (DC) scheme is also a straightforward exercise at any moment during the working life of the scheme members <sup>(4)</sup>.

In contrast, in a defined-benefit (DB) scheme, the calculation of accrued-to-date pension liabilities during the working life raises a number of technical hurdles and several diverse options are possible. In particular, the accumulation of social contributions paid may provide little guidance in estimating the level of accrued-to-date liabilities <sup>(5)</sup>.

Assume an unfunded pension scheme that pays pensions proportional to wages during the working life, but where there is a five-year vesting period. The five-year vesting period means that workers would receive no pension if they left the pension scheme, for example if they emigrated, during the first five years of affiliation to the scheme. At the end of the fifth year, workers acquire the rights in relation to the first five years. How should statisticians measure and record situations like this? A first option is that, during the first years, the scheme members accumulate no pension rights. For the sake of the argument, assume that all scheme members left the scheme before the end of the fifth year. In this unlikely case, the

<sup>(4)</sup> Public pension systems are usually defined-benefit rather than defined-contribution.

<sup>(5)</sup> For example, contributions paid so far may seriously underestimate the liabilities if the pension scheme is partly financed through taxation or if the PAYG scheme is maturing. In the last case, the level of contribution today is set in relation with the current pensions (which are low) and not in relation with future pensions which will be much higher.

pension scheme would never pay any pension and, therefore, would not have accumulated any pension liabilities.

Another option is to distribute the present value of pensions to be paid in future proportionally to the number of years of affiliation to the scheme during the vesting period. The vesting period is only relevant in the sense that statisticians need to estimate the probability that members leave the scheme before completing the vesting period.

Similar options are also relevant when the pension award formulas contain other nonlinearities with respect to the length of the career or to the earnings taken into consideration in the pension award formula, typically when the pension award formula depends on the wages of a limited number of years <sup>(1)</sup>. Regarding the latter issues, these nonlinearities are magnified by the fact that for most people, wages, not only in nominal and real terms, but also relative to the average wage of the economy <sup>(2)</sup>, increase with seniority.

The two main options to deal with these situations are usually denoted as ABO and PBO methods, standing respectively for accumulated benefit obligation and projected benefit obligation. According to ABO, what matters is the present value of pensions to be paid in the future if the employee continued in employment until retirement age at current wage rates, in proportion to the working life already behind him/her, i.e. if he/she had no further increases in wage. PBO corresponds to the present value of benefit accrued to the valuation date taking into account the projected career progression until the retirement date.

There is no consensus as regards which option is preferable in corporate accounting <sup>(3)</sup>. This may depend on the use of data. From the pension scheme viewpoint, an ABO measure represents the cost if all workers were to leave the pension scheme today and is a useful measure for solvency assessment purposes. However, a PBO measurement is more appropriate for most economic analysis. In the case of social security — where pension award formulas are usually more complex and less linear than in employer pension schemes — the PBO valuation is preferable in view of ensuring comparability of estimates

<sup>(1)</sup> For example, pension award formulas may depend on the wages of the last 5, 10 or 25 years, or the best 5 of the last 10, or simply on the last wage.

<sup>(2)</sup> An example of such wage profile on French data can be found in Koubi (2003).

<sup>(3)</sup> However, international accounting standard (IAS19) specifies a 'projected unit credit method' which is basically PBO.

across countries <sup>(4)</sup>. However, the most appropriate option for national accounts is still subject to discussion.

#### 2.3.4. Conclusions

The compilation of data on pension liabilities — or more precisely on accrued-to-date pension obligations — by the EU statisticians will provide useful information to assess and compare fiscal policies, better comparing pension systems among countries, understanding the evolution of these liabilities over time, better measuring the costs and benefits of reforms, etc. In particular data on those narrowly-defined implicit liabilities will provide a complement to the existing statistics on government debt.

The measurement of accrued-to-date pension liabilities of social security is a complex task. In spite of the backward-looking nature of the indicator, its measurement requires a number of complex assumptions and long-term projections. The uncertainty around such a measure will be very large, and in particular much larger than in most macroeconomic aggregates. For the sake of transparency, those assumptions and projections should be spelled out and open to scrutiny <sup>(5)</sup>.

Data on the implicit pension liabilities are not by themselves a measure of sustainability, either for each specific pension scheme, or for the government as a whole. The assessment of sustainability of public finances needs to be done by estimating how all government spending and receipts will evolve in the future. It implies projecting pension expenditure under unchanged policies, i.e. including rights that workers will accrue in the future if the pension scheme remains unchanged. It also implies projecting all other budgetary lines on the expenditure (e.g. healthcare, long-term care, education) and revenue side. In the European budgetary surveillance framework, such projections are made on commonly agreed principles and methodology to ensure the comparability and the reliability of the assessment <sup>(6)</sup>.

<sup>(4)</sup> For example, in sectors where the wage profile is broadly similar for many workers (typically, for civil servants), it is common to define the pension as a share of the last wage. However, the same pensions can be defined as a (higher) share of the average wage over the entire career. Yet applied partially in the course of the career, the formulas may lead to substantially different measures of accrued-to-date liabilities if the projected wages are not duly taken in consideration.

<sup>(5)</sup> Whenever possible, those assumptions and projections should be consistent with other long-term projections, such as those by the working group on ageing (AWG) of the EPC.

<sup>(6)</sup> See 'The long-term sustainability of public finances in the European Union', European Commission (2006b).

## 2.4. Quarterly government accounts and fiscal surveillance

### 2.4.1. Introduction

The data that are relevant for deciding whether a country is complying with the Treaty and Stability and Growth Pact (SGP) requirements are the annual deficit and debt ratios, compiled according to the ESA95 accounting rules. Given that the government budgets are adopted and executed by the political institutions of each country with a yearly frequency, it would not make sense to implement the SGP on a basis other than annual. However, the economic literature has stressed the need to base budgetary surveillance on a wide range of indicators, going beyond those that are defined by ESA 95 and specifically mentioned in the SGP-related acts. Notably, this means paying attention to data compiled on different accounting bases (e.g. accrual and cash), nominal and cyclically adjusted, with annual and infra-annual frequencies.

An effective fiscal surveillance requires, in particular, tracking budgetary developments during the implementation of each annual budget. In this respect, all Member States have a long tradition of publishing monthly data, according to specific national definitions<sup>(1)</sup>. However, since such data are not harmonised they are of limited use for fiscal surveillance in an international context. The lack of harmonised infra-annual budgetary statistics was identified in the Ecofin Council report on statistical requirements in economic and monetary union, approved on 18 January 1999<sup>(2)</sup>. The Council concluded that ‘a high priority should be given to statistics on the public finances. The objective is the production of quarterly national and financial account data for general government’.

After a number of intermediate steps<sup>(3)</sup>, quarterly government accounts, compiled according to the ESA 95 rules, are now being released timely by a very large majority of Member States (see Table II.2.3).

Quarterly government accounts may give a relevant contribution to the quality of fiscal surveillance. These infra-

annual data can give early signals on the course of fiscal policy; thus allowing policymakers to better attune their measures within each year, whenever any deviation from plans becomes evident. Moreover, infra-annual data allow fiscal policy analysts to better understand the interaction between the fiscal positions of countries and economic activity. The availability of timely quarterly data also allows the Council and the Commission to better measure and consider the budgetary efforts by the EU Member States, for example when assessing compliance with Council recommendations during an excessive deficit procedure<sup>(4)</sup>. Moreover, experience from other statistics shows that the compilation of data with a higher frequency (quarterly figures) has a favourable impact on the quality of statistics with a lower frequency (annual data).

### 2.4.2. Challenges for economic analysis

While quarterly government accounts provide useful information, they also raise a number of challenges for analysis. The interpretation of quarterly fiscal data needs to be done very carefully. Economists and policymakers need to learn how to properly interpret quarterly data.

A first challenge comes from the fact that the available series are yet not seasonally adjusted<sup>(5)</sup>. As a result, the revenue, expenditure and deficit series are extremely volatile from one quarter to another. Quarter-on-quarter growth rates of government expenditure and revenue, such as those frequently quoted with reference to GDP, and changes in the deficit/surplus from one quarter to another are meaningless.

However, the volatility of the revenue, expenditure and deficit figures is not an insurmountable difficulty. Given a relatively stable seasonality, useful information can be extracted by reference to moving averages (see Graph II.2.7) or by looking into the year-on-year growth rates of expenditure and revenue (see Graph II.2.8). Actually a four-period moving average of quarterly deficit ratios corresponds to an annual deficit, similar to those that are relevant for the SGP, with the difference that each ‘year’ may start and end in months other than January and December.

<sup>(1)</sup> The monthly data that Member States publish follow national definitions which may differ quite considerably from the ESA 95 concept, notably in terms of sectoral delimitation (central government rather general government) and time of recording (cash rather than accrual accounting). On the use of those monthly data to predict the yearly government deficit see Moulin et al. (2004) and Pérez (2007).

<sup>(2)</sup> The 1999 report, and a series of subsequent progress reports and status reports are available at: <http://www.consilium.europa.eu/showPage.asp?id=741&lang=en&mode=g>

<sup>(3)</sup> On the several steps leading to the publication of quarterly government accounts, see Section II.4.4.3 of the 2006 edition of this report.

<sup>(4)</sup> For example, in the Commission recommendation for a Council decision abrogating Decision 2003/487/EC on the existence of an excessive deficit in France (SEC(2006) 1529 final of 29 November 2006), the assessment of debt developments refers to the quarterly debt.

<sup>(5)</sup> Though there are not yet concrete plans on the seasonal adjustment of quarterly government accounts, one may expect that this issue will be considered by the statisticians in the coming years.

The quarterly deficit ratios for the euro area show that the trough of the latest cycle of deterioration in the deficit ratios was reached in the second quarter of 2004 (see

Graph II.2.7), a view which is consistent with the available information on real GDP, as well as with government debt data (see Graph II.2.9).

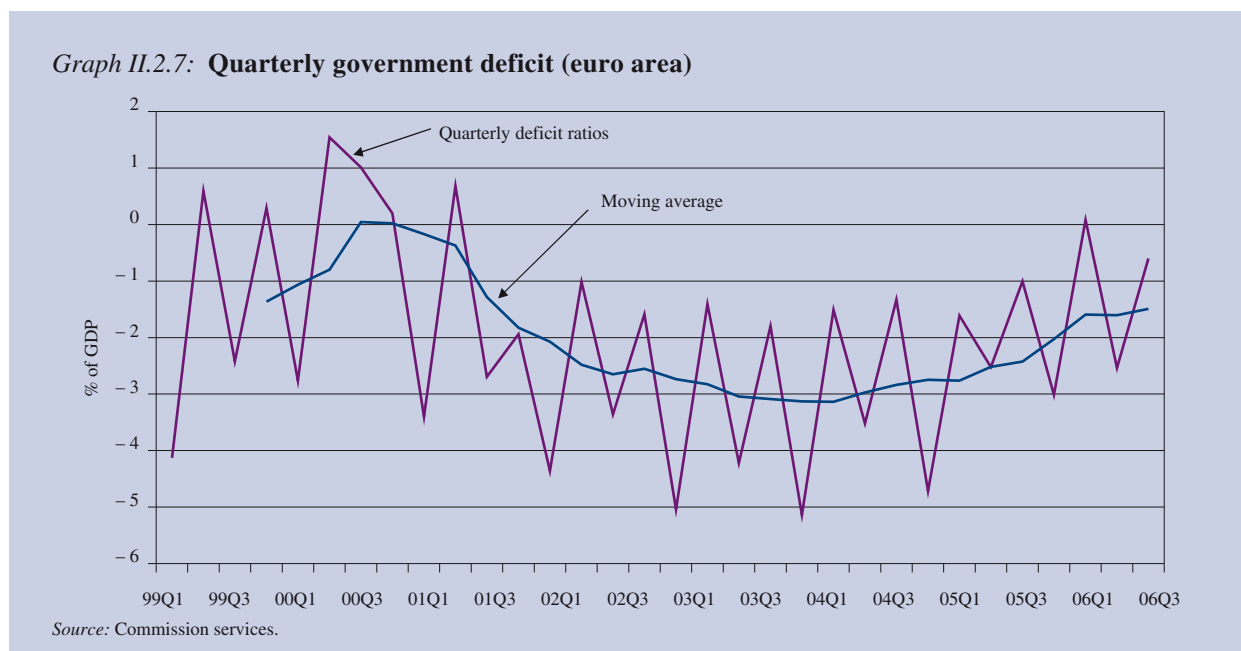


Table II.2.3

Availability of quarterly government accounts

	Revenue, expenditure and deficit	Gross debt		Revenue, expenditure and deficit	Gross debt
BE	y	y	HU	x (*)	y
BG	y	y	MT	y	y
CZ	y	y	NL	y	y
DK	y	y	AT	y	y
DE	x (**)	y	PL	y	y
EE	y	y	PT	y	y
IE	y	y	RO	x	y
EL	x (*)	y	SI	y	y
ES	y	y	SK	y	y
FR	x (**)	y	FI	y	y
IT	y	y	SE	y	y
CY	y	y	UK	y	y
LV	y	y	Euro area	y (***)	y
LT	y	y			
LU	x (*)	y	EU-27	y (***)	y

Legend and notes:

y = data available.

x = data not yet available, not complete or not released timely.

(\*) A few components of the revenue and expenditure account are available, but the quarterly deficit/surplus figures have not been released timely.

(\*\*) A few components of the revenue and expenditure account are available, but the quarterly deficit/surplus figures are not released yet. The quarterly deficit/surplus figures are released when the annual figures are published.

(\*\*\*) Data for the EU and the euro area are an aggregation of national data, including of Member States that do not publish their own figures.

Source: Commission services.

During the 10 quarters up to the end 2006, quarterly data have indicated improvements in budgetary situation. This improvement was due to both dynamic revenue and a deceleration of expenditure (see Graph II.2.8). However, a significant acceleration in expenditure is reported for the second half of 2006. It remains to be seen whether this dynamism of expenditure in the latest quarters of 2006 puts progress in fiscal consolidation at risk.

Another difficulty in the interpretation of quarterly data is related to the reliability of statistics. It is useful to distinguish reliability from volatility. Volatility refers to the rises and falls of a given indicator from one period to the next.

As discussed above, in the case of government accounts, the volatility of series is mainly related to the fact that quarterly government accounts are not yet seasonally adjusted. Reliability refers to the revision in the statistical series between successive data transmissions. Quarterly data, not only data on government accounts but also many other macroeconomic indicators, are less reliable than annual accounts. This means that the first data transmissions are less precise and are subject to wider revisions than annual figures. The revisions in quarterly data are related to the technical difficulty in compiling government accounts on the basis of limited information and in a relatively short period of time.

The revisions in the quarterly deficit ratios for the euro area are illustrated in Graph II.2.10. The graph shows three series. The blue dots depict the first transmission of data, that is, how each specific quarter was measured when data were published for the first time <sup>(1)</sup>. The yellow diamonds show how the quarterly deficit ratios were revised at the moment the annual figures were made public; that is at the time quarterly accounts were calibrated to be consistent with annual data. The solid line shows the latest available series, that is taking into account all successive data revisions.

The comparison between the dark dots and the solid line indicates that quarterly figures have been subject to large revisions. However, the quality of quarterly data should not be assessed by comparing the first and the latest transmission. A more appropriate comparison is between the blue dots and the yellow diamonds, that is, the revision that took place by the time of publication of annual data and the calibration of quarterly and annual series. Indeed the revisions between the yellow diamonds and the solid line are the result of revisions in annual data which imply

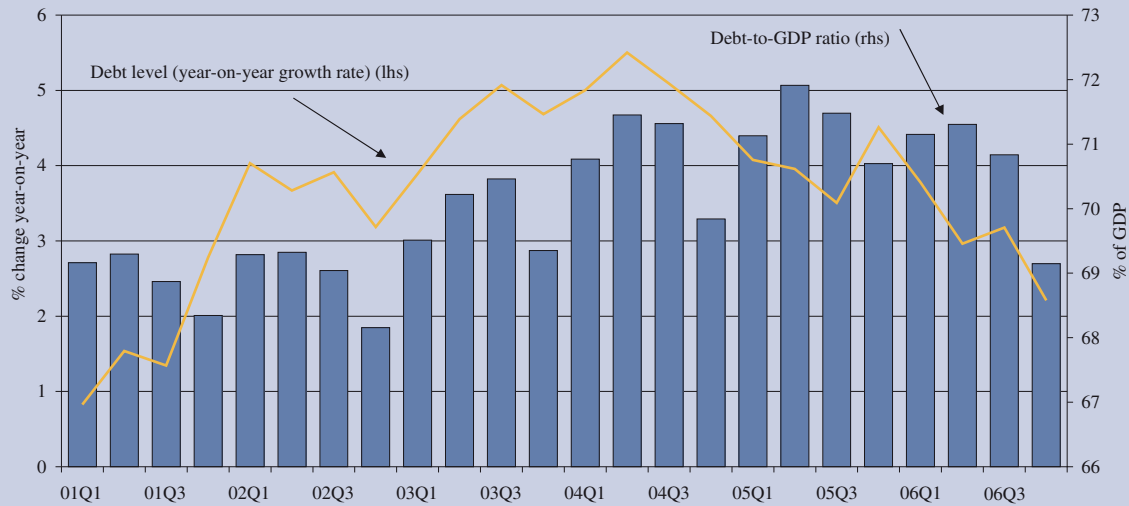
<sup>(1)</sup> Usually, the first transmission takes place within three months after the end of the respective quarter. Thus data for the fourth quarter of 2002, the first period in Graph II.2.10, were compiled (though data were not made public at the time) by end March 2003.

Graph II.2.8: Government expenditure and revenue (euro area) (% of GDP)



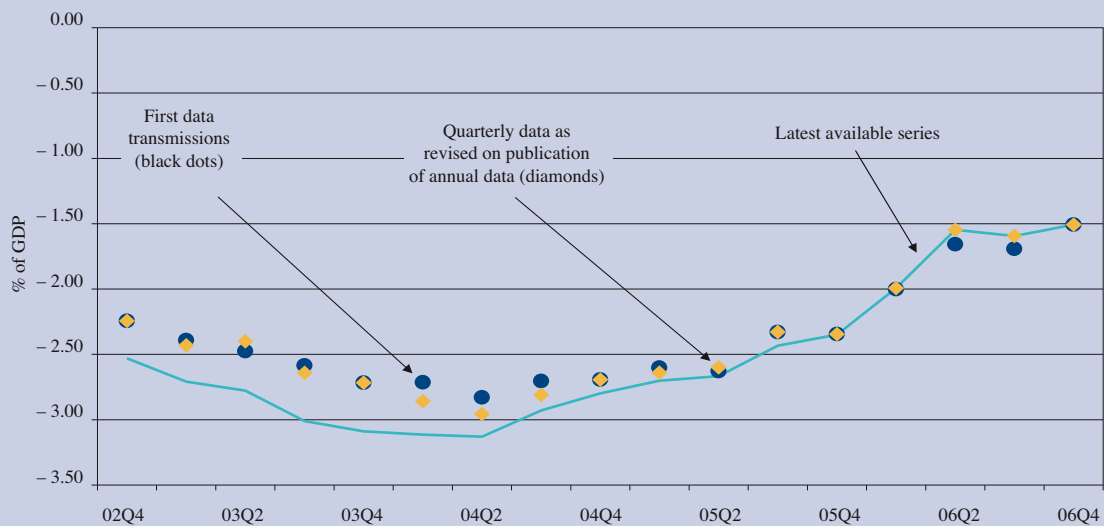
NB: Data exclude the proceeds of the allocation of UMTS licences in 2000.  
Source: Commission services.

Graph II.2.9: Quarterly government debt (euro area)



Source: Commission services.

Graph II.2.10: Revisions in quarterly government deficit figures (euro area)



NB: Because of missing observations, this graph does not include data of Ireland, Greece, Portugal and Slovenia  
Source: Commission services.

revisions in quarterly data to ensure consistency in series <sup>(1)</sup>. Therefore, while the quarterly figures may devi-

ate quite considerably from final data, they are useful to predict the first transmission of annual accounts.

<sup>(1)</sup> The difference between the yellow diamonds and the solid line in Graph II.2.10 is mainly due to revisions in the annual data of Italy for 2002, 2003 and 2004. On the revisions of annual data see Gordo and Nogueira Martins (2007).

### 2.4.3. Conclusions

Although the formal implementation of fiscal surveillance in the EU is, and should remain, based on annual

data, the availability of high-quality quarterly figure is a significant contribution to fiscal analysis. In particular, infra-annual data can give early signals on fiscal policy development, thus allowing analysts to better understand the underlying developments, and policy-

makers to better calibrate the implementation of their budgets.

However, differences in the volatility and reliability of annual and quarterly data mean that the interpretation of quarterly figures must be very careful.



# 3. Advances in the assessment of the long-term sustainability of public finances

## 3.1. Introduction

The comprehensive assessment by the Commission services of the long-term sustainability of public finance based on common budgetary projections, as laid out in the Sustainability Report, is the basis for the annual examination of the stability and convergence programmes (SCPs) <sup>(1)</sup>.

In 2006, the Ecofin Council has given a mandate to the Economic Policy Committee (EPC) to update and to further deepen its common exercise of age-related expenditure projections by the autumn of 2009, in time for the assessment of the SCPs to be delivered during that year, on the basis of a new population projection to be provided by Eurostat <sup>(2)</sup>. The Ecofin Council also considered that a new Sustainability Report should be prepared by the Commission once the new common age-related expenditure projections become available in 2009.

The purpose of the new common projection exercise is twofold: (i) provide further insights into the economic and budgetary impact of ageing and (ii) update the long-

term projections for the assessment of the sustainability of public finances.

Given the substantial advances made during the previous exercise, the scope, basic approach and principles to underpin the new common projections exercise should remain essentially the same as set down in the two relevant reports by the EPC and the Commission <sup>(3)</sup>. Following the mandate received by the Ecofin Council in 2006, efforts will be mainly devoted to refinements and improvements of the methodological underpinnings in specific areas and to an extension of the country coverage.

## 3.2. Envisaged improvements of the long-term budgetary projections

Bulgaria and Romania, who joined the EU in January 2007, will participate for the first time in the projection exercise. As for the other Member States, the Commission and the working group on ageing of the EPC (AWG) should examine the full set of expenditure items also for these two countries, i.e. public spending on pensions, healthcare, long-term care, education and unemployment benefits.

In addition, and in line with the invitation of the Ecofin Council, the new exercise will also assess the feasibility of accounting for the expected impact of ageing populations on government tax revenues; especially revenues from taxes on pensions will be considered <sup>(4)</sup>.

<sup>(1)</sup> See European Commission (2006b).

<sup>(2)</sup> The Council invited:

- the EPC to deepen its analysis of the labour market implications of ageing populations, and on policy measures, including reforms aiming at the modernisation of social protection and welfare systems, which can contribute to extending working lives and lead to a better control and management of public expenditures;
- the EPC to update and further deepen its common projection exercise of age-related expenditure projections by the autumn of 2009 on the basis of a new population projection to be provided by Eurostat; and
- the Commission, on the basis of the projections, to undertake a comprehensive assessment of the sustainability of Member States' public finances by autumn 2006, using the commonly agreed framework. It invites the EPC on the basis of that assessment to report back to the Council by the end of 2006.' See Council of the European Union (2006).

<sup>(3)</sup> See Economic Policy Committee and European Commission (2005) and Economic Policy Committee and European Commission (2006).

<sup>(4)</sup> The Ecofin Council invited the EPC and the Commission to explore further improvements in the methodology in dealing with the impact of ageing on government revenues over the long-term, including the feasibility and value-added of more detailed projections. Conclusions of the Council of the European Union on the long-term sustainability of public finances in the EU, 14615/06, 30 October 2006.

The new projections should cover the period up to at least 2060, from currently 2050. As regards the methodology, Eurostat's population projection will form the basis of the exercise. All other layers of the projection such as labour market, productivity and government spending will be built upon the demographic scenario.

The commonly agreed underlying economic and employment assumptions should be used for all expenditure projections in the new exercise and, if agreed to do so, revenue projections.

The basic approach for projecting pensions, healthcare, long-term care, education and unemployment should be largely unchanged from the previous exercise. In particular, the models of the national authorities will again be used to project pension expenditures whereas the common methodology and models already developed for the previous projection exercise will be used for other expenditure items.

However, further efforts are envisaged to improve the quality of data used. Also, the feasibility and usefulness of upgrading the projections for public spending on healthcare and long-term care in order to better take account of non-demographic drivers such as technology and how to address the issue of inadequate provisions in the face of growing needs will be addressed.

### **3.2.1. Common demographic and macroeconomic assumptions**

The new round of projections will continue to rely on commonly agreed demographic and macroeconomic assumptions for each Member State. They will be used for all expenditure items covered by the projection exercise and possibly for revenues, in case an agreement is reached to make revenue projections endogenous. Reliance on commonly agreed assumptions ensures that Member States take 'ownership' of the results and safeguards consistency of the whole exercise. Commonly agreed assumptions will cover population, labour market developments (labour force, employment and unemployment), and productivity.

#### *Population projections*

Considerable progress was made in the previous projection exercise as regards the demographic assumptions. In particular, considerable resources were invested in gaining a better understanding of main forces driving demographic change. Progress was also made in the design of sensitivity tests, especially the execution of a 'high life

expectancy' scenario based on changes in age-specific mortality rates.

For the new exercise, the new population projection EuroPOP 2007 will be used as a basis for the age-related expenditure projections. Eurostat has already started working on these projections with the appropriate involvement of national statistical institutes, represented in the Eurostat working group on population projections. It is expected to deliver new population projections by March 2008.

In order to ensure that appropriate coordination takes place at national level between members of the EPC working group on ageing and members of the working group on population projections, Eurostat will keep the Secretariat of the EPC working group on ageing informed of planned meetings so that the members of the EPC working group on ageing can make the necessary arrangements in their home country. Also the relevant issues and outcomes of the population projection working group should be represented at the EPC working group on ageing meetings in order to ensure sufficient information and exchange of views.

#### *Labour market developments*

The labour force projection and notably the cohort approach allowing to model employment patterns by age group was one of the most significant advances of the recent projection exercise. It is suggested that the cohort component approach be replicated for the 2009 exercise, with some refinements. In particular, a closer look at the following issues is envisaged: (i) the disaggregating of the labour force projection between full-time and part-time workers; and (ii) the transformation of employment (both full-time and part-time) in hours worked to be used as input in the production function model to estimate the impact of ageing on GDP growth.

#### *Labour productivity*

As regards the assumptions on labour productivity (and on labour input and potential GDP growth) the starting point and reference values over the first three years of the projection (medium-term reference period) should continue to be those stemming from the calculations of the output gap using the commonly agreed method. This is necessary to guarantee consistency across the medium-term assessment of budgetary conditions and long-term fiscal sustainability. The revised production function approach developed in the EPC output gap working

group and the use of hours worked as labour input will be applied (the commonly agreed method for estimating potential output and the output gap is presented in Part VI of this report).

### **3.2.2. Projections of specific expenditure items**

#### *Pension projections*

As regards the coverage of the pension projection exercise the forthcoming update will be built on the experiences of the previous exercise. Projections should be made for pensions, contributions and asset accumulation. The definitions should be kept largely unchanged. Pension schemes should include those classified within the general government sector and the statutory private schemes that replace earlier public schemes, and for which a full coverage was achieved in the previous exercise. Moreover, an effort should be made to cover more broadly also occupational pensions based on agreements between social partners and managed by the private sector. In particular, it would be important to cover these schemes in countries where they play an important role in the total pension provision. Also, information regarding the contributions to occupational schemes would be important for checking the consistency between contributions and outlays and would be required if the EPC working group on ageing started modelling tax revenues.

As regards the common interest rate and the rate of return on pension fund investments, a further discussion is needed on the assumption against the background of the projected GDP growth rates <sup>(1)</sup>.

More generally, there is a need for a more in-depth understanding of pension systems and pension models, including possible risks stemming from large declines in the benefit ratio, i.e. average pension expenditure in relation to GDP per worker <sup>(2)</sup>. A workshop will be organised to improve the consistency between macroeconomic projections and their translation into pension expenditure projections.

It should be noted that several countries will have enacted pension reforms by the time the new common projections are completed in 2009. Separate estimates

of their budgetary impact will be necessary to follow up progress made in reforming pension schemes over the forthcoming rounds of assessment of stability and convergence programmes (SCPs). In order to ensure the comparability of the long-term projections used in the assessments and the transparency of the assessments of the Commission and the Council of the SCPs, new long-term projections should be submitted to a peer review in the EPC working group on ageing before being used in the calculations in the baseline sustainability indicators <sup>(3)</sup>.

#### *Healthcare and long-term care*

In the previous exercise, some doubt and confusion on the functions belonging to health and long-term care became apparent when gathering basis data. There is therefore a need to ensure that consistent data are used in the coming projection exercise. In particular with respect to the delimitation between healthcare and long-term care expenditure.

Regarding coverage and methodology, the previous round of projections was based on a pure demographic methodology. The age-related expenditure profiles in the base year have been matched with the demographic projections under simple cost assumptions. While this approach has the advantage of simplicity and reflects the pure demographic impact, it does not take into account that in practice demographic change has not been the major driver of increasing levels of healthcare expenditures in recent decades, but rather demand and supply factors have prevailed. Consideration will be given to whether it would be feasible and useful to analyse demand and supply factors in more detail.

#### *Education*

The first two exercises of education projections were based on a 'quasi-demographic' methodology. It included the impact of demographic trends as well as

<sup>(1)</sup> By using a common interest rate (3 % real) and country-specific (non-common) GDP growth rates, the discount rates used in the fiscal sustainability analysis are not the same across the Member States.

<sup>(2)</sup> Large projected decreases in relative pensions, the benefit ratio, may imply some risks concerning the 'social' sustainability of current pension arrangements, See further Chapter IV.2 in European Commission (2006b).

<sup>(3)</sup> According to the EPC opinion ECFIN/EPC(2006)REP/56232 final of 25 October 2006 on the Commission's report on the long-term sustainability of public finances in the EU (2006), '[...] new projections prepared by Member States in the event of a major pension reform can be taken into account for the purposes of the annual assessment of sustainability in the context of the examination of the stability and convergence programmes under certain conditions. These conditions are that it has been subject to a peer review and an ensuing opinion by the EPC working group on ageing and the EPC, so as to ensure comparability of the results in an EU perspective'. See also the EPC opinion ECFIN/EPC(2006) REP/58042 final of 15 January 2007 on the framework for taking into account new major pension reforms in the long-term sustainability assessment of stability and convergence programmes.

changes in participation rates in the relevant age groups. It needs to be considered whether and how the next round of projections should go beyond this approach and include other non-demographic factors so as to take into account the way public consumption adjusts to demographic changes.

#### *Unemployment benefits*

The projections for unemployment benefits will follow the same methodology as in the previous projection exercises. In broad terms, per capita unemployment insurance spending in a base year is multiplied by the projected number of unemployed persons in future years.

#### **3.2.3. Sensitivity of the projection results**

During the 2006 common projections exercise, a number of sensitivity tests were run. These sensitivity tests provide useful information on the robustness of the projections to possible changes in the key underlying assumptions. The results can be used as kinds of ‘elasticity’ parameters <sup>(1)</sup>.

However, in order to better compare the relative importance of different factors in terms of their impact on both the economic and budgetary consequences of ageing, the design of sensitivity tests could explore giving more consideration to ensure that shocks are of a similar size. For example, assuming linearity in the relevant models, one can use the estimated impact on pension spending of a 5 percentage point increase in the employment rate of older workers to get a rough indication of the impact of a future reform that would increase the overall employment rate by 1 % percentage point.

Moreover, when designing the sensitivity test to be conducted it would be important to consider what those tests intend to illustrate (general uncertainties, policy changes, impact of reforms, the rate of return on assets in pension schemes, demographic variants, income elasticity of healthcare expenditure, etc.).

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<sup>(1)</sup> Assuming linearity in the relevant models, one can use the estimated impact on pension spending of the increase of 5 percentage points in the employment rate of older workers to get a rough estimate of the impact of a future reform that is estimated to increase this rate by only 1 % percentage point.

### **3.3. Improving the assessment of public finance sustainability**

The Commission’s Sustainability Report included a comprehensive assessment of the sustainability of the public finances in the EU <sup>(2)</sup>. The Council considered that this multiannual assessment by the Commission, the Sustainability Report, should be the basis for the annual examination of the SCPs <sup>(3)</sup>.

The assessment of fiscal sustainability based on the budgetary information in the 2006/07 updated SCPs was the first update of the comprehensive assessment in the Sustainability Report. The assessment focused on the changes that had occurred since the completion of the Sustainability Report. This notably involves the most recent budgetary developments and in some cases policy measures taken by Member States with an assessment of the impact on the long-term budgetary trends.

Further refinements of the assessment are envisaged. In particular, the feasibility of long-term projections of government revenues is going to be discussed in 2007. Currently, government revenues are held constant as a share of GDP. This simplifying assumption has been questioned especially in the light of the fact that population ageing is expected to have a significant impact on some tax categories. For example, if pensions are taxed, the projected gross public pension expenditure on public pensions may be higher than pension expenditure net of income taxes. Moreover, if contributions to private pension schemes (for example occupational pensions) are tax deductible while pension disbursements are subject to taxation, pension tax revenues might increase as a share of GDP in the future. The main aspects are included in the Sustainability Report <sup>(4)</sup>.

Moreover, a projection of revenues from property income would be an improvement of the analysis. Under the assumption that there are no stock flow adjustments (SFA) and that the rate of return on pension fund investments is the same as on government bonds, the nominal return on pension fund investment is constant while their share of GDP would decrease <sup>(5)</sup>. One method to do this was included in the Commission’s Sustainability Report,

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<sup>(2)</sup> See European Commission (2006b).

<sup>(3)</sup> See the Council conclusions on the long-term sustainability of public finances in the EU, 14615/06, 30 October 2006.

<sup>(4)</sup> See Chapter IV.3 in European Commission (2006b).

<sup>(5)</sup> Assuming positive GDP growth.

in which it was assumed that the return on property income overall was the same for all countries (equal to that of German bonds and converging significantly over the medium term to 3 % real) <sup>(1)</sup>. However, the exact implementation of the projection methodology, notably regarding how to treat different revenue categories (such as fixed income, shares, and rents on subsoil assets) will be addressed.

Furthermore, there is a need to discuss in more detail how the projection results should be interpreted for the purposes of assessing the sustainability of public finances. For example, projected changes in relative pension (the benefit ratio) may entail risks concerning the ‘social’ sus-

tainability of current pension arrangements <sup>(2)</sup>. For health-care, the projections show quite different results depending on the assumptions. For long-term care, there is a large variation in the projected spending increases, depending largely on whether formal care systems are well developed or not. The projections also show a growing gap between those who may need formal care services and those who will receive formal care on the basis of current policies, which could have public finance implications. For education, the possible savings due to demographic factors might not be realised in view of possible policy goals of raising quality in education or expanding educational attainment.

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<sup>(1)</sup> See Chapter IV.3.3 in European Commission (2006b).

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<sup>(2)</sup> See Chapter IV.2 in European Commission (2006b).

## 4. Systemic pension reforms in the revised Stability and Growth Pact

### 4.1. Introduction

Many EU Member States have reformed or will reform their pension systems to improve the sustainability of their public finances. There are several options for reform, ranging from small parametric changes to more radical reforms, implying for instance the introduction of mandatory, fully funded pension schemes <sup>(1)</sup>. Reforms can take place in one go, or be spread over the years with a series of incremental changes. The favourable impact on fiscal sustainability of pension reforms may take place directly, by curbing entitlements, or indirectly by increasing participation in labour market and potential output. However, some of these pension reforms may also entail entry costs as reforms may need time to pay in or simply because acceptability of reforms must be at the price of lower taxes or higher expenditure addressed to specific categories of population.

Reform costs may be direct and particularly large in the case of pension reforms introducing a multi-pillar system that includes a mandatory, fully funded pillar (to simplify, these reforms are denominated in this section as 'systemic' pension reforms) <sup>(2)</sup>. When a government creates a new funded defined-contributions pension scheme and shifts to this new scheme a share of social contributions that were previously collected by social security, government revenues fall. The pensions that

will be paid by the new scheme will no longer be government expenditure. However, such a gain will not materialise before long. Therefore, a systemic pension reform that establishes a funded pension pillar improves the government balance in the longer term, at the cost of an increase in deficits in the short and medium term. This is because, according to the ESA 95 rules, funded defined-contributions pension schemes are classified in the financial sector and not in social security <sup>(3)</sup>. In other words, the reform consists, inter alia, in making implicit liabilities explicit. Table II.4.1 shows that the estimated cost of such pension reforms can be important in a number of EU Member States.

The Stability and Growth Pact (SGP), as reformed in 2005, contains specific provisions on how to take into account the implementation of pension reforms in its preventive and corrective arms. The aim of those legal provisions is avoiding that the SGP discourages structural reforms addressing longer-term sustainability issues <sup>(4)</sup>. The remainder of this chapter describes and clarifies how to implement those provisions in the excessive deficit procedure. The role of pension reforms in the preventive arm is assessed in Box II.4.1.

<sup>(1)</sup> For a survey of pension reforms in OECD countries, see Whiteford and Whitehouse (2006).

<sup>(2)</sup> The terminology used here is the same as in Regulation (EC) No 1467/97 as amended by Regulation (EC) No 1056/2005. The negative impact on the general government deficit of such reforms 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, after the reform, be paid by the pension scheme.

<sup>(3)</sup> For the Eurostat decision clarifying the ESA95 rules on the sectoral classification of pension schemes, see Eurostat news release No 30/2004 and Chapter I.1.3, 'Classification of funded pension schemes and impact on government finance' of Eurostat's manual on government deficit and debt, available for download at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-BE-04-002/EN/KS-BE-04-002-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-BE-04-002/EN/KS-BE-04-002-EN.PDF)

There was a transitory period until 1 April 2007 for the implementation of such a decision (see Eurostat news release No 117/2004 of 23 September 2004).

<sup>(4)</sup> In the debate prior to the SGP reform of 2005, several authors argued that the Pact provided disincentives against pre-funding of ageing-related costs. In a two-period model of a government subject to a SGP-type rule, Buti et al. (2006) show that the complementary/substitutability of fiscal discipline and structural reforms depend on the degree of myopia of the government: strict budgetary constraints lead to more (less) reforms if the government is myopic (forward looking).

Table II.4.1

**Estimated budgetary impact of systemic pension reforms (in % of GDP)**

	2002	2003	2004	2005	2006	2007	2008
DK	1.0	1.1	1.0	0.9	1.0	1.0	1.0
EE	0.3	0.6	0.6	0.7	0.7	0.7	0.8
LV	0.3	0.3	0.3	0.3	0.4	0.7	1.3
LT	—	—	0.3	0.5	0.7	0.7	0.8
HU	0.7	0.9	1.2	1.3	1.5	1.7	1.6
PL	1.8	1.6	1.8	1.9	2.0	2.0	2.1
SK	—	—	—	0.6	1.2	1.2	1.2
SE	0.9	0.9	1.0	1.0	1.1	1.1	1.1

Source: Commission services.

## 4.2. Pension reforms in the excessive deficit procedure

Under the provisions of the revised SGP other relevant factors can be taken into account in the various steps of the excessive deficit procedure. In view of their impact on public finances, where costs may be frontloaded and benefits spread out over time, some pension reforms qualify as other relevant factors in the excessive deficit procedure. Such reforms can be taken into account, under well-specified conditions, when deciding on the existence of an excessive deficit. They can also be considered when setting the deadline for the correction of an excessive deficit. The reformed SGP also foresees that systemic pension reforms can be taken into account when abrogating the excessive deficit procedure.

### 4.2.1. Pension reforms as an ‘other relevant factor’

Based on the provisions of Article 2(3) and 2(6) of Council Regulation (EC) No 1467/97 all pension reforms (not only systemic pension reforms) can be taken into account in the excessive deficit procedure as one of the other relevant factors. The implementation of such reforms can therefore be considered as a positive factor when deciding on the existence of an excessive deficit if, and only if, the deficit remains close to 3 % of GDP and is only temporarily above that reference value. The implementation of pension reforms can also be considered when setting the deadline for the correction of an excessive deficit. Other relevant factors are however not given any specific consideration when deciding whether a Member State can benefit from a repetition of steps in the procedure: this is primarily based on an assessment of effective action. Moreover, the other relevant factors are not taken into account when considering whether the decision on the existence of an excessive deficit should be abrogated.

However, given the importance of systemic pension reforms for the sustainability of public finances and the potentially large and protracted costs for the government deficit of those reforms, the revised Pact makes an exception to this principle for systemic pension reforms. The revised SGP states that the direct budgetary costs, i.e. the increase in government deficits implied by the implementation of systemic pension reforms, should be taken into account in all steps of the excessive deficit procedure, including when deciding on abrogation. The next section elaborates further on this <sup>(1)</sup>.

### 4.2.2. The ‘degressive scale’ when abrogating a decision on the existence of an excessive deficit

The Treaty and the Pact do not precisely specify the conditions for abrogation of decisions on the existence of an excessive deficit. Article 104(12) of the Treaty states that: ‘The Council shall abrogate some or all of its decisions referred to in paragraphs 6 to 9 and 11’ ... (i.e. the decisions establishing that an excessive deficit exists, the recommendation and notices for its correction, the decision whether the recommendations are being put into practice and the decision to apply sanctions) ... ‘to the extent that the excessive deficit in the Member State concerned has, in the view of the Council, been corrected.’ Logically, the Council should abrogate a decision on the decision of an excessive deficit when the conditions for initiating an excessive deficit procedure no longer exist. Leaving aside the debt criterion, this means that the deficit ratio should have fallen durably to below 3 % of GDP or, in case it still

<sup>(1)</sup> Systemic pension reforms can also be taken into account when deciding on a repetition of steps in the EDP. This means that if a Member State’s failure to stick to the adjustment path required by the Council reflects higher-than-planned costs of a systemic pension reform, a repetition of the respective step could be considered.

exceeds it, the ratio has declined substantially and continuously and comes close to that reference value.

This is clarified in Article 2(7) of Council Regulation (EC) No 1467/97: 'In the case of Member States where the deficit exceeds the reference value, while remaining close to it, and where this excess reflects the implementation of a pension reform introducing a multi-pillar system that includes a mandatory, fully funded pillar, the Commission and the Council shall consider the cost of the reform to the publicly managed pillar when assessing developments in EDP deficit figures. For that purpose, consideration shall be given to the net cost of the reform on a linear degressive basis for a transitory period of five years (...). The same article stresses that '(...) This net cost shall be taken into account also for the decision of the Council under Article 104 (12) of the Treaty on the abrogation (...), if the deficit has declined substantially and continuously and has reached a level that comes close to the reference value'. By repeating and elaborating on a provision already contained on the Treaty, Article 2(7) of Regulation (EC) No 1467/97 should be understood as reinforcing the case for early abrogation of decisions on the existence of an excessive deficit.

The code of conduct clarifies what is the cost of reform to be taken into account and how such a cost should be considered: 'The net cost of the reform is measured as its direct impact on the general government deficit. (...) Consideration to the net cost of the reform will be given for the initial five years after a Member State has introduced a fully funded system, or five years after 2004 for Member States that have already introduced such a system. Furthermore, it will also be regressive, i.e. during a period of five years, consideration will be given to 100, 80, 60, 40 and 20 % of the net cost of the reform to the publicly managed pillar'. Therefore, the following issues are crucial to apply the SGP provisions on systemic pension reforms, in particular when deciding whether an excessive deficit should be abrogated.

- **Systemic pension reforms:** the SGP provisions on pension reforms apply only in case of reforms which consist in the establishment of multi-pillar system that includes a mandatory, fully funded pillar. Parametric pension reforms that change social contributions, retirement age, pension award formulae, etc. are not specifically relevant in the excessive deficit procedure.
- **Direct costs:** a systemic pension reform does not necessarily have direct budgetary costs. For example, there may be no direct budgetary cost when the establishment of a new pension scheme leads to an increase in the overall level of social contributions. The code of conduct clarifies that the costs to be considered are those that 'stem from the fact that revenue, which used to be recorded as government revenue, is diverted to a (...) sector other than general government'. Moreover, indirect budgetary costs, such as reduction in taxes or increases in spending that may be necessary to make a reform that is socially painful acceptable, are not taken into account either.
- **First year of the reform:** the specific provision of the Pact on systemic pension reforms applies for a limited period of time ('on a linear degressive basis for a transitory period of five years'), while those costs may extend over a much longer period. Therefore, it is important to identify what is the initial year of the reform. Such an initial year should be defined in relation to the appearance of direct budgetary costs. It does not necessarily correspond to the year the reform was formally adopted by national parliaments. It should be noted that pension reforms may lead to a progressive increase in costs. In particular it may happen that the direct costs are very small during the first years of the reform and increase quickly afterwards<sup>(1)</sup>. This is relevant when reforms are adopted in stages, or when a single reform progressively covers more and more categories of population. In these cases, the degressive scale should be applied taking into account the marginal increase of reform costs (see second example in the following section).
- **Measuring the pension reform costs:** the cost of the reform is made up of three main elements: (i) the social contributions or other revenue collected by the new pension scheme which otherwise would be collected by social security; (ii) the interest expenditure that the government has to bear since the diversion of revenue to the new pension scheme leads to a higher deficit and an accumulation of debt, less (iii) the pensions paid by the new pension scheme which otherwise would be paid by the government. For the recently adopted reforms, (iii) is expected to be very

<sup>(1)</sup> See, the concrete examples in Table II.4.1 above, in particular the case of Latvia, Hungary and Slovakia.



**Box II.4.1: Pension reforms in the preventive arm of the Stability and Growth Pact**

The 2005 reform of the Stability and Growth Pact introduced the possibility for Member States to deviate from the agreed benchmark of a 0.5 %-of-GDP annual adjustment for Member States not yet at their medium-term objective (MTO), or from the MTO itself, where major structural reforms (including pension reforms) are implemented. Moreover, the MTO can be revised when structural reforms are adopted.

Article 5(1) of Council Regulation (EC) No 1466/97, as amended, stipulates the following: ‘(...) When defining the adjustment path to the medium-term budgetary objective for Member States that have not yet reached this objective and in allowing a temporary deviation from this objective for Member States that have already reached it,(...) the Council shall take into account the implementation of major structural reforms which have direct long-term cost-saving effects, including by raising potential growth, and therefore a verifiable impact on the long-term sustainability of public finances. Special attention shall be paid to pension reforms introducing a multipillar system that includes a mandatory, fully funded pillar (...)’. The same language appears in Article 9(1). Article 5 applies to Member States that have already adopted the euro as their national currency, while Article 9 applies to those that have not yet adopted the euro.

The following issues are relevant for allowing deviations from the MTO, or from the adjustment path towards it.

- Only major reforms that have a verifiable positive, clear and certain impact on the long-term sustainability of public finances should allow deviations from the MTOs or the adjustment path towards it. A detailed cost-benefit analysis of the reform needs to be provided in the stability and convergence programmes submitted by the Member States concerned. It is up to the Member State to provide evidence of the impact of a given major structural reform.
- The code of conduct clarifies that ‘only adopted reforms should be considered’ in this context. No deviation from the adjustment path towards the MTO should be allowed for vaguely planned or announced reforms. However, adopted reforms do not mean that the reform must have been formally voted by national parliaments. A reform decided by the government, for which the crucial features are known could be considered even if it still needs to be formally adopted.
- The reformed SGP does not include any specific provision on the magnitude of deviations from the adjustment path to the MTO or from the MTO itself. However, two elements impose *de facto* limits to the size and duration of deviations. First, a safety margin needs to be guaranteed to ensure the respect of the 3 % of GDP reference value. This implies that no deviation should be allowed for countries which are not yet at their minimum benchmark. Second, Member States are expected to reach the MTO within the period covered by their stability or convergence programme.

Moreover, according to Article 2a of the same regulation, ‘the medium-term budgetary objective can be revised when a major structural reform is implemented’. Since systemic pension reforms improve the long-term sustainability of public finances, they will allow somewhat less ambitious MTOs. Therefore, the Pact not only allows Member States to deviate from their MTO, but recommends Member States to adapt their MTO to their post-reform sustainability situation. This assumes that the situation of each country in relation to their implicit liabilities and long-term sustainability is taken into account in defining the medium-term objective. This will be the case as soon as criteria and modalities for doing so are appropriately established and agreed by the Council.

small. The cost of the reform can be directly estimated by the difference between the government deficit as compiled according to ESA95 rules and an alternative government deficit compiled as if the new pension scheme were classified in the government sector.

- **Not a statistical issue:** the SGP provisions on systemic pension reform leads to consider a government deficit temporarily adjusted for the costs of the pension reform (on degressive basis). This is an economic, not a statistical issue, in the sense that the statistical authorities will not publish alternative deficits, or that

the new funded pension schemes will progressively be classified in a sector other than government. The government deficit adjusted for the pension reform costs will be taken into account during the economic analysis and does not imply the creation of new balancing items in the government accounts.

- **Closeness to 3 % of GDP:** the SGP provisions on systemic pension reforms are relevant only when the overall deficit (i.e. including the pension reform burden) is close to 3 % of GDP. Therefore, the degressive scale is not applicable when the overall deficit

is significantly above 3 % of GDP, even if the excess over the reference value is the result of the pension reform. The concept of closeness has not been explicitly defined and will have to be assessed by the Commission and the Council in the presence of concrete situations. However, there are grounds to presume that the Council and the Commission will be rather strict in that assessment.

- **Deficit declining substantially and continuously:** the provisions on systemic pension reforms, in particular the abrogation of decisions on the existence of excessive deficits, are applicable only 'if the deficit has declined substantially and continuously'. The Treaty and the Pact do not elaborate on the meaning of a substantial and continuous decline in the deficit. Therefore, the interpretation of this provision will have to be

made on a case-by-case basis. A key consideration seems to be the existence of a credible trend of deficit reduction (towards below 3 % of GDP) that would continue in the years following the decision.

- **Sustainable correction of the excessive deficit:** the abrogation of a decision on the existence of an excessive deficit is primarily based on actual data, rather than forecasts. However, given the SGP reform which has strengthened the relevance of budgetary consolidation in a sustainable manner, it is also important to look at planned developments. Although this is valid in general, it is all the more important when the provisions on systemic pension reforms are being considered, since the costs to be taken into account by the Council and the Commission will fade out over time.

Table II.4.2

**Numerical example on the implementation of the Pact provision on systemic pension reforms, when considering an abrogation of the procedure (Case 1)**

% of GDP, except (4)	2004	2005	2006	2007	2008	2009	2010	2011
(1) Government deficit	3.8	4.4	4.2	3.2	3.1	2.5	2.4	2.4
(2) Alternative deficit, calculated as if the new pension scheme was classified in the government sector (*)	3.8	3.4	3.2	2.2	2.1	1.5	1.4	1.4
(3) Cost	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
(4) Degressive scale	—	100 %	80 %	60 %	40 %	20 %	—	—
(5) Cost to be considered	—	1.0	0.8	0.6	0.4	0.2	—	—
(6) Government deficit adjusted by the cost to be considered	3.8	3.4	3.4	2.6	2.7	2.3	2.4	2.4

(\*) This is the deficit concept reported by Member States which benefited from the transitory period granted by Eurostat until 1 April 2007.

Source: Commission services.

Table II.4.3

**Numerical example on the implementation of the Pact provision on systemic pension reforms, when considering an abrogation of the procedure (Case 2)**

% of GDP, except (4)	2004	2005	2006	2007	2008	2009	2010	2011
(1) Government deficit	3.8	4.4	4.2	3.8	3.6	3.3	2.4	2.4
(2) Alternative deficit, calculated as if the new pension scheme was classified in the government sector (*)	3.8	4.1	3.9	3.5	3.3	2.4	1.5	1.5
(3) Cost (total)	0.0	0.3	0.3	0.3	0.3	0.9	0.9	0.9
(3a) Cost (stage 1)	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
(3b) Cost (stage 2)	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
(4a) Degressive scale (stage 1)	—	100 %	80 %	60 %	40 %	20 %	—	—
(4b) Degressive scale (stage 2)	—	—	—	—	—	100 %	80 %	60 %
(5a) Cost to be considered (stage 1)	—	0.3	0.2	0.2	0.1	0.1	—	—
(5b) Cost to be considered (stage 2)	—	—	—	—	—	0.6	0.5	0.4
(5) Cost to be considered (total)	—	0.3	0.2	0.2	0.1	0.7	0.5	0.4
(6) Government deficit adjusted by the cost to be considered	3.8	4.1	4.0	3.6	3.5	2.6	1.9	2.0

(\*) This is the deficit concept reported by Member States which benefited from the transitory period granted by Eurostat until 1 April 2007.

Source: Commission services.

### 4.3. Numerical examples

A few numerical examples displayed in Tables II.4.2 and II.4.3 may be useful to illustrate the application of the above considerations. In each of the examples, line (1) shows the government deficit, compiled according to ESA 95 rules, that is including the pension reform costs. Line (2) shows the government deficit if the new pension scheme was classified in the general government sector. Such a deficit is not officially published by the statistical institutes; it appears in the table to help understand how the pension reform costs are calculated. The difference between (1) and (2) corresponds to the pension reform cost (3). The degressive linear scale, from 100 % to 20 % during the first five years of the reform is shown in line (4). Line (5 = (3)x(4)) shows the reform cost to be specifically considered by the Council and the Commission in the application of the excessive deficit procedure. Finally line (6 = (1)–(5)) shows the government deficit adjusted for the pension reform cost to be considered in application of the SGP provision on pensions. As discussed above, such a deficit would not be published by the statistical offices. Since the aim of the examples is illustrating the implementation of the Pact provision on systemic pension reforms, all cases assume that Member States were already in excessive deficit even before the pension reform.

In case 1 reported in Table II.4.2, there is a pension reform in 2005 which increases the deficit by 1.0 % of GDP per year. This cost is assumed to be constant over time. In 2005 and 2006, the overall deficit including the pension reform costs is well above 3 %. Therefore, the Member State should remain in a situation of excessive deficit. In 2007, the deficit (3.2 % of GDP) is relatively close to 3 % of GDP and has been declining for two years. In that year, the pension reform cost to be considered is 0.6 % of GDP (i.e. 60 % of the pension reform costs, since it is the third year of the reform). The government deficit adjusted for the reform cost and the degressive scale is below 3 % of GDP. Moreover, plans show that the conditions for abrogation would also be applicable in the following years. Therefore, an abrogation of the excessive deficit procedure could be considered in 2008 on the basis of 2007 data.

Case 2, in Table II.4.3, shows a situation with pension reform costs which are not constant. The pension

reform costs appear in 2005 and remain constant until 2008. In 2009, the pension reform costs jump significantly (from 0.3 % to 0.9 % of GDP) because either an increasing fraction of the population became affiliated to the new pension funded scheme or a second stage of the reform was adopted. The interesting case concerns 2009. In that year, the overall deficit could be judged close to 3 % of GDP, and be considered as sufficiently declining. The fifth year of the reform is 2009. Therefore, a simple application of the degressive scale would imply that only 20 % of the reform costs would be specifically taken into account. In that case, the government deficit adjusted for the total cost and by the degressive scale ( $3.3 - 0.9 \times 20 \% = 3.1$ ) would remain above 3 % and the decisions on the existence of excessive deficits could not be abrogated. However, given the increasing reform costs associated with two reform steps, the Council and the Commission could consider applying the degressive scale twice: first from 2005 to 2009 in relation to the initial reform costs, and a second time from 2009 to 2013 in relation to the second stage of costs. In this case, the costs to be considered in 2009 would be 0.7 % of GDP, which could allow abrogation if the deficit is considered sufficiently close to 3 %.

### 4.4. Conclusion

The reformed SGP contains specific provisions on how to take into account the implementation of pension reforms in its preventive and corrective arms. A relevant issue concerns the treatment of systemic pension reforms when considering the abrogation of an excessive deficit procedure. The implementation of such a provision was precisely codified. The Council and the Commission explicitly consider the costs of systemic pension reforms, but this is only the case when the overall deficit remains close to the reference value, the excess reflects direct costs of the reform and if the deficit has declined substantially and continuously. Moreover, the costs to be considered are taken into account for a limited number of years in a declining way. The SGP provisions on systemic pension reforms are the result of a delicate balance between avoiding discouragement of pension reforms and the imperative of the SGP ensuring fiscal discipline and remaining simple, based on observed variables and robust to moral hazard.

# 5. Strengthening budgetary procedures

## 5.1. Introduction

An extensive strand of literature has developed addressing the question of how to design fiscal frameworks that promote sound fiscal policy. Three different elements are generally distinguished: (i) procedural rules of the budgetary process, (ii) numerical fiscal rules that constrain the discretion of policymakers, and (iii) independent bodies or institutions that provide inputs and formulate recommendations in the area of fiscal policy.

While national fiscal rules and independent institutions have extensively been surveyed in the context of the EU budgetary surveillance framework less attention has been given to procedures related to the preparation, legislation and execution of the budget <sup>(1)</sup>. This section is a first step to close this gap. It reviews budgetary procedures in the EU with a view to take stock of the quality and effectiveness of current arrangements across 18 Member States. The analysis does not cover all EU Member States because it relies on the OECD/World Bank budget practices and procedures database, which collects the results of an extensive survey covering a wide range of features of national budgetary procedures. The structure and content of the database is described in Box II.5.1.

The review of budgetary procedures in the EU is carried out in three steps. The first step discusses the main features of budgetary procedures identified in the literature. The second step consists in building numerical indicators that capture the quality of national budgetary procedures for the individual features. The third and last step examines the link between the quality of budgetary procedures and other country-specific variables, e.g. measures of budgetary performance.

<sup>(1)</sup> See for instance European Commission (2006a) and Ayuso et al. (2006).

## 5.2. Basic features of budget procedures

The literature pinpoints a number of basic features of the budget process that may contribute to better budgetary outcomes and/or a greater efficiency of public spending. Blöndal (2003) summarises common trends in the budget reforms in OECD member countries and highlights some features that are necessary to effectively control public expenditure, inter alia medium-term budgetary frameworks, prudent economic assumptions, top-down budgeting techniques, focus on results and budget transparency. Moreover, a branch of literature following von Hagen (1992) and Alesina et al. (1996) finds empirical evidence that budgetary institutions play a role in explaining the budgetary performance of a country. They particularly focus on measures aimed at centralising the budget process, but also budget transparency and long-term planning <sup>(2)</sup>.

Reflecting the findings in the literature and based on the information provided in the OECD/World Bank database the focus in this section is on seven different dimensions of the budgetary processes:

- transparency,
- multiannual planning horizon,
- centralisation of the budget process,
- centralisation during execution,
- the use of top-down budgeting techniques,
- prudent economic assumptions and reserves,
- performance budgeting <sup>(3)</sup>.

<sup>(2)</sup> See also von Hagen and Poterba (1999) for an overview.

<sup>(3)</sup> Performance budgeting is an arrangement which aims at strengthening the link between funds provided for a programme and its output or outcome.

These seven dimensions cover all three stages of the budget process, notably planning, legislation and implementation, in different ways. Budget transparency, top-down budgeting techniques and performance budgeting cover all three stages. Multiannual planning horizon and prudent economic assumptions are mainly concerned with the planning stage, while the centralisation of the budgeting process covers the two first stages only. Centralisation during execution is concerned with the implementation stage.

For each of the seven dimensions or features the information provided in the OECD/World Bank database is used to construct numerical indices. The score of the index reflects the quality of the specific features of the budgetary process in the national context. Details regarding the construction of the indices are provided in

Box II.5.1. Before commenting on the data a word of caution is in order.

The OECD/World Bank database refers to the year 2003 only. Hence, recent developments are not reflected. An update of the database is planned for the year 2007. Nevertheless, the information is still useful to get a first idea of budgetary procedures across countries.

### 5.2.1. Budget transparency

A feature which according to the literature is particularly important for the quality of the budgetary process is transparency. It encompasses all elements ensuring that the government can be held accountable for its policies by the electorate. This can only be achieved if the general public has the possibility to assess (i) the accuracy

#### **Box II.5.1: Construction of indices based on information from the OECD/World Bank budget practices and procedures database**

The OECD/World Bank budget practices and procedures database <sup>(1)</sup>

During 2003 the OECD and the World Bank conducted a comprehensive survey on national budget procedures in 44 countries, both OECD members and others, including 18 EU Member States. The nine EU Member States not included are Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Poland and Romania. The survey was very extensive and detailed, and included close to 400 questions. The questions are divided into seven parts covering: general information, formulation, budget execution, accounting, control and monitoring systems, budget documentation and performance management, fiscal relations among levels of government, and special relationships/issues. The collected data are not time-varying, i.e. they describe the current budget procedures in the country at the time when data were collected. Part of the data are already applied by Filc and Scartascini (2004) and European Commission (2004). The OECD is now in the process of updating the 2003 survey, with an extensive revision of the questionnaire. The results will be made public during 2007.

Construction of indices on the quality of budget procedures

The information in the database on budget practices and procedures was categorised according to whether they could provide information on the seven dimensions for our analysis. Four to eight questions were selected for each dimension covering different aspects of each dimension <sup>(2)</sup>. To have a numerical representation, the answers to each of the selected questions were given a score between 0 (lowest) and 5 (highest). If there were more than two alternatives, intermediate values were used <sup>(3)</sup>. For each of the seven dimensions a numerical index was constructed by finding the average scores on all answers regarding this dimension for each country. In absence of an empirical or strong theoretical basis to choose a particular weighting of each question, all questions were given equal weight.

<sup>(1)</sup> <http://ocde.dyndns.info>

<sup>(2)</sup> All answers selected were discriminating, meaning that questions where all countries gave the same answer were excluded.

<sup>(3)</sup> When the answer included a written specification the scoring was done individually based on the specification. Missing data were filled by expertise at the European Commission, DG ECFIN in contact with national authorities when necessary.

of budget figures and (ii) the likely impact of planned policy measures. Some of the key elements for the transparency of the budget considered in the literature are <sup>(1)</sup>:

- the budget proposals and accounting reports must be released systematically and timely;
- the budget documentation should be as comprehensive as possible; also reporting extra-budgetary funds, the level of tax expenditure and all liabilities, including contingent liabilities in the form of loan guarantees and public-private partnership;
- the multi-year effects of new policy measures should be revealed in the basis for decision-making;
- all economic assumptions and the models used should be disclosed explicitly;
- the legislature must be able to play an active role in independently scrutinising the budget and hold the government accountable for the implementation of the policy. This requires clarity of roles and responsibilities, and that the legislature is given both enough time and resources to review the budget and accounting reports in detail;

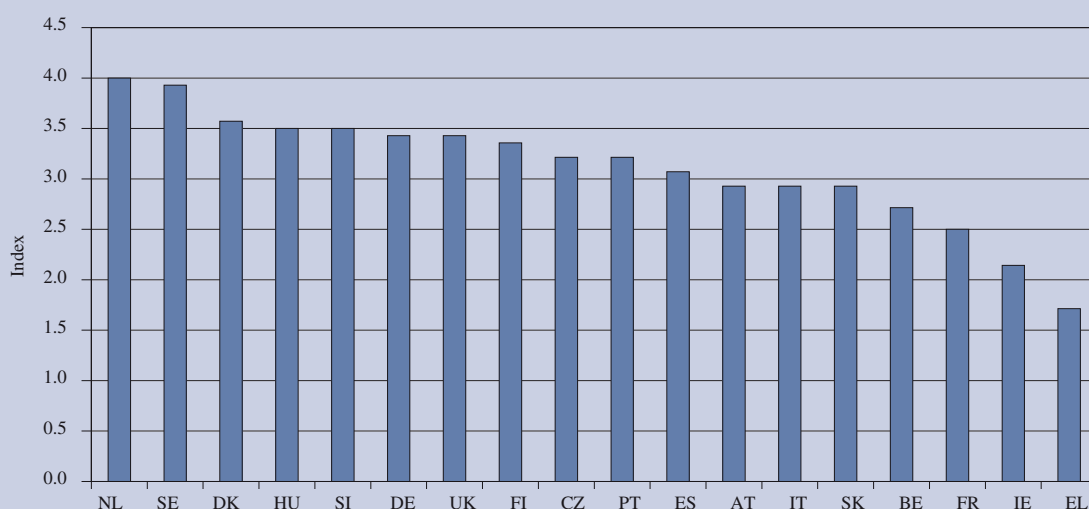
<sup>(1)</sup> See for instance OECD (2002), Alt and Lassen (2003), Blöndal (2003), IMF (2001).

- the media and non-governmental organisations should be allowed to act as a watchdog for the public.

The information in the OECD/World Bank database covers the majority of these elements. Our index includes timeliness of general government accounts, the disclosure of macroeconomic assumptions and the macroeconomic model used, the follow up on recommendations from national audit body, the time for the auditor and legislator to scrutinise the budget, the existence of multi-year cost estimates for new spending and the comprehensiveness of the budget information in the sense that also off-budget funds are reported.

Graph II.5.1 summarises the scores of our budget transparency-index. The countries with the highest scores are the Netherlands, Sweden and Denmark. These countries make the assumptions underpinning the budget publicly available, and present multiannual implications of new policy measures. In Netherlands the parliament is given a long time span to review the budget proposal, and off-budget funds are reported in the budget documentation. The lowest scores are recorded for Greece, Ireland and France. These three countries lacked a well-developed system for reporting multiannual effects of new policy measures and the economic model underpinning the budgetary projections was not available for scrutiny. Greece also reported that the economic assumptions underpinning the budget were not publicly available.

Graph II.5.1: Budget transparency index



Source: Commission services.

### 5.2.2. Multiannual planning horizon

A fully developed medium-term budgetary framework is found to be strengthening the quality of budget procedures. The benefits of a well-defined medium-term budgetary framework are relatively clear. Firstly, it provides an incentive for the government to commit to a predefined path for the main aggregates of government finances. Secondly, it is an instrument to present the multiannual budgetary effects of new policy measures. A comprehensive overview of the literature on medium-term budgetary frameworks is provided in Part III of this report.

The concept of a medium-term budgetary framework is very broad and covers several of the aforementioned basic features of a budgetary framework in general. For the purposes of the present exercise, our index of multiannual planning horizon focuses attention on one particular aspect: the multiannual orientation of the budget process.

The information used to construct the index of the multiannual planning horizon covers the existence of national medium-term budget targets, the legal basis for the medium-term budgetary framework (e.g. law, constitution), the identification of deviations between the medium-term target and the annual budget, the existence of multi-year expenditure estimates and macroeconomic forecasts for several years.

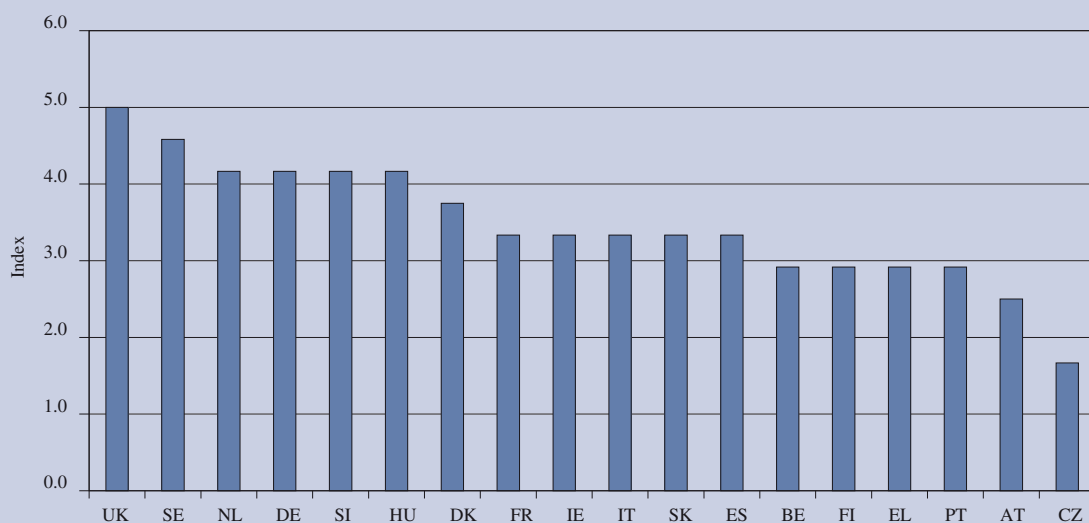
Graph II.5.2 summarises the scores of the index. The countries with highest scores are the United Kingdom and Sweden. Both countries have well-developed medium-term budgetary frameworks which ensure the multiannual perspective of the budget process. The lowest scores are recorded for the Czech Republic and Austria. Austria reported that there were no multiannual macroeconomic forecasts underpinning the multiannual budget plans, and that there was no systematic reporting on deviation in the annual budget from the medium-term fiscal policy objectives. As regards the Czech Republic, the budget documentation did not contain multi-year expenditure projections and there were shortcomings regarding the framework for multiannual planning.

### 5.2.3. Centralisation of the budget process

Another characteristic which has attracted a great deal of attention in the literature is the centralisation of the budget process<sup>(1)</sup>. The starting point is generally the so-called ‘common pool resource’ problem in public finances. Individual policymakers consider the full benefits from expanding projects in their policy areas or district, but do not take into account the whole cost of increased taxation or borrowing. A fragmented budget

<sup>(1)</sup> The main contributions are by von Hagen et al. (1992, 1999, 2001b, 2006), Alesina et al. (1996), Gleich (2003) and Yläoutinen (2004).

Graph II.5.2: Multiannual planning horizon index



Source: Commission services.

process involving autonomous decisions made by a large number of participants can thus lead to excessive spending and a deficit bias. One way to solve the common pool resource problem is to centralise the budget process by delegating budgetary power to the Prime Minister or the Finance Minister, and thereby better internalise the true costs of new policy measures. Another instrument to cope with the common pool resource problem during the legislative stage is to impose limits to the parliament to amend the draft budgets.

The information from the OECD/World Bank database used to construct the index for the 'centralisation of the budget process' essentially includes two elements: the power of the Finance Minister (or Prime Minister) and restrictions on the legislature to amend the budget. The index only covers the first two stages of the budget process: the preparation by government and legislation in parliament. The execution stage is treated separately (see below).

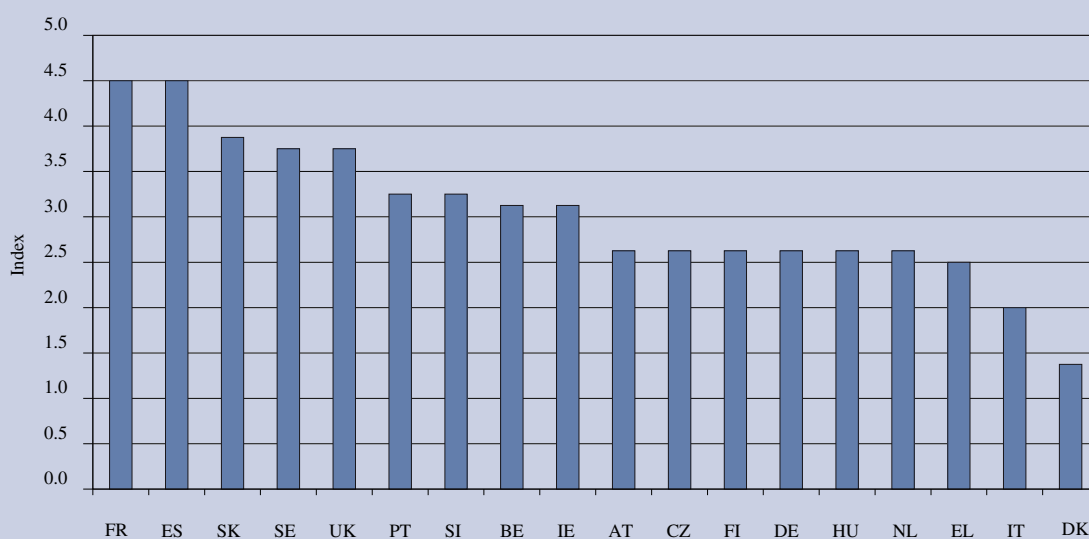
Graph II.5.3 summarises the scores of the index of the 'centralisation of the budget process'. The countries with highest scores are France, Spain and Slovakia. In both France and Spain there are restrictions on parliament amendments to the budget. Disagreement between the central budget authority and the ministries is solved by a

strong principal executive. The lowest scores are recorded for Denmark, Greece and Italy. In Denmark the parliament is reported to have a strong amendment power, while the disputes inside government were solved in a Ministerial Committee instead of delegating the power to the Finance Minister or Prime Minister.

A separate index was constructed to measure the degree of centralisation during the execution stage of the budget. The reason for this analytical distinction is that a strong centralisation of the execution stage could be more in conflict with other features of the budgetary procedures which requires greater flexibility in the execution stage, e.g. a well-functioning top-down budgeting approach or performance budgeting. The information used to build this index refers to the following elements: power of the central budget authority to withhold funds during implementation of the budget, existing restrictions on changes in expenditure outside the budget process, and the participation of the central budget authority in the evaluation of the budget implementation.

Graph II.5.4 summarises the scores of the 'centralisation during execution' index. The countries with highest scores are Belgium, the Czech Republic, Greece and France. In Greece the central budget authority can withhold funds during budget execution, and there are no

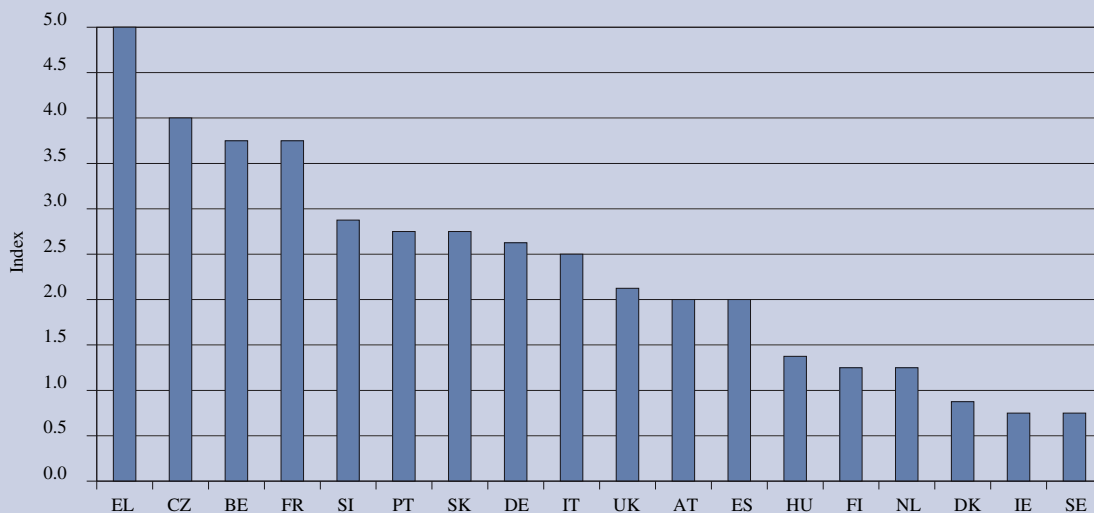
*Graph II.5.3: Centralisation of the budget process index*



Source: Commission services.



Graph II.5.4: Centralisation during execution index



Source: Commission services.

possibilities to change expenditure outside the budget process. The lowest scores are recorded for Denmark, Ireland and Sweden. These three countries reported that the central budget authorities had no authority to withhold funds during budget execution either for entitlements or other appropriations.

Earlier studies of centralisation of the budget process include a somewhat greater variety of dimensions as compared to the information available in the OECD/World Bank database. It can therefore be useful to check whether our indices show the same pattern as corresponding indices in the literature. To construct a reference index which includes the same countries as in our study we integrated data from Hallerberg et al (2006) on the EU-15 countries with the data of Gleich (2003) on new Member States <sup>(1)</sup>.

The correlation coefficient between a synthetic index of our two centralisation indices and the reference index covering all three stages of the budget process is found to be positive and reasonably high (0.46).

#### 5.2.4. Top-down budgeting techniques

Within the traditional bottom-up approach, the budget process starts with the line ministries submitting their

budget requests to the Ministry of Finance. These requests usually contain bids that are generally higher than what line ministers expect as the final outcome of the budget negotiation. At the same time there are no incentives for the line ministries to reveal possibilities for expenditure reductions in their programmes if they do not get assurances that the saving will be allocated back to the same policy area.

One way indicated in the literature to reduce the upward pressure on spending associated with bottom-up budgeting is to reverse the process <sup>(2)</sup>. The main principle of top-down budgeting is to start the budget planning process with a binding decision on the total amount of the budget, which is subsequently divided on different sub-sectors managed by line ministers. Similarly, in parliament top-down budgeting techniques imply that the voting process starts by a vote on hard ceilings for the total budget, and allocations on the budget are subsequently done within this hard ceiling <sup>(3)</sup>.

A key success factor of the top-down budgeting approach is that the detailed allocation of resources

<sup>(1)</sup> To ensure comparability information naturally sorted under other headings in our study were excluded, e.g. questions on fiscal rules, sequences of voting (top-down budgeting).

<sup>(2)</sup> Kim and Park (2006) and Blöndal (2003).

<sup>(3)</sup> Ferejohn and Krehbiel (1987) and von Hagen and Hallerberg (1997), however, argue that a change in voting order is not in itself sufficient to lower the size of the budget. They also show theoretically that a top-down voting order under some conditions might lead to higher total spending.

within sub-areas is left to the line ministers and agency managers. The idea is that by giving the line ministers/agency managers wide latitude to operate as they find best within their ceilings, the right incentives are provided to allocate funds more efficiently.

Unfortunately, the information in the OECD/World Bank database is not particularly suited to measure the concept of top-down budgeting. In particular, it would be useful to have more information on the sequencing of the decision-making process in the preparation stage, as well as on the degree with which the ceilings decided upon at different points of the process are really binding or are subject to frequent revisions. In the light of these restrictions, our index for the degree of top-down budgeting mainly includes information about the link between the medium-term framework and the annual budget process. We also exploit information about the sequence of the voting in parliament. Finally, there are some pieces of information that give an idea of the degree of flexibility of the line ministers/agency managers within their budget area. Overall, in spite of the limitations the available data should allow for a fairly good approximation of the concept of top-down budgeting.

Graph II.5.5 summarises the scores of the index measuring the degree of top-down budgeting. The countries

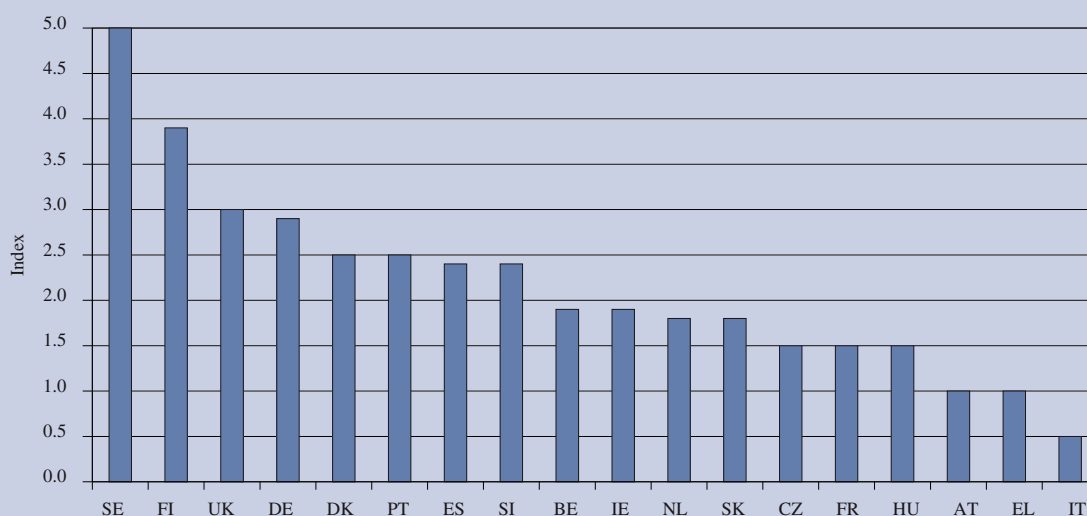
with highest scores are Sweden, Finland and the United Kingdom. In Sweden the link between the medium-term budgetary framework and the annual budget is strong, both concerning the process in government and in parliament, and the flexibility during the execution stage is high. The lowest scores are recorded for Austria, Greece and Italy. None of these countries reported arrangements for the parliament to establish aggregate expenditure ceilings before beginning debate on individual expenditure items. The links from the medium-term budgetary frameworks to the annual budgets seem to be weak and the flexibility given to line ministers during budget execution was reported to be small.

#### 5.2.5. Prudent economic assumptions and reserves

One of the most critical factors in the budget process is consistent and prudent macroeconomic assumptions. There is evidence in the literature that governments may have an incentive to build budgetary projections on over-optimistic projections so as to justify a higher level of spending and *ex post* blame bad luck for not achieving budgetary targets <sup>(1)</sup>.

(1) Milesi-Ferreti and Moriyama (2004) and Jonung and Larch (2006).

Graph II.5.5: Top-down budgeting index



Source: Commission services.

One way to assure that the assumptions are not biased is to let an independent institution make the forecasts. This was extensively discussed in European Commission (2006a). Making the assumptions more independent does, however, not fully remove the uncertainty. Optimistic forecasts are particularly problematic, since it is especially hard to downsize expenditure at a late stage in the budget process. The literature therefore suggests that a safety margin should be built in by making more ‘prudent economic assumption’, i.e. systematically downward adjustment of economic assumptions <sup>(1)</sup>. Another way to safeguard against unpleasant surprises is to incorporate contingent reserves in the budget which can be used for instance for unexpected expenditures. A key success factor in applying reserves is to have clear rules for their use to protect against the pressure for new policy measures.

The information used to construct our index of prudent economic assumptions and reserves covers the degree of prudence of the economic assumptions, the delegation of forecasting to independent institutions, the review of the macroeconomic assumptions by independent institu-

tions, the existence of budget reserves and the formal rules for the use of the reserves.

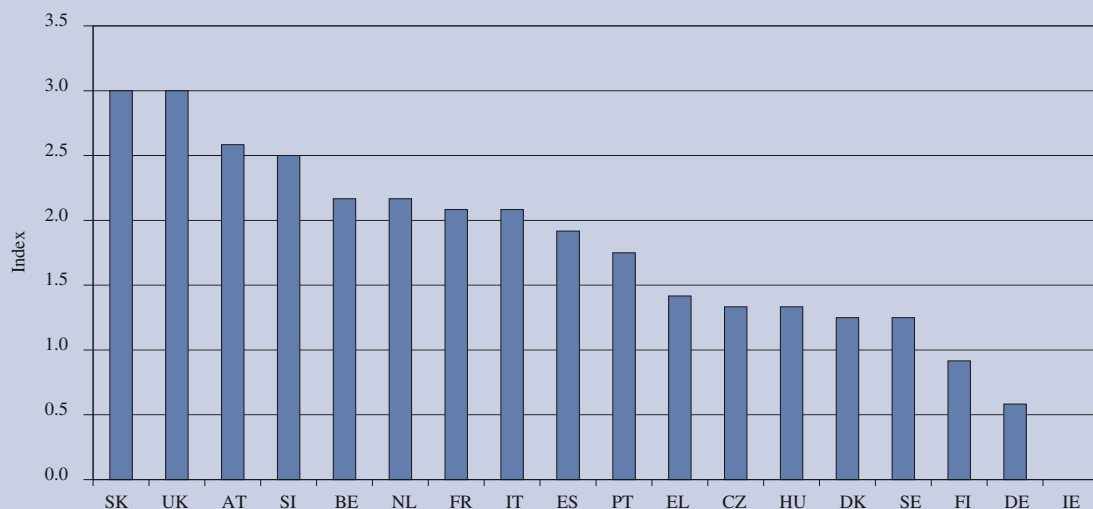
Graph II.5.6 summarises the scores of the ‘prudent economic assumptions and reserves’ index. The countries with highest scores are Slovakia, the United Kingdom and Austria. Slovakia used a margin of prudence for the forecasts in their medium-term budgetary framework. In Austria an independent body makes the forecasts used in the budget, while in United Kingdom the audit office has a special role in independently reviewing the economic assumptions. Those with the lowest scores are Finland, Germany and Ireland. Both Ireland and Germany reported to be using neither prudent economic assumptions nor budget reserves. Both Ireland and Finland reported to have no kind of independent review of the economic assumptions.

#### 5.2.6. Performance budgeting

In view of the impending increase in age-related spending the more efficient use of scarce public resources in Member States will be a key element in safeguarding a high level of public services while keeping public finances sustainable. The effectiveness and the efficiency of public expenditure has thus become an issue of growing importance in political debate. The literature emphasises that the traditional input-oriented budget approach has its short-

<sup>(1)</sup> Blöndal (2003).

Graph II.5.6: Prudent economic assumptions and reserves index



Source: Commission services.

comings as it only focuses on how the expenditures are allocated, but does not assess whether the resources were used efficiently <sup>(1)</sup>. Increased attention has therefore been given to methods of performance budgeting, which strengthen the link between the resources provided for a programme and its output or outcome <sup>(2)</sup>.

An extreme variant of performance budgeting consists in establishing an automatic link between output or outcome measures and the budget appropriation. Since outcome seldom can be precisely defined or quantified, the link is often made to output. Experience shows, however, that this variant sometimes can become a pitfall since the achievement of output targets can overshadow the real policy goals <sup>(3)</sup>.

In our analysis we follow a broader definition, including also elements referred to in the literature as ‘performance-informed budgeting’. The key characteristic of performance budgeting is to *ex ante* mark out an expected

performance in terms of outcome for each spending programme. Secondly, the assessment of agencies and managers is based on the degree to which they achieve pre-defined target. To give managers the possibility to find the best solutions, a certain loosening of input controls may be required. However, this can only be done if the managers face overall budget constraints. The last issues are in our study sorted under the top-down-budgeting dimension.

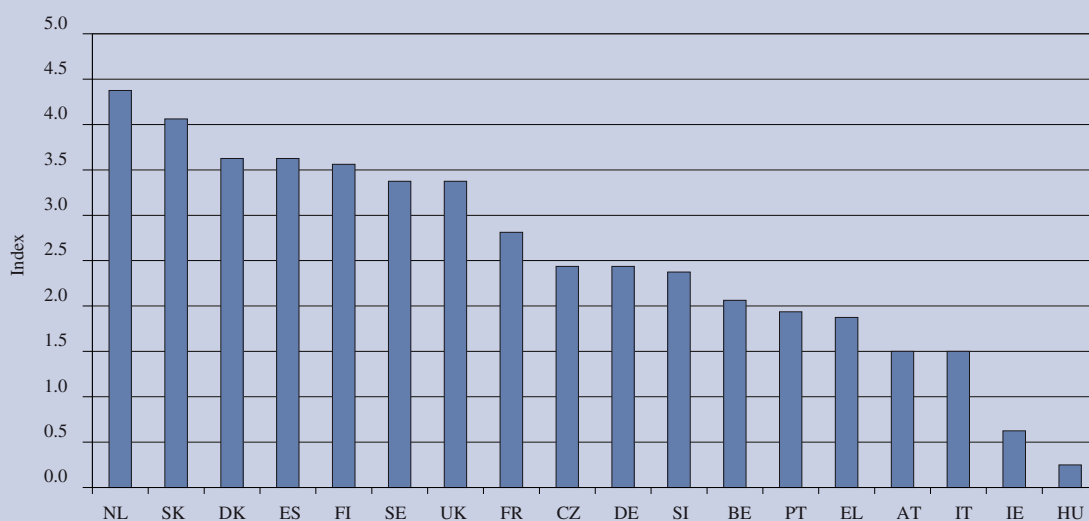
A related issue is the use of cost-benefit analyses. They ensure that the potential benefits (outcomes) and costs of new policy measures are compared *ex ante* and the expected most efficient composition of expenditure is disclosed. Due to lack of data this dimension is not assessed in our study.

The information used to construct our index of performance budgeting cover the following items: the regular presentation of non-financial performance data in the budget documentation, the responsibility for achieving the performance targets, the monitoring of the performance against targets and the use of performance indicators in determining budget allocations.

Graph II.5.7 summarises the scores of the index. The countries with highest scores are the Netherlands, Slovakia,

<sup>(1)</sup> See for instance Joumard et al. (2004), Robinson and Brumby (2005) and Currstine et al. (2007).  
<sup>(2)</sup> Output stands for the goods and services produced by the government such as number of health operations, schools etc., while outcome represents the policy result the policymakers want to achieve for instance improvements in health condition.  
<sup>(3)</sup> See Robinson and Brumby (2005).

Graph II.5.7: Performance budgeting index



Source: Commission services.

Denmark and Spain. The Netherlands has a well-developed system for reporting targets and actual performance in the budget. It also reported clear links between the achievement of target and allocation of funds. Currently the Dutch system is also being revised to improve the design of targets and thereby avoid possible perverse effects of a strict link between the outcome achieved and resources allocated. Those with the lowest scores are Ireland and Hungary. Both countries inter alia reported that performance data or targets were not systematically included in the budget documentation and the achievement of performance targets were not used to determine budget allocations.

### 5.2.7. Construction of overall indexes

From the indices covering individual features of the budgetary process three composite indices were constructed: an index summarising the overall degree of centralisation, an indicator of quality and an overall index of budgetary procedures <sup>(1)</sup>.

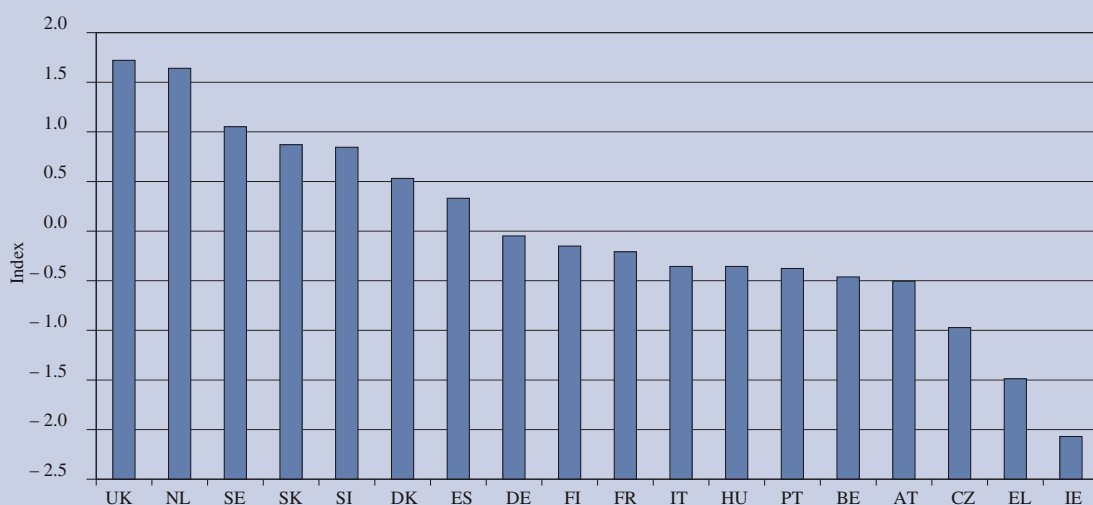
<sup>(1)</sup> The indices were constructed by finding the unweighted average of the individual indices for the dimensions included. All indices were standardised (over the sample the average is set to 0, and the standard deviation to 1.) By standardising the indices before the summation, we only focus on the mutual differences between the countries included in the study on each characteristic, and the index level cannot be compared to countries not included in the study.

The quality-index includes four different dimensions: (i) budget transparency, (ii) multiannual planning horizon, (iii) prudent economic assumptions and reserves and (iv) performance budgeting.

Graph II.5.8 presents the scores of the quality-index for all countries in our sample. The countries with highest scores are the United Kingdom, the Netherlands and Sweden. Those with the lowest scores are the Czech Republic, Greece and Ireland.

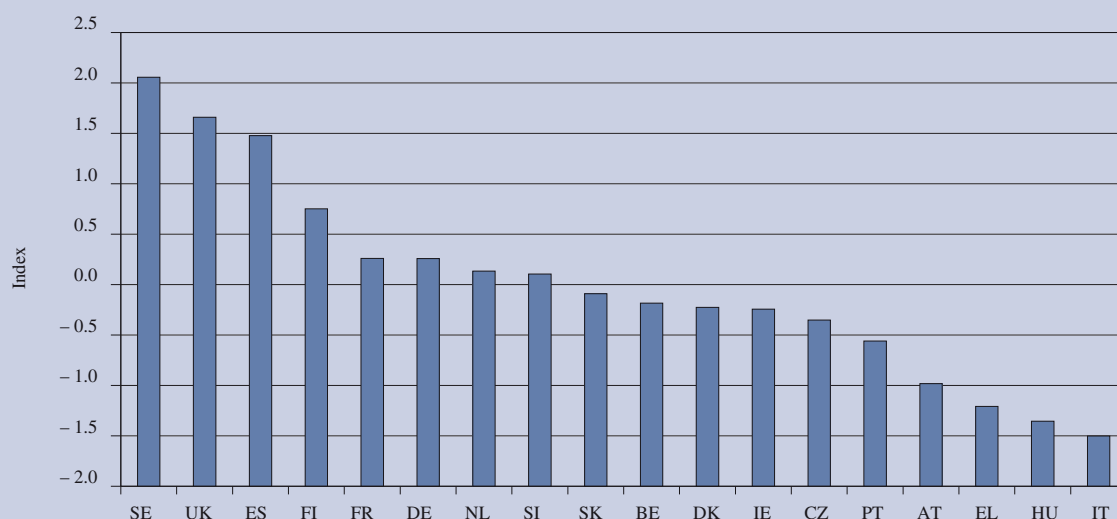
The index summarising the degree of centralisation encompasses the dimensions that aim at reducing the so-called ‘common pool’ resource problem. This includes (i) centralisation of the budget process and (ii) the use of top-down budgeting techniques. We also found it natural to include the use of numerical fiscal rules under this heading, since the literature highlights numerical fiscal rules as one of the main contributors to solve the common pool resource problem. Instead of building a new index on fiscal rules, we used the more comprehensive index established by Ayuso et al. (2006), which takes into account both the coverage and the characteristics of numerical fiscal rules. The index measuring the centralisation during budget execution was, however, not included in the overall index, since the findings in literature are more ambiguous when it comes to the desirability of detailed centralisation of this stage. The approaches of top-down budgeting and performance budgeting particularly call for greater flexibility in this stage of the budget process.

Graph II.5.8: Overall quality index



Source: Commission services.

Graph II.5.9: Overall centralisation index



Source: Commission services.

Graph II.5.9 summarises the scores of the overall index of centralisation. The countries with highest scores are Sweden, the United Kingdom and Spain. The lowest scores are recorded for Greece, Hungary and Italy.

The overall total index of budget procedures incorporates all the individual dimensions used for the other two overall indexes: Budget transparency, multiannual planning horizon, centralisation of the budget process, top-down budgeting, prudent economic assumption, performance budgeting and numerical fiscal rules. The scores of the index for the countries in our sample are presented in Graph II.5.10.

The United Kingdom, Sweden and the Netherlands are the countries with the highest scores, whereas Italy, Ireland and Greece end up at the lower end of the range.

Graph II. 5.11 presents the overall index of budget procedures together with the range from the highest value to the lowest value of sub-indices. Some interesting patterns emerge. Countries with a high score on the total index also tend to rank high on individual indices. The United Kingdom for instance scores above average on all indices included in the overall budget procedures index, and with a few exceptions this is also the case for Sweden, the Netherlands, Spain and Slovenia. Similarly, countries at the lower end of the ranking attain relatively

low values across most of the features captured by the overall index. This is the case for Austria, Hungary, Italy, Ireland and Greece. The picture is comparatively mixed in the middle section of the ranking. For most countries of that section, the overall index reflects a relatively wide dispersion on the individual components.

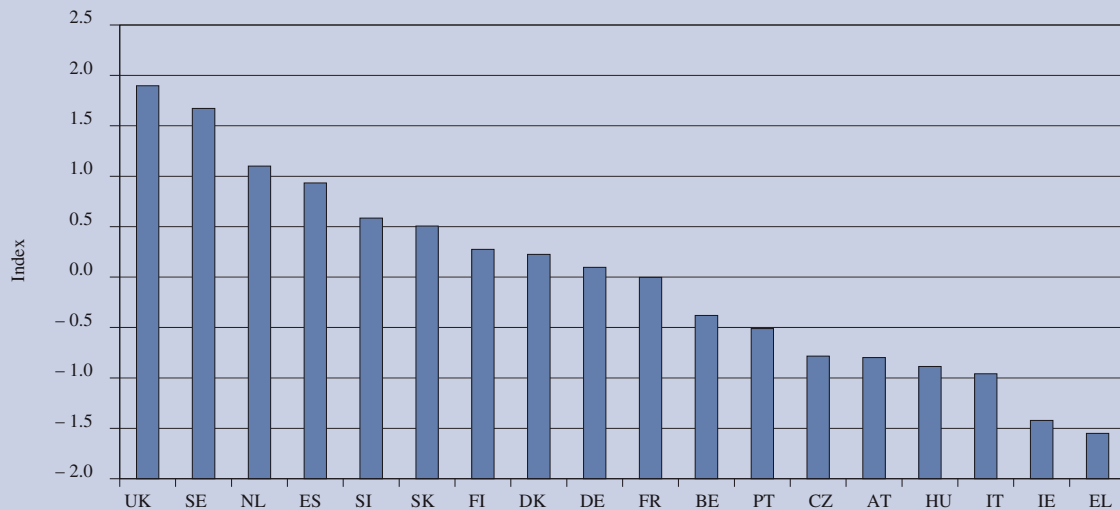
Although our overall index is more comprehensive than comparable indices found in the literature, a number of caveats need to be noted. First, the information extracted from the OECD/World Bank database was not specifically designed for our purposes leaving out some relevant pieces of information. Moreover, the data are based on self-reporting with no control-check. The robustness of the index should also be further tested. Finally, as mentioned above the information refers to the year 2003. Subsequent changes are not covered. The planned update of the OECD/World Bank database in 2007 will give an improved basis for developing the study further along the avenues outlined in this section.

### 5.3. Descriptive analysis of the budget procedures

#### 5.3.1. Relations between different characteristics of the budget procedures

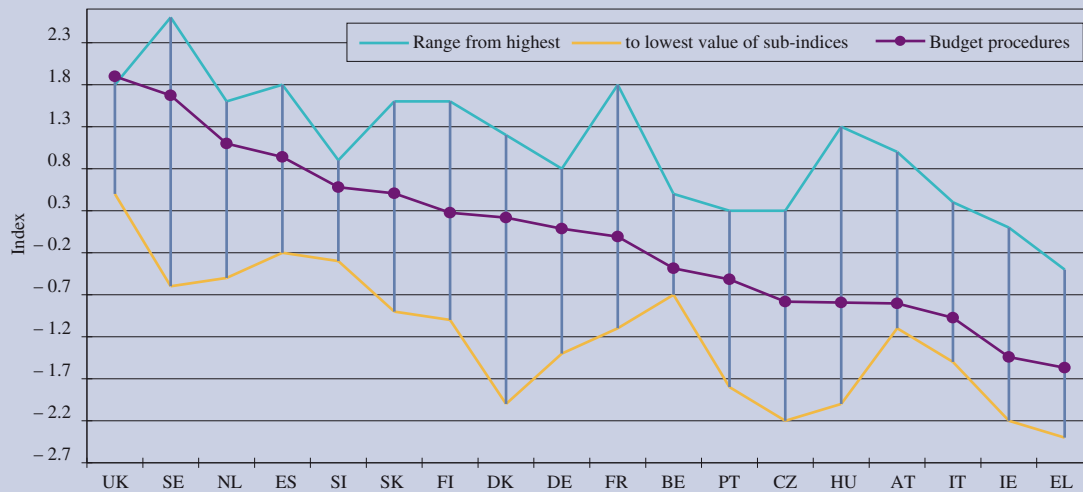
In the preceding section we described the budget procedures in 18 EU Member States on the basis of seven

Graph II.5.10: Budgetary procedures



Source: Commission services.

Graph II.5.11: The index of budget procedures and range of sub-indices



NB: The index of budget procedures is not an arithmetical average of the subindices because it is standardised after summarising the indexes.  
Source: Commission services.

basic features. In the following paragraphs we examine the links between the various dimensions of budgetary procedures. The demarcation between the individual features is not always clear cut. A certain degree of overlapping exists. It is therefore interesting to investigate the relations between the various characteristics. Table

II.5.1 presents the correlation coefficients between the different indices.

We find that performance budgeting, the use of top-down budgeting techniques and the fiscal rules are positively correlated. The common theme of all these three

Table II.5.1

Correlation coefficients between the indices reflecting features of the budget procedures

	TRA	MAPH	CBP	TDB	PEAR	PB	CDE	FR	OQ	OC	TB
TRA	1.00	0.50	-0.11	0.55	0.12	0.45	-0.56	0.41	0.76	0.42	0.68
MAPH		1.00	0.14	0.43	0.09	0.16	-0.48	0.28	0.64	0.41	0.61
CBP			1.00	0.25	0.33	0.25	0.14	-0.02	0.23	0.59	0.44
TDB				1.00	-0.25	0.46	-0.48	0.44	0.44	0.81	0.68
PEAR					1.00	0.34	0.28	0.01	0.57	0.05	0.39
PB						1.00	-0.13	0.66	0.74	0.65	0.78
CDE							1.00	-0.29	-0.32	-0.33	-0.37
FR								1.00	0.52	0.69	0.68
OQ									1.00	0.58	0.92
OC										1.00	0.86
TB											1.00

NB: TRA = Transparency, MAPH = Multiannual planning horizon, CBP = Centralisation of the budget process, TDB = Top-down budgeting, PEAR = Prudent economic assumptions and reserves, PB = Performance budgeting, CDE = Centralisation during execution, FR = Fiscal rules, OQ = Overall quality index, OC = Overall centralisation index, TB = Total budget procedures index.

Source: Commission services.

characteristics are the firm decisions on overall targets at an early stage of the process, leaving high degree of flexibility for operating managers and line ministers to find the right methods to reach overall goals within the pre-defined frames. It is therefore also not surprising that these features are to various extents negatively correlated with the index of centralisation during the execution stage.

The index of top-down budgeting is also positively correlated with the degree of multiannual planning, as both factors are two important parts of a well-designed medium-term budgetary framework. Surprisingly, these two indices are, however, not correlated with the index measuring the degree of prudence of economic assumptions, which also can be viewed as a required feature for a successful medium-term budgetary framework.

Budget transparency is positively correlated with multiannual planning horizon, the use of top-down budgeting and performance budgeting. Multiannual planning horizon could be included in a broad definition of transparency, and it is not surprising that the same countries are in the forefront on both dimensions.

### 5.3.2. Budget procedures and other country-specific elements

The observed budget procedures are a result of many factors: government structure, administrative traditions, political systems and history. In this section we will try

to explore some common trends in the budget procedures on the basis of national characteristics.

First we investigate the relation between the size of a country and the degree of federalism and the total budgetary procedures index <sup>(1)</sup>. As shown in Graph II.5.12, we find that large countries score higher on the 'budget procedures' index than small countries, while federal countries score higher than their counterparts. Both results seem reasonable, since both a high degree of federalism and the size of a country tend to make budgetary procedure more complex. For federal countries we find that the use of fiscal rules and top-down budgeting procedures are more developed than more centralised countries, most likely following the need for central government to define clear frames for lower level of governments. Large countries do rely more on fiscal rules, multiannual planning and centralisation of the budget process than small countries.

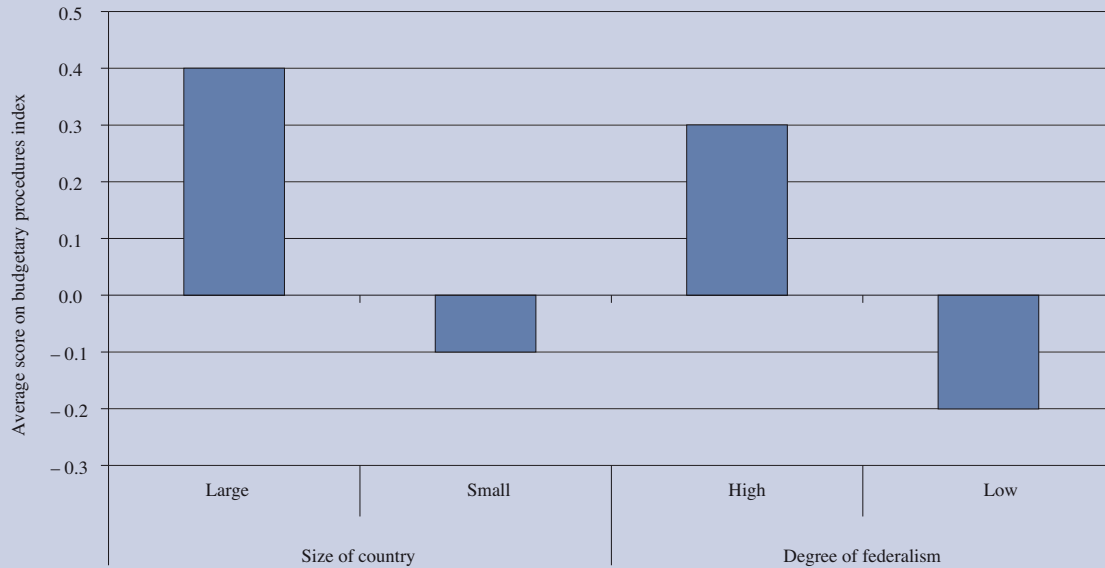
The branch of literature called 'fiscal institutionalism' has in particular pointed to the relation between different political variables and budgetary procedures <sup>(2)</sup>. On the basis of a set of political variables countries are divided into two broad categories; delegation countries and contract (or commitment) countries. Delegation countries

<sup>(1)</sup> Federalism is measured as the size of local and State government expenditures compared to central government expenditure. A value above average of the countries in our study on this index is defined as high degree of federalism. Source: Eurostat.

<sup>(2)</sup> The tradition following von Hagen (1992).

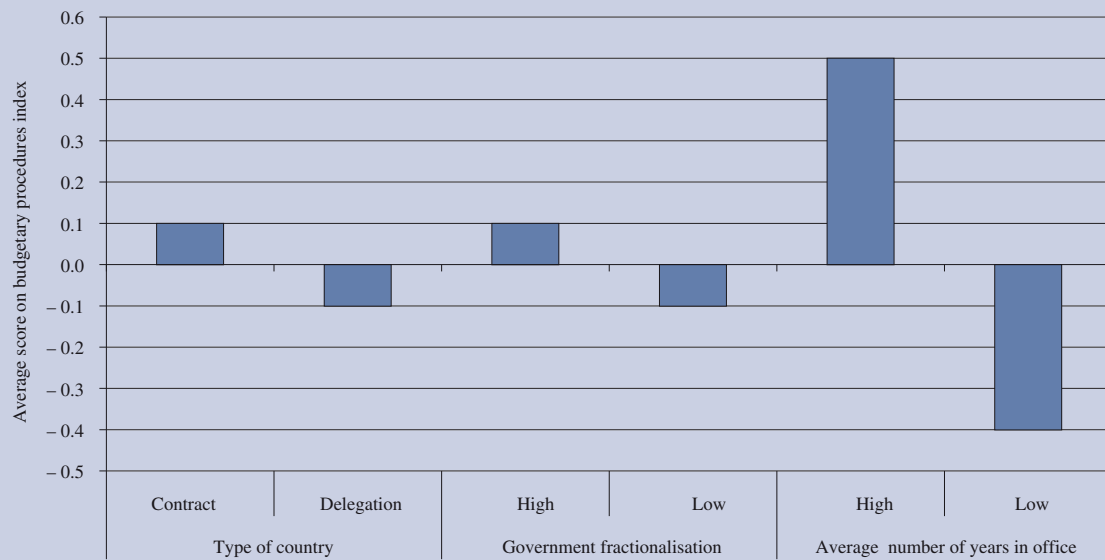


Graph II.5.12: Budgetary procedures and country-specific features



Source: Commission services.

Graph II.5.13: Budgetary procedures and political variables



Source: Commission services.

are countries with an election system and a political landscape which tends to produce one-party governments or coalition governments of parties with small ideological distance. Contract countries, on the other hand, are countries where coalition governments consisting of

parties with large ideological distance are observed. Von Hagen et al. (2001b) and Hallerberg et al. (2006) <sup>(1)</sup>

<sup>(1)</sup> See, for instance, von Hagen et al. (2001) and Hallerberg et al. (2006).

argue that the budget procedures suitable for the two types of countries are very different.

An interesting exercise will therefore be to take a close look on the relation between our budget indexes and some political variables. We find that there are no differences between delegation and contract countries in the score of the total budget procedures (see Graph II.5.13) <sup>(1)</sup>. We also checked against another related variable, ‘government fractionalisation’, which only takes into account the number of parties in government and not the ideological distance, and the result is the same <sup>(2)</sup>. However, if we look closer into the scores on the indices for specific characteristics, we find a picture in line with the ideas of von Hagen et al. (see Graph II.5.14). Contract countries rely highly on fiscal rules, performance budgeting and top-down budgeting, which are all characteristics which depend on each other. Interestingly, we also observe that they score somewhat higher on budget transparency, which might also be seen as a condition for success in these budgetary frameworks where responsibilities are widely delegated within predetermined rule-based frames.

Delegation countries exhibit a higher degree of centralisation in budget procedures, prudent economic assumptions and a multiannual planning horizon. Since we have split the centralisation into two indexes we can observe that the differences are particularly large in the execution stage of the budget process, while centralisation of the two first stages of the budget process is more compatible with the performance and top-down budgeting characterising the contract countries.

In Graph II.5.13 another political variable measuring notably the political stability is included: average number of years the Prime Minister or Head of State stays in office <sup>(3)</sup>. Not surprisingly, the countries with a high degree of political stability score higher on the ‘budget procedures’ index than other countries.

### 5.3.3. Budget procedures and budget outcomes

Several studies show that developed budgetary procedures can contribute to improve budgetary performance <sup>(4)</sup>. It is therefore interesting to check whether our index of budget procedures is positively related to measure for budgetary

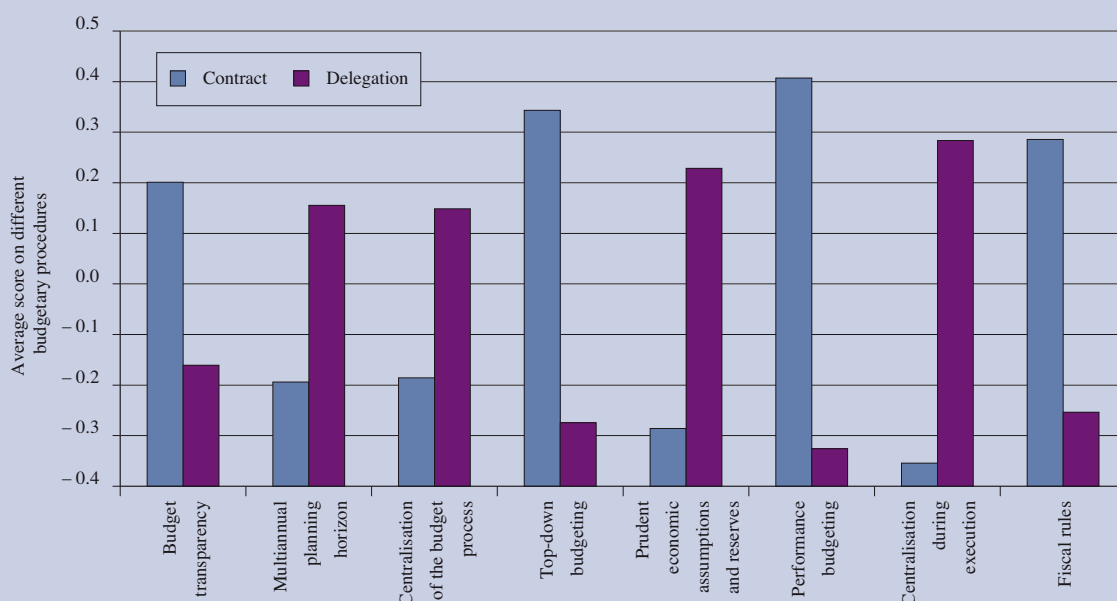
<sup>(1)</sup> The classification used in our analysis is based on von Hagen et al. (2001) and Yläoutinen (2004).

<sup>(2)</sup> Values for the years 1990-2004 compared to average across countries. The data source is the World Bank database of political institutions (2004).

<sup>(3)</sup> Values for the years 1990-2004 compared to average across countries. The data source is the World Bank database of political institutions (2004).

<sup>(4)</sup> Hallerberg et al. (2006), Fabrizio and Mody (2006), Alt and Lassen (2003), Alesina et al. (1996).

Graph II.5.14: ‘Contract’ versus ‘delegation’ and budgetary procedures



Source: Commission services.

outcome. Graph II.5.15 shows the correlation between the index and average changes in primary cyclically – adjusted balance in the years 1995–2006. Following the results of existing studies, it is not surprising to see that this comprehensive index is positively related to the budget balance <sup>(1)</sup>.

Clearly, the correlation is not necessarily an indication of causality and factors other than budget procedure may be at play as well. A more detailed analysis of the relation between budget procedures and fiscal performance would go beyond the scope of this section and is a topic for further research.

### 5.3.4. Conclusions

Based on 2003 data, we reviewed the budget procedures of 18 EU Member States. Particular attention was given to seven dimensions of the budget procedures which were aggregated to one overall index.

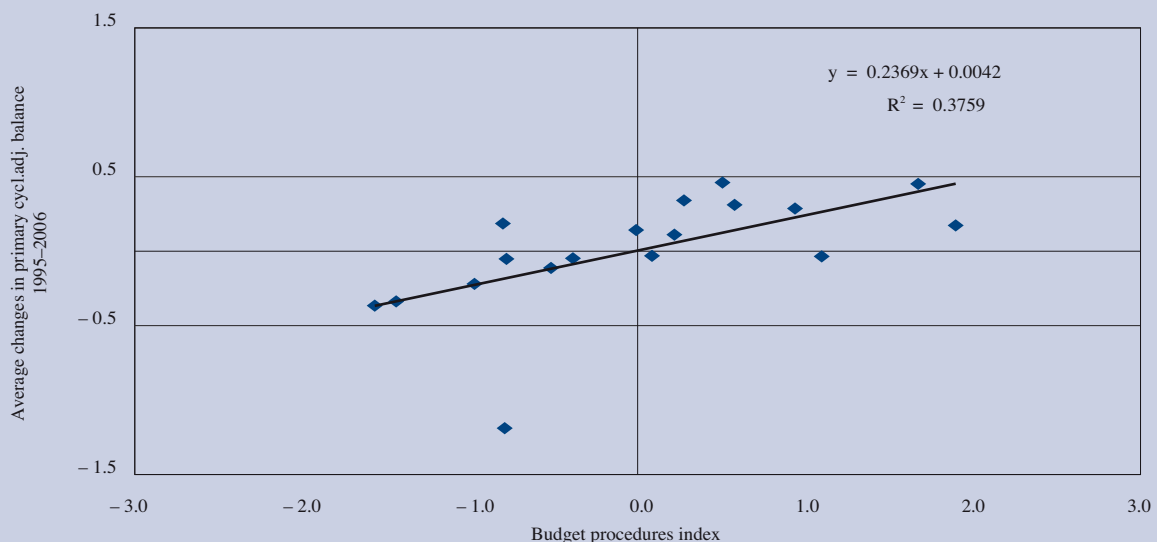
Our analysis shows that Member States differ significantly in terms of budget procedures, reflecting a number of country-specific elements plus history. Although there is no single best framework that would be suitable for all countries, some interesting patterns are observed.

In line with expectations, federal and large countries were found to have high scores on the overall index; the same applies to countries with high degree of political stability. No significant differences concerning the overall index of budget procedures between ‘delegation’ countries and ‘contract’ countries were found. However, at the level of individual components of the overall index a number of notable features are recorded. ‘Contract’ countries seem to rely more on fiscal rules, top-down and performance budgeting.

In line with expectations, the overall index of budget procedures is positively correlated with budgetary outcomes.

<sup>(1)</sup> Since the condition for choosing dimensions for the study were that they were found to be conducive to better budgetary outcome in the existing literature, such a relationship should be expected.

**Graph II.5.15: Budgetary procedures and budget outcome**



Source: Commission services.



# Part III

How to stick to medium-term  
budgetary plans



# Summary

A number of EU countries faced in the past chronic difficulties in respecting the medium-term budgetary targets set in their stability and convergence programmes (SCPs). The ‘close to balance or in surplus’ objective of the original Stability and Growth Pact became, in these countries, a moving target. Against this background, the finance ministers of the EU Member States decided, in the context of the 2005 SGP reform, to take concrete actions to strengthen the preventive arm of the Pact. To ensure a better functioning of the SGP, the Council notably emphasised the importance of improving national fiscal governance and formulated concrete proposals to strengthen the national ownership of the medium-term budgetary targets set in the SCPs. The aim of this chapter is to assess which factors explain that some countries were able to stick to their medium-term budgetary plans while this was not the case for others. It is notably analysed to what extent reliance on a proper medium-term budgetary framework helps respect multiannual budgetary targets.

The analysis proceeds in three steps. Firstly, it presents the main arguments in favour of medium-term budgetary frameworks. Based on concrete examples in the EU countries and existing literature, it reviews the various types of frameworks and identifies a number of desirable characteristics. Secondly, the analysis reviews the medium-term budgetary plans formulated by Member States in their SCPs and compares them with outcomes. The aim is to identify possible origins for the difficulties of some Member States to achieve the planned improvements in the government balance. Thirdly, it assesses which factors explain that some countries were able to stick to budgetary plans while this was not the case for others. It is notably examined whether reliance on a proper medium-term budgetary framework (MTBF) favours better adherence to medium-term fiscal plans.

## Functions of medium-term budgetary frameworks

In most EU countries, the preparation of the annual budget is the budgetary step in which crucial fiscal policy decisions are taken. At the same time, most fiscal policy deci-

sions have economic and budgetary implications which go well beyond the year in which they are taken. A majority of EU countries have therefore decided to supplement their budgetary institutions with MTBFs. The literature has underlined the benefits of such instruments, which contribute to improved transparency in the conduct of fiscal policy and provide the fiscal authorities with a better planning tool supporting effective expenditure management and the implementation of structural reforms.

## Design of medium-term budgetary frameworks

There is a wide range of possibilities concerning the design and status of MTBFs, depending on country preferences. A number of characteristics appear however desirable to ensure that such frameworks play a meaningful role in the conduct of fiscal policy. MTBFs should preferably cover the whole of the general government sector, to fully take into account the medium-term budgetary impact of policy decisions. Medium-term budgetary targets should be vested with a sufficient degree of political commitment, by the executive and the legislative branches. They should also preferably be set following a proper coordination between various levels of government involved in the conduct of fiscal policy. Moreover, there should be a strong connection between the MTBF and the annual budget procedure, in the sense that the multiannual targets set in the previous years should form the basis upon which the budget is prepared. Finally, the preparation of macroeconomic assumptions underpinning budgetary projections should be devoted a careful attention, as these assumptions largely determine the amount of public resources available in the medium term to finance policies.

## Situation in the EU Member States

The situation of the EU Member States varies considerably concerning the degree to which their fiscal policy is placed in a medium-term perspective. While in some countries developed national MTBFs have been introduced a long time ago and play a key role in fiscal policy-making, in some other Member States the only instrument

putting annual fiscal policy decisions in a multiannual context is the SCP. In some countries, the medium-term budgetary targets are prepared by the government with no or little coordination with other levels of governments and virtually no involvement of the national parliament. In other countries, the medium-term budgetary targets are set following coordination between all levels of governments and the approval of the national parliament. The situation also varies substantially concerning the link between the MTBF and the annual budgetary procedure. In a number of EU countries, this link can be assessed as relatively strong while in other cases the medium-term budgetary projections seem to be only indicative and hardly taken into account in the preparation of the annual budget laws. Overall, the analysis on the existence and properties of MTBFs currently in force in the EU countries points, on average, to a relatively large gap between what would be desirable and current practice.

#### **Medium-term fiscal plans and outcomes**

A critical question is whether reliance on proper MTBFs favours the respect of multiannual budgetary targets. A detailed examination of the reasons for the difficulties to respect these targets in the past provides necessary background material for this analysis. The analysis of multiannual budgetary plans formulated by Member States in the SCPs shows that the EU countries have typically planned expenditure-based fiscal adjustments: the expenditure-to-GDP ratio has on average been projected to decline by about 1½ percentage points over the three-year horizon typically covered by a SCP.

When comparing budget plans to outcomes, it appears that there were on average sizeable deviations from the planned adjustment paths. In about two thirds of cases the improvement in the government balance was less pronounced than targeted. Difficulties in the implementation of medium-term expenditure plans can be considered the main cause for the underperformance in attaining budget balance targets. The increase in nominal government expenditure over the three-year period covered by SCPs was higher than planned in more than three quarters of cases. Such a result contrasts with the expected benefits of MTBFs: negative and positive risks should tend to offset each other over time so that in the medium-term deviations from medium-term expenditure plans should be limited in frequency and size. It should however be stressed that there was a considerable heterogeneity of performance across Member States. While some countries were

almost consistently successful in sticking to expenditure targets, others were almost always unsuccessful.

The analysis suggests that deviations from the planned improvements in the government balance also partly result from negative GDP growth surprises compared to the projections in the SCPs. While the frequencies of positive and negative surprises in real GDP growth are similar, the average size of negative surprises has been significantly higher than that of positive surprises. Interestingly, the picture is different when looking at developments in nominal GDP. When considering this variable, the frequency and size of positive and negative GDP growth surprises are very similar. This explains that developments in government revenue were on average in line with medium-term plans, or even slightly more favourable.

#### **Which factors help respecting medium-term expenditure plans?**

The analysis brings a number of answers on the determinants of government expenditure overruns in the EU. It shows notably that there is a statistically significant relation between the 'degree of ambition' of medium-term expenditure plans, in terms of the planned reduction in the expenditure-to-GDP ratio, and the size of the discrepancy between the planned and observed increase in government expenditure. Member States projecting large cuts in their expenditure-to-GDP ratio tend, *ceteris paribus*, to show a lower degree of adherence to plans. The analysis also confirms that it is relatively easier for countries with a relatively large public sector to achieve ambitious expenditure-based fiscal consolidations. Another interesting result is that expenditure overruns seem to be independent from macroeconomic developments. The frequency and size of expenditure overruns were similar in periods of positive and negative growth surprises. Finally, and this can be considered the main result of the analysis, there is a statistically significant relation between the quality of institutions for medium-term budgetary planning and the capacity to achieve multiannual expenditure targets. Overall, the implementation in the EU countries of adequate MTBFs seems to be a promising way forward to ensure better compliance with medium-term expenditure targets. Controlling for other variables, reliance on developed medium-term budgetary frameworks can significantly contribute to limit the size of the discrepancy between planned and observed increase in real primary expenditure. This suggests that the implementation in the EU countries of adequate MTBFs is a promising way forward to ensure better compliance with medium-term expenditure targets.



# 1. Introduction

Several EU countries faced in the past difficulties in respecting the medium-term budgetary targets set in their stability and convergence programmes (SCPs) and the ‘close to balance or in surplus’ objective of the original Stability and Growth Pact became, in these countries, a moving target. The finance ministers of the EU countries decided, in the context of the 2005 SGP reform, to take concrete actions to strengthen the preventive arm of the Pact. Country-specific medium-term budgetary objectives (MTOs) were set for all Member States and a number of simple provisions relating to the appropriate speed of adjustment towards the MTOs were introduced in the SGP <sup>(1)</sup>. To ensure a better functioning of the SGP, the Council also emphasised the importance of improving national fiscal governance and formulated concrete proposals to strengthen the national ownership of the medium-term budgetary targets set in the stability and convergence programmes (SCPs)<sup>(2)</sup>. The Council notably encouraged newly elected governments to present a ‘stability or convergence programme for the legislature’, providing information on the means and instruments they intend to employ to reach the medium-term targets. It also invited governments to strengthen the status of their SCP by presenting it, as well as the Council opinion thereon, to their national parliament.

The aim of this chapter is to assess which factors explain that some countries were able to stick to their medium-term budgetary plans while this was not the case for others. It is notably analysed to what extent reliance on developed medium-term budgetary framework (MTBF) helps respect multiannual budgetary targets. According to a survey launched by the European Commission in 2006, the situation of the EU Member States varies considerably concerning the degree to which their fiscal policy is placed in a medium-term perspective. While in some

countries developed national MTBFs have been introduced a long time ago and play a key role in fiscal policy-making, in some other Member States the only instrument putting annual fiscal policy decisions in a multiannual context is the SCP. Moreover, the status and role of SCPs vary considerably from one country to another. In some Member States, they are prepared by the government with no or little coordination with other levels of governments and virtually no involvement of the national parliament. In other countries, the medium-term budgetary targets are set following coordination between all levels of governments and the approval of the national parliament. Several studies have already demonstrated the potential benefits of MTBFs, notably on fiscal discipline. Compared to existing literature, this part of the report takes an original perspective and seeks to assess whether reliance on such institutional devices can effectively help a country to attain its medium-term budgetary targets.

The analysis proceeds in three steps. Firstly, it presents the main arguments in favour of MTBFs. Based on concrete examples in the EU countries and existing literature, it reviews the various types of frameworks and identifies a number of desirable characteristics. The analysis exploits newly-collected survey data on MTBFs in force in the EU Member States and on the preparation and status of SCPs. Secondly, this part of the report reviews the medium-term budgetary plans formulated by Member States in their SCPs and compares them with outcomes. The aim is to identify possible origins for the difficulties of some Member States to achieve the planned improvements in the government balance. The analysis is based on a comprehensive database comparing multiannual budgetary projections and observed developments. Thirdly, it assesses which factors explain that some countries were able to stick to budgetary plans while this was not the case for others. It is notably examined whether reliance on a proper MTBF favours better adherence to medium-term fiscal plans. The respective influences of the initial budgetary position and of macro-economic developments are also examined.

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<sup>(1)</sup> For a detailed description of the changes introduced by the 2005 SGP reform, see European Commission (2005a).

<sup>(2)</sup> For a review and assessment of the influence of national fiscal rules and institutions, see European Commission (2006a).

## 2. The functions of medium-term budgetary frameworks

### 2.1. Introduction

The preparation of the annual budget law is, in all European countries, the budgetary step in which crucial fiscal policy decisions are taken. At the same time, most fiscal policy decisions have economic and budgetary implications which go well beyond the year in which they are taken. In some cases, the budgetary consequences of policy measures even only show up in the medium or long run. Moreover, there is widespread recognition that a single-year budget perspective gives fiscal policymakers a poor basis for strategic budgetary planning and the implementation of structural reforms, the positive effects of which generally materialise in the medium term. These considerations have led a majority of EU countries to supplement their budgetary institutions with MTBFs. Such frameworks today exist in most of the EU Member States. This section presents the functions and benefits of MTBFs and reviews the various types of frameworks. It also provides an overview of the MTBFs in force in the EU countries and discusses the properties of SCPs as a MTBF.

### 2.2. Functions of medium-term budgetary frameworks

A MTBF can be defined as an institutional device allowing fiscal authorities to extend the horizon for fiscal policymaking beyond the annual budgetary calendar. MTBFs are typically based on a macroeconomic scenario, which determines the availability of government resources in the medium term to finance policies. On this basis, the fiscal authorities provide medium-term projections for the main aggregates of government finances (government balance and debt; government expenditure and revenue and their composition), for part or the whole of the general government sector.

#### 2.2.1. Expected benefits from medium-term budgetary frameworks

MTBFs have several benefits. They contribute to an increased transparency on the medium-term budgetary objectives of the country, which allows economic agents to be better informed on the ongoing trends in government finances. MTBFs also allow to better take into account future budgetary implications of policy measures in the decision-making process. Taken together, these elements contribute to sound fiscal policies and help address the main causes for the deficit bias in fiscal policymaking.

MTBFs notably contribute to better time consistency in the conduct of fiscal policy. The literature has highlighted that governments may have a short-term focus when taking fiscal policy decisions <sup>(1)</sup>. Reliance on MTBFs helps address the time inconsistency issue in two ways. Firstly, the existence of a developed MTBF will make it more difficult for governments to hide or understate the multiannual budgetary effects of new policy measures. Secondly, well-defined MTBFs force the fiscal authorities to commit to a predefined path for the main aggregates of government finances in the medium term. This makes it more difficult to postpone the implementation of difficult fiscal consolidation measures.

MTBFs also help address the common pool problem of public resources, which is according to literature the other main reason for overspending and accumulation of deficits and debt over time. This problems arises when

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<sup>(1)</sup> See Persson and Svensson (1989) and Tabellini and Alesina (1990). The main argument is that governments not sure of being re-elected may have a tendency to implement generous fiscal policy measures to increase their re-election chances and to overlook the medium to long-term consequences of budgetary decisions. This is possible because individuals (voters) tend to see the short-term benefits they can get from lower taxes and increased government spending but are not always fully aware of the possible long-term costs of such policies.

groups that benefit from a particular type of government spending or tax exemption do not fully internalise the costs of such measures, since the financing is generally spread among a wide set of contributors <sup>(1)</sup>. By allowing to better take into account future consequences of budgetary decisions, in the context of a centralised framework, reliance on a well-defined MTBF will contribute to reduce the common pool problem and shift the focus from the size of total government spending to the possibilities for reallocations within programmes over a pre-defined period.

Another argument in favour of MTBFs is that such frameworks provide the fiscal authorities with a better planning tool for the conduct of their policies. In the absence of a proper MTBF, the risk exists that resource allocation is made on an ad hoc or piecemeal basis, with the implications of past and present decisions being overlooked. MTBFs are a way to bridge this gap and to improve the quality and stability of the decision-making process. A number of authors have highlighted that MTBFs favour the implementation of structural reforms targeting, for instance, significant re-allocations across general government subsectors or government programmes, or major changes in the level and structure of taxation. Such reforms are generally implemented over several years, and reliance on a MTBF permits to give visibility to economic agents on the benefits of such reforms in the medium term. This contributes to increased acceptability and feasibility of reforms.

### **2.2.2. Key conditions for the effectiveness of medium-term budgetary frameworks**

#### *Cautious macroeconomic assumptions*

The literature has pointed out a number of key conditions for the effectiveness of MTBFs. To the preparation of macroeconomic assumptions underpinning budgetary projections particular careful attention should be devoted as these assumptions determine the amount of public resources available in the medium term. A delicate issue is related to the uncertainty associated with multi-year macroeconomic projections. The basic idea is that overestimation of GDP growth over the medium term may create *ex ante* an upward pressure on multiannual public expenditure plans. Moreover, line ministries and departments may see the resource allocation defined in the context of the MTBF as an entitlement, making *ex*

*post* downward revisions of expenditure difficult in the event of a shortfall in GDP growth developments (OECD, 2003). The difficulty is that projecting macroeconomic developments in the medium term is a genuinely difficult exercise. A way to address this question is to deliberately base medium-term budgetary projections on conservative assumptions. A number of EU countries have to this end introduced so-called ‘prudence factors’ in their MTBF. This is done either through a systematic downward adjustment of economic assumptions compared to the central scenario, or by incorporating contingent reserves which can only be activated in case of a negative surprise on macroeconomic or government revenue developments (e.g. in Sweden). To avoid possible use of macroeconomic forecasts to artificially increase the amount of resources available in the medium term, a number of Member States (e.g. Belgium, the Netherlands and Austria) have decided to delegate the preparation of the medium-term macroeconomic scenario used in the MTBF to independent bodies.

#### *Budgetary objectives need to be credible*

The literature also mentions the risk of opportunistic use of MTBFs. The temptation may exist for opportunistic governments to avoid or postpone the implementation of difficult (politically costly) fiscal consolidation measures by presenting an overly favourable picture of medium-term prospects for government finances, projecting for instance large reductions in the government deficit and debt. To avoid such a risk, a number of conditions should be fulfilled for budgetary targets to be credible.

Firstly, medium-term budgetary targets should be vested with a sufficient degree of political commitment by all actors playing a role in the conduct of fiscal policy. In this respect, the involvement of the national parliament in the preparation of the budgetary targets is a relevant indicator. The medium-term targets should also preferably be set following a proper coordination between the various levels of government involved in the conduct of fiscal policy. Secondly, for the MTBF to have a meaningful role and influence in the conduct of fiscal policy there should be a clear link with the annual budget law, in the sense that the preparation of the annual budget should start by considering the projections elaborated in the preceding year(s) in the context of the MTBF. Deviations from previous plans should be explained and justified. Thirdly, there should be a high degree of transparency concerning the nature of the budgetary projections

<sup>(1)</sup> See Weingast et al. (1981).

formulated in the context of the MTBF. There should notably be a clear indication of whether the medium-term budgetary projections are forecasts or targets; in other words whether the projected path for the main budgetary aggregates is attainable under unchanged policies or whether policy action will be needed in the future to achieve the fiscal targets. In case policy actions will be needed to reach the targets the framework should request the specification of the financial gap between the objectives and developments in government finances under unchanged policies.

### 2.2.3. Main types of medium-term budgetary frameworks

Experience shows that the nature and properties of national MTBFs vary considerably from one country to another. This section reviews the main options in the design of MTBFs and identifies a number of desirable characteristics.

#### *Share of government finances covered and time horizon of MTBFs*

MTBFs can cover part or the whole of the general government sector. A wide coverage is preferable (IMF, 2001) as partial coverage may not allow considering the total implications of new policy measures, which is one of the main objectives of MTBFs. In the case of MTBFs covering several general government subsectors, a sufficient degree of coordination between various general government tiers should be ensured when setting the multiannual budgetary targets. This is crucial to ensure a sufficient degree of political commitment of all actors taking part in the conduct of fiscal policy to implement the necessary policies to respect these targets. As regards the time horizon, MTBFs generally cover three or four years, including the budget year. This can be considered

a good compromise between the need to stay within foreseeable time horizons for the macroeconomic aggregates and the objective of providing fiscal authorities with a proper medium-term planning tool.

#### *Flexible versus fixed frameworks; rolling versus periodical frameworks*

A distinction should be made between ‘flexible’ and ‘fixed’ MTBFs. Flexible frameworks allow for revisions of the overall objectives from year to year to adjust for economic developments or changes in the fiscal policy agenda. In a fixed framework, a number of key budgetary objectives are set once for all and are not adjusted over time. Fixed frameworks are generally articulated around a medium-term path for government expenditure (in real or nominal terms) which cannot be revised from year to year, unless exceptional events occur (e.g. sharp economic slowdown, change of government). These frameworks have the big advantage to provide strong guarantees against temptations to revise expenditure targets in good times. By construction, they also ensure a strong connection between the MTBF and the annual budget process.

A distinction is also made between ‘rolling’ and ‘periodical’ MTBFs. A periodical framework covers a definite period of time, in the sense that a new framework is not drawn up before this period ends, unless exceptional events occur (e.g. change of government, major slippages compared to initial targets, etc.). The period covered by a periodical framework is generally aligned with the term of a legislature. In a rolling framework, on the contrary, a new year is added at the end of the period covered by the previous projections at the occasion of every annual update. It should be stressed that

Table III.2.1

### Medium-term budgetary frameworks — A typology

	Fixed frameworks	Flexible frameworks
Rolling frameworks	<b>Rolling fixed frameworks</b> A new year is added every year, but the targets already set in the previous years for the intermediate years are not updated.	<b>Rolling flexible frameworks</b> A new year is added to the framework every year, and at the same time the targets for the intermediate years are revised.
Periodical frameworks	<b>Periodical fixed frameworks</b> The medium-term targets are set once and for all for a definite time period. There is no updating of the targets during the period.	<b>Periodical flexible frameworks</b> The medium-term targets are set for a definite time period (e.g. 2005–10), but the targets are revised during the period.

Source: Commission services.

rolling frameworks can incorporate fixed elements (see Table III.2.1 and the description of the Swedish MTBF in Box III.2.3). However, practice shows that most of the rolling frameworks turn out to be flexible as in the annual process of adding a new year to the framework the opportunity also to revise targets for the intermediate years is typically exploited.

#### *Level of detail and nature of the projections*

Another important feature concerns the level of detail of the medium-term budgetary projections. The provision of sufficient detail on the evolution of the composition of taxes and government spending is an element favouring the stability and credibility of the medium-term budgetary objectives. Detailed indications on the medium-term appropriations (by programmes of min-

istries) will allow line ministers and agency managers to have a clearer view of the resources available in the medium term to finance policies, and will possibly favour savings in programmes with less priority. The preparation of detailed projections should, on the expenditure side, be based at least in part on ‘bottom-up’ information from the line ministries (for central government) and from other authorities responsible for part of government spending (local and regional governments, authorities in charge of social security), which are the economic agents with the best knowledge of the underlying spending trends. The incorporation in the MTBF of efficiency targets will also improve the accurate costing of expenditure programmes.

#### **Box III.2.1: The medium-term budgetary framework in the Netherlands**

##### **Description**

The Dutch MTBF has a four-year-ahead horizon (t to t+4). The medium-term budgetary targets are set when a new government arrives in office. These targets are not enshrined in law, but are based on a coalition agreement between the parties in government. During the design of the coalition agreement, the Central Planning Bureau (CPB), an independent governmental forecasting institution, plays an important role. It is responsible for the medium-term forecasts assuming unchanged policy, which is the baseline scenario in the medium-term. During the negotiations between the government parties, the CPB also estimates the effects of the main proposals for new policy measures.

A key element of the Dutch MTBF is the expenditure ceiling. This ceiling is divided into three subceilings: the ‘core’ central government sector, the social security sector and the healthcare sector. While the two last sectors usually are the responsibilities of a single minister respectively, the responsibilities for the ‘core’ are divided between many ministers and the MTBF also contains projections of expenditure on these different policy areas. The expenditure ceiling is set in real terms. As opposed to the flexible medium-term frameworks in many other EU countries, the overall expenditure ceiling in the Netherlands is fixed, i.e. it is usually not revised as long as the coalition stays in office. The allocation between different sectors and programmes are, however, frequently revised. The automatic stabilisers are, in principle, allowed to work on the revenue side.

##### **Monitoring and enforcement**

The Ministry of Finance is responsible for reporting about compliance of the medium-term fiscal targets, and all budgetary memorandums sent to parliament are supposed to include such a report. In practice the ceiling is well respected. The success is linked to the fixed nature of the framework, which turns the attention away from the total expenditure and gives incentives for line-ministers to look for expenditure reallocations to finance new policy measures. It also reflects the fact that economic forecasts used to calculate the ceilings in the medium-term budgetary framework are based on a cautious scenario, prepared by an independent institution. The framework also contains a signal value for the government deficit: when the deficit approaches 2.5 % of GDP, measures to increase revenues or cut expenditure should be taken.

##### **Functioning**

The Dutch MTBF has regularly been assessed as one of the most developed example of such frameworks. It is based on a sound economic rationale (reliance on fixed expenditure ceilings) and benefits from the involvement of a credible independent institution. Nevertheless, like for other MTBFs which are highly dependent on expenditure ceilings, the question of circumvention through tax expenditures has been raised.

#### 2.2.4. Conclusions

As seen above, MTBFs can be designed in several different ways. To some extent, the choice depends on the institutional characteristics of each country. A number of key characteristics appear however desirable in most of cases. Firstly, careful attention should be devoted to the preparation of the macroeconomic assumption. Secondly, MTBFs should cover a large part of the general government sector, to fully take into account the medium-term budgetary impact of policy decisions. Where several government subsectors are covered, there should be a proper coordination between various government tiers when setting the multiannual budgetary targets. This is crucial to ensure a sufficient degree of ownership of these targets by all actors taking part in the conduct of fiscal policy. Thirdly, there should be a strong connection between the MTBF and the annual budget procedure in the sense that multiannual targets set in the previous years should form the basis upon which the budget is prepared. Finally, the medium-term targets should be vested with a sufficient degree of political commitment, by the executive and the legislative branches. The reliance on 'fixed' MTBFs, articulated around a fixed path for government spending, generally ensures a strong degree of political commitment to the medium-term targets and connectedness with the annual budget procedure.

### 2.3. What types of medium-term budgetary frameworks in the EU?

This section provides an overview of the MTBFs currently in force in the EU countries. The first subsection concerns the properties of the national MTBFs. The second subsection is about the preparation and status of the SCPs in the Member States. While the primary aim of SCPs is to ensure a proper coordination of fiscal policies in the EU, these programmes can also be used domestically as a MTBF, as Member States are requested to present in these programmes detailed information on their medium-term macroeconomic and budgetary targets for the whole of the general government sector <sup>(1)</sup>. The analysis is based on original survey data collected by the European Commission by the end of 2006 <sup>(2)</sup>.

<sup>(1)</sup> In five EU-25 countries, the SCP is the only public instrument placing fiscal policy in a multiannual perspective. In countries where a national MTBF exists, the SCPs projections are largely based on those formulated in the context of the national MTBF.

<sup>(2)</sup> Note by the Commission services for the attention of the Economic and Financial Committee on stability and convergence programmes and budgetary procedures in the Member States: a questionnaire.

#### 2.3.1. National MTBFs

Of the EU-25, 20 Member States have complemented their fiscal institutions with a national MTBF <sup>(3)</sup>. The only exceptions are Greece, Cyprus, Luxembourg, Hungary and Portugal. The properties of these MTBFs vary significantly across countries.

##### *Time horizon and share of public finances covered*

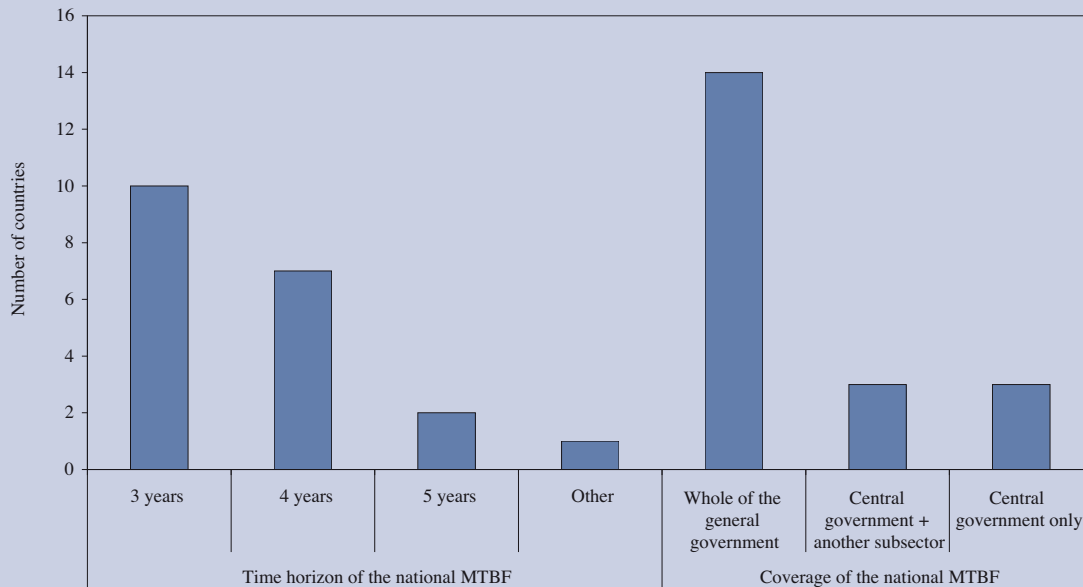
In almost all EU countries the MTBF covers a period of three to four years including the budget year. There are however exceptions. In Latvia, for instance, medium-term budgetary projections cover a period of five years, including the budget year. The diversity is larger for what concerns the part of government finances covered by national MTBFs. In 14 countries, the national MTBF covers the whole of the general government. In the Netherlands and Sweden the MTBF covers the central government and the social security sectors; in Ireland, it covers the central and local governments. In the remaining three countries, the MTBF only covers the central government. Among the 17 countries in which the MTBF covers all or several general government subsectors, in only nine cases there is a proper *ex ante* coordination exercise involving all government subsectors covered by the MTBF (see Graph III.2.2). In the remaining cases the fiscal targets seem, at least to some extent, imposed by the central government. In these countries the ownership of the medium-term budgetary targets by sub-central governments may not be sufficient to ensure a strict adherence to plans.

##### *Rolling versus periodical and flexible versus fixed MTBFs*

Most of national MTBFs are flexible rolling frameworks. This means that, every year, a new year is added at the end of the period covered by the previous projection. It also means that revisions to budgetary objectives (and notably expenditure targets) generally occur within the period covered by a multiannual plan. In only a limited number of cases, the MTBF is articulated around a fixed path for government expenditure. This is notably the case in the UK, the Netherlands, Finland and Sweden. In the first two countries the framework is fixed and periodical. In the Netherlands, for instance, new multi-year expenditure ceilings are announced for a period of four years when a new government arrives in office. The expenditure ceil-

<sup>(3)</sup> The analysis in this part of the report focuses on the EU-25 Member States. The case of Romania and Bulgaria are not treated as these Member States have submitted their first convergence programme only by end-2006.

**Graph III.2.1: Features of national medium-term budgetary frameworks**



Source: Commission services.

ings are neither revised nor extended on a rolling basis but only after expiration of the period (see Box III.2.1 for a detailed description of the Dutch MTBF).

#### *Level of detail and nature of the projections*

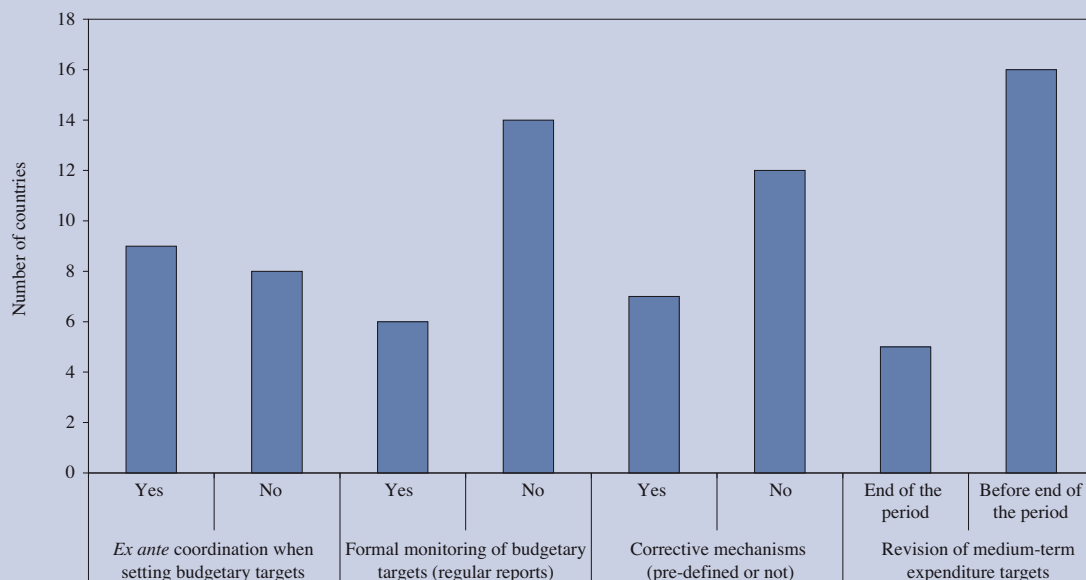
The situation varies considerably across Member States concerning the level of detail of the projections provided in the context of the national MTBF. An example of country with very detailed medium-term budgetary projections is Slovenia. In this country, the government prepares every year a fully detailed budget for the two following years. Another example is Sweden, where the MTBF revolves, to a large extent, around the expenditure ceiling and where the government makes projections for 27 expenditure areas for all the years covered by the MTBF. In the UK, the budget preceding a multiannual spending review sets an overall envelope for public spending that is divided between government departments, giving them fixed three-year budgets. In most other countries, medium-term budgetary projections cover the main government finances aggregates (i.e. budget balance and debt; government expenditure and revenues) but there is only little quantified indication on the composition of government spending and taxation in the medium term. In most cases, little information is also provided on the ways to attain the objectives.

#### *Degree of political commitment and connectedness to the annual budget*

The degree of political commitment attached to the multi-annual budgetary targets varies considerably from one country to another. In several cases, the budgetary targets are considered by policymakers as purely indicative targets, resulting from a technical exercise. Some countries set, on the contrary, constraining budgetary targets for the general government and/or its subsectors. In a few countries the fiscal targets themselves are approved by the parliament and written into law (e.g. Slovenia, Sweden). In other countries (e.g. the Netherlands, Austria) the medium-term budgetary targets are part of the coalition agreement between parties in government. In Finland the medium-term budgetary targets are set when a new government arrives in office <sup>(1)</sup>. In a number of countries (e.g. France, Poland) a medium-term path for the main general government finances aggregates is set in documents annexed to the budget law.

<sup>(1)</sup> Each year in the spending limits decision a revision is made taking into account price changes and changes in the structure of the budget. In addition the government is free to change the allocation of expenditure between administrative branches.

Graph III.2.2: Features of national medium-term budgetary frameworks



Source: Commission services.

Another key criterion to assess the importance of the MTBF in the fiscal policy setting of a country concerns the degree of connectedness between the MTBF and the annual budget. In about half of the cases, this link was assessed, on the basis of the questionnaires submitted by the Member States, as strong or relatively strong, in the sense that expenditures plans in the budget have to remain within the multiannual real expenditure ceilings set previously (e.g. the Netherlands) or that the multiannual targets form the basis on which the budget proposal is prepared (e.g. Finland). In a number of other cases the link between the MTBF and the preparation of annual budgets is either not very clear or appears relatively weak. In a number of countries budgets for the following years are in practice rarely consistent with the previously announced budgetary or expenditure targets.

#### *Monitoring and enforcement mechanisms*

In most cases, there is no predefined action in case of deviation from the targets set in the multiannual projection and the objectives are simply adjusted in the context of the following medium-term planning exercise. Only in a few countries, the compliance with the multiannual targets is formally monitored, and the government regularly publishes reports assessing compliance with the previous multiannual targets. The examples of Spain and

Slovakia are interesting. In Spain, when a risk of deviation is detected, the government sends a warning to the administration concerned and informs the relevant authorities. If the deviation is confirmed, a three-year plan to restore the budgetary situation has to be prepared. In Slovakia, the Ministry of Finance publishes regular reports on fiscal developments and assesses whether the medium-term budgetary targets will be achieved or not. If a risk of slippage is identified in the report, measures should be proposed to correct the situation.

#### **2.3.2. The role of stability and convergence programmes**

In the EU context, the EU Member States prepare every year stability and convergence programmes (SCPs) in which they provide medium-term budgetary objectives for the general government sector and its subsectors <sup>(1)</sup>. These programmes are then assessed by the Commission and the Ecofin Council. The preparation of SCPs has been, since 2001, guided by a code of conduct on the format and content of SCPs. This document, which was updated in the context of the SGP reform in 2005, stipulates that SCPs should provide macroeconomic and

<sup>(1)</sup> Euro area countries prepare stability programmes and non-euro area countries prepare convergence programmes.



**Box III.2.2: Empirical studies on the effectiveness of medium-term budgetary frameworks**

The empirical research on the effectiveness of MTBFs covers two broad families of studies. (I) horizontal quantitative studies covering a large number of countries; these studies are generally based on the construction of numerical indexes measuring the quality of budget procedures (including the existence of a MTBF), and test the significance of such indexes in explaining budgetary developments; (II) detailed country studies assessing the procedures of one or a group of countries.

**Horizontal studies**

Von Hagen (1992) investigates, for a sample of 12 EU countries, whether the degree of fiscal discipline increases when budgetary procedures force policymakers to consider the medium and long-term trends and consequences of their policy. The main result of the analysis is that the influence of MTBFs is in most cases positive, but that a MTBF alone is not sufficient to overcome the problems of fiscal discipline for a country where budgeting procedures have structural weaknesses. Yläoutinen (2004) highlighted that most of the new Member States have introduced MTBFs. The medium-term fiscal targets are however generally relatively weak (not binding) and in many cases there is no clear link between the MTBF and the annual budget. He concludes that strengthening the MTBFs in these countries is a promising avenue for promoting fiscal discipline. Other relevant studies were made on a sample of South American countries, which provide evidence of the positive role of MTBFs. Notably, Filc and Scartascini (2004) find that the existence of a MTBF is significant to explain differences in budget outcomes.

A frequent argument in this body of the literature is that a medium-term orientation in the budget process is particularly suited for countries with ideologically dispersed coalitions, and in which agreement on multiannual budget plans between various government parties is conducive to fiscal discipline. These countries are generally denominated in the literature as ‘contract countries’. Some authors have argued that MTBFs may be less efficient in ‘delegation countries’, i.e. countries with one-party governments or coalition governments of closely aligned parties. The main arguments for the introduction of MTBFs are, however, valid for both categories of countries and most authors are viewing MTBFs as a useful tool for all countries.

**Case studies**

Based on the experience with MTBFs in Germany, the United Kingdom and Australia, the IMF (2001) draws a number of conclusions on the desirable features of MTBFs: (i) fiscal policy objectives and quantitative fiscal targets need to be articulated and defended at the highest level of government; (ii) robust revenue forecasts are critical; (iii) budget estimates are better set in nominal terms; (iv) the framework should be based on clearly defined and fully costed policy proposals; (v) the MTBFs should be accompanied by strengthened measures to review individual expenditure policies. It is notably emphasised that MTBFs will only be effective if there is a real stable, transparent fiscal control.

In a study on Finland, Blöndal, Kristensen and Ruffner (2002) stress the importance of developing a better rolling multi-year expenditure framework to support the targets set in the coalition agreements between government parties. They consider the link between the medium-term targets and the annual budget process too weak. The Finnish budget system was revised in 2004, introducing a firmer framework with annual expenditure limits. In a recent study, Kraan and Wehner (2005) analyse the Slovenian budgetary framework, which is a unique system of annual formulation of detailed budgets for two consecutive years. They conclude that such a framework provides an interesting compromise between the needs to give medium-term visibility to the budget process and to maintain flexibility in the face of macroeconomic circumstances. Blöndal and Kristiansen (2002) evaluate the periodical MTBF set in coalition agreements in the Netherlands. They find that the system is an excellent instrument for control of public finances and an example for other countries to follow. Kraan (2005) finds that one particular advantage with the Dutch framework is that the framework is fixed. Boije and Fischer (2007) assess positively the Swedish MTBF noting among other things that the expenditure ceilings have been met in all years since their introduction. They suggest that one reason to its success is the critical surveillance of several national institutions and the relatively extensive media coverage.

budgetary projections for the current year and at least the three following years <sup>(1)</sup>. It leaves the possibility for Member States to cover a longer period if they so wish. Projections have to be provided for all the main budgetary aggregates. Moreover, the code of conduct specifies that SCPs should be based on realistic and cautious macroeconomic forecasts and describe the budgetary and other economic policy measures being taken or proposed to achieve the medium-term budgetary targets. In many respects, SCPs can therefore be considered a type of MTBF. In countries where a national MTBF exists, the SCP is typically largely based on the budgetary plans formulated in the context of the national framework. The SCPs are rolling frameworks in the sense that they are adding a new year in every update. In most of the cases they are also flexible frameworks, except in countries relying domestically on a fixed MTBF. According to the results of the survey, the preparation and status of the SCPs vary considerably from one country to another <sup>(2)</sup>.

<sup>(1)</sup> See opinion of the Economic and Financial Committee on the content and format of the stability and convergence programmes, endorsed by the Ecofin Council on 10 July 2001; and specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes, endorsed by the Ecofin Council in September 2005.

<sup>(2)</sup> Complementary information on the relation between SCPs and the annual budget process can be found in Section II.1.2.

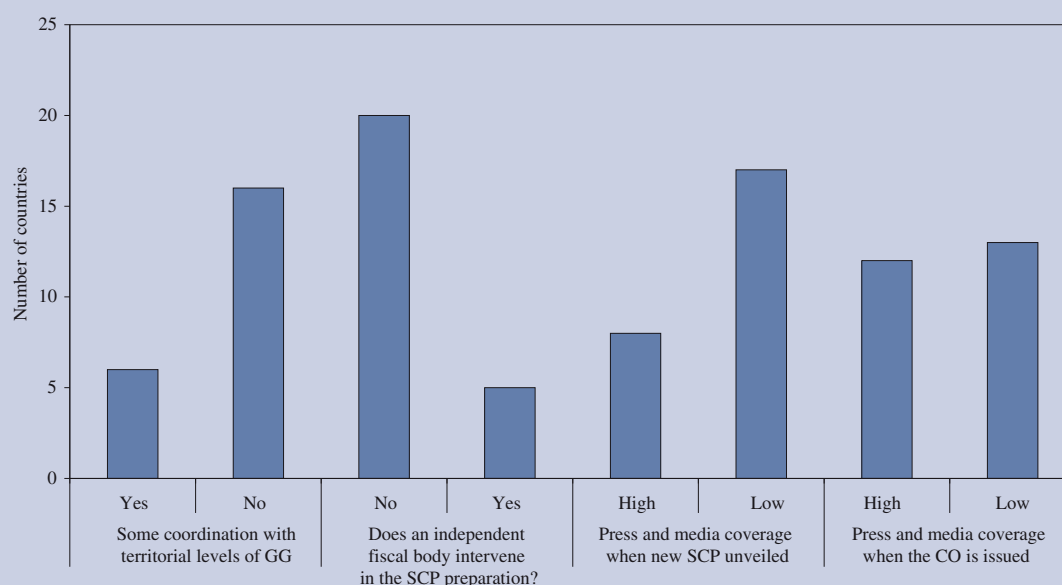
#### Coordination across levels of government

SCPs have to present budgetary projections for the whole of the general government sector. However, according to available information, these programmes are typically prepared with only little, in several cases without, coordination between the various levels of government (see Section II.1.2). In some cases, the targets set for local governments are based on the expected adherence to existing numerical budget balance or debt rules, but then it is not clear how projections for developments in expenditure are made (e.g. France). In a number of cases the budgetary targets for the social security and territorial levels of governments are based on agreements reached in the context of a national MTBF.

#### Involvement of national parliaments in the preparation of SCPs

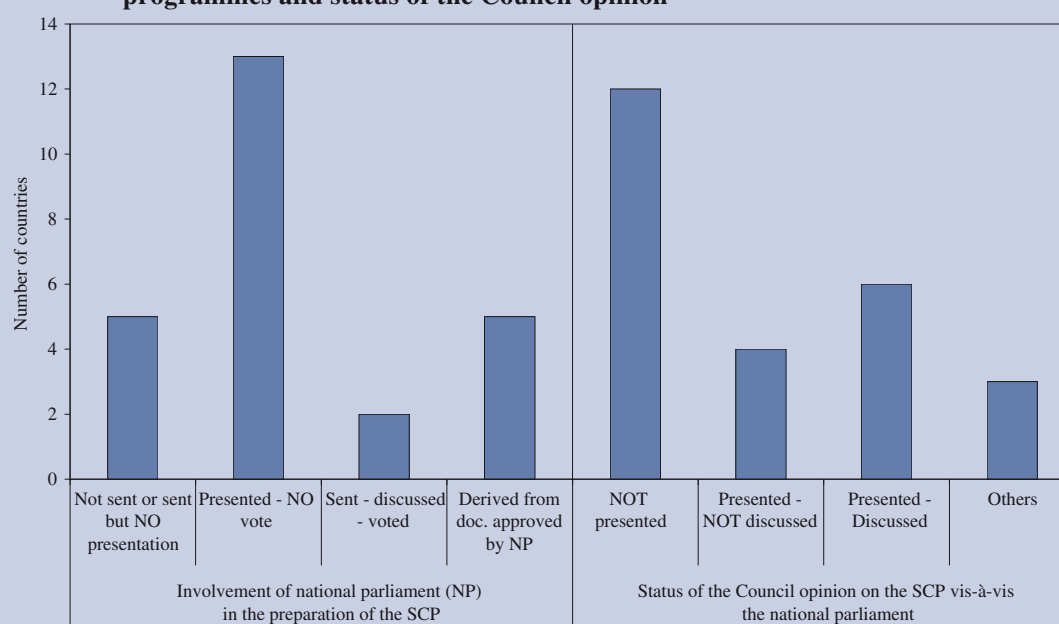
In the context of the 2005 SGP reform, the Council formulated concrete proposals to strengthen the national ownership of the medium-term budgetary targets set in the SCPs and the degree of political commitment to reach them. The Council notably encouraged newly elected governments to present a 'stability or convergence programme for the legislature', providing information on the means and instruments they intend to employ to reach the medium-

Graph III.2.3: Preparation of the stability and convergence programmes



Source: Commission services.

**Graph III.2.4: Involvement of national parliament in the preparation of the stability and convergence programmes and status of the Council opinion**



Source: Commission services.

term targets. It also invited governments to strengthen the status of their SCP by presenting it, as well as the Council opinion thereon, to their national parliaments. According to the survey in only two countries the SCP is the object of a vote in the national parliament (see Graph III.2.4). In five other cases, the SCP is derived from a document which was previously adopted by the national parliament (generally in the context of the national MTBF). In about half of the cases, the SCP is presented to the national parliament, but there is no vote on it. In five cases, the programme is not even presented to the national parliament.

The survey also provides interesting information on the follow-up in the Member States to the adoption of the Council opinion on the SCP. It appears that in about half of cases, the Council opinion is formally discussed by the government of the country concerned. This opinion is systematically presented and discussed in the national parliament in only six countries. These results suggest that, in a significant number of EU countries, the opinion of the Council on the SCP does not lead to a formal discussion in the domestic context. This of course does not mean that the Council opinions do not have influence on the conduct of national fiscal policies. An interesting element in this respect is that, according to answers to the

questionnaires, the release of the Council opinion seems to draw more attention from the media and public opinion than the release of the SCP itself.

## 2.4. Conclusions

The preparation of the annual budget is typically the budgetary step in which crucial fiscal policy decisions are taken. At the same time, most fiscal policy decisions have economic and budgetary implications which go well beyond the year in which they are taken. A majority of EU countries have therefore decided to supplement their budgetary institutions with MTBFs. Such instruments contribute to improved transparency in the conduct of fiscal policy and provide fiscal authorities with a better planning tool supporting effective expenditure management and the implementation of structural reforms. In the context of a MTBF the fiscal authorities set their medium-term budgetary targets and a path towards these targets. Budgetary projections are based on a multiannual macroeconomic scenario which determines the amount of resources available in the medium term to finance policies. The preparation of these assumptions therefore deserves particular attention.

*Box III.2.3: The medium-term budgetary framework in Sweden*

**Description**

The Swedish MTBF has a three-year-ahead horizon (t to t+3). In both the spring fiscal policy bill and the budget bill the budgetary information is presented in a three-year perspective. The budgetary framework revolves, to a large extent, around the expenditure ceiling, which covers the central government and the pension system. Interest payments are excluded. The ceiling sets a restriction for nominal expenditure in budget accounted terms (cash-based). A new third additional year (t+3) is added each year in the context of the preparation of the budget, and is approved by parliament. For example, the ceiling for 2010 is proposed to parliament in the budget bill for 2008. In principle, the parliament can also make changes to the previously approved expenditure ceilings of year t+1 and t+2, but this is rarely the case. The Swedish MTBF can therefore be characterised as a fixed framework.

In a formal sense, parliament only approves the detailed budget for the upcoming fiscal year and the overall expenditure ceiling for year t+3. However, parliament is also asked to vote on a preliminary allocation of expenditure to 27 expenditure areas. In this way, the government seeks to anchor its medium-term fiscal policy at an early stage. The budget also contains the estimated levels of appropriations for the second and third additional years, which makes it possible to compare the government's projected fiscal development to the expenditure ceiling. This level of detail is, however, only presented as information. There is also a government agency, the National Financial Management Authority, that makes in-year and medium-term forecasts, which are publicly disclosed. These forecasts also help the public assess the performance of the government in relation to the expenditure ceiling.

**Monitoring and enforcement**

There are no *ex ante* specified sanctions if the ceiling is exceeded. But so far the expenditure ceiling has been observed for every year since its introduction in 1997. The success in this case is probably connected with the strong 'top-down'-approach, which makes the ceiling binding also throughout the execution of the budget with a great amount of freedom for the line minister to make reallocations within their policy area. Also the parliamentary approval process follows the 'top-down' approach starting with the approval of ceilings and subceilings, followed by the approval of appropriations within the ceiling. There is also an informal budget margin built in the system against forecasting errors as the total sum of the indicative subceilings normally is less than the overall expenditure ceiling. This can be considered a relevant prudence factor. As from 2000 the MTBF has contained a surplus target for the general government sector requiring that average net lending should average 2.0 % of GDP over the business cycle.

**Functioning**

According to several authors, the first 10 years with the framework can be defined as a success story. Some criticisms were however recently put forward, notably concerning the link between the surplus target and the expenditure ceilings. Some authors have also raised the question of circumvention of the ceiling through tax expenditures and creative accounting.

Beyond these common basic features, the nature and design of MTBFs may vary significantly, reflecting notably country-specific preferences. A number of characteristics appear however desirable. Firstly, MTBFs should preferably cover the whole of the general government sector, to fully take into account the medium-term budgetary impact of policy decisions. Secondly, there should be a proper coordination between various government tiers when setting the multiannual budgetary targets. This is crucial to ensure a sufficient degree of ownership of these targets by all actors taking part in the conduct of fiscal policy. Thirdly, there should be a strong connection between the MTBF and the annual budget procedure. The multiannual targets set in the previous

years should form the basis upon which the budget is prepared. Finally, the medium-term targets should be vested with a sufficient degree of political commitment, by the executive and the legislative branches. The reliance on 'fixed' MTBFs, which are articulated around a fixed path for government spending, generally ensures a strong degree of political commitment to respect the medium-term targets and strong connectedness with the annual budget procedure.

Of the EU-25, 20 Member States have a national MTBF. Most of these frameworks cover the whole of the general government sector or several subsectors of general government. However, there is a proper *ex ante* coordination

exercise involving various government tiers in only about one third of cases. Most national MTBFs are flexible frameworks, in the sense that revisions to the budgetary objectives generally occur within the period covered by a multiannual plan. The situation also varies substantially across Member States concerning the link between the MTBF and the annual budgetary procedure. In about half of cases, this link can be assessed as relatively strong. In other cases the medium-term budgetary projections seem to be largely indicative and hardly taken into account in the preparation of the annual budget laws.

In the context of the preventive arm of the SGP all Member States are requested to present annually SCPs in which they provide medium-term macroeconomic and budgetary forecasts for the whole of the general government sector. While the main aim of such programmes is to ensure a proper coordination of fiscal policies in the EU, they can also be used domestically as a MTBF. Even if such programmes have to present budgetary projec-

tions for all general government subsectors, it appears that the degree of coordination with other levels of government in the preparation of SCPs is generally relatively low. Moreover, budgetary targets in the SCPs are on average vested by a relatively low degree of political commitment. In only a few EU countries the SCP is the object of a vote or derived from a document which was previously adopted by the national parliament.

Overall, the analysis in this part of the report on the existence and properties of MTBFs currently in force in the EU countries points to a relatively large gap between what would be desirable according to theory and the actual practice. Considerable progress can be made by most of the EU Member States to establish MTBFs or to strengthen the existing ones. A number of good examples can however be identified in the EU. According to the information provided by Member States in the 2006/07 updates of SCPs, there seems to be ongoing progress in a number of countries towards the introduction of national MTBFs, or reforms of existing ones.

# 3. Experience with stability and convergence programmes under the preventive arm of the Stability and Growth Pact

## 3.1. Introduction

This section analyses the medium-term budgetary plans formulated by Member States and compares them with outcomes. The analysis exploits an updated and extended version of a database summarising the medium-term budgetary plans laid down in the SCPs <sup>(1)</sup>. Every year before December, the EU Member States prepare such programmes in which they provide medium-term economic and budgetary projections. The EU-15 Member States submitted their original SCP in 1998. The ‘new’ EU-10 Member States submitted their first SCP in June 2004. These programmes have since then been updated annually, so that a total of nine vintages of SCPs have so far been submitted by the EU-15 Member States (four for the EU-10 countries).

The content of SCPs has become more and more standardised over time with the adoption by the Council of a code of conduct on the content and format of SCPs in July 2001. This document was revised and enriched in the context of the 2005 reform of the SGP. The objectives have also evolved over time. The original Stability and Growth Pact stated that Member States should target in their SCP the attainment of a budgetary position close to balance or in surplus. The 2005 SGP reform changed this requirement and the revised SGP requests Member States to target the attainment of country-specific medium-term budgetary objectives (MTOs) <sup>(2)</sup>. The

2005 SGP reform has also introduced a number of simple principles guiding the adjustment towards the MTO <sup>(3)</sup>. The EU Member States have provided a considerable amount of information in their SCPs. In practice, these programmes contain medium-term projections for the general government balance and debt, but also on the expected developments in government expenditure, interest payments and revenue. Information is also provided on the macroeconomic assumptions underpinning the budgetary projections and on the policy measures being envisaged to achieve the objectives of the programme. SCPs have a medium-term perspective and programmes submitted before December of year  $t$  contain projections for the years  $t+1$ ,  $t+2$  and  $t+3$  <sup>(4)</sup>.

This section first reviews the medium-term fiscal consolidation strategies followed by the Member States in their SCP in terms of the size and composition of the planned fiscal adjustments. In a second step, it assesses to what extent Member States achieved their multiannual budgetary targets and the reasons for possible deviations.

## 3.2. Stylised facts about a typical stability/convergence programme

### 3.2.1. Member States have on average planned significant improvement in public finances

Table III.3.1 summarises the plans formulated by Member States in the SCPs submitted over the period

<sup>(1)</sup> A description of this database, which was first built-up and used by Moulin and Wierds (2005), is provided in Box III.3.1.

<sup>(2)</sup> MTOs are defined taking into account the current debt ratio and potential growth prospects. Considerations on implicit liabilities, i.e. the budgetary impact of ageing population, will be taken into account as soon as modalities for doing so are appropriately established and agreed by the Council (see Section II.1.6).

<sup>(3)</sup> Notably, the countries of the euro area or participating in ERM II which have not yet reached their MTO have to pursue an annual adjustment of their structural balance by 0.5 % as a benchmark. Larger efforts have to be made in good times.

<sup>(4)</sup> A number of programmes cover a longer time horizon (up to  $t+5$  in some cases). However, for comparability reasons, it was decided to base the analysis on the years  $t$  to  $t+3$ .

1998–2006. It shows that, over the three-year horizon of their SCP, the EU-15 countries have on average planned a cumulated improvement in the government balance by 0.7 percentage point of GDP. Interestingly, the projected improvement in the first year covered by the SCP (0.1 % of GDP on average) has on average been lower than in the following two years (0.3 % of GDP). Such a result is surprising. It could on the contrary have been expected that countries which have not yet reached a sound fiscal position plan significant efforts in the early years covered by the SCP to reach

such a position and plan to stabilise the government balance thereafter.

The tendency to project larger adjustments in the outer years of the periods covered by SCPs has regularly been highlighted by the Commission in its assessments. A possible interpretation is that some EU countries have sought to avoid the implementation of difficult measures by delaying the consolidation efforts to the end of the period covered by their SCP. The announced budgetary targets for these years are indeed vested by a much

*Table III.3.1*

**Medium-term budgetary plans formulated by Member States in their stability and convergence programmes over the period 1998–2006**

% of GDP	Initial gen. gov. balance (1)	Initial debt ratio (2)	Planned change in the balance ratio	Planned change in the exp. ratio	Planned change in the prim. exp. ratio	Planned change in the revenue ratio	Planned change in the debt ratio
<b>EU-15 Member States — Simple averages</b>							
t – t+1	– 0.6	65.8	0.1	– 0.4	– 0.2	– 0.3	– 1.6
t – t+2 (cumulated)			0.4	– 1.0	– 0.7	– 0.6	– 3.3
t – t+3 (cumulated)			0.7	– 1.6	– 1.1	– 0.9	– 5.2
<b>Before SGP reform — EU-15 Member States — Simple averages</b>							
t – t+1	– 0.5	66.4	0.1	– 0.5	– 0.2	– 0.3	– 1.6
t – t+2 (cumulated)			0.3	– 1.1	– 0.7	– 0.7	– 3.4
t – t+3 (cumulated)			0.6	– 1.6	– 1.2	– 1.0	– 5.2
<b>After SGP reform — EU-15 Member States — Simple averages</b>							
t – t+1	– 1.0	63.7	0.2	– 0.3	– 0.3	– 0.2	– 1.4
t – t+2 (cumulated)			0.4	– 0.8	– 0.6	– 0.4	– 3.0
t – t+3 (cumulated)			0.8	– 1.2	– 1.0	– 0.5	– 4.9
<b>EU-10 Member States — Simple averages</b>							
t – t+1	– 2.8	38.7	0.4	– 0.4	– 0.4	0.1	– 0.6
t – t+2 (cumulated)			0.9	– 1.5	– 1.4	– 0.5	– 1.4
t – t+3 (cumulated)			1.5	– 2.6	– 2.5	– 1.1	– 2.5
<b>EU-15 Member States with a large initial deficit (above 2% of GDP) — Simple averages</b>							
t – t+1	0.0	71.6	0.6	– 0.4	– 0.3	0.1	– 0.3
t – t+2 (cumulated)			1.1	– 1.1	– 1.0	0.0	– 1.4
t – t+3 (cumulated)			1.7	– 1.8	– 1.6	– 0.1	– 2.8

NB: (1) and (2) show the budget balance and the debt ratios in year t, which is the year of submission of the programme.

Source: Commission services.

weaker degree of political commitment, potentially for two reasons. Firstly, the outer years of the programme may fall after the term of the current legislature. Secondly, the status of budgetary projections for the outer years of SCPs is by nature different from those for the year following its submission, which is generally the year covered by the budget and for which budgetary objectives and measures to achieve them were approved, or are about to be approved, by the national parliament.

Unsurprisingly, there is a strong link between the level of the initial government balance and the magnitude of the planned fiscal adjustment. Countries with a relatively large government deficit (larger than 2 % of GDP) in the year of submission of the SCP have on average planned an annual improvement more than twice as high as the average. The fiscal adjustments planned by these countries were also spread more evenly across the time horizon of the SCP: the planned improvement in the deficit in the first year of the programme was broadly the same as that planned in the following two years. A possible reason for these differences with the average pattern is that a significant proportion of these SCPs was submitted by countries subject to an excessive deficit procedure and therefore to obligations to bring their government deficit below 3 % of GDP within specified time limits. Graph III.3.1 points to a linear relation between the average starting point for the general government balance (as

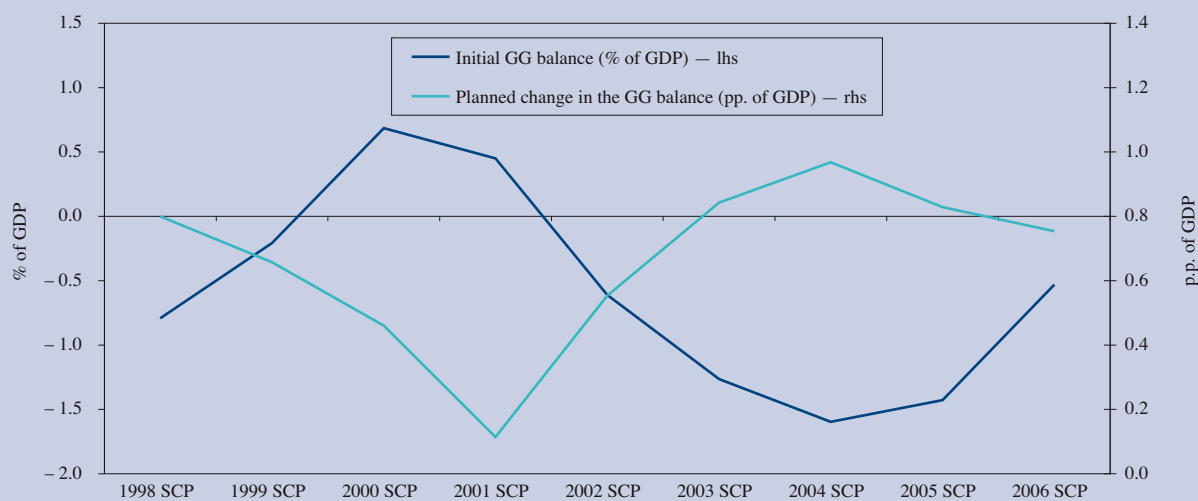
a percentage of GDP) and the planned change in this variable over the following three years. On average, a worse starting position for the general government balance by one percentage point of GDP implied a larger planned adjustment cumulated over a three-year period by about ½ % of GDP (see Table III.3.2 for detailed data).

Data in Table III.3.1 also show that the EU-10 Member States have on average planned large fiscal adjustments in their SCPs. These countries have planned a cumulated improvement of their government balance by 1½ percentage points of GDP over three years, as against about ¾ percentage point for the EU-15 countries. To a large extent this reflects the fact that the initial fiscal position was significantly worse in these countries (by about two percentage points of GDP on average).

### 3.2.2. Composition of the planned adjustment

As already pointed out by the European Commission (2005a) and Moulin and Wierts (2006), the EU countries have typically planned expenditure-based fiscal adjustments. Member States have on average projected a decline in the expenditure-to-GDP ratio by about ½ percentage point per year (1½ percentage points over a three-year horizon). About half of the savings expected from such a decline were planned to be allocated to an improvement in the government balance; the other half

Graph III.3.1: Initial fiscal position and planned consolidation over a three-year horizon (simple average of EU-15 Member States)



Source: Commission services.



to finance a reduction in the government revenue-to-GDP ratio <sup>(1)</sup>. Interestingly, Member States with high initial deficits (more than 2 % of GDP) have on average planned reductions in the expenditure-to-GDP ratio of a similar size compared to those with small initial deficits. However, these Member States planned to allocate virtually all the budgetary margins created on the expenditure side to the improvement in the government balance. About one third of the envisaged fall in the ratio of government expenditure to GDP was expected to stem from a decline in the debt interest burden. Such a reduction was supposed to be triggered by (i) a planned reduction in the debt interest rate (reflecting past and, in some cases, projected declines in interest rates) and (ii) a planned decline in the debt ratio, by a total of five percentage points of GDP on average over a three-year period.

Graph III.3.2 complements the information in Table III.3.1 by providing a synthetic representation of the composition of the planned change in the government balance ratio in the SCPs considered in the analysis. It shows that almost 90 % of SCPs have planned a

decline in the government expenditure-to-GDP ratio over a three-year period. About 80 % of SCPs have planned a decline in both the expenditure and the revenue ratio. As already pointed out by Moulin and Wierds (2005), in only 15 % of cases the fiscal adjustment planned in the programme was also based on an increase in the revenue ratio.

An interesting result is that the planned decline in the ratio of government expenditure to GDP was significantly larger in the programmes submitted in the early years of the period considered (1998–99) than in the latest years (2005–06), despite the comparatively better starting fiscal position in the early years (see Table III.3.2). The more favourable medium-term growth assumptions in the SCPs submitted in the early years of the period considered explain only part of the difference between the two periods (denominator effect), suggesting that expenditure targets have become less ambitious over time. A possible explanation is that the expenditure-to-GDP ratio has declined significantly in a number of countries over the period considered: countries may then have felt a less pressing need for expenditure restraint in the recent period. Another possible reason is that recurrent difficulties in attaining ambitious expenditure targets (see Section 3.3.4 below) have led Member States to project more realistic and attainable expenditure targets.

<sup>(1)</sup> The information available in the database does not allow drawing a firm conclusion on whether the projected decline in the ratio of government revenue to GDP in the SCPs reflected expected unfavourable tax-to-GDP elasticities developments or planned tax cuts. However, given the relatively long time period considered and the evidence in the programmes, the second assumption is to be privileged.

*Table III.3.2*

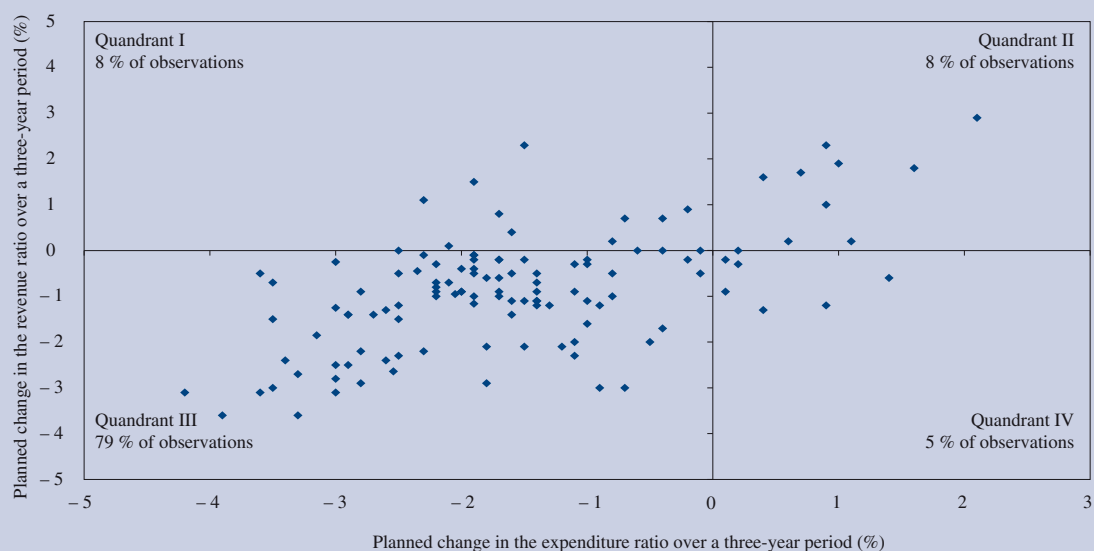
**Medium-term budgetary plans formulated by Member States in the successive stability and convergence programme updates over the period 1998–2006 (change over three years, simple averages)**

% of GDP	Initial gen. gov. balance (1)	Initial GG expenditure ratio (2)	Initial GG revenue ratio (3)	Planned change in the gen. gov. balance (over three years)	Planned change in the GG exp. ratio (over three years)	Planned change in the GG rev. ratio (over three years)	Planned increase in real GDP (over three years), % change
<b>EU-15 Member States — Simple averages</b>							
1998 SCP	– 0.8	49.1	48.2	0.8	– 2.1	– 1.2	8.9
1999 SCP	– 0.2	48.4	48.3	0.7	– 2.0	– 1.3	9.3
2000 SCP	0.7	47.0	47.7	0.5	– 1.9	– 1.4	9.9
2001 SCP	0.5	46.9	47.3	0.1	– 1.1	– 1.0	8.2
2002 SCP	– 0.6	47.4	46.8	0.6	– 1.4	– 0.8	8.1
2003 SCP	– 1.3	47.8	46.5	0.8	– 1.6	– 0.7	8.0
2004 SCP	– 1.6	47.9	46.3	1.0	– 1.5	– 0.5	8.3
2005 SCP	– 1.4	47.3	45.9	0.8	– 1.3	– 0.5	7.8
2006 SCP	– 0.5	46.4	45.9	0.8	– 1.2	– 0.4	8.0

NB: (1), (2) and (3) show the ratios as a % of GDP in the year of submission of the programme.

Source: Commission services.

Graph III.3.2: Composition of the consolidation planned in the programme (EU-15 Member States)



Source: Commission services.

### 3.2.3. Macroeconomic assumptions

The EU-15 Member States have on average planned an annual increase in real GDP by 2¾ % over the period covered by the SCPs (unweighted average) <sup>(1)</sup>. This is slightly higher than the average rate observed in the last two decades for the same sample of countries <sup>(2)</sup>. The

planned rate of real GDP growth has on average been the same for the first, second and third year of the period covered by the programme. EU-10 Member States have on average planned an increase in GDP by 4.8 % per year in real terms and 8 % in nominal terms. This is clearly above the average observed in the period preceding the submission of the first programme by these Member States.

<sup>(1)</sup> In the case of SCPs containing several macroeconomic scenarios only the cautious scenario was considered.

<sup>(2)</sup> The simple average of real GDP growth rates of the EU-15 countries over the period 1980–2000 is 2.5 %.

Interestingly, there were over time significant fluctuations in the medium-term real GDP growth forecasts (see

Table III.3.3

### Medium-term macroeconomic projections in the stability and convergence programmes

	Planned increase in nominal GDP (%)	Planned increase in real GDP (%)	Planned increase in the GDP deflator (%)
<b>EU-15 Member States — Simple averages</b>			
t – t+1	4.9	2.7	2.1
t – t+2 (cumul.)	10.1	5.6	4.2
t – t+3 (cumul.)	15.4	8.5	6.3
<b>EU-10 Member States — Simple averages</b>			
t – t+1	8.1	4.8	3.1
t – t+2 (cumul.)	16.3	9.8	5.9
t – t+3 (cumul.)	25.2	15.3	8.5

Source: Commission services.

Table III.3.3). A close look at the data suggests that contemporaneous macroeconomic developments have had a significant influence on the medium-term macroeconomic forecasts included in the SCPs. Graph III.3.3 exhibits a link between real GDP growth in the year of submission of a SCP and the average annual real GDP growth rate projected in the three following years covered by the SCP. The macroeconomic assumptions underlying the SCPs submitted in the midst of the high-growth period at the turn of the decade were particularly high. Real GDP growth was projected to average 3¼ % over the period 2001–03 in the EU-15 Member States (simple average).

The fact that SCPs elaboration in high-growth periods were based on more optimistic macroeconomic assumptions suggests that forecasters and policymakers tend to extrapolate contemporaneous developments to the medium term. The indicators commonly used in the analysis of cyclical developments may also have played a role, as real-time estimates of potential growth, which generally constitute one of the elements used in the preparation of medium-term macroeconomic forecasts, are to some extent influenced by ongoing macroeconomic developments. It should be noted that the tendency to revise growth forecasts upwards in favourable growth periods seems to have come to an end in the recent period and notably since the 2005 SGP reform. The positive macroeconomic developments in 2006 has not led

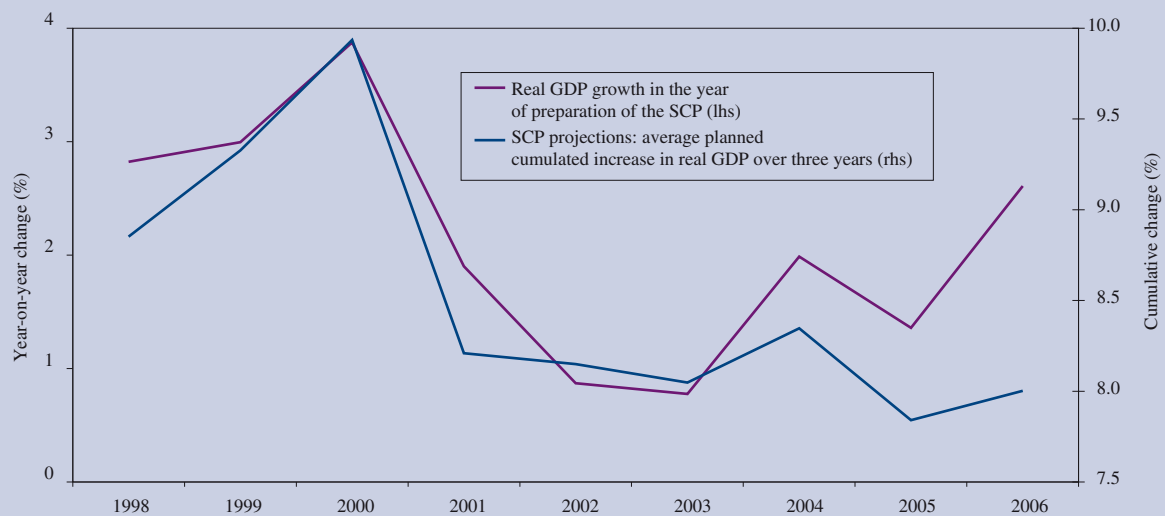
to upward revisions in medium-term growth forecasts for the period 2007–09.

### 3.3. Comparing plans to outcomes

This section compares the multiannual budgetary plans submitted by Member States in their SCPs to outcomes. A number of papers have provided analysis on the capacity of Member States to respect their medium-term budgetary targets. Strauch et al. (2004) evaluated the performance of budget and growth forecasts in the convergence reports and SCPs over the period 1991–2002. Their analysis notably concluded that national forecasts of budget balances and economic growth are marked by a cautionary bias in some countries, while in others they seem to be affected by an optimistic bias. These authors also found that governments do not seem to use available information efficiently to minimise the forecast error of their budgetary projections, as forecasts of budget balances and economic growth produced by the Commission services generally show better results than those included in the multiannual programmes submitted by Member States <sup>(1)</sup>.

<sup>(1)</sup> These authors argue that political and institutional variables can explain these patterns. Notably, they find that the forms of fiscal governance are important determinants of biases in budgetary and GDP growth forecasts. Those governments where budgetary targets are based on pre-negotiated contracts seem to have a cautionary bias.

**Graph III.3.3: Contemporaneous growth conditions and macroeconomic forecasts (simple average of EU-15 countries)**



Source: Commission services.

**Box III.3.1: The database comparing multiannual budgetary plans and outcomes**

The analysis of the medium-term budgetary plans of Member States is based on an updated and extended version of a database summarising the macroeconomic and fiscal projections included in the SCPs submitted by Member States from 1998 to 2006. This database contains data on the macroeconomic assumptions underlying budgetary projections (real GDP, nominal GDP, GDP deflator) and on the projected developments in the main aggregates of government finances (budget balance, government expenditure, interest payments, government revenue and debt). The database contains information on these aggregates (projected and observed) expressed as a percentage of GDP, but also in level.

The database covers all EU Member States, except Bulgaria and Romania. As the EU-15 Member States submitted their initial SCP in 1998, a total of nine vintages of SCPs are included in the database. The new EU-10 Member States submitted their first SCPs in July 2004. Due to their different submission date (July vs November) and to the need to base comparisons on a homogeneous basis, these programmes were not included in the database. The three updates of these SCPs, submitted in November 2004, 2005 and 2006 were included in the database. The database therefore consists of a total of 165 SCPs (15 countries times 9 SCPs, plus 10 countries times 3 SCPs). Each SCP has three observations ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ), so that the database has a total of 495 observations.

A number of SCPs do not contain all the information. Notably, SCPs for EL (1998), BE (2000), NL (1999, 2000, 2001) and LU (1998) did not provide information on projected developments in government expenditure and revenue. In some cases (e.g. FR 1998, FR 1999, FR 2000) linear extrapolations were made as data were only provided for the initial and end-year covered by the SCP. In a number of other cases, there were no data on primary expenditure and interest payments.

Moulin and Wierts (2006) showed that problems to achieve the projected improvements in the general government balance reflect primarily difficulties to adhere to expenditure plans (in nominal or real terms). The analysis in this section updates and complements the previous findings by these authors. The analysis of the reasons for the deviation from budgetary targets is extended, notably by not only looking at average developments but also at the distribution of SCPs depending on the reasons for the difficulties to reach multiannual budgetary targets. The analysis is extended to the EU-10 Member States<sup>(1)</sup>. The analysis of the respective influence of developments in government revenue and expenditure, as a share to GDP but also in level (in nominal and real terms), is also deepened. The aim of the analysis in this section is to identify broad trends in the reasons for the difficulties to respect the budgetary targets, rather than to provide a detailed country-by-country analysis. Box III.3.2 provides indications on the relative positions of the various Member States.

**3.3.1. Planned improvements in the general government balance were not achieved**

The previous section has shown that Member States have on average planned significant improvements in

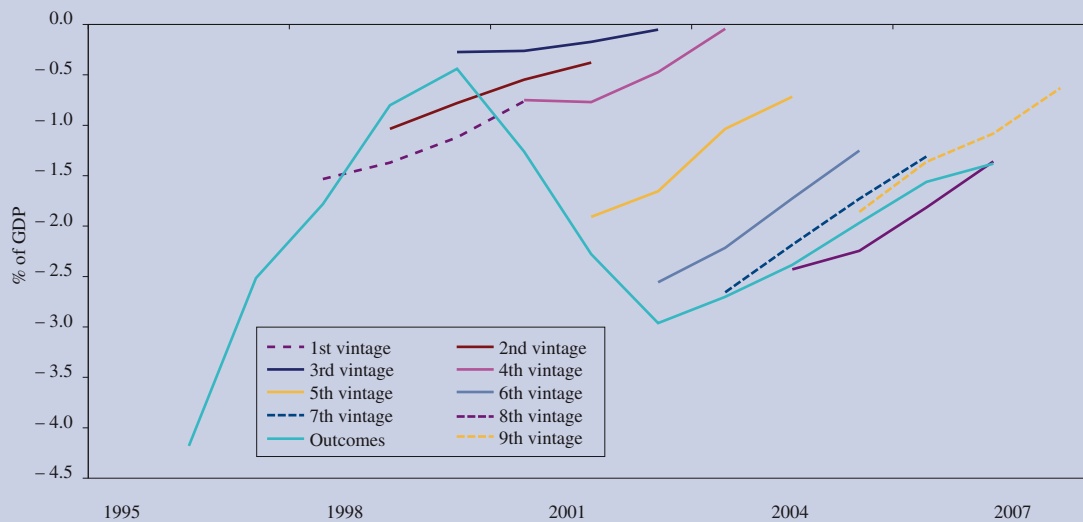
their government balance over the three-year horizon of their SCP. Graph III.3.4 shows that there were on average sizeable deviations from the planned adjustment paths. It also indicates a better performance in the recent years, which correspond to those following the 2005 reform of the Stability and Growth Pact and to a context of improving macroeconomic conditions.

Graph III.3.5 provides complementary information. It plots the planned changes in the government balance ratio on the horizontal axis and the observed changes on the vertical axis, for the EU-15 Member States and for various time horizons ( $t-t+1$ ; cumulated over  $t-t+2$ ; cumulated over  $t-t+3$ ). The focus on changes in government finances aggregates is justified by the need to neutralise possible base effects resulting from statistical revisions in the initial years<sup>(2)</sup>. The main message is that in about two thirds of cases the improvement in the general government balance was less pronounced than planned (or there was a worsening). Interestingly, the frequency of negative surprises increases when lengthening the time horizon considered. When considering the gap between plans and outcomes for the first year covered by the SCPs, i.e. the year

<sup>(1)</sup> The analysis for these countries is less detailed than for the EU-15 Member States, for data availability reasons.

<sup>(2)</sup> The influence of base effects cannot however be fully neutralised. In some Member States, better-than-expected or worse-than-expected budgetary outcomes in the year of submission of the SCP may indeed have had an influence on the fiscal policy decisions in the following years and implied deviations from plans.

**Graph III.3.4: Budget balance ratio — Successive plans in the stability and convergence programmes and outcomes (% of GDP) — Simple average of EU-15 countries**



Source: Commission services.

generally covered by the budget law, the performance is almost balanced: changes in the government balance were disappointing in only 55 % of cases. Cumulated changes in the government balance over three years were worse-than-planned in more than 70 % of cases.

The same message emerges when looking at the average difference between the projected and observed change in the government balance-to-GDP ratio (simple averages of the EU-15 Member States). Table III.3.4 shows that the gap between the planned and observed improvement in the general government balance tends to increase when lengthening the time horizon considered. Such a result, which is surprising as negative and positive risks (e.g. growth and tax elasticity surprises) should offset each other over time provided that GDP growth evolves around a stable trend, calls for further investigation on the reasons for the negative surprises in budgetary developments.

Data for the EU-10 Member States show a different pattern. There were on average fewer surprises in government finances developments in these countries compared to the projections of the SCPs. The conclusions for the EU-10 countries should however be taken with care as the analysis for these countries relies on a much smaller sample. It is

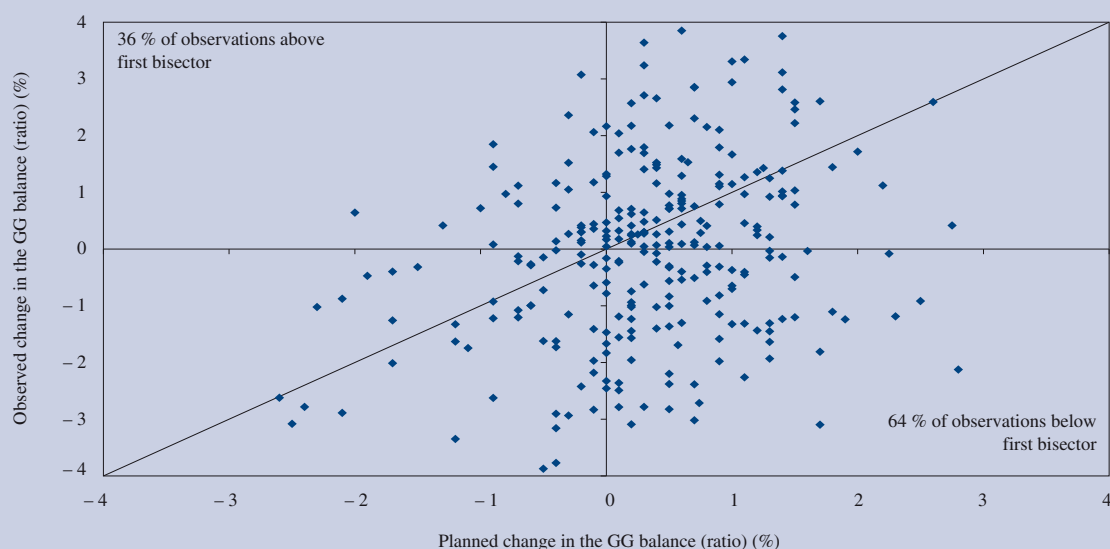
based on the comparison of plans submitted in the 2004 and 2005 SCPs with budgetary outcomes in 2005 and 2006.

### 3.3.2. Developments in GDP growth

A possible explanation for the worse-than-planned developments in the government balance is that macro-economic developments turned out to be less favourable than expected. Graph III.3.6 compares the cumulated increase in real GDP over various time horizons ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ) projected in the SCPs to the observed increases over the corresponding period. It appears that the frequency of positive surprises in real GDP developments is roughly equivalent to the frequency of negative surprises. This could suggest that real GDP growth has, on average, been in line with projections. However, a closer look at the data shows that the size of negative surprises has on average been twice as high as the size of positive surprises, implying that there were on average substantial negative surprises in real GDP growth developments compared to plans (see Table III.3.5).

An interesting exercise is to assess what may have been the consequences of negative growth surprises on budgetary developments. A proxy can be estimated by applying the standard budgetary sensitivity to the cycle to the

Graph III.3.5: Plans versus outcomes — General government balance (ratio) — EU-15 Member States



Source: Commission services.

Table III.3.4

Planned and observed changes in the government balance ratio

% of GDP	Surprise in the change in the budget balance (1)	Contributions of developments in		
		Primary expenditure ratio	Interest payments ratio	Government revenue ratio
<b>EU-15 Member States — Simple averages</b>				
t-t+1	- 0.1	- 0.4	0.1	0.2
t-t+2 (cumul.)	- 0.5	- 1.1	0.2	0.5
t-t+3 (cumul.)	- 1.1	- 1.8	0.2	0.6
<b>E-10 Member States — Simple averages</b>				
t-t+1	- 0.4	- 0.7	0.0	0.2
t-t+2 (cumul.)	- 0.2	- 1.3	0.1	1.1

NB: (1) Difference between the planned and observed change in the budget balance (% GDP) for different time horizons.

Source: Commission services.

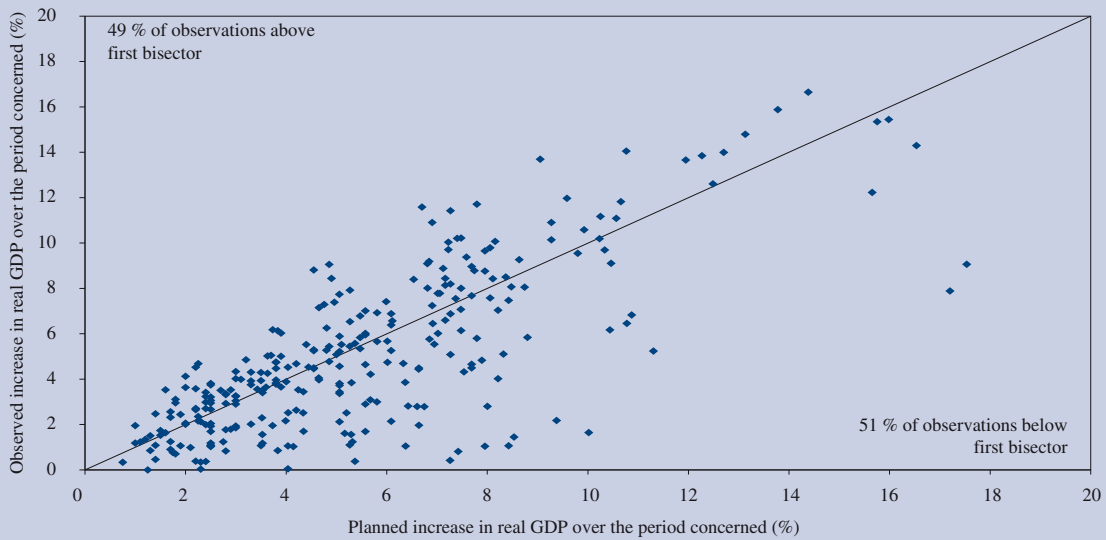
surprise in real GDP growth. The calculation shows that a significant part (from one third to half) of the difference between the planned change in the government balance and the observed change can be attributed to negative GDP growth surprises.

The assessment of real GDP growth developments compared to plans does however not tell the full story, and the picture is significantly different when considering developments in nominal GDP. As shown in Graph III.3.7 and

Table III.3.5, nominal GDP growth developments were in fact on average very much in line with plans (frequency and size of negative and positive surprises are similar).

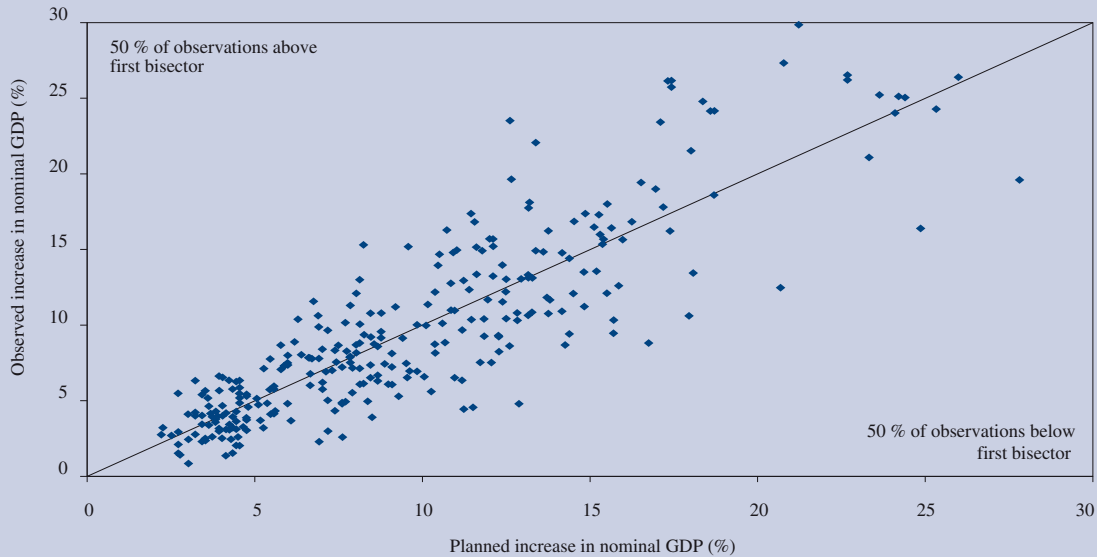
The analysis for the EU-10 countries shows a significantly different picture than for the EU-15 Member States. On average there were, over the short period of time considered, large positive GDP growth surprises compared to the macroeconomic assumptions included in the SCPs (in both real and nominal terms).

**Graph III.3.6: Plans versus outcomes — Real GDP growth — EU-15 Member States**



Source: Commission services.

**Graph III.3.7: Plans versus outcomes — Nominal GDP growth — EU-15 Member States**



Source: Commission services.

### 3.3.3. Developments in government revenue

The previous section has shown that nominal GDP has increased roughly in line with plans in the EU-15 Member States. Graph III.3.8 compares the cumulated

increase in government revenue over various time horizons ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ) to the observed increases over the corresponding period. It appears that developments in government revenue were more favourable than expected in more than half of cases. This is confirmed by

Table III.3.5

Planned and observed changes in GDP growth

	Surprise in the variation of the budget balance (1) (%)	Surprise in nominal GDP growth (2) (%)	Surprise in real GDP growth (3) (%)
<b>EU-15 Member States — Simple averages</b>			
t-t+1	- 0.1	0.3	0.1
t-t+2 (cumul.)	- 0.5	0.2	- 0.4
t-t+3 (cumul.)	- 1.1	0.1	- 1.1
<b>EU-10 Member States — Simple averages</b>			
t-t+1	- 0.4	2.0	1.4
t-t+2 (cumul.)	- 0.2	1.3	1.3

NB: (1) Difference between the planned and observed change in the government balance ratio (% GDP).

(2) Difference between the planned and observed change in nominal GDP.

(3) Difference between the planned and observed change in real GDP.

Source: Commission services.

the data in Table III.3.6 which show that, over the three-year horizon of a SCP, nominal government revenue increased significantly faster than expected in the SCP.

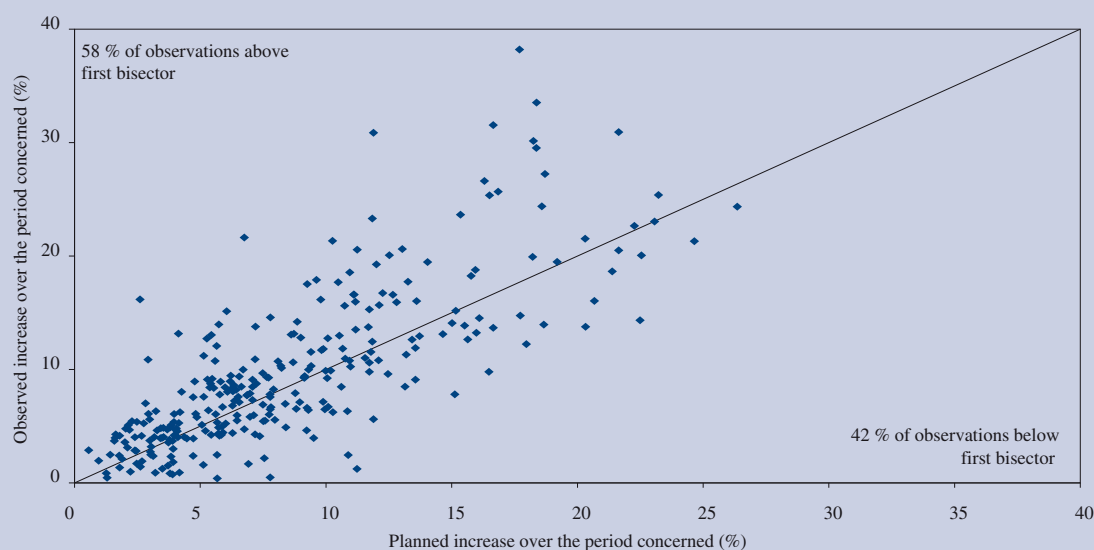
The fact that government revenue increased faster than expected, while nominal GDP increased in line with plans, calls for an explanation. A first possibility is that there were recurrent positive surprises on the developments in the 'spontaneous' (i.e. before the impact of policy measures) tax elasticities. Given the period consid-

ered (eight years), systematic positive tax elasticity surprises appear however unlikely. An alternative explanation is that part of the tax reductions initially planned in the SCPs were not implemented or at least partly offset by other measures affecting revenue developments.

### 3.3.4. Developments in government expenditure

The analysis of compliance with expenditure plans is crucial for several reasons: (i) as seen in Section III.3.2

Graph III.3.8: Plans versus outcomes — Nominal revenue — EU-15 Member States



Source: Commission services.



the EU countries have typically planned expenditure-based fiscal adjustments; (ii) government expenditure is the part of government finances that is the most directly under the control of the government; (iii) the previous section showed that there were on average positive surprises on the revenue side, implying that the main source for the difficulties in respecting medium-term budgetary targets are to be found on the expenditure side.

Graph III.3.9 compares the planned cumulated increase in nominal government expenditure over various time horizons (t-t+1; t-t+2; t-t+3) for the EU-15 Member States to the observed increases over the corresponding period. It appears that the increase in nominal government expenditure growth was larger than planned in 75 % of cases. This percentage falls to less than 70 % when considering the discrepancy between the planned and observed increase in government expenditure plans for the year t+1, i.e. the year covered by the budget law, and exceeds 80 % when considering the gap between the planned and observed cumulated increase in government expenditure over a three-year horizon.

Table III.3.7 shows that the larger-than-planned increase in government expenditure is largely responsible for the difficulties to achieve budget balance targets. It also shows that the negative gap between the observed and planned increases in government expenditure has had a tendency to widen with the time horizon considered. On average (simple average of EU-15 Member States), the negative surprise in the increase in nominal government expenditure reached 0.4 % of GDP after one year, 1.1 %

of GDP after two years and a cumulated 1.9 % over the three-year horizon of a SCP. Such developments show that the fiscal authorities have, on average, not compensated expenditure overruns in a given year by restraint in the following years of the period considered.

The analysis of the reasons for the negative surprises on the expenditure side should take into account that nominal government expenditure can also be affected by macroeconomic developments. In particular, inflation developments and fluctuations in interest rates may have an influence on government expenditure (depending on indexation rules, the level of interest rates and the size of government debt). A way to address this issue is to focus the analysis on developments in government expenditure net of interest payments and corrected for inflation developments. Graph III.3.10 compares developments in real primary expenditure to initial plans. It shows that the frequency of observations showing a larger-than-planned increase in expenditure is even higher when considering this variable. This is because developments in interest expenditure have contributed to limit the increase in government expenditure compared to plans, due to the unexpected fall in interest rates over the period.

Another element possibly explaining the larger-than-planned increase in government expenditure is the direct effect of negative growth surprises on government expenditure, e.g. through higher unemployment benefits and other social transfers. This effect is neglected here due to the very low level of the sensitivity of government expenditure to cyclical developments (less than 0.1 on

*Table III.3.6*

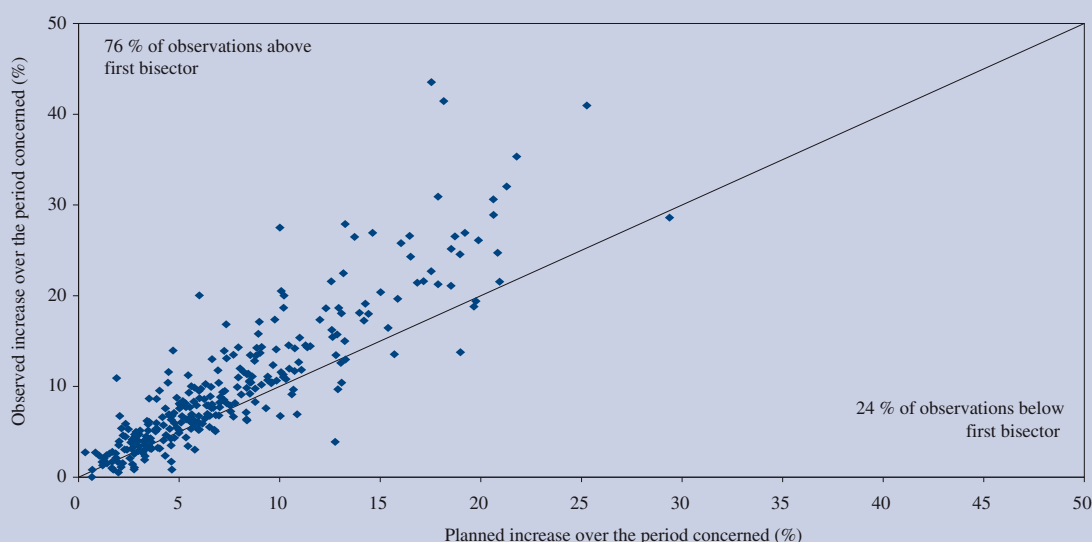
**Planned and observed changes in the government revenue ratio**

	Surprise in the revenue ratio (1) (%)	Numerator effect (2) (%)	Denominator effect (3) (%)
<b>EU-15 Member States — Simple averages</b>			
t-t+1	0.2	0.3	- 0.1
t-t+2 (cumul.)	0.5	0.6	- 0.1
t-t+3 (cumul.)	0.6	0.7	0.0
<b>EU-10 Member States — Simple averages</b>			
t-t+1	0.2	1.0	- 0.7
t-t+2 (cumul.)	1.1	1.6	- 0.5

NB: (1) Difference between the planned and observed change in the revenue ratio (% GDP).  
(2) Contribution of the larger-than-planned increase in nominal government revenues.  
(3) Contribution of developments in nominal GDP compared with plans.

Source: Commission services.

Graph III.3.9: Plans versus outcomes — Nominal expenditure — EU-15 Member States



Source: Commission services.

Table III.3.7

Planned and observed changes in the government expenditure ratio

	Surprise in the GG balance ratio (1) (%)	Surprise in the expenditure ratio (2) (%)	Numerator effect (3) (%)	Denominator effect (4) (%)
<b>EU-15 Member States — Simple averages</b>				
t-t+1	- 0.1	- 0.3	- 0.4	0.1
t-t+2 (cumul.)	- 0.5	- 0.9	- 1.1	0.1
t-t+3 (cumul.)	- 1.1	- 1.7	- 1.9	0.0
<b>EU-10 Member States — Simple averages</b>				
t-t+1	- 0.4	- 0.7	- 1.5	0.7
t-t+2 (cumul.)	- 0.2	- 1.2	- 1.8	0.5

NB: (1) Difference between the planned and observed change in the government balance ratio (% GDP).

(2) Difference between the planned and observed change in the expenditure ratio (% GDP).

(3) Contribution of the larger-than-planned increase in the nominal expenditure to the surprise in the expenditure ratio.

(4) Contribution of developments in nominal GDP to the surprise in the expenditure ratio.

Source: Commission services.

average in the EU). However, it is not excluded that for some Member States having faced large negative growth surprises, this may have explained a non-negligible part of the expenditure overrun compared to plans <sup>(1)</sup>.

Another interesting exercise is to assess whether expenditure overruns in a given year reflect successive upward revisions in expenditure plans or whether they reflect a default in the implementation of plans which were consistent over time. Given that SCPs are rolling and flexible medium-term frameworks, growth in government expenditure in a given year t is typically projected three times: in the SCPs submitted in November of year t-3, t-2 and t-1.

<sup>(1)</sup> See Moulin and Wierds (2006).

### Box III.3.2: Situation in groups of Member States

As indicated in the introduction, this chapter does not aim at identifying country-specific patterns. A number of interesting messages can however be drawn when looking at developments in the various countries. A first relevant message emerging from the data is that there was a large heterogeneity of performance across Member States, in the sense that some of them were consistently successful in sticking to budgetary targets, notably expenditure targets, while others were almost always unsuccessful. The analysis in the previous paragraphs has shown that two variables have played a crucial role in explaining deviations from budgetary plans: (i) negative surprises in real GDP growth; and (ii) expenditure overruns. The table below shows the distribution of the EU countries depending on whether the size of surprises in real GDP growth and government expenditure developments compared to plans of the SCPs were larger or lower than the median. On this basis, four groups of countries can be identified.

- A first group is made up of countries which experienced negative growth surprises, in some cases of a significant size (e.g. Germany), and showed at the same time a relatively high degree of adherence to government expenditure targets. This allowed them to limit the negative budgetary consequences of unfavourable economic developments for government finances. This group consists of Belgium, Denmark, Germany and Austria. Within this group, the behaviour of Belgium is very close to the average, while Denmark, Germany and Austria have shown a remarkably high degree of compliance with expenditure plans compared to the average.
- The second group consists of countries which combined negative growth surprises and larger-than-average spending overruns. This group is made of France, Italy and Portugal. In the three cases the size of spending overruns was relatively close to those observed on average in the EU-15 countries, but negative real GDP growth surprises were significantly larger in the case of Portugal. This country experienced a significant deterioration in its budgetary position over the period considered.
- A third group consists of countries which experienced positive real GDP growth surprises and managed to keep expenditure in line with plans. This group is made of Finland and Sweden. The size of positive growth surprises was relatively larger in the case of Sweden compared to Finland. The two countries in this group experienced over the period considered a large improvement in their government finances. In both countries, the general government balance improved from a deficit of about 1 % of GDP in 1997 to a large surplus (more than 3 % of GDP) in 2006.
- Finally, a fourth group is made up of countries which experienced at the same time larger-than-planned increases in real growth and larger-than-average expenditure overruns. Ireland, Greece, Spain and the United Kingdom are in this group. The magnitudes of growth and expenditure surprises differ considerably from one country to another. Positive real GDP growth surprises were particularly large in Ireland and Spain. The larger expenditure overruns were also observed in these two countries. A key issue is of course to what extent real GDP growth surprises reflect temporary or permanent factors, which could justify an upward revision in expenditure targets.

#### Situation of the EU-15 Member States compared with the median

	Small or positive surprises in nominal expenditure growth	Large negative surprises in nominal expenditure growth
Negative surprises in real GDP growth	BE, DK, DE, AT	FR, IT, PT
Small or positive surprises in real GDP growth	FI, SE	IE, EL, ES, UK

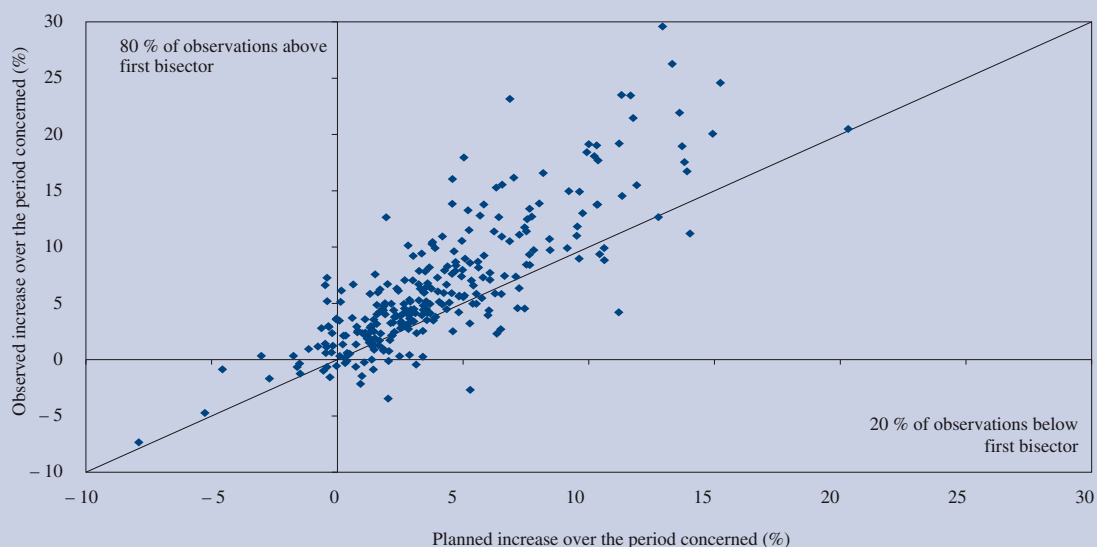
Note: The Netherlands and Luxembourg were not inserted in the table due to a lack of data for these two countries.

Source: Commission services.

Table III.3.8 analyses how growth in nominal and real government expenditure in a given year has on average been revised in the successive SCP updates. It shows that, on average over the period considered, about half of the discrepancy between the first forecast for the increase in government expenditure in year *t* (made in year *t*-3) and the observed increase reflects revisions in

plans (from the SCP submitted in year *t*-3 to the SCP submitted in year *t*-1); the other half reflects expenditure overruns compared to budget plans. This points to a relatively high degree of inconsistency of expenditure targets over time and, at the same time, to significant defaults in the implementation of plans formulated in the context of annual budgets.

Graph III.3.10: Plans versus outcomes — Real primary expenditure — EU-15 Member States



Source: Commission services.

Table III.3.8

**Consistency of general government expenditure plans over time (EU-15 Member States), 2000–06**

Observed and planned growth rates	Nominal GG expenditure (%)	Real GG expenditure (%)
Observed increase in year t	5.4	2.8
Planned increase in the SCP submitted in t-1	4.2	1.9
Planned increase in the SCP submitted in t-2	3.7	1.7
Planned increase in the SCP submitted in t-3	3.1	1.5

Source: Commission services.

**3.4. Conclusions**

This section reviews the medium-term budgetary plans formulated by Member States in their stability and convergence programmes (SCPs) and compares them with outcomes. The analysis shows that the EU-15 Member States have on average planned significant improvements of their government balance in their SCPs. Countries have typically planned expenditure-based fiscal adjustments. The expenditure-to-GDP ratio has on average been projected to decline by about 1½ percentage

points over the three-year horizon typically covered by a SCP. In about 80 % of cases, SCPs have planned, over a three-year period, a decline in both the expenditure and the revenue ratios. When comparing plans and outcomes, it appears that there were on average sizeable deviations from the planned adjustment paths. In about two thirds of cases the improvement in the general government balance was less marked than planned. Moreover, the negative gap between the planned and observed improvements in government finances is smaller when considering the first year of the SCP, i.e. the year generally covered by the budget law, than when considering the gap for a cumulated period of two or three years following the submission of the SCP.

While government revenue evolved broadly in line with plans, there were considerable difficulties in the implementation of medium-term expenditure plans. This can be considered the main cause for the underperformance in attaining budget balance targets. The increase in nominal government expenditure over the three-year period covered by SCPs was higher than planned in more than three quarters of cases. The frequency of spending overruns is similar when comparing developments in real primary expenditure to plans in the SCPs. The data show that expenditure overruns in a given year were in general not compensated in the other years of the multiannual

period considered. It should however be stressed that there was a considerable heterogeneity of performance across Member States. Some of them were almost consistently successful in sticking to expenditure targets, while others were almost always unsuccessful.

The EU-15 Member States have on average planned annual increases in real GDP by 2¾ % over the period covered by their SCPs. This is above the average of the last two decades. Interestingly, contemporaneous macroeconomic developments seem to have had a significant influence on the medium-term macroeconomic forecasts included in the SCPs. The ambitious macroeconomic assumptions of the SCPs submitted in the midst of the high-growth period at the turn of the decade turned out to be clearly optimistic. This inclination

to revise medium-term growth forecasts upwards in favourable growth periods seems however to be less pronounced since the 2005 SGP reform. The analysis confirms that part of the worse-than-planned developments in the government finances is related to negative growth surprises. While the frequencies of positive and negative surprises in real GDP developments are equivalent, the average size of negative surprises has been twice as high as that of positive surprises. Interestingly, the picture is different when considering developments in nominal GDP, for which the frequency and size of positive and negative growth surprises were very similar. This explains that developments in government revenue were on average broadly in line with multiannual plans.

## 4. Which factors help stick to budgetary plans?

### 4.1. Introduction

The previous section has shown that difficulties in the implementation of medium-term expenditure plans can be considered the main cause for the underperformance in attaining budget balance targets. It also pointed to a possible role played by negative growth surprises. In a first step, this section assesses which factors explain that some countries were able to stick to expenditure plans while this was not the case for others. It is notably analysed whether and how the initial fiscal position of a country, the degree of ambition of a SCP in terms of the planned reduction in the expenditure-to-GDP ratio, or differences in national fiscal governance arrangements have influenced the capacity of Member States to achieve their medium-term expenditure targets. The analysis is based on newly collected survey data on the existence and properties of national medium-term budgetary frameworks (MTBFs) in the Member States and on the preparation and status of SCPs. In a second step, this section discusses possible explanations for the negative surprises in real GDP growth developments compared to plans in some of the EU countries.

### 4.2. Which factors explain the difficulties in respecting expenditure plans?

Government expenditure is the part of government finances that is most directly under the control of the fiscal authorities. The capacity to achieve expenditure targets therefore reveals, at least in part, the ability of policymakers to implement the chosen policies in the medium term. In this context, the chronic difficulties faced by a number of European countries to respect their own multi-annual expenditure targets are a source of concern.

This section examines which factors may have played a role in the capacity of a country to stick to its own

medium-term expenditure plans. The reference variable in this assessment is the difference between the planned and observed increase in real primary government expenditure, for different time horizons. The choice to focus the analysis on real primary expenditure, instead for instance of nominal government expenditure, was driven by the consideration that it is preferable to neutralise the influence of fluctuations in interest payments and in inflation, which are outside the control of governments (interpretation of results is easier) <sup>(1)</sup>. The analysis of the reasons for the negative surprises in government expenditure is by nature complex, as the magnitude of expenditure overruns can potentially depend on a number of interrelated factors.

- Firstly, there may be a relation between the size of the planned reduction in the expenditure-to-GDP ratio, and the size of spending overruns. Large cuts in the expenditure ratio may be more difficult to implement. This relation may also depend on the initial size of the government sector, in the sense that large cuts in the expenditure-to-GDP ratio may be relatively easier to implement in countries with initially large public sectors.
- Secondly, expenditure overruns can result from voluntary, discretionary action in reaction to particular macroeconomic developments, favourable or unfavourable, or simply reflect an insufficient control by the fiscal authorities on the dynamics of expenditure.
- Thirdly, the institutional characteristics of a country may play a role. A number of economists have

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<sup>(1)</sup> The results and conclusions of this part of the report would be similar if the analysis focused on developments in total nominal government expenditure compared to plans.

argued that a rules-based, medium-term orientation in the budget is particularly suited in countries with governments typically formed by ideologically dispersed coalitions, than in countries with one-party governments or coalition governments of closely aligned parties <sup>(1)</sup>.

- Finally, the performance in achieving expenditure targets may depend on the quality of the institutions which constitute the environment in which medium-term budgetary plans are formulated and in which adherence to plans is monitored and enforced. Reliance on well-defined medium-term budgetary frameworks can be expected to favour a better adherence to plans.

The next section assesses the influence of these elements in a descriptive way. The following one studies the interactions between various dimensions.

#### **4.2.1. Descriptive evidence on the influence of the various factors**

##### *Ambition of multiannual expenditure targets and size of governments*

Difficulties to adhere to medium-term expenditure targets may partly reflect the fact that initial plans, in terms of the envisaged cut in the government expenditure-to-GDP ratio over the medium-term, were very ambitious. Large cuts in the expenditure ratio may genuinely be more difficult to implement. It also cannot be excluded that in a number of cases — concerning notably Member States with large government deficits the fiscal authorities made the choice to plan very large reductions in the government deficit, to be achieved through equally large cuts in the expenditure-to-GDP ratio, knowing that only a share of them could actually be implemented. Such a strategy could have been used to signal to private economic agents the strong willingness of fiscal authorities to cut government expenditure, with the aim of making fiscal consolidation less costly in terms of growth. Another possible explanation could be linked to a strategy of the finance ministers to set in advance strong negotiation basis for the preparation of budgets in the following years <sup>(2)</sup>. Such strategies would however have

been at the price of a loss of credibility for the national medium-term budgetary projections.

Graph III.4.1 puts in relation, for various time horizons ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ), the degree of ambition of expenditure targets — in terms of the planned change in the expenditure-to-GDP ratio over a given period and the size of the discrepancy between the planned and observed increase in government expenditure over the same period. The graph exhibits a negative but relatively weak relationship between the two variables. This conclusion holds when considering separately the various time horizons considered in the analysis ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ). This suggests that while the initial degree of ambition may play a role in explaining the difficulties to stick to expenditure targets, a number of other elements may be relevant to determine and explain differences in the degree of adherence to expenditure plans across the EU Member States.

One of these elements is the initial size of the ratio of primary expenditure to GDP. The basic idea is that it may be relatively easier to achieve a given reduction in the expenditure-to-GDP ratio in countries with a relatively large public sector than in those with a relatively small public sector. Graph III.4.2, which shows a negative relationship between the initial level of the ratio of primary expenditure to GDP and the size of expenditure slippages, tends to confirm this view.

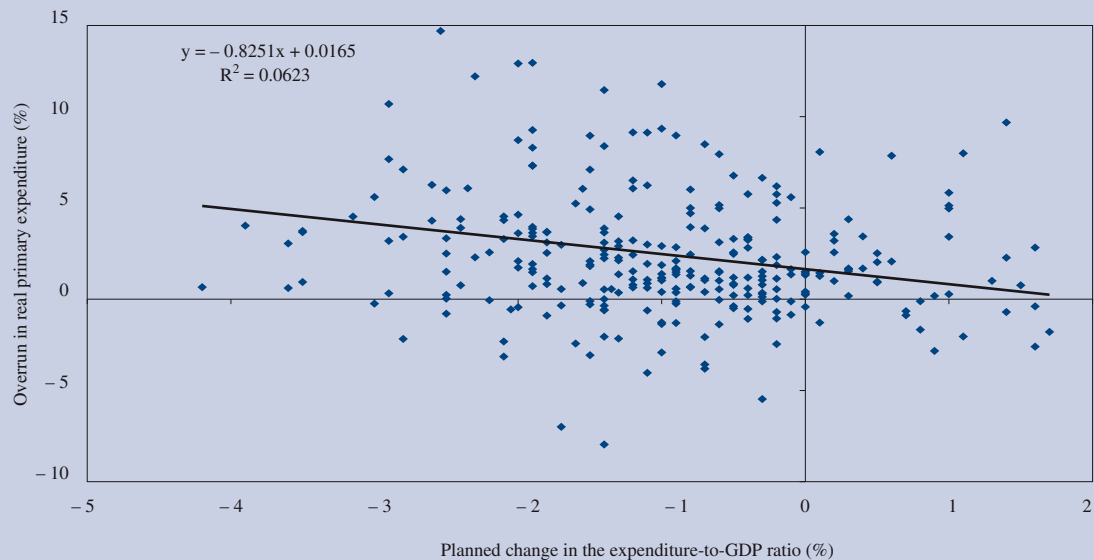
##### *Policy action versus insufficient control of government expenditure*

Expenditure overruns can result from voluntary, discretionary action in reaction to particular macroeconomic developments or simply reflect an insufficient control of fiscal authorities on the dynamics of expenditure. For instance, governments facing a severe economic downturn may deliberately decide to stabilise the economy via a discretionary increase in expenditure compared to plans. Another possibility, not exclusive with the previous one, is that governments facing positive growth and tax revenue surprises deliberately choose to use part of the revenue windfalls to finance additional government expenditure compared to plans. In both cases, the larger-than-planned increase in expenditure results from a deliberate policy choice.

<sup>(1)</sup> The basic idea is that the deficit bias stemming from the common pool problem may be more severe in countries with ideologically dispersed coalitions. These countries however generally rely on multiannual budgetary contracts agreed *ex ante* in the context of a coalition agreement. They are generally denominated in literature as 'contract' countries. For a precise definition see European Commission (2006a).

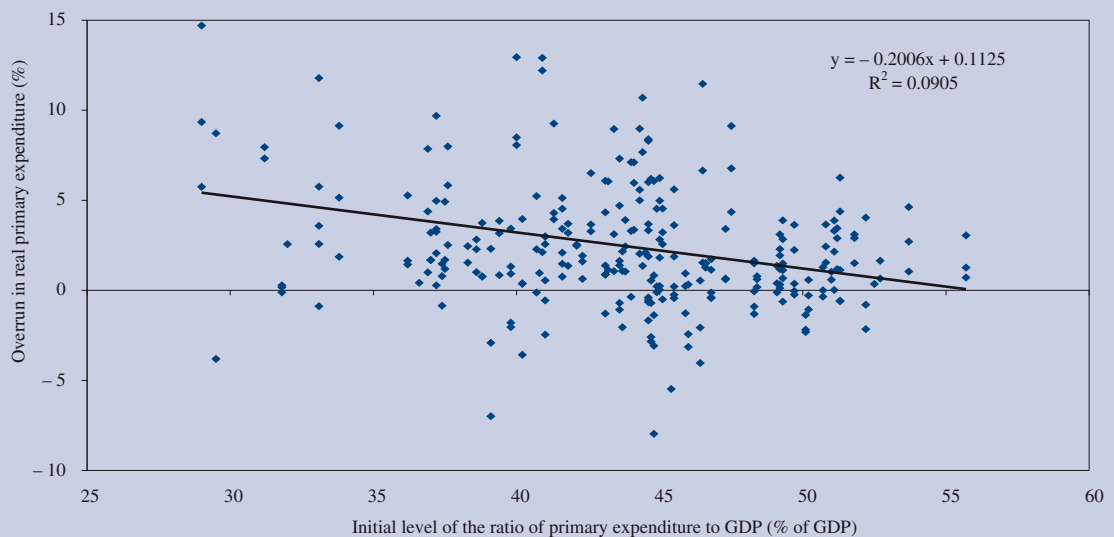
<sup>(2)</sup> Some countries could have used such a strategy to delay the possible imposition of sanctions in the context of the excessive deficit procedure.

Graph III.4.1: Plans versus outcomes — Expenditure overruns and planned changes in the expenditure ratio — EU-15



Source: Commission services.

Graph III.4.2: Plans versus outcomes — Expenditure overruns and size of general government — EU-15



Source: Commission services.

The alternative possibility is that the larger-than-planned increase in expenditure reflected an insufficient control by fiscal authorities on the dynamics of government

spending. This would be the case, for instance, if the central government, which is *ex ante* in charge of the preparation of the SCP and therefore of setting expenditure



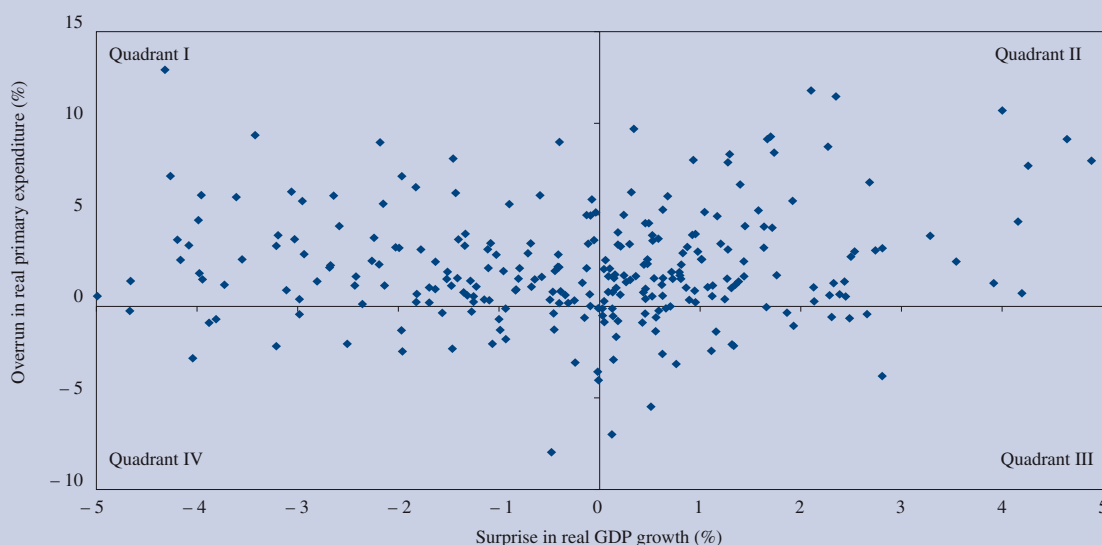
targets for the whole of the general government, does not succeed in imposing *ex post* fiscal discipline (on the expenditure side) to the other levels of government. Such a situation may occur in case of insufficient coordination prior to the setting of the multiannual expenditure targets for the whole of the general government. It may also arise in case the multiannual budgetary targets are not vested by a sufficient degree of political commitment (e.g. adoption by the national parliament).

To shed light on this question, Graph III.4.3 shows the relation between surprises in real GDP growth and surprises in real primary government expenditure. Both variables are measured as the difference between the observed and planned increase over various time horizons. A relatively larger frequency of observations in quadrant I, which corresponds to episodes of higher-than-planned increase in government expenditure in periods of negative growth surprises, would tend to support the assumption according to which expenditure plans were deliberately revised upwards to counter unfavourable macroeconomic developments. A larger frequency of observations in quadrant II (positive surprises on growth and larger-than-planned increase in government expenditure) would on the contrary support the assumption according to which the larger-than-planned

increase in government expenditure reflected the decision to finance extra expenditure via tax windfalls in periods of positive growth surprises.

The graph shows that the frequency and size of government expenditure overruns observed in periods of positive real GDP growth surprises are remarkably similar to those observed in periods of negative growth surprises. This result can be interpreted in two ways. Firstly, it can be argued that there is a significant spending bias in the EU countries, which leads to overspending both in good and bad economic times. According to this view, the fiscal authorities would deliberately choose to spend more than planned in both periods of positive and negative growth surprises. An alternative explanation of the high degree of dispersion (or randomness) in the distribution of surprises in expenditure developments is that there is, in some EU countries, a lack of control in the dynamics of government spending. According to this view, the distribution of expenditure overruns would be independent from cyclical developments as it does not result from the implementation of policy choices, but rather from the lack of the adequate instruments (expenditure rules, medium-term expenditure frameworks, internal stability pacts, etc.) to keep expenditure in line with initial plans.

**Graph III.4.3: Plans versus outcomes — Expenditure overruns and real GDP growth surprises — EU-15**



Source: Commission services.

*Type of fiscal governance (contract versus delegation countries)*

Another element possibly explaining the discrepancy between the planned and observed increase in government expenditure concerns the type of governance in place in a country. As stressed in Section III.2, a number of authors have in the past argued that a medium-term orientation in the budget process is particularly suited to countries with ideologically dispersed coalitions. The presumption is that in such countries the deficit bias stemming from the common pool problem may be more severe as various parties in coalitions will try to satisfy their own electoral base. Experience however shows that such countries have in the past introduced ‘contracts’, under the form of multiannual fiscal rules, with a view to taking into account spending claims in a centralised way. It is also argued that checks and balances may be stronger in these countries, which is conducive to fiscal discipline and better adherence to budgetary targets. The effect of the type of fiscal governance in a country on its capacity to respect expenditure objectives is therefore a priori undetermined.

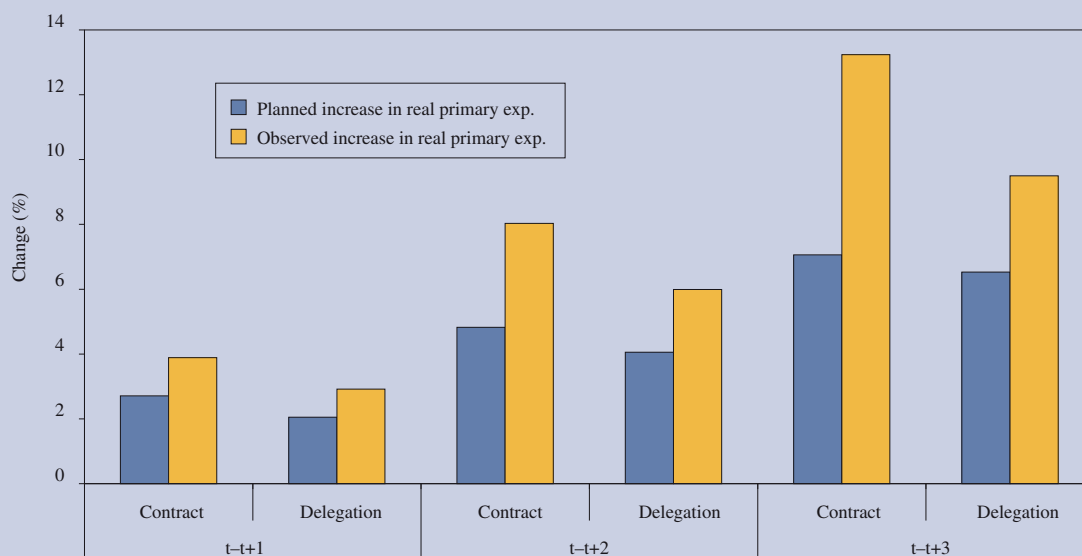
When looking at the data, it appears that the track record in the respect of plans in real government primary expenditure was on average better in so-called

‘delegation countries’ than in ‘contract countries’ (see Graph III.4.4). This conclusion applies to all the time horizons considered in the study ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ). This result reflects the fact that a number of delegation States managed to keep expenditure remarkably in line with plans (Germany, Austria), while a number of contract countries experienced important overruns in government expenditure (Ireland, Luxembourg). It indeed confirms that sound fiscal institutions to place fiscal policy in a medium-term perspective are even more important in countries with ideologically dispersed coalitions than in countries with single or closely aligned parties in government.

*Quality of medium-term budgetary frameworks*

A last relevant aspect in examining the reasons for departures from medium-term expenditure targets is related to the quality of the institutions which constitute the environment in which such plans are formulated and adherence to them is monitored. The basic idea is that countries in which medium-term budgetary targets are vested with a strong degree of political commitment are less likely to show important deviations from their expenditure plans. In the EU context, two types of institutions may play a role in this respect: the national

**Graph III.4.4: Planned and observed increases in real primary expenditure in groups of countries — EU-15 — Simple averages**



Source: Commission services.

MTBFs and the SCPs. According to the survey presented in Section III.2, 20 of the EU-25 Member States have a national MTBF. However, there are big differences in the design of these frameworks, concerning notably the share of government finances they cover, the existence of coordination mechanisms between levels of governments when setting the medium-term budgetary targets, the link with the annual budgetary procedure, etc. Similarly, while all Member States submit SCPs, there are large differences in the preparation of the multiannual budgetary targets in these programmes.

A way commonly used in economic literature to analyse the link between the quality of institutions and budgetary developments is to put in relation country-level fiscal variables with synthetic indicators measuring the extent to which the fiscal institutions of a country correspond to the desirable features according to theory. To this end, an index was built to capture the existence and properties of national MTBFs and the preparation and status of the SCPs. This index takes into account the following dimensions (Box III.4.1 provides details on how scores were attributed in constructing the index).

- *Existence of a national MTBF:* it was considered that the existence of a national MTBF, on which the SCP is generally based, constitutes per se a positive element for the reliability of medium-term budgetary targets. The basic idea is that medium-term fiscal plans formulated domestically and supported by sound domestic institutions are likely to benefit from a higher degree of national ownership and therefore to be respected.
- *Connectedness between the multiannual budgetary framework and the annual budget:* in developed MTBFs, the multiannual targets set in the previous years typically form the basis upon which the budget is prepared. Countries relying domestically on a ‘fixed’ medium-term budgetary framework, which are typically articulated around a fixed path for government spending, can be expected to show a better respect of medium-term expenditure plans than countries relying on flexible medium-term budgetary frameworks.
- *Involvement of the national parliament when setting the medium-term budgetary objectives:* countries where the multiannual budgetary targets are formally adopted by the national parliament, and therefore vested with a stronger degree of political

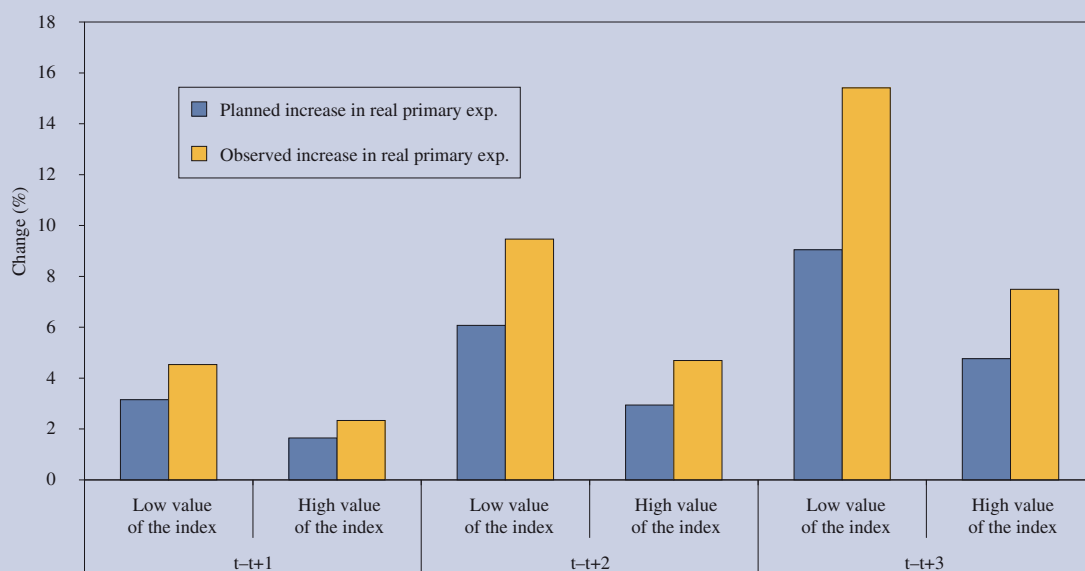
commitment, can be expected to show a better adherence to medium-term expenditure plans.

- *Coordination between levels of government:* countries where multiannual budgetary targets for the general government are set following a proper coordination between the levels of government playing a role in fiscal policy can also be expected to show a better adherence to plans. Coordination is crucial to ensure a sufficient political commitment of all actors taking part in fiscal policy to respect the medium-term budgetary targets of the country.
- *Monitoring and enforcement procedures:* countries where the achievement of medium-term targets is the object of a regular monitoring and predefined action is foreseen in case of deviation from the objectives in the multiannual projection, are expected to show a better track record in terms of adherence to their multiannual budgetary plans.

Graph III.4.5 exhibits a positive relation between the level of the synthetic index measuring the quality of institutions for medium-term budgetary planning and the capacity of the country concerned to achieve its medium-term expenditure targets. The average gap between the planned and observed increases in real primary expenditure is, for all the time horizons considered in the study ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ), lower in countries with values of the index higher than the median. The gap between the two groups of countries seems to widen when lengthening the time horizon considered and becomes very significant when considering the three-year horizon of a SCP. More generally, countries with a high value of the index measuring the quality of institutions for medium-term budgetary planning seem to perform better with respect to all the fiscal variables considered in the study (see Graph III.4.6). The track record in terms of adherence to planned changes in the budget balance, debt, and expenditure ratios is better for all the time horizons considered in the study.

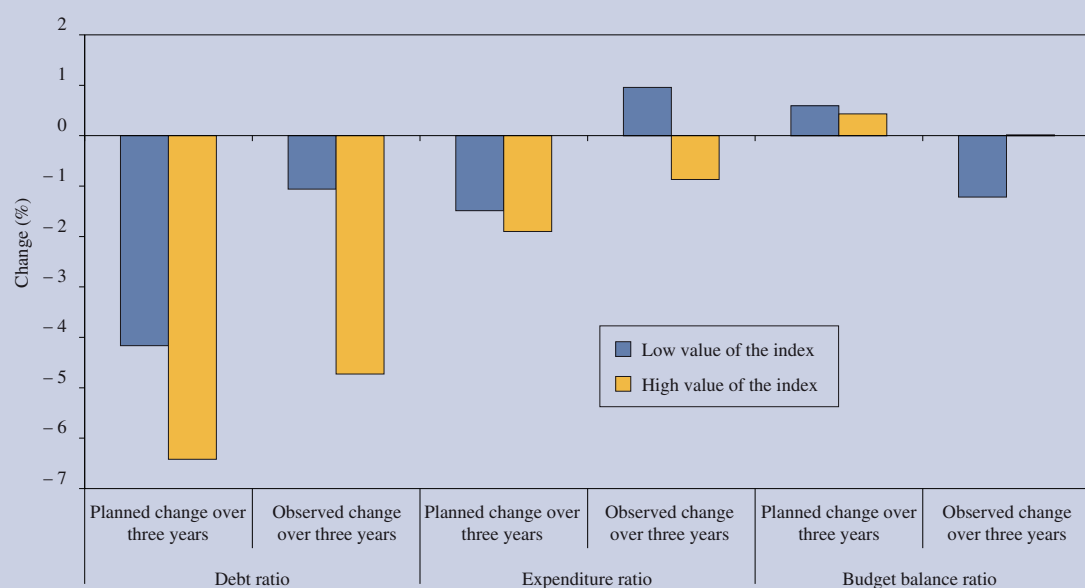
This section has shown that a number of factors may explain the differences of country performances in respecting medium-term government expenditure targets. The analysis has been based on simple, descriptive analysis. However, in a number of cases, interactions between the various factors may be relevant. For instance, countries with a high value of the index on the quality of institutions for medium-term budgetary planning had on average better starting fiscal positions, in

Graph III.4.5: Planned and observed increase in real primary expenditure in groups of countries EU-15 — Simple averages



Source: Commission services.

Graph III.4.6: Planned and observed budgetary developments in different groups of countries EU-15 — Simple averages



Source: Commission services.

terms of the size of their government deficit. They therefore have on average projected less ambitious cuts in the expenditure-to-GDP ratio, which could in turn explain the better-than-average performances in respecting

medium-term expenditure targets. Assessing the interactions between all the dimensions considered requires relying on more sophisticated empirical techniques. This is made in the following section.

**Box III.4.1: Construction of an index on the quality of institutions for medium-term budgetary planning**

This box provides details on the construction of the index measuring the quality of institutions for medium-term budgetary planning. The index was calculated taking into account both the existence and properties of national MTBFs and the preparation and status of SCPs. A difficulty when constructing the index was to assess how national MTBF, when they exist, interact with SCPs. In some cases, for instance, the SCP is entirely based on a pre-existing national MTBF: there is no formal approval of the budgetary targets set in the SCPs in the national parliament, but the SCP is entirely based on a document which was previously approved by the national parliament. This was taken into account when attributing scores for the various dimensions considered. Another case concerns the situation where the national MTBF regards only the central government sector. In such a situation, scores concerning the coordination between levels of government prior to setting the multiannual targets were assigned taking into account the information on the preparation of the SCP. This box provides details on the how scores were attributed and how the EU-25 countries rank with respect to this index.

Construction of the index

The synthetic index measuring the quality of institutions for medium-term budgetary planning is made of five components (justifications for taking into account these dimensions are in the main text). For each criterion, the scores were attributed as follows:

- (1) Existence of a national MTBF (on which the SCP is based):
  - 2 for a MTBF covering the whole of government sector or a large part of it (e.g. central government and social security)
  - 1 for a MTBF covering central government
  - 0 no national MTBF
- (2) Connectedness between the multiannual budgetary targets and the preparation of the annual budget (domestic MTBF or SCP):
  - 2 fixed framework (articulated around a pre-defined path for government expenditure, generally not revised over time)
  - 1 the medium-term budgetary targets form the basis upon which the budget is prepared but there can be deviations
  - 0 flexible framework in which medium-term targets are only indicative (no clear link with the annual budget)
- (3) Involvement of the national parliament in the preparation of the medium-term budgetary plans (domestic MTBF or SCP):
  - 2 vote of the parliament on the main medium-term objectives (in the context of a national MTBF or of the SCP)
  - 1 no vote but formal presentation of the objectives to the national parliament
  - 0 no formal presentation of the objectives to the national parliament
- (4) Existence of coordination mechanisms prior to setting the medium-term budgetary targets (domestic MTBF or SCP):
  - 2 in case there is a proper *ex ante* coordination mechanism between all levels of general government
  - 1 coordination mechanisms only for some general government sub-sectors
  - 0 no coordination mechanism
- (5) Monitoring and enforcement of multiannual budgetary targets:
  - 2 if there are well-defined actions in case of deviations from plans and a regular monitoring of targets (reports, etc.)
  - 1 some monitoring and enforcement procedures
  - 0 no clearly defined monitoring and enforcement procedures

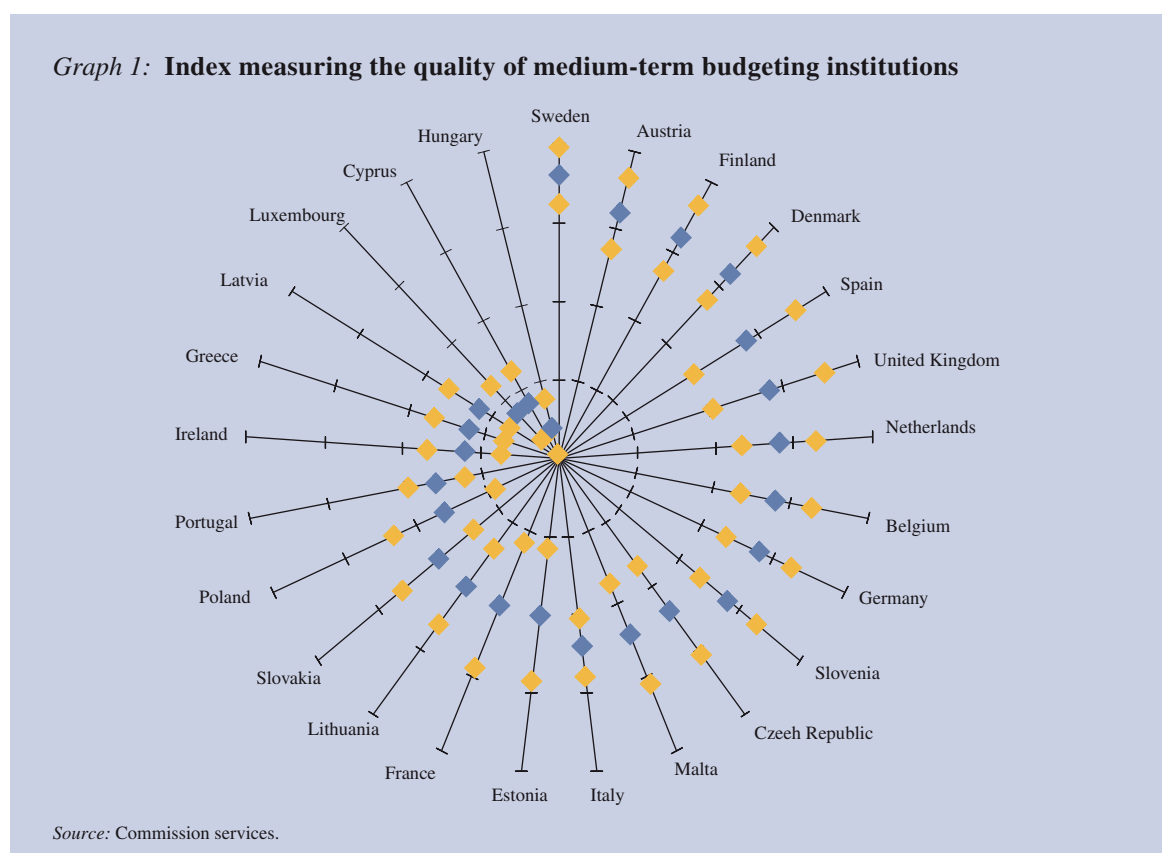
*(Continued on the next page)*

Box III.4.1 (continued)

Scores concerning the existence and properties of national MTBFs

The graph below shows how the EU countries rank with respect to the index. The dark points show the value of the total index. In absence of strong a priori on which of the five dimensions considered above is the most important, the same weight was given to all the five components. The clear points show the limit within which 90 % of the values of the synthetic index would fall if the synthetic index was calculated with 10 000 different sets of random weights applied to the five dimensions. As expected, countries with well-developed MTBFs (Denmark, Spain, the Netherlands, Austria, Finland, Sweden, etc.) have relatively high scores.

Graph 1: Index measuring the quality of medium-term budgeting institutions



#### 4.2.2. Empirical analysis

The main purpose of this section is to assess whether there is a link between the adherence to medium-term expenditure targets and the institutional settings of a country, controlling for other variables. The approach followed is to analyse econometrically the impact of various variables on the capacity to achieve expenditure targets for various time horizons (one, two and three years ahead).

The dependent variable is the difference between the observed and planned increase in real primary expendi-

ture. The explanatory variables are (i) the degree of ambition of expenditure targets, measured as the planned change in the primary expenditure-to-GDP ratio; (ii) the initial size of the government, as measured by the level of the ratio of primary expenditure to GDP in the year of submission of the SCP; (iii) a dummy variable capturing the type of fiscal governance in a country and the ideological distance of parties in government coalitions (contract vs delegation); (iv) the gap between the planned and observed real GDP growth over the period considered; and (v) our synthetic index measuring the quality of insti-

tutions for medium-term budgetary planning, calculated as detailed in Box III.4.1. The econometric relations were estimated for the sample of EU-15 countries. Four regressions were run: three to assess the determinants of the gap between plans and outcomes for a given time horizon (first year, first two years or first three years covered by a SCP), and one combining all time horizons. In the latter case two dummies were inserted in the specification to capture the fact that the average deviation between the planned and observed increases in real primary expenditure has had a tendency to increase with the time horizon considered. The results of the econometric estimates (see Table III.4.1) can be summarised as follows.

- There is a statistically significant relation between the size of the planned reduction in the expenditure-to-GDP ratio and the size of the discrepancy between the planned and observed change in real primary expenditure. The relation is significant for all the time horizons considered. This suggests that Member States projecting large cuts in their expenditure-to-GDP ratio tend, *ceteris paribus*, to show a lower degree of adherence to plans <sup>(1)</sup>. A possible explanation is that SCPs planning ambitious cuts in government expenditure were not always backed with equally ambitious policy measures.
- The variable capturing the level of the ratio of primary expenditure to GDP at the moment of the elaboration of the medium-term budgetary plans (year of submission of the SCP) is also significant with a negative sign. This confirms the presumption according to which ambitious cuts in the expenditure-to-GDP ratio are relatively easier to implement in countries with a large initial ratio of primary expenditure to GDP.
- The variable capturing the economic growth surprises (difference between forecasts and outcomes in real GDP growth) is not statistically significant in explaining the deviations from expenditure plans. The achievement of expenditure targets does not seem to depend crucially on the sign and magnitude of surprises in real GDP growth developments <sup>(2)</sup>. This result holds when taking into account surprises in nominal GDP growth. Given the possible reverse causation effects between surprises in government

expenditure and surprises in GDP growth developments, further empirical investigation would however be necessary to confirm this result.

- The dummy capturing the size of ideological distance between parties in government and the type of fiscal governance (contract vs delegation countries) is significant in the equations, with a negative sign. This suggests that, on average and controlling for all the other variables, delegation States tend to show a better adherence to their budgetary plans than contract countries.
- Finally, and this can be considered the main result of the analysis, the coefficient of the index measuring the quality of the medium-term budgetary planning institutions is negative and significant (at the 5 % level) for all the time horizons considered in the study ( $t-t+1$ ;  $t-t+2$ ;  $t-t+3$ ). This means that, controlling for other variables, reliance on developed medium-term budgetary frameworks can significantly contribute to limit the size of the discrepancy between planned and observed increase in real primary expenditure.

### **4.3. Real GDP growth forecasts: the role of institutions**

As seen in Section III.2, relying on unbiased or even cautious macroeconomic projections is crucial for the effectiveness of medium-term budgetary frameworks. Macroeconomic forecasts are one of the main inputs for the preparation of multiannual budgetary plans, as they determine the global amount of resources available in the medium term to finance envisaged policies. Optimistically biased forecasts may create an upward pressure on public expenditure in the medium term, which will be difficult to correct *ex post*. In this context, the fact that there were on average significant negative surprises in real GDP growth developments in the EU-15 countries is a cause for concern.

#### **4.3.1. Possible explanations for the negative real GDP growth surprises**

A key question concerns the reasons for the negative real GDP growth surprises. A first possibility is that there were genuine, unpredictable negative growth surprises. It is relevant in this respect to compare real GDP growth in the period considered in the study with the average developments in the previous decades. Graph III.4.7 shows that in the period considered in the study (1999–2006) the simple average of annual real GDP growth rates in the EU-15 countries reached 2.8 %. This is rela-

<sup>(1)</sup> These are not necessarily Member States with high initial government deficits. See Section III.2 for more details.

<sup>(2)</sup> This result holds when taking into account surprises in nominal GDP growth.

Table III.4.1

Dependent variable: difference between the observed and planned increase in real primary expenditure

Time-horizon considered	t-t+1		t-t+2		t-t+3		Whole sample	
	Coefficient	t-stat	Coefficient	t-stat	Coefficient	t-stat	Coefficient	t-stat
<b>EU-15 Member States</b>								
Constant	0.1 (***)	4.4	0.1 (***)	4.8	0.2 (***)	5.4	0.1 (***)	4.6
Planned change prim exp. ratio	-0.6 (**)	-2.2	-0.9 (**)	-2.8	-1.3 (**)	-2.2	-1.0 (**)	-2.3
Initial level prim exp. ratio	-0.1 (***)	-3.4	-0.2 (***)	-3.7	-0.3 (***)	-4.1	-0.2 (***)	-3.8
Dummy contract (0) delegation (1)	-0.0 (***)	-3.0	-0.1 (***)	-3.7	-0.3 (***)	-3.7	-0.2 (***)	-3.4
Real GDP growth surprises	0.1	1.1	0.0	0.2	-0.2	-1.4	-0.1	-0.9
Total index MTBF/SCP	-0.2 (**)	-2.2	-0.6 (**)	-2.3	-1.3 (**)	-2.6	-0.6 (**)	-2.5
Dummy t+2	—	—	—	—	—	—	0.1 (***)	3.8
Dummy t+3	—	—	—	—	—	—	0.2 (***)	3.5
N. Obs.	109		94		79		282	
R. Sq	0.18		0.28		0.53		0.48	

NB: Estimation method: fixed-effect OLS with robust standard errors. (\*\*) and (\*\*\*) denote, respectively, significance at the 5 % and 1 % levels.

Source: Commission services.

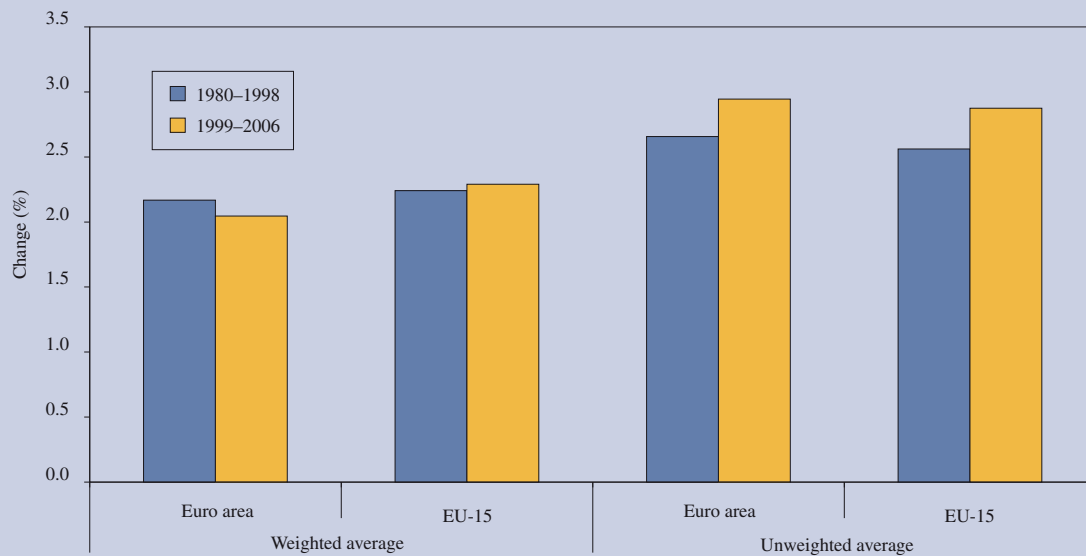
tively close to the average rate observed for the same sample of countries over the period 1980–98 (2.6 %). This result supports the view that the negative growth surprises compared to plans experienced since 1999 cannot be attributed to a genuinely unpredictable economic slowdown over the period considered. This conclusion however does not apply to individual countries. Real GDP growth in the period considered in the study was significantly lower than in the preceding 20 years in a number of countries (notably Germany and Portugal). It was significantly higher for a number of other countries, e.g. Ireland, Greece, and Spain.

Another possibility is that medium-term macroeconomic projections were, in a number of countries, deliberately optimistic. Milesi-Ferretti and Moriyama (2004) provided an explanation for the possible optimistic bias in macroeconomic forecasts. These authors argued that opportunistic governments may try to avoid the political cost associated with the implementation of difficult consolidation measures by using overly favourable growth assumptions. Corrective measures can then be avoided *ex ante*, while *ex post* the deficit will turn out to be higher than expected as growth is lower than projected. The resulting higher deficit can then be blamed on bad luck, even if it results from a deliberate forecast bias in growth projections.

Recent empirical analysis on the role of growth forecasts provides evidence of a forecast bias in a number of EU countries. Larch and Salto (2005) found evidence of a significant negative impact of such a bias on budgetary outcomes in three of four large EU Member States. Moulin and Wierts (2006) studied whether growth forecast in the SCPs have been deliberately optimistic since 1998. Taking the European Commission service's autumn 2005 forecast as a benchmark, they show that only in two cases growth was lower than projected in the SCP and domestic growth projections were significantly more optimistic than those released by the Commission services. According to Larch and Jonung (2006), a way to remedy possible politically motivated biased macroeconomic forecasts is the establishment of institutions in charge of providing independent macroeconomic forecasts. This may have a direct beneficial impact if the government is obliged to use the forecasts of the independent institution in the preparation of the budgetary plans. A positive effect can also be expected when there is no formal obligation for the government to take into account these forecasts. In such cases, the independent forecasts provide benchmarks against which the plausibility of the macroeconomic forecasts of the government can be assessed, which may limit the temptation to deliberately overes-



**Graph III.4.7: Real GDP growth developments in the period considered by the study and in the two decades preceding it**



Source: Commission services.

timate growth. These arguments were further developed in European Commission (2006a).

#### 4.3.2. The role of institutions

According to a survey launched by the European Commission in 2005, 10 EU countries already have at least one institution that regularly produces independent macroeconomic forecasts against which the official projections can be assessed <sup>(1)</sup>. However, in the large majority of cases, the government is free to base its budgetary plans on its own forecasts, without having to provide any justification in case there are deviations compared to the forecasts of the independent institution. There are three exceptions to this rule: in Belgium, the National Account Institute provides the macroeconomic forecasts to be used by the federal government in the budgetary process. The second exception concerns the Institute of Economic Research in Austria. The macroeconomic forecasts prepared by this independent body almost always constitute the basis for the preparation of fiscal plans. The third exception is the Netherlands Bureau for Economic Policy Analysis. Against this background, it is interesting to assess whether negative real GDP growth surprises were less pronounced

in countries where the task of preparing macroeconomic forecasts is delegated to independent institutions. Another interesting question is to see whether these countries project real GDP growth in the medium term more in line with the currently estimated trend or potential growth.

When looking closely at the data comparing real GDP growth projections in the SCPs and outcomes, it is striking to observe that two of the three countries in which the task of preparing macroeconomic forecasts used for annual and medium-term budget planning are prepared by an independent institutions experienced larger than average negative surprises in real GDP growth developments (see Graph III.4.8) <sup>(2)</sup>. Similarly, when dividing the sample in three groups of countries: (i) those delegating the macroeconomic forecast activity to independent institutions; (ii) those in which an independent forecasting institution exists, but there is no delegation of task; (iii) those in which there is no such institution, it appears that the relation between forecast errors and the existence of an independent institution is not clear cut. This result is largely influenced by the large positive surprises in real GDP

<sup>(1)</sup> See European Commission (2006a) for an overview of the results of this survey.

<sup>(2)</sup> According to Moulin and Wierds (2006), these countries experienced genuine negative growth surprises, in the sense that other, independent forecasters did not predict better the economic downturn experienced by these countries.

growth developments in Ireland and Luxembourg, two countries in which no independent institution in charge of preparing macroeconomic forecasts exist. For that reason, and because the analysis is based on a short period of time, during which most EU countries were affected by unexpectedly steep and protracted economic slowdown, the conclusions should be taken with care.

#### 4.4. Conclusions

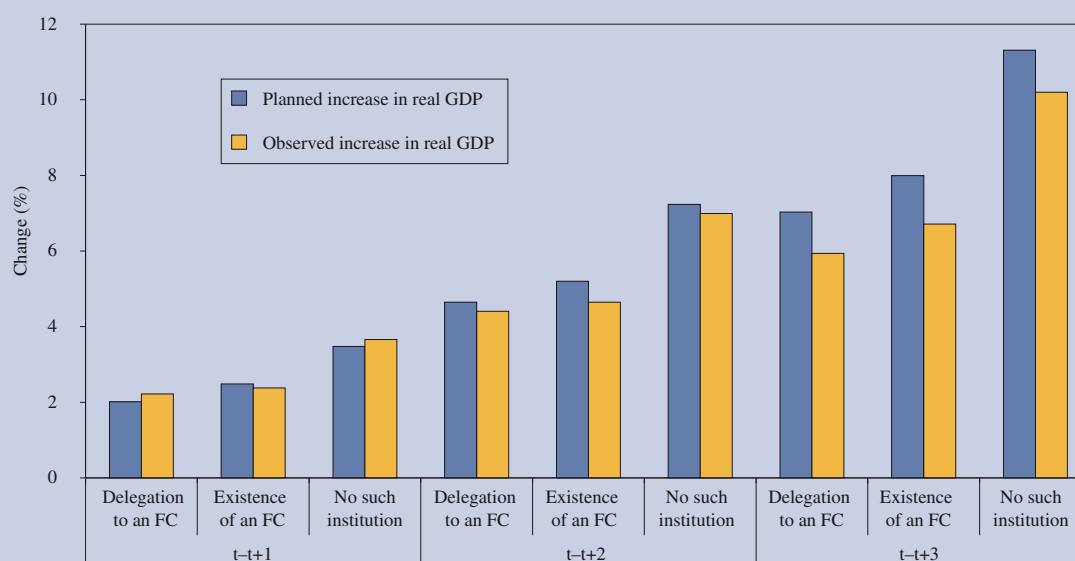
This section assesses which factors explain that some countries were able to stick to their medium-term budgetary plans while this was not the case for others. The analysis first examines the reasons for the difficulties to adhere to multiannual expenditure targets. This is crucial as medium-term fiscal consolidation efforts planned by Member States typically foresaw significant efforts on the expenditure side and as government expenditure is the part of government finances that is most controlled by the fiscal authorities.

The analysis brings a number of answers on the determinants of expenditure overruns in the EU. It shows notably that there is a statistically significant relation between the 'degree of ambition' of medium-term expenditure plans, in terms of the planned reduction in the expenditure-to-GDP ratio, and the size of the discrepancy

between the planned and observed increase in government expenditure. Member States projecting large cuts in their expenditure-to-GDP ratio tend, *ceteris paribus*, to show a lower degree of adherence to plans. *Ceteris paribus*, it is relatively easier to achieve ambitious expenditure targets for countries with a relatively large public sector. Another interesting result is that expenditure overruns seem to be independent from macroeconomic developments. Both the frequency and size of expenditure overruns were similar in periods of positive and negative growth surprises. Finally, and this can be considered the main result of the analysis, there is a statistically significant relation between the quality of institutions for medium-term budgetary planning and the capacity to achieve expenditure targets. Reliance on developed MTBFs can significantly contribute to limit the size of the discrepancy between planned and observed increase in real primary expenditure.

In a second step, the analysis focuses on the causes for the negative GDP growth surprises. The analysis in this case is less conclusive. The data suggest that real GDP growth surprises were on average not due to a genuinely unpredictable economic slowdown, as real GDP growth was in the period considered in line with the trend of the previous two decades.

Graph III.4.8: Real GDP growth projections in different groups of countries



Source: Commission services.

# Part IV

## Lessons from successful fiscal consolidations



# Summary

Over past decades most EU countries underwent successive episodes of fiscal consolidation in the attempt to achieve or restore sound public finances. Two major waves can be distinguished. In the first half of the 1980s consolidation was a relatively late but inescapable response to the large fiscal imbalances accumulated in the wake of the preceding two oil shocks. In the first half of the 1990s and beyond, consolidation was largely driven by the deadlines of the Maastricht Treaty. Member States that wanted to be part of the Economic and Monetary Union (EMU) from the beginning were required to bring their public finances in line with the requirements of the Pact. More recently, consolidation efforts in the EU are largely determined by the provisions of the Stability and Growth Pact according to which Member States are required to achieve medium-term budgetary positions taking into account the budgetary impact of ageing populations.

## Main findings of the literature

While each consolidation episode has its specificities, a relatively broad strand of empirical research has developed exploring two distinct questions: can fiscal consolidation have expansionary effects on economic growth and what type of consolidations are successful, i.e. lead to a lasting correction of budgetary positions. Especially in the second half of the 1990s a number of influential studies were carried out focusing attention on the experience of OECD countries. The effect on economic growth and the success of a fiscal correction are to some extent interrelated as an expansionary impact on growth may contribute to improve the budget balance over a longer period of time. Some studies cover both aspects, others focus exclusively attention on one of the two.

As regards the issue of success, the findings in the literature have meanwhile turned into a kind of received wisdom. One of the most important results relates to the composition of adjustment, suggesting that the odds for making a fiscal correction last increase significantly if the adjustment is more expenditure and less revenue-

based and if expenditure cuts are mainly on current primary outlays, in particular government wages. Findings concerning other determinants such as the size of adjustment or the role of the economic environment were less clear cut.

## Review of fiscal consolidation in the EU

This chapter reviews the experience of fiscal consolidation in the EU since 1970 and reassesses the question of what makes fiscal consolidation successful. The analysis complements previous work on fiscal consolidation in the EU which focused exclusively attention on the possible growth effects of fiscal consolidation <sup>(1)</sup>.

The current reassessment of successful fiscal consolidation in the EU is underpinned by an empirical analysis, which, compared to the literature, explores a significantly broader set of potential determinants. On top of the traditional elements such as the fiscal and macroeconomic conditions prevailing ahead of the fiscal correction and the composition of fiscal adjustment, our analysis takes a look at the role played by structural reforms and fiscal governance. A broad strand of the literature has shown that the overall fiscal performance of a country benefits from strong and effective elements of fiscal governance such as fiscal rules, fiscal councils and budgetary procedures and from structural reforms. The conjecture is that the same factors may be conducive to start episodes of fiscal consolidation and to contribute to their success.

## The factors triggering fiscal consolidation

The findings of our empirical work can be grouped into four different sets. The first relates to the factors that trigger fiscal consolidation. It is fully in line with the literature and includes some new elements. Our EU sample confirms the role played by the fiscal difficulties in the

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<sup>(1)</sup> See European Commission (2003).

year preceding the fiscal correction. In particular, a high deficit as well as a highly increasing debt ratio are significant in prompting fiscal consolidation. In addition to these 'traditional' determinants we find clear evidence that fiscal rules and effective budgetary procedures can play a significant role in triggering fiscal consolidation. The evidence concerning macroeconomic conditions and structural reforms is less clear cut.

### **Gradual versus 'cold shower' consolidations**

The second set of findings concerns the type of adjustment, notably the choice between a relatively sharp and short adjustment episode, which we refer to as 'cold shower' consolidation, and a more measured and protracted episode, which we refer to as gradual consolidation. Our empirical analysis supports a number of intuitive conclusions. If economic conditions at the start of the consolidation are particularly bad, the fiscal correction is more likely to be gradual so as to avoid an additional negative impact on the cycle. The likelihood of engaging in a gradual as compared to 'cold shower' adjustment also increases if the correction comes shortly after an earlier episode. Finally, consolidation episodes that rely heavily on reductions of politically sensitive expenditure items such as subsidies, government wages or pensions are also more likely to be gradual. The common thread of all three points is that a gradual adjustment is likely to improve the political feasibility of the adjustment.

### **Determinants of successful fiscal consolidation**

The third and probably most important set of results refers to the link between the composition of the fiscal adjustment and the rate of success. The findings established in the literature have so far been relatively clear: corrections that are mainly based on current primary expenditure, in particular the government wage bill, are more likely to be successful than corrections relying on higher revenues or cuts in investment expenditure. Our empirical analysis substantiates this 'received wisdom' for the entire sample period 1970 and 2006. The established recipe for success characterised by significant cuts in primary government expenditure is not outdated. It was particularly effective in the 1970s and 1980s and was still used in the 1990s and beyond. However, since the beginning of the 1990s the menu of options seems to have widened. Successful consolidation still remained markedly more expenditure and less revenue-based than unsuccessful episodes but the differences narrowed somewhat. In the 1990s and beyond cutting primary

expenditure is still found to have had a positive impact on the likelihood of success, however the link has grown weaker.

Moreover, in terms of individual items of primary expenditure the recipe for success in the EU is more balanced than suggested by the literature. Especially, in the 1990s and beyond lasting corrections were rather characterised by across-the-board savings of primary expenditure rather than by cuts in one specific expenditure category. The contribution of investment expenditure declined compared to previous decades.

The slight yet notable change in the recipe of success since 1990 is likely to reflect a number of factors of which two may be of particular importance. Firstly, over the past decades there has been a tendency towards reducing the size of government which reduces the leeway for further 'easy' expenditure cuts on individual categories and may give rise to more balanced expenditure restraints.

Secondly, in a bid to participate in the EMU from the outset several EU Member States implemented sometimes impressive consolidation programmes, also in favourable economic times, which, in view of their overall size, operated on a broader set of expenditure categories and also included revenue increases. In this context the likelihood of success was somewhat less determined by the composition of adjustment per se. Other factors that helped safeguarding expenditure cuts or revenue increases are likely to have gained importance.

### **The role of fiscal governance and structural reforms**

Two particularly prominent examples of such other factors are fiscal governance and structural reforms. Their impact on the likelihood for success forms the fourth set of findings of our work. As regards fiscal governance our analysis points to a relatively clear link. The likelihood of success significantly increases with the strength and coverage of fiscal rules; essentially the same hold for the effectiveness of budgetary procedures. While the exact mechanisms still need to be determined, the link between fiscal governance and lasting fiscal corrections is likely to work via at least two channels. First, comprehensive and strong fiscal rules favour discipline-oriented budgets. They provide incentives to draw up adjustments that stand a larger chance to be sustainable, not least in view of the possible costs associated with the risk of running afoul of the rules. Second, effective budgetary procedures favour good planning, a balanced composition and

an effective implementation of consolidation measures as opposed to a situation in which measures are planned over a short period of time and in an uncoordinated way.

The EU experience also supports the conclusion that the success of fiscal consolidation increases significantly when coupled with structural reforms. We find a significant link for a number of different types of reforms including those focusing on product and labour markets. The evidence concerning pension reforms is weak, probably because the associated dynamics cover a longer period. Our analysis does not detail the precise channels through which structural reforms help fiscal consolidation. Further work is needed to clarify the relationship. However, the favourable impact of structural reforms on the success rate of fiscal consolidation, especially of labour market reforms, does not come as a complete surprise, and highlights the potential complementarities between the Stability and Growth Pact and the Lisbon process for growth and jobs. The empirical literature on fiscal consolidation includes many references to potentially beneficial feedback mechanisms between reforms

that contribute to wage moderation and fiscal adjustment. Two channels can be at work. First, wage moderation in the economy as a whole is likely to spill over to government wages which help contain expenditure growth. Second, wage moderation spurs economic activity and hence helps fiscal consolidation indirectly via a higher level of GDP.

#### **Expenditure dynamics of unsuccessful consolidations**

As a final point, our study examines the expenditure dynamics of consolidation episodes that do not lead to a lasting correction of the underlying budgetary position. Using expenditure data in terms of functions of government (COFOG) the analysis shows that there are essentially two items that rebound after the consolidation has come to an end, namely health and social protection. These two items are set to increase in size once the population ageing is going to produce its full effect on the budget. Thus, the success of consolidation will increasingly depend on the ability to control ageing-related expenditure.

# 1. Introduction

Episodes of fiscal consolidation reflect the attempt to put public finances on a sustainable footing and to create conditions for stable and successful economic development. In the European context, sound public finances acquire additional importance as they guarantee a smooth functioning of the economic and monetary union (EMU).

In the run-up to the EMU some Member States have implemented impressive fiscal retrenchment programmes and today public finances are, overall, in a better shape as compared to the early 1990s. However, the scope for fiscal consolidation has not vanished. In recent years, a large number of EU countries, both 'old' and recently acceded Member States, faced the challenge to restore or achieve budgetary discipline. Governments responded with different cures that were implemented under diverse economic and institutional circumstances and gave rise to a varying degree of success.

This section of the report examines evidence on fiscal consolidation in the EU since 1970 with a view to shedding light on the factors that determine the success or failure of consolidation. Following common practice in the literature the notion of success refers to a more lasting as opposed to a merely short-lived correction of the budgetary position and abstracts from the issue of whether fiscal consolidation produces contractionary or expansionary effects on economic growth. The question of whether economic activity is spurred or hampered by a fiscal correction was studied in an earlier edition of this report <sup>(1)</sup>.

Compared to the existing literature on successful fiscal consolidation we add a number of new dimensions. First of all, we explore a broader set of ingredients that may determine the recipe for success. In addition to the composition of adjustment, which has extensively been

examined in the literature, we consider further elements such as the recourse to 'fiscal gimmickry', the quality and strength of fiscal governance and the implementation of structural reforms. Secondly, our analysis seeks to differentiate between at least two different types of consolidation episodes, one in which a relatively big fiscal correction is implemented in a short period of time, dubbed 'cold shower' consolidation, as compared to more gradual episodes of adjustment. Such a differentiation is motivated by the conjecture that the recipe for success may be conditional on the type of adjustment chosen.

Our analysis combines different methods. Following established practice, regression analysis is at the core of our work. It explores whether and how different economic, institutional and other factors affect the occurrence and the success of fiscal adjustment episodes. The regression analysis is complemented by other quantitative techniques such as mean comparisons to highlight differences between years of consolidation and 'normal' times, between types of consolidation and, finally, between successful and unsuccessful adjustment episodes. To round off the analysis and to illustrate the general findings on the basis of country-specific evidence, a number of country cases are presented.

The presentation is organised as follows. Chapter 2 prepares the ground for a detailed examination of fiscal consolidation in the EU. It starts with the definitions of both fiscal consolidation and success. The choice underlying our work is set out and motivated against the definitions used in the existing literature. The chapter also summarises the existing stock of knowledge about the factors explaining successful consolidation and includes a first descriptive analysis of fiscal consolidations in the EU.

Chapter 3 characterises the main differences between 'normal' times and years that qualify as years of fiscal consolidation. The main purpose is to explore the ele-

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<sup>(1)</sup> See European Commission (2003).



ments and conditions that lead to and trigger episodes of fiscal adjustment.

Chapter 4 focuses attention on the features and elements that separate successful from unsuccessful episodes of fiscal consolidation. It also identifies the revenue and expenditure categories that rebound after the end of unsuccessful episodes.

Chapter 5 summarises and concludes. The main findings of our analysis are set out against those in the literature.

The Annex presents four country cases: Spain, Italy, the Netherlands and Hungary. They illustrate the findings of our statistical analysis but also highlight a number of elements that are not necessarily captured by the statistical regularities established in Chapters 3 and 4.

## 2. Basic features of successful fiscal consolidations

### 2.1. Introduction

The empirical analysis of fiscal consolidation has become a distinct and rich field of economic research. The first comprehensive studies were published in the mid-1990s starting with the seminal contribution of Alesina and Perotti (1995). Initially, following up on previous theoretical work, the focus was primarily on the question of whether and what type of fiscal consolidation would produce expansionary effects on the aggregate level of economic activity. More recently, also due to the looming budgetary impact of ageing population, the focus has shifted towards a more in-depth study of the factors that are conducive to the success of fiscal consolidation. Our study falls within this later line of research and focuses on the experience in the 27 EU Member States.

This section sets the scene for our own work in three steps. In line with the literature, the first step consists in establishing operational definitions of what is actually meant by fiscal consolidation and when a consolidation episode is thought to be successful. We motivate our choice and compare it with definitions used in the existing literature. So far no commonly agreed definition has been established, *inter alia* because some of the characteristics are chosen as a function of the specific questions being addressed. The second step is a brief review of the main findings of the empirical literature on the determinants of fiscal consolidation. It serves as background and benchmark for our own analysis. The third step portrays some basic features of the fiscal consolidation episodes identified in our data sample. It highlights the distribution of consolidation episodes over time, the frequency of large and smaller adjustments as well as the overall success rate.

### 2.2. Defining episodes of successful fiscal consolidation

A definition of successful consolidation involves at least three different elements: (i) a measure of fiscal consolidation; (ii) a reference period over which a given size of consolidation is implemented; and (iii) a criterion discriminating between success and failure.

As regards the measure of fiscal consolidation, we use improvements of the cyclically adjusted primary budget balance (CAPB), derived as the difference between the nominal primary balance and the cyclical component of the budget (<sup>1</sup>). Interest expenditure is excluded because it is generally not considered discretionary, unless exceptional measures to reduce debt are taken.

In the literature, the most commonly used measure is an indicator proposed by Blanchard (1990). It attempts to isolate the discretionary components of the primary nominal budget balance while maintaining a certain degree of simplicity. This is done by calculating the balance that would have prevailed if the unemployment rate had remained unchanged with respect to the previous year. In the 1990s measures of this type were clearly preferred over more complex indicators involving potential output estimates such as the CAPB (<sup>2</sup>). In the meantime, the CAPB has become the main reference for purging the budget of its temporary cyclical components. In particular, it is used by all major international economic organisations including the IMF and the OECD. The cyclically adjusted budget balance is also the official indicator in the

(<sup>1</sup>)  $capb_t = pb_t - \varepsilon \cdot OG_t$  where  $pb_t$  is the nominal primary budget balance,  $\varepsilon$  the sensitivity of the budget with respect to the cycle as measured by the output gap  $OG_t$ . For a detailed discussion of the cyclical-adjustment method used in the EU fiscal framework see European Commission (2004).

(<sup>2</sup>) See Alesina and Perotti (1995), Alesina and Perotti (1996) and Alesina and Ardagna (1998).

EU fiscal surveillance framework to capture the budgetary effects of discretionary fiscal policy <sup>(1)</sup>.

Possible shortcomings of using changes in the CAPB and the Blanchard type of indicator as a measure for discretionary fiscal policy are well known. In addition to discretionary fiscal policy measures they can also reflect one-off and accounting distortions, autonomous revenue fluctuations and growth surprises <sup>(2)</sup>. In our analysis presented in Section IV.3 and IV.4 we try to address these measurement issues (i) by choosing sufficiently large changes in the CAPB and (ii) by using specific variables that may control for at least some of these other factors, notably data on one-off measures and apparent tax elasticities <sup>(3)</sup>.

As regards the size and timing of consolidation, we allow for two different types of consolidation episodes. The first is characterised by a sharp fiscal adjustment effort concentrated in one single year. By way of contrast, the second type is one in which the fiscal correction is implemented over a longer period.

**Definition 1 — Consolidation:** a consolidation is an improvement of the CAPB of at least 1.5 % of GDP which is either achieved (i) in one single year or (ii) over a period of three years where in each single year the improvement of the CAPB is less than 1.5 % of GDP and the CAPB does not deteriorate by more than 0.5 % of GDP compared to the year before.

The relatively high threshold of a 1.5 % of GDP improvement of the CAB was chosen for two reasons. First and foremost, because of what was just said above about the ‘noise’ included in observed changes in the CAB. Large adjustments are unlikely to result from other factors than discretionary fiscal policy. Second, it is eas-

ier to discern differences in the composition of fiscal adjustment if the overall correction is larger.

Episodes satisfying at least one of the two conditions in Definition 1 are consolidation episodes for the purpose of our analysis. Episodes of the first type will be referred to as ‘cold shower’ consolidations, to highlight the relatively strong tightening over a period of one calendar year. Episodes of the second type will be called ‘gradual consolidations’. It is important to note that the two definitions are mutually exclusive but a ‘cold shower’ adjustment could be adjacent to a ‘gradual’ episode. Moreover, the definition of a ‘gradual’ adjustment formally excludes consolidations of more than 4.5 % of GDP over three years. Consolidations of this type are treated as successive ‘cold shower’ episodes.

The reason for discriminating between those two types of consolidation episodes is straightforward. They can be taken to represent polar cases. In a ‘cold shower’ adjustment the fiscal correction is concentrated in a short period of time and may potentially reflect a completely different economic environment as well as different institutional arrangements than a gradual consolidation episode.

A stylised presentation of the two episodes is provided in Graph IV.2.1 and Graph IV.2.2.

The presentation of a ‘cold shower’ consolidation is simple. Graph IV.2.1 refers to the case in which the minimum adjustment of 1.5 % of GDP is achieved. The presentation of a ‘gradual’ adjustment is slightly more involved, as it is consistent with several adjustment patterns over a three year period that gives rise to the required overall minimum adjustment of 1.5 % of GDP. The solid line refers to the case in which the adjustment is distributed evenly over the consolidation period. The two grey lines delimit the range of adjustment patterns consistent with the definition.

Most existing studies of fiscal consolidation rely on combined definitions, i.e. definitions that include different combinations of size and in particular time of fiscal adjustment as in Definition 1 <sup>(4)</sup>. The obvious advantage of combined definitions is to increase the number of consolidation episodes for the purpose of the econometric analysis.

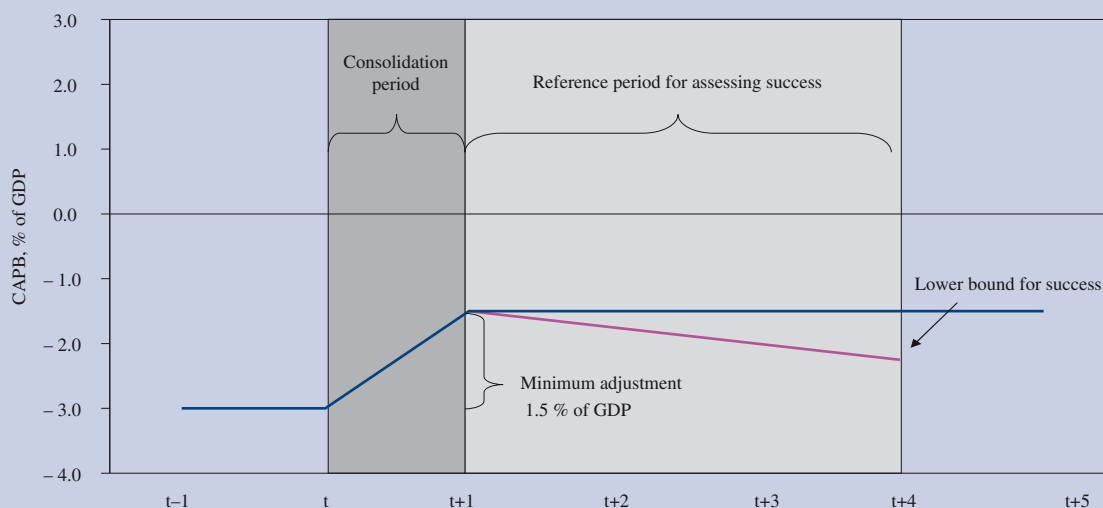
<sup>(1)</sup> Initially used as an analytical instrument, the CAB was established as a key instrument of budgetary surveillance under the SGP in March 2003, when the Ecofin Council adopted conclusions consistent with the recommendations contained in the November 2002 Commission Communication ‘Strengthening the coordination of budgetary policies’ advocating the use of underlying budget balances. The role of the CAB was further strengthened with the reformed Pact in which both the medium-term budgetary objectives and the adjustment towards them are expressed in cyclically adjusted terms. The commonly agreed methodology for estimating potential output and the output gap, which is one of the main inputs to the CAB used for EU fiscal surveillance, is explained in detail in Part VI of this report.

<sup>(2)</sup> Koen and Van den Noord (2005) examine the distortions arising from one-off measures and accounting issues. Girouard and Price (2004) highlight the role of autonomous fluctuation in revenues that are not netted-off when adjusting the budget for the effect of the cycle. Larch and Salto (2005) point to the impact of economic growth surprises.

<sup>(3)</sup> The impact of autonomous fluctuations on the assessment of fiscal adjustment is described in Section II.2.1 of this report.

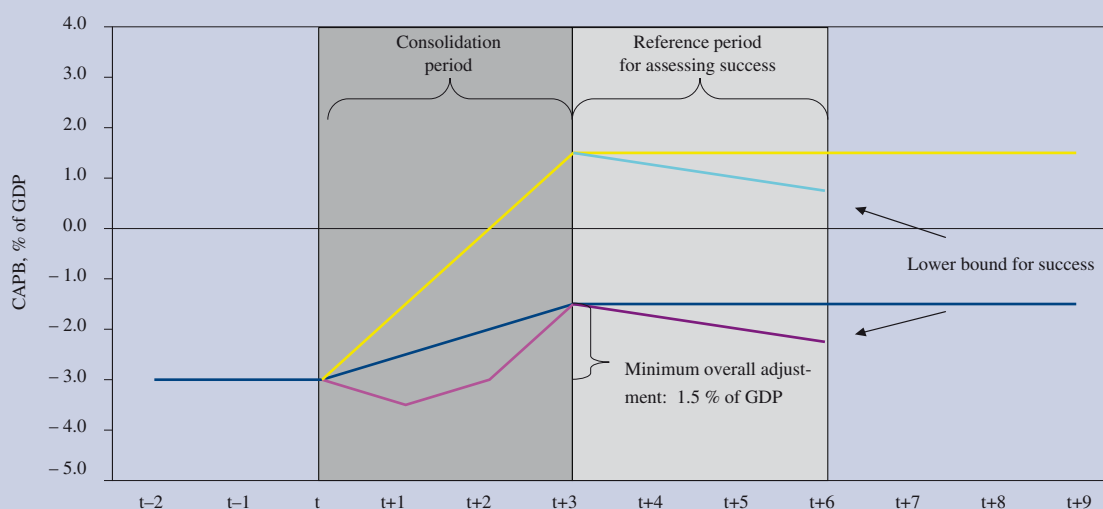
<sup>(4)</sup> This is the case in Alesina and Perotti (1996), Alesina and Ardagna (1998) and von Hagen et al.(2002).

Graph IV.2.1: Stylised fiscal consolidation episode: 'cold shower' adjustment



Source: Commission services.

Graph IV.2.2: Stylised fiscal consolidation episode: 'gradual' adjustment



NB: The grey solid lines indicate the maximum variation in the CAPB during the adjustment.  
Source: Commission services.

Turning to the definition of success, we use the following criteria:

**Definition 2 — Success:** a consolidation in line with Definition 1 is successful if the following condition applies: in the three years after the end of the consolidation episode the CAPB does not deteriorate by more

than 0.75 % of GDP in cumulative terms compared to the level recorded in the last year of the consolidation period. In other words, at least half of the overall minimum fiscal correction required to qualify as consolidation has to be safeguarded three years after. A consolidation is deemed unsuccessful if this condition is not met.

This definition departs in one important respect compared to previous work. It is not linked to the evolution of the government debt ratio. This was a deliberate choice so as to avoid the clear head start of high debt countries to reduce the debt ratio for a given rate of GDP growth.

As in any alternative, there is of course a certain degree of arbitrariness in our definitions of consolidation and success. However, abstracting from a number of specificities concerning the length and size of fiscal adjustment our definition of consolidation shares one important feature with those found in the literature. The focus is on episodes of tight fiscal policy reflecting a marked change in the fiscal policy stance. As mentioned before, this ensures that the improvement in the cyclically adjusted primary balance is genuinely discretionary and not due to other factors.

However, the choice of excluding smaller adjustments comes at a price. It basically, rules out longer periods of moderate fiscal adjustment. In particular, Definition 1 does not allow for adjustment episodes that satisfy the formal requirements of the reformed SGP <sup>(1)</sup>. Under the provisions of the preventive arm of the reformed Pact, Member States that have not yet reached their country-specific medium-term budgetary objective are expected to improve the cyclically adjusted budget balance, net of one-offs and other temporary measures by 0.5 % of GDP each year as a benchmark <sup>(2)</sup>. The adjustment effort should be higher in good times and could be lower in bad times. A minimum annual adjustment of 0.5 % of GDP is also required for countries in EDP.

These provisions cannot be directly translated into an operational definition of fiscal consolidation comparable to the ones set out above. The criteria for success are clearly given by the achievement of the MTO, but the period of adjustment is a function of the starting point and of the cyclical conditions prevailing along the adjustment path, which allow for a modulation of the annual adjustment effort. Moreover, the issue of factors other than discretionary fiscal policy that ‘pollute’ changes in the cyclically adjusted budget balance is recurrent in the EU budgetary surveillance framework.

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<sup>(1)</sup> The ‘old’ Pact did not include detailed requirements for annual fiscal adjustment. Member States were merely expected to achieve a close-to-balance or in surplus position over the cycle.

<sup>(2)</sup> Article 5, Council Regulation (EC) No 1466/97, as amended by Regulation (EC) No 1055/2005.

In the light of this, we chose a definition that mimics some of the key elements of the adjustment required under the provisions of the SGP:

**Definition 3 — SGP adjustment:** an SGP-type of adjustment is one in which for at least one year the cyclically adjusted budget balance improves by 0.5 % of GDP or more.

Definition 3 is applied to the data for illustrative purposes only. The main focus of our studies, especially of the econometric analysis, will be on Definition 1 and Definition 2. The requirements of the reformed SGP are binding only for the most recent years of the time period covered by our data and hence, did not constitute a benchmark for fiscal adjustment in the past. Nevertheless, it may be instructive to see how the provisions of the reformed Pact compare with past adjustment patterns.

### 2.3. Findings from existing literature

A fairly rich literature has emerged on the determinants and the economic effects of successful fiscal consolidation. In some cases success and economic effects are covered at the same time. In this section we review the results concerning the factors that determine the success of fiscal consolidation.

#### 2.3.1. Results applicable to industrialised countries in general

The first comprehensive empirical analysis of fiscal adjustments is by Alesina and Perotti (1995). It focuses on OECD countries and sets the foundations for the by now familiar notion that the composition of adjustment is crucial for success. In particular, Alesina and Perotti (1995) find that successful adjustments are mainly expenditure based, with a focus on primary current expenditure. The paper also introduces the analysis of political factors, where single-party governments were shown to be more successful in carrying out adjustments than coalitions. Indications about a possible link between consolidation, labour market performance and economic activity are also provided.

Precursor studies include Alesina (1988), and Dornbusch (1989), who however focus on individual country cases (Italy and Ireland respectively), and largely abstract from any issues of composition. In a similar vein, the issue of how coalition governments affect the budget balance has been covered earlier in Grilli et al. (1991), albeit with a primary focus on debt.

The question to what extent the composition of fiscal consolidation in industrialised countries matters for success has been subject of further research, for instance in Mc Dermott and Westcott (1996), and in Alesina and Perotti (1996). Their main results are echoed in the more elaborate paper by Alesina and Perotti (1997), who find that budgetary consolidations which focus on reductions in public sector wages and employment, and transfer payments, were generally longer-lasting than those which were centred on tax hikes and reductions in public investment. The reason why expenditure-based consolidations are found to be more durable is that they tackle the very items which generally exhibit a comparatively steep upward trend. The authors obtain these results on the basis of a full sample of 20 OECD countries covering the period 1960–94.

A further comprehensive benchmark study of fiscal consolidation episodes is by Alesina and Ardagna (1998). They look into 10 OECD country cases from the early 1960s onwards confirming earlier findings that expenditure-based budgetary consolidations, centred on cuts in public employment, transfers and government wages, are generally longer-lasting. In this context they also highlight the labour market channel of successful fiscal consolidation, arguing that the ‘right’ composition of adjustment can produce beneficial effects on the labour market and finally on economic activity by lowering unit labour costs. The analysis of fiscal consolidation is deepened by looking at additional economic and political factors. In particular, in some cases devaluations are found to be helpful for achieving consolidation. A further interesting result is that fiscally responsible governments are not found to be necessarily penalised at elections.

Ardagna (2004) examines 17 OECD countries from 1975 to 2002 and focuses on new dimensions of fiscal adjustment such as the size of the budgetary correction, the rate of real GDP growth and the monetary policy stance. She finds that the size of the adjustment is more important than the composition for the likelihood of success. However, the composition of budgetary consolidation is characterised as decisive for a consolidation to produce expansionary effects.

Apart from the purely fiscal issues, over time increasing attention has been paid to political factors. An early overview of these is presented in Alesina et al. (1998). In general, single party governments are identified as more effective for achieving fiscal consolidation than coalitions, while the political alignment of governments hardly matters. Potentially painful budgetary consolidation

measures are found to be best implemented during the period soon after an election, when popular support for the government is still running at high levels. The role of political leadership (of the Prime Minister and Finance Minister in particular) in promoting fiscal consolidation and the way the necessity of consolidation is communicated to the public is often discerned as relevant too.

The increasing focus on political factors is also reflected in recent case study work, such as the report commissioned by the Bertelsmann foundation, covering in detail nine country cases for the period 1992–2005. Building on a very policy-oriented analysis of various economic and political issues the report comes up with some original, albeit strong proposals of how to set the right incentives for consolidation. These include introducing clear rules for the use of surpluses and augmenting the reference values of 3 % and 60 % by further criteria.

As to monetary conditions and exchange rates, they have also been identified as factors that determine the likelihood of success of fiscal consolidations. Ahrend et al. (2006) find that on average consolidations are more likely to be successful if monetary policy is accommodating during their early phase, and hence counteracts any contractionary effects of budgetary tightening. In addition, both short and long-term interest rates are found to be more likely to fall if the fiscal consolidation is based on cuts in current spending rather than on tax increases. This is explained by the fact that implementing politically sensitive expenditure-side measures demonstrates the commitment of the government to consolidation and hence enhances the credibility of its budgetary strategy.

Lambertini and Tavares (2005) focus on the question of how exchange rate policies affected fiscal consolidation in 20 OECD countries between 1970 and 1999. Apart from confirming the relevance of composition, size, and the initial level of public debt they find that exchange rate depreciations or devaluations, which boost competitiveness, have often preceded successful budgetary consolidations. From this they infer that fiscal consolidation will be harder in the economic and monetary union (EMU), in which by definition the nominal exchange rate is not available any more as a policy instrument.

### **2.3.2. EU-specific results**

Empirical work on fiscal consolidations in the EU is less ample. Zaghini (1999) looks into 14 EU country cases (the EU-15 excluding Luxembourg) for the period between 1970 and 1998, i.e. preceding the inception of the EMU.

**Box IV.2.1: Main determinants of successful fiscal consolidations:  
a synthetic overview of the evidence from previous empirical studies**

Determinants	Main findings	References
<b>Composition of fiscal adjustment</b>	Cuts in expenditure are more effective than tax increases in making consolidation successful. Reductions in public sector employment and wages, and in transfers are found to be particularly conducive. Thus far, this result represents 'conventional wisdom'. More recent studies, focusing on country cases, provide evidence that both expenditure and revenue-based consolidation can be successful.	Alesina and Perotti (1995), Zaghini (1999), v. Hagen et al. (2002), Briotti (2004), Lambertini and Tavares (2005), Ahrend et al. (2006) Alesina and Perotti (1997), Alesina and Ardagna (1998) Bertelsmann Foundation (2006).
<b>Size of fiscal adjustment</b>	The size of fiscal adjustment is found to be relevant as it may make a consolidation harder to reverse. The result is not robust across alternative studies and seems to depend on the definition of success.	Ardagna (2004), v. Hagen et al. (2002), Briotti (2004), Lambertini and Tavares (2005) Alesina and Ardagna (1998) Zaghini (1999).
<b>Initial conditions: macroeconomic and fiscal conditions</b>	The gravity of initial macroeconomic and fiscal conditions plays a role, especially in triggering an episode of consolidation. It is also found to influence the success rate of consolidation.	Ardagna (2004), Zaghini (1999), von Hagen et al. (2002), Briotti (2004), Lambertini and Tavares (2005), Ahrend et al. (2006) Alesina and Ardagna (1998).
<b>Monetary stance</b>	A number of studies conclude that the monetary policy stance is relevant for success as it may accommodate consolidation. This conclusion is not corroborated in general.	Ahrend et al. (2006), Bertelsmann Foundation (2006) v. Hagen et al. (2002) Ardagna (2004), Lambertini and Tavares (2005).
<b>Exchange rate</b>	As for the monetary stance, the exchange rate is found to matter as it may accommodate consolidation. In particular, depreciations increase the chances of success.	Alesina and Perotti (1997), Alesina and Ardagna (1998), Lambertini and Tavares (2005).
<b>Rate of GDP growth</b>	The findings concerning economic growth are not clear cut. There is evidence that accelerating growth benefits the rate of success.	Alesina and Perotti (1995), Bertelsmann Foundation (2006) and Ardagna (2004).
<b>Political factors</b>	Single-party governments are generally more effective than coalitions, while the political alignment hardly matters.	Alesina and Perotti (1995), Bertelsmann Foundation (2006).

His results confirm the relevance of the composition of adjustment for success. In addition, he emphasises that the length of the fiscal adjustment episodes matters for achieving lasting consolidation while its size does not.

Von Hagen, Hughes-Hallett and Strauch (2002) examine fiscal consolidations in 20 OECD countries with a particular focus on 11 euro area countries for the period 1960–98. Overall they confirm the importance of the composition (dubbed 'quality') of adjustment and find evidence that the size of consolidation can also be important for success. Monetary conditions are not found to matter. However, they detect a sort of positive externality from fiscal consolidation carried out in other countries in the sense that the likelihood of a budgetary consolidation to persist increases if it falls within an international context of consolidation. As regards the

euro area countries, the authors take a closer look at the experience over the 1990s, but find only limited evidence that the Maastricht fiscal criteria did contribute to the fiscal consolidations observed. The importance of centralisation of the budgetary process for achieving fiscal discipline and lasting consolidation is emphasised.

Briotti (2004) uses data for the EU-15 Member States from 1991 to 2002. She confirms established findings notably concerning the role of the composition of fiscal adjustment for success as well as the relevance of initial macroeconomic and fiscal conditions, where the latter are measured as the debt-to-GDP ratio. She also finds evidence indicating that the size of the adjustment is instrumental for success. Moreover, she concludes that the implementation of the EU fiscal framework has been successful in promoting budgetary consolidation among

Member States in the run-up to EMU and that a consolidation fatigue set in after its inception in 1999.

## 2.4. Basic features of successful fiscal consolidations in the EU

Our sample covers all 27 Member States of the EU. The time period depends on the availability of the data and is not the same for all countries. For the EU-15 countries the

period is generally 1970–2006 <sup>(1)</sup>. Significantly shorter periods, mostly starting in the mid-1990s, are covered for the recently acceded Member States. The exact sample length by country is indicated in Table IV.2.1.

<sup>(1)</sup> The EU-15 includes Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden and the United Kingdom.

Table IV.2.1

### Overview of episodes of fiscal consolidation in the EU

	Type of consolidation				Total No of years	Sample period
	Cold shower	No of years	Gradual	No of years		
BE	1977, 1982, 1984, 1993, 2006	5	1985, 1986, 1987, 1996, 1997, 1998	6	11	1971–2006
BG		–		–	0	2003–06
CZ	2004	1		–	1	1998–2006
DK	1983, 1984, 1986	3	2003, 2004, 2005	3	6	1971–2006
DE	1982, 1989, 2000	3	1983, 1984, 1985, 1992, 1993, 1994	6	9	1971–2006
EE	2000, 2003	2		–	2	1996–2006
IE	1976, 1983, 1988, 2004	4	1991, 1992, 1993, 1994	4	8	1971–2006
EL	1974, 1982, 1986, 1987, 1991, 1994, 1996, 2005, 2006	9		–	9	1971–2006
ES	1986, 1992, 1996	3		–	3	1971–2006
FR	1996	1	2004, 2005, 2006	3	4	1971–2006
IT	1976, 1982, 1983, 1991, 1992, 1993, 1997	7		–	7	1971–2006
CY	2000, 2004, 2005	3		–	3	1999–2006
LV	1996, 2000	2	2003, 2004, 2005	3	5	1996–2006
LT	1998, 1999	2		–	2	1996–2006
LU	1983, 1985, 1993, 1997	4	1994, 1995, 1996	3	7	1983–87, 1991–2006
HU	1999, 2003	2		–	2	1998–2006
MT	1999, 2004, 2005	3	2000, 2001, 2002	3	6	1999–2006
NL	1985, 1991, 1993, 1996, 2005	5	1971, 1972, 1973, 1981, 1982, 1983, 1984	7	12	1971–2006
AT	1984, 1996, 1997, 2001	4		–	4	1971–2006
PL	2005	1		–	1	1996–2006
PT	1977, 1982, 1983, 1984, 1986, 1992, 2002, 2006	8		–	8	1971–2006
RO	1997, 1998, 1999	3		–	3	1996–2006
SI	2002	1		–	1	2001–2006
SK	1998, 2001, 2003	3		–	3	1997–2006
FI	1976, 1981, 1984, 1988, 1996, 1998, 2000	7		–	7	1971–2006
SE	1971, 1976, 1983, 1987, 1995, 1996	6	1980, 1981, 1982, 1984, 1985, 1986, 2003, 2004, 2005	9	15	1971–2006
UK	1974, 1980, 1982, 1996, 1997, 1998, 2000	7		–	7	1971–2006
Total		99		47	146	



Overall, our data set contains 634 observations of which 146, close to one quarter, qualify as years of consolidation in line with Definition 1 presented in Section 2.2 above. One third of the 146 years of consolidation were crowned with success in line with Definition 2.

#### **2.4.1. Features and occurrence of fiscal consolidation**

Table IV.2.1 summarises some basic information organised by country and more interestingly by type of consolidation. It shows a clear prevalence of the ‘cold shower’ type of adjustment, which accounts for around two thirds of the total number of years in which fiscal consolidations have taken place. ‘Gradual’ adjustments are significantly less frequent. In actual fact, when choosing the definition of ‘gradual’ adjustment we noticed that in practice the CAPB rarely follows a smooth path. In our EU sample there are only three episodes in which the CAPB posts an improvement between zero and 1 % of GDP over three consecutive years. The vast majority exceed this range.

Hence, the first point to note is that episodes of fiscal consolidation in line with Definition 1 are generally not characterised by steady steps of annual adjustment. They rather follow a pattern of abrupt and sizeable corrections of more than 1.5 % of GDP, mostly concentrated in one single year. Even if part of the variance is probably imputable to elements that are generally not related to active discretionary fiscal policy measures such as autonomous variations in tax elasticities or economic growth surprises, the degree of variation is important. The frequency distribution of the change in the CAPB during years of consolidation displayed in Graph IV.2.3 provides telling evidence.

Close to 70 % of the annual improvements exceed 1.5 % of GDP; one sixth of the years of consolidation fall in the range of 3 % of GDP and more. The hefty incidence of very large improvements in one single year is strongly influenced by the experience of the new or recently acceded Member States. With a view to EU accession these countries implemented at times impressive fiscal adjustments. Almost 30 % of the consolidation years recorded for the new Member States gave rise to an annual improvement of the CAPB of 3 % of GDP or more.

In the EU-15 countries the pattern of annual improvements of the CAPB during consolidation episodes

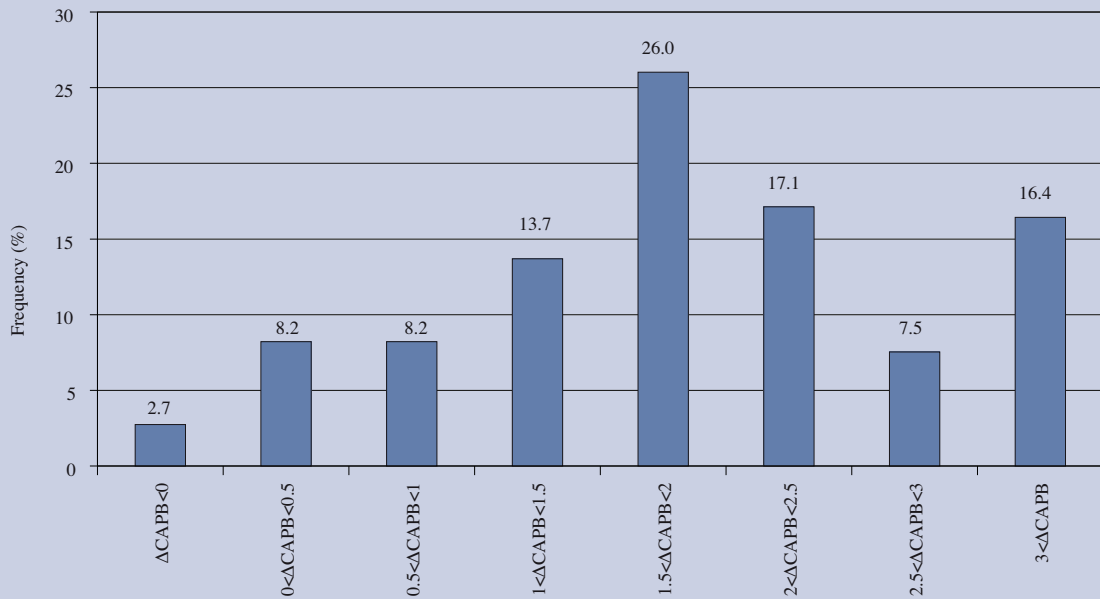
changed significantly over time (see Graph IV.2.4). In the 1970s and 1980s there was more diversity in the size of the distribution; especially large annual improvements were carried out relatively frequently. By contrast, in the 1990s and 2000s a clear convergence towards ‘medium-sized’ annual improvements has taken place. More than half of the cases are in the range of 1 to 2 % of GDP, as compared to slightly less than 30 % in the two previous decades.

This shift across time most probably reflects the response to major events in the economic environment. In the early 1980s, public finances had to be brought in order in the wake of the two negative oil shocks, during which many countries had accumulated comparatively large fiscal imbalances also due to the, at the time still prevailing, view that governments would be in a position to spend an economy out of a crisis.

The first half of the 1980s, the period after the second oil price shock, hosts more than one quarter of the overall number of years of consolidation identified in our sample (see Graph IV.2.5). After this first major wave, the number of consolidations dropped significantly in the second half of the decade in spite of the fact that only a small share of the corrections implemented in the first half had turned out to be successful on the basis of our definition.

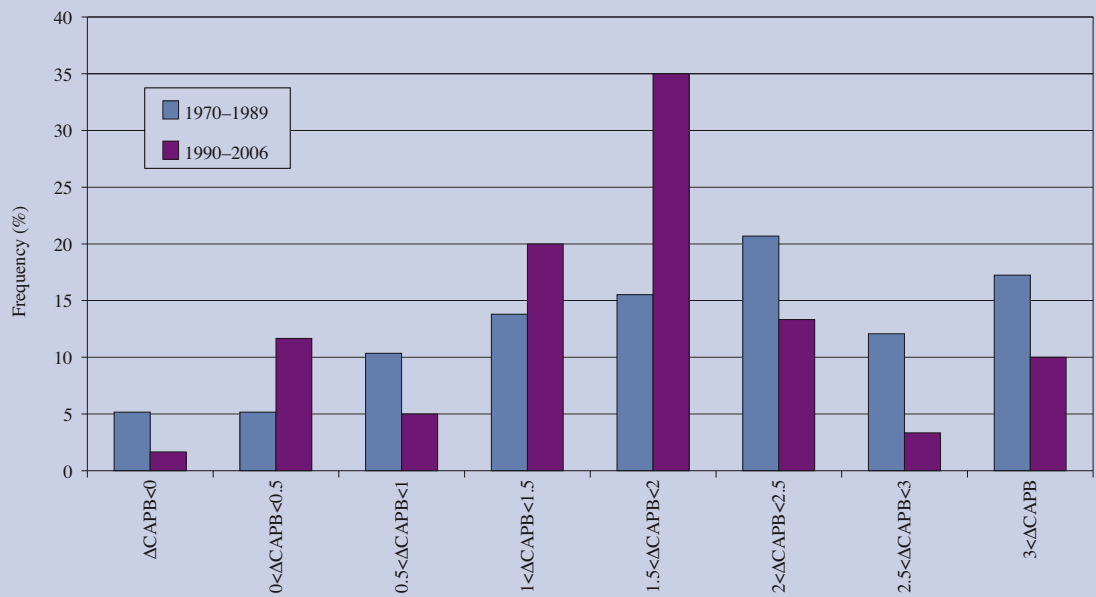
Against this backdrop, and also in view of the convergence process towards the common currency, which required Member States to bring the deficit and the debt in line with the thresholds of the Treaty, fiscal consolidation episodes boomed again in the second half of the 1990s, this time with greater success. More than half of the years of consolidation gave rise to improvements that were at least in part safeguarded in the three years after the end of the period. The occurrence of fiscal consolidations remained invariably high in the first six years of the 2000s, but the success rate dropped significantly. This drop reflects two factors: one formal, the other more of substance. First, on the basis of our definition success can only be established three years after the end of the consolidation period. Hence, the verdict is still out for episodes that started in 2004 or later. Second, the first half of the 2000s was characterised by an economic slowdown that turned out to be much longer and deeper than expected. In this context, consolidation efforts were successively eroded by repeated negative growth surprises.

Graph IV.2.3: Frequency distribution of the annual improvement in the cyclically adjusted budget balance (CAPB) during consolidation years



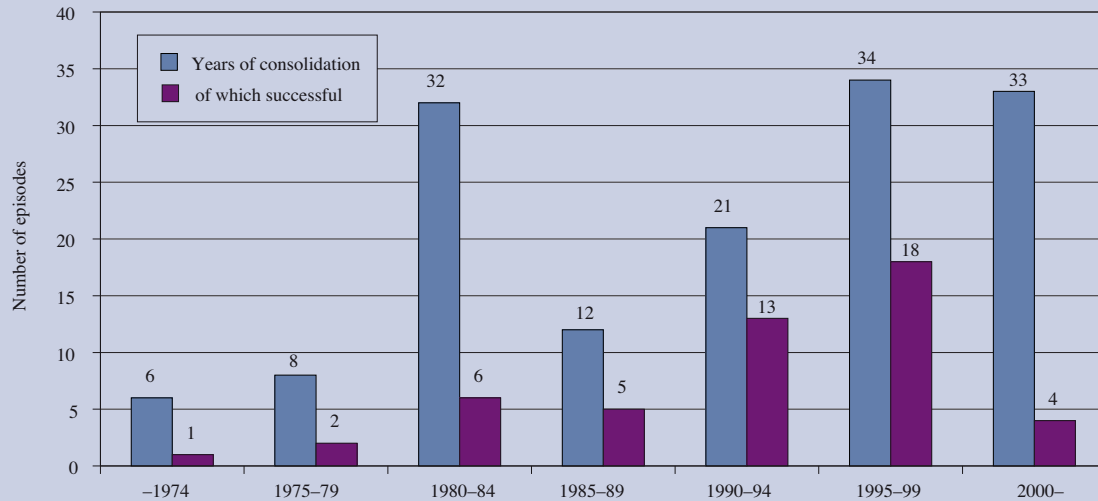
Source: Commission services.

Graph IV.2.4: Frequency distribution of annual improvement in the cyclically adjusted budget balance (CAPB) during consolidation episodes in EU-15



Source: Commission services.

Graph IV.2.5: Frequency distribution of consolidation episodes



Source: Commission services.

As regards the ‘SGP-type’ of adjustment, there are altogether 144 episodes in our EU sample that satisfy Definition 3, i.e. episodes in which the cyclically adjusted budget balance improved by 0.5 % of GDP or more for at least one year. More than half of these SGP-type episodes gave rise to a headline deficit that was consistent with a stable or declining debt ratio.

As indicated in Graph IV.2.6, the clear majority of the ‘SGP-type’ of consolidations is limited to one year only. There are very few episodes in which the improvement of the CAB is sustained over a number of years in a row. Such protracted episodes are typically linked to profound adjustment processes generally in the wake of economic crisis and/or regime shifts in fiscal policy-making. The more general and intuitive point is that the length of the ‘SGP-type’ of adjustment correlates with the size of the initial deficit.

Prominent examples of protracted adjustments are Italy in the beginning of the 1990s, as well as the UK and Sweden in the second half of the 1990s. In all three cases, the protracted improvement of the underlying fiscal position came after economic difficulties had significantly worsened the public finance situation of the country. In Sweden, the adjustment came after the global economic recession of the early 1990s had been amplified by a real estate collapse which in turn gave rise to a financial crisis. In Italy, the already precarious situation

of public finances carried over from the 1980s deteriorated further in the wake of a recession and the exchange rate crisis at the beginning of the 1990s. The exchange rate crisis coupled with weak economic growth also triggered the fiscal adjustment in the United Kingdom. In the eve of consolidation the deficit had increased to more than 10 % of GDP in Italy and Sweden and was above 7 % of GDP in the United Kingdom.

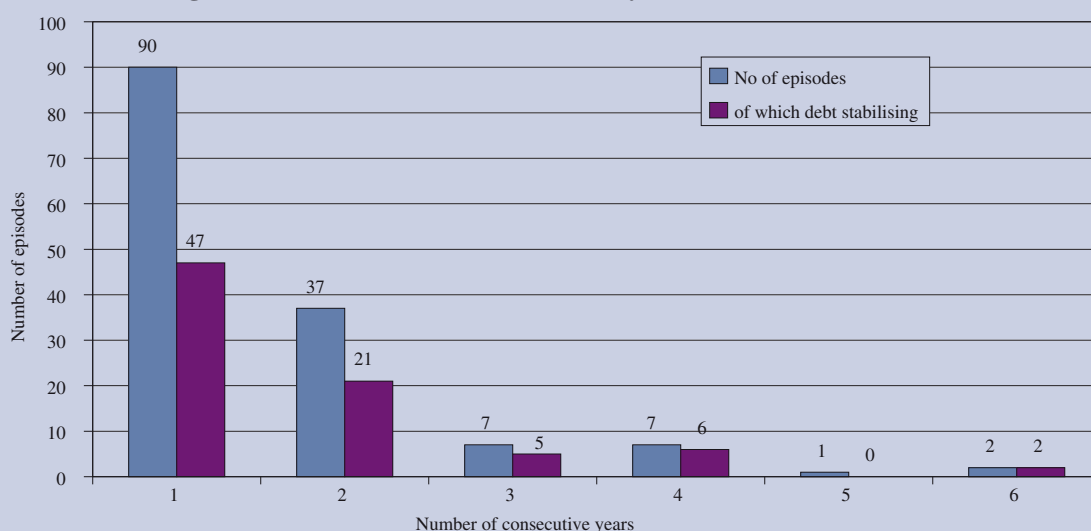
#### 2.4.2. Features of successful fiscal consolidation

Success and failure of fiscal consolidation can be expected to reflect different public finance conditions and to take place against the backdrop of different macroeconomic situations. They may also give rise to different outcomes in terms of both fiscal variables and key macroeconomic figures.

Tables IV.2.2 and IV.2.3 provide an overview of the basic differences between successful and unsuccessful consolidation in the EU on the basis of three successive stages in time: the period before, during and after fiscal consolidation. The period before is the two-year period preceding the first year of the fiscal adjustment. Similarly, the period after is the two-year period following the last year of the adjustment. The two tables show period averages.

Starting with the fiscal situation, Table IV.2.2 highlights a number of interesting regularities that are mostly in

Graph IV.2.6: Frequency of at least 0.5 % of GDP improvements of the cyclically adjusted primary budget balance (CAPB) over consecutive years



Source: Commission services.

line with the findings of previous work. Public finances ahead of successful consolidation episodes are on average in a worse shape than before unsuccessful episodes, in terms of both the underlying budget balance and the debt ratio. This pattern would seem to be consistent with the general finding that difficult starting positions provide motivation and incentive for more determined consolidation efforts. The debt ratio is generally stabilised after a successful consolidation and the improvement in the CAPB between before and after the episode is significantly bigger. In particular, the improvement achieved by successful consolidations is on average twice as high as compared to unsuccessful episodes <sup>(1)</sup>.

The figures in Table IV.2.2 also corroborate the well-known finding related to the composition of fiscal consolidation, namely that successful episodes are more expenditure and less revenue based than unsuccessful ones. At the end of a successful fiscal consolidation total primary expenditures net of cyclical factors are on aver-

age almost 2 % of GDP lower than before the episode, mainly thanks to restraints on current expenditure. Conversely, unsuccessful consolidations largely rely on higher revenues, while primary expenditure net of cyclical factors is on average increased. Particularly striking is the evolution of the debt. Its average annual increase is significantly reduced during successful episodes. The progress is by far smaller during unsuccessful years of consolidation, partly due to a high and rising debt-increasing stock-flow adjustment.

The behaviour of the macroeconomic environment before, during and after fiscal consolidations in the EU is portrayed in Table IV.2.3. It includes variables describing aggregate economic activity, price and cost developments, labour market characteristics as well as some monetary variables.

Difficult macroeconomic conditions, together with poor public finances, seem to be a catalyst for successful consolidations. In the period preceding them, cyclical conditions, as measured by the output gap, are on average negative, and the rate of unemployment is higher as compared to the situation ahead of unsuccessful consolidations.

The situation is reversed during and after the consolidation. Episodes of successful fiscal consolidation start

<sup>(1)</sup> This result contrasts with the findings of Alesina and Ardagna (1998). They do not detect any significant difference between successful and unsuccessful consolidation as regards the improvement in the CAPB from the period before, to the period after the consolidation. The likely reason for the divergence in results is the different set of countries covered. Alesina and Ardagna (1998) do not examine recently acceded Member States of the EU, of which, as mentioned in Section IV.2.4.1 above some have implemented impressive successful consolidations since the mid-1990s.

Table IV.2.2

**Successful and unsuccessful fiscal consolidations — Fiscal conditions and composition of adjustment**

	Successful					Unsuccessful				
	Before	During	After	Diff.	Diff.	Before	During	After	Diff.	Diff.
	(a)	(b)	(c)	(b)-(a)	(c)-(a)	(a)	(b)	(c)	(b)-(a)	(c)-(a)
Debt	65.56 (31.10)	71.76 (33.54)	70.14 (33.56)	6.20	4.58	43.72 (22.94)	46.47 (24.03)	46.15 (22.88)	2.75	2.43
Change in debt	3.20 (4.71)	1.55 (3.83)	0.62 (4.88)	- 1.64	- 2.58	1.76 (3.81)	1.31 (3.43)	1.04 (3.61)	- 0.46	- 0.72
Stock-flow adjustment	1.38 (3.95)	1.30 (2.82)	1.50 (3.25)	- 0.09	0.11	2.12 (2.78)	2.90 (2.99)	2.72 (3.51)	0.78	0.60
Primary balance, cycl. adj.	- 1.03 (3.16)	1.47 (2.84)	2.37 (2.90)	2.50	3.40	0.14 (3.47)	2.45 (3.27)	1.75 (3.67)	2.31	1.61
Total revenue, cycl. adj.	43.01 (8.06)	44.20 (7.51)	44.18 (7.57)	1.18	1.16	42.11 (9.37)	45.19 (8.59)	43.96 (8.74)	3.07	1.84
Total tax burden	38.72 (6.46)	39.98 (6.61)	39.85 (6.80)	1.26	1.13	37.62 (5.92)	38.72 (5.71)	37.98 (6.34)	1.10	0.36
Total expenditure, cycl. adj.	49.82 (8.53)	49.02 (7.74)	47.98 (7.84)	- 0.80	- 1.83	45.82 (8.62)	46.86 (8.26)	46.22 (7.40)	1.05	0.40
Total primary expenditure, cycl. adj.	44.11 (7.43)	42.80 (6.23)	41.92 (6.16)	- 1.31	- 2.19	42.04 (7.74)	42.79 (7.30)	42.27 (6.73)	0.75	0.23
Current expenditure	44.48 (8.45)	44.85 (7.73)	43.72 (7.66)	0.38	- 0.76	40.59 (8.39)	42.31 (8.26)	41.44 (7.45)	1.72	0.84
Consumption expenditure	21.12 (3.71)	20.88 (3.33)	20.50 (3.36)	- 0.25	- 0.62	18.71 (3.29)	18.98 (3.21)	18.69 (3.10)	0.26	- 0.02
Transfers	27.11 (6.74)	27.01 (5.66)	26.27 (5.50)	- 0.09	- 0.83	24.63 (5.07)	24.60 (4.81)	24.09 (5.05)	- 0.03	- 0.54
Wages	12.16 (2.46)	12.03 (2.26)	11.85 (2.19)	- 0.13	- 0.32	11.64 (3.08)	12.06 (3.24)	11.66 (2.99)	0.42	0.02
Investment expenditure	3.13 (0.93)	2.89 (0.89)	2.73 (0.85)	- 0.24	- 0.40	3.33 (1.03)	3.16 (0.94)	3.03 (0.85)	- 0.17	- 0.30
Subsidies	1.98 (1.09)	1.87 (1.03)	1.66 (0.98)	- 0.12	- 0.32	2.63 (1.24)	2.55 (1.31)	2.53 (1.30)	- 0.08	- 0.10
Interest expenditure	5.70 (3.47)	6.22 (3.53)	6.06 (3.57)	0.51	0.36	3.69 (2.41)	4.09 (2.31)	3.98 (2.26)	0.40	0.29

NB: All variables refer to general government and are expressed in % of GDP. Standard deviations are in parentheses.

Source: Commission services.

under more difficult conditions, but would seem to go along with a better macroeconomic performance during and especially after the adjustment is accomplished compared to unsuccessful episodes. Real GDP growth dips slightly during both successful and unsuccessful consolidation phases but seems to recover more briskly after successful episodes on the back of a recovery of private consumption and gross fixed capital formation. Linked to this, successful episodes also seem to weigh less on cyclical conditions, which on average remain essentially unchanged. By contrast, unsuccessful consolidations,

while starting from an essentially neutral position in the cycle, would on average seem to end with a negative output gap. No major change is observed in the unemployment rate which remains on average higher at the end of successful episodes.

The behaviour of financial and monetary variables is also revealing. Long-term real interest rates tend to decline with successful consolidations, while they edge up during and after unsuccessful episode. However, in terms of level they stay on average below those recorded

Table IV.2.3

Successful and unsuccessful fiscal consolidations — Macroeconomic performance

	Successful					Unsuccessful				
	Before	During	After	Diff.	Diff.	Before	During	After	Diff.	Diff.
	(a)	(b)	(c)	(b)-(a)	(c)-(a)	(a)	(b)	(c)	(b)-(a)	(c)-(a)
Output gap (% of GDP)	-0.91 (2.48)	-0.83 (2.02)	-0.79 (1.76)	0.09	0.12	0.07 (2.32)	-1.11 (2.31)	-0.89 (2.46)	-1.18	-0.95
Unemployment rate (% of labour force)	9.72 (3.76)	9.83 (3.53)	10.03 (3.81)	0.11	0.31	6.10 (3.68)	6.59 (4.04)	6.58 (3.48)	0.49	0.48
Real GDP growth (% change)	2.89 (2.24)	2.50 (2.40)	3.26 (2.47)	-0.39	0.36	2.70 (2.73)	1.92 (2.50)	2.83 (2.53)	-0.78	0.14
Private consumption (% change)	1.58 (7.94)	2.66 (2.30)	3.08 (2.49)	1.08	1.50	2.67 (2.77)	2.13 (2.69)	1.82 (6.90)	-0.55	-0.86
Gross fixed capital formation (% change)	-0.88 (8.20)	-0.85 (5.68)	0.62 (6.68)	0.03	1.50	0.10 (6.70)	-1.98 (6.69)	-0.47 (7.64)	-2.08	-0.57
Export (% change)	7.10 (5.87)	5.44 (7.80)	7.71 (7.08)	-1.65	0.61	5.60 (8.53)	7.38 (6.65)	7.04 (7.36)	1.78	1.44
Real effective exchange rates (% change)	0.37 (5.72)	1.02 (7.02)	-0.44 (5.86)	0.65	-0.81	-0.43 (6.56)	-0.11 (6.16)	0.00 (4.80)	0.32	0.44
Real long-term interest rates (%)	5.05 (2.99)	4.19 (2.97)	4.35 (2.93)	-0.86	-0.70	2.37 (3.80)	2.69 (3.64)	3.15 (2.68)	0.32	0.78
Inflation (% change)	7.11 (5.90)	5.12 (4.68)	4.53 (4.40)	-2.00	-2.58	8.94 (7.00)	8.04 (7.11)	7.27 (7.08)	-0.90	-1.67
Trade balance (% of GDP)	-1.20 (5.14)	-0.36 (5.11)	0.04 (5.08)	0.84	1.24	-1.98 (6.72)	0.33 (6.97)	-0.20 (6.45)	2.31	1.78
Real unit labour costs (% change)	-0.78 (4.69)	0.16 (5.40)	-0.76 (6.27)	0.94	0.02	-0.04 (7.31)	-0.42 (7.06)	-0.37 (6.78)	-0.38	-0.33
Nominal wage (% change)	7.84 (8.20)	7.89 (6.92)	6.32 (6.49)	-2.20	-1.52	9.34 (11.85)	8.24 (10.21)	7.50 (10.77)	-1.10	-2.82
Gross saving, private sector (% of GDP)	21.80 (4.71)	21.44 (4.42)	20.76 (4.99)	-0.37	-1.04	21.52 (4.72)	20.21 (4.56)	20.47 (4.89)	-1.30	-1.04
Net national saving (% of GDP)	6.06 (4.49)	6.55 (3.86)	7.13 (4.14)	0.49	1.07	9.79 (6.94)	9.70 (6.03)	9.15 (6.01)	-0.09	-0.64

NB: Standard deviations are in parentheses. Real effective exchange rates are measured as performance relative to the rest of 20 industrial countries; double export weights. Unit labour cost and nominal wages are in the manufacturing sector.

Source: Commission services.

after successful consolidations. Successful consolidation also seems to have an easing effect on inflation, which is not the case for unsuccessful episodes. As regards exchange rates, our sample does not corroborate the findings highlighted in a number of existing works namely that successful consolidation are helped by a

depreciation of the currency. Most likely this is due to the fact that a very large part of successful consolidations was carried out after the mid-1990s when most EU countries were already converging towards the EMU and tried to keep the exchange rate within the limits required by the Treaty.

# 3. The determinants of fiscal consolidation

## 3.1. Introduction

This chapter takes a closer look at the features of fiscal consolidation in the EU. Following up on the purely descriptive analysis of the previous section, the aim is to explore in detail regularities for a number of dimensions, notably the start of a consolidation episode and the type of fiscal adjustment, i.e. ‘gradual’ versus ‘cold shower’.

The list of determinants considered in our work is broader and more comprehensive compared to existing studies. On top of the traditional factors such as the macroeconomic and fiscal conditions prevailing ahead of the consolidation episode, we also explore the role played by fiscal governance and structural reforms. The conjecture linked to both, fiscal governance and structural reforms, is that their occurrence and quality should have a positive impact on the probability of triggering fiscal consolidation.

The analysis of a broader set of determinants of fiscal consolidation compared to the existing literature relies on data sets of which some were made available only recently. This is especially the case for indicators of fiscal governance and expenditure reforms. A detailed description of the data sets, including coverage of countries and time period is provided in Box IV.3.1 below.

Two additional innovations compared to the literature refer to the composition of fiscal adjustment. First, on top of the typical distinction between revenue and expenditure-based fiscal adjustment we use data on ‘fiscal gimmickry’ i.e. one-off measures and/or measures that move budgetary items ‘below the line’. The a priori is that successful fiscal consolidation should rely less on ‘fiscal gimmickry’ than consolidation that are not successful. Second, we examine expenditure data based on the classification of functions of government (COFOG). This allows us to better identify the areas in which consolidations are taking or not taking place.

In terms of methodology our analysis essentially relies on two techniques: mean comparison and regression analysis. The first is a simple and intuitive way to high-

light statistically significant differences across distinct groups. Specifically, it will help us to sketch a typical profile of years of consolidation versus ‘normal’ times, of ‘gradual’ versus ‘cold shower’ consolidations and finally, of successful versus unsuccessful consolidations. The limitation of the mean comparison is that only one factor, i.e. only one variable, is considered at a time. With a view to controlling for a range of potential determinants we also use regression analysis. It explores the likelihood of starting a fiscal consolidation and the likelihood of engaging in a particular type of consolidation.

## 3.2. How do episodes of consolidation in the EU compare to ‘normal’ times and what triggers them?

The primary purpose of fiscal consolidation consists in correcting existing imbalances in public finances. Accordingly, episodes of fiscal consolidation should be characterised by at least two basic elements: the need for adjustment and the adjustment itself.

### 3.2.1. The typical profile of fiscal consolidation

Table IV.3.1 displays the results of a comparison of means between years of fiscal consolidation and years in which no consolidation has taken place.

In line with expectations and with the descriptive analysis reported in Section IV.2 the initial conditions of years of fiscal consolidation are characterised by economic and fiscal hardship. As regards the fiscal situation, both the headline deficit and government debt are on average measurably higher than in ‘normal’ times.

The difference in the headline deficit before consolidations and in ‘normal’ times reflects the combination of two factors: a worse underlying budgetary position and a less favourable economic cycle. At the eve of fiscal consolidations the CAPB has on average dwindled to a modest surplus of 0.3 % of GDP, as compared to a more comfortable level of around 1.5 % of GDP in ‘normal’ times.

Table IV.3.1

Fiscal consolidation in normal times — Mean comparisons

	Consolidation	No consolidation	t-/q-value	p-value
	Mean value	Mean value		
<i>Initial macroeconomic and fiscal conditions</i>				
Output gap (t-1) % of GDP	-0.52	-0.64	1.91	0.06
Real GDP growth (t-1) % change	2.58	3.06	1.84	0.07
Inflation (t-1) % change	6.57	7.15	0.62	0.53
Real long-term interest rate (t-1) %	3.48	2.98	-1.46	0.15
Unemployment rate (t-1) % of labour force	7.59	7.37	-0.54	0.59
Debt (t-1) % of GDP	55.51	50.17	-1.81	0.07
Budget balance (t-1) % of GDP	-4.69	-2.64	5.06	0.00
Actual minus debt stabilising deficit (t-1) % of GDP	0.53	-0.87	-3.13	0.00
Primary balance, cycl. adj. (t-1) % of GDP	0.27	1.45	3.53	0.00
<i>Size and composition of fiscal adjustment (% of GDP, change)</i>				
Net lending	1.57	-0.49	-12.48	0.00
Primary balance, cycl. adj.	2.01	-0.58	-18.76	0.00
Total revenue, cycl. adj.	1.18	0.05	-7.06	0.00
Total expenditure, cycl. adj.	-0.61	0.57	6.07	0.00
Interest expenditure	0.14	-0.29	-3.14	0.00
Consumption expenditure	-0.10	0.14	2.82	0.01
Wages	-0.05	0.08	2.53	0.01
Social transfers other than in kind	-0.02	0.11	1.72	0.09
Social transfers in kind	0.01	0.10	1.62	0.11
Subsidies	-0.28	-0.23	0.13	0.90
Investment expenditure	-0.18	0.01	5.25	0.00
Stock-flow adjustments	0.40	-0.19	-2.06	0.04
'Fiscal gimmickry'	0.32	0.40	0.63	0.53
<i>Classification of functions of government — COFOG (% of GDP, change)</i>				
Defence	-0.04	-0.06	-0.27	0.79
Economic affairs	-0.46	0.12	2.89	0.00
Housing and community	-0.16	-0.01	2.18	0.03
Health	0.06	0.13	1.08	0.28
Education	0.01	0.02	0.15	0.88
Social protection	0.09	0.06	-0.34	0.73
Public order and safety	0.01	0.01	-0.10	0.92
General public services	-0.16	-0.22	-0.47	0.64
<i>Fiscal governance</i>				
Fiscal rules (index, time average) (1)	0.03	0.08	0.34	0.74
Expenditure rules (index, time average) (1)	0.27	0.12	-1.03	0.31
Budget procedures (2)	-0.03	-0.02	0.03	0.98
Fiscal council (dummy)	0.34	0.38	0.30	0.59
Contract versus delegation country (dummy) (3)	0.66	0.56	2.08	0.15
<i>Structural reforms (dummies) (4)</i>				
Pension reform (RDBF)	0.24	0.28	0.28	0.60
Reform of employment protection legislation (RDBF)	0.20	0.17	0.25	0.62
Reform of stricter unemployment benefits (RDBF)	0.50	0.35	4.09	0.04
Labour market reform (IMF, 2004)	0.27	0.25	0.15	0.70
Product market reform (IMF, 2004)	0.36	0.30	0.97	0.32
Expenditure reforms	0.33	0.21	6.41	0.01
Ambitious expenditure reforms (5)	0.25	0.12	11.28	0.00
Strengthening the Minister for Finance	0.10	0.04	6.23	0.01
Fiscal contracts	0.09	0.06	1.02	0.31

(Continued on the next page)



Table IV.3.1 (continued)

Fiscal council	0.04	0.04	0.00	0.95
Improved parliamentary control over budget	0.07	0.01	12.46	0.00
Multi-year budget planning	0.14	0.05	12.76	0.00
Expenditure ceilings	0.12	0.05	6.98	0.01
Deficit/surplus rule	0.07	0.02	9.12	0.00
Pension reform	0.09	0.02	9.34	0.00
Labour market reform	0.19	0.08	12.45	0.00
Tax reform/cuts	0.17	0.09	6.53	0.01
Wage-setting reform	0.04	0.02	1.01	0.31
Wage moderation	0.06	0.05	0.29	0.59

NB: (1) Index of coverage and strength of rule (see Box IV.3.1).

(2) Index of quality of budget procedures (see Box IV.3.1).

(3) The dummy takes the value 1 for contract States. The classification is based on von Hagen et al. (2001, 2002, 2005) and Yläoutinen (2004).

(4) See Box IV.3.1 for a detailed description of the variables.

(5) Combinations of ambitious expenditure reforms and structural reforms. For dummies the mean values for the two groups are compared with a chi-square-test, and the value given in the table is the q-value. For the other variables a t-test is used, and the value given is the t-value. The corresponding p-value is given to both tests.

Source: Commission services.

### **Box IV.3.1: Indicators of determinants of fiscal consolidation**

#### **Fiscal governance**

- Fiscal rules (coverage and strength): index summarising, for each Member State, the information on what part of general government finances is covered by numerical rules for the deficit and the debt (measured as the share of government expenditure of the general government sub-sector to which the rule applies in total general government expenditure). All numerical rules are aggregated. In case of overlap (same government subsector covered by several rules), different weights are applied. Secondly the strength of each fiscal rule is calculated taking into account five criteria: the statutory base of the rule; whether there is an independent monitoring; the nature of the institution responsible for enforcement; the existence of pre-defined enforcement mechanisms; and media visibility. The fiscal rule index is calculated by multiplying the share of government finances covered by the rule with the index of the strength of the rule. Country coverage: EU-25. Time period: 1990–2005.

Source: Commission services, Directorate-General for Economic and Financial Affairs.

- Expenditure rules (coverage and strength): index, constructed following exactly the same methodology as for fiscal rules but limited to expenditure rules, thus combining the measurement of the share of government finances covered by expenditure rules, with that of the strength of those rules. Country coverage: EU-25. Time period: 1990–2005.

Source: Commission services, Directorate-General for Economic and Financial Affairs.

- Budgetary procedures: a synthetic index taking into account the features of the national budget procedures. The index is aggregated from six sub-indexes covering the following dimensions: Budget transparency, multiannual planning horizon, centralisation of the budget process, top-down budgeting, prudent economic assumptions and reserves and performance budgeting. The index is calculated by finding the average of the standardised (average 0, standard deviation 1) scores on the sub-index. The score on each sub-index is derived from the unweighted average score on from four to eight questions concerning that particular dimension. The construction of the indicator is further explained in Section II.3. Note to that description that fiscal rules are not included in the index used for this purpose, since the fiscal rule index is used separately. Data source: OECD/World Bank budget practices and procedures database (2003). Country coverage: 18 EU Member States. Time period: 2003.

Source: Commission services, Directorate-General for Economic and Financial Affairs.

#### **Structural reforms**

- Expenditure reforms: based on information provided in Hauptmeier et al. (2006) the index was computed by the Commission services using self-constructed dummies indicating ambitious or timid expenditure reforms as well as combinations of expenditure reforms and other types of reforms measures. Country coverage: 21 OECD countries. Time period: 1960–2007.

Source: Hauptmeier et al. (2006) and Commission services.

*(Continued on the next page)*

Box IV.3.1 (continued)

- Labour market reform: labour market index consisting of the unweighted average of indicators of employment restriction, unemployment benefit replacement rate and benefit duration. The index is normalised in such a way to be between 0 and 1 and to increase as labour market restrictions are reduced. Original data source: Nickell and Nunziata (2001), Labour Market Institutions Database and data used in OECD (2003), *World Economic Outlook*, April, Ch. IV. Country coverage: EU-14 except Greece. Time period: 1970–98.

Source: IMF (2004).

- Product market reform: index measuring entry barriers, public ownership, market structure, vertical integration and price controls in public utilities and transport services. The index is normalised in such a way to be between 0 and 1 and to increase as product market restrictions are reduced. Original data source: Nicoletti and Scarpetta (2003). Country coverage: EU-14 except Greece. Time period: 1975–98.

Source: IMF (2004).

- Reforms of public pension systems, employment protection legislation, unemployment benefits: data indicating the years in which reforms of the three types were approved by parliament and the major characteristics of the reforms. Country coverage: EU-14. Time period: 1985–2005.

Source: Fondazione Rodolfo de Benedetti (FRDB).

The situation is further complicated by on average lower GDP growth, higher interest rates and somewhat higher unemployment, which taken together put additional weight on the budget balance and heighten the need for adjustment.

During episodes of fiscal consolidation the CAPB improves on average by 2 % of GDP per year, whereby more than half is achieved thanks to higher revenues. In ‘normal’ times the CAPB deteriorates by around 0.6 % of GDP almost exclusively on the back of expenditure increases; final consumption expenditure including wages and transfers other than in kind (i.e. mainly pensions) are the main drivers.

Interestingly, there is no statistically significant difference in the recourse to ‘fiscal gimmickry’. Using the data set of Koen and van den Noord (2005), which covers the 10 year period 1993–2003, the incidence of temporary deficit-reducing measures of on average 0.3 % of GDP in years of fiscal consolidation is actually slightly lower than in ‘normal’ years.

A breakdown of expenditure in terms of the classification of functions of government (COFOG), which so far has not been considered in the literature, reveals some noteworthy patterns<sup>(1)</sup>. The mean comparison in Table IV.3.1 shows that the brunt of expenditure cuts during years of consolidation is essentially borne by two categories: expenditure for economic affairs and expenditure for housing and community amenities. There are no statistically significant differences between years of consolidation and ‘normal’ times in the changes of the other

COFOG categories. This is especially true for expenditure on education, health and social protection, which incidentally continue to increase in per cent of GDP during consolidations, as they do during ‘normal’ times.

In the EU average, expenditure for economic affairs amounts to about one 10th of total expenditure. In terms of composition the largest items are subsidies, gross fixed capital formation (mostly basic infrastructure such as roads and bridges), capital transfers and intermediate consumption which together amount to three quarter of the total. Subsidies are generally more difficult to cut, as evidenced by the fact that in our sample the annual change in the overall national accounts aggregate is on average the same in years of consolidation and ‘normal’ times and normally rather small. The political economy aspect is relatively evident, as subsidies generally go to relatively strong and well-defined constituencies. Hence, savings under the functional heading economic affairs are more likely to come from fixed capital formation and non-wage consumption expenditure.

The contribution to fiscal consolidation from expenditure on housing and community amenities is somewhat

(1) COFOG data are available from 1995 onward only. The two-digit classification of functions of government (COFOG) comprises 10 divisions: general public services; defence; public order and safety; economic affairs; environmental protections; housing and community amenities; health; recreation, culture and religion; education; social protection. For details see the Internet site of the United Nations Statistics Division. Of the 10 categories we do not consider environmental protection and recreation, culture and religion, because in the EU average they represent only around 2 % of total expenditure. For details see: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4&Lg=1>

more surprising, also because it mainly refers to activities carried out by local authorities such as water supply, street lighting, and housing development. A possible explanation for the significant decline of this category during years of consolidation is that sales of real estate, which are a typical example of so-called one-off operations, are recorded under this heading <sup>(1)</sup>.

Episodes of fiscal consolidation may or may not be coupled to other economic policy measures notably structural reforms. A priori there could be trade-offs as well as complementarities. The trade-offs would reflect the fact that some reforms have a direct budgetary cost. By the same token, reforms and consolidation could also be considered to be complementary on the grounds that some reforms release weight from the expenditure side of the budget, such as a reform of social transfers. A comprehensive discussion of the issue was provided in Deroose and Turrini (2005) and European Commission (2005a). The analysis was based on indicators for labour and product market reforms used in IMF (2004) and pension reform indicators reporting the year of adoption and the main characteristics of the reform. At the time, some evidence was found that consolidations do not preclude structural reforms. More specifically, structural reforms do not happen less frequently in years of fiscal consolidation.

The present study broadens the view on the link between structural reforms and fiscal consolidation by taking into account new data on expenditure reforms enacted in 21 OECD countries over the period 1960–2007, where the last two years represent forecasts. The data refer to Hauptmeier et al. (2006) <sup>(2)</sup>. Depending on the degree of effort, expenditure reforms are divided into two categories: ‘ambitious’ and ‘timid’ expenditure reforms. Ambitious reforms are identified as episodes in which the primary spending ratio is reduced by at least 5 % of GDP over seven years. Timid reforms are episodes in which the reduction is less than 5 % of GDP, again over a seven-year period. Clearly, such definitions are potentially overlapping with our definition of consolidation with one big exception; they refer to expenditures only and, hence, depending on what happens on the revenue side may more or less intersect with fiscal consolidation as measured by the improvement of the primary budget balance.

However, what makes the data set interesting is that ambitious reforms are further divided into several sub-categories depending on whether they were accompanied by structural reforms. This gave us the possibility to construct indicators that take the value one in case an ambitious expenditure reform went hand in hand with other specific policy measures such as changes in the institutional arrangements concerning fiscal policymaking or structural reforms of the labour market <sup>(3)</sup>.

The results of a mean comparison for the indicators of expenditure reforms are also reported in Table IV.3.1. As expected expenditure reforms are enacted more frequently during years of fiscal consolidation, indicating that they are generally not offset by contemporaneous tax cuts. The difference is even more significant for ‘ambitious’ expenditure reforms. Among the complementary measures that accompany ‘ambitious’ reforms only three types do not seem to be particularly linked to consolidation episodes, namely the introduction of fiscal contracts as well as wage-setting reforms or measures aimed at achieving wage moderation.

### **3.2.2. The likelihood to start a fiscal consolidation**

A final set of elements that may potentially shape fiscal consolidations and which have not been studied so far, are fiscal rules, institutions and budgetary procedures, i.e. elements of fiscal governance. A comprehensive database covering features of fiscal governance has been built by the Directorate-General for Economic and Financial Affairs of the European Commission over the past few years. It includes all EU Member States and covers the period 1990–2005. The most developed section of the database is on fiscal rules. It formed the basis of the analysis presented in European Commission (2006a) and in Ayuso et al. (2006). The indicators of fiscal rules are relatively complex. They are constructed in such a way as to capture not only the existence of rules, but also its strength and the fraction of general government finances covered by the rule. Similarly, the indicators of budgetary procedures encompass a number of dimensions such as transparency, level of centralisation and prudence. A brief description of the database and its content is in Box IV.3.1 <sup>(4)</sup>.

A priori, the presence and quality of fiscal rules, institutions and budgetary procedures should not be a discrim-

<sup>(1)</sup> For a detailed discussion of one-off and other temporary measures see European Commission (2006a).

<sup>(2)</sup> We thank Ludger Schuknecht for making the data available to the Commission services.

<sup>(3)</sup> A detailed description of the data set is provided in Box IV.3.1.

<sup>(4)</sup> A detailed description of the database of fiscal rules is provided in European Commission (2000) and European Commission (2002).

inatory element between years of consolidation and ‘normal’ times. Unless they are put in place during fiscal corrections, as gauged by the indicators of Hauptmeier et al. (2006), they rather describe a state of the world that does not necessarily change with fiscal performance. However, rules, institutions and procedures are likely to help trigger and carry through consolidations whenever the fiscal performance deteriorates as compared to countries or years in which such arrangements are not present.

This assumption is supported by the results of *probit* regressions on panel data that explore the link between the probability to start a fiscal consolidation and a number of potential determinants (see Table IV.3.2). In addition to a baseline specification, which includes the initial headline deficit and the cyclical stance, the *probit* regressions were run by groups of thematic variables notably, fiscal governance, political factors and structural reforms <sup>(1)</sup>. The obvious gain vis-à-vis a simple

mean comparison is that regressions permit control for a number of variables simultaneously.

As regards fiscal governance, the likelihood of starting a fiscal consolidation increases with the coverage and the strength of numerical fiscal rules and with the quality of budgetary procedures. Not all indicators are significant, most probably due to multi-collinearity. For instance, the summary indicator of budgetary procedures turns highly significant if the indicators of fiscal rules are not included in the regression indicating that countries with a high score on fiscal rules also rank high in terms of budgetary procedures.

The *probit* regressions also reveal a number of other factors that act as catalyst for fiscal consolidation. The ‘usual suspects’ identified in previous studies are clearly the initial level of the deficit and the cyclical stance. Large deficits and unfavourable cyclical conditions significantly increase the likelihood of fiscal adjustment. This result is robust across alternative specifications of the *probit* regression and corroborates the patterns brought to light by our descriptive analysis and the mean comparison. It is also in line with the political economy

<sup>(1)</sup> The approach of running probit regressions sequentially for a baseline specification plus separate groups of variables is dictated by the need to have a well-behaved maximum likelihood solution.

Table IV.3.2

### Probability of starting a fiscal consolidation

	Explanatory variables	Estimated coefficient	p-value	No of obs.
	<i>Initial conditions</i>			
Baseline	Budget balance % of GDP	- 3.84	0.00	466
	Output gap (t-1) % of GDP	2.32	0.02	466
	<i>Political factors</i>			
	Elections (t-1), dummy	1.41	0.16	417
	Size of majority in parliament	0.48	0.63	417
	<i>Fiscal governance (1)</i>			
	Fiscal rules (average), index	0.83	0.41	230
	Expenditure rules (average), index	1.47	0.14	230
	Budgetary procedures, index	2.09	0.04	213
	<i>Structural reforms (1)</i>			
	Pensions (RDBF), dummy	- 0.66	0.51	216
	Employment protection legislation (RDBF), dummy	- 0.11	0.91	216
	Unemployment benefits (RDBF), dummy	2.26	0.02	216
	Labour market (IMF, 2004), dummy	1.90	0.06	258
	Product market (IMF, 2004), dummy	- 0.33	0.75	258

NB: (1) See Box IV.3.1 for detailed description of the indicators. Estimation method: *probit* regression on panel data. On top of the baseline specification, regressions were run sequentially by adding variables. Estimated coefficients represent the marginal contribution of the explanatory variable (measured at sample mean) to the probability of starting a fiscal consolidation enacting a gradual rather than a ‘cold shower’ adjustment. All equations include country-specific constants, whose coefficient, significant in most cases, is not reported.

Source: Commission services.

literature on inaction and delay according to which things generally have to get bad to induce policy action <sup>(1)</sup>. Our results are less clear cut as regards the role played by the economic cycle as measured by the output gap. The sign of the estimated coefficient conflicts with the general expectation that economic hardship may act as a catalyst for consolidation. It actually suggests that corrections are more likely to be launched when the output gap is positive. This result needs to be qualified in at least two respects. First, the sign of the estimated coefficient changes and turns out in line with expectations if the economic cycle of the year in which the consolidation starts is used. Second, output gap estimates available in real time are typically revised as additional data become available, meaning that the *ex post* output gap used in our regression analysis or similar studies may not necessarily reflect the assessment of the cycle at the moment the consolidations are undertaken. Finally, the indications from the mean comparison suggest that a series of other indicators, which are much less prone to revisions, such as real growth, unemployment rate and real interest rate are all less favourable ahead of consolidations than in ‘normal’ times. Turning to structural reforms, it was already mentioned before that they may both conflict with and foster fiscal consolidation depending on whether they imply direct budgetary costs or savings. Our regression analysis provides some evidence that specific structural reforms can indeed increase the probability to begin fiscal adjustment. In particular, the approval by parliament of reforms that reduce the generosity of unemployment benefits turns out to be an important and statistically significant factor for prompting fiscal consolidation. A similar result is obtained for the more general indicator of labour market reforms of the IMF (2004). The causality implied by these result is not clear cut. It could simply signal that consolidations tend to go along with changes in some expenditure categories, in particular unemployment benefits. It could also mean that reforms in general are a good predictor of the general willingness of fiscal policymakers to bring in order public finances. The evidence for the second conjecture is mixed. The approval of reforms that loosen employment protection legislation as measured by the indicators of the Fondazione Rodolfo de Benedetti (FRDB) (see Box IV.3.1) have a small positive effect on the kick-off probability yet the link is not significant at conventional levels. The same holds for the summary indicators of product market reforms constructed by the IMF (2004).

<sup>(1)</sup> See Drazen (2000) for an overview of the literature.

The estimated impact of pension reforms, as measured by the indicators of the Fondazione Rodolfo de Benedetti (FRDB) is also not statistically significant. The negative sign would tend to suggest, that after controlling for the initial level of the headline deficit and for initial cyclical conditions the approval of pension reforms tends to diminish the likelihood of fiscal consolidation being started. However, this result cannot be attributed to a potentially negative short-term budgetary impact of pension reforms. The pension reform indicator used in our regression refers to the approval and not the implementation of the reform. Hence, to the extent that the full implementation of reforms takes time there should be no conflict between costs of systemic pension reforms and fiscal adjustment effort. In addition, most of the pension reforms included in the data set used for our regressions are rather incremental in nature, i.e. they impact on a part of an existing system instead of overhauling it completely. The estimated negative impact of pension reforms on the chances to start a fiscal consolidation is more likely to reflect political economy elements. In particular, it is preferable to stagger major fiscal policy measures rather than to overburden the electorate that must support the reforms.

The evidence concerning the role of political factors as measured by the occurrence of parliamentary elections and the strength of the ruling coalition in parliament is in line with expectation but weak. In theory, the likelihood of fiscal consolidations should increase immediately after parliamentary elections, i.e. at the beginning of a new political term, as well as with the strength of the political backing of the government in parliament. The estimated impact of both variables after controlling for the initial size of the headline deficit and cyclical conditions has the expected sign but their statistical significance is relatively weak especially as regards the size of the majority of the ruling coalition in parliament.

### 3.3. What explains the difference between ‘cold shower’ and ‘gradual’ consolidations?

In Section IV.4 below, when discussing the determinants of success it will be shown that, based on our empirical analysis, the type of consolidation, i.e. ‘cold shower’ versus ‘gradual’, does not significantly affect the probability of success. Nevertheless, separate *probit* regressions on the determinants of gradual adjustments reveal a number of insightful patterns which will be briefly

discussed in the following paragraphs. The results are reported in Table IV.3.3.

As a first important point, the likelihood of engaging in a 'gradual' rather than a 'cold shower' type of adjustment significantly increases if the adjustment comes closely after an earlier episode of consolidation, specifically within a period of three years. This result is quite intuitive suggesting that in terms of political feasibility there is the tendency not to overburden the electorate and the economy with a close sequence of large and short-lived episodes of fiscal corrections.

Similarly, the probability of a 'gradual' adjustment increases with the gravity of the initial cyclical conditions as measured by the output gap. This link is to be judged against the background of the potentially or perceived restrictive effects of fiscal consolidation. If the

prevailing economic conditions are already difficult the decision to implement a fiscal consolidation is more likely to translate in a gradual adjustment plan than into a 'cold shower' therapy so as to spread out the possible weight on economic activity and to make it more palatable to the electorate <sup>(1)</sup>.

A third interesting result refers to the composition of the expenditure restraints. Fiscal consolidations that rely strongly on a reduction of government wages are more likely to be of the gradual type. The explanation for this should be relatively straightforward. Fiscal policymakers will generally face the resistance of public servants,

<sup>(1)</sup> The gravity of the fiscal situation as measured by the difference between the actual and the debt stabilising deficit seems to reduce the probability of a gradual adjustment suggesting that fiscally bad times are catalysts of harsher corrections.

Table IV.3.3

### Probability of a gradual fiscal consolidation

	Explanatory variables	Estimated coefficient	p-value	No of obs.
	<i>Initial conditions</i>			
Baseline	Actual minus debt stabilising deficit (t-1) % of GDP	- 1.10	0.27	124
	Output gap (t-1) % of GDP	- 1.10	0.27	124
	Consolidation in three preceding years (dummy)	4.39	0.00	124
	<i>Composition of adjustment (change, % of GDP)</i>			
	Cyclically adjusted primary expenditure	3.65	0.00	124
	Government wage bill	- 2.34	0.02	124
	Government investment expenditure	2.97	0.00	124
	Government final consumption expenditure	- 1.09	0.28	124
	Subsidies	- 2.19	0.03	124
	Transfers other than in kind	- 1.84	0.07	124
	Transfers in kind	- 1.65	0.10	124
	<i>Political factors</i>			
	Elections (t-1), dummy	0.08	0.94	116
	Size of majority in parliament	- 0.76	0.45	116
	<i>Fiscal governance (1)</i>			
	Fiscal rules (time average), index	0.21	0.83	50
	Expenditure rules (time average), index	1.20	0.23	50
	Budgetary procedures, index	- 0.78	0.44	50
	<i>Structural reforms (1)</i>			
	Expenditure reforms, dummy	0.18	0.85	102
	Ambitious expenditure reforms, dummy	0.36	0.72	102

NB: (1) See Box IV.3.1 for detailed description of the indicators. Estimation method: *probit* regression on panel data. On top of the baseline specification, regressions were run sequentially by adding variables. Coefficients represent marginal contribution of the explanatory variable (measured at sample mean) to the probability of enacting a gradual rather than a 'cold shower' adjustment. All equations include country-specific constants, whose coefficient, significant in most cases, is not reported.

Source: Commission services.

a relatively homogeneous and generally well-organised interest group, to abrupt and large reductions in the salary or number of employees. A similar reasoning applies to cuts in subsidies or transfers other than in kind (i.e. mostly pensions). The estimated coefficients of these two expenditure categories are also positive and statistically significant signalling that large savings are more likely to be achieved in the context of a 'gradual' fiscal adjustment.

The political economy dimensions underlying these results are well known and have been extensively explored in the literature under the heading of vested interests. Strong policy measures, in our specific case expenditure cuts, that affect well-defined or powerful constituencies will encounter fiercer opposition as opposed to measures that concern a broader and heterogeneous group. As a corollary of this, it will generally be more difficult to implement them via a 'cold shower' approach. A gradual approach increases the political feasibility.

By contrast, large cuts in expenditure items that do not relate to well-defined constituencies, typically investment expenditure, are more likely to be implemented during 'cold shower' episodes. The estimated coefficient relating to government investment expenditure in the respective *probit* regression reported in Table IV.3.3 has the correct (positive) sign and is highly significant. Hence, after controlling for initial conditions and the overall contribution of primary expenditure cutbacks of investment expenditure are more characteristic for short and sharp consolidation episodes.

The role of political factors, fiscal governance and structural reforms, seems to be limited to the start and success of fiscal consolidation. The estimated coefficients of fiscal rules and structural reforms have mostly a positive sign, suggesting that structural reforms and better governance give rise to a more measured pace of fiscal consolidation. However, the results are not statistically significant.

## 4. The determinants of success

### 4.1. Introduction

In the previous section attention was focused on the elements that trigger fiscal consolidation and that determine the type of adjustment. We now turn to the question of what makes fiscal consolidation successful and, if not, which budgetary components are responsible for the slippage.

In our sample, roughly one out of three consolidation episodes turns out to be successful on the basis of our definition, i.e. half of the minimum improvement of the CAPB of 1.5 % of GDP is safeguarded three years after the end of the consolidation. The success rate is slightly higher for ‘cold shower’ episodes than for ‘gradual’ consolidations. However, the difference does not turn out to be statistically significant.

The analysis of success is analogous to the one of the previous section. We first start by comparing the episodes of successful and unsuccessful fiscal consolidations identified in our sample for a number of macroeconomic and fiscal variables. This gives us a first overview of the characteristics of success. After that we proceed to a more detailed and advanced analysis of the factors that are conducive to improve the probability of success.

Also in line with the previous section we screen a list of potential determinants that is significantly broader compared to that found in the literature. In particular, we examine the role played by fiscal governance, including budgetary procedures, and structural reforms in improving or deteriorating the chances of success. The expectations are that a fiscal consolidation is more likely to be successful if it is carried out in the framework of strong and effective fiscal governance and/or it is accompanied by structural reforms.

### 4.2. The typical profile of successful consolidations

Successful consolidations are on average started under more difficult economic and fiscal conditions than consol-

idations that do not produce a lasting correction of the underlying deficit. As shown in Table IV.4.1, the output gap is somewhat more negative, real interest rates are significantly higher and a significantly higher percentage of the labour force is unemployed as compared to unsuccessful episodes. Similarly, the initial level of the headline deficit and the debt ratio are also considerably higher. This, together with the findings related to the elements that trigger fiscal consolidation confirms that the gravity of the initial economic and fiscal conditions plays a dual role. It increases the likelihood of prompting a fiscal consolidation episode and seems to have an effect on the resolve and efficacy of the fiscal adjustment.

The difference in terms of the overall size of the budgetary correction is measurable yet not statistically significant. The annual average improvement of the CAPB during successful episodes is 2.3 % of GDP, as opposed to 1.9 % of GDP in years of unsuccessful episodes. A much more important and familiar difference concerns the composition of the budgetary adjustment. Successful consolidations are significantly less revenue and significantly more expenditure based than unsuccessful episodes. The average annual reduction in total primary expenditure net of cyclical factors enacted during successful episodes is more than 1.2 % of GDP, five times higher than during unsuccessful episodes. A relatively large part of the expenditure restraint weighs on final consumption expenditure including wages, followed by cuts on investment, transfers and subsidies. All this is broadly in line with the findings of previous studies, confirming that the durability of fiscal consolidation is linked with the ability to control expenditure.

Contrary to our expectations the recourse to ‘fiscal gimmickry’ does not seem to be a typical attribute of unsuccessful fiscal consolidations. Although not statistically significant, the annual average incidence of such measures expressed in per cent of GDP was actually somewhat higher during adjustments that produced a lasting correction. However, this result needs to be interpreted



with some care. While the data set by Koen and van den Noord (2005) is one of the most comprehensive inventories of its kind, it is still not exhaustive. For instance, it does not capture the effect of temporary expenditure

freezes, which contribute to a fiscal correction in a given year and give rise to a rebound in following year. It also excludes measures with an impact of less than 0.1 % of GDP.

*Table IV.4.1*

**Episodes of fiscal consolidation — Mean comparisons**

	Successful	Unsuccessful	t-/q-value	p-value
	Mean value	Mean value		
<i>Initial macroeconomic and fiscal conditions</i>				
Output gap (t-1) % of GDP	- 0.65	- 0.32	0.74	0.46
Real GDP growth (t-1) % change	2.71	2.38	- 0.73	0.47
Inflation (t-1) % change	5.91	7.92	1.72	0.09
Real long-term interest rate (t-1) %	4.92	2.79	- 3.40	0.00
Unemployment rate (t-1) % of labour force	9.52	6.26	- 4.64	0.00
Debt (t-1) % of GDP	70.21	46.55	- 4.36	0.00
Budget balance (t-1) % of GDP	- 7.16	- 3.42	5.13	0.00
Actual minus debt stabilising deficit (t-1) % of GDP	1.88	- 0.52	- 2.95	0.00
Primary balance, cycl. adj. (t-1) % of GDP	- 0.78	0.97	2.72	0.01
<i>Size and composition of fiscal adjustment (% of GDP, change)</i>				
Net lending	1.92	1.28	- 2.07	0.04
Primary balance, cycl. adj.	2.25	1.92	- 1.13	0.26
Total revenue, cycl. adj.	0.90	1.40	1.68	0.10
Total expenditure, cycl. adj.	- 1.10	- 0.22	2.33	0.02
Interest expenditure	0.24	0.13	- 1.01	0.32
Consumption expenditure	- 0.17	0.08	1.67	0.10
Wages	- 0.06	- 0.01	0.52	0.60
Social transfers other than in kind	- 0.13	0.10	1.74	0.08
Social transfers in kind	0.01	0.07	0.61	0.54
Subsidies	- 0.05	0.01	1.06	0.29
Investment expenditure	- 0.16	- 0.22	- 0.91	0.36
Stock-flow adjustment	0.14	0.64	0.85	0.40
'Fiscal gimmickry'	0.40	0.23	- 1.11	0.28
<i>Classification of functions of government — COFOG (% of GDP, change)</i>				
Defence	- 0.02	- 0.01	0.12	0.90
Economic affairs	- 0.43	- 0.11	1.50	0.14
Housing and community	- 0.29	- 0.03	1.08	0.29
Health	0.07	0.02	- 0.47	0.64
Education	0.00	0.04	0.67	0.51
Social protection	0.02	0.19	1.05	0.30
Public order and safety	0.01	0.02	0.43	0.67
General public services	- 0.08	- 0.42	- 1.59	0.12
<i>Fiscal governance</i>				
Fiscal rules (index) (1)	0.48	- 0.34	- 3.23	0.00
Expenditure rules (index) (1)	0.14	0.40	0.81	0.42
Budget procedures (2)	0.17	- 0.36	- 1.62	0.11
Fiscal council (dummy)	0.46	0.17	4.93	0.03
Contract versus delegation country (dummy) (3)	0.63	0.65	0.04	0.84
<i>Structural reforms (dummies) (4)</i>				
Pension reform (RDBF)	0.31	0.14	2.21	0.14
Reform of employment protection legislation (RDBF)	0.25	0.14	1.04	0.31

*(Continued on the next page)*

Table IV.4.1 (continued)

Reform of stricter unemployment benefits (RDBF)	0.63	0.32	4.91	0.03
Labour market reform (IMF, 2004)	0.47	0.11	13.18	0.00
Product market reform (IMF, 2004)	0.56	0.19	11.23	0.00
Expenditure reforms	0.49	0.29	3.86	0.05
Ambitious expenditure reforms (5)	0.30	0.25	0.21	0.64
Strengthening the Minister for Finance	0.10	0.12	0.10	0.75
Fiscal contracts	0.08	0.11	0.19	0.66
Fiscal council	0.06	0.03	0.65	0.42
Improved parliamentary control over budget	0.00	0.14	7.25	0.01
Multi-year budget planning	0.10	0.20	1.92	0.17
Expenditure ceilings	0.08	0.17	1.79	0.18
Deficit/surplus rule	0.02	0.12	3.96	0.05
Pension reform	0.04	0.14	2.97	0.08
Labour market reform	0.20	0.23	0.09	0.77
Tax reform/cuts	0.14	0.23	1.30	0.26
Wage-setting reform	0.10	0.00	7.04	0.01
Wage moderation	0.04	0.09	1.09	0.30

NB: (1) Index of coverage and strength of rule (see Box IV.3.1).

(2) Index of quality of budget procedures (see Box IV.3.1).

(3) The dummy takes the value 1 for contract states. The classification is based on Von Hagen et al. (2001, 2002, 2005) and Yläoutinen (2004).

(4) See Box IV.3.1 for a detailed description of variables.

(5) Combinations of ambitious expenditure reforms and structural reforms. For dummies the mean values for the two groups are compared with a chi-square-test, and the value given in the table is the q-value. For the other variables a t-test is used, and the value given is the t-value. The corresponding p-value is given to both tests.

Source: Commission services

Turning to fiscal governance, the comparison of successful and unsuccessful years of consolidation gives rise to a clear cut picture. Both dimensions considered in our work, that is fiscal rules and budgetary procedures make a difference. Their presence and quality turn out to be an important characteristic of success. An interesting detail and exception in relation to aspects of fiscal governance concerns the widely used classification introduced by Hallerberg and von Hagen (1999) between the delegation and the contract states. Delegation States entrust decision-making and enforcement power to the Minister for Finance, who has a strong capacity to implement the budget, including taking corrective measures. In contract States fiscal policy is based on pre-commitments among the parties of the ruling coalition. As a renegotiation of the commitment may be costly, in the event the implementation of the budget gets off track, contract solutions are thought to be less apt to effectively deal with the correction of fiscal imbalances (see Strauch et al., 2004). This conjecture is not confirmed by our EU sample. Contract and delegation governments are equally distributed across success and non-success of fiscal consolidation.

The *prima facie* evidence in relation to structural reforms is encouraging. The occurrence of reforms is significantly higher during periods of fiscal consolidation that are crowned by success than those that do not lead to a lasting

correction of the deficit. This result is relatively robust across the three different sets of indicators of structural reforms used for our work and described in Box IV.3.1, notably the IMF indicators for labour and product market reforms, the indicators on pension reforms and specific types of labour market reforms provided by the Rodolfo de Benedetti Foundation (RDBF) and the indicators related to expenditure reforms of Hauptmeier et al. (2006). Two exceptions are worth mentioning. First, reforms that loosen the rigidity of employment protection legislation do not seem to be a particularly recurrent element of successful fiscal consolidation, most probably because they produce no direct impact on the budget. A more complex explanation for the weak link could be that employment protection legislation is generally thought to produce ambiguous effects on unemployment in the short run (see for instance Jackman et al., 1990). Hence, it would not necessarily contribute to the success of fiscal consolidation indirectly via the channel of economic activity. Second, there is no across-the-board evidence that successful consolidations are more frequently linked to the ambitious expenditure reforms recorded and documented by Hauptmeier et al. (2006). Only reforms coupled with some specific additional policy measures seem to be of importance, notably improved parliamentary control, the introduction of fiscal rules over the budget and wage setting reforms. The first two measures fall under the heading of fiscal

governance and hence reinforce the patterns described before.

The bearing of wage-setting reforms for the success of fiscal consolidation is somewhat more intricate yet consistent with findings in the literature. Two different channels can be distinguished. The first channel produces a direct impact on the budget as a general shift towards wage moderation can be expected to spill over to the government wage bill. The second channel is more indirect and falls under the category of non-Keynesian effects of fiscal consolidation. Alesina and Perotti (1996) were among the first to argue that expenditure-based consolidations, especially those that include cuts of government wages, would contribute to wage moderation and in turn spur aggregate economic activity which finally would produce a positive feedback on public finances. We will qualify this conclusion somewhat for our EU sample later on.

### **4.3. The likelihood of success**

With a view to exploring possible interactions among the determinants of success, we move on to regression analysis. As in Section IV.3 we consider groups of economic, fiscal and institutional variables while controlling for some basic determinates. The results are shown in Table IV.4.2. The baseline specification of the *probit* regressions includes variables gauging the initial economic and fiscal conditions as well as the size and the composition of the fiscal adjustment. Except for the initial level of the output gap, all variables have the expected sign.

#### **Initial conditions and the size of adjustment**

To start with, the gravity of the initial fiscal conditions measured either as the initial level of the headline deficit or the initial level of the debt ratio is a statistically significant determinant of success. The worse the public finance situation the higher the probability of implementing a lasting fiscal correction. The gravity of initial conditions seems to heighten the awareness that significant policy measures are required to change the status quo.

#### **Size and composition**

However, the channel through which the degree of awareness increases the chances of success is not necessarily the size of the fiscal adjustment. The estimated coefficient of the change of the CAPB is not statistically significant and does not have the expected sign. The findings in the literature concerning the link between the size of adjustment

and the likelihood of success are not clear cut. The results would also seem to depend on the specific definition of success used in the empirical analysis. The definition used in our analysis is based on a fixed deterioration of the CAPB compared to the last year of the adjustment. As long as this criterion is met there is no difference between very large adjustments and smaller ones. Our definition may even penalise very large adjustments which, while not meeting the condition of Definition 2, give rise to a larger net improvement of the CAPB.

In a number of other studies, on top of a deficit criterion the stabilisation of the debt ratio is used as complementary condition for success. In that case success is correlated with the initial debt level; i.e. the larger the fiscal correction the higher the likelihood to stabilise the debt.

What appears to make the difference for success is the composition of the fiscal adjustment, as measured by the size of the change in cyclically adjusted primary expenditure. In particular, the likelihood of success significantly increases with savings in primary expenditure net of cyclical factors. To control for the role of investment expenditure we also added the change in government gross fixed capital formation on top of our baseline specification of the *probit* regression. The corresponding result indicates that reliance on investment expenditure significantly reduces the chances of success because cuts in investment expenditure are more likely to be reversed over time.

At first glance, the findings emerging from our EU sample about the composition of the adjustment are essentially in line with the standard result reported in the literature: the likelihood of success increases with the savings on current primary expenditure and decreases with cuts in investment expenditure. However, a closer look reveals a somewhat more differentiated picture. Two separate issues can be highlighted. The first refers to the relative importance of primary expenditure cuts in explaining the success of consolidation; the second concerns the role of individual components of current primary expenditure.

As regards the overall composition of adjustment the standard result in the literature according to which expenditure-based consolidations stand a bigger chance to be lasting is confirmed for the entire sample period but does not hold for the 1990s and beyond. A separate *probit* regression for this subperiod shows that savings in primary expenditure have a positive impact on the probability of success but the evidence is weak. The esti-

mated coefficient is not statistically significant as compared to the regression for the period as a whole.

This result is quite important as it points to a possible shift in the recipe for success over time. The conventional wisdom about the importance of expenditure-based consolidations seems to have lost some of its bearing. One potential explanation could be that there has been a convergence in the composition of adjustment. If successful and unsuccessful consolidations increasingly relied on a similar mix of expenditure and revenue cuts, composition would no longer be a discriminatory element. This conjecture is only partially confirmed by the data. As regards cuts in primary expenditure net of cyclical factors the difference between successful and unsuccessful consolidations narrowed somewhat in the 1990s and beyond. In the latter period, the average annual reduction of expenditure net of cyclical factors achieved during years of unsuccessful consolidation almost doubled as compared to the entire period, when the overall size of the adjustment in terms of the primary budget balance remained broadly unchanged. This slight shift towards stronger expenditure cuts during unsuccessful episodes was not attained by reducing investment expenditure, i.e. the category that is generally thought to be easier to restrain in the short term with the risk of bouncing back afterwards.

The average annual decline in investment expenditure during consolidation episodes was actually slightly lower in the 1990s and beyond. Overall, while narrowing the difference in the composition between successful and unsuccessful consolidations remained significant. Consequently, there must have been other factors at play affecting the likelihood for success.

One important element in this context is certainly the experience ahead of the inception of the economic and monetary union (EMU), when a number of EU Member States made relatively large efforts to qualify for the euro. In several cases those efforts involved both a significant increase in government revenues and significant savings on the expenditure side. What made the difference between success and failure was the ability to safeguard the corrections over time, independently of the composition of the adjustment. As will be shown below, structural reforms and numerical fiscal rules seem to play an important role in this respect.

The exceptional circumstances linked to the run-up to the euro also seem to have had an impact on the effec-

tiveness of recipes which based on conventional wisdom is generally not crowned by success. This conclusion is corroborated by some of the country cases presented in the annex to this chapter. For instance, consolidation episodes in Italy and Spain in the 1990s are telling examples of fiscal corrections that yielded significant results while following at first glance non-standard strategies. In the case of Italy, the heavy reliance on higher revenues was accompanied by measures aimed at capping existing expenditure trends. Such measures did not translate into measurable expenditure savings in per cent of GDP but calmed expenditure dynamics. In the case of Spain, the sustainability of revenue based consolidations was probably helped by the fact that the overall tax burden was comparatively low. A common feature of both cases is that fiscal consolidations were accompanied by the strengthening of fiscal governance and the implementation of structural reforms.

#### **The government wage bill**

The second qualification vis-à-vis the literature concerns the common finding that successful consolidations are those that focus on cutting social security and, in particular, government wages. Our analysis weakens the conclusion on government wages. In our sample, there is no specific item in current primary expenditure that on top of the aggregate stands out as particularly instrumental for the likelihood of success. The prevailing pattern seems to be one of across-the-board savings in current primary expenditures. All components seem to be moving into the same direction during episodes of fiscal consolidations with total current transfers showing the largest average annual decline followed by non-wage consumption expenditure (see Table IV.4.2). The government wage bill does not play a particularly prominent role in our EU sample of successful consolidations.

One possible explanation for this result as compared to the literature is the selection of countries. Existing studies largely focus attention on OECD economies i.e. including a number of non-EU countries, notably the USA, Canada and Australia where cuts in government wages during episodes of fiscal consolidation may have been particularly important. This is partly confirmed by Alesina and Ardagna (1998) who provide country-specific information on a number of consolidation episodes in the OECD. Other possible explanations for the weak link between cuts in wages and success in our EU sample are: (i) wage cuts are likely to be implemented in a gradual way and hence do not produce their full effect in three years after the end of the consolidation period;

Table IV.4.2

**Probability of a successful fiscal consolidation**

	Explanatory variables	Estimated coefficient	p-value	No of obs.
<i>Initial conditions</i>				
Baseline	Actual minus debt stabilising deficit (t-1) % of GDP	1.84	0.07	110
	Output gap (t-1) % of GDP	0.95	0.34	110
	<i>Size and compensation of adjustment (change, % of GDP)</i>			
	Cyclically adjusted primary balance	- 0.15	0.88	110
	Cyclically adjusted primary expenditure	- 2.54	0.01	110
	Government wage bill	1.16	0.25	110
	Government investment expenditure	2.04	0.04	110
	Government final consumption	- 0.24	0.81	110
	Subsidies	- 0.57	0.57	110
	Transfers other than in kind	- 0.65	0.52	110
Transfers in kind	1.10	0.27	110	
<i>Other fiscal factors</i>				
	Gradual consolidation, dummy	- 0.43	0.67	110
	Tax elasticities	- 0.48	0.63	110
<i>Political factors</i>				
	Elections (t-1), dummy	1.07	0.28	107
	Size of majority in parliament	- 0.54	0.59	107
	Herfindahl index	- 0.60	0.55	107
<i>Fiscal governance (1)</i>				
	Fiscal rules (average), index	3.98	0.00	52
	Expenditure rules (average), index	- 0.97	0.33	52
	Budgetary procedures, index	1.82	0.07	44
<i>Structural reforms (1)</i>				
	Pensions (RDBF), dummy	1.23	0.22	54
	Employment protection legislation (RDBF), dummy	0.54	0.59	54
	Unemployment benefits (RDBF), dummy	2.14	0.03	54
	Labour market (IMF, 2004), dummy	3.51	0.00	77
	Product market (IMF, 2004), dummy	2.59	0.01	77
	Expenditure reforms, dummy	1.91	0.06	93
	Ambitious expenditure reforms, dummy	- 1.33	0.18	93
	Wage setting, dummy	predicts success perfectly		88
	Wage moderation, dummy	- 0.93	0.35	93

NB: (1) See Box IV.3.1 for a detailed description of the indicators. Estimation method: probit regression on panel data. Starting from the baseline specification additional variables were added individually in turn. Coefficients represent marginal contribution of the explanatory variable (measured at sample mean) to the probability of successful consolidation. All equations include country-specific constants, whose coefficient, significant in most cases, is not reported.

Source: Commission services

(ii) wage cuts are politically costly and are coupled with compensatory measures like tax cuts in the short run.

The weak link between cuts in the government wage bill and the likelihood of success does not necessarily mean that fiscal consolidations in the EU did not fully exploit the potentially beneficial effects of wage moderation, including the expansionary effects that wage moderation may have on economic growth. There are at least two different channels through which fiscal con-

solidation may foster wage moderation. The first channel consists in constraining the increase in government wages directly. To the extent that the government sector acted as the leader in the national wage bargaining process, the control of government wages would spill over to the economy as a whole and in turn sustain economic activity. In practice, however, there seem to be no clear examples of EU countries where the government sector can be taken to set the agenda in national wage bargaining.

The indirect and probably equally important channel through which fiscal consolidation impacts on wage developments, which in turn contribute to the success of a fiscal correction via stronger economic growth, is the one suggested by Alesina and Perotti (1996). In the framework of a country's wage setting mechanism wage claims will generally be more moderate if fiscal consolidation does not affect after-tax wages in the economy as a whole. This will typically be the case for expenditure as compared to revenue-based fiscal corrections. Hence, the right composition of adjustment can induce wage moderation in the economy as a whole, including the government sector. Moreover, wage moderation is conducive to sustained economic growth which will feed back to the government sector via revenues <sup>(1)</sup>.

#### **Other fiscal factors**

In addition to the size and the composition of the fiscal adjustment, we have examined two other fiscal factors: the type of adjustment and the behaviour of tax elasticities. Whereas there is no clear conjecture about the role played by the type of adjustment, the expectations linked to tax elasticities is the following. Empirically, the tax elasticity with respect to GDP, i.e. the relative change of total current taxes with respect to the relative change of nominal GDP, can be subject to significant autonomous fluctuations. Such fluctuations are due to changes in the composition of aggregate demand or changes in the primary distribution of income towards more or less tax rich components. For instance, private consumption expenditure is markedly more tax rich than exports or investment expenditure, and compensations of employees are generally more tax rich than gross operating surplus. In case a fiscal consolidation relied on a temporary increase in tax elasticities the chances for success should be negatively affected, as revenues would at some point move back to 'normal' levels. This conjuncture is only partially confirmed by our regression analysis. The estimated coefficient of the variable controlling for autonomous fluctuations in the tax elasticity has the expected negative sign, yet is not statistically significant.

There is also no statistically significant link between the likelihood of success and the type of fiscal adjustment. Hence, the choice between 'cold shower' and a more 'gradual' approach does not systematically affect the odds. There are however interesting differences between

the two types of adjustments in terms of initial conditions and composition, which are discussed in Section IV.3.3.

#### **Political factors**

Among the elements that do not systematically influence the likelihood of success are also the two political factors considered in our work: the beginning of a political term and the size of the majority of the ruling coalition in parliament. They are conducive for prompting a fiscal consolidation, as indicated in Section IV.3 but play no statistically significant role in determining the outcome of the adjustment. Although one may have assumed that governments backed by a strong majority in parliament may stand a greater chance to implement more effective fiscal corrections, the relationship between the size of a majority and its political strength are not necessarily linear. A large majority may reflect a coalition of ideologically not homogenous parties. However, even the Herfindahl index of concentration does not turn out to be statistically significant <sup>(2)</sup>.

#### **Fiscal governance**

The more interesting and certainly novel finding of our analysis refers to the link between success and fiscal governance. Our regression results clearly show that, after controlling for initial conditions as well as for the size and the composition of the fiscal adjustment, the presence, coverage and strength of numerical fiscal rules and budgetary procedures are conducive to the success of consolidation. Somewhat surprisingly the link between success and fiscal governance is weak when considering expenditure rules only. The estimated coefficient is not statistically significant and has the wrong sign. One possible reading of this result could be that expenditure rules may impose an excessive focus on expenditure thereby affecting investment expenditure which by experience is likely to rebound. By contrast, deficit and debt rules provide leeway to combine expenditure cuts with some revenue increases. On the other hand, the weaker role of expenditure rules in explaining the success of consolidation could simply reflect the fact that in practice they are generally limited to central government whereas deficit and debt rules have a larger coverage of general government public finances.

<sup>(1)</sup> For a discussion of the link between wages, employment and economic activity see for instance Blanchard and Wolfers (1999) and Mourre (2004).

<sup>(2)</sup> The Herfindahl index measures the degree of concentration in parliament with respect to the number of political parties. It takes a large value when the number of parties is low and lower values if the number of parties is high.

The link between fiscal governance and the success of fiscal adjustment is likely to work via at least two different channels. First, comprehensive and strong fiscal rules favour discipline-oriented budgets. They provide incentives to design adjustment measures that stand a higher chance to be effective and lasting, not least in view of the possible costs associated with the risk of running afoul of the rules. Second, well-designed budgetary procedures favour good planning, a balanced composition and an effective implementation of consolidation measures as opposed to a situation in which measures are drawn up over a short period of time, in an uncoordinated way and potentially based on not very prudent assumptions.

### **Structural reforms**

The last group of potential determinants of success examined in our regression analysis is structural reforms. *Ex ante* it could be argued that reforms improve the chances of success as they should typically result in durable changes in the way public money is spent. For instance, labour market reform or pension reforms translating into a reduction of the level of the benefits should *ceteris paribus* produce direct and lasting effects on expenditure. In addition, some structural reforms can also be expected to have a positive impact on economic growth and hence support the success of consolidation via the denominator of the deficit ratio. Clearly, the ultimate effect of structural reforms on both the budget and economic activity *inter alia* depend on their specific design. Especially, in the case of labour market reform one should probably make a distinction between those that impact on active versus passive labour market policies.

A positive link between the probability of success and structural reforms is confirmed for our sample. A first interesting and clear point emerging from the analysis is that the likelihood of success is significantly increased when consolidation is linked to or falls in years in which labour and/or product market reforms as measured by the indicators used in IMF (2004) are enacted.

The results are somewhat more differentiated, yet generally positive, with respect to expenditure reforms as defined by Hauptmeier et al. (2006). Overall, expenditure reforms appear to be conducive to the success of fiscal consolidation. A negative coefficient is estimated for ambitious expenditure reforms i.e. reforms that reduce primary expenditure by more than 5 % of GDP over

seven years, suggesting that very large expenditure restraints are less likely to be sustainable <sup>(1)</sup>.

One way to make fiscal consolidations coupled with ambitious expenditure reforms successful is to combine them with wage-setting reforms. Based on the *probit* regressions such a constellation is actually a guarantee for success: all expenditure reforms that went along with a reform of the wage-setting mechanisms gave rise to successful fiscal consolidation. While this result needs to be interpreted with caution because of the rather low number of cases (overall there are only five cases in point) it relates to the findings in the existing literature about the importance of the labour market channel emphasised by Alesina and Perotti (1996) and confirmed by Alesina and Ardagna (1998). Notably, elements that impact on the wage formation in the economy as a whole are conducive to successful fiscal consolidation. This finding relates to the more general insight of economics according to which wage moderation is beneficial for employment creation, overall economic activity and finally fiscal performance: a given level of government expenditure is easier to sustain if economic activity increases.

### **4.4. Why do consolidations fail?**

In this section we take a brief look at the consolidation episodes which according to our definition did not end with success. The focus will be on the different budgetary items that rebounded in the three years following the end of the consolidation episode leading or contributing to an overall deterioration of the CAPB of more than 0.75 % of GDP. In case of successive ‘cold shower’ or ‘gradual’ consolidations we considered the three years following the last episode. The corresponding results are summarised in Table IV.4.3.

The messages emerging from this exercise are relatively clear. Unsuccessful episodes of fiscal consolidation fail because of two reasons: (i) they do not manage to preserve the sizeable increases in government revenues on which the fiscal adjustment was built; and (ii) they do not manage to control government expenditure in the first place.

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<sup>(1)</sup> The negative sign can also reflect our specific definition of success. The threshold for success versus non-success is expressed in absolute terms and is not linked to the overall size of adjustment. Hence, a very large adjustment of say 5 % of GDP is judged to be unsuccessful even if the net correction three years after the end of the consolidation is 2.5 % of GDP.

In the three years following an unsuccessful consolidation episode, revenues net of cyclical factors decline on average by 0.6 % of GDP in cumulative terms, eroding almost half of the increase attained during the consolidation phase. However, what weighs more are expenditure dynamics. Adjusted for the cycle, primary expenditures increase on average by close to 2 % of GDP in the three years following the end of the adjustment. This drift is not due to one specific expenditure item; it rather reflects a general problem in controlling expenditures as a whole. In relative terms the strongest slippages concern social transfers other than in kind (i.e. mostly pensions) and non-wage government consumption.

Overall, this is a rather clear indication that consolidation measures did not attempt to tackle existing expenditure trends, which continue irrespective of the sizeable increase in revenues. As time goes on the revenue hikes tend to be reversed or turn out to be short-lived unveiling again the underlying need to restrain expenditure.

Additional insight into the ‘anatomy of failure’ can be gained by analysing the expenditure dynamics in terms of the COFOG classification. This shortens considerably the sample to 1995–2006 but still provides some useful information. As indicated in the lower part of Table IV.4.3, there are essentially two expenditure categories that rebound in the aftermath of unsuccessful fiscal adjustments, namely health and social protection. Incidentally, these two COFOG headings include the expenditure items which will principally bear or do already bear the budgetary impact of ageing population. A better control of them will be increasingly important in the future. Alternatively, a better control or restraint of expenditure of other functions of government is required to compensate for the increasing weight of social protection and health.

Table IV.4.3

**Backtracking of unsuccessful fiscal consolidations: cumulative change of revenue and expenditure items in the three years after the end of an unsuccessful fiscal consolidation**

Economic classification	Cumulative change in % of GDP	Number of observations
Total revenue	- 0.46	34
Total expenditure	1.71	34
Cyclically adjusted revenue	- 0.59	33
Cyclically adjusted primary expenditure	1.92	33
Final consumption	0.35	29
Wages	0.19	34
Subsidies	0.00	34
Transfers other than in kind	0.69	29
Transfers in kind	0.35	28
Investment expenditure	0.17	34

**Classification of function of government**

General public service	- 0.60	10
Defence	- 0.18	10
Public order and safety	- 0.11	10
Economic affairs	- 0.14	10
Housing	- 0.13	10
Health	0.38	10
Education	- 0.04	10
Social protection	0.18	10

Source: Commission services.



## 5. Conclusions

Our empirical analysis of successful fiscal consolidations in the EU highlights a number of important lessons. Some match up with the findings in the existing literature; others are new or somewhat different from ‘conventional wisdom’.

The lessons consistent with previous findings refer to the fiscal and macroeconomic conditions under which successful consolidations are generally started as well as to the overall composition of the fiscal correction as such. In particular, the likelihood of success increases if initial conditions are difficult: the deficit and the debt ratio are generally higher. Episodes of successful consolidation are on average also characterised by more difficult economic conditions compared to consolidations that do not result in a lasting correction.

As regards the composition of successful fiscal consolidation the EU experience over the whole sample period 1970–2006 confirms that fiscal corrections involving cuts in current primary expenditure are more likely to produce a lasting effect than those relying on higher revenues or on large cuts in government investment. However, the validity of this by now familiar notion is somewhat weakened for consolidation episodes enacted since the beginning of the 1990s. The composition of adjustment per se seems to have lost some of its influence in determining the success of fiscal consolidation.

A number of possible factors may explain this finding. Firstly, the observed shift in the composition of fiscal consolidation since the beginning of 1990s may reflect a general trend towards smaller governments. Starting from a relatively large size of government in the 1980s, many EU Member States have embarked on a path that has measurably reduced the weight of the public sector in the economy. Along this path the leeway for further expenditure cuts is gradually reduced unless they are embedded in a structural overhaul of specific functions of government.

Secondly, in the 1990s and beyond there was a general increase in the expenditure content of fiscal consolidation also among unsuccessful episodes. While successful consolidations continued to rely significantly more on expenditure restraints the difference vis-à-vis unsuccessful correction narrowed to some extent and hence lost some of its discriminatory power.

Thirdly, the motivation and resolve to participate in the common currency has induced Member States to implement comparatively large consolidation packages that did not necessarily follow the conventional recipe for success. Cuts in primary expenditure still played a role but were complemented by additional measures and factors that proved to be sustainable over time. Improvements in fiscal governance and structural reforms are prominent candidates of such additional factors.

On the basis of our empirical analysis the quality of fiscal governance turns out to be conducive to the success of fiscal consolidation. After controlling for initial conditions and the composition of adjustment the probability to produce a lasting correction is increased when public finances are covered by numerical fiscal rules and/or effective budgetary procedures. The link between the quality of fiscal governance and the chances of success of fiscal consolidation is likely to be complex and needs to be examined in more detail. The main point is certainly that effective fiscal governance fosters discipline-oriented budgets as well as an effective implementation of budgetary plans including fiscal corrections.

On top of fiscal governance, the chances of achieving a lasting fiscal correction also increase significantly if consolidation efforts are complemented by or go hand-in-hand with structural reforms. This result points to potential complementarities between the Stability and Growth Pact and the Lisbon process for growth and jobs. Apart from pension reforms, for which the statistical evidence is weak, measures that aim at improving the functioning of labour and product markets turn out to be

clearly conducive to success. The channels through which structural reforms help fiscal consolidation are twofold: directly by capping or flattening existing expenditure trends and indirectly by spurring economic activity. Clearly, the ultimate effect of structural reforms on both the budget and economic activity *inter alia* depend on their specific design. Especially, in the case of labour market reform one should probably make a distinction between those that impact on active versus passive labour market policies.

A second notable qualification of received wisdom emerging from our analysis relates to the more detailed composition of expenditure cuts. According to the prevailing view significant cuts in the government wage bill are taken to be an instrumental ingredient to the recipe for success, also because they are thought to contribute to wage moderation, which in turn is expected to trigger non-Keynesian effects by promoting investment and economic activity. Our analysis indicates that in the EU direct cuts in government wages or employment play a comparatively minor role in explaining the success of fiscal consolidation. The main contributors to savings in primary expenditure during successful consolidation are transfers and non-wage government consumption.

This conclusion does not diminish the importance of wage moderation as such. While further work is needed to explore in detail the precise link between the determinants of successful fiscal consolidation and wage developments our analysis supports the conclusion that wage moderation in the economy as a whole is conducive to success.

Firstly, and linked to the role played by structural reforms outlined before, the likelihood of success

increases significantly in our EU sample if fiscal consolidations are coupled with reform measures geared towards improving the functioning of the labour market, especially the wage setting mechanism. The effect is likely to operate through two separate channels: (i) indirectly via the expansionary impact of wage moderation on economic activity, which in turn benefits public finances and (ii) directly via lower government wage increases as wage moderation in the private sectors spills over to the government sector.

Secondly, expenditure versus revenue based consolidations can also be conducive to wage moderation in the economy as a whole as they do not reduce after-tax wages. Consolidations that heavily rely on revenue increases reduce after tax wages and may trigger higher wage claims by trade unions, with a potentially negative feedback on economic activity and hence lower government revenues.

On the whole, our results give rise to the following conclusions. The established recipe for success characterised by significant cuts in primary government expenditure is not outdated. It was particularly effective in the 1970s and 1980s and was still used in the 1990s. On top of it, the menu of options has widened. Especially in the 1990s, the composition of adjustment in terms of primary expenditure cuts lost some of their discriminatory power between success and failure. Successful consolidation still remained more expenditure and less revenue-based than unsuccessful episodes. However, the differences narrowed. As a result, other factors have become more decisive such as fiscal governance and structural reforms. They turn out to be instrumental in safeguarding the fiscal correction over time.

# A. Annex: Country cases

## A.1. Introduction

This annex presents four country cases: Spain, Italy, the Netherlands and Hungary. The aim is to highlight some of the basic features and (ir)regularities of successful versus unsuccessful consolidation examined in the main body of Part IV by means of ‘real life’ examples. The selection of countries does not reflect any judgement about the specific experience; it was rather driven by the intention to illustrate a number of particularly interesting aspects that are common to many episodes across a number of countries but which we thought were particularly evocative and representative in terms of both the macroeconomic background and the specific recipes of fiscal adjustments.

Spain exemplifies fiscal consolidation episodes that were carried out successfully against the backdrop of rapid economic convergence. Italy represents a case of a mature industrialised country, which has undergone a series of adjustment episodes with a varying degree of success. The Netherlands stands for a small open economy at the core of the EU integration process which for some time has been relying on a number of supportive elements of fiscal governance and budgetary procedures. Hungary is a new Member State in which fiscal policy is embedded in a still ongoing transition and convergence process.

## A.2. Spain

Spain underwent three ‘cold shower’ consolidations: in 1986, 1992 and 1996. All turned out successful in line with our Definition 1. We focus on the two episodes of the 1990s for reasons of data availability and the fact that the 1986 consolidation may have largely been shaped by the Spanish EU accession. The fiscal consolidation of 1992 was mainly revenue-based, whereas the 1996 episode mainly relied on expenditure cuts. The success rate of fiscal consolidation benefited from fiscal rules, binding agreements between the different levels of government as well as from an effective budgetary process. Moreover, fiscal consolidation in the 1990s was accompanied by significant structural reforms geared towards stimulating the labour market and improving long-term sustainability.

As regards fiscal governance, some legal and institutional changes aiming at higher budgetary discipline and prudence were introduced in the 1990s. These include strengthening the position of the Minister for Economy and Finance, the creation of a State bureau of public expenditure and budget and the extension of a monthly expenditure control to the social security. Fiscal rules adopted in 1990 include spending limits on State expenditure. Fiscal constraints agreed with the lower levels of government in the financial agreement 1992–96 were renewed in 1997. Political coordination between the different levels of government has been supported by the existence of the ‘National committee of local administration’, which was established by law in 1985 and the Court of Auditors already set up in 1978.

The 1992 consolidation was mainly revenue based and was enacted when macroeconomic circumstances were still positive but deteriorating. Consolidation efforts were suspended in 1993 as Spain was hit by a very deep recession. The nominal deficit peaked at 6.6 % of GDP in 1993. Nevertheless, the fiscal stance was only slightly expansionary in 1993, and tightened again as soon as economic growth gained momentum. The cumulative improvement of the CAPB amounted to 1.6 % of GDP over the period 1992–95. The overall fiscal adjustment in the early 1990s was dominated by the ‘cold shower’ consolidation of 1992 which improved the CAPB by 1.7 % of GDP, brought about by increasing cyclically adjusted revenues by almost 2.5 % of GDP. The revenue increase was due to changes in the income tax law to reverse the income tax reform of 1991 and due to intensified fight against tax fraud. The sustainability of tax increases benefited from the comparatively low tax burden in Spain compared to the EU average. The high level of other current revenues attained in 1992 and 1993 can largely be explained by one-offs resulting from the revaluation of foreign assets held by the Bank of Spain. On the expenditure side, a structural reform of the social security system tightened the eligibility to unemployment benefits and sickness transfers. Moreover, government investment was cut back markedly. Nonetheless, these measures were more than offset by a large increase in public pensions and government consumption implying an increase in total cyclically adjusted expenditure. Furthermore, cyclically adjusted expenditure was adversely affected by the sizeable increase in interest payments after the increase of government debt by roughly 12 % of GDP in 1993.

The Maastricht criteria and the determination to join the EMU from the outset backed the expenditure-based fiscal consolidation process initiated in the mid-1990s. The largest improvement of the CAPB of 1.8 % of GDP was achieved in 1996, hence qualifying as a ‘cold shower’ consolidation. Overall, the CAPB improved by 2.6 % of GDP in 1994–97, when the economic conditions were still affected by the consequences of the 1993 recession. The strong decrease of cyclically adjusted expenditure of 1.2 % of GDP in 1996 was exclusively the result of the retrenchment of primary expenditure. Expenditure measures adopted in the course of the consolidation process encompassed cuts in social benefits other than social transfer in kind as well as cuts in government consumption and investment.

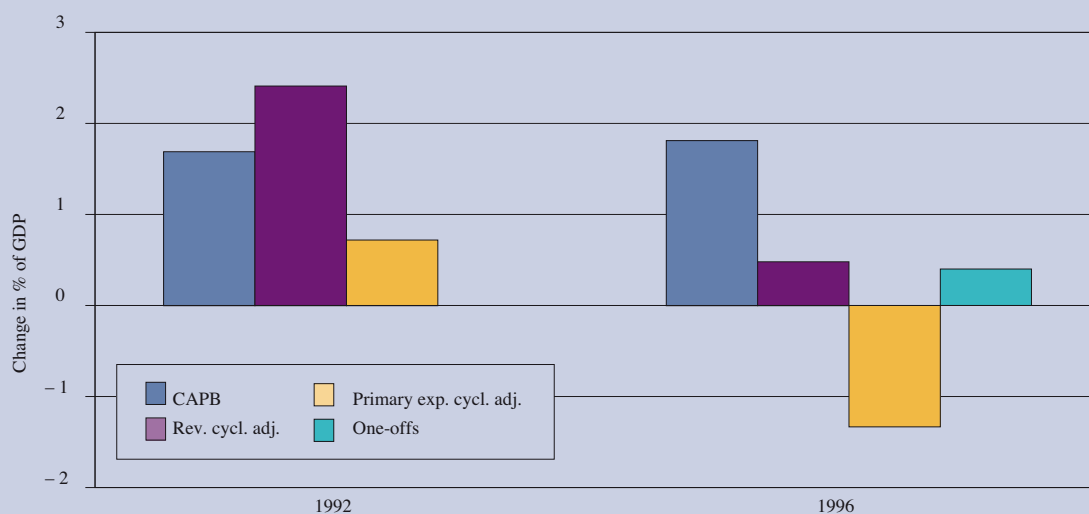
The cut of government consumption was achieved by a continued wage freeze combined with a reduction in the number of employees and the decline in the purchase of goods and services. Structural reforms reduced expenditure pressures stemming from social benefits, namely unemployment compensations and temporary disability payments by tightening eligibility criteria and shifting a larger part of the initial cost to firms. Government investment expenditure was cut by introducing new modes to finance public infrastructure investment such as introducing private sector participation in 1997. The improved revenue performance in 1996 was mainly the result of increases in indirect taxes, namely on tobacco

and alcohol, higher dividends by public enterprises and the Bank of Spain and the change in the recording of social contributions yielding a 0.4 % of GDP one-off intake. In 1997, reforms of the labour market intended to stimulate employment growth translated into higher direct tax revenues.

### A.3. Italy

Italy underwent seven consolidation periods in 1970–2006 (1976, 1982, 1983, 1991, 1992, 1993 and 1997). According to our Definition 1 all of them were ‘cold shower’ consolidation and, except for the episodes in 1983 and 1997, all of them were successful. The most impressive adjustments were enacted in the 1990s, after the deficit and the debt ratio had reached 11.4 % of GDP and 95 % of GDP respectively. The CAPB improved by more than 10 % of GDP over the period 1990–97, when macroeconomic conditions were generally not supportive. The fiscal adjustment was almost exclusively revenue based. Nevertheless, the successive consolidations were comparatively effective in curbing the medium-term expenditure trends. Fiscal consolidation in the 1990s was helped by a number of structural reforms. As regards the labour market a key reform was implemented at the beginning of the decade, which abolished the system of automatic wage indexation (*scala mobile*) and promoted wage moderation (*concertazione* 1993).

Graph IV.A.1: Spain: composition of fiscal consolidation



Sources: OECD and Commission services.

Furthermore, incremental reforms followed in the second half of the 1990s aimed at increasing the flexibility of wage contracts. The parametric pension reform of 1992 was estimated to have cancelled about one quarter of net pension liabilities, while the 1995 pension reform introduced a gradual shift towards a first pillar notional defined contribution system. Progress was also made in liberalising product and capital markets.

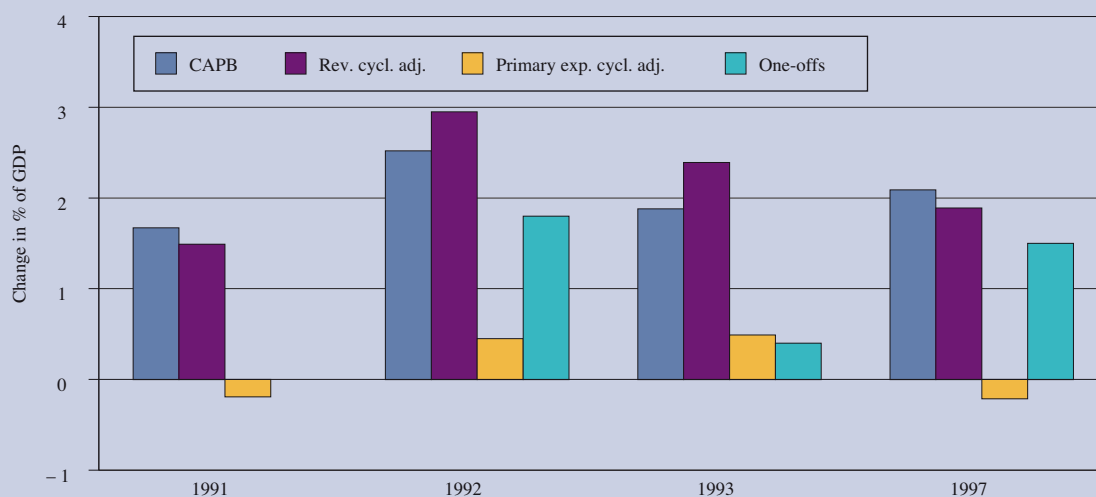
In terms of fiscal governance, the 1990s were characterised by a slow process of regional decentralisation, where increased tax autonomy of lower levels of government was traded off against cuts in transfer payments and the devolvement of duties to local governments (*Bassanini* laws and enacting legislation 1997–98). However, local financial autonomy remained very limited and, in 1997, its increase was temporarily suspended, as administrative constraints on local government cash flows and mandatory limits for transfers from the State to local authorities were introduced to meet the Maastricht target. Only in 1999 an Internal Stability Pact was introduced to foster budgetary coordination between the different levels of government. On top of the Internal Stability Pact a number of fiscal rules have been introduced among which two expenditure rules and two budget balance rules covering all levels of government.

Over the successive ‘cold shower’ consolidations of 1991–93 the CAPB improved by roughly 6 % of GDP

via large increases in revenues and in the face of increasing expenditures. Despite a significant cyclical deterioration, direct taxes increased by 1.8 % of GDP due to a change in personal income tax brackets, a limitation of compensation for fiscal drag and a new levy on firms’ net assets. Indirect tax revenues grew by 1.3 % of GDP partly as the result of revisions in the VAT rates and a new municipal tax on buildings. Furthermore, one-off measures heavily supported the consolidation effort, yielding more than 2 % of GDP in 1992–93. Cyclically adjusted expenditure increased by 3.3 % of GDP in 1991–93, mainly due to a 2.6 % of GDP increase in interest expenditure. Primary expenditure growth was curbed by a cumulative cut in government investment of 0.6 % of GDP over the consolidation years, and also by a wage freeze in the public sector combined with more stringent hiring limits. More structural expenditure retrenchments including the 1992 pension reform did not immediately restrain social benefits other than social transfers in kind which continued to grow by a cumulative 1.6 % of GDP in 1991–93.

The consolidation efforts were temporarily interrupted in 1994, when, after the end of the recession, which spanned from the second quarter of 1992 to the third quarter of 1993, budgetary policy aimed at supporting the economic recovery. Fiscal consolidation resumed in 1995 and peaked in 1997 to guarantee Italy’s participation in the EMU. The reduction of the headline deficit by

**Graph IV.A.2: Italy: composition of fiscal consolidation**



Sources: OECD and Commission services.

4 % of GDP in 1997 was almost equally attributable to lower interest expenditure and an improvement of the CAPB. However, the impressive reduction in interest payments of 2 % of GDP in part resulted from a reclassification of expenditure for interest payment on postal savings. The tightening of the fiscal stance of 2.1 % of GDP was brought about by increasing cyclically adjusted revenues, while cyclically adjusted primary expenditure was broadly stabilised. On the revenue side, substantial use was made of temporary measures, which amounted to more than 1.5 % of GDP and mainly consisted of one-off taxes (such as the *tassa per l'Europa* a progressive one-year surcharge on the income tax rates). On the expenditure side, capital expenditure was curbed, essentially through cuts in capital transfers by 0.3 % of GDP. However, primary current expenditure raised as savings in intermediate consumption by 0.1 % were more than offset by increases in other expenditure items, in particular in social benefits, which increased by 0.6 % of GDP.

#### A.4. The Netherlands

The Netherlands underwent two episodes of 'gradual' consolidation in the early 1970s and early 1980s and five 'cold shower' consolidations in 1985, 1991, 1993, 1996 and 2005. Apart from a mixed track record in the 1970s and 1980s, the episodes since 1991 produced a lasting correction of public finances. In the 1990s, consolidations did not follow a specific template; the composition varied from mainly revenue to mainly expenditure-based. Mix-strategies were also tried. One strong point in the Dutch experience is fiscal governance. Firstly, Dutch fiscal policy has benefited from the Netherlands Bureau of Economic Policy Analysis (CPB), the classic example of a strong fiscal council, founded in 1945, which provides independent forecasts and analysis for the preparation and the execution of the budget. Secondly, the Netherlands has high quality budgetary procedures which are conducive to fiscal performance. The role of the CPB and the budgetary procedures in general are clearly reflected in the indicators of national budgetary procedures (see Section II.5). Moreover, in the 1990s consolidation benefited from an important reform of the social benefit system. Furthermore, active labour market programmes were designed to decrease long-term unemployment via training and a wage moderation agreement between the social partners were introduced.

The fiscal retrenchment in 1991 improved the CAPB by an impressive 3.1 % of GDP, almost exclusively by

increasing cyclically adjusted revenues. Part of the revenue increase was temporary as it was due to the decision to bring forward the deadline for the payment of direct taxes. On the expenditure side, several measures to reduce structural long-term unemployment were introduced and the growing trend in housing subsidies was reversed.

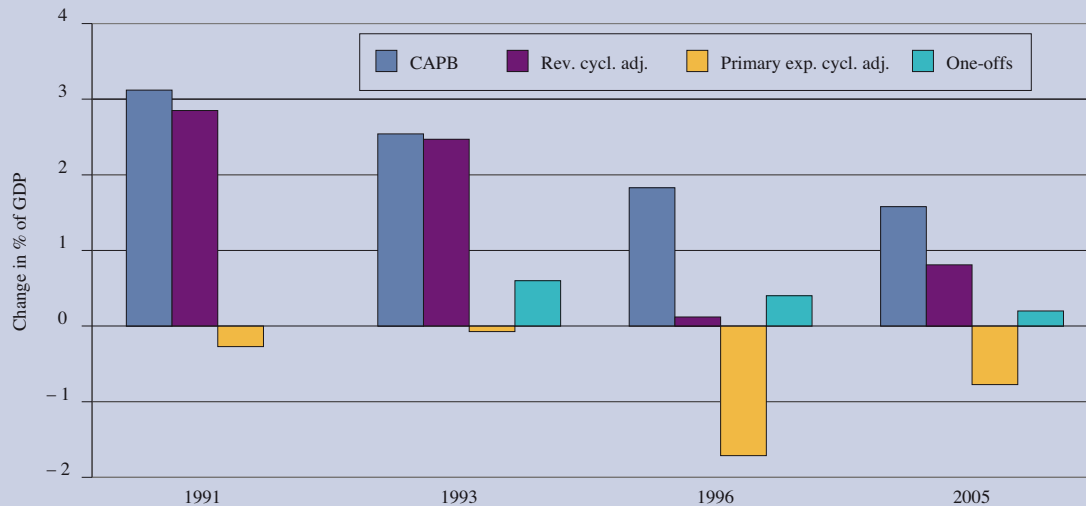
In 1993, the improvement of the CAPB of 2.5 % of GDP was again almost entirely achieved by an increase in cyclically adjusted revenues. Most of this revenue increase stemmed from higher social security contributions and one-off windfalls due to the reorganisation and computerisation of the tax department.

In a bid to participate in Stage III of the EMU the Dutch authorities implemented a significant expenditure-based consolidation in 1996, which improved the CAPB by 1.8 % of GDP. The marked reduction of cyclically adjusted expenditures of 2 % of GDP *inter alia* reflected the effects of the introduction of a medium-term budgetary framework including public expenditure growth ceilings in 1994, which reduced expenditure by 5 % of GDP compared to 1993. Social benefits other than social transfers in kind were curbed as a result of a number of reform measures: reform of disability assistance (1993), reform of sick leave (fully privatised in 1996), reform of unemployment, and social assistance schemes tightening eligibility criteria. A 1 % of GDP restraint of government consumption was achieved by a reduction of government employees and moderate wage increases. On the revenue side, 1996 was the first year to post a slight increase in cyclically adjusted revenues, after a cumulative decrease of 5.6 % of GDP between 1993 and 1996. Tax shortfalls, caused by higher tax deductions (mortgage interest, company saving plans) and the growing number of self-employed who benefited from the lower corporate tax rates, were partly compensated by an ecotax on electricity and natural gas consumption. Furthermore, exceptionally strong natural gas revenues and a one-off payment stemming from Court decision regarding natural gas receipts amounting to 0.4 % of GDP contributed to the increase of the cyclically adjusted revenue ratio <sup>(1)</sup>.

After three consecutive years of fiscal loosening and unfavourable growth conditions the Dutch deficit breached the 3 % of GDP threshold of the Treaty in

<sup>(1)</sup> See Koen, V. and van den Noord, P. (2005).

Graph IV.A.3: The Netherlands: composition of fiscal consolidation



Sources: OECD and Commission services.

2003. In order to correct the excessive deficit the government started mixed consolidation strategy in 2004. The CAPB was reduced by 2.7 % of GDP over 2004 and 2005, whereby only 2005 classifies as a ‘cold shower’ consolidation. The 2004 consolidation package included a reduction in the government workforce together with a wage freeze, and structural expenditure cuts in the healthcare sector. Structural revenue measures comprised a higher health insurance premium. A series of one-off measures yielded 0.2 % of GDP. The 2005 budget encompassed a structural rise in social contributions, and tax base broadening measures as well as the obligation for two independent public sector agencies to pay corporate taxes. Expenditure was curbed by keeping a lid on public wages and by restraining outlays for social benefits other than social transfers in kind. Furthermore, tax revenues temporarily increased by 0.2 % of GDP as corporate tax receipts relating to 2006 were brought forward to 2005.

### A.5. Hungary

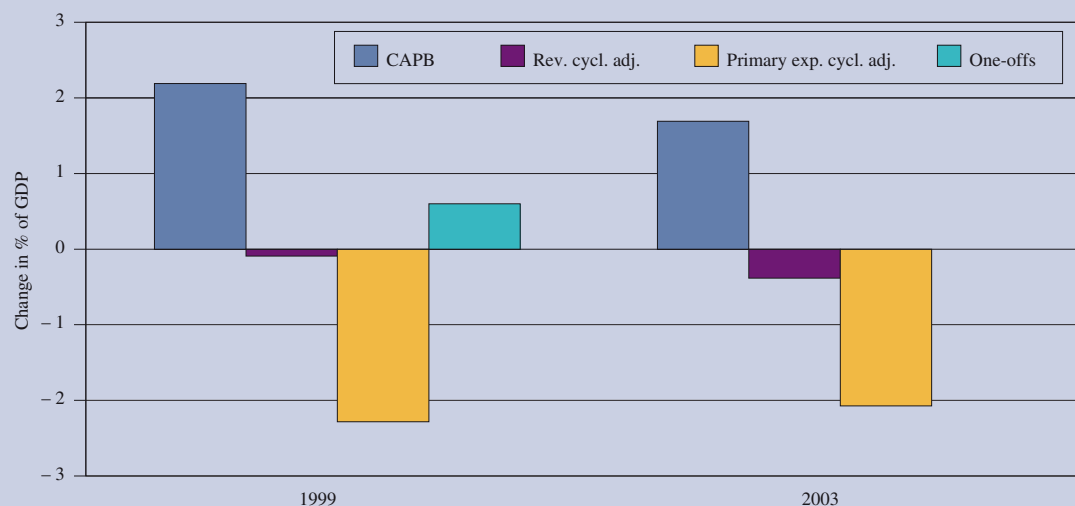
Hungary underwent two ‘cold shower’ consolidations in 1999 and in 2003, which according to our Definition 1 turned out unsuccessfully. Both episodes were mainly expenditure based with sizeable cuts in government investment. Hungarian fiscal policy was extremely volatile in 1998–2006 due to pronounced political cycles. Every episode of fiscal tightening was followed by an

even stronger fiscal expansion. Overall, the CAPB deteriorated by more than 10 % of GDP in 1998–2006.

As regards fiscal governance, the State Audit Office, which is the highest financial monitoring institution of the State, was created in 1989. However, as this institution is not actively participating in the budgetary process its support to fiscal consolidation has been limited. Audit rules and rules governing tax enforcement were modified and strengthened in 2003. Nevertheless, so far this has not visibly improved the effectiveness of fiscal consolidation.

After the election year 1998, Hungary carried out an expenditure-based fiscal consolidation against the background of a widening negative output gap. The consolidation measures improved the CAPB by an overall 3.7 % of GDP in 1999 and 2000, whereby only 1999 classifies as a ‘cold shower’ consolidation. While cyclically adjusted revenues remained broadly unchanged in per cent of GDP compared to 1998, cyclically adjusted expenditures declined by 2.7 % of GDP in each of the two years. However, in 2000, this was primarily the result of reduced interest payments. Government consumption growth was restrained by reducing the number of government employees, which was matched by large wage increases and higher spending on goods and services. The spending categories that declined substantially were interest payments, government investment and

Graph IV.A.4: Hungary: composition of fiscal consolidation



Sources: OECD and Commission services.

capital transfers. On the revenue side, the budget included a number of structural tax measures designed to permanently reduce the fiscal burden such as the introduction of a more generous child allowance and the reduction of the number of tax brackets from six to three. Cuts in social security contributions for employers were only partially compensated by increases in the contributions paid by individuals. One-off measures included the sale of government assets and 50 % of the revenues from a 15-year mobile telephone licence.

In 2001, after the end of the consolidation, the CAPB deteriorated by 2½ % of GDP reflecting discretionary spending measures and unforeseen expenditure surprises, notably in social benefits other than social transfers in kind. The loosening continued in 2002, in the context of the last phase of the electoral cycle, with the CAPB deteriorating by 5.5 % of GDP. This deterioration was partly due to debt transfers and other one-off operations. The other part can be attributed to the continued high increases of public sector wages and social benefit spending as well as a revenue loss due to the exemption of old-age pension from the calculation of taxable income.

The expenditure-based consolidation in 2003 reduced the CAPB by 1.7 % of GDP, qualifying as a ‘cold

shower’ consolidation. Fiscal consolidation initially continued in 2004, but was completely abandoned in view of upcoming elections and despite improving macroeconomic conditions. In 2003, cyclically adjusted expenditures were cut by more than 2 % of GDP; more than two thirds were cuts in government investment (1.4 % of GDP). The remaining adjustment was achieved by structural cuts in housing subsidies and changes in the unemployment benefit entitlements, while government consumption increased considerably due to high public sector wage increases. Deficit increasing one-off measures included compensation payments for unpaid child benefits ordered by a court decision (0.2 % of GDP). Revenue measures in 2003 were intended to make the fiscal environment for businesses easier and to promote lifelong learning and new technologies via tax benefits. The change of VAT rates for some items increased indirect tax revenues, which helped to limit the decrease of cyclically adjusted revenues to 0.4 % of GDP. Consolidation efforts were sustained in 2004, when the CAPB was improved by 0.7 % of GDP. But fiscal policy was loosened again in 2005 on the back of expenditure increases as well as revenue shortfalls reflecting permanent tax cuts and increasing social benefit other than social transfers in kind expenditure (mainly increases in pension expenditure) respectively.



# Part V

## Member State developments



# 1. Belgium

## Recent developments and medium-term prospects

In 2006, the general government recorded a budget surplus of 0.2 % of GDP, as compared with a balanced budget targeted in the December 2005 update of the stability programme. Public finances benefited from the higher-than-anticipated economic growth, in particular through indirect tax revenue. Direct taxes (excluding the impact of one-off measures) turned out to be lower than anticipated, mainly because the budgetary impact of the final stage of the 2001 personal income tax reform seems to have been underestimated by about 0.3 % of GDP, which was only identified in the second half of 2006. The unfavourable developments in direct tax revenue were compensated by the better-than-anticipated proceeds from sales of real estate and by stepping up a one-off measure to advance the collection of corporate taxes. As a result, the total impact of one-off measures turned out to be well above 0.8 % of GDP. Government expenditure remained reasonably on track. The debt-to-GDP ratio in 2006, which includes the debt assumed from the railway company SNCB/NMBS (see footnote 6 to Table V.1.1), was 89.1 %.

The 2007 budget was presented in October 2006 and approved by parliament on 21 December. It targets a nominal surplus of 0.3 % of GDP (confirmed in the December 2006 update of the stability programme) and some initiatives to further reduce the tax burden on labour (around 0.1 % of GDP) <sup>(1)</sup>. New measures that include fiscal revenues include: a new fiscal framework for tax-exempt corporate reserves (a tax shelter for corporate profits), higher excise duties on alcohol and tobacco, and new initiatives to fight tax fraud. The initial budget also included a new tax on packing material (with an initial expected revenue of 0.1 % of GDP in 2007),

but it turned out to be difficult to implement and its expected revenue was downsized considerably during the March 2007 budget control exercise. A number of smaller measures to bring down the tax burden on labour reduced government revenue by around 0.1 % of GDP. The budget also foresees a series of new one-off measures (½ % of GDP), including a takeover of pension obligations and the sale of real estate. Some changes in the timing of social contributions on holiday allowances also have a temporary positive effect on government revenue. The government expenditure ratio-to-GDP is planned to diminish slightly. In particular, for 2007, regions and communities have agreed to refrain from spending additional transfers assigned to them by the federal government (about 0.1 % of GDP), while public investment by local authorities is expected to return to its trend level after a marked investment boom in the run-up to the 2006 local elections (a pattern frequently observed in the past). The Commission services' 2007 spring forecast foresees a small deficit of 0.1 % of GDP, but the difference with the official government target can be largely explained by the fact that, based on the usual no-policy-change assumption, the Commission services did not take into account some of the planned one-off measures (about 0.3 % of GDP) because they were not yet sufficiently specified at the time of the forecast <sup>(2)</sup>. According to the Commission services' 2007 spring forecast, the structural primary balance is expected to stabilise at around 3.8 % of GDP in 2007. Therefore the fiscal stance can be considered to be broadly neutral.

As for 2008, on a no-policy-change basis, a slight deterioration of the budget balance to a deficit of around 0.2 % of GDP is forecast, mainly due to the expiry of the one-off measures for 2007 that are retained in the forecast, which is only partially compensated by a reduction of interest expenditure. This compares with

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> In particular, the forecast did not include the impact of the take-over of pension obligations, as well as about half of the planned real estate sales.

a 0.5 % of GDP surplus targeted in the most recent update of the stability programme. Like the Commission services' forecast, the programme assumes a further reduction of the debt burden (about 0.2 % of GDP), but it does not explain what measures will be taken to replace the expired one-off measures included in the 2007 budget. After 2008 the stability programme foresees a further build-up of surpluses up to 0.9 % of

GDP in 2010, mainly based on decreasing interest expenditure.

The debt-to-GDP ratio is forecast to remain on a downward path, falling from 89.1 % in 2006 to 82.6 % in 2008, which is only slightly higher than foreseen in the stability programme. By 2010, the stability programme foresees a debt ratio below 75 %.

Table V.1.1

**Budgetary developments 2005–10, Belgium (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>		
General government balance	- 2.3	0.2	- 0.1	- 0.2		
— Total revenues	49.9	49.3	48.5	48.2		
<i>Of which:</i>						
— <i>current taxes</i>	30.3	30.0	29.6	29.5		
— <i>social contributions</i>	16.1	15.9	15.8	15.8		
— Total expenditure	52.2	49.1	48.7	48.5		
<i>Of which:</i>						
— <i>collective consumption</i>	8.8	8.7	8.7	8.7		
— <i>social transfers in kind</i>	14.1	13.9	13.9	14.0		
— <i>social transfers other than in kind</i>	16.0	15.7	15.7	15.7		
— <i>interest expenditure</i>	4.2	4.1	3.9	3.8		
— <i>gross fixed capital formation</i>	1.8	1.7	1.6	1.7		
Primary balance	2.0	4.3	3.8	3.5		
Tax burden	45.5	45.1	44.5	44.4		
One-off and other temporary measures	- 2.0	0.8	0.2	0.0		
Structural balance <sup>(3)</sup>	0.2	- 0.4	- 0.1	0.1		
Structural primary balance	4.5	3.7	3.8	3.9		
Government gross debt	93.2	89.1	85.6	82.6		
<i>pm Real GDP growth (%)</i>	1.1	3.1	2.3	2.2		
<b>Stability programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
General government balance <sup>(5)</sup>	- 2.3*	0.0	0.3	0.5	0.7	0.9
Primary balance	1.9	4.1	4.2	4.1	4.1	4.2
One-off and other temporary measures	n.a.	0.6	0.4	n.a.	n.a.	n.a.
Structural balance <sup>(3)</sup> <sup>(5)</sup>	n.a.	- 0.4	0.1	n.a.	n.a.	n.a.
Government gross debt <sup>(6)</sup>	93.2*	89.4*	85.6*	82.1*	78.3*	74.3*
<i>pm Real GDP growth (%)</i>	1.2	2.7	2.2	2.1	2.2	2.2

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

<sup>(6)</sup> The deficit and debt figures in the 2005 programme are those notified by Belgium. In October 2006 Eurostat amended the data notified by Belgium as they were found not to be in accordance with ESA95 rules, specifically, in relation to the assumption by government (FIF/FSI — Fonds de l'infrastructure ferroviaire/Fonds voor spoorweginfrastructuur) of 2.5 % of GDP of the debt of the railway company SNCB/NMBS in 2005 (see Eurostat News Release No 139/2006). According to ESA95 rules, the impact on the 2005 government deficit is of the same amount; the impact on government debt in 2005 amounts to 1.7 % of GDP, taking into account a partial reimbursement occurred in that year. Data for 2005 marked with an asterisk are as amended by Eurostat. Debt data marked with an asterisk for years 2006 to 2010 have been 'mechanically' adjusted by the Commission services to comply with ESA95. This adjustment of debt figures is based on the technical assumption that the stock of FIF/FSI's debts remains unchanged. In December 2006 the Belgian Government challenged Eurostat's amendment of the Belgian data before the European Court of First Instance.

Sources: Commission services and December 2006 update of the stability programme of Belgium.

Table V.1.2

**Main measures in the budget for 2007, Belgium**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Take-over of pension funds (0.2 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Agreement with regions and communities not to spend the additional transfers they receive from the federal level in 2007 (- 0.1 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Measures to reduce taxes and social contributions on labour (- 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Real estate sales (- 0.2 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• New tax regime for corporate tax exempt reserves (0.1 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Increased excise duties on tobacco (0.1 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• New measures to fight fiscal fraud (0.1 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Advancing social contributions on holiday allowances (0.1 % of GDP)</li> </ul>	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and Chambre de Représentants de Belgique, *Budget des recettes et dépenses pour l'année 2007: Exposé Général*.

## 2. Bulgaria

### Recent developments and medium-term prospects

In 2006, the general government surplus in Bulgaria was 3.3 % of GDP. This is considerably better than the balanced budget originally planned in the December 2005 pre-accession economic programme and in the 2006 budget law. The better-than-expected outcome is due to both higher revenues and lower expenditures. Higher-than-anticipated revenue growth was the result of stronger economic activity, improved tax collection and cautious initial tax projections. Despite a reduction in social contributions of 6 percentage points, the revenue-to-GDP ratio came out 0.7 percentage point stronger than originally expected. The better budgetary outcome is, however, also due to substantial expenditure restraint in 2006. The expenditure-to-GDP ratio was reduced by 2½ percentage points compared to original plans and by almost 3 percentage points compared to the 2005 outcome. This reflects higher-than-expected growth of nominal GDP but also a reduction in the growth of nominal expenditure, in particular current expenditure compared to initial plans. Thus, current expenditure decreased by more than 3 percentage points compared to 2005, while at the same time government gross fixed capital formation increased by 0.3 percentage point. General government gross debt reached 22.8 % of GDP, down from 29.2 % of GDP in 2005.

The 2007 budget law, which was adopted by parliament on 19 December 2006, envisages a general government surplus of 0.8 % of GDP. However, a separate provision in the budget law specifies that 10 % of primary expenditures will not be released for spending if the current account deficit widens further in 2007. This provision would be binding until a general government surplus of 2 % of GDP is achieved. Bulgaria's first convergence programme which was submitted in January 2007 confirmed the target of a budget surplus of 0.8 % of GDP but underscored that a higher surplus of 2 % of

GDP would effectively be aimed at <sup>(1)</sup>. On the revenue side, the 2007 budget foresees a cut in the corporate income tax rate and an increase in the tax-exempted income under the personal income tax. However, on the basis of improved tax collection, an increase in some excise duties and higher EU transfers, the budget envisages a slight increase in the revenue-to-GDP ratio. The budget also projects an increase in the expenditure-to-GDP ratio by 2.8 percentage points, reflecting Bulgaria's contribution to the EU budget and an increase in subsidies and other current expenditures. In order to achieve the 2 % of GDP surplus, the increase in expenditure would be limited to around 1½ % of GDP, with the additional savings coming mainly from other current expenditure. The Commission services' spring 2007 forecast is broadly in line with the projections in the convergence programme. However, the forecast expects that revenue losses linked to tax cuts and the reallocation of part of the VAT revenues to the EU budget will not be fully compensated, while at the same time the increase in the expenditure-to-GDP ratio will probably turn out more moderate. The fiscal stance in 2007 will be strongly expansionary as the structural surplus is estimated to decrease by more than 1 percentage point of GDP. In 2008 and 2009, the budgetary targets in the convergence programme imply a broadly neutral fiscal stance.

Based on a no-policy-change scenario, the Commission services' spring 2007 forecast expects the general government surplus to remain at 2 % of GDP in 2008. Taking into account a further increase in capital expenditure, the convergence programme projects the general government surplus to decline to 1.5 % of GDP in 2008, down from 2 % in 2007, and to remain at that level in 2009. A relatively tax-rich composition of growth in 2008 could, however, imply an increase in

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

the revenue-to-GDP ratio in 2008 which may cover planned expenditure increases.

On account of general government surpluses and strong nominal GDP growth, the Commission services' spring 2007 forecast projects government gross debt to decrease to 20.9 % of GDP in 2007 and 19 % of GDP in 2008. This is broadly in line with the projections in the convergence programme with minor differences due to stronger economic activity and a stronger outcome for debt reduction in 2006. The convergence programme expects a further decrease in the debt-to-GDP ratio by over 1 percentage point in 2009. The projected debt reduction in 2008 and 2009 takes into account debt increasing stock-flow adjustments due to an accumulation of financial assets in both years.

### Estimating the budgetary impact of accession

Following its accession to the EU on 1 January 2007, Bulgaria will benefit from considerable transfers of EU funds under the EU's structural and cohesion policy, the common agricultural policy (CAP) and a number of other policy regimes (e.g. on research or education and training). These EU transfers can play an important role in promoting economic growth and convergence. However, a number of studies on the accession of 10 Member States in 2004 argued that while becoming net recipients of EU transfers, these countries could face substantial pressure on their public finances as a result of accession. Following the methodology used in Hallet and Keerman (2005) to assess these claims for the Member States

Table V.2.1

#### Budgetary developments 2005–09, Bulgaria (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	1.9	3.3	2.0	2.0	
— Total revenues	41.4	39.9	39.3	39.6	
Of which:					
— current taxes	24.6	24.9	24.2	24.4	
— social contributions	10.3	8.8	8.7	8.7	
— Total expenditure	39.5	36.6	37.3	37.6	
Of which:					
— collective consumption	9.8	9.4	9.2	9.1	
— social transfers in kind	8.2	8.0	7.9	7.8	
— social transfers other than in kind	11.9	11.5	11.5	11.5	
— interest expenditure	1.6	1.3	1.2	1.1	
— gross fixed capital formation	3.4	3.7	4.0	4.5	
Primary balance	3.4	4.6	3.1	3.0	
Tax burden	34.1	33.7	33.0	33.2	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	1.3	2.8	1.6	1.8	
Structural primary balance	2.9	4.1	2.8	2.9	
Government gross debt	29.2	22.8	20.9	19.0	
<i>pm Real GDP growth (%)</i>	6.2	6.1	6.1	6.2	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	2.4	3.2	0.8	1.5	1.5
Primary balance	3.9	4.6	2.2	2.8	2.7
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	2.1	3.2	1.0	1.9	2.0
Government gross debt	29.8	25.3	22.7	22.3	21.1
<i>pm Real GDP growth (%)</i>	5.5	5.9	5.9	6.2	6.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in January 2007.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and convergence programme of Bulgaria.

Table V.2.2

Main measures in the budget for 2007, Bulgaria

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>Reduction of corporate income tax rate from 15 % to 10 % (– ½ % of GDP)</li> <li>Increase in the tax-free income under the personal income tax (– ¼ % of GDP)</li> <li>Increase in excise rates on certain fuels and introduction of excise duties on coke, coal and electricity (+ ¼ % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Indexation of pensions by 8.5 % from 1 July 2007</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and convergence programme of Bulgaria.

that joined in 2004, this section tries to estimate the fiscal impact of accession for Bulgaria in 2007.

**Financial transfers between Bulgaria and the EU 2007–13:** EU funds pre-allocated to Bulgaria under the financial perspective 2007–13 amount to more than EUR 12.5 billion in total (see Table V.2.3). These figures refer to so-called appropriations for commitments which represent the maximum amount of EU funds that can be committed in a given year. For 2007, these pre-allocated funds represent around 4 % of Bulgarian GDP.

The main EU funds which are pre-allocated to Bulgaria are as follows: (i) under the budget heading ‘Sustainable growth’ and in line with the Protocol to Bulgaria’s Treaty of Accession, EUR 70 million (in 2004 prices) is assigned annually until 2009 for the decommissioning of the Kozloduj nuclear power plant. In addition, Bulgaria has also been assigned an overall envelope of EUR 6.8 billion (in current prices) for the period 2007–13 under the EU’s Structural and Cohesion Funds; (ii) an overall amount of around EUR 2.7 billion has been pre-allocated for rural development and fisheries for 2007–13. As in the case of the Member States that joined in 2004, direct payments to farmers will be gradually phased in, starting with amounts equal to 25 % of the EU-15 Member States level in 2007 <sup>(1)</sup>; (iii) in the first three years after accession Bulgaria will benefit from compensations under the Schengen and cash-flow facility foreseen in the Protocol to the Treaty of Accession <sup>(2)</sup>.

In addition, Bulgaria will also benefit from EU funds spent within the framework of various internal policies. However, these funds are not pre-allocated to specific countries but are project-based. These additional funds are therefore not taken into consideration here.

Since 1 January 2007, Bulgaria also has to contribute to the EU budget, through ‘traditional own resources’ (agricultural levies and custom duties), value added based own resources, gross national income-based resources and the UK rebate. In 2007, the Bulgarian contribution <sup>(3)</sup> is expected to amount to EUR 230 million (0.85 % of GDP). This amount excludes the traditional own resources which cannot be attributed to individual countries as they are levied at the EU external border.

**Budgetary impact in 2007:** Bulgaria will be a net recipient of EU funds over the period 2007–13. However, the impact on the general government budget can differ from the impact on the country as a whole for a number of reasons.

Firstly, the impact on the budget will depend on the actual disbursement of funds and not on their commitment. In particular in the case of Structural and Cohesion Funds, disbursements depend on the implementation of projects and will occur only over time. Especially in the first year of accession, both commitments and disbursements can only start after the approval of all operational

<sup>(1)</sup> This procedure is specified in Council Regulation (EC) No 2011/2006 and also applies to Bulgaria

<sup>(2)</sup> As published in OJ L 157, 21.6.2005.

<sup>(3)</sup> Further details on each Member State’s contribution to the EU budget can be found at: [http://eur-lex.europa.eu/budget/data/D2007\\_VOL1/EN/nmc-grseq42960935830-3/index.html](http://eur-lex.europa.eu/budget/data/D2007_VOL1/EN/nmc-grseq42960935830-3/index.html)



programmes. Actual disbursements are therefore likely to be limited in 2007. In the following analysis, it is assumed that only 20 % of the commitments in 2007 will actually be disbursed. However, in addition to disbursements under the new financial framework, Bulgaria will also still receive disbursements for commitments made under the pre-accession instruments (Phare, Sapard, ISPA), which are also taken into account here. Secondly, differences can also arise because part of the transfers from the EU will go to beneficiaries outside general government. These transfers are therefore recorded outside general government and have no impact on the budget. This concerns mainly direct payments under the common agricultural policy, but also part of the funds transferred under the Structural and Cohesion Funds and through pre-accession financial assistance. Thirdly, in cases where general government is the final beneficiary (typically transfers under the Structural and Cohesion Funds and pre-accession assistance) EU funds are usually linked to the financing of certain projects. Hence, assuming strict additionality, they affect both the revenue and expenditure side of the general government budget, but are in principle neutral in terms of the budget balance.

The only transfers that have a direct impact on the budget balance are therefore on the one hand Bulgaria's contribution to the EU, through a re-allocation of part of the VAT revenue to the EU and through transfers, and on the other hand the compensation payments received under the Schengen and cash-flow facility. The direct budgetary impact of EU accession in 2007 would indeed be negative and amount to around 0.43 % of GDP.

In analysing the budgetary impact of EU transfers, certain indirect effects should, however, also be taken into account. To the extent that EU transfers are not subject to a strict additionality rule, they can at least partly substitute previously national expenditure. This is the case in particular for direct payments under the CAP which can in principle replace national subsidies. While a strict additionality rule exists for structural fund transfers, this is not the case for the Cohesion Fund. Moreover, additionality rules for pre-accession aid refer to the project level and are therefore difficult to verify. Hence, substantial savings can in principle be realised through an appropriate restructuring of the expenditure side of the budget and a partial substitution of previously national expenditures. This potential for additional savings is captured in Table V.2.4 under the heading 'substitution', assuming that all possibilities for substituting national expenditures are used.

On the other hand, co-financing requirements as they exist under both Structural and Cohesion Funds can imply a need to mobilise additional budgetary resources. This can in principle be avoided, if the projects to be financed under the Structural and Cohesion Funds were fully aligned with national spending priorities. In practice this may, however, be difficult to realise. Therefore, in Table V.2.4 the standard maximum co-financing rates under the different funds (15 % for the Cohesion and Structural Funds in the case of Bulgaria, 25 % in the case of the Rural Development and Fisheries Funds) were applied to estimate additional expenditure needs due to co-financing.

*Table V.2.3*

**EU budget allocations to Bulgaria 2007–13 (current prices)**

Euro	2007	2008	2009	2010	2011	2012	2013	Total
<b>1. Sustainable growth</b>								
Decommissioning of Kozloduj	74.28	75.77	77.29	—	—	—	—	227.34
Structural and Cohesion Funds	514.44	737.40	991.81	1 044.07	1 116.08	1 188.43	1 260.63	6 852.86
<b>3. Natural resources</b>								-
Rural development	244.06	337.14	437.34	399.10	398.06	397.70	395.70	2 609.10
Fisheries	5.82	8.52	11.60	12.22	13.08	13.95	14.82	80.01
CAP direct payments (1)	200.38	240.52	281.15	321.38	401.62	481.96	562.31	2 489.33
<b>4. Compensations</b>	129.26	62.72	62.19	—	—	—	—	254.16
<b>Total</b>	1 168.24	1 462.07	1 861.38	1 776.77	1 928.84	2 082.04	2 233.46	12 512.79

(1) CAP: Common agricultural policy.

Source: Commission services.

Taking into account these indirect budgetary impacts via co-financing and a partial substitution of previous national expenditures, Table V.2.4 shows that the overall

budgetary impact of transfers between Bulgaria and the EU would be positive and could amount to more than 1 % of GDP in 2007.

Table V.2.4

**Budgetary effect of transfers between the EU and Bulgaria in 2007 (% of GDP)**

	EU transfers		Impact on general government budget					
	Allocations	Estimated disbursements	Direct impact (1)			Indirect impact (2)		Overall (1)+(2)
			Revenue	Expenditure	Balance	Substitution	Co-financing	Balance
<b>Pre-accession funds (a)</b>	0.00	1.23	1.02	1.02	0.00	1.02	- 0.34	0.68
<b>Sustainable growth</b>								
Decommissioning of Kozloduj NPP	0.27	0.27	0.27	0.27	0.00			
Structural and Cohesion Funds (b)	1.86	0.37	0.30	0.30	0.00	0.10	- 0.05	0.05
<b>Natural resources</b>								
Rural Development and Fisheries Fund (c)	0.90	0.18	0.04	0.04	0.00	0.04	- 0.01	0.03
CAP direct payments (d)	0.72	0.72	0.00	0.00	0.00	0.72	0.00	0.72
<b>Compensations</b>	0.47	0.47	0.47	0.00	0.47	0.00	0.00	0.47
<b>Contribution to EU budget (c)</b>								
VAT-based own resource			- 0.15		- 0.15			- 0.15
GNI-based own resource, UK rebate				0.74	- 0.74			- 0.74
<b>TOTAL</b>	<b>4.22</b>	<b>3.24</b>	<b>1.94</b>	<b>2.37</b>	<b>- 0.43</b>	<b>1.88</b>	<b>- 0.40</b>	<b>1.05</b>

- (a) The pre-accession funds include Phare, ISPA and Sapard. It is assumed that general government is the final beneficiary of 100 % of ISPA, 80 % of Phare and 50 % of Sapard Funds; there is no strict additionality attached and the maximum co-financing rate is 25 % for all three programmes.
- (b) Assuming an absorption rate of 20 % in 2007 and that the government is the final beneficiary of 80 % of the total transfers. Only the Cohesion Fund (expected to represent approximately one third of total Structural and Cohesion Fund transfers) is not subject to a strict additionality requirement. The co-financing rate is 15 % for Structural and Cohesion Funds.
- (c) Assuming an absorption rate of 20 % in 2007 and that the government is the final beneficiary of 20 % of the total transfers. Transfers are not subject to a strict additionality requirement. The maximum co-financing rate is 25 % for both funds.
- (d) The national ceiling for direct payments under the CAP is fully used and all funds are disbursed in 2007. Payments are transferred to final beneficiaries outside general government. CAP direct payments can substitute previously national subsidies.

Source: Commission services.

# 3. The Czech Republic

## Recent developments and medium-term prospects

In 2006, the general government deficit was 2.9 % of GDP, compared with a deficit target of 3.8 % of GDP set out in the November 2005 update of the convergence programme <sup>(1)</sup>. Higher-than-projected growth and lower-than-budgeted expenditures contributed to the better-than-expected outturn. As in 2005, lower-than-budgeted expenditures reflected the possibility given to government departments to carry over unspent budgetary allocations, rather than intentional and sustainable spending cuts. Unspent budgetary allocations amounted to about ¼ % of GDP, accumulating to over 2 % of GDP since 2004. Public debt in 2006 reached about 30½ % of GDP.

The budget for 2007 was approved by parliament on 13 December 2006, targeting a deficit of 4 % of GDP. On the expenditure side the budget includes an increase in social spending of about 1.1 % of GDP and an increase in research and development expenditure of about 0.1 % of GDP. On the revenue side, there are no major changes. The increase in budgetary expenditures is projected to be higher than the increase in nominal GDP, leading to a rise in the expenditure ratio of about

half a percentage point. The 2007 budget exceeds the medium-term expenditure ceilings set by the Czech authorities. The deficit target of 4 % of GDP for 2007 in the March 2007 convergence programme exceeds the target of 3.3 % of GDP of the November 2005 convergence programme. The increase in the target is due to the expansionary budget of 2007 and is broadly in line with the Commission services' spring 2007 forecast for a deficit of 3.9 % of GDP for 2007. This forecast is based on the assumption that the reserve fund of unspent budgetary allocations will remain constant in 2007, unlike in 2006. Fiscal policy is expected to be expansionary in 2007 as the structural primary balance is estimated to deteriorate by 1¼ % of GDP.

The Commission services' forecasts for 2008 a deficit of 3.6 % of GDP, based on a no-policy change assumption. The structural primary balance is estimated to improve in 2008 by some ¼ % of GDP. The envisaged deficit for 2008 set in the March 2007 convergence programme is 3½ % of GDP while the new government has announced a package of as yet unapproved measures intended to bring about a stronger reduction in the deficit for 2008. In 2009, the convergence programme envisages the general government deficit to be reduced to 3.2 % of GDP.

The general government debt ratio is projected by the Commission services to slightly increase in 2007 and 2008 to about 31 % of GDP.

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<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

Table V.3.1

**Budgetary developments 2005–09, Czech Republic (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	– 3.5	– 2.9	– 3.9	– 3.6	
— Total revenues	40.4	39.5	39.2	39.4	
<i>Of which:</i>					
— current taxes	20.8	19.8	19.7	19.9	
— social contributions	15.1	15.0	14.7	14.5	
— Total expenditure	44.0	42.5	43.1	43.0	
<i>Of which:</i>					
— collective consumption	11.2	10.8	10.9	10.7	
— social transfers in kind	11.0	10.6	10.7	10.5	
— social transfers other than in kind	11.5	11.4	11.1	10.7	
— interest expenditure	1.2	1.1	1.1	1.0	
— gross fixed capital formation	4.9	5.1	5.3	5.3	
Primary balance	– 2.4	– 1.8	– 2.8	– 2.6	
Tax burden	36.4	35.4	35.0	34.9	
One-off and other temporary measures	– 1.1	– 0.2	0.0	0.0	
Structural balance <sup>(3)</sup>	– 2.0	– 2.8	– 4.1	– 3.8	
Structural primary balance	– 0.9	– 1.7	– 3.0	– 2.8	
Government gross debt	30.4	30.4	30.6	30.9	
<i>pm Real GDP growth (%)</i>	6.1	6.1	4.9	4.9	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	– 3.6	– 3.5	– 4.0	– 3.5	– 3.2
Primary balance	2.5	2.4	2.6	2.0	1.6
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	– 3.4	– 3.9	– 4.4	– 3.9	– 3.5
Government gross debt	30.4	30.6	30.5	31.3	32.2
<i>pm Real GDP growth (%)</i>	6.1	6.0	4.9	4.8	4.8

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in March 2007.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and March 2007 update of the convergence programme of the Czech Republic.

Table V.3.2

**Main measures in the budget for 2007, Czech Republic**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
	<ul style="list-style-type: none"> <li>• Increase in social transfers (1.1 % of GDP)</li> <li>• Increase in R &amp; D expenditures (0.1 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and March 2007 update of the convergence programme of the Czech Republic.

## 4. Denmark

### Recent developments and medium-term prospects

In 2006, the general government recorded a surplus of 4.2 % of GDP <sup>(1)</sup>. This was markedly higher than the surplus of 2.1 % of GDP projected in the November 2005 convergence programme. It marks the continuation of relatively sizeable surpluses in recent years, which in particular are due to healthy economic growth. Together with increasing employment and a persistent fall in unemployment to historically low levels, this has implied higher tax revenue and lower expenditure due to a fall in transfer payments. However, the higher-than-estimated surpluses are also due to certain windfall revenues. Notably, high energy prices have resulted in strong tax revenue from oil and gas activities in the North Sea and favourable developments in financial markets in the second half of 2006 implied stronger than estimated revenue from the taxation of pension funds. Against the background of the high surplus, the government debt ratio was reduced further to just above 30 % of GDP in 2006.

The central government budget for 2007 was approved by parliament on 13 December 2006. The budget was presented against the backdrop of the tax freeze introduced in 2001. Consequently, no taxes or fees were raised. Overall, the budget did not contain any quantitatively significant revenue measures. On 18 April 2007, however, the government presented an agreement to lower the corporate tax rate by 3 percentage points to 25 %, with effect from 2007. The Danish corporate tax rate was thereby brought in line with the current average tax rate in EU. On the expenditure side, the budget confirmed the upward revision of the target for annual real growth of public consumption from ½ to 1 %, which was agreed in the context

of the 'Agreement on wealth and welfare and investments in the future' of June 2006. The new expenditure measures were limited and focused on initiatives in response to the challenges of globalisations, e.g. the setting-up of a globalisation fund, and on health and welfare. According to the most recent update of the convergence programme, which was submitted to the Commission in November 2006, a general government surplus of 2.8 % of GDP is projected for 2007 <sup>(2)</sup>. This is 1 percentage point lower than the estimated surplus in the Commission services' spring 2007 forecast. The difference is mainly due to the fact that the governments estimate does not take into account the higher-than-expected surplus for 2006. It is also due to a rather cautious macroeconomic scenario in the convergence programme. As measured by the change in the structural primary balance, the fiscal stance appears to be mildly expansionary in 2007.

For 2008, the Commission services' spring 2007 forecast projects a surplus of 3¾ % of GDP, similar to the projection for 2007. This forecast is based on a no-policy-change assumption and, hence, only takes into account measures' for which at least draft laws exist. The Commission services' projection is markedly higher than the expected surplus of 2.5 % of GDP presented in the most recent update of the convergence programme. This is mainly due to a markedly cautious macroeconomic scenario in the programme beyond 2007, which is based on a technical assumption of a closing output gap by 2010. However, the assumption of a gradual fall in the oil price over the programme period until 2010 also plays a role. On the basis of these assumptions, the programme forecasts the surplus to be reduced further to 1.8 % of GDP and 1.2 % of GDP in 2009 and 2010, respectively.

<sup>(1)</sup> The government accounts of Denmark now include the pension reform costs, as the transitory period on the sectoral classification of pension schemes expired. The funded second-pillar pension scheme is now classified in the corporate sector, rather than in government. Targets in convergence programmes were adapted so that data are comparable.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

On the basis of continued general government surpluses, the debt ratio is expected to continue to fall. According to the Commission services' spring forecast the debt ratio is expected to reach 25 % of GDP in 2007 and 20 % of GDP

in 2008. Considering the somewhat higher surpluses projected by the Commission services, this is a slightly more rapid reduction of the debt ratio than outlined in the latest update of the convergence programme.

Table V.4.1

**Budgetary developments 2005–10, Denmark (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	4.7	4.2	3.7	3.6		
— Total revenues	57.2	55.1	53.8	53.1		
Of which: — current taxes	48.9	47.3	46.2	45.8		
— social contributions	2.0	2.0	1.9	1.9		
— Total expenditure	52.6	50.9	50.1	49.6		
Of which: — collective consumption	7.7	7.7	7.5	7.4		
— social transfers in kind	18.1	17.9	17.8	17.7		
— social transfers other than in kind	16.2	15.3	15.4	15.2		
— interest expenditure	1.8	1.6	1.4	1.2		
— gross fixed capital formation	1.8	1.8	1.6	1.5		
Primary balance	6.5	5.8	5.0	4.7		
Tax burden	50.3	48.7	48.6	48.1		
One-off and other temporary measures	0.2	0.3	0.3	0.0		
Structural balance <sup>(3)</sup>	4.7	3.7	3.4	3.9		
Structural primary balance	6.5	5.2	4.7	5.0		
Government gross debt	36.3	30.2	25.0	20.0		
<i>pm Real GDP growth (%)</i>	3.1	3.2	2.3	2.0		
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	4.0	3.1	2.8	2.5	1.8	1.2
Primary balance	5.8	4.7	4.3	3.4	2.5	1.8
One-off and other temporary measures	0.3	0.3	0.3			
Structural balance <sup>(3)</sup> <sup>(5)</sup>	3.5	2.2	1.9	2.7	2.6	2.7
Government gross debt	36.2	29.8	25.8	22.7	20.5	19.0
<i>pm Real GDP growth (%)</i>	3.6	2.7	2.0	0.7	0.7	0.6

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in November 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and November 2006 convergence programme of Denmark.

Table V.4.2

**Main measures in the budget for 2007, Denmark**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Lower corporate tax rate (– 0.3 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Globalisation (0.1 % of GDP)</li> <li>• Welfare reform (0.1 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Source: Commission services, 2007 budget law and the Danish Ministry of Finance.

## 5. Germany

### Recent developments and medium-term prospects

In 2006, the general government deficit amounted to 1.7 % of GDP, against the target of 3.3 % of GDP set in the February 2006 update of the stability programme. About half of this unexpected improvement in the government balance is due to cyclical factors (real GDP actually grew by 2.7 % compared with the update's projection at 1.4 %). The principal contribution to the better structural outturn comes from the revenue side. Direct taxes, especially those related to profits, yielded substantially stronger revenues than economic developments would have suggested. As a result, the tax ratio increased by more than ½ percentage point in 2006 compared with 2005. This is not the result of recent discretionary tax policy measures. Rather, it was partly driven by payments of tax arrears and early payments of direct taxes, to some extent the counterpart of the relatively low direct tax ratio of the recent past. General government expenditure has been kept under firm control in 2006, growing only by 0.6 % and thus slightly less than targeted. Government debt amounted to 67.9 % of GDP at the end of 2006.

In 2007, the increase in the standard VAT rate from 16 % to 19 % is expected to boost general government revenue by about 1 % of GDP. The pension contribution rate was raised from 19.5 % to 19.9 % and public health insurers are projected to increase contribution rates on average by ½ percentage point. On the other hand, the unemployment insurance contribution rate has been reduced from 6.5 % to 4.2 %, so that the overall social contributions as a percentage of GDP will decline. The German authorities projected the deficit to amount to 1.6 % of GDP in the updated stability programme of November 2006 <sup>(1)</sup>. In view of the improving macroeconomic situation and the lower-than-expected 2006 deficit, the deficit projec-

tion was revised to 1.2 % of GDP in the April 2007 notification for the excessive deficit procedure. The Commission services' spring 2007 forecast, with a significantly more favourable macroeconomic scenario, projects the deficit ratio to decline to 0.6 % of GDP. With the structural deficit estimated to narrow by ¾ percentage point, the fiscal stance would be restrictive.

Under the assumption of unchanged policies, including social contribution rates, the general government deficit is projected by the Commission services to decline further to 0.3 % of GDP in 2008, albeit almost entirely due to persistent favourable cyclical conditions. Continuing consolidation effects of measures already in force will be more than offset by the budgetary impact from the planned reform of company taxation, for which the government presented a draft law in March 2007, amounting to more than 0.3 % of GDP in the initial year. While the update of the stability programme did not imply an improvement in the structural balance in 2008, its premises of a less favourable macroeconomic outlook and the higher projected deficits in the preceding years resulted in a deficit projection at 1½ % of GDP in 2008, falling to ½ % of GDP by 2010.

With GDP growth expected to remain buoyant, the Commission services' spring 2007 forecast projects the debt ratio to decline to 63.6 % of GDP by 2008. This decline is steeper than projected in the updated stability programme of November 2006, which foresees a debt ratio at 66½ % of GDP for 2008.

### National budgetary coordination

On 5 June 2007, the Council decided that Germany had corrected its excessive deficit in 2006. The general government deficit had been above the 3 % of GDP reference value since 2002. In last year's edition of this report, the existing mechanisms of national budgetary coordination in Germany were discussed and it was argued that some of the difficulties in implementing

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

corrective measures arose because of the way national budgetary procedures are institutionalised <sup>(1)</sup>. The focus was on the expenditure coordination mechanism between the federal level and the State level (all *Länder* combined), which was set up in July 2002, when an amendment to the Law on Budgetary Principles (*Haushaltsgrundsätze-gesetz*, HGrG) entered into force in order to implement, at the national level, the commitments made by Germany in the context of the Stability and Growth Pact. At the time, this meant a balanced general government budget by 2004.

In the 2002 Fiscal Planning Council (*Finanzplanungsrat*, FPLR), the levels of government agreed to implement the law as follows. In 2003 and 2004, the federal level was to reduce expenditure by ½ % on average per year (in nominal terms), the *Länder* were to limit joint expenditure growth to 1 % on average per year. The agreement was renewed on 16 June 2004, relaxing the expenditure target for the federal level: its annual expenditure growth should not exceed 1 % on average in 2005 and 2006. The target for the *Länder* level remained unchanged.

The agreement neither details data requirements for monitoring, nor are progress reports published. Table V.5.3 shows compliance with the targets of the second agreement, which elapsed in 2006. The federal level and

<sup>(1)</sup> See European Commission (2006a).

Table V.5.1

**Budgetary developments 2005–10, Germany (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	- 3.2	- 1.7	- 0.6	- 0.3		
— Total revenues	43.5	44.0	43.7	43.4		
Of which:						
— current taxes	10.2	10.8	10.9	10.8		
— social contributions	17.7	17.4	16.5	16.4		
— Total expenditure	46.8	45.7	44.3	43.7		
Of which:						
— collective consumption	7.7	7.5	7.2	7.1		
— social transfers in kind	11.0	11.0	10.9	10.8		
— social transfers other than in kind	19.2	18.6	17.7	17.3		
— interest expenditure	2.8	2.8	2.8	2.8		
— gross fixed capital formation	1.3	1.4	1.4	1.5		
Primary balance	- 0.5	1.1	2.2	2.5		
Tax burden	39.1	39.8	39.7	39.5		
One-off and other temporary measures	0.1	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	- 2.4	- 1.5	- 0.8	- 0.7		
Structural primary balance	0.4	1.3	2.0	2.0		
Government gross debt	67.9	67.9	65.4	63.6		
<i>pm</i> Real GDP growth (%)	0.9	2.7	2.5	2.4		
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	- 3.2	- 2.1	- 1 ½	- 1 ½	- 1.0	- ½
Primary balance	- 0.5	- 1 ½	1.0	1.0	1 ½	2.0
One-off and other temporary measures	0.1	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 2.7	- 2.0	- 1.5	- 1.5	- 1.0	- 0.6
Government gross debt	67.9	67.9	67.0	66.5	65.5	64.5
<i>pm</i> Real GDP growth (%)	0.9	2.3	1.4	1.7	1.7	1.7

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in November 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and November 2006 update of the stability programme of Germany.



Table V.5.2

**Main measures in the budget for 2007, Germany**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• VAT and insurance tax (from 16 % to 19 %) (up to 1% of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Discretionary restraint in labour market expenditure (0.1–0.2 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Social contributions (in total: – 0.4 % of GDP)                             <ul style="list-style-type: none"> <li>— unemployment insurance (6.5 % to 4.2 %)</li> <li>— pension system (19.5 % to 19.9 %)</li> <li>— public healthcare (14.2 % to 14.7 % on average)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Healthcare reform 2007 (negligible)</li> </ul>
<ul style="list-style-type: none"> <li>• Reduction of tax allowances (0.1 % of GDP)</li> </ul>	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and various draft laws.

social security are combined, since the social security schemes are controlled by the federal budget through legislation. Likewise, the *Länder* and the local level are combined, since local governments are under fiscal supervision by the respective *Land*. Transfers to other subsectors of government are netted out, so that only the direct expenditures (*unmittelbare Ausgaben*) are considered. Summing direct expenditures over subsectors yields total consolidated expenditure of general government. In order to be consistent with the Stability and Growth Pact, data are in national accounts.

Table V.5.3 shows that the first expenditure agreement for the years 2003 and 2004 had been respected by the *Länder* but not by the federal level <sup>(1)</sup>. This agreement was made before the excessive deficit procedure was initiated. Its underlying aim was to bring the general government account into balance by 2004. With hindsight, however, the expenditure agreement taken in 2002 would not have been strict enough to enable Germany to correct the excessive deficit over the period of this agreement, i.e. by 2004. Given actual revenue developments, if the agreement had been overall just respected, the general government deficit would have amounted to 3.4 % of GDP instead of the actual 3.7 % of GDP in 2004. Taking the actual performance of the *Länder* as given, whose budgetary execution was even tighter than required by the agreement, and if the federal level had just met its target, the general government deficit would have amounted to 3.1 % of GDP in 2004. Certainly, actual revenue developments over this period reflect unex-

pected growth shortfalls; however, the agreement was not revised when they became apparent. By contrast, the second agreement of June 2004 was respected by both levels of government, and budgetary execution was even tighter than required therein.

What can explain the different performance over the two consecutive agreements? Expenditure growth at the federal level (including the social security systems) amounted to 0.5 % on average during the first agreement. Social benefits contributed 0.6 percentage points to expenditure growth, current transfers (outside German Government) 0.2 percentage point and intermediate consumption 0.1 percentage point. Conversely, gross investment and the public wage bill remained stable, and expenditure growth was dampened by subsidies and interest expenditure; the latter reflected falling interest rates. At the *Länder* and local level, social benefits even contributed 0.7 percentage point, but this was countered especially by investment (– 0.6 percentage points) and also investment grants (– 0.3 percentage points). The contribution of intermediate consumption and public wages was mildly positive.

During the second agreement, social benefits contributed only 0.4 percentage points to average expenditure growth at the federal level, while intermediate consumption now contributed 0.3 percentage points. The remaining components, including public wages, remained almost stable. At the *Länder* level, the contribution of social benefits to expenditure growth was 0.4 percentage points, while that of intermediate consumption soared to 0.6 percentage points and interest payments to 0.3 percentage points. This was countered

<sup>(1)</sup> Differences from the table in last year's edition of this report are due to data revisions.

especially by public sector wages (–0.3 percentage points), investment and investment grants.

Overall, this analysis confirms the broad picture that expenditure restraint in Germany relied particularly on reducing investment and the cost of public administration. The latter involved both modest public sector wage agreements (reflecting wage moderation in the private sector) and a substantial reduction in staff levels (on average over 2 % per year between 2002 and 2005). Other consolidation efforts are somewhat hidden behind these figures. For example a public healthcare reform dampened expenditure growth considerably in 2004 by contributing one half to the federal expenditure restraint (but healthcare spending returned to previous growth rates thereafter) and the strong improvement in the labour market in 2006 helped containing expenditure of social security.

Moreover, the composition of expenditures between subsectors of government is quite different. While the *Länder* and local governments account for about 70 % of total public investment and even 77 % of the public sector wage bill, the federal level controls directly 85 % of social expenditure. Even so, social benefits at the *Länder* level consist mostly of pensions for civil servants and basic social aid. This implies that the federal expenditure is far more exposed to cyclical fluctuations.

Overall, the results of the expenditure agreement between levels of government give a mixed picture. Even though the *Länder* levels performed better than planned in the first agreement, in 2004 the federal level was not able to reverse enough its high expenditure growth of the preceding year, some of which was due to

worsening cyclical conditions. By the same token, the federal level benefited towards the end of the second agreement from improving cyclical conditions, while the *Länder* levels began rising especially consumption.

The agreement was renewed in the FPLR meeting of 29 June 2006. Nominal expenditure growth should not exceed 1 % per year on average in the years 2007 to 2010.

Despite the remarkable expenditure restraint between 2002 and 2006, the agreement has not fully achieved the intended results in its first implementation until 2004. It is unknown whether the soft sanctioning device (a recommendation by the Fiscal Planning Council) has been applied at the time. Moreover, the targets are not well-defined in terms of statistics.

Finally, it is not clear whether, for the remaining years, the existence of this agreement was the reason why its expenditure targets have been respected. Its non-binding nature makes the agreement a softer device for budgetary control at subsectors of government than the constitutional requirement that net borrowing should not exceed gross investment (excluding investment grants received) in cash terms for each budgetary authority. Between 1991 and 2006, almost 30 % of all budgets (the federal and each of the 16 *Länder*) violated this constraint *ex post* <sup>(1)</sup>. The definition of gross investment for this budgetary rule is wider than in national accounts and invites to some accounting creativity. Moreover, the rule

<sup>(1)</sup> See Kitterer and Groneck (2006) for the years 1991–2005; Statistisches Bundesamt (2007) for 2006.

Table V.5.3

Agreements on expenditure growth for subsectors of government in %

	2002 % of total expenditure	2003 (1)	2004 (2)	Target average (1),(2)	Result average (1),(2)	2005 (3)	2006 (4)	Target average (3),(4)	Result average (3),(4)
Federal government and social security	63.1	2.2	–1.2	–0.5	0.5	1.2	0.2	1.0	0.7
<i>Länder</i> and local governments	36.9	0.8	–0.2	1.0	0.3	0.2	1.3	1.0	0.7
General government <sup>(1)</sup>	100.0	1.7	–0.8	(0.06)	0.4	0.9	0.6	(1.0)	0.7

<sup>(1)</sup> The agreement does not contain a target for general government. Numbers in parentheses are implicit.

Sources: Federal Statistical Office, Commission services' calculations.

usually foresees a vague exception clause ('deviation from the equilibrium of the total economy'), which is not made operational in numerical terms.

In March 2007, a joint commission of federal and State representatives began work on the modernisation of fiscal relations between federal and *Länder* levels (*Föderalismuskommission II*). The aim is, among other things,

to strengthen the fiscal accountability of each budgetary authority. Particular attention will be given to: (i) establishing an early-warning system, by developing criteria for government borrowing and instruments for enforcement, taking into account structural differences between the *Länder*, and by using a common system of accounts; (ii) ways to resolve acute budgetary crises at sublevels of government. Results are expected for early 2009.

## 6. Estonia

### Recent developments and medium-term prospects

In 2006, public finances were considerably better than originally budgeted. The general government surplus reached 3.8 % of GDP, against the projection of 0.1 % of GDP in the December 2005 update of the convergence programme. The main reasons behind this outturn were higher-than-expected tax revenues due to exceptionally buoyant economic activity. At the same time expenditure plans of some times, in particular public investment, were not fully implemented and carried over to 2007. Efficiency of tax collection has also improved in recent years, coupled with measures implemented by the government to stimulate declaration of income. In September 2006 the government adopted a supplementary budget to allocate higher-than-expected revenues of 2.5 % of GDP, of which one third was placed in the pension insurance reserve and the remaining part mainly directed towards additional investment. The government debt ratio continued to decline and stood at 4.1 % of GDP as of end-2006.

The State budget for 2007 was adopted by the government in September 2006 and by the parliament in December. The budget, restricted to central government and social security funds, set a precedent compared to the previous practice of targeting nominal balance by projecting an overall surplus of 0.5 % of GDP. This compares with the general government surpluses of 1.2 % of GDP in the November 2006 update of the convergence programme and of 1.9 % of GDP in the spring 2007 forecast of the Ministry of Finance <sup>(1)</sup>. Such adjustment repeats the practice of recent years, according to which cautiously set targets are subsequently considerably overachieved.

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

For 2007 the Commission services' spring 2007 forecast projects a general government surplus of 3.7 % of GDP. The more optimistic projection compared with the official view results from the expectation of continued strong and domestic demand led economic growth and a sizeable overachievement of fiscal targets in recent years. Robust domestic demand associated with attractive credit conditions, rising wages and disposable income of households, should contribute to higher-than-budgeted inflows of taxes, as is already evident from healthy tax receipts during the first months of 2007.

The main measures foreseen by the 2007 budget include on the revenue side further reduction of the income tax rate, which is the same for both individuals and corporations, by one percentage point to 22 %, an increase in the personal income tax-free threshold for families with children, and on the other hand a rise in the social tax minimum contribution basis and an increase in VAT applied to heating and certain medical equipment. On the expenditures side, the main changes include increase in pensions and family allowances, as well as investments in the field of public order and safety, inter alia to comply with the Schengen technical requirements. On the basis of the Commission services' spring 2007 forecast, the fiscal stance as measured by the change in the structural primary balance appears broadly neutral.

For 2008, the Commission services' spring 2007 forecast, which is based on the customary no-policy-change assumption, projects a general government surplus of 3.5 % of GDP, while the medium-term budgetary strategy of Estonia, embodied in the 2006 update of the convergence programme, foresees the general government surplus to be 1.3 % of GDP in 2008 and to grow to about 1½ % of GDP thereafter. The income tax rate will continue to decline by one percentage point yearly and reach 20 % in 2009.

General government debt, which is the lowest in the EU, will continue to decline further. Following repayment of Eurobonds amounting to 0.7 % of GDP, it is projected that the general government debt will fall below 3 % of

GDP in 2007. The net financial position of the general government is already positive, as the government has accumulated substantial financial assets amounting to 13 % of GDP as of end-2006.

*Table V.6.1*

**Budgetary developments 2005–10, Estonia (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>		
General government balance	2.3	3.8	3.7	3.5		
— Total revenues	35.5	37.0	36.2	35.9		
<i>Of which:</i>						
— <i>current taxes</i>	20.2	20.7	20.8	20.8		
— <i>social contributions</i>	10.5	10.4	10.3	10.2		
— Total expenditure	33.2	33.2	32.4	32.4		
<i>Of which:</i>						
— <i>collective consumption</i>	7.9	7.7	7.7	7.6		
— <i>social transfers in kind</i>	9.5	9.1	8.6	8.4		
— <i>social transfers other than in kind</i>	9.2	9.0	9.1	9.1		
— <i>interest expenditure</i>	0.2	0.2	0.1	0.1		
— <i>gross fixed capital formation</i>	3.2	3.6	3.8	4.0		
Primary balance	2.5	3.9	3.8	3.6		
Tax burden	30.9	31.3	31.2	31.1		
One-off and other temporary measures	0.0	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	2.4	3.3	3.5	3.8		
Structural primary balance	2.6	3.4	3.6	3.9		
Government gross debt	4.4	4.1	2.7	2.3		
<i>pm Real GDP growth (%)</i>	10.5	11.4	8.7	8.2		
<b>Convergence programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
General government balance	2.3	2.6	1.2	1.3	1.6	1.5
Primary balance	2.5	2.8	1.4	1.4	1.7	1.6
One-off and other temporary measures	0.0	0.6	0.4	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	2.2	1.4	0.4	1.2	1.7	1.7
Government gross debt	4.5	3.7	2.6	2.3	2.1	1.9
<i>pm Real GDP growth (%)</i>	10.5	11.0	8.3	7.7	7.6	7.5

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

*Sources:* Commission services and December 2006 update of the convergence programme of Estonia.

Table V.6.2

**Main measures in the budget for 2007, Estonia**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Personal and corporate income tax: reduction of income tax rate from 23 % to 22 % (- 0.34 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in pensions (0.88 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Personal income tax: basic exemption is applicable starting from second child, previously from third child (- 0.15 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in parental and family benefits, in particular increase in child allowances to EEK 900 starting from third child (0.06 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• VAT: standard 18 % rate applied to heating from 1.7.2007, previously 5 % (0.07 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Issuance of biometric travel documents and investments in the field of public order and safety (0.08 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• VAT: standard 18 % rate applied to certain medical equipment from 1.1.2007, previously 5 % (0.03 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Social tax: increase in social tax minimum contribution basis from EEK1 400 to EEK 2 000 (0.11 % of GDP)</li> </ul>	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and December 2006 update of the convergence programme of Estonia and Estonian Ministry of Finance.

## 7. Ireland

### Recent developments and medium-term prospects

In 2006, the general government balance is estimated to have posted a surplus of 2.9 % of GDP. This compares with a deficit target of 0.6 % of GDP set in the December 2005 update of the stability programme <sup>(1)</sup>. Starting from a 0.8 % of GDP higher surplus in 2005 than expected, the significantly better-than-projected outturn in 2006 is essentially due to the revenues. The increase in the total revenue ratio by almost 1½ percentage points of GDP between 2005 and 2006 is attributable to tax receipts arising from a more tax-rich growth. It reflects in particular the high levels of activity and valuations in the housing market boosting related tax receipts (capital gains and stamp duties), but also higher output growth having a similar effect on corporation and personal income taxes. Overall expenditure was slightly below target, in particular as lower-than-budgeted cash social transfers more than offset higher than expected 'other' expenditure. Government debt was at 24.9 % of GDP in 2006, which is around 3 percentage points less than budgeted.

The budget for 2007 was presented on 6 December 2006, together with the updated stability programme for 2006–09. On the revenue side, the main measures include a more generous personal income tax regime and a less onerous VAT for small businesses. One measure worthy of note, even if its total budgeted cost is not large, is a slight increase in mortgage relief, particularly for first-time buyers. On the expenditure side, the budget foresees further increases in social welfare payments and other social transfers, additional funds for elderly and disabled care and increased capital expenditure as part of the new medium-term public investment programme 'National development plan 2007–13'. Built on a still positive outlook for the Irish economy, although with

some easing due to the property market, the 2007 budget targeted a general government surplus of 1.2 % of GDP. The target was later revised to 1.1 % of GDP, mainly on account of an upward revision of expenditure commitments at central government level and a worsening in the forecast balances of the social insurance fund. For 2007, the Commission services' spring 2007 forecast projects a somewhat better outcome, a surplus of 1.5 % of GDP, taking account of the recent record of much better-than-expected budgetary outturns <sup>(2)</sup>. Given the projected worsening of the general government balance in 2007, the deterioration in the structural balance by over 1 % of GDP points to an expansionary fiscal stance <sup>(3)</sup>.

In view of the non-indexed nature of the tax and social benefit systems, the no-policy-change assumption for 2008 is made operational, in the absence of new announced measures, by freezing average nominal tax rates and adjusting social transfer payments by the forecast CPI inflation rate (with a small top-up). On these assumptions, the Commission services' spring 2007 forecast projects a surplus shrinking further to 1 % of GDP, only marginally better than the target in the December 2006 stability programme update. For 2009, the programme projects a further decline in the surplus to 0.6 % of GDP. Overall, the public finances are expected to remain strong over the forecast period. However, some of the macroeconomic risks (notably related to developments in the housing sector), if realised, have the potential to weigh negatively on the Irish public finances <sup>(4)</sup>.

The government debt ratio is projected to decrease further in 2007 and 2008 to less than 22 % of GDP. The

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://europa.eu.int/comm/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://europa.eu.int/comm/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> The forecast of the general government deficit of Ireland for 2006, as stated in the April 2006 fiscal notification.

<sup>(3)</sup> Cyclically adjusted balance net of one-off and other temporary measures.

<sup>(4)</sup> While robust growth of the Irish economy is expected to continue, the Commission services spring 2007 forecast points also to some risks in the years ahead. On the external side, recent competitiveness pressures expose the economy's sensitivity to changes in the global economic environment. On the domestic side, the extended residential construction boom and accelerating house prices are noteworthy risks over the medium term.

debt ratio would be falling at a faster pace in the absence of the accumulation of non-general government assets in

the National Pensions Reserve Fund (NPRF), established in 2001 to pre-fund future pension liabilities.

*Table V.7.1*

**Budgetary developments 2005–09, Ireland (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	
General government balance	1.0	2.9	1.5	1.0	
— Total revenues	35.5	36.9	36.6	36.4	
<i>Of which:</i>					
— <i>current taxes</i>	25.8	27.1	27.0	27.0	
— <i>social contributions</i>	6.2	6.2	6.2	6.2	
— Total expenditure	34.4	34.1	35.1	35.5	
<i>Of which:</i>					
— <i>collective consumption</i>	5.5	5.5	5.5	5.6	
— <i>social transfers in kind</i>	10.4	10.4	10.4	10.5	
— <i>social transfers other than in kind</i>	8.7	8.2	8.9	8.9	
— <i>interest expenditure</i>	1.0	1.0	1.0	1.0	
— <i>gross fixed capital formation</i>	3.7	3.9	4.1	4.3	
Primary balance	2.0	3.9	2.5	2.0	
Tax burden	30.8	32.2	32.1	32.1	
One-off and other temporary measures	0.3	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	0.8	3.0	1.8	1.6	
Structural primary balance	1.9	4.0	2.9	2.6	
Government gross debt	27.4	24.9	23.0	21.7	
<i>pm Real GDP growth (%)</i>	5.5	6.0	5.0	4.0	
<b>Stability programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
General government balance	1.1	2.3	1.2	0.9	0.6
Primary balance	2.1	3.3	2.3	1.8	1.6
One-off and other temporary measures	0.3	-0.1	—	—	—
Structural balance <sup>(3)</sup> <sup>(5)</sup>	1.0	2.9	1.8	1.8	1.6
Government gross debt	27.4	25.1	23.0	22.4	21.9
<i>pm Real GDP growth (%)</i>	5.5	5.4	5.3	4.6	4.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the Irish stability programme.



Table V.7.2

**Main measures in the budget for 2007, Ireland**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• For personal incomes, more generous tax-exempt thresholds, widening of standard rate tax bands and a reduction of the higher rate (– 0.7 % of GDP)</li> <li>• Less onerous VAT regime, with changes oriented towards small businesses and mainly of a one-off cash-flow nature (– 0.1 % of GDP)</li> <li>• Mortgage interest relief (less than – 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased social welfare weekly rates (0.6 % of GDP) and child and family benefits (0.1 % of GDP)</li> <li>• Additional funds for elderly and disabled care (0.2 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and Irish Department of Finance, budget 2007.

## 8. Greece

### Recent developments and medium-term prospects

In 2006, the government deficit was 2.6 % of GDP <sup>(1)</sup>, in line with the target projected in the previous update of the stability programme in December 2005 <sup>(2)</sup>. The 2006 deficit figure includes 0.6 % of GDP temporary revenues (deferred payments by banks in exchange of the assumption by social security of pension commitments). Without one-off revenues the 2006 deficit would have been 3.2 % of GDP. The outcome is identical to the estimation in the December 2006 updated stability programme. The debt-to-GDP ratio is moving downwards slowly, from an average of almost 110 % over the period 2001–05 to around 104½ % in 2006.

The 2007 budget was adopted by the Greek Parliament on 22 December 2006. According to the budget law, the official objective for 2007 is a deficit of 2.4 % of GDP. On the revenue side, the budget envisages a reform in personal-income taxation and a further rise in excise taxes on fuel, while intensifying the fight against tax evasion. On the expenditure side, the annual growth of primary expenditures is projected to fall short of that of nominal GDP and, along with a further reduction in interest payments, should lead to a decline in the expenditures ratio. The reduction will be supported by a slower growth in the total public wage bill (approximately 25 % of total primary expenditure), which according to the budget will not exceed 6 % in nominal terms. Significant cutbacks in intermediate consumption (mainly administrative cost and procurement) and public investment are also planned.

According to the Commission services' spring 2007 forecast, the general government deficit is projected to be 2.4 % of GDP in 2007. This includes additional expenditure-saving measures of a permanent nature amounting to around ¼ % of GDP as well as additional one-off revenues of the same amount, both announced by the Minister for Finance on the cut-off date of the forecast. Without one-off revenues, the Commission services deficit forecast for 2007 would be 2.9 % of GDP. This is above the objective of 2.4 % of GDP set in the December 2006 updated stability programme, which did not include the additional consolidation measures announced by the Greek authorities in April this year. In particular, the impact of the announced measures is projected to be offset by (i) a more cautious growth assumption in the Commission services' spring forecast and (ii) the fact that the permanent measures included in the stability programme would, in Commission services view, be insufficient to fully compensate for the decline in one-off revenues from 0.6 % of GDP in 2006 (excluding those announced in April) to ¼ % of GDP in 2007.

In 2007, total revenues are projected to decline by less than ¼ percentage point, as higher indirect taxes are likely to only partly compensate reductions in revenues from takeovers of pension funds, and direct tax revenues are to decline in view of the personal income tax cuts. In parallel, expenditure is projected to fall by around ½ % of GDP, mainly driven by lower interest expenditure, public consumption and gross fixed capital formation, and only partly offset by social transfers' increases. Overall, the structural balance, i.e. the cyclically adjusted balance net of one-off and other temporary measures is estimated to improve by around ¼ % of GDP in 2007. Based on a no-policy-change assumption, the projection for 2008 is a deficit of around 2¾ % of GDP. This compares with the target set in the December 2006 updated stability programme of Greece of 1.8 % of GDP for 2008 and 1.2 % of GDP for 2009.

<sup>(1)</sup> GDP in this document refers to the old GDP series provided by the Greek authorities as an annex to the EDP notification of April 2007. The 'revised' GDP data reported by the Greek authorities in October 2006, which would lead to an upward revision of nominal GDP by around 26 % per year since 2000, are still subject to examination by Eurostat.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

The Commission services' spring 2007 forecast projects a general government debt-to-GDP ratio at just below 101 % in 2007, which is close to the target shown in the December 2006 updated stability programme. Increasing primary surpluses, lower debt-increasing stock-flow

adjustments, privatisations, and sustained nominal GDP growth all contribute to a further reduction of the debt-to-GDP ratio in 2008, at just below 98 %. According to the December 2006 updated stability programme, the debt-to GDP-ratio is foreseen at 91¼ % in 2009.

Table V.8.1

**Budgetary developments 2005–09, Greece (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	
General government balance	- 5.5	- 2.6	- 2.4	- 2.7	
— Total revenues	41.6	43.2	43.0	42.5	
<i>Of which:</i>					
— current taxes	9.2	8.7	8.6	8.6	
— social contributions	14.4	14.9	14.9	14.6	
— Total expenditure	47.1	45.8	45.5	45.2	
<i>Of which:</i>					
— collective consumption	9.6	9.3	10.4	10.4	
— social transfers in kind	6.4	6.2	4.7	4.7	
— social transfers other than in kind	17.6	17.7	18.1	18.1	
— interest expenditure	4.9	4.6	4.4	4.2	
— gross fixed capital formation	3.5	3.6	3.5	3.5	
Primary balance	- 0.6	2.0	2.0	1.5	
Tax burden	36.6	36.7	36.8	36.5	
One-off and other temporary measures	0.0	0.6	0.5	0.0	
Structural balance <sup>(3)</sup>	- 6.1	- 3.9	- 3.6	- 3.4	
Structural primary balance	- 1.2	0.7	0.8	0.8	
Government gross debt	107.5	104.6	100.9	97.6	
<i>pm Real GDP growth (%)</i>	3.7	4.3	3.7	3.7	
<b>Stability programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
General government balance	- 5.2	- 2.6	- 2.4	- 1.8	- 1.2
Primary balance	- 0.4	2.0	2.0	2.4	2.9
One-off and other temporary measures	0.0	0.4	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 5.6	- 3.4	- 2.7	- 2.2	- 1.6
Government gross debt	107.5	104.1	100.1	95.9	91.3
<i>pm Real GDP growth (%)</i>	3.7	4.0	3.9	4.0	4.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the stability programme of Greece.

Table V.8.2

**Main measures in the budget for 2007, Greece**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Increases in excise taxes on fuel and tobacco, VAT on transfers of new constructions and tax duty imposed on mobile connection bills (¼ % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Cutbacks in intermediary government expenditure, through the improvement of fiscal audits and controls — Establishment of a DG for fiscal audits within the Ministry of Economics and Finance</li> </ul>
<ul style="list-style-type: none"> <li>• Income tax reform, decrease in personal income tax ratios (– 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Further cutbacks of public spending by EUR 430 million (– 0.2 % of GDP) <sup>(3)</sup></li> </ul>
<ul style="list-style-type: none"> <li>• Temporary revenues from takeovers of private banks' pension funds (0.3 % of GDP) <sup>(3)</sup></li> </ul>	
<ul style="list-style-type: none"> <li>• Temporary revenues from sale of public real estate and the extension of licences of casinos (0.2 % of GDP) <sup>(3)</sup></li> </ul>	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

<sup>(3)</sup> Measures publicly announced by the Minister for Economy and Finance in April 2007.

Sources: Commission services and 2007 budget law.

# 9. Spain

## Recent developments and medium-term prospects

In 2006, the general government balance recorded a surplus of 1.8 % of GDP. This compares with a surplus of 0.2 % of GDP projected in the 2006 budget law and a surplus of 0.9 % of GDP in the December 2005 stability programme <sup>(1)</sup>. The higher-than-planned surplus is explained by stronger-than-expected revenues, accounting for 1 % of GDP, while expenditures turned out as planned. Specifically, corporate tax revenues grew by 14.5 % on the year before and income taxes grew by 14.8 %. By levels of government, the central government posted a surplus of 0.8 % of GDP, regional governments registered a balanced budget and local authorities a deficit of 0.2 % of GDP. Social security achieved a surplus of 1.2 % of GDP. Government gross debt amounted to 39.9 % of GDP in 2006, down from 43.2 % of GDP in 2005.

In 2007, the budget law adopted by the government on 28 December 2006 projected a surplus of 0.7 % of GDP. However, the December 2006 update of the stability programme forecasts a surplus of 1 % of GDP. The Commission services' spring 2007 forecast projects a surplus of 1.4 % of GDP. According to the 2007 budget law, central government revenues are projected to increase by 10½ % in nominal terms. Direct taxes are expected to increase by 16.6 %, indirect taxes by 12 % and social contributions by 6.7 %. On the expenditure side, the projected increase is 7.8 %.

The economic policy objectives of the central government are twofold: (i) Enhance productivity by increasing spending on R & D education and infrastructure. Specifically, in 2006 the R & D budget (excluding military items) is projected to grow by 33 %, in line with the objective of attaining 2 % of GDP in 2010. Also in 2006,

allocations for education are forecast to grow by 26 %, (amounting to 0.2 % of GDP), mainly reflecting the increase in students' grants. Infrastructure investment is planned to increase by 9½ % in line with the strategic plan of infrastructure and transports (PEIT); (ii) enhance social protection by improving pensions and increasing its reserve fund and starting the implementation of the dependency policy. Specifically, the allocated budget for pensions will grow by 8 % in nominal terms. Additionally, the expenditure allocated for long-term care in 2007 is 0.04 % of GDP. The reserve fund of pensions, created at the end of the 1990s to guarantee the future payment of pensions, will increase by 0.6 % of GDP.

In 2008, the December 2006 update of the stability programme targets a general government surplus of 0.9 % of GDP. This projection is lower than the 2007 Commission services' spring forecast, in which, under a no-policy-change assumption, the general government balance is expected to achieve a surplus of 1.2 % of GDP. This latter projection takes into account the impact in 2008 of the direct tax reform and the higher surplus projected for 2007. In 2009, according to the December 2006 stability programme, the general government surplus is projected at 0.9 % of GDP.

Concerning government debt, the stability programme foresees a gradual decline towards 34 % of GDP in 2008. This is broadly in line with the projections in the Commission services' spring 2007 forecast.

## Developments in tax revenues

Since the mid-1990s, the dynamic performance of the Spanish economy went along with strong government revenue flows. The apparent elasticity of total taxes to GDP, i.e. the relative changes of taxes over the relative change of nominal GDP, was consistently above the 'normal' level which is estimated to be close to one. The composition of economic growth is part of the explanation. Graph V.9.1 suggests that private consumption,

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

Table V.9.1

**Budgetary developments 2005–10, Spain (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	1.1	1.8	1.4	1.2	
— Total revenues	39.3	40.3	39.7	39.7	
Of which: — current taxes	23.0	24.0	23.9	24.1	
— social contributions	13.0	13.0	12.9	12.8	
— Total expenditure	38.2	38.4	38.3	38.5	
Of which: — collective consumption	7.5	7.5	7.7	7.7	
— social transfers in kind	10.5	10.4	10.4	10.5	
— social transfers other than in kind	11.6	11.6	11.8	11.8	
— interest expenditure	1.8	1.6	1.6	1.5	
— gross fixed capital formation	3.6	3.9	3.6	3.7	
Primary balance	2.9	3.4	3.0	2.7	
Tax burden	35.6	36.5	36.7	36.9	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	1.6	2.3	1.8	1.7	
Structural primary balance	3.4	3.9	3.4	3.2	
Government gross debt	43.2	39.9	37.0	34.6	
<i>pm</i> Real GDP growth (%)	3.5	3.9	3.7	3.4	
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	1.1	1.4	1.0	0.9	0.9
Primary balance	2.9	3.0	2.5	2.3	2.2
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	1.5	1.8	1.5	1.6	1.6
Government gross debt	43.1	39.7	36.6	34.3	32.2
<i>pm</i> Real GDP growth (%)	3.5	3.8	3.4	3.3	3.3

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the stability programme of Spain.

Table V.9.2

**Main measures in the budget for 2007, Spain**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Reform on direct taxes (– 0.4 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in R &amp; D spending (0.15 % of GDP)</li> <li>• Increase in investment in infrastructure (0.1 % of GDP)</li> <li>• Increase in social benefits (pensions) (0.6 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

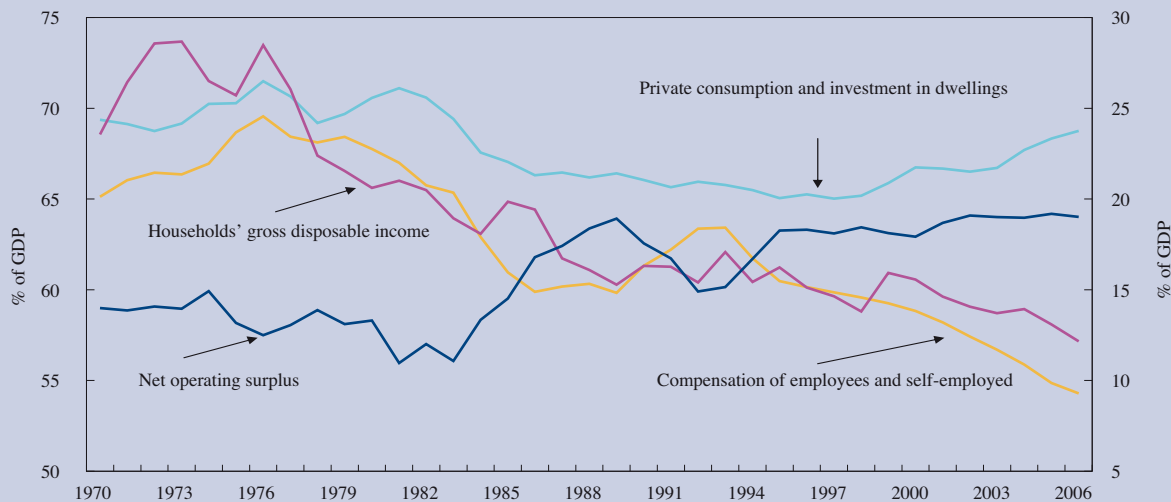
<sup>(2)</sup> Estimated impact on general government expenditure.

Source: Commission services.

investment in dwellings and corporate profits were the main drivers of the 'boom' of indirect and corporate tax revenues over the last decade. By contrast, while discre-

tionary measures were predominant drivers of tax revenues in the 1980s, they are assessed to have played a rather secondary role at the present time.

Graph V.9.1: Developments in selected tax bases 1970–2006



Source: Commission services.

In 1995–2006, total current taxes have been growing at 8½ % per year in nominal, 1 percentage point faster than nominal GDP terms (see Table V.9.3) <sup>(1)</sup>. As a result, the tax burden went up by 4 percentage points of GDP and the gap vis-à-vis the euro area significantly narrowed. In the mid-1990s, the Spanish tax burden was 8 percentage points of GDP lower than that of the euro area.

When a longer-term perspective is taken, the current buoyancy of tax revenues in Spain looks less exceptional. The average apparent elasticity of total taxes to GDP of 1¼ over the last 10 years does not differ significantly from the average recorded over the last 35 years. Moreover, when compared with previous expansions of the Spanish economy, especially that of the 1980s, current developments might appear relatively modest. Specifically, between 1970 and 2006 tax revenues have been growing in nominal terms at an annual average rate of 14½ %, more than 2 percentage points faster than nominal GDP. As a consequence, the tax burden has increased from 18 % of GDP in 1970 to 36½ % in 2006.

However, there is a notable difference between the past 10 years and the last quarter of the 20th century. The increase of the tax burden, especially between the mid-

1970s and the early 1990s, is closely linked to the modernisation of the Spanish fiscal system. This process included the reform of direct taxes in 1977, which raised substantially direct tax rates during the 1980s, as well as the introduction of the VAT in 1986 coinciding with the accession of Spain to the EU. No comparable institutional developments explain the recent buoyancy of tax revenue.

**Indirect taxes:** In 1995–2006 indirect taxes have been growing at an average annual rate of 9½ % as compared to 7½ % of nominal GDP. Today indirect taxes account for 12¼ % of GDP, up from 10 % of GDP in 1995. Using private consumption plus an estimate of transactions of new dwellings as tax base, the implicit tax rate has declined marginally from 15½ % in 1995 to 15 % in 2006. Indirect tax revenues have posted an apparent elasticity to GDP of on average 1¼. No substantial legislative changes affecting VAT were implemented in 1995–2006.

VAT related to housing is estimated to have grown by 19 % per year since 1995. As a result, it accounted for 7 % of total indirect tax revenues or 1 % of GDP in 2006, which corresponds to an average elasticity to GDP of 2.7.

This reflects not only the increasing share of investment in dwellings in real GDP but also the boom of housing prices, which have been growing annually by around three times the GDP deflator. As no legislative changes

<sup>(1)</sup> Current taxes include direct and indirect taxes as well as social contributions.

Graph V.9.2: Total tax burden: breakdown by types of taxes 1970–2006

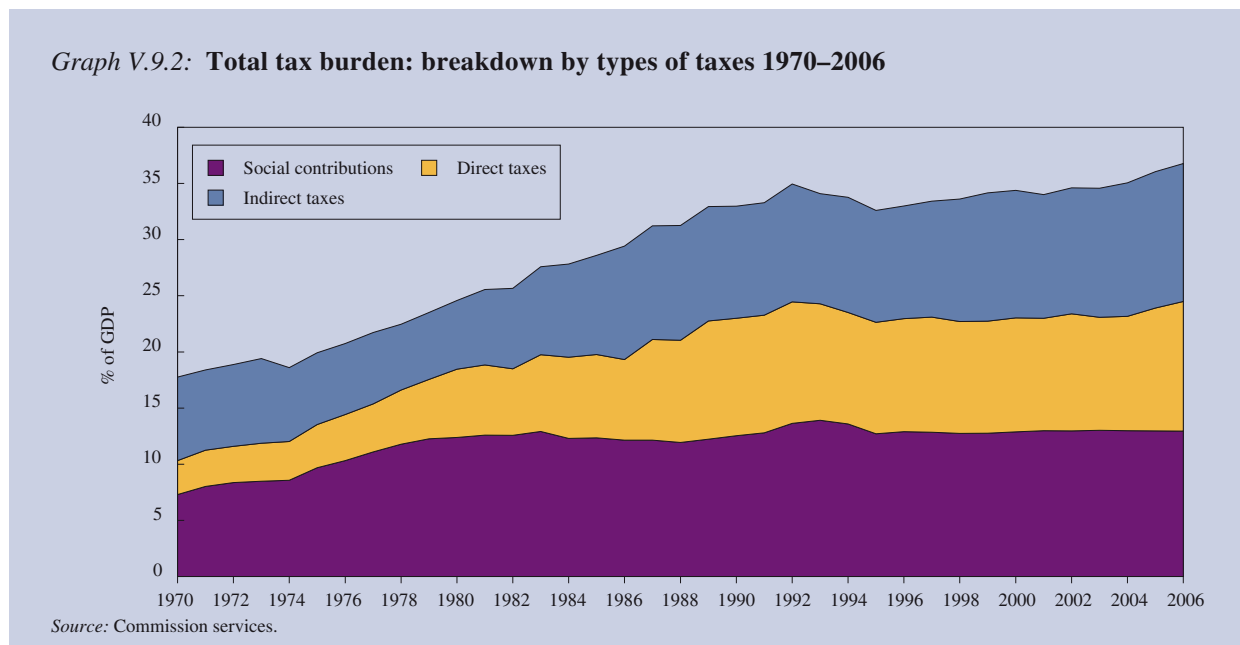


Table V.9.3

Tax revenues in Spain, 1995–2006

		Current taxes	Indirect taxes			Direct taxes	Social contributions
		Total	VAT on housing	Other VAT	Other indirect taxes		
Revenues	Annual % change, average	8.6	9.4	19.8	9.1	8.9	7.5
	% of GDP, average	34.7	11.3	0.5	5.1	5.7	13.0
Tax bases <sup>(1)</sup>	Annual % change, average	7.4	9.8	22.3	7.0	7.0	6.3
Elasticity	Annual average to GDP	1.2	1.3	2.7	1.3	1.2	1.0
	Annual average to base		1.0	1.1	1.3	1.3	1.2

NB: Nominal GDP growth rate 7.4 %

<sup>(1)</sup> The chosen tax bases are: gross domestic product (tax base for total taxes), private consumption and investment in dwellings (tax base for indirect taxes), investment in dwellings (tax base for VAT on housing), private consumption (tax base for other VAT and other indirect taxes), gross value added (tax base for direct tax), compensation of employees and self-employed (tax base for social contributions).

Source: Commission services.

have been implemented during the last decade concerning VAT on new houses, it is not surprising that the implicit tax rate remained essentially unchanged and the elasticity to the base is close to unity <sup>(1)</sup>. Consequently, the bulk of the increase in revenues from VAT on housing would be explained by the increase in the tax base.

Concerning VAT other than on housing, in 1995–2006 revenues expanded at an annual average rate close to 10 %, which has resulted in a tax elasticity-to-GDP of 1.3. In parallel, the implicit tax rate has increased from 7½ % in 1995 to 9¼ % in 2006 <sup>(2)</sup>. The apparent elasticity to the base is therefore comparable to that to GDP and

<sup>(1)</sup> Tax revenues are calculated on the basis of the number of new dwellings built each year multiplied by the market price per square metre and by the average square metres per dwelling (90).

<sup>(2)</sup> The proxy of tax base for VAT (other than on housing) is private consumption.



reaches an annual average 1.4. Developments in this tax category seem to respond to income effects, as consumption shifts towards goods with higher VAT rates.

**Direct taxes:** In 1995–2006, direct taxes have been growing at an average annual rate close to 9%. As a result, they accounted for 11½% of GDP in 2006, up from 10% of GDP in 1995. The implicit tax rate has increased from 11% in 1995 to 13% in 2006<sup>(1)</sup>. The bulk of the increase has taken place during the last two years. The apparent tax elasticity to GDP and to the base is well above unity; 1.2 and 1.3 respectively.

The recent expansion of direct tax revenues is somewhat surprising, as it has coincided with reforms of personal income tax in 1999 and 2003, which reduced statutory tax rates. However, based on available estimates, neither the changes in the tax base nor discretionary measures can explain the recorded development in direct tax revenues. These two factors should have had a moderating effect on revenues from direct taxation of income. Since

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<sup>(1)</sup> The proxy of tax base for direct taxes is the gross value added (GVA).

tax brackets have not been updated in line with inflation every year, the dynamism of direct taxes could be explained by the intrinsic progression of the tax system. Moreover, the regularisation of immigrants and, last but not least, extraordinary corporate profits also played a role.

**Social contributions:** In 1995–2006, social contributions have been growing at an annual average rate close to nominal GDP and their share in GDP has remained broadly unchanged at around 13%. The implicit tax rate (in per cent of compensations of employees and self-employed) has increased from 21% in 1995 to 24% in 2006.

During the last 10 years, the labour share in income has actually declined. However, the negative effect on social contributions has been compensated by other factors, such as a substantial broadening of the contribution base in 2001 and 2002 together with the regularisation of immigrants in 2005. As regards the regularisation of immigrants, it increases revenues without changing the tax base because national accounts already estimate non-declared jobs that do not contribute to the social security system.

# 10. France

## Recent developments and medium-term prospects

Following a decline to 3.0 % of GDP in 2005, the general government deficit was further reduced to 2.5 % in 2006, mainly thanks to higher-than-expected revenues. One-off revenues totalled 0.3 % of GDP, after 0.6 % of GDP in 2005. The deficit outturn is 0.4 percentage point better than the target presented in the January 2006 update of the stability programme and 0.1 percentage point better than the official forecast of March 2006 <sup>(1)</sup>. The budgetary outturn benefited from higher-than-expected inflow of VAT and corporate taxes, which more than offset the implementation of some tax cuts. On the expenditure side, the target was respected at the central government level but some slippages were recorded for healthcare and local government expenditure so that growth in total public expenditure overshot its official target. The structural balance, i.e. the balance net of cyclical and one-offs, improved by 0.9 % of GDP. After a rise in the debt-to-GDP ratio by nearly 2 percentage points in 2005, the government committed itself to reduce the ratio by 2 % of GDP in 2006. This objective was achieved.

Based on the assumption that real GDP will grow between 2 % and 2.5 %, the 2007 budget adopted by the parliament on 19 December 2006 plans a deficit of 2.5 % of GDP. The improvement compared to 2005 is projected to result from expenditure restraints, notably (i) a reduction of State expenditures by 1 % in real terms after four years of stabilisation in volume, (ii) a slowdown of outlays for unemployment benefits in connection with an improved employment performance, and (iii) a slowdown of health expenditure resulting from the full effect of the 2004 healthcare reform and additional measures incorporated in the 2006 and 2007 budget for the social

security sector (in particular, the 'pharmaceutical plan', the 'hospital plan' and continued efforts to control the cost of medical treatment and fight frauds). On the revenue side, the main measures are an income tax reduction (0.2 % of GDP), an increase in the employment premium and lower tax rates on new capital expenditure. The reduction in the deficit will benefit from one-off revenues of about 0.05 % of GDP <sup>(2)</sup>. The Commission services' spring 2007 forecast projects a government deficit of 2.4 % of GDP. This is slightly below the 2007 budget target of 2.5 % of GDP which assumed a 0.2 percentage point of GDP higher deficit outcome for 2006. If the carry over from the lower-than-expected deficit in 2006 was applied to the 2007 deficit target, the excess of the Commission services' forecast (of 0.1 percentage point of GDP) would stem from higher expenditures, notably expenditure by the social security funds and investment expenditure by local governments. The Commission services' forecast implies a structural improvement of 0.3 % of GDP.

In 2008, based on the conventional no-policy-change assumption, the Commission services' spring 2007 forecast projects a deficit of 1.9 % of GDP. The official deficit target for 2007 set in the 2006 update of the stability programme is 1.8 % of GDP (or 1.6 % when taking into account of the favourable base effect from the 2006 outturn of the budget deficit). The higher Commission projection is due to a higher deficit estimate for 2007 by 0.1 % of GDP (negative base effect) and higher expenditures from the State, in particular on the basis of unchanged policies it is assumed that the rule of a expenditure reduction of 1 % in volume terms is implemented, while the official scenario is based on a reduction of expenditure by 1¼ % in volume terms, higher expenditures in the local government sector and higher expenditures in the social security sector. The 2006

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> The one-off revenues result from a change in the corporate tax code and the advanced collection of social contributions on saving plans.

update of the stability programme also projected a continuous reduction in the deficit so that there are no more deficits in 2010.

The government's objectives of debt reduction are forecast to be achieved in 2007 with a projected further reduction in the debt level to 62.9 % of GDP, based on the full allocation of privatisation receipts to debt reduction and a better overall management of the debt (notably of the cash-flow) of the different general government entities. For 2008, the forecast includes EUR 7.5 billion of privatisation receipts, i.e. the middle of the range presented in the latest update of the stability programme, which would further reduce the debt ratio by 1 percentage point of GDP. The 2006 update of the stability pro-

gramme anticipated that the debt-to-GDP ratio would decline below the 60 % of GDP threshold by 2010.

### The corporate income tax in recent years

In 2006, windfall revenues compared to the official projections of the finance law for the general government sector totalled about EUR 12 billion (budgetary accounting), i.e. 0.7 % of GDP, of which EUR 10 billion were concentrated at the central government level.

Corporate tax revenues, which were EUR 6.4 billion higher than the estimate included in the initial budget bill, constituted half of the overall windfall. When assessing the performance of the State budgetary execution in their

Table V.10.1

#### Main measures in the budget for 2007, France (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	- 3.0	- 2.5	- 2.4	- 1.9		
— Total revenues	50.7	51.0	50.7	50.8		
Of which:						
— current taxes	26.8	27.3	27.1	27.2		
— social contributions	18.2	18.4	18.3	18.3		
— Total expenditure	53.6	53.5	53.2	52.7		
Of which:						
— collective consumption	8.3	8.3	8.2	8.1		
— social transfers in kind	15.5	15.4	15.3	15.1		
— social transfers other than in kind	17.8	17.8	17.8	17.8		
— interest expenditure	2.6	2.5	2.5	2.5		
— gross fixed capital formation	3.3	3.4	3.4	3.4		
Primary balance	- 0.3	0.0	0.1	0.5		
Tax burden	43.8	44.4	44.1	44.1		
One-off and other temporary measures	0.6	0.3	0.0	0.0		
Structural balance <sup>(3)</sup>	- 3.2	- 2.3	- 2.1	- 1.5		
Structural primary balance	- 0.6	0.2	0.5	1.0		
Government gross debt	66.2	63.9	62.9	61.9		
pm Real GDP growth (%)	1.2	2.0	2.4	2.3		
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance <sup>(5)</sup>	- 2.9	- 2.7	- 2.5	- 1.8	- 0.9	0.0
Primary balance	- 0.2	- 0.1	0.1	0.7	1.7	2.5
One-off and other temporary measures	0.5	0.1	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 3.0	- 2.5	- 2.2	- 1.6	- 0.7	0.2
Government gross debt <sup>(6)</sup>	66.6	64.6	63.6	62.6	60.7	58.0
pm Real GDP growth (%)	1.2	2.0-2.5	2.0-2.5	2.2	2.2	2.2

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 economic forecasts.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the stability programme of France.

Table V.10.2

Main measures in the budget for 2007, France

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>Income tax reform (– 0.2 % of GDP)</li> <li>Lower tax rates on new capital expenditure (– 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in the number of civil servants (– 0.03 % of GDP)</li> <li>Implementation of the State modernisation audits' recommendations regarding potential savings and productivity gains (– 0.05 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>Increase in the employment premium (– 0.05 % of GDP)</li> <li>One-offs: change in the corporate tax code and advance payment of taxes on specific saving plans (+ 0.05 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Budget bill for social security (– 0.02 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and 2007 budget bill.

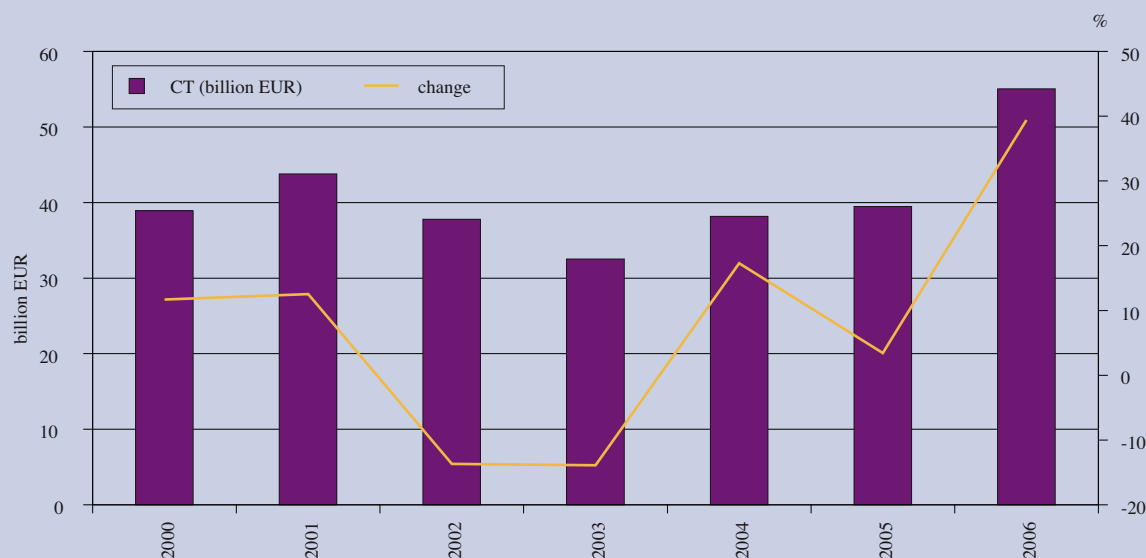
communiqué of January 2007, the authorities underlined two factors: the good performance of French firms and the December 2006 change in the corporate tax code, which yielded EUR 1 billion additional revenues (0.05 % of GDP).

The apparent elasticity, of the corporate tax to GDP, i.e. the relative change of corporate taxes over the relative change of GDP, averaged 1.7 in 2000–06 (see Graph V.10.2), against an *ex ante* OECD elasticity of 1.6 <sup>(1)</sup>. The apparent elasticity can be decomposed into the elas-

ticity of the tax base (which is approximated by the gross operating surplus — GOS) with respect to GDP and the elasticity of corporate taxes to the tax base.

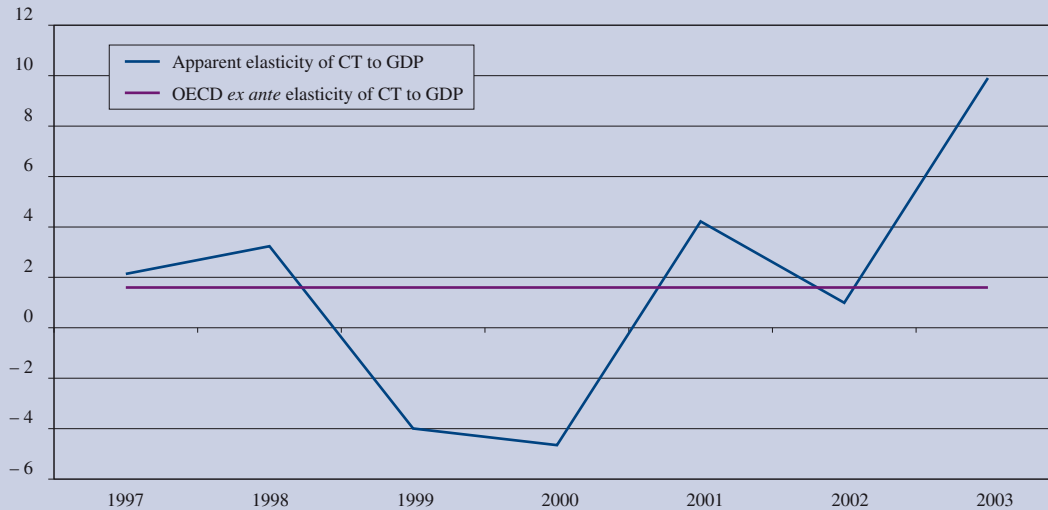
<sup>(1)</sup> The budgetary elasticities used in the EU budgetary surveillance framework are derived from a commonly agreed method developed by the OECD. For details see [http://www.oilis.oecd.org/olis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/\\$FILE/JT00187415.PDF](http://www.oilis.oecd.org/olis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/$FILE/JT00187415.PDF)

Graph V.10.1: Corporate tax (CT) revenues



Sources: INSEE and Commission calculations.

Graph V.10.2: Apparent elasticity of corporate taxes (CT) with respect to GDP



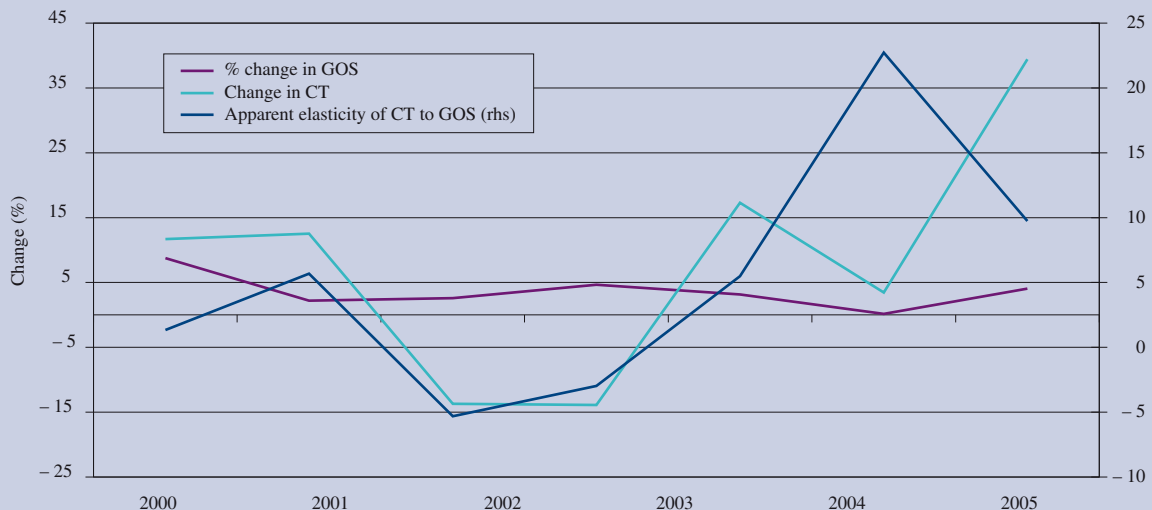
Sources: INSEE and Commission services.

The OECD *ex ante* elasticity of the GOS to GDP is 1.6. In recent years the fluctuations of the apparent elasticity were comparatively mild. Indeed, the GOS has been stable at 17 % of GDP over this period.

Over the period 2000–06, the growth rate of the GOS of French firms has been quite volatile yet not too different

compared to that of nominal GDP. By contrast, the relation between corporate tax revenues (CT) and the GOS is not stable. Between 2000 and 2006 the apparent elasticity of the CT with respect to the GOS was well above the OECD *ex ante* elasticity, estimated at 1 (Graph V.10.3). In 2006, the apparent elasticity reached 9.7 after 22.7 in 2005 (partly due to the lack of growth in GOS in that year).

Graph V.10.3: Apparent elasticity of corporate taxes (CT) to gross operating surplus (GOS)



Sources: INSEE and Commission services.

There are several explanations behind the volatility of the apparent elasticity of the GT to GOS. Firstly, the GOS does not exactly correspond to the tax base of corporate taxes. The actual tax base, the *bénéfice fiscal*, is calculated on the basis of the earnings minus the deductible charges (which notably include provisions for risks, higher prices, depreciation, etc.). Secondly, until December 2005 the corporate tax on profits in year t was paid (in four instalments) in year t (estimated on the basis of profits in year t-1), with an additional corrective payment in March of year t+1 on the basis of taxable profits in year t. This time discrepancy could arguably distort the link between the GOS and tax receipts. To correct for this distortion, the lagged corporate tax revenues elasticity with respect to gross operating surplus of the preceding year was calculated. It proved to be as volatile as the un-lagged one and thus unable to explain the high volatility in the tax elasticity <sup>(1)</sup>.

Thirdly, smoothing CT payments over time (depending on the series of benefits and losses, etc.) also impinges

<sup>(1)</sup> Changes in the tax code in 2005 and 2006, may reduce the lag between the GOS and CT revenues. Since December 2005, in the case of firms with a turnover of over EUR 1 billion, the first three instalments of the CT are still linked to the taxable profits of year t-1, but the fourth one, in December, is linked to the estimate of the taxable profits in year t and thus brings forward at least part of the adjustment payment which occurs in March of year t+1. As this provision was extended in December 2006 to firms with turnover of over EUR 0.5 billion and will again be extended in 2007, the time distance between the GOS and the CT payments should be further reduced.

on the relation between the GOS and CT receipts. There is a possibility of transferring losses to future exercises, but also a 'carry-back system' which allows firms to impute losses on past benefits (up to three years before the occurrence of the losses). In this case, a claim on the French Treasury materialises, corresponding to past corporate tax payments, which would be reimbursed if not offset against new corporate tax payments within five years <sup>(2)</sup>. Fourth, the link between the GOS and the CT is blurred by discretionary measures.

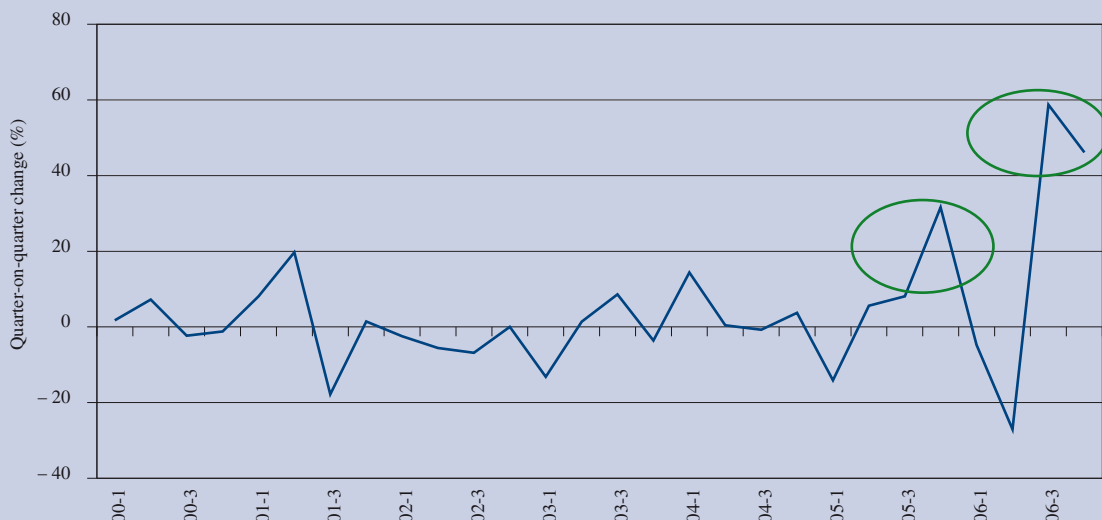
Graph V.10.5 presents the apparent elasticity corrected for the effect of discretionary measures using the data in Table V.10.3. Despite the correction, the volatility of the apparent elasticity is still strong.

<sup>(2)</sup> Example

Million EUR	2002	2003	2004	2005
Taxable profit	+ 50	+ 10	+ 30	- 70
'Carry-back' of the 2005 EUR 70 million deficit	50	10	10	
Claim on the French Treasury	EUR 70 million * 33.33 % = EUR 23.3 million			

If the 2006 result is a EUR 100 million profit, the firm should pay a corporate tax amount of EUR 33.33 million: it could offset its claim on the Treasury and pay 10 million in cash. On the contrary if the firm continues to record losses up to 2010, it could ask the French Treasury to reimburse the EUR 23.3 million claim from 2011.

Graph V.10.4: Quarterly profile of corporate tax (CT) payments



Sources: INSEE and Commission calculations.

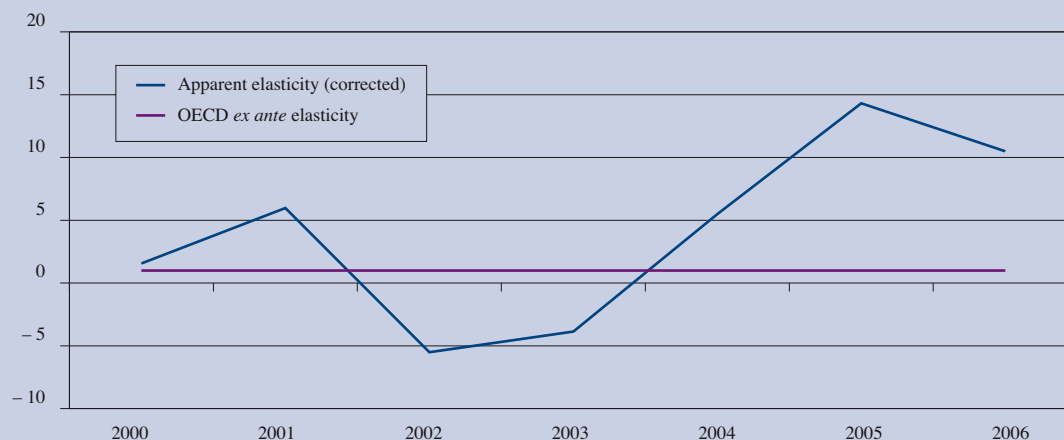
Some important points need to be stressed concerning the data used. It is extremely difficult to quantify the effect of some discretionary measures, as estimates are sometimes drastically revised. For example, an exceptional tax of 25 % on distributed profits not taxed at the normal rate was estimated in 2003 to increase CT revenues by EUR 0.5 billion in 2005, while in 2005 its estimated impact on CT receipts in that year stood at about EUR 2 billion.

It is difficult to disentangle the effect of discretionary measures from the impact of growth. For example, the change in the tax code of December 2005 was first estimated to yield about EUR 0.4 billion; the latest estimate is now EUR 2.3 billion.

In the corrective budget bill for year *t*, the French authorities' present *ex post* estimates of discretionary

measures, but only since 2000 such figures have been presented in a constant manner. Therefore, the historical series are extremely short. Table V.10.3 shows the total discretionary measures affecting corporate tax revenues over the last six years (2006 results are provisional). An important drawback of these data is that problems of consistency remain in assessing the cumulated impact of a series of measures taken on the same budgetary items over a number of years. For example, in Table V.10.3, the amount displayed for 2006 only takes into account the estimated impact of the December 2006 corporate tax code change (EUR 1 billion) but does not integrate any estimate of the change in the code implemented in December 2005, whereas in other cases the impact of previous years' measures is taken into account.

**Graph V.10.5: Apparent elasticity of corporate taxes (CT) to gross operating surplus (GOS) taking into account discretionary measures**



Sources: INSEE, projet de loi portant règlement définitif du budget (for the years 2000–06) and Commission services.

*Table V.10.3*

**Impact of discretionary measures**

Net effect	2000	2001	2002	2003	2004	2005	2006
EUR billion	- 1.4	- 1.8	- 1.3	0.5	0.6	1.1	0.4
% of GDP	- 0.1	- 0.1	- 0.1	0.0	0.0	0.1	0.0

Sources: Projet de loi portant règlement définitif du budget (for the years 2000–06) and Commission services' calculations.

# 11. Italy

## Recent developments and medium-term prospects

In 2006, the general government deficit was 4.4 % of GDP. This compares with a deficit target of 3.5 % of GDP set in the December 2005 update of the stability programme <sup>(1)</sup>. The headline deficit was affected by two exceptional factors, namely a ruling of the European Court of Justice (ECJ) concerning VAT on company cars, entailing refunds officially estimated at 1.1 % of GDP <sup>(2)</sup> and the government decision to cancel the debt of the railway company related to the high-speed project resulting in a 0.9 % of GDP increase in the deficit <sup>(3)</sup>. Excluding one-off and other temporary measures <sup>(4)</sup>, the 2006 deficit was 3¼ % of GDP, ½ percentage point better than planned. The increase in revenue net of one-offs ended up 1½ % of GDP higher than projected in December 2005, which more than offset the higher-than-planned growth of expenditure net of one-offs, amounting to around 1 % of GDP. A mid-year package adopted in June 2006, officially estimated to have increased revenue and expenditure by around 0.25 and 0.15 % of GDP respectively, contributed to this result. The windfall revenue seems to be linked to a previous underestimation of the impact of budgetary provisions as well as to an overshooting of VAT receipts, the reasons of which are still

unclear. Concerning expenditure, sizeable slippages in compensation of employees and healthcare accounted for around half of the overshooting in 2006. The refunds of VAT on company cars unduly paid in 2006 also increased expenditure by more than 0.3 % of GDP. The 2005 update of the stability programme projected a slight decrease in the debt-to-GDP ratio in 2006. By contrast, the gross debt ratio increased to 106.8 % of GDP in 2006, up from 106.2 % in 2005, essentially due to the accumulation of deposits to finance part of the reimbursement following the ECJ ruling on VAT.

The 2007 budgetary package is composed of the budget law proper and a decree law that, among other measures, compensates for the permanent loss in VAT revenues linked to the ECJ ruling with higher direct taxes. It also includes a framework law that lays the basis for the harmonisation of taxation on households' income from financial assets. Parliament passed the decree law on 23 November and approved the budget law on 21 December 2006. However, the adoption of the framework law, which is expected to yield around 0.1 % of GDP of higher revenue, has been postponed. Redistributive and growth-oriented measures in the package entail a budgetary burden of almost 1½ % of GDP. Around two thirds of these amounts are higher expenditures; the rest are lower revenues, including deductions related to the regional tax on productive activities (IRAP) aimed at reducing the labour tax wedge. The negative budgetary effect of these measures is more than offset by deficit-reducing measures officially estimated at 2½ % of GDP, mostly, around 1¾ percentage points, revenue-based. The single most important measure, planned to yield more than ¼ % of GDP, is the partial diversion of the accumulation of the severance pay scheme of private sector employees (TFR) from enterprises to the national social security institute (INPS). It must be noted that, while reducing the deficit, this measure does not improve fiscal sustainability, as it implies additional future expenditure. Additional revenues are supplemented by around ¾ % of GDP expenditure cuts, distrib-

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://europa.eu.int/comm/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://europa.eu.int/comm/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> The ruling entails the refunding of VAT paid between 2003 and September 2006 and lower VAT revenues thereafter. VAT refunds for the years 2003–05 (officially estimated at ¾ percentage point of GDP) are treated as one-off, whereas the 2006 refunds (officially estimated at more than 0.3 % of GDP) are not.

<sup>(3)</sup> Following a Eurostat decision of 23 May 2005 (see Eurostat news release No 65/2005), such debt was already booked as government liability. This means that national accounts recorded a debt from the RFI-TAV (the high-speed project company) towards government and a debt from government towards bond holders ('on-lending').

<sup>(4)</sup> One-off and temporary measures increased the 2006 deficit by 1.2 % of GDP in 2006. On top of the ECJ ruling and the debt cancellation, the following transactions are treated as one-off: sales of real estate (0.1 % of GDP) and taxes on the revaluation of companies' assets (0.4 % of GDP). By contrast, the 2005 update of the stability programme projected deficit-reducing one-off measures at 0.3 % of GDP in 2006.



uted between central and local governments. A further revision to the domestic stability pact, the framework for local government' finances, aims to deliver the planned savings at local level.

The update of the stability programme submitted in December 2006 targeted a deficit at 2.8 % of GDP in 2007, built on an economic growth forecast of 1.3 % and assuming the full implementation of the 2007 budget. In light of the favourable economic and budgetary developments, a new report published by the Ministry of Economy and Finance in March 2007 revised the 2007 deficit target downwards to 2.3 % of GDP, with an economic growth forecast of 2 %. The Commission services' spring 2007 forecast projects a deficit of 2.1 % of GDP, just less than 0.2 percentage point lower than the official

projection. Starting from the positive base following the 2006 budgetary outturn, this forecast assumes slightly lower than officially projected interest and capital expenditure. However, it does not incorporate the full implementation of some measures in the 2007 budget. According to the Commission services forecast, the primary structural balance (i.e. net of cyclical factors and excluding one-off measures) is projected to improve by more than 2 % of GDP in 2006–07, implying a restrictive fiscal policy stance.

The 2008 deficit forecast of 2.2 % of GDP is based on the customary no-policy-change assumption and is in line with the target set in the December 2006 update of the stability programme. However, given the better-than-planned budgetary and economic developments,

Table V.11.1

**Budgetary developments 2005–11, Italy (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>			
General government balance	-4.2	-4.4	-2.1	-2.2			
— Total revenues	44.0	45.6	46.0	46.1			
<i>Of which:</i> — current taxes	27.6	29.3	29.2	29.2			
— social contributions	12.9	13.0	13.5	13.6			
— Total expenditure	48.2	50.1	48.1	48.3			
<i>Of which:</i> — collective consumption	8.5	8.4	8.3	8.3			
— social transfers in kind	11.9	11.9	11.7	11.8			
— social transfers other than in kind	17.0	17.1	17.3	17.3			
— interest expenditure	4.5	4.6	4.7	4.8			
— gross fixed capital formation	2.3	2.3	2.4	2.4			
Primary balance	0.3	0.1	2.7	2.5			
Tax burden	40.6	42.3	42.8	42.9			
One-off and other temporary measures	0.6	-1.2	0.1	0.1			
Structural balance <sup>(3)</sup>	-3.9	-2.6	-1.6	-1.8			
Structural primary balance	0.7	2.0	3.1	2.9			
Government gross debt	106.2	106.8	105.0	103.1			
<i>pm Real GDP growth (%)</i>	0.1	1.9	1.9	1.7			
<b>Stability programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
General government balance	-4.1	-5.7	-2.8	-2.2	-1.5	-0.7	0.1
Primary balance	0.7	-0.9	2.2	2.8	3.4	4.2	5.0
One-off and other temporary measures	0.5	-1.4	0.1	0.1	0.0	0.0	0.0
Structural balance <sup>(3) (5)</sup>	-4.0	-3.9	-2.5	-1.9	-1.2	-0.4	0.3
Government gross debt	106.6	107.6	106.9	105.4	103.5	100.7	97.8
<i>pm Real GDP growth (%)</i>	0.0	1.6	1.3	1.5	1.6	1.7	1.7

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the stability programme of Italy.

Table V.11.2

Main measures in the budget for 2007, Italy

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
• TFR diversion to INPS (0.4 % of GDP)	• Cuts to central government expenditure (– 0.3 % of GDP)
• Higher social contributions (0.3 % of GDP)	• Cuts to local government expenditure (– 0.2 % of GDP)
• Fight of tax evasion/elusion (0.3 % of GDP)	• Transfers to the railways (0.2 % of GDP)
• Deduction from IRAP tax base (– 0.2 % of GDP)	• Social transfers (0.2 % of GDP)
• Increase of local and regional taxes (0.2 % of GDP)	• Higher compensation of employees (0.1 % of GDP)
• Increase of the tax base of the self-employed and small firms (0.2 % of GDP)	• Peace-keeping operations (0.1 % of GDP)
• Tax relief for family charges (– 0.1 % of GDP)	• Savings on healthcare expenditure (– 0.1 % of GDP)
• Annual extension of special tax provisions (– 0.1 % of GDP)	
• Change personal income break tax (0.1 % of GDP)	
• Harmonisation of taxation on households' financial assets (0.1 % of GDP)	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and Italy's Ministry of Economy and Finance.

the Commission services' forecast does not imply any adjustment in structural terms, whereas the updated stability programme foresees an improvement by more than 0.5 % of GDP, as required by the Stability and Growth Pact. For the subsequent years, the updated stability programme plans a further improvement of the government balance, which is expected to turn into surplus by 2011.

The debt ratio is expected to decline to 105 % of GDP in 2007 and, assuming unchanged policy, to continue diminishing in 2008, broadly in line with the decline projected in the latest update of the stability programme. The latter projects the pace of debt reduction to accelerate over the outer years of the programme, as the targeted primary surplus continues increasing steadily and in the absence of any significant debt-increasing operations recorded below the line.

### The diversion of the severance pay scheme (TFR) to INPS

The 2007 budget law further modified the scheme governing severance pay (*Trattamento di Fine Rapporto* — TFR) for dependent workers in the private sector. In the previous scheme, employers were obliged to accumulate each year about one month's worth of salary per worker as book reserves. The amounts thus accumulated were returned to workers at the end of the employment relationship or, in exceptional circumstances (like for the purchase of a dwelling or healthcare), during the working

relationship. The TFR funds accrued a yearly return of 1.5 % plus three quarters of the inflation rate. Given higher market interest rates and relatively difficult credit conditions, particularly for small firms, TFR funds typically represented a source of low-cost and easy financing for enterprises.

In 2005, legislation enacting the pension reform of 2004 intended to kick-start the privately funded pension pillar, established that from 1 January 2008 all dependent workers in the private sector could choose to either continue accumulating the severance pay fund with their employer or direct future flows to a private pension fund. The 2007 budget law advanced the implementation of the above provision to 1 January 2007. At the same time, employers with at least 50 employees have to divert the flows that employees decide not to transfer to private pension schemes towards a new scheme set up within the Italian social security institute INPS. The funds thus accumulated will continue to yield to employees the same yearly return of 1.5 % plus  $\frac{3}{4}$  of the inflation rate that was granted by the previous scheme and will be eventually paid back to them as severance pay. The government will use them to fund specific projects, mainly infrastructure, set out in the budget law. The concerned employees can communicate their decision on the destination of their TFR payments until 30 June 2007; the decision will however concern all TFR payments as from 1 January 2007.

In national account terms, the previous severance pay scheme TFR managed by firms in the private sector is

classified as a social insurance scheme: the flows into the book reserves are recorded as employers' social contributions, whereas the severance payments to employees are recorded as social benefits <sup>(1)</sup>.

The creation of the new scheme within INPS foreseen in the 2007 budget law implies a change in the institutional sector that manages severance payments, from the corporate sector to the government sector, but does not affect the accounting classification of the relevant in- and out-flows. Hence, the new scheme must be considered as a social security scheme. Flows from employees (via their firms) to INPS will be recorded as government revenue (i.e. social contributions) that reduces the deficit, whereas severance payments from the government to employees will represent public consumption (social benefits) that increases the deficit.

The government estimates that the net gain stemming from the TFR diversion, after taking account of contributions received, benefits paid and also the compensatory measures in the way of fiscal advantages to firms, will amount to more than 0.3 % of GDP in 2007. The deficit-

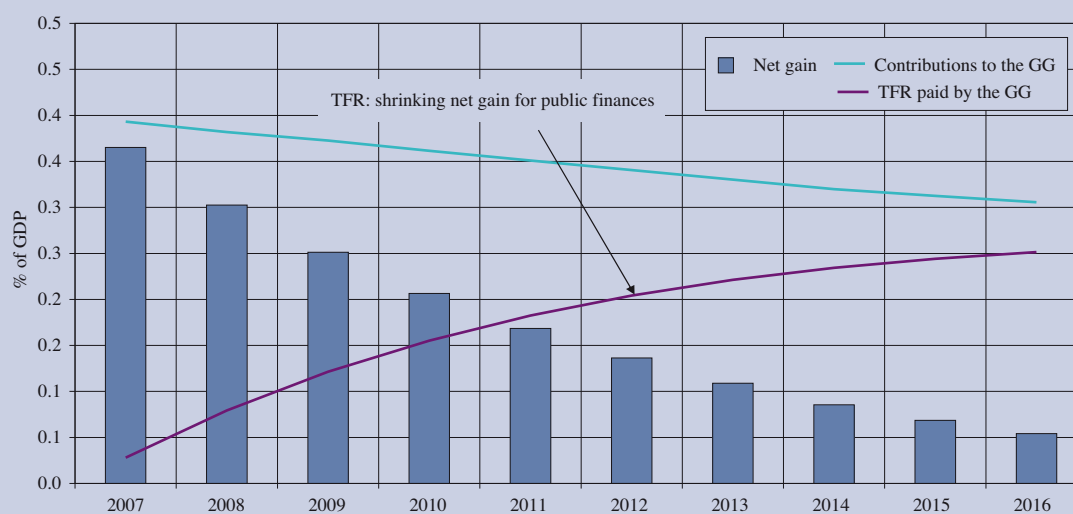
reducing impact is projected to decrease over time. While in the first years of its operation revenues will largely exceed the benefits paid, the positive impact on the budget balance is officially estimated to progressively fade away over the next eight to nine years, when additional revenues and expenditure will balance out.

There are considerable uncertainties attached to the estimated impact of this measure on the budget, as it requires assumptions on decisions of employees that cannot be easily anticipated. In particular, the government's estimation hinges on the assumption that more than 60 % of employees in firms concerned would explicitly refuse the transfer of their funds to the private pension schemes. Especially given that employees can opt for the private pension funds through silent assent, the officially projected budgetary impact of the measure appears to be at risk. This is particularly relevant for 2007, when participation in private pension schemes could be higher than assumed. The official estimate of the budgetary impact of the measure also appears to be in conflict with the ongoing promotion of private pension funds via information campaigns in the media, as a way to help workers preserve adequacy of their future pensions.

Finally, although the transfer of the TFR flows will imply an improvement in the fiscal position of the government for some years to come, the additional revenue stemming from it does not improve the sustainability of public finances as it implies additional future expenditure.

<sup>(1)</sup> The scheme is classified as 'non-autonomous private funded social insurance schemes'. 'Non-autonomous' and 'funded' because employers build up reserves by legal obligation for the exclusive and explicit purpose of paying severance to their employees remaining, however, within the employers institutional unit. An analogous scheme for civil servants, managed by the social security unit INPDAP, is also classified as a social security scheme, but it is recorded as unfunded in line with ESA95 rules.

Graph V.11.1: Severance payment by the general government



Source: Commission services.

## 12. Cyprus

### Recent developments and medium-term prospects

In 2006, the general government deficit in Cyprus was 1.5 % of GDP. This is about ½ percentage point of GDP better than the target of the convergence programme submitted in December 2005 <sup>(1)</sup>. Compared with 2005, the deficit improved by around ¾ percentage point of GDP. The better-than-expected outcome was due to higher tax revenues associated with the buoyant performance of the real estate sector as well as improved tax administration and collection. This more than compensated the temporary revenues that were initially budgeted (¼ % of GDP linked to the issuance of deeds for buildings with minor irregularities) but did not materialise. Revenues were also supported by the high-tax content of growth, which was almost fully based on private consumption thus leading to higher indirect tax revenues. The general government debt ratio declined to around 65¼ % of GDP in 2006 compared with 69¼ % a year earlier, slightly higher than the 64¾ % of GDP projected in the convergence programme. This difference is mainly explained by the somewhat more gradual than planned reduction of deposits held at the Central Bank.

The 2007 budget law, which was approved by parliament on 21 December 2006 and incorporated in the December 2006 update of the convergence programme, targets a nominal general government deficit of 1.6 % of GDP. The fiscal adjustment is planned to be underpinned by a decline in the expenditure ratio (about ¼ percentage point of GDP) and a marginal increase in the revenue ratio (0.1 percentage point of GDP). In particular, interest expenditure is projected to fall by ¼ percentage point and the reduction in collective consumption would be of almost ½ percentage point. These savings are expected

to be offset by an increase in transfers other than in kind and other current expenditure. The small increase in revenue actually compensates the termination in 2007 of Cyprus' receipts of temporary compensating grants from the EU budget (estimated at slightly below ½ % of GDP). The budget also contemplates administrative improvements and an increase of fees of the Land and Survey Department, which would enhance tax collection and revenues. On the expenditure side, the main budgetary measures include the maintenance of a ceiling on the nominal growth rate of current expenditures of 2 % per year, the continuation of the restrictive recruitment and wage policy in the general government sector, the limitation of the rate of growth of current transfers (pensions, allowances and other benefits) to the rate of inflation, more targeted social benefits, and the reduction of interest expenditure by running down the stock of debt financed by running down deposits held in the Central Bank.

According to the Commission services' spring 2007 forecast, the general government deficit for 2007 is projected to remain almost unchanged, just below 1½ % of GDP, despite the better-than-anticipated outturn of 2006. This is to account for the announcement of a forthcoming package of social transfers, amounting to about ¼ percentage point of GDP. The primary surplus is projected to remain at 1.7 % of GDP. The projected improvement of the structural balance, i.e. the budget balance net of cyclical factors and one-off and other temporary measures, is expected to be marginal, which would correspond to a broadly neutral fiscal stance.

In 2008, based on the customary no-policy-change assumption, the Commission services project a general government deficit of 1.4 % of GDP. The 2006 update of the convergence programme targets a deficit of ¾ % of GDP which then gradually declines to an almost balanced position by the end of the programme period (2010).

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

The Commission services' spring 2007 forecast project the debt-to-GDP ratio to continue its downward path reaching 61.6 % in 2007, down from 65.3 % in the previous year, and then decline further to 54.9 % in 2008, largely driven by the planned reduction of deposits with the central bank. According to the 2006 update of the convergence programme, the debt-to-GDP ratio is projected to decline from 64.7 % in 2006 to 52.5 % in 2008, before gradually improving further and reaching 46.1 % in 2010. The difference between the Commission services' forecast and the updated convergence programme over 2007–08, is mainly explained by different projections of the primary balance and nominal GDP growth.

### Composition of the fiscal adjustment in Cyprus

The general government balance in Cyprus has been in deficit since 1998, the first year for which statistical information is available. As regards the past six years, two clearly separate subperiods can be identified. The first is characterised by a worsening of the government balance, while the latter is characterised by fiscal adjustment required by the Council in relation to the excessive deficit procedure <sup>(1)</sup>.

<sup>(1)</sup> Council Decision 2005/184/EC, OJ L 62, 9.3.2005 p.19.

Table V.12.1

#### Budgetary developments 2005–10, Cyprus (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	-2.3	-1.5	-1.4	-1.4		
— Total revenues	41.2	42.4	42.6	42.6		
Of which: — current taxes	26.2	28.7	29.2	29.2		
— social contributions	8.3	8.0	8.1	8.1		
— Total expenditure	43.6	43.9	44.0	43.9		
Of which: — collective consumption	10.0	9.9	9.9	9.9		
— social transfers in kind	8.1	8.1	8.1	8.1		
— social transfers other than in kind	12.7	12.3	12.8	12.8		
— interest expenditure	3.4	3.3	3.1	3.1		
— gross fixed capital formation	3.1	3.3	3.3	3.3		
Primary balance	1.1	1.7	1.7	1.7		
Tax burden	35.6	37.0	37.6	37.6		
One-off and other temporary measures	0.9	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	-2.8	-1.2	-1.1	-1.1		
Structural primary balance	0.7	2.1	2.1	2.0		
Government gross debt	69.2	65.3	61.5	54.9		
<i>pm Real GDP growth (%)</i>	3.9	3.8	3.8	3.9		
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	-2.3	-1.9	-1.6	-0.7	-0.4	-0.1
Primary balance	1.1	1.4	1.4	2.1	2.1	2.2
One-off and other temporary measures <sup>(6)</sup>	1.3	0.4	0.0	0.0	0.0	0.0
Structural balance <sup>(3) (5)</sup>	-3.3	-1.9	-1.2	-0.3	0.0	0.3
Government gross debt	69.2	64.7	60.5	52.5	49.0	46.1
<i>pm Real GDP growth (%)</i>	3.9	3.7	3.9	4.1	4.1	4.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

<sup>(6)</sup> The programme reports one-offs and temporary measures to be at 1.3 % of GDP from 2005 and 0.4 % of GDP in 2006, all deficit reducing. These one-off measures include 0.4 % of GDP in both years accounting for EU funds, which are not considered as one-off measures in our analysis.

Sources: Commission services and December 2006 update of the convergence programme of Cyprus.

Table V.12.2

Main measures in the budget for 2007, Cyprus

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>Administrative and price-policy improvement of Land and Survey Department services' fees (+ 0.5 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Restrictive employment and wage policy in the general government sector (- 0.1 % of GDP)</li> <li>Limiting the rate of growth of current transfers (pensions, monetary allowances and other benefits) to the rate of inflation</li> <li>Maintaining a ceiling on the rate of growth in both current and capital expenditure (excluding wages and salaries and debt-servicing costs) compared with the previous year</li> <li>The reduction of net interest payments by running down stock of debt financed by sinking fund deposits (- 0.3 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and December 2006 update of the convergence programme.

From 2001 to 2003 the general government deficit increased from 2.2 % of GDP to 6.3 % of GDP. This was the result of a cyclical downturn and a counter-cyclical expansionary fiscal policy. In the early 2000s, Cyprus, like the rest of Europe, was exposed to a global economic slowdown. Real GDP growth halved from 4.0 % in 2001 to 2.0 % in 2002 and edged further down to 1.8 % in 2003. However, the worsening of the fiscal conditions went beyond the pure effect of economic activity, as shown by the cyclically adjusted primary balance, which deteriorated by 2¾ percentage points of GDP during this period. Total revenues increased modestly, from almost 36 % of GDP to slightly more than 38¾ % of GDP, owing mainly to temporary measures of around ¼ % of GDP in 2002 and 1¾ % in 2003. Net of one-offs, total revenues increased by only 1 percentage point of GDP; from just below 36 % of GDP in 2001 to 37 % in 2003, mainly driven by an increase in indirect taxes partly offset by a decline in direct taxes. This shift in the composition of tax revenues from direct to indirect taxes was the result of a comprehensive tax reform, consistent with the process of harmonisation with the EU *acquis*. Social contributions posted only a minor increase of some ¼ percentage point of GDP. By contrast, total expenditure rose by almost 7 percentage points of GDP, from 38¾ % of GDP in 2001 to around 45 % in 2003, clearly outpacing total revenues. The strongest deterioration of the budget balance occurred in 2003, a pre-election year. Retroactive increases in salaries and wages of the public sector by around 8 %, coupled with a rise in the cost-of-living-allowance (COLA) payments following the increase in indirect taxes, induced an increase of the government wage bill in the order of 10-11 %. Fur-

thermore, social transfers and subsidies increased by almost 2 % of GDP in 2003, in order to mitigate the economic slowdown and the negative impact of the tax reform.

The period between 2004 and 2006 was a period of fiscal retrenchment. Cyprus embarked on a consolidation programme aiming at bringing the deficit below the 3 % of GDP Treaty threshold by 2005. The consolidation programme was mainly frontloaded, with the bulk of the adjustment taking place in 2004 and 2005, when Cyprus recorded a deficit reduction of 2¼ percentage points of GDP and 1¾ percentage points of GDP respectively, while in 2006 the adjustment was more moderate, by ¾ percentage point of GDP. As a result, between 2004 and 2006 the government deficit declined by nearly 4¾ % of GDP to 1½ % of GDP in 2006. The magnitude of the fiscal adjustment was reflected in the improvement of the cyclically adjusted primary balance, which moved from a deficit of 2¾ % of GDP in 2004 to a surplus of around 2 % of GDP in 2006. The fiscal adjustment was driven by both revenues and expenditures, but especially by the former. Over the period 2004–06 total revenues increased by slightly above 3½ percentage points of GDP while expenditure fell by slightly above 1 percentage point of GDP. Revenues were boosted in 2004 and 2005 by temporary revenues of some 2 percentage points of GDP, mainly associated with the tax amnesty. Net of one-offs, total revenues increased by around 4¾ percentage points of GDP, mainly driven by direct and indirect taxes. This improvement in revenues benefited from the broadening of the tax base following the tax amnesty, and by higher tax compliance of the tax

payers. The adoption of legislation passed in 2005, designed to enforce better tax compliance, in conjunction with efforts to improve the efficiency of the public service's revenue collecting departments contributed to higher tax revenues.

On the other hand, total expenditure fell sharply by more than 2 percentage points of GDP in 2004 when Cyprus embarked on a strong consolidation path while cyclical conditions improved; GDP growth shot up to 4.2 % in 2004 from 1.8 % in the previous year. Over the period 2004–06 expenditure grew by just above 1 % of GDP. Current primary expenditure plummeted by more than 2¼ % of GDP in 2004 while social transfers and subsidies retreated slightly by ¼ % of GDP. However, capital expenditure inched higher in 2004 by almost ¼ % of GDP. Nonetheless, during 2005 and 2006, while compensation of employees remained at similar levels as a per cent of GDP and capital expenditure declined, intermediate consumption and social transfers and subsidies recorded an increase. These in tandem with an increase in other current expenditure led

current primary expenditure to record an increase of some 3½ % of GDP in 2006.

In spite of the adjustment effort implemented so far, improving the quality and composition of government expenditure remains a challenge. Fiscal consolidation until now has been mainly revenue-driven and has often relied on one-off measures. Expenditure trends have not been reversed.

The response of fiscal policy in Cyprus to the business cycle has been asymmetric. The counter-cyclical stance during the slowdown has created large public deficits and increased government debt, which have not been fully corrected during the upside of the cycle. Therefore, a main challenge for Cyprus in the short run would be to pursue further consolidation, by restraining current primary expenditure, so as to create room for fiscal policy to react to downturns, notably by allowing the automatic stabilisers to operate fully. In this way, fiscal policy could contribute to offset the pervasive effects of international shocks to which the Cypriot economy is highly exposed.

Table V.12.3

**Composition of the fiscal adjustment in Cyprus (% of GDP)**

	2001	2002	2003	2004	2005	2006
<b>Revenue</b>	<b>35.9</b>	<b>35.9</b>	<b>38.8</b>	<b>38.8</b>	<b>41.2</b>	<b>42.4</b>
<i>Of which one-offs</i>	0.0	0.3	1.8	1.1	0.9	0.0
Tax revenue	24.1	24.5	26.0	24.9	26.2	28.7
<i>Of which:</i>	11.1	11.2	9.6	8.0	9.3	10.9
<i>Direct taxes</i>						
<i>Indirect taxes</i>	13.0	13.3	16.4	16.9	16.9	17.8
Social contributions	6.8	6.7	7.0	7.7	8.3	8.0
Other current resources	3.6	3.0	4.0	3.7	4.0	3.4
<b>Expenditure</b>	<b>38.2</b>	<b>40.3</b>	<b>45.1</b>	<b>42.9</b>	<b>43.6</b>	<b>43.9</b>
Final consumption expenditure	17.1	18.2	19.8	17.9	18.1	18.0
<i>Compensation of employees</i>	13.2	13.8	15.6	14.8	14.8	14.8
Transfers in kind, other than in kind and subsidies	18.6	19.5	21.4	21.2	21.5	21.8
Interest expenditure	3.4	3.2	3.4	3.3	3.4	3.3
Current primary expenditure	30.4	31.9	35.9	33.6	34.7	37.1
Capital expenditure	3.4	3.6	4.0	4.2	3.6	3.5
<b>General government deficit</b>	<b>-2.2</b>	<b>-4.4</b>	<b>-6.3</b>	<b>-4.1</b>	<b>-2.3</b>	<b>-1.5</b>
<b>General government consolidated gross debt</b>	<b>60.7</b>	<b>64.7</b>	<b>69.1</b>	<b>70.3</b>	<b>69.2</b>	<b>65.3</b>
<i>pm:</i>						
<i>Real GDP growth rate (% change)</i>	4.0	2.0	1.8	4.2	3.9	3.8
<i>Primary balance</i>	1.1	-1.2	-2.9	-0.8	1.1	1.7
<i>Cyclically adjusted primary balance</i>	0.1	-1.8	-2.7	-0.5	1.6	2.1
<i>Total tax burden</i>	30.9	31.2	33.1	33.5	35.6	37.0

Source: Commission services.

# 13. Latvia

## Recent developments and medium-term prospects

In 2006, the general government balance recorded a surplus of 0.4 % of GDP. This is better than the targeted deficit of 1.5 % of GDP set in the November 2005 update of the convergence programme, despite a supplementary budget in October 2006 which increased expenditures by around 1.5 % of GDP. The better outcome was a result of higher-than-expected tax revenues, as nominal GDP growth exceeded plans in the November 2005 update of the convergence programme by a remarkable 10 ½ percentage points, an excess of 4 ½ points in real terms and 5 ½ in the deflator. The efficiency of tax collection has also improved in recent years. Social security recorded a sizeable surplus of 2 % of GDP, as the strong growth in nominal wages and employment in 2006 increased social contributions by 29 %. General government expenditure grew by 29.6 %, well above initial plans <sup>(1)</sup>. The debt ratio declined to 10 % of GDP, one of the lowest in the EU.

The 2007 budget law was adopted by the parliament on 19 December 2006 and targets a deficit of 1.3 % of GDP in 2007. The target was confirmed in the January 2007 update of the convergence programme <sup>(2)</sup>. The main measures on the revenue side include the increase of the tax-free threshold of the personal income tax and the income tax rebate for dependants. From 2007, the rate of social contributions channelled to the second-pillar pension scheme doubled to 4 % of gross wages and it is scheduled to increase further in the coming years; this will reduce government revenue

as the second-pillar pension scheme is not classified in the government sector. The harmonisation of excises on tobacco and oil products with EU rules will, on the other hand, bring in significant additional revenues. Although in 2007 discretionary measures amount to a net loss of revenue, this is to be counterbalanced by the positive impact of continuing strong economic growth. The largest increases on the expenditure side are directed towards the healthcare and the defence sectors, but public sector wages in general are increased significantly. High investment in infrastructure, mainly in road building, will drive up capital expenditure in 2007.

Medium-term fiscal targets were tightened in March 2007 in the context of an anti-inflation plan, including balanced budgets for the years 2007 and 2008 and surpluses in the following two years (excluding local governments, which have had anyhow small surpluses in 2005–06). In addition, the government committed itself to end the practice of previous years, to spend additional revenue in the form of supplementary budgets. The Commission services' spring 2007 forecast projects a general government budget surplus of 0.2 % of GDP for 2007. The main reason explaining the difference with the convergence programme is the better-than-expected deficit outturn in 2006 and the projected higher economic growth in 2007. According to the Commission services' spring 2007 forecast, the fiscal stance in 2007, as measured by the change in the structural balance, is estimated to be broadly neutral.

In 2008, based on a no-policy-change assumption, and taking into account the policy revisions of March 2007, the Commission services' spring 2007 forecast projects the general government balance to remain at a marginal surplus. This compares with a deficit target of 0.9 % of GDP in the convergence programme of January 2007. The convergence programme also foresees a deficit of 0.4 % of GDP in 2009, but this target

<sup>(1)</sup> The assessment of developments in specific categories of expenditure, in 2005 and 2006, is somewhat hindered by the rapid increase of 'other current transfers payable', which apparently include expenditure that should have been classified elsewhere.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)



was revised to a 'surplus' by the anti-inflation plan of March 2007.

The debt-to-GDP ratio is projected in the Commission services' spring 2007 forecast to decline to 8.0 % at the

end of 2007 and to 6.7 % at the end of 2008, thanks to high nominal GDP growth and marginal surpluses. This is more optimistic than the 10.5 % of GDP for 2007 and 10.6 % of GDP for 2008, presented in the January 2007 update of the convergence programme.

*Table V.13.1*

**Budgetary developments 2005–09, Latvia (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	
General government balance	- 0.2	0.4	0.2	0.1	
— Total revenues	35.2	37.4	37.5	36.5	
<i>Of which:</i>					
— <i>current taxes</i>	20.3	21.2	21.2	20.7	
— <i>social contributions</i>	8.6	8.9	8.6	8.2	
— Total expenditure	35.5	37.0	37.3	36.4	
<i>Of which:</i>					
— <i>collective consumption</i>	9.0	8.7	8.6	8.4	
— <i>social transfers in kind</i>	8.5	8.2	8.1	7.8	
— <i>social transfers other than in kind</i>	8.4	8.0	7.8	7.6	
— <i>interest expenditure</i>	0.6	0.5	0.4	0.3	
— <i>gross fixed capital formation</i>	3.3	3.4	3.8	4.2	
Primary balance	0.3	0.9	0.6	0.4	
Tax burden	29.0	30.2	30.1	29.1	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	- 0.2	0.0	0.0	0.4	
Structural primary balance	0.4	0.5	0.4	0.8	
Government gross debt	12.0	10.0	8.0	6.7	
<i>pm Real GDP growth (%)</i>	10.6	11.9	9.6	7.9	
<b>Convergence programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
General government balance	0.1	- 0.4	- 1.3	- 0.9	- 0.4
Primary balance	0.7	0.2	- 0.8	- 0.4	0.1
One-off and other temporary measures					
Structural balance <sup>(3)</sup> <sup>(5)</sup>	0.1	- 0.9	- 1.7	- 0.8	0.2
Government gross debt	12.1	10.7	10.5	10.6	9.4
<i>pm Real GDP growth (%)</i>	10.2	11.5	9.0	7.5	7.5

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in January 2007.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

*Sources:* Commission services and the January 2007 update of the convergence programme of Latvia.

Table V.13.2

**Main measures in the budget for 2007, Latvia**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Increase in the personal income tax-free threshold from LVL 32 per month to LVL 50 per month and the setting of income tax rebates for dependents at LVL 35 per month (– 0.5 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Reform of the National Armed Forces and NATO integration related requirements (+ 0.6 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Increase of the statutory minimum wage from LVL 90 per month to LVL 120 per month (+ 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Modernisation and restructuring of the healthcare system (+ 0.5 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Increase in excise duties on oil and tobacco products (+ 0.3 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase of the statutory minimum wage for the public sector employees (+ 0.1 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Reduced VAT rate (5 % instead of 18 %) on natural gas, electricity and some other non-commercial services (– 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased judges' and prosecutors' wages (+0.1 % of GDP)</li> </ul>

(1) Estimated impact on general government revenue. Please note that the tax measures of the anti-inflation plan were not yet adopted by the parliament at the time of the preparation of this document.

(2) Estimated impact on general government expenditure.

Sources: Commission services, the January 2007 update of the convergence programme of Latvia and the budget for 2007.

# 14. Lithuania

## Recent developments and medium-term prospects

The general government deficit decreased slightly to 0.3 % of GDP in 2006. This compares with a deficit target of 1.4 % of GDP in the December 2005 update of the convergence programme. Carrying-over from a better-than-projected outturn in 2005, the more favourable outcome results from a good budgetary performance at all levels of general government, which are estimated to have recorded higher-than-planned revenues while expenditure plans, including the supplementary budget in July 2006, were broadly achieved. This was possible due to stronger economic activity, employment, faster wage growth and improvement in tax collection. Against the background of higher revenue collection in the first half of 2006, the supplementary budget in July 2006 allocated additional spending of about 0.5 % of the GDP. The government debt ratio decreased slightly in 2006 to 18.2 % of GDP, thanks to strong growth and receipts from privatisation.

The budget for 2007 was approved by the parliament on 7 December 2006. The general government deficit target confirmed in the most recent update of the convergence programme is 0.9 % of GDP <sup>(1)</sup>. The budget did not contain significant tax changes, apart from already planned tax reductions in accordance with the tax policy provisions of the Government action programme for 2004–08, in particular the reduction in personal income tax revenues resulting from the tax cut in July 2006 and a planned decrease of one percentage point in the so-called ‘social tax’ from the beginning of 2007. This temporary tax was introduced in January 2006 and is a *de facto* increase in the corporate tax rate by 4 percentage points; it will be abolished in 2008. The costs of the pension reform (establishing second-pillar pen-

sion schemes outside the general government) which started in 2004 are estimated to account for 0.8 % of GDP in 2007. The revenues are expected to benefit from increases in excise duties on tobacco introduced in March 2007 and from improved tax administration and an expansion of the real estate tax base. On the expenditure side, the budget includes an increase in capital expenditure growth largely related to public investment co-financed by the EU. The growth rate of current expenditure is also planned to rise, mainly driven by an intended significant increase in social transfers other than in kind (e.g. pensions and child benefits), salary increases for public sector employees and higher subsidies to farmers.

The official projection for 2007 compares with an estimated deficit in the Commission services’ spring 2007 forecast of 0.4 % of GDP. The main reason explaining the difference is the better-than-expected deficit outturn in 2006, which was not anticipated by the authorities when presenting the programme. If the better outcome is carried over to 2007 and the budget is strictly implemented, the deficit is likely to be lower than planned. This is backed by a public commitment to disciplinary and responsible management of public finances expressed by the parliamentary parties and the government by signing an agreement on fiscal responsibility. The Commission services’ spring 2007 forecast expects the fiscal stance to be mildly restrictive in 2007, when the primary structural deficit, i.e. the primary deficit net of cyclical and one-off and other temporary measures, is estimated to decline by 0.3 percentage point.

The Commission services’ spring 2007 forecast foresees the general government deficit in 2008 to worsen to 1 % of GDP. The forecast is based on the no-policy change assumption and includes the impact of the tax reform, namely a planned decrease of the personal income tax rate from 27 % to 24 % taking effect in January 2008. The main reason for the deterioration is explained by the negative impact of the tax reform, together with increas-

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

ing costs of the pension reform. The most recent update of the convergence programme foresees the deficit to improve to 0.5 % of GDP in 2008 and to achieve a balanced budget in 2009.

The Commission services' spring 2007 forecast expects the general government debt ratio to remain low at about 19-20 % of GDP in 2007–08. The authorities foresee the debt ratio to decrease in 2009.

Table V.14.1

**Budgetary developments 2005–09, Lithuania (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	
General government balance <sup>(3)</sup>	- 0.5	- 0.3	- 0.4	- 1.0	
— Total revenues	33.1	33.3	34.4	34.9	
<i>Of which:</i> — current taxes	20.3	20.9	21.4	21.8	
— social contributions	8.6	8.8	9.2	9.1	
— Total expenditure	33.6	33.6	34.8	36.0	
<i>Of which:</i> — collective consumption	7.1	7.0	6.7	6.5	
— social transfers in kind	9.6	10.3	10.8	11.1	
— social transfers other than in kind	9.0	8.6	8.5	8.6	
— interest expenditure	0.8	0.5	0.6	0.8	
— gross fixed capital formation	3.5	4.2	5.1	6.0	
Primary balance	0.3	0.2	0.2	- 0.3	
Tax burden	28.9	29.3	30.3	30.5	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(4)</sup>	- 0.9	- 0.6	- 0.6	- 1.0	
Structural primary balance	- 0.1	- 0.2	0.1	- 0.2	
Government gross debt	18.6	18.2	18.6	19.9	
<i>pm Real GDP growth (%)</i>	7.6	7.5	7.3	6.3	
<b>Convergence programme <sup>(5)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
General government balance	- 0.5	- 1.2	- 0.9	- 0.5	0.0
Primary balance	0.3	- 0.4	0.0	0.4	0.8
One-off and other temporary measures					
Structural balance <sup>(4) (6)</sup>	- 1.0	- 1.8	- 1.3	- 0.5	0.5
Government gross debt	18.7	18.4	19.2	19.0	17.7
<i>pm Real GDP growth (%)</i>	7.6	7.8	6.3	5.3	4.5

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> The costs of the ongoing pension reform are included in the deficit. The costs are estimated at 0.8 % of GDP per year in the period 2007–09.

<sup>(4)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(5)</sup> Submitted in December 2006.

<sup>(6)</sup> Commission services' calculations on the basis of the information in the programme. There are no one-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the convergence programme of Lithuania.

Table V.14.2

**Main measures in the budget for 2007, Lithuania**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Pension reform (– 0.8 % of GDP)</li> <li>• Personal income tax cut implemented in July 2006 (– 0.8 % of GDP)</li> <li>• Improved tax administration (0.4 % of GDP)</li> <li>• Social tax (0.5 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased public investment (0.5 % of GDP)</li> <li>• Higher social transfers other than in kind (0.7 % of GDP)</li> <li>• Increased support for agriculture (0.1 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services, the 2007 budget and the December 2006 update of the convergence programme of Lithuania.

# 15. Luxembourg

## Recent developments and medium-term prospects

In 2006, the general government balance improved further to reach a surplus of 0.1 % of GDP, after a deficit of 0.3 % of GDP in 2005. While very modest compared to the record surpluses registered in 2000 and 2001 (about 6 % of GDP in both years), the general government balance was much better than planned in the November 2005 update of the stability programme, when the deficit was projected to decline to 1.8 % of GDP in 2006 after reaching a peak of 2.3 % in 2005. The improvement actually recorded in 2006 was broadly of the same magnitude as that projected by the programme (0.4 percentage point of GDP instead of 0.5) but starting from a much more favourable 2005 outcome. Moreover, real GDP growth (6.2 % according to the latest estimates) was significantly stronger than projected in the 2005 and 2006 programmes (4.4 % and 5.5 % respectively).

The 2007 budget was adopted by the parliament on 22 December 2006. It includes a series of adjustment measures agreed in April 2006 between the government and the business and labour organisations in order to cope with the deterioration in public finances and to reinforce the competitiveness of the economy. These measures mainly consist of increases in several contributions and taxes and a temporary (up to 2009) suspension of the normal indexation of wages and social benefits on consumer prices, which has been replaced by an indexation at predetermined dates. The budget for 2007, as well as the 2006 update of the stability programme, projected the deficit to improve from an estimated 1.7 % of GDP in 2006 (revised to 1.5 % in the programme) to 0.9 % in 2007 <sup>(1)</sup>. However, as already stated, the general government actually recorded a 0.1 % of GDP surplus in 2006.

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

Starting from these much more favourable outcomes, the Commission services' spring 2007 forecast projects the general government balance to keep improving to a 0.4 % of GDP surplus in 2007. This would imply a broadly neutral fiscal stance in 2007, with the structural primary surplus slightly rising from 0.6 % of GDP in 2006 to 0.8 %.

Under a no-policy-change assumption, implying in particular that the adjustment measures decided in the spring of 2006 will continue to be carried out as planned despite the better-than-expected outcome recorded in 2006, the Commission services' spring 2007 forecast projects the general government balance to further improve in 2008 to a surplus of about 0.6 % of GDP. This compares to a deficit of 0.4 % of GDP presented in the most recent update of the stability programme starting from a much less optimistic projection for 2007. However, the improvement in the general government balance projected for 2008 by the Commission services, forecast (0.2 percentage point of GDP) is more limited than that in the programme (0.5 percentage point of GDP) because the latter projects a larger relative decline in expenditure than the forecast (1.2 percentage points of GDP instead of 1.0) and a smaller decrease in revenues (0.6 percentage point of GDP compared to 0.8). The stability programme projects a further improvement of the general government balance in 2009 to a surplus of 0.1 % of GDP.

The government gross debt is one of the lowest in the EU and has been on a slightly decreasing trend in the last decade, in spite of the emergence of budget deficits. However, it rose from 6.1 % of GDP in 2005 to 6.8 % in 2006 because several loans related to road and railway infrastructure projects were issued during those years for a total of about 1 % of GDP. It is projected to resume slightly declining in per cent of GDP in 2007 and 2008 thanks to the improvement in the general government balance and to strong real and nominal GDP growth.

Table V.15.1

**Budgetary developments 2005–09, Luxembourg (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	- 0.3	0.1	0.4	0.6	
— Total revenues	42.6	40.5	39.4	38.6	
<i>Of which:</i>					
— <i>current taxes</i>	27.4	25.8	25.2	24.8	
— <i>social contributions</i>	11.7	11.0	10.7	10.4	
— Total expenditure	42.8	40.4	39.0	38.0	
<i>Of which:</i>					
— <i>collective consumption</i>	6.7	6.1	5.9	5.7	
— <i>social transfers in kind</i>	10.2	9.7	9.4	9.3	
— <i>social transfers other than in kind</i>	14.9	14.0	13.4	13.0	
— <i>interest expenditure</i>	0.2	0.2	0.2	0.1	
— <i>gross fixed capital formation</i>	4.7	4.1	3.9	3.8	
Primary balance	- 0.1	0.3	0.6	0.8	
Tax burden	38.6	36.3	35.4	34.7	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	1.0	0.5	0.6	0.8	
Structural primary balance	1.2	0.6	0.8	1.0	
Government gross debt	6.1	6.8	6.7	6.0	
<i>pm Real GDP growth (%)</i>	4.0	6.2	5.0	4.7	
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	- 1.0	- 1.5	- 0.9	- 0.4	0.1
Primary balance	- 0.8	- 1.3	- 0.8	- 0.2	0.3
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 0.2	- 1.3	- 0.5	- 0.1	0.9
Government gross debt	6.1	7.5	8.2	8.5	8.5
<i>pm Real GDP growth (%)</i>	4.0	5.5	4.0	5.0	4.0

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in November 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the November 2006 update of the stability programme of Luxembourg.

Table V.15.2

**Main measures in the budget for 2007, Luxembourg**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
• Increase of the dependency insurance contribution: + 0.2 % of GDP	• Reduction of 'current operating expenditure': - 0.1 % of GDP
• Reduction of the withholding tax rate: - 0.4 % of GDP	• Hiring freeze by central government: less than - 0.1 % of GDP
• Increase in the tax on motor vehicles: + 0.1 % of GDP	• Freeze of government's wages in real terms: - 0.1 % of GDP
	• Suspension of indexations: - 0.3 % of GDP
	• Other measures in the field of social security: - 0.2 % of GDP
	• Reduction in central government investment: - 0.5 % of GDP
	• Reduction in spending by Employment Fund: less than - 0.05 % of GDP
	• Increase in public research expenditure, in line with the NRP: + 0.3 % of GDP

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services, 2007 budget, 2006 stability programme and Stavec, *Note de conjoncture* No 2006/1, pp. 24–27.

# 16. Hungary

## Recent developments and medium-term prospects

In 2006, the general government deficit reached 9.2 % of GDP. It was substantially higher than the original deficit target of 6.1 % of GDP set in the December 2005 update of the convergence programme, despite the implementation of a fiscal retrenchment package in the second half of the year, reducing the deficit in 2006 by around 2 % of GDP <sup>(1)</sup>. The overshoot took place almost entirely on the expenditure side, mainly due to operational costs of central budgetary institutions (collective consumption expenditure), pension and healthcare expenditure and local government investment. Interest expenditure was also higher than budgeted by 0.3 % of GDP, due to the higher debt level and a substantial increase in market rates by over 100 basis points. It also reflects the inclusion of motorway investment inside the general government (around 1 % of GDP) after Eurostat clarified that this could not be recorded as an off-budget operation. The corrective measures (the ‘new equilibrium’ package) adopted during the summer were broadly evenly distributed between the expenditure and revenue-side of the budget. Due to the very high deficit, the debt-to-GDP ratio increased significantly in 2006 to 66 % from 61.7 % in 2005. This increase was mitigated somewhat by privatisation revenues of around 1¼ % of GDP.

The 2007 budget adopted by parliament on 21 December 2006 sets a general government deficit target of 6.8 % of GDP, in line with the envisaged adjustment path of the December 2006 convergence programme <sup>(2)</sup>. On the revenue side, the budget confirmed the tax increases and the introduction of co-payments for healthcare services of the consolidation package which had not yet been implemented

at the time. Measures on the expenditure side largely consist of freezes in operational and wage expenditure of the public administration and nominal cuts in universal price subsidies and public investment expenditures. Since October 2006 a series of structural reform steps were taken mainly in the areas of public administration, healthcare, and price subsidies, which have increased the credibility of the expenditure savings planned in 2007. The budget also introduces a new control mechanism to enhance line ministries’ respect of expenditure ceilings and increases the level of budgetary reserves by 0.3 % of GDP as a safeguard for unforeseen slippages. The Commission services’ spring 2007 forecast projects a deficit of 6.8 % of GDP for 2007 in line with the official target. The structural primary balance is estimated to improve by 3½ % of GDP in 2007, indicating a strongly restrictive stance of fiscal policy.

For 2008, the Commission services forecast, on the basis of a no-policy-change assumption, a deficit of 4.9 % of GDP against the official target of 4.3 % of GDP. The forecast does not take into account future measures that the Hungarian Government may decide to take in the course of 2007 and that were announced in broad terms in the most recent convergence programme update. These future measures include the possible introduction of the central real estate tax or further structural reform steps (most notably, the revamping of the disability and also the regular pension systems and the transition from a single insurer to a multi-insurer health system). Furthermore, the forecast assumes that not all the planned freezes of wages and operational expenditures are fully sustained in 2008, also in view of the past negative experience with similar measures. For 2009, the convergence programme update plans a further reduction in the deficit to 3.2 % of GDP. In 2010, a reduction in the deficit to 2.7 % of GDP is foreseen.

The Commission services’ spring 2007 forecast projects the debt-to-GDP ratio to continue to moderately increase throughout the forecast horizon: to 67.1 % in 2007 and to 68.1 % in 2008. According to the most recent update

<sup>(1)</sup> All budgetary targets and projections in the text include the burden of the pension reform.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)



of the convergence programme, the general government debt ratio is expected to further increase from 67.5 % of GDP in 2006 to 71.3 % of GDP in 2008 and start

decreasing again in 2009. However, the latter does not take into account the better-than expected public finance outcomes in 2006.

*Table V.16.1*

**Budgetary developments 2005–10, Hungary (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008
General government balance	- 7.8	- 9.2	- 6.8	- 4.9
— Total revenues	42.2	43.7	44.0	44.1
<i>Of which:</i> — current taxes	24.5	24.5	25.2	25.2
— social contributions	12.6	12.8	12.9	12.7
— Total expenditure	50.0	52.9	50.9	49.0
<i>Of which:</i> — collective consumption	9.9	9.9	9.7	8.9
— social transfers in kind	12.6	12.6	11.7	11.1
— social transfers other than in kind	14.5	15.1	15.2	15.2
— interest expenditure	4.1	3.9	4.1	3.9
— gross fixed capital formation	4.0	4.5	3.6	3.3
Primary balance	- 3.7	- 5.3	- 2.7	- 1.0
Tax burden	37.4	37.6	38.4	38.2
One-off and other temporary measures	0.4	- 0.2	- 0.9	- 0.1
Structural balance <sup>(3)</sup>	- 8.4	- 9.4	- 6.1	- 4.6
Structural primary balance	- 4.3	- 5.5	- 1.9	- 0.7
Government gross debt	61.7	66.0	67.1	68.1
<i>pm Real GDP growth (%)</i>	4.2	3.9	2.4	2.6

Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	- 7.8	- 10.1	- 6.8	- 4.3	- 3.2	- 2.7
Primary balance	- 3.7	- 6.2	- 2.4	0.0	0.9	1.1
One-off and other temporary measures	0.0	- 0.7	- 1.0	- 0.1	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 8.0	- 9.8	- 5.6	- 3.7	- 3.0	- 2.9
Government gross debt	61.7	67.5	70.1	71.3	69.3	67.5
<i>pm Real GDP growth (%)</i>	4.2	4.0	2.2	2.6	4.2	4.3

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

*Sources:* Commission services and the December 2006 update of the convergence programme of Hungary.

Table V.16.2

**Main measures in the budget for 2007, Hungary**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Increase of the lower tax bracket by HUF 150 000 (– 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• 0.9 percentage point of GDP decrease in public investment expenditures</li> </ul>
<ul style="list-style-type: none"> <li>• Introduction of the minimum expected profit tax for corporations (0.2 % of GDP) <sup>(3)</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Freezing the public wage bill at the end 2006 level and cuts in operational expenditures of public administration (– 0.6 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Introduction of a 4 % 'separate tax' for personal incomes (0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Cuts in universal pharmaceutical and gas price subsidies (– 0.5 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Increase in the rate of employees' healthcare contribution from 6 % to 7 % (0.2 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased subsidies (+ 0.2 % of GDP) and capital injections (+ 0.4 % of GDP) to the national railway company in the context of a restructuring plan</li> </ul>
<ul style="list-style-type: none"> <li>• Introduction of co-payments in healthcare services (0.1 % of GDP)</li> </ul>	

<sup>(1)</sup> Estimated impact on general government revenue (including tax increases adopted already in July 2006 but effective from 1 January 2007).

<sup>(2)</sup> Estimated impact on general government expenditure.

<sup>(3)</sup> The Constitutional Court annulled the tax on 27 February 2007.

Sources: Commission services, State Audit Office, December 2006 update of the convergence programme of Hungary.

# 17. Malta

## Recent developments and medium-term prospects

In 2006, the general government deficit turned out at 2.6 % of GDP, marginally better than the official target of 2.7 % of GDP set out in the January 2006 update of the convergence programme. The slightly lower-than-planned deficit ratio is largely attributable to a higher-than-expected nominal GDP. Both total revenues and total expenditures were lower than projected in the January 2006 update of the convergence programme. Relative to GDP, general government debt stood at 66.5 % in 2006, significantly lower than the target of 70.8 % of GDP set out in the January 2006 update of the convergence programme.

The budget for 2007 was approved by the parliament on 17 November 2006 and targets a budget deficit of 2.3 % of GDP. The budget includes a revenue increasing measure consisting of a new licensing system for gaming machines as well as a revenue decreasing measure related to a review of the personal income tax regime. Other measures with a marginal overall impact on revenue include a reduction in social contributions for certain categories of part-time employment, tax deductions for parents utilising the services of childcare facilities and a reduction in the airport tax. The main expenditure increasing measures include a grant to low-income households aimed at alleviating the cost of energy and an increase in certain social benefits. It is noted, however, that other ongoing measures, namely a tighter control on the public sector wage bill and social payments, are expected to contribute to a reduction in the deficit ratio in 2007 to 2.3 % of GDP. This was confirmed in the 2006 update of the convergence programme <sup>(1)</sup>. The 2007 budget also announced the securitisation of certain government property (estimated at around 1 percentage point of GDP) to finance payments for expropriated land.

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

The forecast for the 2007 deficit ratio was subsequently improved to 1.9 % of GDP in the April 2007 fiscal notification. The lower deficit ratio in the April 2007 notification is primarily due to advance receipts in relation to a one-off operation related to sale of land amounting to 0.4 % of GDP, originally booked in 2006. The transaction was, however, completed in 2007 and appropriately booked as a deficit-reducing operation in that year. According to the Commission services' spring 2007 forecast, the general government deficit is projected at 2.1 % of GDP in 2007. This slightly more cautious projection stems from lower social contributions, which are forecast to move in line with the increase in compensation of employees. The Commission services' forecast implies a broadly neutral fiscal stance in 2007, as the structural deficit, i.e. the general government deficit net of cyclical and one-off and other temporary measures, is estimated to decline only marginally from 2.7 % of GDP in 2006 to 2.6 % in 2007.

Based on the customary no-policy-change assumption, the Commission services' spring 2007 forecast projects the general government deficit decline to 1.6 % of GDP in 2008. The significant improvement is primarily due to lower public investment linked with the completion of a large health-care facility. According to the December 2006 update of the convergence programme, the general government deficit for 2008 is anticipated to decline to 0.9 % of GDP. For 2009, the most recent update of the convergence programme foresees a broadly balanced budget in nominal terms.

According to the Commission services' spring 2007 forecast, general government debt is expected to continue the downward path which started in 2005. For 2007, the debt-to-GDP ratio is forecast at slightly below 66 %. This compares with 66.7 % of GDP in the latest update of the convergence programme, which was revised downwards to 66 % of GDP in the April 2007 fiscal notification. For 2008, the general government debt is projected to fall further to 64.3 % of GDP, according to the Commission services' spring 2007 forecast. The 2006 updated convergence programme foresees a further decline in the debt ratio, to 63.2 % of GDP in 2008 and to 59.4 % in 2009.

Table V.17.1

**Budgetary developments 2005–10, Malta (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	
General government balance	- 3.1	- 2.6	- 2.1	- 1.6	
— Total revenues	42.9	42.7	42.2	41.9	
Of which: — current taxes	26.6	27.8	28.0	28.0	
— social contributions	8.6	8.0	8.0	7.8	
— Total expenditure	46.0	45.2	44.3	43.4	
Of which: — collective consumption	9.6	9.7	9.4	9.2	
— social transfers in kind	11.5	11.4	11.0	10.7	
— social transfers other than in kind	13.0	13.0	12.7	12.7	
— interest expenditure	3.8	3.7	3.3	3.3	
— gross fixed capital formation	5.3	4.6	5.2	4.0	
Primary balance	0.7	1.1	1.2	1.8	
Tax burden	34.5	34.9	35.2	35.0	
One-off and other temporary measures	1.7	0.7	0.6	0.0	
Structural balance <sup>(3)</sup>	- 3.8	- 2.7	- 2.6	- 1.6	
Structural primary balance	0.0	1.0	0.8	1.7	
Government gross debt	72.4	66.5	65.9	64.3	
<i>pm Real GDP growth (%)</i>	3.0	2.9	3.0	2.8	
<b>Convergence programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
General government balance	- 3.2	- 2.6	- 2.3	- 0.9	0.1
Primary balance	0.8	1.1	1.1	2.5	3.2
One-off and other temporary measures	1.6	1.1	0.2	0.2	0.2
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 3.8	- 2.9	- 2.0	- 1.0	- 0.4
Government gross debt	74.2	68.3	66.7	63.2	59.4
<i>pm Real GDP growth (%)</i>	2.2	2.9	3.0	3.1	3.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the convergence programme of Malta.

Table V.17.2

**Main measures in the budget for 2007, Malta**

<b>Revenue measures <sup>(1)</sup></b>	<b>Expenditure measures <sup>(2)</sup></b>
• Income tax reform (- 0.5 % of GDP)	• Restraint in public services wages <sup>(3)</sup> (- 0.7 % of GDP)
• Gaming machines' licenses (0.2 % of GDP)	• Control of benefit fraud <sup>(3)</sup> (- 0.2 % of GDP)
• Revision in social contribution rates (- 0.05 % of GDP)	
• Reduction in airport tax (- 0.02 % of GDP)	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

<sup>(3)</sup> On-going measure, not specific to 2007 budget.

Sources: Commission services, 2006 updated convergence programme and budget for 2007.

# 18. The Netherlands

## Recent developments and medium-term prospects

In 2006, the general government balance improved to a surplus of 0.6 % of GDP, up from a deficit of 0.3 % of GDP in 2005. The official target, as contained in the December 2005 update of the stability programme, was a deficit of 1.5 % of GDP. The main reason for the better outcome are tax receipts which turned out around 2 % of GDP higher than targeted, reflecting inter alia higher-than-expected growth (by ½ a percentage point). Furthermore, unexpectedly high revenue from gas sales (around 0.3 % of GDP) and a 0.3 % of GDP better-than-expected deficit of the lower levels of government worked to improve the overall balance. Social contributions, on the other hand, were 0.4 % of GDP lower than planned. The debt-to-GDP ratio declined from 52.7 % in 2005 to 48.7 % in 2006, in part because of debt-reducing stock-flow operations amounting to 1.2 % of GDP. These operations reflect both the sale of financial assets and a correction of higher-than-needed borrowing that took place in 2005.

The budget for 2007 adopted on 5 October 2006 targets a general government surplus of 0.2 % of GDP in 2007, which was confirmed in the November 2006 update of the stability programme <sup>(1)</sup>. The budget includes corporate and income tax breaks and a reduction of unemployment premiums following the strong decline in registered unemployment in 2006. Table V.18.2 specifies the main measures. In the spring note on budgetary implementation 2007 <sup>(2)</sup>, the Dutch Government lowered their target for the general government balance for this year to a deficit of 0.7 % of GDP. The main factors behind the worsened target are expenditure overruns of around 0.4 % of GDP and a reduction in estimated gas receipts of around 0.5 % of GDP. Furthermore, the recent agree-

ment on the upcoming constitutional reform of the Netherlands Antilles included a takeover of debt, which worsens the nominal government balance in 2007 by 0.1 % of GDP. Finally, the new government modified the disability scheme, leading to further expenditure of around 0.1 % of GDP annually from 2007 onwards.

On the other hand, total receipts from taxes and social contributions are expected to come out 0.2 % of GDP higher than anticipated in the budget.

In the Commission services' spring 2007 forecast, the general government balance is also foreseen to come out at a deficit of 0.7 % of GDP, although the composition is slightly different. More specifically, on the one hand the revenues from mineral gas sales are expected to be higher by around ¼ % of GDP in the Commission services' spring forecast as a result of higher assumed oil prices. On the other hand, social benefits are foreseen to come out ¼ % of GDP higher. In structural terms, the government balance is estimated to deteriorate by ½ % of GDP, implying a clearly procyclical fiscal stance in 2007 at a time of strong economic growth.

On a no-policy-change basis, the Commission services' spring 2007 forecast projects the nominal budgetary balance to improve again by 0.7 % of GDP in 2008 and to reach a balanced budget. The improvement compared with 2007 is in part explained by an expected increase in gas receipts resulting from the assumed rise in oil prices towards the end of the forecast horizon. Furthermore, the elasticity of social premiums with respect to compensations of employees is expected to return to its long-term value and no further debt takeovers are foreseen for 2008.

The no-policy-change assumption implies that the planned measures of the new government, as set out in the new government's programme, are not taken on board in the forecast. If all the measures that are planned for 2008 were implemented, this would further improve the government balance by around 0.4 % of GDP in 2008. The most recent update of the stability programme targeted a surplus of

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> Sent to parliament on 29 May 2007.

0.3 % of GDP, hence only a 0.1 % of GDP improvement in the nominal government balance. This is explained by the fact that the target was based on GDP growth of only 1¾ % instead of 2.6 % in the Commission services' spring 2007 forecast. For 2009, the stability programme update targets a surplus of 0.9 % of GDP. This reflects falling interest expenditures and the reduction of the Dutch contributions to the EU own resources by 0.5 % of GDP.

### Tax revenues in the Netherlands

Tax receipts and social premiums as a share of total government revenues have been relatively stable in the past decade and a half, at around 85 % (Graph V.18.1).

The relative shares of the major tax categories do not show large shifts over the time horizon, although one

development can be inferred from the graph: the share of the main components of direct taxes (i.e. taxes on personal and corporate income) has fallen from 32 % of total government revenues in 1995 to around 26 % in 2006. In the same period, the share of taxes on production and imports, or indirect taxes, has increased from 22 % to 28 % of total government income.

Although the shares of total receipts from taxes and social contributions to government revenues have been relatively stable over a protracted period, the overall elasticity of tax receipts with respect to GDP shows significant fluctuations from one year to another. Graph V.18.2 shows that the apparent elasticity of total tax revenues and social premiums to GDP fluctuates in an interval of 0.5 and 2 with an average of 1.1, very close to the OECD estimate of 1.0. It also shows that in recent years,

Table V.18.1

#### Budgetary developments 2005–09, the Netherlands (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	-0.3	0.6	-0.7	0.0	
— Total revenues	45.2	47.2	46.3	46.3	
Of which: — current taxes	24.2	24.7	24.8	25.1	
— social contributions	14.1	15.3	15.0	14.9	
— Total expenditure	45.4	46.6	47.0	46.2	
Of which: — collective consumption	10.6	10.3	10.4	10.5	
— social transfers in kind	13.5	15.0	15.0	14.9	
— social transfers other than in kind	11.1	11.2	10.9	10.6	
— interest expenditure	2.4	2.3	2.2	2.0	
— gross fixed capital formation	3.2	3.3	3.3	3.2	
Primary balance	2.1	2.9	1.5	2.1	
Tax burden	38.2	39.7	39.5	39.7	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	0.7	1.1	-0.4	0.1	
Structural primary balance	3.1	3.4	1.7	2.1	
Government gross debt	52.7	48.7	47.7	45.9	
<i>pm</i> Real GDP growth (%)	1.5	2.9	2.8	2.6	
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	-0.3	0.1	0.2	0.3	0.9
Primary balance	2.1	2.4	2.4	2.4	2.9
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.3
Structural balance <sup>(3)</sup> <sup>(5)</sup>	0.8	0.4	-0.1	0.0	0.4
Government gross debt	52.7	50.2	47.9	46.3	44.2
<i>pm</i> Real GDP growth (%)	1.5	3.5	3.0	1.7	1.7

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in November 2006

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the November 2006 update of the stability programme of the Netherlands.

Table V.18.2

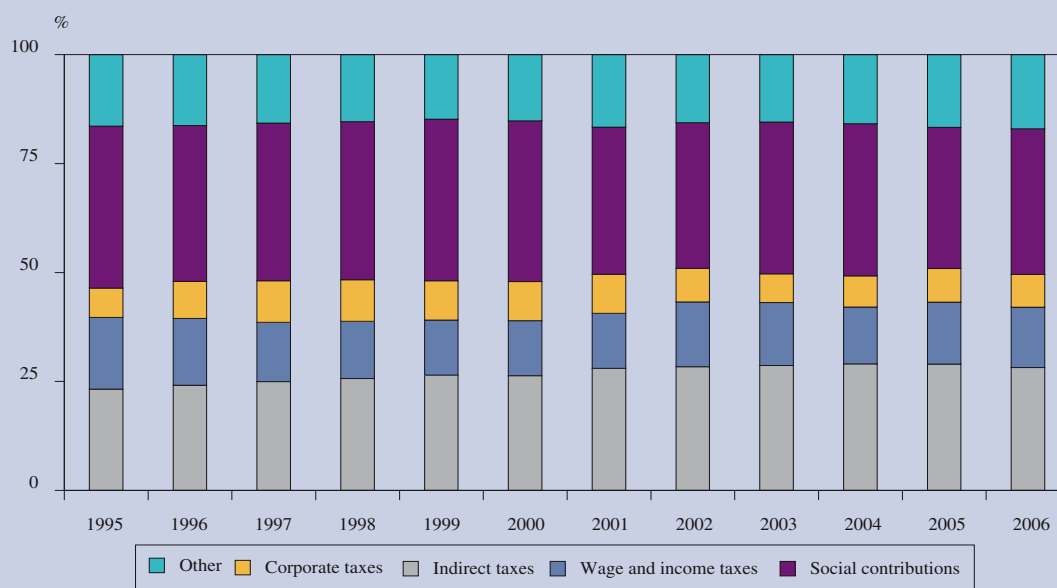
**Main measures in the budget for 2007, the Netherlands**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Increase in healthcare premiums (0.2 % of GDP)</li> <li>• Reduction of income tax rates (- 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Measures to improve security (0.1 % of GDP)</li> <li>• Reduction of environmental fees, integration and asylum, education (combined 0.1 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Reduction of unemployment premiums (- 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in child allowance, tax breaks for households' childcare costs, increased running costs of social benefit administration</li> </ul>
<ul style="list-style-type: none"> <li>• Overhaul of corporate tax system (- 0.1 % of GDP)</li> <li>• Increases in several tax breaks (- 0.1 % of GDP) (combined 0.1 % of GDP)</li> </ul>	

(<sup>1</sup>) Estimated impact on general government revenue.  
(<sup>2</sup>) Estimated impact on general government expenditure.

Sources: Commission services and 2007 budget.

Graph V.18.1: Breakdown of total government revenue into its main categories



Source: Statistic Netherlands.

and especially in 2005, tax receipts were relatively buoyant.

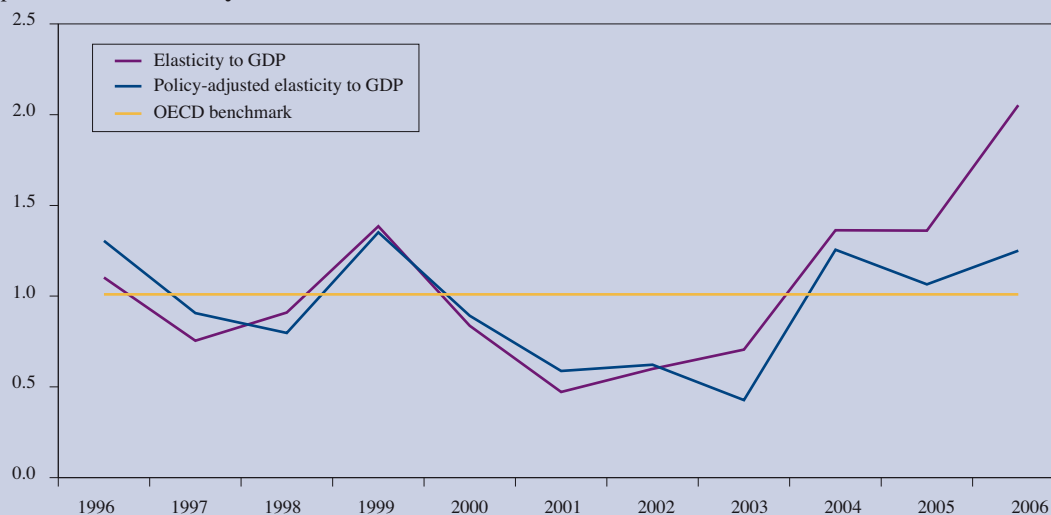
Part of the fluctuations in tax elasticities can be traced back to tax policy. Changes in tax policy may take any form from adjusting the tax rate, changing the scope of the tax base or adjusting the speed of tax collection.

Although the effects of policy measures on tax revenues are difficult to disentangle from the variations that result from normal economic fluctuations, it can be approxi-

mated by constructing corrected elasticities that use *ex ante* estimates of the impact of tax measures on revenues (<sup>1</sup>). Graph V.18.2 also depicts the corrected elasticity, which fluctuates around a mean of 0.9. Total receipts of taxes and social premiums should clearly not be considered buoyant in 2005 and 2006, after adjustment.

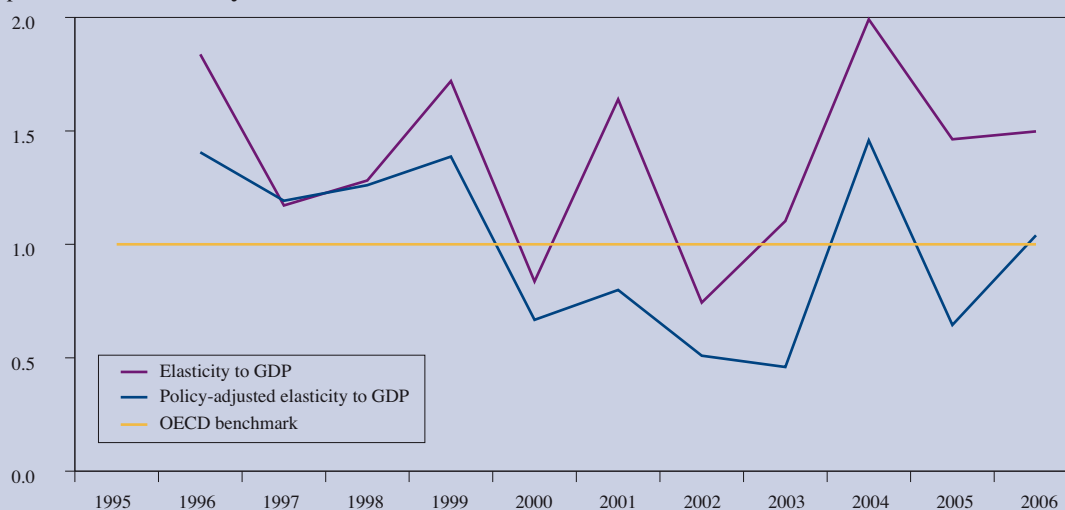
(<sup>1</sup>) To this end, the *ex ante* estimates in the budget of the respective years were used.

Graph V.18.2: Elasticity of total tax revenues to GDP



Source: Commission services.

Graph V.18.3: Elasticity of indirect taxes to GDP



Source: Statistic Netherlands.

The increasing relative share of indirect tax receipts in total tax receipts can be inferred from Graph V.18.3 as for most years the apparent elasticity exceeds the standard value of 1 by a significant margin <sup>(1)</sup>. In fact, it averages at 1.4 over the period shown. This strongly resembles the elasticity with respect to private consumption expenditure, which averages 1.5. The persisting high elasticity of indirect taxes reflects a deliberate strategy of shifting direct taxation to indirect taxation. In the time frame under

review, environmental taxes were introduced and steadily raised and the highest VAT rate was increased from 17.5 to 19 %. Adjusted for these policy measures, the tax

<sup>(1)</sup> Budgetary elasticities used in the EU fiscal surveillance framework are estimated on the basis of a commonly agreed methodology developed by the OECD. For details see [http://www.oilis.oecd.org/oilis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/\\$FILE/JT00187415.PDF](http://www.oilis.oecd.org/oilis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/$FILE/JT00187415.PDF)



elasticity to both private consumption expenditure and GDP shows significantly less volatility and averages 1.0.

Although most taxes on production and imports can be expected to move with private consumption expenditure and GDP, some taxes have a base that is not directly linked to these variables. The share of these taxes in total indirect taxes increased from 7½ % in 1995 to 10 % in 2005. Examples include taxes on assets and the real estate transaction tax. The most volatile of these is the real estate transfer tax. It is levied on transfers of existing dwellings and offices from one owner to another. During the period under review, the tariff levied remained unchanged at 6 % of the tax base, which is the total value of transferred real estate, both private and corporate. Despite the fixed tariff, the share of this tax in total indirect taxes has more than doubled from 3 % in 1990 to 6½ % in 2005, which can be explained by a rapidly increasing tax base.

Over the whole period under review, the average transaction price for private real estate sales tripled and the annual number of real estate transactions increased by two thirds. As a result, the tax base grew significantly

faster than private consumption expenditure, the typical tax base for taxes on production and imports (Graph V.18.4).

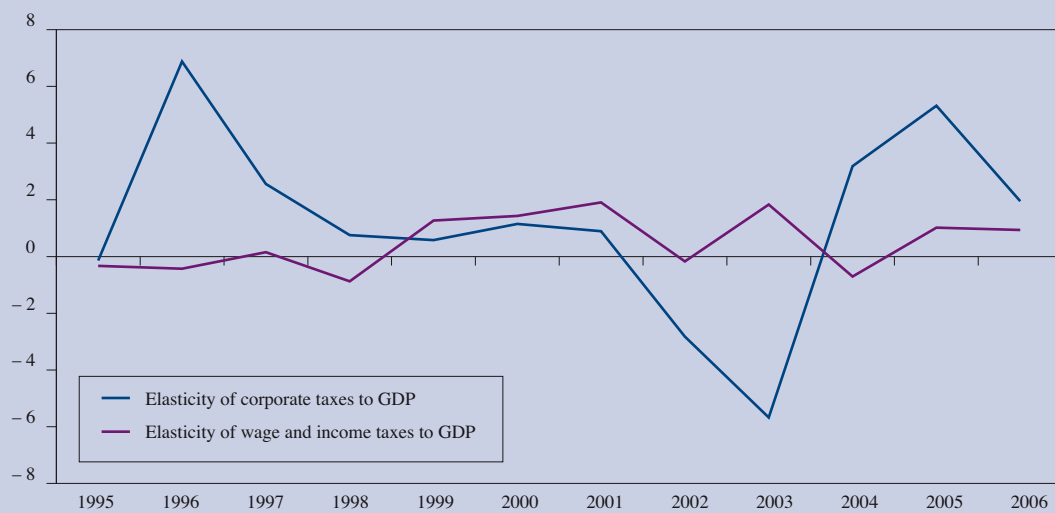
Receipts from direct taxes in the Netherlands have been more volatile than those of indirect taxes. The policy-adjusted wage and income tax receipts fluctuated between – 1 and + 2 and have averaged 0.8 over the period 1995–2006, significantly below the OECD reference value of 1.7 (Graph V.18.5). Corporate tax receipts have been even more volatile. The policy-adjusted elasticity of corporate taxes with respect to GDP fluctuated between – 5.7 and + 6.9 in the period 1995–2006 and averaged 1.2. This figure compares with an *ex ante* OECD elasticity of 1.5. The single most important cause for the high volatility of corporate taxes is that companies have the possibility to compensate profits with losses incurred in previous years. Graph V.18.5 shows that tax elasticities are especially volatile around the time of strong changes in the economic cycle and are relatively stable at times of economic stability. In light of this experience, the strong corporate elasticity in 2004 and 2005 may be expected to return to normal, a movement that appears to have already started in 2006.

**Graph V.18.4: Development of two tax bases for indirect taxes**



Sources: Kadaster and Statistic Netherlands.

Graph V.18.5: Policy-adjusted elasticity to GDP of the main direct tax categories



Source: Commission services.

# 19. Austria

## Recent developments and medium-term prospects

In 2006, the general government recorded a deficit amounting to 1.1 % of GDP. This is a markedly better outcome than the deficit of 1.7 % of GDP that was projected in the 2005 update of the stability programme.<sup>(1)</sup> The improvement in public finances is largely the result of a significantly more-robust-than-anticipated economic growth, which was accompanied by a notable pickup in tax revenues. The favourable outcome concerns in particular higher-than-expected receipts from corporate taxes and indirect taxes, which led also to a rise in the revenue ratio by 1 % of GDP. The overall fall in the deficit was dampened, however, by the fact that expenditures also rose faster than expected, albeit at a lower pace than revenues. The government debt ratio fell to 62.2 % of GDP. This too is better than expected, in parallel with the lower-than-anticipated deficit.

The federal budgets for 2007 and 2008 were tabled jointly by the new government at the end of March 2006. The adoption of the budgets by parliament took place on 3 May 2007. The budget for 2007 targets a general government deficit of 0.9 % of GDP. Regarding expenditures, the government gives priority to R & D, education and social affairs. Higher spending on social affairs comprises an increase in minimum pensions in 2007. Moreover, expenditure on military aircraft will burden the budget by 0.2 % of GDP.

At the same time, savings on the wage bill and discretionary expenditure ease the budget by 0.1 percentage point in 2007. As regards revenues, excises on fuel will be increased in mid-2007 (+ 0.3 cent per litre on diesel and +0.5 cent per litre on petrol with an impact in the 2007 accounts of 0.1 % of GDP). Already in 2006, the govern-

ment enacted several measures to lower the tax burden on small and medium-sized enterprises by EUR 190 million, (around 0.1 % of GDP) with an impact on the 2007 accounts. Moreover, the phasing-out of the investment subsidy and of the indexation of discretionary expenditure will ease the budget by 0.1 percentage point in 2007. Moreover, pension and labour market reforms, as well as the favourable macroeconomic outlook are expected to lead to significant savings.

The official deficit projection of 0.9 % of GDP is fully in line with the projection in the Commission services' spring 2007 forecast. Expenditure and revenue developments are only insignificantly more moderate in the Commission services' projections compared with the budget. In spite of the better-than-expected starting position in 2006 and an upward revision of economic growth for 2007 by ¼ percentage point compared with the previous update of the stability programme, the planned deficit is even 0.1 percentage point higher than projected one year ago. On this basis, the Commission services estimate a tiny deterioration of the structural balance in 2007 by 0.1 percentage point of GDP. This implies a broadly neutral fiscal stance and contrasts with the originally targeted structural improvement of ¾ percentage point in the stability programme of November 2005

For 2008, the Commission services' forecast projects a deficit of 0.8 % of GDP, practically unchanged from 2007 in nominal and structural terms. This estimate is based on the measures decided for the 2008 budget and against the background of a slight softening in economic growth. Both revenues and expenditures continue their downward trend in per cent of GDP, but continue to rise in absolute terms. The projected deficit is slightly higher than that in the latest update of the stability programme, even though the growth assumptions of the Commission services are slightly more optimistic than those of the national authorities. This is explained by a somewhat more cautious assessment by the Commission services of expected tax revenue. For 2009, the stability programme foresees an

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

improvement in the general budget balance by 0.5 percentage point narrowing the deficit to 0.2 % of GDP.

On the basis of buoyant economic growth and nominal deficits of around 1 % of GDP, the debt ratio is expected

to decline further from 62.2 % of GDP in 2006 to 60.6 % of GDP in 2007, dipping below the 60 % of GDP reference value in 2008. As there are no concrete plans, this projection does not include any significant privatisation receipts.

Table V.19.1

**Budgetary developments 2005–10, Austria (% of GDP) <sup>(1)</sup>**

<b>Outturn and forecast <sup>(2)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>		
General government balance	- 1.6	- 1.1	- 0.9	- 0.8		
— Total revenues	48.2	48.0	47.4	47.1		
<i>Of which:</i>						
— <i>current taxes</i>	12.9	13.2	13.1	13.1		
— <i>social contributions</i>	16.1	16.0	15.8	15.7		
— Total expenditure	49.8	49.1	48.3	47.9		
<i>Of which:</i>						
— <i>collective consumption</i>	6.9	6.9	6.8	6.9		
— <i>social transfers in kind</i>	11.2	11.2	10.9	10.8		
— <i>social transfers other than in kind</i>	18.6	18.3	18.0	17.8		
— <i>interest expenditure</i>	2.9	2.7	2.6	2.6		
— <i>gross fixed capital formation</i>	1.1	1.1	1.1	1.0		
Primary balance	1.3	1.6	1.8	1.7		
Tax burden	42.2	42.0	41.5	41.2		
One-off and other temporary measures	0.0	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	- 1.1	- 1.0	- 1.1	- 1.2		
Structural primary balance	1.8	1.7	1.5	1.4		
Government gross debt	63.5	62.2	60.6	59.2		
<i>pm Real GDP growth (%)</i>	2.0	3.1	2.9	2.5		
<b>Stability programme <sup>(4)</sup></b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
General government balance	- 1.6	- 1.1	- 0.9	- 0.7	- 0.2	0.4
Primary balance	1.3	1.9	2.0	2.1	2.6	3.1
One-off and other temporary measures	0.0	0.0	- 0.2	- 0.4	- 0.1	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 1.1	- 0.9	- 0.7	- 0.3	- 0.1	0.4
Government gross debt	63.5	62.2	61.2	59.9	58.5	56.8
<i>pm Real GDP growth (%)</i>	2.0	3.1	2.7	2.3	2.5	2.6

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in March 2007.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the March 2007 update of the stability programme of Austria.

*Table V.19.2*

**Main measures in the budget for 2007, Austria**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"><li>• Increase of the petroleum tax (0.1 % of GDP)</li></ul>	<ul style="list-style-type: none"><li>• Military aircraft (0.2 % of GDP)</li><li>• R &amp; D, education, universities (0.1 % of GDP)</li><li>• Social protection (0.1 % of GDP)</li><li>• SME package (0.1 % of GDP)</li></ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

*Sources:* Commission services and Austrian stability programme.

# 20. Poland

## Recent developments and medium-term prospects

In 2006, the general government deficit was 3.9 % of GDP, compared with the official target of 4.6 % of GDP in the January 2006 update of the convergence programme <sup>(1)</sup>. This was possible thanks to a much lower-than-projected central government deficit by around 0.6 % of GDP and a higher-than-anticipated surplus of social security sub-sector by around 0.4 % of GDP. In contrast, the finances of local government slipped into a deficit of about 0.4 % of GDP, whereas the programme projected a balance. The better-than-expected outturn mainly results from an incomplete execution of expenditure plans, much better than expected tax-rich growth and lower unemployment allowances to be paid out thanks to the strongly improved situation in the labour market. The debt ratio, at 47.8 % of GDP, also turned out lower than expected (51.2 % of GDP).

The Polish Government tabled the draft 2007 budget on 27 September and parliament adopted it on 15 December 2006. Excise duty hikes are the main revenue-increasing measures (0.2 % of GDP). However, they are more than offset by an extraordinary indexation of personal income tax brackets (compensating for the lack of indexation since 2001) and tax-deductible costs, as well as pro-family tax relief (together 0.3 % of GDP). The 2007 budget sets a general government deficit target of 3.7 % of GDP, compared to 3.4 % of GDP in the November 2006 update of the convergence programme, which relies on a more favourable growth scenario <sup>(2)</sup>. According to the Commission services' spring 2007 forecast, the deficit should reach 3.4 % of GDP in 2007. On the one hand, a

fast and tax-rich real GDP growth exceeding 6 % is expected, fuelled also by public investment expansion of almost 18 % in real terms. On the other hand, social contribution cuts have been brought forward compared to what was foreseen in the 2006 update of the convergence programme and they will not be offset by additional deficit-decreasing measures. However, these tax reductions will be offset by still-high growth of compensations of employees thanks to fast rising wages and employment and smaller incentives to stay in the underground economy. Besides, as a consequence of social contribution cuts, there will be larger personal income tax revenues, thanks to higher taxable income, and a slower increase in expenditure on gross wages in the public sector. The fiscal stance in 2007, as measured by the change in the structural primary balance, is broadly neutral.

The Commission services' spring 2007 forecast, based on the no-policy-change assumption, indicates that the general government deficit will improve to 3.3 % of GDP in 2008. If the reorganisation of the public administration starts in 2008, as intended by the government, the outturn may be better than forecast. On the other hand, if the costly annual indexation of pensions and social benefits, linked to wage growth, is restored, the general government balance can turn out worse. The November 2006 update of the convergence programme sets deficit targets of 3.1 % of GDP for 2008 and 2.9 % of GDP for 2009.

According to the Commission services' spring 2007 forecast, the debt ratio is expected to increase by approximately one percentage point to around 49 % of GDP between 2006 and 2008.

## Revenue uncertainty: tax bases and elasticities in Poland in 1992–2005

Understanding the relationship between tax revenues and different GDP components is important for projections of government revenues. Volatile tax elasticities

<sup>(1)</sup> The government accounts of Poland now include the pension reform costs, as the transitory period on the sectoral classification of pension schemes expired. The funded second-pillar pension scheme is now classified in the corporate sector, instead of government.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

Table V.20.1

**Budgetary developments 2005–09, Poland (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	- 4.3	- 3.9	- 3.4	- 3.3	
— Total revenues	39.0	39.4	39.0	38.0	
Of which:					
— current taxes	20.6	21.4	21.7	22.0	
— social contributions	12.3	12.2	11.6	10.4	
— Total expenditure	43.4	43.3	42.4	41.4	
Of which:					
— collective consumption	8.0	7.9	7.6	7.3	
— social transfers in kind	10.1	10.1	9.6	9.2	
— social transfers other than in kind	15.7	15.4	14.7	14.4	
— interest expenditure	2.8	2.4	2.6	2.6	
— gross fixed capital formation	3.4	4.1	4.6	4.7	
Primary balance	- 1.5	- 1.5	- 0.9	- 0.8	
Tax burden	32.8	33.5	33.7	32.7	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	- 4.2	- 4.0	- 3.6	- 3.3	
Structural primary balance	- 1.4	- 1.5	- 1.0	- 0.7	
Government gross debt	47.1	47.8	48.4	49.1	
<i>pm Real GDP growth (%)</i>	3.6	6.1	6.1	5.5	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	- 2.5	- 1.9	- 1.4	- 1.0	- 0.6
Primary balance	0.1	0.5	1.0	1.4	1.7
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3) (5)</sup>	- 2.3	- 1.9	- 1.4	- 1.0	- 0.7
Government gross debt	41.9	42.0	42.1	41.4	40.6
<i>pm Real GDP growth (%)</i>	3.5	5.4	5.1	5.1	5.6

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and December 2006 update of the convergence programme of Poland.

Table V.20.2

**Main measures in the budget for 2007, Poland**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Reintroduction of the indexation of personal income tax brackets and tax-deductible cost plus pro-family tax reliefs (0.3 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increases of salaries for medical personnel (0.4 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Excise duty hikes for fuels and cigarettes (0.2 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increased military expenditure (0.1 % of GDP)</li> <li>• Increased salaries of teachers (0.1 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and budget for 2007.

make budgetary planning more difficult. However, the policymakers themselves can be responsible for high volatility, if many changes in tax regulations are contin-

uously introduced. Such instability can be costly for enterprises because, firstly, it involves additional costs to learn the changes in tax codes and, secondly, economic

decisions under previous tax regulations can be no longer optimal in a new setting. Nevertheless, the economic transition in east European countries, such as Poland, required numerous changes in tax policy during a trial-and-error process of finding an optimal tax system for a newly established market economy. On the other hand, the more advanced the transition, the more stability in a tax system could be expected. In Poland, this is not yet the case.

Until 1998, the *ex post* (empirical) tax elasticities in Poland were relatively stable and close to the *ex ante* (theoretical) elasticities estimated by the OECD <sup>(1)</sup>. The theoretical elasticities for the largest aggregates are the following: 1.0 for taxes on production and imports (relative to private consumption) as well as for social contributions (relative to compensation of employees) and 1.1 for taxes on income and wealth (relative to GDP).

Since 1999, one can observe much higher volatility (Graph V.20.1) even if outliers (1999 and 2002) are ignored. This volatility is mainly the result of tax regulations which have been changed continuously in Poland <sup>(2)</sup>. Before focusing on tax code changes, it is worthwhile mentioning that the lower volatility of tax

elasticities in the 1990s compared to the 2000s, may also result to some extent from much higher inflation in the earlier period, which had a smoothing effect on both tax base and revenues.

Table V.20.3

Volatility of tax elasticities in Poland

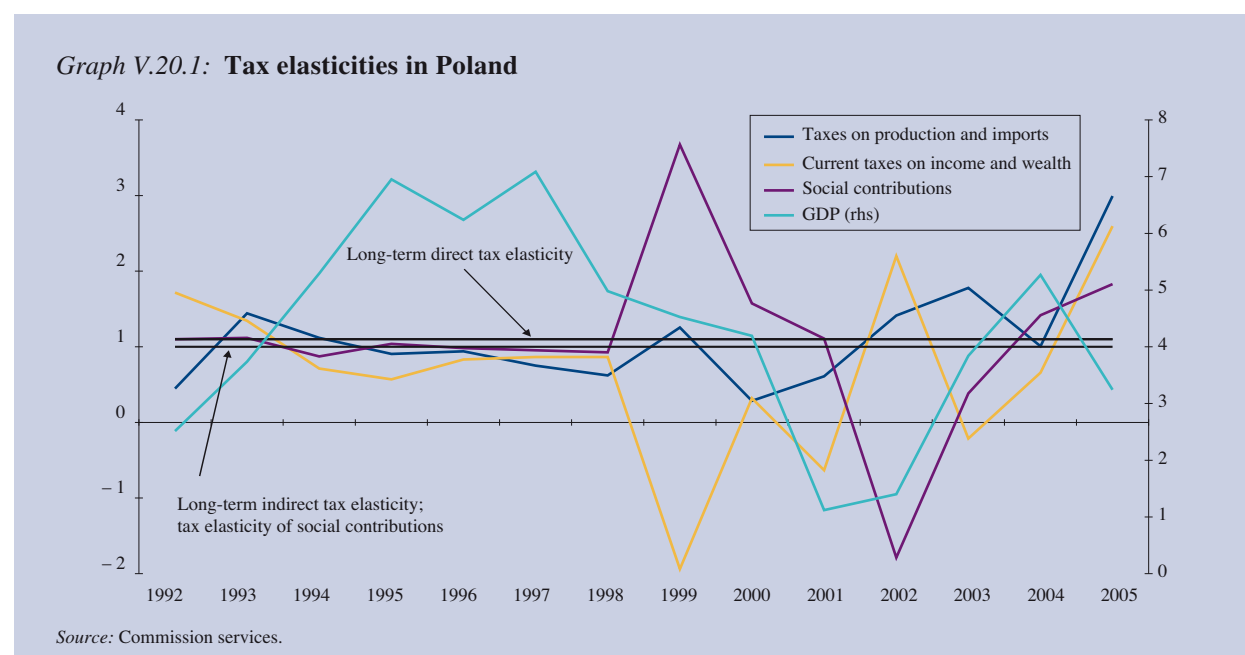
Standard deviation	1992–98	2000, 2001, 2003–05
Taxes on production and imports	0.3	0.9
Current taxes on income and wealth	0.4	1.2
Social contributions	0.1	0.6

Source: Commission services.

The revenue uncertainty in Poland is illustrated by the larger volatility in revenue growth (Graph V.20.1.), compared to the instability in the tax base (Graph V.20.2.). Graphs V.20.1 and V.20.2 present real growth rates of tax revenues and bases in order to avoid that the picture be blurred by the very high inflation in Poland at the beginning of the economic transition and the ensuing disinflation.

Even after elimination of the revenue outliers (years 1992 and 1999 for direct taxes and social contributions;

<sup>(1)</sup> See Girouard and André (2005).  
<sup>(2)</sup> See Schratzenstaller (2005).





year 1992 for indirect taxes), the volatility of real tax revenue growth in both categories is higher than the volatility of the corresponding tax base growth; for social contributions and the associated tax base, wages, the volatility is similar. It needs to be remembered that the tax bases presented are only proxies for actual tax bases resulting from the tax code.

In the next section the focus is on tax revenues and changes in the tax code. Afterwards, the question is asked whether there is a systematic link between the growth rate of tax bases and the level of tax elasticities, which could point at income progressivity or growth composition having an influence on revenue.

### Tax revenues and changes in the tax code

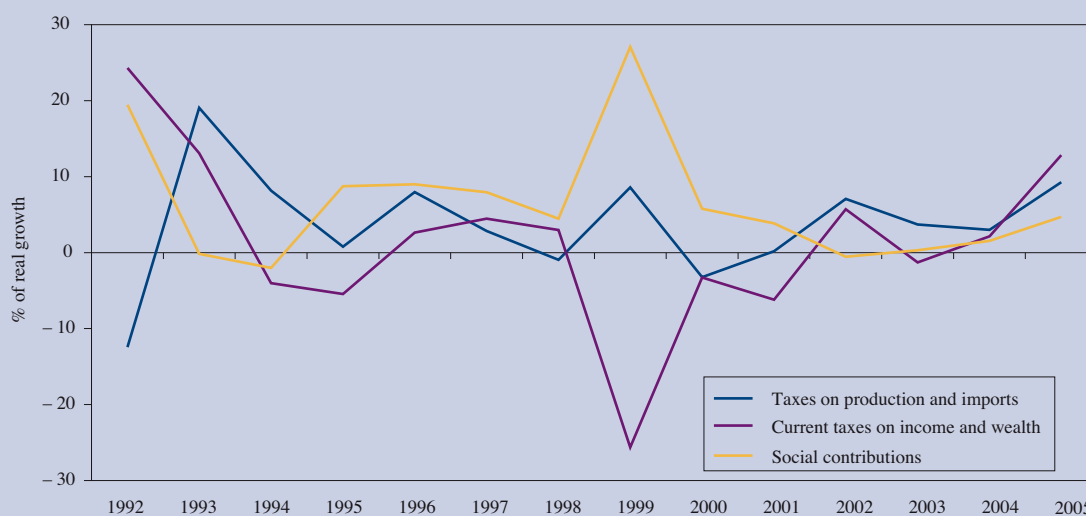
As far as direct taxes are concerned, the main measures undertaken since 1995 in personal income taxation (PIT) concentrate on closing tax loopholes and exemptions. To counterbalance the loss in tax revenue due to the decline in PIT progressivity, the tax base has been broadened by abolishing a number of tax deductions and by including fringe benefits and benefits in kind in taxable income <sup>(1)</sup>.

<sup>(1)</sup> See European Commission (2006a), p. 176.

The statutory corporate income tax (CIT) rate was kept at 40 % until 1995. In the period 1997–2003, it was reduced by about 2 percentage points annually on average. In 2004, the CIT rate has been cut from 27 % to 19 %. In the same year, the PIT regime has been extended with an option for small entrepreneurs to have their income taxed at a flat rate of 19 % at the price of foregoing tax deductions. These CIT and PIT reforms concerning large and small businesses may be partly responsible for increased elasticity of direct tax revenues in the most recent years through the closing of loopholes and tax deductions as well as less tax avoidance and evasion under much lower tax rates.

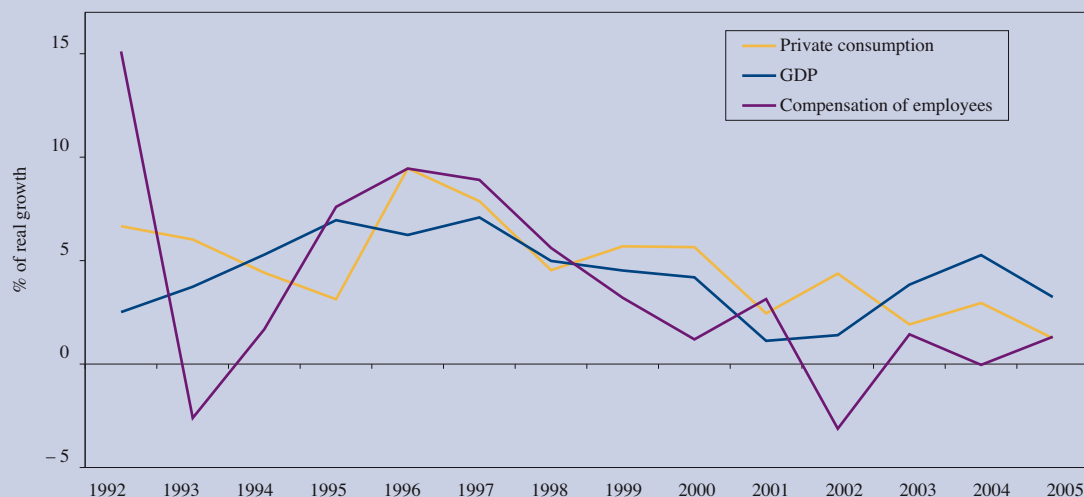
The large symmetric blips in the elasticities of direct taxes and social contributions in 1999 and 2002 appear to be the result of changes in rules concerning social contributions. It should be noted that social contributions are deductible from the PIT base. In 1999, a set of different individual social contributions replaced enterprise-level contributions. This was an element of the pension reform which implied the creation of individual pension fund accounts and was intended to increase long-term savings. In 2002, there was a reduction in the rates of social contributions, though not as fundamental as the increase in 1999, which resulted in higher taxable personal income and higher PIT revenue.

**Graph V.20.2: Tax revenues in Poland**



Source: Commission services.

Graph V.20.3: Tax bases in Poland



Source: Commission services.

Table V.20.4

#### Volatility of tax revenues and tax bases in Poland

% real change	Years	Standard deviation (percentage points)
Taxes on production and imports	1993–2005	6.5
Current taxes on income and wealth	1993–98, 2000–05	5.8
Social contributions	1993–98, 2000–05	3.8
Private consumption	1992–2005	2.3
Nominal GDP	1992–2005	1.8
Compensation of employees	1993–2005	4.0

Source: Commission services.

#### Tax elasticities and growth

The concept of elasticity implies that one expects a stable linear relation between changes in tax revenue and changes in the tax base, i.e. the dynamism of the tax bases do not influence the elasticity. This can be tested: the correlation between tax bases and the elasticities should be close to zero in the long term. Alternatively, there could be some non-linearities in the reaction of tax revenues to changes in tax bases, e.g. tax revenues may rise progressively faster when tax bases expand at a higher growth rate. To eliminate spurious correlation

resulting from a common external factor such as inflation, real rather than nominal growth rates are scrutinised. The data do not reveal strong correlations between the elasticities and real changes in the corresponding tax bases. The strongest correlation can be observed between real private consumption growth and the elasticity for indirect taxes: 0.50 (significant at 7%). It implies that, at higher private consumption growth, indirect tax revenue may increase less than proportionally to the theoretical or average elasticity. This phenomenon may be the result of composition effects. Notably, the households' purchases of construction materials used for building or renovation of houses and apartments are taxed at lower rates, given a number of tax allowances and deductions. These allowances were exploited more when income growth (also reflected in consumption growth) was highest.

To conclude, one observes that the volatility of tax elasticities has increased since 1999 compared to the preceding period. The fluctuations in tax elasticities result mainly from a number of reforms. Modifications in the system of social contributions introduced together with the pension reform, personal income tax rearrangements and corporate income tax cuts were the main tax measures in Poland in the recent years. In addition, composition effects played a role together with specificities of the tax systems such as tax allowances for construction goods.

# 21. Portugal

## Recent developments and medium-term prospects

In 2006, the general government deficit was 3.9 % of GDP. This compares with a target of 4.6 % of GDP set in the December 2005 update of the stability programme. The better-than-expected outturn was mainly due to higher-than-budgeted current revenue and lower-than-planned capital spending. In 2006, government debt declined to 64.7 % of GDP, below the target of 68.7 % of GDP, thanks to a downward revision of the 2005 debt ratio <sup>(1)</sup>, the lower-than-expected deficit in 2006 and the impact of the stock-flow adjustment.

The budget for 2007 was adopted on 30 November 2006. It targets a general government deficit of 3.7 % of GDP, confirmed in the December 2006 stability programme update <sup>(2)</sup>. However, in early May, in the report on budgetary policy guidelines, the deficit target was revised to 3.3 % of GDP, following the better-than-expected outcome in 2006. The 2007 budget plans the deficit reduction to be mainly driven by a containment of government consumption, notably compensation of employees. In particular, important contributions to the expenditure retrenchment are planned to come from measures adopted in recent years, notably restraint on public employment and wages. At the same time, social transfers are expected to grow somewhat more moderately than in previous years reflecting changes in old-age pension rules, especially for civil servants, and curbs on early retirement for private-sector workers. However, in line with the plans announced in 2005, higher means-tested benefits for elderly citizens are foreseen to be extended. The latter meas-

ure will work in the opposite direction of the expiry of the progressive increase of the minimum old-age pension towards the minimum wage, which took place until 2006. Lower expenditure for medication is expected. Additional contributions to fiscal consolidation are planned to come from higher tax revenue thanks to increases in taxes on petrol and tobacco products and in social contributions, as well as a further lowering in tax allowances for pension income, and further improvements in revenue collection. However, such an increase in the tax burden will be largely offset by a decline in EU capital transfers, so that the total revenue-to-GDP ratio will remain unchanged from 2006. The Commission services' spring 2007 forecast projects a deficit of 3½ % of GDP, with the small difference vis-à-vis the new deficit target arising essentially from a slightly more conservative assessment of government expenditure growth <sup>(3)</sup>. In 2007, the fiscal stance, as measured by the change in the structural primary balance, i.e. the budget primary balance net of one-off and other temporary measures, is estimated to be mildly restrictive.

Under the customary no-policy-change assumption, the Commission services' spring 2007 forecast projects the general government deficit to fall below 3¼ % of GDP in 2008. The improvement reflects the lagged effects of the abovementioned measures adopted to contain central government employment and old-age pension expenditure. The government deficit target for 2008 presented in the December 2006 update of the stability programme is 2.6 % of GDP, with the improvement compared with 2007 being based on further spending restraint. In the report on budgetary policy guidelines of May 2007, the deficit target for 2008 was revised to 2.4 % of GDP. The difference between the new official target and the Commission services' spring 2007 forecast is mainly due to

<sup>(1)</sup> Most of the downward revision in the debt ratio in 2005 was due to of the upward revision in the GDP level by about 2½ %, explained by methodological changes as well as by the incorporation of new data, and a lower-than-planned debt-increasing stock-flow adjustment by about ¾ percentage point of GDP.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://europa.eu.int/comm/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://europa.eu.int/comm/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(3)</sup> Additionally, unlike the budget, the Commission services forecast assumes that all planned capital injections in hospitals in 2007 and 2008 will be recorded as capital transfers, rather than as transactions in equity, thus impacting the government expenditure and deficit levels (see Eurostat news release 55/2007).

the fact that the latter does not incorporate measures that have not yet been fully detailed and predicts lower GDP growth. Beyond 2008, the December 2006 stability programme projects the general government deficit to reach 1.5 % of GDP in 2009 and 0.4 % of GDP in 2010 on the back of further expenditure retrenchments and of gradually increasing GDP growth.

According to the Commission services' spring 2007 forecasts, the government debt ratio will reach 65.4 % of GDP at the end of 2007 and 65.8 % of GDP at the end of 2008, on the back of still high deficits and subdued nominal GDP growth.

The December 2006 update of the stability programme projects the debt ratio to peak at 68 % of GDP in 2007 and to start declining thereafter, hovering at 62 % of GDP in

2010, thanks to the return to primary surpluses, the acceleration of nominal GDP and privatisation proceeds. The better-than-expected deficit outturn in 2006, and the subsequent downward revision of the fiscal targets in May 2007, resulted in a revision of the projections of the debt ratio to 65.1 % of GDP in 2007 and 64.5 % of GDP in 2008. The differences between the new path and the Commission services' forecast are therefore limited and mainly due to higher deficits and lower GDP growth in 2008 in the Commission services' forecast.

### Evolution of tax revenues

In Portugal, an increase of tax revenues and social contributions in excess of GDP has been the rule over most of the past 10 years. The tax burden has increased from almost 32 % of GDP in 1995 to around 35½ % of GDP

Table V.21.1

#### Budgetary developments 2005–10, Portugal (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	- 6.1	- 3.9	- 3.5	- 3.2		
— Total revenues	41.4	42.2	42.3	42.3		
Of which:						
— current taxes	23.5	24.3	24.5	24.6		
— social contributions	12.5	12.5	12.5	12.4		
— Total expenditure	47.5	46.1	45.8	45.5		
Of which:						
— final government consumption	21.2	20.5	20.1	19.8		
— social transfers other than in kind	14.8	15.1	15.2	15.1		
— interest expenditure	2.7	2.8	2.9	3.0		
— gross fixed capital formation	2.8	2.3	2.2	2.2		
Primary balance	- 3.4	- 1.1	- 0.6	- 0.2		
Tax burden	34.9	35.6	36.0	36.0		
One-off and other temporary measures	- 0.1	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	- 5.0	- 2.9	- 2.7	- 2.6		
Structural primary balance	- 2.4	- 0.1	0.2	0.3		
Government gross debt	63.6	64.7	65.4	65.8		
pm Real GDP growth (%)	0.5	1.3	1.8	2.0		
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	- 6.0	- 4.6	- 3.7	- 2.6	- 1.5	- 0.4
Primary balance	- 3.3	- 1.7	- 0.7	0.4	1.5	2.5
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 4.9	- 3.4	- 2.6	- 1.8	- 1.3	- 0.5
Government gross debt	64.0	67.4	68.0	67.3	65.2	62.2
pm Real GDP growth (%)	0.4	1.4	1.8	2.4	3.0	3.0

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the stability programme of Portugal.

Table V.21.2

**Main measures in the budget for 2007, Portugal**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>Increase in excise taxes on petrol and tobacco products (almost +0.1 % of GDP each)</li> <li>Increase in the social contributions to be paid by civil servants for their healthcare subsystem (almost + 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>Savings on medication co-payments and clinical material purchases (- 0.1 % of GDP)</li> <li>Freeze of nominal transfers to local governments from central government</li> <li>Cut or freezes in expenditure plans of most ministries</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services, 2007 budget and December 2006 update of the stability programme of Portugal.

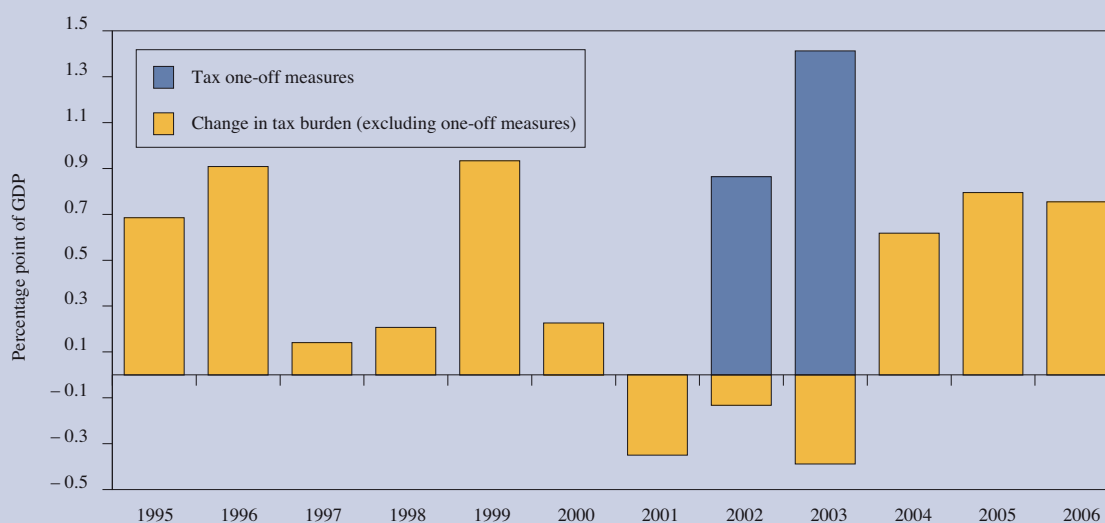
in 2006. However, the strength of those increments has varied over time owing to different factors. Graph V.21.1 below shows the evolution of tax revenue with respect to GDP, including a variant that controls for one-off fiscal revenues in some years <sup>(1)</sup>. It shows that as a share of GDP taxes started to decline only in 2001 at the same time, in 2002 and 2003, one-off measures were crucial to avoid a further decline in the tax burden.

<sup>(1)</sup> One-off measures that directly impacted on tax revenue: two tax amnesties undertaken in 2002 and 2003; a sale of tax and social contributions arrears in 2003 (0.9 %, 0.1 % and 1.3 % of GDP, respectively). In the rest of this section, tax revenue data exclude those one-off measures. Imputed social contributions are also excluded.

Graph V.21.1 shows the evolution of the apparent elasticity of total taxes with respect to GDP; i.e. the relative change of taxes over the relative change of nominal GDP, against the backdrop of GDP and household's consumption growth rates, yielding the following observations. First, in the second half of the 1990s, the elasticity of the total tax burden picked up in 1999 and has since behaved quite procyclically. Accordingly, between 2001 and 2003, tax revenues showed very little resilience to the deceleration in economic activity with the underlying tax revenue growing below GDP. Finally, as from 2004, tax revenue has been growing well in excess of a subdued GDP, hence yielding rising revenue ratios.

Over the past decade, all major tax categories have increased their GDP shares. In particular, indirect taxes

Graph V.21.1: Tax burden in Portugal (annual change)



Source: Commission services.

have been the major driver of the higher tax burden by adding some 2½ percentage points since 1995, representing about 15½ % of GDP in 2006. A similar pattern was observed for actual social contributions, which increased by almost 2 percentage points during the same period. Direct taxes (both corporate and personal income taxes), which went up by less than ½ % of GDP, have had a more uneven behaviour over time, increasing until 2000–01, declining until 2003 and rebounding afterwards to some 9 % of GDP in 2006. Nonetheless, the different tax categories have shown rather different reactions to GDP, notably with direct taxes responding sharply to economic fluctuations, in particular in the slowdown to the 2003 recession.

Different forces are behind the evolution of tax revenues, in particular macroeconomic developments, as well as discretionary fiscal policy measures. In an attempt to identify the importance of the different drivers, Graph V.21.4 disentangles some of the main factors behind the changing tax burden in the current decade <sup>(1)</sup>.

In particular, the difference between the apparent elasticity of tax revenue and the long-term average or *ex ante*

<sup>(1)</sup> Also (actual) social contributions related to pensions of civil servants were excluded in Graph V.21.4 as they are also registered on the expenditure side, thus being neutral on the government balance. Compensation of employees has been netted out from social contributions.

elasticity is separated into three components <sup>(2)</sup>. The first is the direct impact of the main changes in the major tax categories implemented since 2001; essentially hikes in the VAT standard rate and a series of cuts in the standard corporate tax rate <sup>(3)</sup>. The second term is the composition component, which captures the effect of the aggregate demand composition, notably the strength of different tax bases, such as household consumption or compensation of employees, relative to GDP. The third component indicates the elasticity elements as well as other discretionary elements <sup>(4)</sup>.

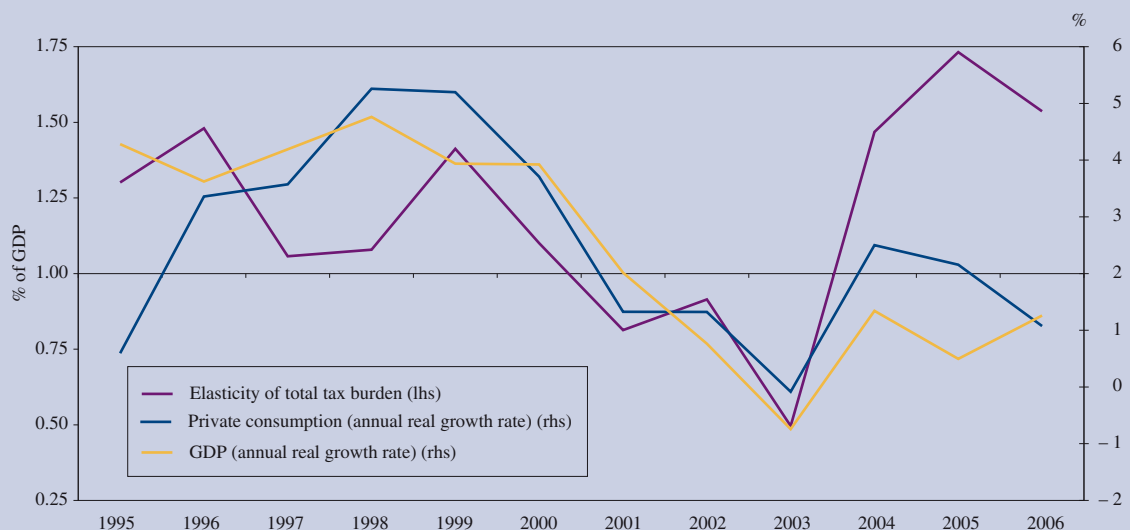
After taking those factors into account, Graph V.21.4 suggests that part of the evolution of the tax revenue is not explained by changes in nominal tax rates or the composition of economic growth. In particular, it seems that in 2001–03 additional factors played a role in dragging down tax revenue more than the pace of economic

<sup>(2)</sup> The *ex ante* elasticity is calculated on the basis of a commonly agreed method developed by the OECD. For details see [http://www.oilis.oecd.org/olis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/\\$FILE/JT00187415.PDF](http://www.oilis.oecd.org/olis/2005doc.nsf/43bb6130e5e86e5fc12569fa005d004c/05fabee2d580f005c1257037002d2179/$FILE/JT00187415.PDF)

<sup>(3)</sup> The changes included are: the increases in the standard VAT rate from 17 % to 19 % in mid-2002 and then to 21 % in mid-2005; and the cuts on corporate taxes (IRC), which decreased gradually from 34 % in 2000 to 25 % at the beginning of 2004.

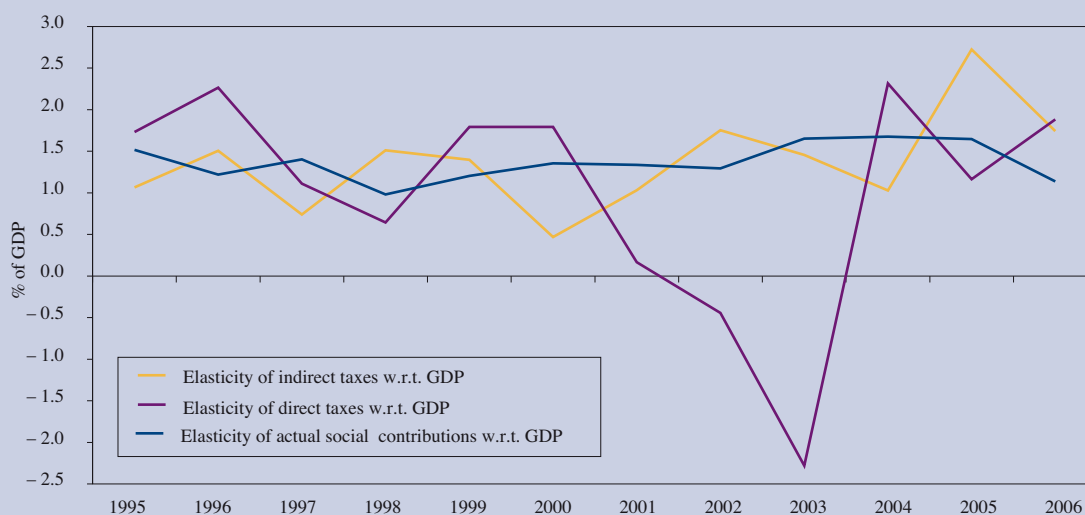
<sup>(4)</sup> For details on the calculation of the composition effect, check economic assessment of the stability programme of Portugal (update of December 2006) (Annex 5). [http://ec.europa.eu/economy\\_finance/publications/publication3843\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication3843_en.pdf)

Graph V.21.2: Tax elasticities and the GDP growth pattern



Source: Commission services.

Graph V.21.3: Behaviour of different tax categories



Source: Commission services.

activity would suggest and thus contributed to the looming fiscal imbalances.

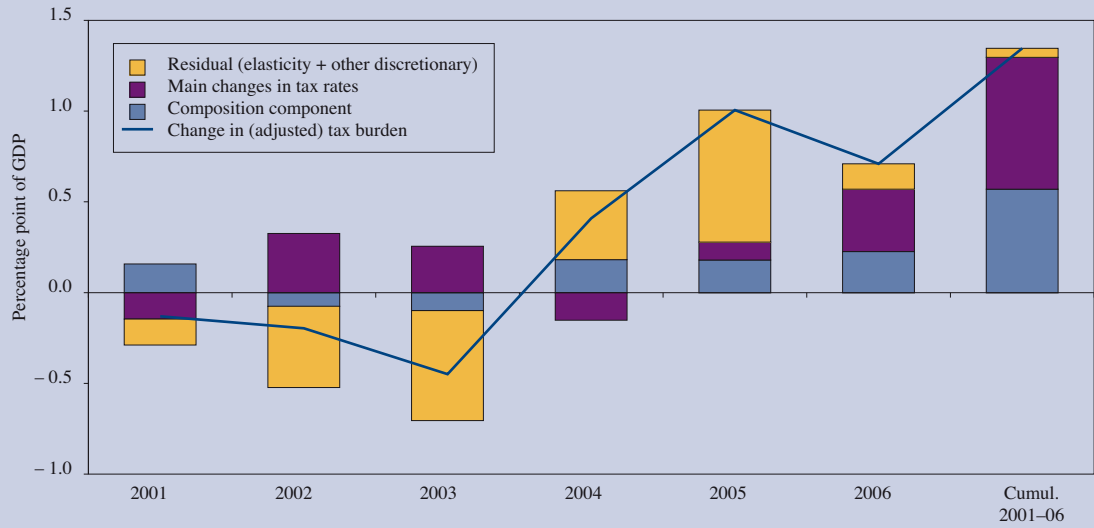
The reverse appears to have happened since 2004, with revenues growing above fundamentals and more than warranted by changes in tax rates, despite a subdued pace of economic activity <sup>(1)</sup>.

A number of additional factors may have played a role in the recently observed pattern of tax revenue: a plethora of changes in less important tax categories that are not accounted for here (e.g., excises on oil and tobacco

products, taxes on real estate sales and property tax); various changes in tax benefits and credits; variations in the time patterns of tax reimbursement and advanced payments; lagged effects of economic activity on tax inflows (particularly relevant for direct taxes); changes in consumption patterns over the cycle as well as changes in income distribution. At the same time, improved tax compliance and tax collection, particularly on corporate taxes, VAT, and, more recently, social contributions, may have also played a role in that evolution. The recent increases have been consistent with improvements in the work of the Portuguese tax administration, namely at the level of improving data management, including information exchange between tax and social contributions administrations or the introduction of automatic systems for clearing tax payments or checking tax declarations.

<sup>(1)</sup> Changes in employment composition in recent years, with an increase in the share of paid employment and the mirroring decline in self-employment (which is at some 25 % of the employed population) may *ceteris paribus* be leading to a higher importance of the composition effect and consequently to a lower importance of the residual component presented in Figure V.21.4.

Graph V.21.4: Drivers of tax revenue



Sources: Commission services and CGA annual reports.



## 22. Romania

### Recent developments and medium-term prospects

In 2006, the general government deficit was 1.9 % of GDP, compared to a target of 0.7 % of GDP in the December 2005 pre-accession programme. The 2006 budget targeted a deficit of 0.5 % of GDP, according to domestic concepts which are different from those of the European system of accounts (ESA). The target was revised upwards several times during the year to 2.5 % of GDP (domestic concepts) partly due to higher expenditure allocated for investment projects and notwithstanding higher revenue from stronger economic growth. Despite an accumulated surplus of 1.2 % of GDP during the 11 months to November, spending of about 3 % of GDP in December turned the budget balance for the whole year into a deficit of 1.7 % of GDP in terms of domestic budgetary accounting. Lower-than-budgeted capital expenditure caused by delays in implementing investment projects reduced the deficit, although part of the unspent funds were shifted to current spending notably wages, purchases of goods and services and social transfers. On the revenue side, direct tax revenues were higher than budgeted due to stronger-than-expected growth, better tax collection and an increase in formal employment. VAT revenue made also a positive contribution as a result of higher private consumption and improved tax collection. The government gross debt ratio was 12.4 % of GDP at the end of 2006 compared to 15.1 % of GDP foreseen in the December 2005 pre-accession economic programme.

The 2007 budget approved by the Romanian Parliament on 19 December 2006 targets a general government deficit of 2.8 % of GDP in domestic accounting methodology. This was translated in the January 2007 convergence programme into a deficit of 2.7 % of GDP in ESA terms <sup>(1)</sup>. Nevertheless, in the April 2007 fiscal notification, the Romanian authorities reported a planned deficit for 2007 of 3.2 % of GDP in ESA terms. On the revenue side, the 2007 budget relies on an increase of revenue mainly due to

a broadening of the VAT and direct tax bases. On the expenditure side, a substantial increase in public investment is foreseen, while social benefits and purchases of goods and services are also set to increase as a share of GDP. According to the Commission services' spring 2007 forecast, the general government deficit is projected to reach 3.2 % of GDP. This deficit is in line with the April 2007 fiscal notification. On the expenditure side, a relaxed policy is expected notably with respect to the capital expenditure as well as collective consumption and social transfers. On the revenue side, the Commission services' spring 2007 forecast is less favourable than the one put forward by the authorities in the January 2007 convergence programme, notably with respect to indirect taxes. Moreover, it includes a negative impact of the property fund scheme for compensation of citizens for the non-return of confiscated property and an increase in public wages which was not captured by the adopted 2007 budget. The fiscal stance in 2007 is expansionary as the structural primary balance will deteriorate by 1.4 % of GDP.

Based on the no-policy-change assumption, the Commission services' spring 2007 forecast expects the general government deficit to remain stable at 3.2 % of GDP in 2008, against the background of a lower, but still robust economic growth. This projection includes a budgetary cost of the pension reform (the introduction of a second-pillar funded pension scheme) of 0.2 % of GDP. The January 2007 convergence programme targets a general government deficit of 2.6 % of GDP in 2008 and a significant tightening to 2.0 % of GDP in 2009.

The Commission services project the debt-to-GDP ratio to increase by 0.7 percentage point between 2006 and 2008, reaching just above 13 % in 2008. The increase of the ratio is due to higher primary deficits partly offset by the positive effect of strong nominal GDP growth.

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

## Financial flows between Romania and the EU budget

EU funds play a key role in promoting economic development. With a GDP per capita measured on the basis of purchasing power standards (PPS) of around 35 % of the EU-15 average, the EU funds provide a major opportunity for Romania to accelerate the catching-up process. On the other hand, as EU member, Romania will also contribute to the EU budget. The following paragraphs give a broad overview of the flows of EU funds to and from Romania, their order of magnitude and the expected budgetary implications.

**Financial perspective 2007–13:** the total amount of EU funds is fixed in a multiannual programming framework, which sets out the maximum commitment appropriate

that can be put into the EU budget each year. For the period 2007–13, these amounts are fixed in the ‘financial perspective 2007–13’. The main EU funds which are pre-allocated to Romania are the following <sup>(1)</sup>.

- In the policy area of competitiveness and cohesion, Romania has been assigned a total envelope of EUR 19.7 billion between 2007 and 2013. They are allocated under the EU Structural Funds.

<sup>(1)</sup> Selected parts of the EU budget are geographically pre-allocated to Member States, i.e. where they are not absorbed by a specific Member State, they cannot be re-directed to another country or purpose. In addition, Member States can also benefit from budget lines in areas such as education and consumer protection, which are allocated on project basis. The present analysis only takes into account the pre-allocated funds, which represent more than 90 % of the funds flowing to Romania.

Table V.22.1

### Budgetary developments 2005–09, Romania (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	- 1.4	- 1.9	- 3.2	- 3.2	
— Total revenues	32.4	30.1	30.4	31.0	
Of which: — current taxes	18.2	17.4	17.4	17.7	
— social contributions	10.5	10.2	10.0	9.8	
— Total expenditure	33.7	32.0	33.6	34.2	
Of which: — collective consumption	9.0	9.0	9.4	9.6	
— social transfers in kind	9.0	9.1	8.7	8.5	
— social transfers other than in kind	8.9	8.2	8.6	8.8	
— interest expenditure	1.1	0.8	0.7	0.8	
— gross fixed capital formation	3.8	2.9	3.8	4.1	
Primary balance	- 0.3	- 1.1	- 2.5	- 2.5	
Tax burden	27.9	26.8	26.6	26.6	
One-off and other temporary measures	0.0	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	- 1.2	- 2.2	- 3.5	- 3.3	
Structural primary balance	- 0.1	- 1.4	- 2.8	- 2.5	
Government gross debt	15.8	12.4	12.8	13.1	
<i>pm Real GDP growth (%)</i>	4.1	7.7	6.7	6.3	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	- 1.5	- 2.3	- 2.7	- 2.6	- 2.0
Primary balance	- 0.4	- 1.2	- 1.6	- 1.5	- 1.0
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 1.7	- 2.9	- 3.4	- 3.3	- 2.4
Government gross debt	15.9	12.8	13.5	12.6	11.7
<i>pm Real GDP growth (%)</i>	4.1	8.0	6.5	6.3	5.9

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in January 2007.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the January 2007 update of the convergence programme of Romania.

Table V.22.2

**Main measures in the budget for 2007, Romania**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
• Increased VAT tax base (+ 1 % of GDP)	• Increased public investment (+ 3.6 % of GDP)
• Personal income tax-related measures (+ 0.5 % of GDP)	• Higher social benefits (+ 0.4 % of GDP)
• Customs duties (– 0.4 % of GDP)	• Lower subsidies (– 0.9 % of GDP)
• Lower social contributions (– 0.3 % of GDP)	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services, 2007 budget and the January 2007 update of the convergence programme of Romania.

Table V.22.3

**EU transfers available to Romania 2007–13 (% of GDP, 2007 prices)**

	2007	2008	2009	2010	2011	2012	2013
<b>1. Competitiveness and cohesion</b>	1.13	1.59	2.10	2.47	2.61	2.75	2.89
<b>2. Natural resources</b>							
Rural development	0.63	0.85	1.07	0.99	0.97	0.95	0.93
Fisheries	0.01	0.02	0.02	0.03	0.03	0.03	0.03
CAP direct payments <sup>(1)</sup>	0.37	0.44	0.51	0.57	0.69	0.82	0.94
<b>3. Compensations</b>	0.26	0.12	0.12				
<b>Total EU funds</b>	<b>2.41</b>	<b>3.02</b>	<b>3.82</b>	<b>4.05</b>	<b>4.30</b>	<b>4.54</b>	<b>4.78</b>

<sup>(1)</sup> CAP: common agricultural policy.

Source: Commission services.

- The area of natural resources covers both expenditure for rural development, fisheries and direct aid to farmers. For Romania, an amount of EUR 8.0 billion has been pre-allocated for rural development, which is channelled through the European Agricultural Fund for Rural Development (EAFRD). EUR 0.1 billion has been pre-allocated through the European Fisheries Fund (EFF). The direct aid to farmers will follow a 10-year phasing-in period, starting with amounts equal to 25 % of the EU-15 Member States in 2007, progressively increasing towards 100 % by 2017 <sup>(1)</sup>.
- Finally, Romania will benefit from compensations, foreseen in the Accession Protocol to ensure that new Member States retain a positive budgetary balance during the first years of accession. They are fixed at EUR 0.6 billion between 2007 and 2009 and

disbursed through the Schengen and cash flow facilities <sup>(2)</sup>.

In 2007, the amounts allocated to Romania represent about 2.4 % of GDP; this is expected to increase to 4.8 % of GDP in 2013.

**Contributions to the EU budget:** starting from 1 January 2007, Romania contributes to the EU budget, which is based on the ‘traditional own resources’ (agricultural levies and custom duties), value added tax receipts, gross national income and the UK rebate. In 2007, the Romanian contribution amounts to EUR 0.9 billion (i.e. 0.8 % of GDP) <sup>(3)</sup>. This amount excludes the traditional own resources, which cannot be attributed to individual countries as they are levied at the EU external border.

<sup>(1)</sup> This procedure is specified in Council Regulation (EC) No 2011/2006 of 19 December 2006 and applies to Bulgaria and Romania (OJ L 384, 29.12.2006).

<sup>(2)</sup> OJ L 157, 21.6.2005.

<sup>(3)</sup> Further details on each Member State’s contribution to the EU budget can be found at: [http://eur-lex.europa.eu/budget/data/D2007\\_VOL1/EN/nmc-grseq42960935830-3/index.html](http://eur-lex.europa.eu/budget/data/D2007_VOL1/EN/nmc-grseq42960935830-3/index.html)

On balance, Romania is a net beneficiary of EU transfers, as are all Member States which joined since 2004. This is consistent with their relatively higher needs to catch up with the other EU economies. In 2007, the GDP per capita (PPS) in the recently acceded new Member States varies between 34 % of the EU-15 (Bulgaria) and 82 % (Cyprus), while the net transfers from the EU budget range from 0.3 % of GDP (Cyprus) and 1.7 % (Hungary) <sup>(1)</sup>.

### Assessing the budgetary impact of EU transfers

Although recently acceded Member States benefit from considerable inflows of EU funds, it is often claimed that the EU financial framework represents a drag on the national fiscal balance because of the co-financing rules,

the additionality requirements and the national contributions to the EU budget <sup>(2)</sup>. Measuring the impact of EU transfers on the budget balance requires the following elements to be taken into account.

- The European system of accounts (ESA 95) requires the 'recording of financial flows when accrued', i.e. when the expenditure of each particular project takes place. This is opposed to the cash basis, whereby revenue and expenditure are registered when actually paid. In practical terms, ESA 95 requires expenditure financed by the EU budget and the corresponding revenue from the EU budget to be booked simultaneously, even if the refund comes with a delay or in advance.
- Experience has shown that in the short run, Member States face constraints in absorbing the EU funds

<sup>(1)</sup> Calculated as the sum of the Structural Funds, rural development and compensations, less national contributions to the EU budget.

<sup>(2)</sup> For an overview of this debate, see Hallet and Keereman (2005).

Table V.22.4

#### Impact of EU transfers on the fiscal balance of Romania in 2007 (%)

	EU transfers		Impact on fiscal balance					Overall (1)+(2) Net impact
	Commitments	Estimated disbursements	Direct (1)			Indirect (2)		
			Revenue	Expenditure	Net impact	Substitution of national expenditure	Co-financing	
<b>Pre-accession funds (a)</b>		0.87	0.69	0.69	0.00	0.69	-0.23	0.46
<b>Competitiveness and cohesion (b)</b>	1.13	0.23	0.18	0.18	0.00	0.06	-0.03	0.03
<b>Natural resources</b>								
Rural development and fisheries (c)	0.64	0.13	0.03	0.03	0.00	0.03	-0.01	0.02
CAP direct payments (d)	0.37	0.37	0.00	0.00	0.00	0.37		0.37
<b>Compensations</b>	0.26	0.26	0.26		0.26			0.26
<b>Contribution to EU budget</b>				0.76	-0.76			-0.76
<b>Total</b>	<b>2.41</b>	<b>1.86</b>	<b>1.15</b>	<b>1.66</b>	<b>-0.50</b>	<b>1.15</b>	<b>-0.27</b>	<b>0.37</b>

- (a) The pre-accession funds include the Phare, ISPA and Sapard programmes. The government is the final user of 80 % of Phare, 100 % of ISPA and 50 % of Sapard funds; all funds substitute national expenditure; national co-financing of 25 % for all pre-accession funds.
- (b) Absorption rate of 20 %; the government is the final user of 80 % of the total transfers; only the Cohesion Fund (assumed to represent about one third of total disbursements) substitutes national expenditure; national co-financing of 15 %.
- (c) Absorption rate of 20 %; the government is the final user of 20 % of the total transfers; all funds substitute national expenditure; national co-financing of 20 %.
- (d) All committed CAP funds are disbursed; all funds are directly transferred to the final beneficiaries (i.e. zero direct impact on revenues and expenditures); all funds substitute national expenditure; no national co-financing.

Source: Commission services.

allocated to them, due to bottlenecks in the administrative capacity to design and implement projects, to provide national co-financing and to draft the required project documentation. While this is less relevant to the common agricultural policy funds, which are direct payments to farmers, the absorption rate has proved to be a critical parameter for the Structural Funds. Where disbursements are lower than commitments, the Commission spending rules allow the funds to be carried-over to the next year, although some restrictions apply <sup>(1)</sup>. Drawing on earlier experience in Romania, the average absorption rate of pre-accession funds during 2005–06 has been low at 25 %. As a reference, the 10 Member States which joined the EU in 2004 have shown an average absorption rate of Structural Funds by around 47 %.

- Thirdly, ESA 95 rules only require the recording of funds where the government is the final beneficiary. Hence, as the CAP related transfers are directly paid to farmers, they appear neither as revenue nor as expenditure in the fiscal balance.

Apart from the ESA 95 rules and the actual absorption rate, the following indirect effects on the budget also need to be accounted for:

Most EU funding rules require additionality, i.e. that they should lead to new projects, on top of what the government would have spent in the absence of external funding. Exceptions are the Cohesion Fund and the CAP

direct payments, the transfers of which are allowed to replace national spending. Pre-accession aid, as well as rural development and the Fisheries Fund, are subject to the additionality requirement, though this is implemented as a soft condition at project level, which is difficult to verify. This implies that they may lead to expenditure reductions in other budget lines.

Finally, most EU funds require national co-financing varying between 10 % and 25 % of the total project cost. This is applicable to all EU transfers, except for the CAP direct payments. The direct fiscal impact of co-financing is limited to the share of the funds destined to the government as a final user. Moreover, as co-financing is not subject to the additionality requirement, the related funds may be taken from other national budget lines, i.e. their net effect on public finances may be zero. However, given the short-term ‘rigidity’ of national budget lines, the impact assessment assumes that national co-financing is additional.

When applying the above rules on the Romanian budget for 2007 and assuming that all remaining pre-accession funds will be spent, the EU transfers increase both the revenue and expenditure level by 1.15 % and 1.66 % respectively, resulting into a direct negative budgetary impact of -0.5 % of GDP (see Table V.22.4). However, when also taking into account the indirect fiscal effects, resulting from the partial substitution of previous national expenditure by EU transfers, the overall net effect becomes largely positive. If the assumption is made that national co-financing cannot be retrieved from existing budget lines, because of rigidities, the net budgetary impact is still positive, representing about 0.4 % of GDP in 2007.

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<sup>(1)</sup> For Structural Funds, the maximum carryover period is n+3 years for commitments until 2010, subsequently reduced to n+2 years, thereafter.

## 23. Slovenia

### Recent developments and medium-term prospects

In 2006, the general government deficit was 1.4 % of GDP, compared with a deficit target of 1.7 % of GDP set in the convergence programme submitted in December 2005 <sup>(1)</sup>. The better-than-expected result is essentially due to a positive base effect from 2005, when the deficit was 0.2 % of GDP lower than initially expected. In addition, in 2006 both revenues and expenditures were less dynamic than planned in 2005 with the expenditure share decreasing by 0.1 percentage point more than the revenue share.

The government gross debt-to-GDP ratio declined by 0.5 percentage point in 2006 compared to the previous year, to 27.8 %, whereas the 2005 update of the convergence programme projected a 0.6 percentage point increase. All the three potential contributors to the change in the debt ratio, namely primary balance, snowball effect and stock-flow adjustment, were more favourable than planned.

Within the framework of the existing budgetary procedure of simultaneously adopting budgets for two consecutive years, the original 2007 budget was adopted in December 2005. The government presented the supplementary 2007 budget to parliament in October 2006, together with the one for 2008. The parliament adopted the 2007 budget law and the accompanying budget implementation act together with the 2008 budget on 20 November 2006.

On the revenue side, the 2007 budget includes changes to personal income and corporate taxation. The new personal income tax, coming into effect as of 1 January 2007, decreases the degree of progression by reducing the

number of tax brackets from five to three and by capping the top tax rate at 41 % as compared to previously 50 %. Similarly, the new corporate income tax regime lowers the tax rate from 25 % to 23 % in 2007, followed by a 1 percentage point cut each year to reach 20 % by 2010, while abolishing tax exemptions related to non-R & D investment. Moreover, in the framework of a gradual elimination of the payroll tax paid by employees by 2009, its rate is trimmed by 40 % in 2007.

On the expenditure side, cost-saving measures related to the ongoing streamlining of government purchases have been included. Restrictive employment and wage policies in the public sector are planned to continue. Further savings are expected from the reform of unemployment and other social benefits, specifically by increasing conditionality and streamlining the indexation mechanism, and aiming at containing the rise of social transfers. However, the deficit-reducing effect of these measures will be partly offset by the decision to index pensions to wages, as well as by additional expenditure linked to the spending commitments related to EU and NATO membership (e.g. Schengen, top-up payments related to the farming sector, defence). Despite a major investment in the railway infrastructure the nominal rate of growth of government gross fixed capital formation is planned to decline significantly in 2007, after the 17 % increase recorded in 2006.

The stability programme submitted in December 2006 set the deficit target for 2007 at 1.5 % of GDP. This is in line with the Commission services' spring 2007 forecast. The projected cuts in expenditure are expected to be almost entirely offset by the reduction in the revenue-to-GDP ratio linked to the extensive tax reforms. The final impact of the tax reform is, however, uncertain and could result in lower or higher revenue compared to official projections, thus affecting the final outcome. The primary structural balance is estimated to worsen to -0.3 % of GDP in 2007 from a balanced position in 2006, thus indicating a mildly expansionary fiscal stance.

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

On the basis of the no-policy-change assumption, the Commission services forecast the government deficit ratio to remain at 1.5 % of GDP in 2008, with the deficit-increasing effect of the tax cuts offsetting the planned expenditure reduction. This is slightly below the 1.6 % of GDP targeted in the stability programme. The stability

programme targets a decline in the deficit in 2009, when it should reach 1.0 % of GDP thanks to expenditure cuts.

According to the Commission services' forecast, the general government debt is expected to remain broadly stable below 30 % of GDP in 2007 and 2008.

*Table V.23.1*

**Budgetary developments 2005–09, Slovenia (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008
General government balance	- 1.5	- 1.4	- 1.5	- 1.5
— Total revenues	45.6	44.8	43.9	42.9
<i>Of which:</i> — current taxes	25.2	24.9	24.2	23.6
— social contributions	15.1	14.9	14.7	14.6
— Total expenditure	47.0	46.3	45.4	44.4
<i>Of which:</i> — collective consumption	7.8	7.8	7.8	7.7
— social transfers in kind	11.8	11.4	11.3	11.3
— social transfers other than in kind	16.3	16.0	15.6	15.4
— interest expenditure	1.7	1.6	1.5	1.4
— gross fixed capital formation	3.4	3.7	3.6	3.0
Primary balance	0.2	0.2	- 0.1	- 0.1
Tax burden	40.2	39.8	39.0	38.2
One-off and other temporary measures	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup>	- 1.1	- 1.5	- 1.7	- 1.7
Structural primary balance	0.6	0.0	- 0.3	- 0.3
Government gross debt	28.4	27.8	27.5	27.2
<i>pm Real GDP growth (%)</i>	4.0	5.2	4.3	4.0

Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	- 1.4	- 1.6	- 1.5	- 1.6	- 1.0
Primary balance	0.4	0.1	- 0.1	- 0.3	0.3
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3) (5)</sup>	- 0.8	- 1.4	- 1.4	- 1.6	- 1.1
Government gross debt	28.0	28.5	28.2	28.3	27.7
<i>pm Real GDP growth (%)</i>	4.0	4.7	4.3	4.2	4.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the stability programme of Slovenia.

Table V.23.2

**Main measures in the budget for 2007, Slovenia**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
• Lowering the payroll tax rate by 40 % (– 0.4 % of GDP)	• Restrictive employment policy (– 0.2 % of GDP)
• The new personal income tax (– 0.5 % of GDP)	• Indexation of pensions to wages (0.1 % of GDP)
• The new corporate income tax (– 0.3 % of GDP)	• Improvement of public procurement (– 0.1 % of GDP)
• Harmonisation of excise duties with the <i>acquis</i> (0.1 % of GDP)	• Streamlining of indexation of social transfers (– 0.4 % of GDP)
	• Railway investment (0.4 % of GDP)

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and the December 2006 update of the stability programme of Slovenia.



## 24. Slovakia

### Recent developments and medium-term prospects

In 2006, the general government deficit amounted to 3.4 % of GDP which was 0.8 percentage point below the target set in the December 2005 update of the Slovak convergence programme <sup>(1)</sup>. The increases in excise taxes on cigarettes and alcohol at the beginning of 2006 induced consumers and enterprises to bring the purchases of these products forward to the end of 2005, which was not foreseen in the 2006 budget and had a negative impact on indirect tax revenues in 2006 of around ¼ % of GDP. Stronger-than-expected GDP and employment growth, nevertheless, ensured that overall tax revenues were higher than anticipated in the 2006 budget. The positive development on the revenue side was, however, partly offset by some unplanned increases in public expenditure mitigated by the fact that a lower-than-expected absorption of EU funds eased demands on public expenditure through co-financing. The unexpected net borrowing at the local government level of some ¼ % of GDP contributed to the overall general government deficit. The debt ratio decreased by almost 4 percentage points to 30.7 % of GDP in 2006 thanks mainly to a reduction in liquidity (deposits) by the agency responsible for managing government debt (ARDAL).

The budget for 2007, which the parliament approved on 12 December 2006, targets a general government deficit of 2.9 % of GDP. The government decided to decrease expenditure in the areas of justice and interior affairs, as well as the transfer to the Academy of Sciences while keeping increases in expenditure on education and social affairs below nominal GDP growth, in order to attain a deficit below the 3 % of GDP threshold. On the other hand, the budget foresees a temporary increase in health

spending amounting to some 0.1 % of GDP. The tax code simplified in 2004 has also been slightly modified by a re-introduction of a lower VAT rate (10 %) on pharmaceutical and medical products, and by decreasing the level of tax-free income for higher income groups. The Commission services' spring 2007 forecast indicates that, given the strong growth prospects, the 2007 deficit target of 2.9 % of GDP can be reached. The fiscal stance in 2007, as measured by the change in the structural primary balance, is estimated to be broadly neutral.

Based on no-policy-change assumption, the 2008 general government balance is expected to remain broadly unchanged. Degressive decreases of the tax-free level of personal income introduced in the 2007 budget should have a positive impact of only 0.05 % of GDP on tax revenues in 2008. Hence, some further measures will have to be adopted in order to meet the 2008 deficit target of 2.4 % of GDP set in the most recent update of the convergence programme, which foresees the general government deficit to decline further to 1.9 % of GDP by 2009.

According to the Commission services' spring 2007 forecast the debt ratio is expected to decline slightly to below 30 % of GDP in 2007 and 2008.

### The potential impact of more binding nominal expenditure ceilings on fiscal consolidation

In the recommendation to Slovakia of 5 July 2004 under Article 104(7) of the Treaty, the Council invited the Slovak authorities 'to strengthen the binding character of the three-year budgetary framework by introducing detailed medium-term expenditure ceilings to be adopted by parliament' <sup>(2)</sup>. In addition, the Council recommended 'to accelerate the fiscal adjustment if the

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

<sup>(2)</sup> The text of the recommendation is available at: <http://register.consilium.eu.int/pdf/en/04/st11/st11221.en04.pdf>

implemented structural reforms result in higher growth than expected in the convergence programme of May 2004, in particular by dedicating any higher-than-budgeted revenues primarily to faster deficit reduction’.

This invitation, although repeated in every subsequent Council opinion on the updates of the convergence programme, has not been followed so far. Given that real GDP growth in Slovakia has been much stronger in the last years than expected in 2004 (on average 6.6 % in 2004–06 compared to a forecast of on average 4.5 % produced in May 2004), the question arises of whether more binding medium-term nominal expenditure ceilings would have led to better budgetary outcomes than eventually achieved.

According to the May 2004 convergence programme, nominal GDP was expected to amount to some SKK 1 291 billion, 1 384 billion and 1 496 billion in 2004, 2005 and 2006 respectively. In reality, nominal GDP was on average 7 % higher than initially forecast. Thanks to stronger-than-anticipated GDP growth, general government revenues (in absolute terms) also exceeded projections.

As a result, the government was able to both increase expenditure and achieve lower-than-planned deficits. The actual deficit outcomes were 2.4 % of GDP, 2.8 % of GDP and 3.4 % of GDP in 2004, 2005 and 2006 respectively, against targets of around 4 % of GDP for each of the three years.

Table V.24.1

**Budgetary developments 2005–09, Slovakia (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	- 2.8	- 3.4	- 2.9	- 2.8	
— Total revenues	35.2	33.9	33.1	32.8	
Of which: — current taxes	18.6	17.4	17.1	17.1	
— social contributions	12.9	12.1	11.8	11.6	
— Total expenditure	38.1	37.3	36.0	35.6	
Of which: — collective consumption	10.9	11.5	11.0	10.8	
— social transfers in kind	7.6	7.7	7.4	7.3	
— social transfers other than in kind	12.5	12.0	11.5	11.2	
— interest expenditure	1.5	1.4	1.3	1.3	
— gross fixed capital formation	2.1	2.2	2.2	2.2	
Primary balance	- 1.3	- 2.0	- 1.5	- 1.5	
Tax burden	31.8	29.8	29.2	29.0	
One-off and other temporary measures	- 0.9	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	- 1.2	- 3.3	- 3.4	- 3.3	
Structural primary balance	0.4	- 1.9	- 2.0	- 2.0	
Government gross debt	34.5	30.7	29.7	29.4	
<i>pm Real GDP growth (%)</i>	6.0	8.3	8.5	6.5	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	- 3.1	- 3.7	- 2.9	- 2.4	- 1.9
Primary balance	- 1.4	- 1.9	- 0.9	- 0.6	- 0.2
One-off and other temporary measures	- 0.8	0.1	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	- 1.6	- 3.5	- 3.2	- 2.9	- 2.5
Government gross debt	34.5	33.1	31.8	31.0	29.7
<i>pm Real GDP growth (%)</i>	6.1	6.6	7.1	5.5	5.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services’ spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services’ calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the convergence programme of Slovakia.

Table V.24.2

**Main measures in the budget for 2007, Slovakia**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Lower VAT on pharmaceutical and medical products (- 0.16 % of GDP)</li> <li>• Changes of consumption taxes (0.05 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Savings in health expenditure due to lower VAT (- 0.13 % of GDP)</li> <li>• Extra health expenditure (0.12 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and the Ministry of Finance.

If a binding nominal ceiling for overall expenditure had been established on the basis of the figures in the May 2004 convergence programme, more ambitious deficit outcomes could *ceteris paribus* have been reached (1.8 % of GDP, 2.3 % of GDP and 1.8 % of GDP in 2004, 2005 and 2006 respectively) <sup>(1)</sup>. Moreover, both interest and capital expenditure in the years 2004–06 ended below the levels foreseen in the May 2004 convergence programme. The higher-than-foreseen expenditure path was thus solely induced by unplanned increases in primary current expenditure. Therefore, if a nominal expenditure ceiling had been enforced for primary current expenditure only (again with the figures of the May 2004 convergence programme), even lower deficits could have been achieved (0.7 % of GDP, 1.0 % of GDP and - 0.1 % of GDP in 2004, 2005 and 2006 respectively).

Concerning 2007, using the revenue projections of the Commission services' spring 2007 forecast, a binding nominal ceiling for overall expenditure established according to the May 2004 convergence programme would imply a balanced budget target for 2007. Furthermore, a nominal expenditure ceiling for primary current expenditure would lead to a surplus of 1.5 % of GDP in 2007. However, the general government deficit,

<sup>(1)</sup> Price developments diverged in both directions from the levels expected by the programme. GDP deflator increased by 6 %, 2.4 % and 2.7 % in the years 2004–06 compared to 3.7 %, 2.7 % and 3 % forecast for these years in May 2004.

Table V.24.3

**General government deficits with May 2004 convergence programme ceilings**

May 2004 CP ceiling for:	2004	2005	2006	2007 (*)
Overall expenditure	1.8	2.3	1.8	0.0
Current primary expenditure	0.7	1.0	- 0.1	- 1.5
Overall expenditure adjusted for lower absorption of EU funds	1.8	1.1	1.6	- 0.4

(\*) Commission services' spring 2007 forecast.

Source: Commission services calculations.

although below the 3 % of GDP reference value of the Treaty, is expected to be higher than planned in the May 2004 convergence programme despite tax revenues and social security contributions which are forecast to be almost 12 % higher than originally assumed.

Finally, one could have taken into account that expenditure ceilings should ideally have been adjusted for deviations from plans that equally affect both sides of the budget and thus cancel out, such as lower-than-foreseen inflows of EU funds. Assuming that lower-than-planned other revenues in 2004–06 are entirely caused by the lower-than-expected absorption of EU funds, the ceiling for overall expenditure should thus have been lowered equivalently. In this case, deficits outcomes of 1.8 % of GDP, 1.1 % of GDP and 1.6 % of GDP would have been achieved in 2004, 2005 and 2006 respectively.

Table V.24.4

Comparison of general government revenue and expenditure projections and outcomes

	May 2004 convergence programme <sup>(1)</sup>				Outcome and projections				Difference between outcome and May 2004 convergence programme			
	2004	2005	2006	2007	2004	2005	2006	2007 <sup>(2)</sup>	2004	2005	2006	2007 <sup>(1)</sup>
Nominal GDP	1 291.3	1 383.6	1 495.9	1 602.6	1 355.3	1 471.1	1 636.3	1 834.1	64.0	87.5	140.4	231.5
General government total revenue (billion SKK)	482.9	524.4	552.0	586.6	511.2	543.9	581.7	635.2	28.3	19.5	29.7	48.7
Taxes and social contributions (bn SKK)	400.3	426.1	448.8	474.4	429.4	464.0	482.6	529.5	29.1	37.8	33.8	55.1
Other revenue (billion SKK)	82.6	98.2	103.2	112.2	81.8	79.9	99.1	105.7	- 0.8	- 18.3	- 4.1	- 6.5
General government total expenditure (billion SKK)	535.9	578.3	611.8	634.6	543.8	585.6	637.1	688.2	7.9	7.2	25.2	53.6
Current expenditure (billion SKK)	485.5	518.9	549.0	570.5	505.3	529.1	587.4	633.6	19.8	10.3	38.4	63.1
Current primary expenditure (billion SKK)	452.0	480.1	508.6	528.9	475.7	506.5	564.9	609.0	23.7	26.4	56.3	80.1
Interest expenditure (billion SKK)	33.6	38.7	40.4	41.7	29.6	22.6	22.5	24.6	- 3.9	- 16.1	- 17.8	- 17.1
Capital expenditure (billion SKK)	50.4	58.1	62.8	64.1	38.5	56.4	49.6	54.6	- 11.8	- 1.7	- 13.2	- 9.5
General government deficit (billion SKK)	51.7	54.0	58.3	48.1	32.6	41.7	55.4	53.0	- 19.1	- 12.3	- 2.9	4.9
General government deficit (% of GDP)	4.0	3.9	3.9	3.0	2.4	2.8	3.4	2.9	- 1.6	- 1.1	- 0.5	- 0.1

<sup>(1)</sup> Differences between sum and the total of individual items due to rounding.

<sup>(2)</sup> Commission services' spring 2007 forecast.

Sources: May 2004 convergence programme, Commission services' calculations.

# 25. Finland

## Recent developments and medium-term prospects

The general government surplus reached 3.9 % of GDP in 2006, which is 2 ¼ percentage points higher than the official target of 1.6 % set in the update of the stability programme of November 2005 <sup>(1)</sup>. The difference originates mainly from the central government finances which recorded a stronger fiscal balance on the back of strong tax and non-tax revenues combined with expenditure restraint and from the social security sector. The debt ratio declined to 39.3 % of GDP in 2006.

The 2007 budget was adopted in December 2006. The main focus of the budget is on employment measures, including various targeted tax incentives and new expenditure programmes, totalling EUR 100 million (0.06 % of GDP). The largest measures are cuts to the personal income tax worth 0.3 % of GDP, which is the final stage of a larger multi-year package. While the budget aimed for a general government surplus of 2.7 % of GDP in 2007, as confirmed in the November 2006 update of the stability programme, this target is outdated. The higher-than-planned surplus in 2006 will carry over to the following years, raising the surplus outlook by about one percentage point. The latest forecast by the Ministry of Finance of 27 March 2007 already includes the carryover effect and foresees a surplus of 3.6 % of GDP. Similarly, the Commission services' spring 2007 forecast expects the general government surplus to reach 3.7 % of GDP in 2007. The fiscal stance will be broadly neutral in 2007, with the structural balance essentially unchanged from 2006.

The Commission services' spring forecast indicates that under a no-policy-change assumption, the general government surplus remains broadly unchanged at 3.6 % of

GDP in 2008. While the new government, which took office in April 2007, has announced in its coalition programme various expenditure and revenue measures with a total direct cost of about EUR 3.1 billion (1.7 % of 2008 GDP). The exact timing of the measures over the next four years is presently not known. Therefore, their impact is not included in the Commission services' forecast, even though the surplus would be affected in the following years by the interplay of the direct cost of the measures and their potentially surplus-increasing effect arising from increased economic dynamism and employment. The stability programme target for 2008 is outdated as it does not include the carryover from 2006, but would remain broadly unchanged from the previous year under a no-policy-change assumption. Beyond 2008, the stability programme expects the surplus to remain stable in 2009, but to edge down by 0.3 percentage point in 2010, signalling the effects of ageing population.

Based on the Commission services' spring 2007 forecast, the debt ratio will be on a steadily declining trend, reaching close to 35 % of GDP by 2008. As presented in the stability programme, the debt ratio would stay on a downward path in 2009–10. The decline in the debt ratio that would result from significant primary surpluses is tempered by a debt-increasing stock-flow adjustment reflecting accumulation of financial assets by social security.

## The economic programme of the new government

The economic strategy of the new government, which took office following the general elections of March 2007, focuses on increasing employment through new active labour market measures, tax measures, improving work incentives by reforming some social benefit schemes, promoting entrepreneurship and innovation. Similar to the previous coalition programme, a target of creating 80 000 to 100 000 jobs over the next four years is set. The government assumes that the gains to public

<sup>(1)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)

finances from the increase in employment and economic activity could offset the net direct costs of the measures. The programme aims to maintain the presently achieved surplus of 1 % of GDP on the central government level by the end of the four-year legislative term, with the objective of securing the long-term sustainability of public finances. The coalition programme also reiterates the adherence to the initiatives presented in the stability programme of November 2006, which were primarily geared towards supporting the sustainability of public finances. Assuming a surplus of 2 % of GDP in social security and a balance in local government finances (based on stability programme data, which does not include the carryover from 2006), the 1 % of GDP central government surplus target would mechanically

translate into a surplus of roughly 3 % of GDP at the general government level in 2010–11. This would be even higher than the surplus of 2½ % of GDP projected in the autumn 2006 stability programme update.

The total cost of the new expenditure is estimated at EUR 1.3 billion (0.7 % of 2008 GDP), mainly targeted at social initiatives, education and R & D. Total tax reductions in net terms amount to EUR 1.8 billion (1 % of 2008 GDP). The tax measures aim to support employment, small businesses and entrepreneurship, and increasing equitability of living standards. The measures with the largest budgetary impact are a reduction of the personal income tax by EUR 1.1 billion (0.6 % of 2008 GDP) and the planned 5 percentage-point reduction of

Table V.25.1

**Budgetary developments 2005–10, Finland (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance	2.7	3.9	3.7	3.6		
— Total revenues	53.0	52.3	51.3	50.9		
Of which:						
— current taxes	31.4	30.7	30.3	30.2		
— social contributions	12.2	12.3	12.2	12.2		
— Total expenditure	50.3	48.5	47.7	47.3		
Of which:						
— collective consumption	7.6	7.2	7.1	7.0		
— social transfers in kind	14.6	14.2	14.1	14.1		
— social transfers other than in kind	16.5	15.9	15.7	15.6		
— interest expenditure	1.5	1.4	1.4	1.3		
— gross fixed capital formation	2.6	2.6	2.6	2.7		
Primary balance	4.2	5.3	5.1	4.9		
Tax burden	44.1	43.6	43.1	43.0		
One-off and other temporary measures	0.0	0.0	0.0	0.0		
Structural balance <sup>(3)</sup>	3.6	3.7	3.5	3.6		
Structural primary balance	5.1	5.1	4.9	5.0		
Government gross debt	41.4	39.1	37.0	35.2		
<i>pm Real GDP growth (%)</i>	2.9	5.5	3.1	2.7		
Stability programme <sup>(4)</sup>	2005	2006	2007	2008	2009	2010
General government balance	2.7	2.9	2.8	2.7	2.7	2.4
Primary balance	3.9	4.5	4.3	4.2	4.1	3.7
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(5)</sup>	3.3	2.9	2.7	2.7	2.8	2.8
Government gross debt	41.3	39.1	37.7	36.2	35.0	33.7
<i>pm Real GDP growth (%)</i>	2.9	4.5	3.0	2.9	2.6	2.1

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in November 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the November 2006 update of the stability programme of Finland.

Table V.25.2

**Main measures in the budget for 2007, Finland**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Income tax cuts (– 0.3 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive employment package combining tax and expenditure measures (0.06 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• A 2 % inflation adjustment of the income tax brackets (– 0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in development cooperation spending (0.04 % of GDP)</li> </ul>
<ul style="list-style-type: none"> <li>• Reduction in electricity tax on industry and greenhouse cultivation (– 0.04 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in spending on health and social welfare projects (0.04 % of GDP)</li> </ul>

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services and 2007 budget review.

VAT on food (at an estimated cost of EUR 450 million or 0.25 % of 2008 GDP). Environmental taxes will be raised by EUR 300 million (0.15 % of 2008 GDP).

The exact timing of the revenue and expenditure measures over the next four years is not specified in the coalition agreement. It will most probably be specified in

the government medium-term expenditure ceilings framework, expected to be negotiated by the end of May 2007. According to the coalition programme, the design and operation of the expenditure ceilings framework will be maintained broadly in the same form as under the previous government, but with some modifications to increase the flexibility of expenditure planning.

## 26. Sweden

### Recent developments and medium-term prospects

In 2006, the general government recorded a surplus of 2.2 % of GDP <sup>(1)</sup>. This was significantly better than the small deficit of 0.1 % of GDP targeted in the convergence programme of November 2005 <sup>(2)</sup>. The better-than-expected general government balance is notably due to a marked pick-up in economic growth in 2006, and stronger-than-anticipated inflows of tax revenue. More positive developments in the labour market and a considerable fall in unemployment in the later part of the year also contributed to reducing expenditure. Owing to the surplus, the government debt ratio was further reduced to 46.9 % of GDP in 2006.

Following the general election and the change in government in the autumn 2006, the budget proposal was presented in October and the 2007 budget law was approved by parliament on 21 December 2006. The budget built on the proposals presented by the old government, but also introduced additional measures aimed primarily at increasing demand and supply of labour. On the revenue side, it notably introduces a considerable reduction of labour income taxes, which are partly financed by a combination of revenue and expenditure measures. These measures include in particular a reduction of active labour market policies, higher unemployment contributions for employees and a cut in unemployment benefits. In the context of the spring budget law, which was presented in April 2007, the government announced some further measures that mainly have an effect on the revenue side. In particular,

wealth taxation is to be fully abolished retroactively with effect from 1 January 2007. According to the macroeconomic scenario underpinning the spring budget law, the government forecasts a general budget surplus of 2.3 % of GDP for 2007. This is fully in line with the Commission services' spring 2007 forecast. It implies a significant upward revision as compared to the estimated surplus of 1.3 % of GDP presented in the most recent update of the convergence programme. As in 2006, the upward revision of the surplus is notably due to higher expected economic growth and to a much stronger performance of the labour market than previously foreseen, which translates into both higher revenue and lower expenditure. The projected surplus respects the redefined national objective of a 1 % of GDP surplus over a cycle of seven years, i.e. the average of the expected budget balance for the present year and the three coming years as well as the outcome of the three preceding years. Actually, it would imply an overshooting of the objective as the currently estimated average balance is 2 % of GDP. As measured by the change in the structural primary balance, the fiscal stance in the Commission services' spring 2007 forecast is mildly expansionary. It should be noted, however, that this weakening of the structural budgetary position is linked to the reforms introduced as part of the policy package presented by the new government.

For 2008, the Commission services' forecast projects a surplus of 2.4 % of GDP, slightly higher than for 2007. This forecast is based on a no-policy-change assumption and, hence, does not take into account announced measures that have not been sufficiently detailed. The Commission services' forecast is significantly higher than the surplus of 1.6 % of GDP in the most recent update of the convergence programme, which was based on a weaker macroeconomic scenario, but is broadly in line with the forecast underlying the spring budget law. For 2009, the convergence programme foresees an improvement in the general budget balance by 0.4 percentage points to 2 % of GDP.

<sup>(1)</sup> The government accounts of Sweden include the pension reform costs, as the transitory period on the sectoral classification of pension schemes expired in April 2007. The funded second-pillar pension scheme is now classified in the corporate sector, rather than in government. The targets in convergence programmes were adapted so that data are comparable.

<sup>(2)</sup> The programme, as well as its assessment by the Commission and the Council, can be found at: [http://ec.europa.eu/economy\\_finance/sg\\_pact\\_fiscal\\_policy/Fiscal\\_policy528\\_en.htm](http://ec.europa.eu/economy_finance/sg_pact_fiscal_policy/Fiscal_policy528_en.htm)



On the basis of continued high general government surpluses, the government debt ratio is projected to be further reduced. According to the Commission services' spring forecast, the debt ratio is expected to

decline to 42.1 % of GDP in 2007 and 37.7 % of GDP in 2008. This reduction is underpinned by privatisation plans that are estimated to yield roughly 2 % of GDP per year.

Table V.26.1

**Budgetary developments 2005–09, Sweden (% of GDP) <sup>(1)</sup>**

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008	
General government balance	2.1	2.2	2.2	2.4	
— Total revenues	58.4	57.5	55.2	54.9	
<i>Of which:</i>					
— current taxes	37.2	37.0	35.1	35.2	
— social contributions	13.9	13.2	13.1	13.0	
— Total expenditure	56.3	55.3	53.0	52.5	
<i>Of which:</i>					
— collective consumption	7.7	7.6	7.4	7.3	
— social transfers in kind	19.4	19.2	19.1	19.0	
— social transfers other than in kind	17.5	16.7	15.5	15.3	
— interest expenditure	1.7	1.7	1.9	1.7	
— gross fixed capital formation	3.0	3.2	3.2	3.2	
Primary balance	3.8	3.9	4.1	4.1	
Tax burden	50.7	49.9	48.2	48.1	
One-off and other temporary measures	0.4	0.0	0.0	0.0	
Structural balance <sup>(3)</sup>	2.1	2.2	1.8	1.9	
Structural primary balance	3.8	3.9	3.7	3.6	
Government gross debt	52.2	46.9	42.1	37.7	
<i>pm Real GDP growth (%)</i>	2.9	4.4	3.8	3.3	
Convergence programme <sup>(4)</sup>	2005	2006	2007	2008	2009
General government balance	2.0	2.0	1.3	1.6	2.0
Primary balance	3.6	3.6	3.0	3.1	3.5
One-off and other temporary measures	0.4	0.0	0.0	0.0	0.0
Structural balance <sup>(3) (5)</sup>	2.0	2.0	1.1	1.4	1.9
Government gross debt	50.9	47.0	42.0	37.9	33.5
<i>pm Real GDP growth (%)</i>	2.7	4.0	3.3	3.1	2.7

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast.

<sup>(3)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(4)</sup> Submitted in December 2006.

<sup>(5)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the convergence programme of Sweden.

Table V.26.2

**Main measures in the budget for 2007, Sweden**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
• Taxation of labour income (– 1.3 % of GDP)	• Labour market measures (– 0.5 % of GDP)
• Unemployment insurance (0.35 % of GDP)	• Education (– 0.1 % of GDP)
• Taxation of property and wealth (– 0.35 % of GDP)	

<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

Sources: Commission services, 2007 budget bill and 2007 spring budget bill.

# 27. United Kingdom

## Recent developments and medium-term prospects

The preliminary outturn for the general government balance in the 2006/07 financial year is a deficit of 2.7 % of GDP <sup>(1)</sup>. This would be 0.1 percentage point less than the deficit projected in the 2005 update of the convergence programme submitted on 14 December 2005. Lower-than-expected revenues and an overshoot in current expenditure were compensated for by reduced capital spending. The deficit in 2006/07 also includes a capital transfer in relation to the cancellation of debt owed by developing countries amounting to 0.1 % of GDP. The preliminary outturn represents an improvement from the 2005/06 deficit of 2.9 % of GDP, on account of strong revenue growth resulting in an increase in the revenue ratio of 0.4 percentage point. The general government debt ratio is estimated to have risen slightly to around 42½ % of GDP at the end of the 2006/07 financial year.

The 2007 budget, presented on 21 March 2007, includes important tax reforms. The changes in the tax regime, however, will only take effect from financial year 2008/09 and should have a practically neutral influence on the profile of the general government deficit over the medium term. The 2007 budget followed the publication of the pre-budget report on 6 December 2006, which had introduced measures that will increase revenues by ¼ % of GDP from the 2007/08 financial year. The tax reforms announced in the 2007 budget include a 2 percentage point reduction in both the basic rate of personal income tax and in the main corporate tax rate, largely compensated for by the abolition of the 10 % starting rate of income tax and a reduction of capital allowances against corporation tax. As regards expenditure, the 2007 budget sets overall spending limits for the three years 2008/09 to 2010/11, but the departmental expenditure limits will be determined in the comprehensive spending review.

Current expenditure growth will be restrained below estimated trend growth, while net investment will be kept constant as a percentage of GDP.

The 2007 budget forecasts a deficit for 2007/08 of 2.6 % of GDP, up from 2.3 % in the 2006 convergence programme. An uncompensated downward revision in expected receipts from North Sea activity led the government to reduce its revenue projections by 0.2 % of GDP for both 2007–08 and 2008–09. Forecast expenditure was also increased by about 0.1 % of GDP, in part reflecting an upward revision in the cost of tax credits and interest payments. The Commission services' spring 2007 forecast projects a deficit of 2.6 % of GDP in 2007/08. General government revenue, boosted by strong growth, fiscal drag and also high corporate profits, is expected to rise by 0.3 percentage point of GDP, slightly less than in the budget projections. However, the higher revenues will be partly offset by an increase in the expenditure-to-GDP ratio of 0.2 percentage point. Overall, the fiscal stance is estimated to be mildly restrictive in 2007/08. With output growth close to potential, the small negative output gap is expected to remain unchanged in 2007 and to increase marginally in 2008, such that that the improvement in the nominal balance is expected to translate into an almost equivalent drop in the structural balance. As a result, a reduction in the structural balance is forecast from 2.6 % of GDP in 2006 to 2.5 % of GDP in 2007 <sup>(2)</sup>.

For 2008/09, under a no-policy-change assumption, the Commission services forecast a modest reduction of the deficit to 2.4 % of GDP. This is 0.5 percentage point higher than the projected deficit in the 2006 update of the

<sup>(1)</sup> The financial year runs from April to March.

<sup>(2)</sup> The output gap is calculated on a calendar year basis, and thus it is not possible to have an estimate of the structural balances on a financial year basis that is strictly based on the commonly agreed methodology. However, taking into account the milder improvement in the nominal balance in 2006/07 and 2007/08 and the output growth profile for the financial years, the structural balance is estimated to have dropped from 3.0 % of GDP in 2005/06 to 2.6 % in 2006/07 and 2.5 % in 2007/08.

convergence programme. This partly reflects the carry-over from the higher deficit forecast in the preceding year 2006/07, but it also reflects slower revenue growth for 2008/09 in the Commission services' forecast.

Beyond 2008/09, the 2007 budget projects a continued reduction of the deficit to 1.8 % of GDP by 2010/11. In line with the convergence programme, the envisaged consolidation is entirely driven by a reduction in the expenditure-to-GDP ratio, on account of tighter growth in current expenditure. Meanwhile, revenue and capital expenditure are both expected to increase at the same rate of GDP.

According to the Commission services' spring 2007 forecast, the debt-to-GDP ratio is expected to rise to about 44 % at the end of 2008/09. The UK authorities also project public sector net debt, taking into account holdings of financial assets. According to the 2007 budget, public sector net debt is projected to reach 38.8 % in 2009–10. Since the government's 'sustainable investment rule' is interpreted as requiring public sector net debt to remain below 40 %, the latter ceiling could become binding should there be any slippages to the forecast consolidation.

### **Developments in the implicit tax rates and in the apparent elasticities**

Since the early 1990s the total tax burden has seen an increase of about 2 percentage points of GDP <sup>(1)</sup>. Underlying the trend increase, however, were two periods of a lower tax burden in the mid-1990s and at the beginning of the current decade, followed by a significant increase over the last three years.

The increase in the tax burden is mainly attributable to an increase in social contributions which in 2002 jumped by about 1 percentage point of GDP following a discretionary policy change, and, to a lesser extent, by a slight increase in indirect taxation. After adjusting for policy-induced changes, these two categories remained relatively stable. By contrast, although the share of direct taxes in GDP in financial year 2005/06, at 17 % of GDP, was broadly equal to its level in the beginning of the 1990s, it fluctuated significantly throughout the period.

<sup>(1)</sup> The tax burden is defined as the ratio of direct taxes, indirect taxes (including those paid to the EU budget) and social contributions over GDP.

Tax reforms partly explain developments in the major tax categories. In 1991, the VAT rate was increased by 2.5 percentage points, to 17.5 %. The main rate of income tax was reduced and a lower starting rate was introduced in the late 1990s. In 1997 and 1998, the main corporate tax rate was reduced by 3 percentage points, whereas the rate of social contributions was increased by 1 percentage point in 2002.

Changes in the apparent elasticity of taxes and social contributions to GDP (i.e. the relative change of tax and social contributions over the relative change of nominal GDP) reflect developments in the implicit tax rates relative to the respective taxable bases, as well as the composition of GDP growth <sup>(2)</sup>. During the period from 1989/90 to 2005/06, the apparent elasticity of total taxes to GDP was on average equal to one. However, the elasticity has been unstable over the period, falling to below one (total taxes change less than proportionally to GDP) at the beginning of the 1990s and between 2002 and 2003. In recent years, the apparent elasticity to GDP has increased significantly, reaching about 1.5 in 2005.

The variations in the apparent elasticity of total taxes to GDP are not entirely explained by discretionary measures. The income and expenditure composition of GDP has not undergone major shifts, although over the period there has been a tendency for stronger growth in more tax-rich areas. Since the beginning of the 1990s, the share of private consumption in GDP has increased slightly, rising by about 4 percentage points to its peak of 66 % of GDP in 2001/02, before falling back slightly to 64 % subsequently. Meanwhile, the share of investment has dropped slightly.

Underlying the slight, but steady, increase in the implicit VAT rate are successive hicks in the respective elasticity, which, nevertheless, averaged around unity over the period under consideration. The increase in the apparent elasticity in 1991/92 reflects the increase in the headline VAT rate, which increased the VAT-to-GDP ratio by about 1 percentage point. Since then the implicit tax rate has shown a slight upward trend, with the apparent elasticity moving significantly above unity on three other occasions. It is likely that the anti-avoidance measures adopted by the government since 2002 may have just

<sup>(2)</sup> The proxies of tax bases used for estimating implicit rates are: private consumption expenditure for VAT, compensation to employees for personal income tax and social contributions, and gross operating surplus for corporation tax.

Table V.27.1

Budgetary developments 2005/06–2010/11, United Kingdom (% of GDP) <sup>(1)</sup>

Outturn and forecast <sup>(2)</sup>	2005	2006	2007	2008		
General government balance <sup>(3)</sup>	- 3.1(- 2.9)	- 2.8(- 2.7)	- 2.6(- 2.6)	- 2.4(- 2.4)		
— Total revenues	40.7 (41.2)	41.4 (41.6)	41.6 (41.9)	41.9 (42.1)		
Of which :						
— current taxes	28.9	29.7	29.9	30.2		
— social contributions	8.4	8.2	8.2	8.3		
— Total expenditure	43.7 (44.1)	44.1 (44.3)	44.2 (44.5)	44.3 (44.5)		
Of which :						
— collective consumption	8.2	8.2	8.1	8.2		
— social transfers in kind	13.3	13.6	13.7	13.7		
— social transfers other than in kind	13.0	12.8	12.7	12.7		
— interest expenditure	2.1	2.0	2.1	2.1		
— gross fixed capital formation	0.6	1.8	2.0	2.3		
Primary balance	- 1.0	- 0.7	- 0.6	- 0.2		
Tax burden	37.2	38.0	38.2	38.5		
One-off and other temporary measures	0.3	0.0	0.0	0.0		
Structural balance <sup>(4)</sup>	- 3.2	- 2.6	- 2.5	- 2.1		
Structural primary balance	- 1.1	- 0.6	- 0.4	0.0		
Government gross debt	42.2 (41.8)	43.5 (42.5)	44.0 (43.3)	44.5 (43.9)		
<i>pm Real GDP growth (%)</i>	1.9	2.8	2.8	2.5		
<b>Convergence programme <sup>(5)</sup></b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>
General government balance	- 2.9	- 2.8	- 2.3	- 1.9	- 1.7	- 1.6
Primary balance	- 0.8	- 0.6	- 0.2	0.1	0.3	0.5
One-off and other temporary measures	0.3	0.0	0.0	0.0	0.0	0.0
Structural balance <sup>(3)</sup> <sup>(6)</sup>	- 3.0	- 2.5	- 2.1	- 1.7	- 1.5	- 1.4
Government gross debt	42.7	43.7	44.1	44.2	44.2	44.0
<i>pm Real GDP growth (%)</i>	1.7	2.7	2.7	2.5	2.5	2.5

<sup>(1)</sup> Interest expenditure, total expenditure and balances include swaps in line with the definitions used in the excessive deficit procedure.

<sup>(2)</sup> Commission services' spring 2007 forecast. Figures in parentheses are on a financial year basis (so that the figure in the 2005 column refers to the 2005/06 financial year). The UK financial year begins in April; the excessive deficit procedure applies to the United Kingdom on a financial year basis. Outturns for deficit and debt in 2006/07 are based on preliminary data.

<sup>(3)</sup> Actual general government balance data reported here apply the Eurostat definition of 14 July 2000 on the allocation of UMTS receipts. The UK has generally not applied this decision in domestic publication of its deficit data, which results in the deficit on a Eurostat basis being up to 0.1 percentage points of GDP per annum higher than reported in the UK national accounts from 2001/02 onwards.

<sup>(4)</sup> Cyclically adjusted balance excluding one-off and other temporary measures.

<sup>(5)</sup> Submitted in December 2006.

<sup>(6)</sup> Commission services' calculations on the basis of the information in the programme. One-off and other temporary measures taken from the programme.

Sources: Commission services and the December 2006 update of the convergence programme of the United Kingdom.

arrested an underlying downward trend due to increased fraud.

Reforms in personal income taxation do not fully explain the variations in the implicit tax rate. The fiscal drag (i.e. the increase in tax revenue due to the fact that taxpayers move to higher income brackets) was allowed to operate during the period, as tax brackets and allowances rose in line with prices rather than earnings. Fiscal drag is estimated to add slightly over 0.1 percentage point to the income tax-to-GDP ratio per annum, compensating the fall in the main tax rates. Fluctuations in the tax base also seem to be correlated with the variations in the tax rates,

suggesting that compositional changes within the tax base could explain developments since the late 1990s. In particular, developments in the share of compensation of employees do not merely reflect the labour force growth. Shifts in the income distribution, with income growing faster at the top of the income scale where the marginal tax rate is highest, can help explain the peaks of the implicit rates and elasticities in 1998/99 and 1999/00 and more recently in 2005/06.

Overall, the implicit rate of social contributions, calculated on the basis of compensation to employees, was broadly stable at around 12½ % between 1990/91 and

Table V.27.2

**Main measures in the 2006 pre-budget report and the 2007 budget, United Kingdom**

Revenue measures <sup>(1)</sup>	Expenditure measures <sup>(2)</sup>
<ul style="list-style-type: none"> <li>• Increase in air passenger duty (0.1% of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Established overall spending limits for 2008/09 to 2010/11 (growth of 2 % per year in real terms) <sup>(3)</sup></li> </ul>
<ul style="list-style-type: none"> <li>• Reduction in basic personal income tax rate (-0.5 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Removal of 10% personal income tax starting rate (+ 0.5 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Reduction in main corporation tax rate (-0.1 % of GDP)</li> </ul>	
<ul style="list-style-type: none"> <li>• Reduction in capital allowances deductible from firms' profits (+ 0.1 % of GDP)</li> </ul>	

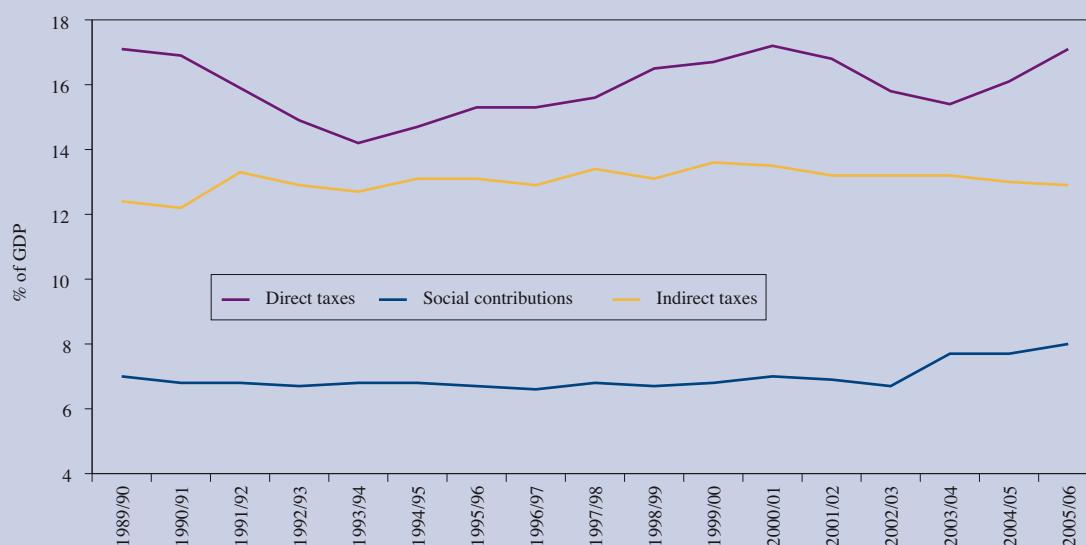
<sup>(1)</sup> Estimated impact on general government revenue.

<sup>(2)</sup> Estimated impact on general government expenditure.

<sup>(3)</sup> The spending limits do not change the expenditure baseline set out in the convergence programme, as the latter had already provided for the reduction in expenditure growth.

Sources: Commission services, December 2006 update of the convergence programme of the United Kingdom and 2007 budget.

Graph V.27.1: Developments in ratio of taxes to GDP



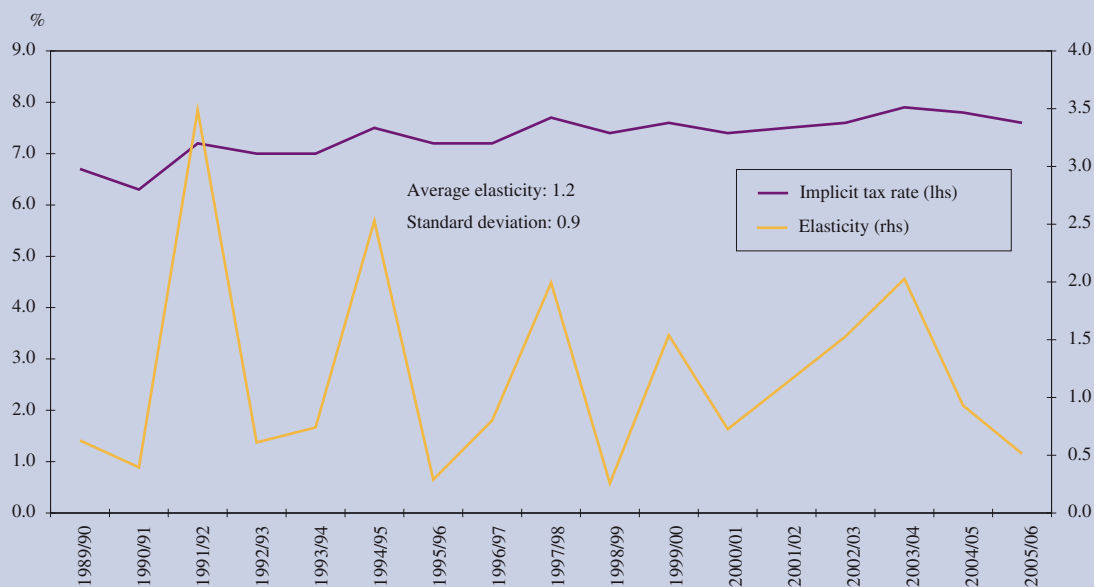
Source: Commission services.

2002/03. The rate, however, rose significantly in 2003/04, following the increase in the headline contribution rates paid by both employers and employees in April 2003. The share of compensation to employees in GDP was stable at around 55 %. On the other hand, the apparent elasticity of social contributions to the tax base was less stable, but largely reflected government reforms to the social security system. These reforms contributed to an increase in the elasticity of social security revenues to compensation to employees to above unity between

2003/04 and 2005/06 by raising the earnings' thresholds with those for income tax and by abolishing the cap on contributions.

Corporation taxes are a relatively important element of UK public finances, accounting on average for 10 % of total revenue over the period examined, compared to 8 % in Italy and around 6 % in France and Germany. Intakes from corporation tax are relatively volatile, and seem to explain most of the variation in the apparent

Graph V.27.2: VAT



Source: Commission services.

Graph V.27.3: Personal income tax



Source: Commission services.

elasticity of aggregate tax revenues to GDP. The implicit tax rate for corporation tax saw a marked drop in the early 1990s and after 2001, when the elasticity turned

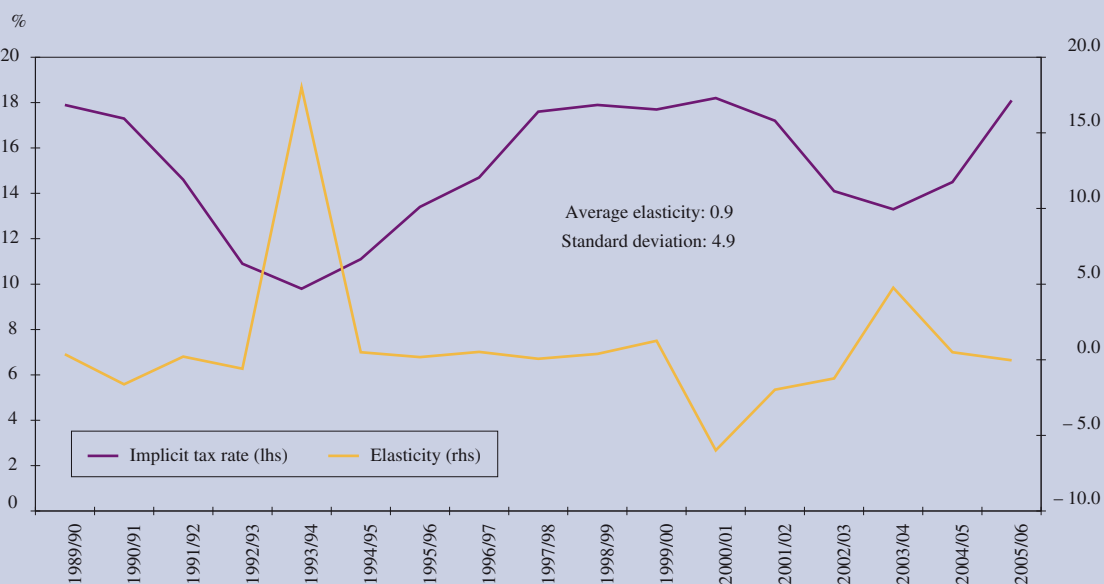
negative (meaning that tax revenues moved in a different direction from the tax base), followed by significant increases in the late 1990s and in the three years between

Graph V.27.4: Social security contributions



Source: Commission services.

Graph V.27.5: Corporation tax



Source: Commission services.

2003/04 and 2005/06. Most of the discretionary measures adopted since the early 1990s tended to decrease the statutory tax rate and do not fully capture the swings in

the implicit tax rate. It is likely that cyclical movements in corporate profitability have a greater impact on the implicit tax rate when compared to policy changes.

The timing of the variation in corporation tax elasticities also seems to suggest a relevant role for the financial sector. A surge in the apparent elasticity coincided with the stock market boom of the late 1990s. On the other hand, the elasticity turned negative after the burst of the bubble in 2001, but normalised from 2004 as financial markets reported large gains. The steady increase in the share of taxes paid by the financial sector, to about a quarter of

total corporate taxes in 2004/05, suggests that factors such as equity prices and mergers and acquisition activity will become increasingly important determinants of government revenue performance. The increase in corporate tax revenues in 2004–06 was further boosted by significant rise in oil prices that contributed to a doubling of profitability for companies operating on the UK continental shelf.



# Part VI

## Resources



# 1. Common methodology for calculating potential output — Overview of key features and recent modifications

## 1.1. Introduction

The assessment of fiscal performance under the provisions of the reformed Stability and Growth Pact (SGP) focuses attention on the budget balance net of cyclical factors and one-off and other temporary measures. One crucial input to the calculation of the cyclically adjusted budget balance is the output gap, measured as the distance between actual output and potential output.

The measure of the output gap used by the Commission services in the EU budgetary surveillance framework is based on potential output estimates derived from a production function model. The methodology was developed in the output gap working group (OGWG) of the Economic Policy Committee and was officially adopted by the Ecofin Council on 12 July 2002 replacing the Hodrick-Prescott (HP) filter as a reference method when evaluating stability and convergence programmes.

While keeping its main features unaltered, the commonly agreed method has gradually evolved over time in response to both the availability of additional data and to a number of technical improvements. This section provides a description of the production function method and highlights the main stages of its evolution.

## 1.2. Basic features of the method

Unlike purely statistical methods such as the HP-filter or the Baxter-King filter, which rely on technical assumptions on the time series properties of trends and their correlation with the cycle, the production function approach makes assumptions based on economic theory. This latter approach focuses on the supply potential of an economy and has the advantage of giving a more direct link

to economic theory. The disadvantage is that it requires assumptions on the functional form of the production technology, returns to scale, trend technical progress and the representative utilisation of production factors. As shown in the diagram below, with a production function, potential GDP can be represented by a combination of factor inputs, multiplied with the technological level or total factor productivity (TFP).

In more formal terms, with a production function, GDP (Y) is represented by a combination of factor inputs — labour (L) and the capital stock (K), corrected for the degree of excess capacity ( $U_L, U_K$ ) and adjusted for the level of efficiency ( $E_L, E_K$ ). In many empirical applications, a Cobb-Douglas specification is chosen for the functional form of the production function. This greatly simplifies estimation and exposition. Thus potential GDP is given by:

(VI.1.1)

$$Y = (U_L L E_L)^\alpha (U_K K E_K)^{1-\alpha} = L^\alpha K^\alpha \cdot TFP$$

where total factor productivity, as conventionally defined, is set equal to:

(VI.1.2)

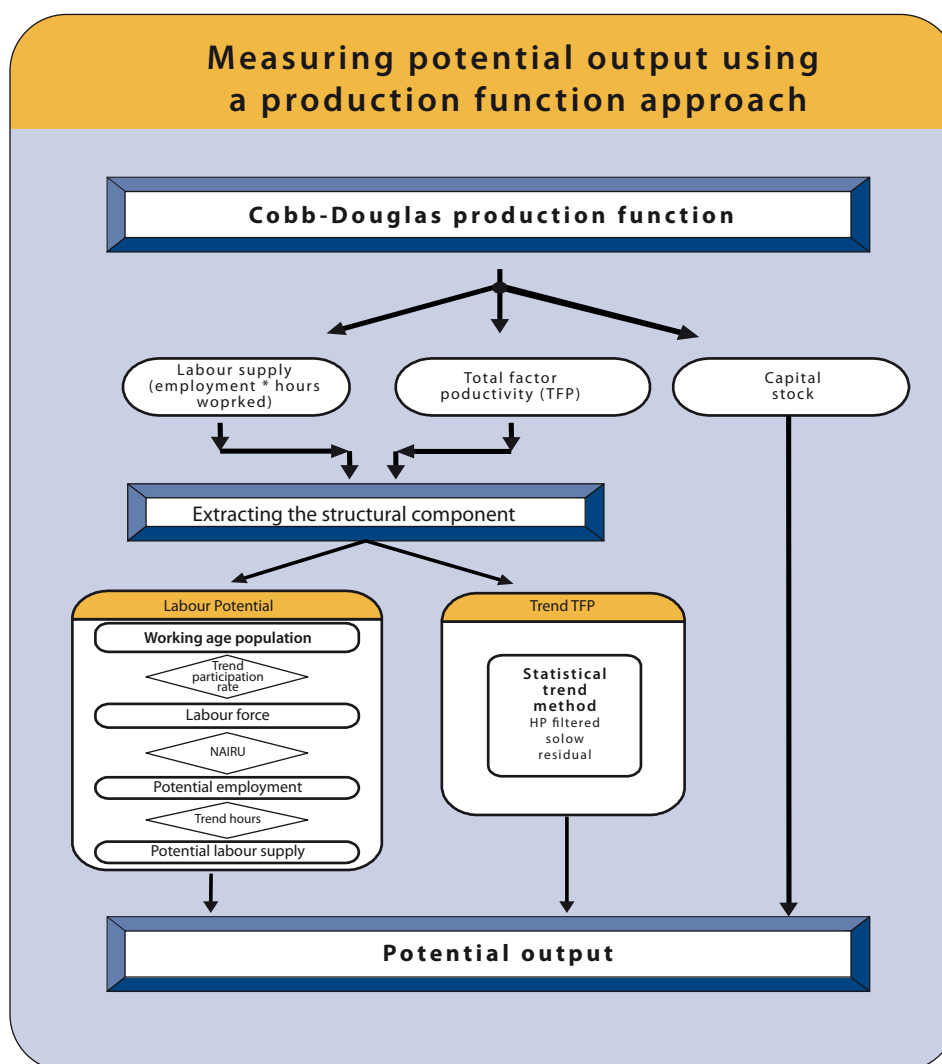
$$TFP = (E_L^\alpha E_K^{1-\alpha})(U_L^\alpha U_K^{1-\alpha})$$

this summarises both the degree of utilisation of factor inputs as well as their technological level. Factor inputs are measured in physical units. An ideal physical measure for labour is hours worked which we use as our labour input. For capital we use a comprehensive measure which includes spending on structures and equipment by both the private and government sectors.

Various assumptions enter this specification of the production function; the most important ones are the assumption of constant returns to scale and a factor price elasticity which is equal to one. The main advantage of these assumptions is simplicity. However these assumptions seem broadly consistent with empirical evidence at the macro level. The unit elasticity assumption is consistent with the relative constancy of nominal factor shares. Also, there is little empirical evidence of substantial increasing/decreasing returns to scale (see, e.g. Burnside et al. (1995) for econometric evidence).

The output elasticities of labour and capital are represented by  $\alpha$  and  $(1 - \alpha)$  respectively. Under the assumption of constant returns to scale and perfect competition, these elasticities can be estimated from the wage share in GDP. The same Cobb-Douglas specification is assumed for all countries, with the mean wage share for the EU-15 over the period 1960–2003 being used as the estimate for the output elasticity of labour, which gives a value of 0.63 for  $\alpha$  for all Member States and, by definition, 0.37 for the output elasticity of capital. While the output elasticity for labour may deviate somewhat from the imposed mean coefficient in the case

Box VI.1.1: Cobb-Douglas production function scheme



of individual Member States, such differences should not seriously bias the potential output results.

To summarise, in moving from actual to potential output it is necessary to define clearly what one means by potential factor use and by the trend (i.e. normal) level of efficiency of factor inputs.

**Capital:** with respect to capital this task of defining potential factor use is straightforward since the maximum potential output contribution of capital is given by the full utilisation of the existing capital stock in an economy. Since the capital stock is an indicator of overall capacity there is no justification to smooth this series in the production function approach. In addition, the unsmoothed series is relatively stable for the EU and the USA since although investment is very volatile; the contribution of capital to growth is quite constant since net investment in any given year is only a tiny fraction of the capital stock figures. In terms of the measurement of the capital stock, the perpetual inventory method is used which makes an initial assumption regarding the size of the capital-output ratio <sup>(1)</sup>.

**Labour:** initially, labour force survey data were used for the labour input. Eurostat and the OECD subsequently agreed that the national accounts are the preferred source for labour input data. As a results, the production function approach now uses the national accounts data for the labour input variables i.e. for hours worked and employment.

The definition of the contribution of labour input to potential output is more involved since it is more difficult to assess the ‘normal’ degree of utilisation of this factor of production. Labour input is defined in terms of hours. Determining the trend of labour input involves several steps. In defining the trend input we start from a maximum possible level, namely the population of working age. We obtain the trend labour force by mechanically de-trending (using an HP filter) the participation rate. In a next step we calculate trend unemployment to be consistent with stable, non accelerating, (wage) inflation (NAIRU/NAWRU) <sup>(2)</sup>. Finally we obtain trend hours worked (potential labour supply) by multiplying trend employment with the trend of average hours worked. One of the big advantages of this

<sup>(1)</sup> In the perpetual inventory model, the capital stock is calculated as the sum of gross fixed capital formation of previous years that is not fully depreciated.

approach is that it generates a potential employment series which is relatively stable whilst at the same time also providing for year-to-year changes to the series to be closely linked to long-run demographic and labour market developments in areas such as the working age population, trend participation rates and structural unemployment.

**Trend efficiency:** within the production function framework, potential output refers to the level of output which can be produced with a ‘normal’ level of efficiency of factor inputs, with this trend efficiency level being measured as the HP filtered Solow Residual.

Normalising the full utilisation of factor inputs ( $U_L, U_K$ ) as one, potential output can be represented as follows:

$$(VI.1.3) Y^P = (L^P E_L^T)^\alpha (K E_K^T)^{1-\alpha}$$

where the superscripts  $P$  and  $T$  denote potential and trend levels respectively.

### 1.3. Recent modifications to the methodology

Following the decisions taken at both the May 2004 Ecofin Council and the June 2005 meeting of the Economic Policy Committee, the most important recent changes regarding the operation of the production function (PF) methodology are as follows.

#### 1.3.1. Country derogations for ‘old’ Member States

The PF methodology is now applicable to all 15 of the ‘old’ Member States. Following the resolution of the outstanding country specific issues pertaining to Germany, Spain and Austria, all of the 15 countries now accept the use of the PF approach as the reference method for the assessment of the stability and convergence programmes. The HP filter approach will only be used as a ‘back-up’ method.

<sup>(2)</sup> The observed unemployment rate ( $U_t$ ) is decomposed into a trend ( $T_t$ ) and a cyclical component ( $C_t$ ):  $U_t = T_t + vC_t$ . The trend component is simply modelled as a random walk with drift  $T_t = \mu_t + T_{t-1} + v_t$ . The drift term follows a random walk  $\mu_t = \mu_{t-1} + a_t$ . The cyclical component is obtained via a Philips curve relationship  $\Delta\pi_t^w = \alpha + \beta X + \gamma C_t + u_t$ , where  $X$  is a vector of explanatory variables including terms of trade, productivity and the wage share. The unobserved components  $T_t$  and  $C_t$ , the parameters are estimated with the Kalman filter.

### 1.3.2. A modified method for the recently acceded Member States

Due essentially to a number of serious statistical problems associated with the availability of only short time series for the new Member States, a modified PF framework had to be developed for these countries. As long as these statistical problems persist, the HP filter and the PF method are used in parallel.

A common starting date of 1995 was imposed for all 12 countries since too many transitional issues were biasing the pre-1995 data. The main modifications to the methodology, relative to that which applies to the EU-15 countries, include: (i) a simpler NAIRU methodology based on wage elasticities <sup>(1)</sup>. It was not possible to use the more sophisticated Kalman Filter based approach applied to the 'old' Member States; (ii) trend TFP is estimated using a moving average based, stochastic trend, approach (as opposed to the random walk model used for the EU-15 countries); and (iii) the capital stock is estimated using a capital-output ratio which is fixed in the base year of 1995.

### 1.3.3. Improvement of NAWRU estimates

Following requests from a number of delegates in the OGWG of the EPC, additional work was undertaken in 2004 (i) to address the issue of whether it was appropriate to constrain the unemployment gap to have a mean of zero over the sample period; (ii) to better capture the specificity of the European labour market and (iii) to help desk officers and the Member States to more easily interpret changes in the NAWRU/NAIRU estimates. In more concrete terms, it was agreed to remove the zero sample mean restriction; to include the wage share in the NAWRU estimation model as an additional explanatory variable.

### 1.3.4. Estimation of trend total factor productivity (TFP)

Trend TFP is obtained as the HP filter of the Solow residual. In order to overcome the well known end-point bias of the HP filter, TFP is extended into the future using statistical models. At the September 2004 meeting of the OGWG of the Economic Policy Committee it was agreed to replace a deterministic method with a stochas-

tic trend approach so as to reduce the mean reverting tendency of the trend TFP estimates <sup>(2)</sup>. In addition, in the context of ongoing research by the Commission services to isolate the best method for extracting the cyclicity from trend TFP, the OGWG of the Economic Policy Committee discussed a paper which experimented with using capacity utilisation indicators.

### 1.3.5. Introduction of hours worked

Total hours worked is the preferred measure of labour input in the national accounts but its measurement has proved challenging due to the growing importance of service activities, self-employed jobs and the emergence of a range of new, often irregular, working patterns. Due to these measurement issues, its use in the PF methodology was delayed until the Commission services' autumn 2005 forecast since there was an absence of data sets of sufficient quality for a large number of the Member States. While the ESA95 data transmission programme provides for the provision of hours worked series, not all EU countries have, as yet, officially provided the data. Eurostat (in close cooperation with the OECD) have however constructed data for total hours worked for most of those countries which were not yet in a position to provide it. Following the agreement of the Economic Policy Committee in June 2005 and the resolution of all the outstanding country-specific data issues over the summer months, the hours worked series for the respective countries were successfully introduced in the Commission services' autumn 2005 forecasting exercise. In addition, given the associated joint OECD/Eurostat decision to use the national accounts (as opposed to the labour force survey) as the preferred source of labour input data, the method has been modified to take both the employment and hours worked input variables from this single source.

## 1.4. Technical specification of the model

This section summarises in a synthetic way the structure of the commonly agreed PF method used in the EU budgetary surveillance framework.

<sup>(1)</sup> The approach used is based on the following equation:  $\Delta^2 ulc = \Delta^2 w - \Delta^2 pr = \beta(U_t - T_t) + v_t$  where *ulc* denotes unit labour costs, *w* wages per employee, *pr* productivity, *U* the rate of unemployment and *T* its unobserved trend component.

<sup>(2)</sup> It should be stressed that the present move from a deterministic to a stochastic I(1) process for the calculation of trend TFP in the EU-15 countries does not change the results for the vast majority of Member States in any meaningful way since mean reversion is a feature of both models. However, a move from an I(1) to an I(2) stochastic model could produce significant changes in terms of trend TFP, with the trend for the most recent past playing a much greater role.

**Exogenous variables**

POPW — (population of working age)

PARTS — (smoothed participation rate)

NAIRU — (structural unemployment)

IYPOT — (investment to potential GDP ratio)

SRHP — (HP filtered Solow residual)

HOURST — (trend, average hours worked)

**Endogenous variables**

LP — (potential employment)

I — (investment)

K — (capital stock)

YPOT — (potential output)

YGAP — (output gap)

**Potential labour input**

$$LP = (POPW * PARTS * (1 - NAIRU)) * HOURST$$

Investment and capital

$$I = IYPOT * YPOT$$

$$K = I - (1 - dep) * K(-1)$$

**Potential output**

$$YPOT = K^{0.35} * LPOT^{0.65} * SRHP$$

**Output gap**

$$YGAP = (Y / YPOT - 1)$$

## 2. Glossary

**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 tends to improve in years of high growth, and deteriorate during economic slowdowns.

**Broad economic policy guidelines (BEPGs)** Annual guidelines for the economic and budgetary policies of the Member States. They are prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (Ecofin).

**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 policymakers 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.

**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*.

**Defined-benefit pension scheme** A traditional pension scheme that defines a benefit, i.e. a pension, for an employee upon that employee’s retirement is a defined benefit plan.

**Defined-contribution pension scheme** A scheme providing for an individual account for each participant, and for benefits based solely on the amount contributed to the account, plus or minus income, gains, expenses and losses allocated to the account.



**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.

**Dependency ratio** A measure of the ratio of people who receive government transfers, especially pensions, relative to those who are available to provide the revenue to pay for those transfers.

**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. 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.

**ESA 95/ESA 79** European accounting standards for the reporting of economic data by the Member States to the EU. As of 2000, ESA 95 has replaced the earlier ESA 79 standard with regard to the comparison and analysis of national public finance data.

**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 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 *primary structural 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 realisation 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.

**Hodrick-Prescott (HP) filter** A statistical technique used to calculate trend GDP and output gaps by filtering actual GDP.

**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.

**Interest burden** *General government* interest payments on public debt as a share of GDP.

**Lisbon strategy** Partnership between the EU and Member States for growth and more and better jobs. Originally approved in 2000, the Lisbon strategy was revamped in 2005. Based on the integrated guidelines (merger of the broad economic policy guidelines and the employment guidelines, dealing with macroeconomic, microeconomic and employment issues) for the period 2005–08, Member States drew up three-year national reform programmes at the end of 2005. They reported on the implementation of the national reform programmes for the first time in autumn 2006. The Commission anal-

yses and summarises these reports in an EU Annual Progress Report each year, in time for the spring European Council.

**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 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).

**Monetary conditions index (MCI)** An indicator combining the change in real short-term interest rate and in the real effective exchange rate to gauge the degree of easing or tightening of monetary policy.

**Mundell-Fleming model** Macroeconomic model of an open economy which embodies the main Keynesian hypotheses (price rigidity, liquidity preference). In spite of its shortcomings, it remains useful in short-term economic policy analysis.

**NAIRU** Non-accelerating inflation rate of unemployment.

**Non-Keynesian effects** Supply-side and expectations effects which reverse the sign of traditional Keynesian multipliers. Hence, if non-Keynesian effects dominate, fiscal consolidation would be expansionary.

**Old-age dependency ratio** Population aged over 65 as a percentage of working age population (usually defined as persons aged between 15 and 64).

**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*.

**Pay-as-you-go pension system (PAYG)** Pension system in which current pension expenditures are financed by the contributions of current employees.

**Pension fund** A legal entity set up to accumulate, manage and administer pension assets. See also *private pension scheme*.

**Pre-accession economic programmes (PEPs)** Annual programmes submitted by candidate countries which set the framework for economic policies. The PEPs consist of a review of recent economic developments, a detailed macroeconomic framework, a discussion of public finance issues and an outline of the structural reform agenda.

**Pre-accession fiscal surveillance framework (PFSF)** Framework for budgetary surveillance of candidate countries in the run up to accession. It closely approximates the policy coordination and surveillance mechanisms at EU level.

**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.

**Procyclical 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 goods** Goods and services that are consumed jointly by several economic agents and for which there is no effective pricing mechanism that would allow private provision through the market.

**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.

**Quality of public finances** The part of the EU fiscal framework that relates to the identification of strategic priorities and the effective and efficient use of resources in reaching them.

**Quasi-fiscal activities** Activities promoting public policy goals carried out by non-government units.

**QUEST** The macroeconomic model of the EU Member States plus the USA and Japan developed by the Directorate-General for Economic and Financial Affairs of the European Commission.

**Recently acceded Member States** Countries that became members of the EU in May 2004 and include the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia. Two additional countries, Bulgaria and Romania, joined in January 2007.

**Ricardian equivalence** Under fairly restrictive theoretical assumptions on the consumer's behaviour (*inter alia* infinite horizon for decisionmaking), the impact of fiscal policy does not depend on whether it is financed by tax increases or by a widening deficit. The basic reasoning behind this statement dates back to Ricardo and was revisited by Robert Barro in the 1970s.

**Securitisation** Borrowing (issuing of bonds) with the intention of paying interest and capital out of the proceeds derived from assets (use or sale of) or from future revenue flows.

**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*, which triggers the early warning procedure of the *Stability and Growth Pact*.

**'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 (SSCs)** Mandatory contributions paid by employers and employees to a social

insurance scheme to cover for pension, healthcare and other welfare provisions.

**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.

**Tax gaps** Measure used in the assessment of the *sustainability* of public finances. They measure the difference between the current tax ratio and the constant tax ratio over a given projection period to achieve a predetermined level of debt at the end of that projection period.

**Tax smoothing** The idea that tax rates should be kept stable in order to minimise the distortionary effects of taxation, while leaving it for the *automatic stabilisers* to

smooth the economic cycle. It is also referred to as neutral *discretionary fiscal policy*. See also *cyclical component of fiscal policy*.

**UMTS:** Third generation of technical support for mobile phone communications. Sale of UMTS licences gave rise to sizeable one-off receipts in 2001.

**Wagner's law:** Theory according to which public spending — since it comprises 'luxury goods' with high elasticity to income — would tend to rise as a share of GDP as per-capita income increases.

**Welfare state:** Range of policies designed to provide insurance against unemployment, sickness and risks associated with old age.

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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	<a href="http://www.treasury.fgov.be/interthes">www.treasury.fgov.be/interthes</a>	Ministère des Finances — Ministerie van Financien
Bulgaria	<a href="http://www.minfin.bg">www.minfin.bg</a>	Ministry of Finance
Czech Republic	<a href="http://www.mfcr.cz">www.mfcr.cz</a>	Ministry of Finance
Denmark	<a href="http://www.fm.dk">www.fm.dk</a>	Ministry of Finance
Germany	<a href="http://www.bundesfinanzministerium.de">www.bundesfinanzministerium.de</a>	Bundesministerium der Finanzen
Estonia	<a href="http://www.fin.ee">www.fin.ee</a>	Ministry of Finance
Ireland	<a href="http://www.irlgov.ie/finance">www.irlgov.ie/finance</a>	Department of Finance
Spain	<a href="http://www.mineco.es/">www.mineco.es/</a>	Ministerio de Economía y Hacienda
France	<a href="http://www.finances.gouv.fr">www.finances.gouv.fr</a>	Ministère Économie, Finances et l'Industrie
Italy	<a href="http://www.tesoro.it">www.tesoro.it</a>	Ministero dell'Economia e delle Finanze
Cyprus	<a href="http://www.mof.gov.cy">www.mof.gov.cy</a>	Ministry of Finance
Latvia	<a href="http://www.fm.gov.lv">www.fm.gov.lv</a>	Ministry of Finance
Lithuania	<a href="http://www.finmin.lt">www.finmin.lt</a>	Ministry of Finance
Luxembourg	<a href="http://www.etat.lu/FI">www.etat.lu/FI</a>	Ministère des Finances
Hungary	<a href="http://www.p-m.hu">www.p-m.hu</a>	Ministry of Finance
Malta	<a href="http://mfea.gov.mt">mfea.gov.mt</a>	Ministry of Finance and Economic Affairs
Netherlands	<a href="http://www.minfin.nl">www.minfin.nl</a>	Ministerie van Financien
Austria	<a href="http://www.bmf.gv.at">www.bmf.gv.at</a>	Bundesministerium für Finanzen
Poland	<a href="http://www.mofnet.gov.pl">www.mofnet.gov.pl</a>	Ministry of Finance
Portugal	<a href="http://www.min-financas.pt">www.min-financas.pt</a>	Ministério das Finanças
Romania	<a href="http://www.mfinante.ro">www.mfinante.ro</a>	Ministry of Finance
Slovenia	<a href="http://www.gov.si/mf">www.gov.si/mf</a>	Ministry of Finance
Slovak Republic	<a href="http://www.finance.gov.sk">www.finance.gov.sk</a>	Ministry of Finance
Finland	<a href="http://www.vn.fi/vm">www.vn.fi/vm</a>	Ministry of Finance
Sweden	<a href="http://finans.regeringen.se">finans.regeringen.se</a>	Finansdepartementet
United Kingdom	<a href="http://www.hm-treasury.gov.uk">www.hm-treasury.gov.uk</a>	Her Majesty's Treasury
Turkey	<a href="http://www.maliye.gov.tr">www.maliye.gov.tr</a>	Ministry of Finance

Japan	<a href="http://www.mof.go.jp">www.mof.go.jp</a>	Ministry of Finance
United States of America	<a href="http://www.ustreas.gov">www.ustreas.gov</a>	Department of the Treasury

### **Central Banks**

European Union	<a href="http://www.ecb.int">www.ecb.int</a>	European Central Bank
Belgium	<a href="http://www.nbb.be">www.nbb.be</a>	Banque nationale de Belgique/Nationale Bank van België
Bulgaria	<a href="http://www.bnb.bg">www.bnb.bg</a>	Bulgarian National Bank
Czech Republic	<a href="http://www.cnb.cz">www.cnb.cz</a>	Czech National Bank
Denmark	<a href="http://www.nationalbanken.dk">www.nationalbanken.dk</a>	Danmarks Nationalbank
Germany	<a href="http://www.bundesbank.de">www.bundesbank.de</a>	Deutsche Bundesbank
Estonia	<a href="http://www.eestipank.info">www.eestipank.info</a>	Eesti Pank
Ireland	<a href="http://www.centralbank.ie">www.centralbank.ie</a>	Central Bank of Ireland
Greece	<a href="http://www.bankofgreece.gr">www.bankofgreece.gr</a>	Bank of Greece
Spain	<a href="http://www.bde.es">www.bde.es</a>	Banco de España
France	<a href="http://www.banque-france.fr">www.banque-france.fr</a>	Banque de France
Italy	<a href="http://www.bancaditalia.it">www.bancaditalia.it</a>	Banca d'Italia
Cyprus	<a href="http://www.centralbank.gov.cy">www.centralbank.gov.cy</a>	Central Bank of Cyprus
Latvia	<a href="http://www.bank.lv">www.bank.lv</a>	Bank of Latvia
Lithuania	<a href="http://www.lb.lt">www.lb.lt</a>	Lietuvos Bankas
Luxembourg	<a href="http://www.bcl.lu">www.bcl.lu</a>	Banque centrale du Luxembourg
Hungary	<a href="http://www.mnb.hu">www.mnb.hu</a>	National Bank of Hungary
Malta	<a href="http://www.centralbankmalta.com">www.centralbankmalta.com</a>	Central Bank of Malta
Netherlands	<a href="http://www.dnb.nl">www.dnb.nl</a>	De Nederlandsche Bank
Austria	<a href="http://www.oenb.at">www.oenb.at</a>	Oesterreichische Nationalbank
Poland	<a href="http://www.nbp.pl">www.nbp.pl</a>	Narodowy Bank Polski
Portugal	<a href="http://www.bportugal.pt">www.bportugal.pt</a>	Banco de Portugal
Romania	<a href="http://www.bnro.ro">www.bnro.ro</a>	National Bank of Romania
Slovenia	<a href="http://www.bsi.si">www.bsi.si</a>	Bank of Slovenia
Slovak Republic	<a href="http://www.nbs.sk">www.nbs.sk</a>	National Bank of Slovakia
Finland	<a href="http://www.bof.fi">www.bof.fi</a>	Suomen Pankki
Sweden	<a href="http://www.riksbank.com">www.riksbank.com</a>	Sveriges Riksbank
United Kingdom	<a href="http://www.bankofengland.co.uk">www.bankofengland.co.uk</a>	Bank of England
Turkey	<a href="http://www.tcmb.gov.tr">www.tcmb.gov.tr</a>	Central Bank of the Republic of Turkey
Japan	<a href="http://www.boj.or.jp">www.boj.or.jp</a>	Bank of Japan
United States of America	<a href="http://www.federalreserve.gov">www.federalreserve.gov</a>	Board of Governors of the Federal Reserve System



# Statistical annex





# Statistical annex

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Table A.1.1

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Belgium	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	11.9	12.9	12.7	13.0	13.2	13.3	13.2	13.2
2. Current taxes on income and wealth	16.3	17.1	16.7	16.7	17.1	16.7	16.4	16.3
3. Social contributions	16.4	16.0	16.5	16.2	16.1	15.9	15.8	15.8
4. of which actual social contributions	14.4	13.9	14.3	14.0	13.9	13.7	13.6	13.6
5. Other current resources	3.3	3.0	2.9	2.6	2.7	2.7	2.7	2.7
6. Total current resources	47.8	49.0	48.8	48.4	49.1	48.7	48.1	48.0
7. Government consumption expenditure	21.5	21.3	23.0	22.9	22.9	22.6	22.6	22.7
8. of which compensation of employees	11.9	11.5	12.3	12.0	12.1	12.0	11.8	11.6
9. Collective consumption	8.6	8.5	9.1	8.9	8.8	8.7	8.7	8.7
10. Social benefits in kind	13.0	12.8	13.9	14.0	14.1	13.9	13.9	14.0
11. Social transfers other than in kind	16.2	15.2	16.1	15.9	16.0	15.7	15.7	15.7
12. Interest payments	8.9	6.6	5.3	4.7	4.2	4.1	3.9	3.8
13. Subsidies	1.3	1.3	1.4	1.2	1.7	1.8	1.9	1.9
14. Other current expenditure	1.9	2.0	2.3	2.3	2.4	2.3	2.3	2.3
15. Total current expenditure	49.7	46.3	48.1	47.0	47.2	46.6	46.4	46.3
16. Gross savings	- 1.9	2.6	0.7	1.3	1.8	2.0	1.6	1.6
17. Capital transfers received	0.4	0.5	2.4	0.9	0.9	0.7	0.7	0.7
18. Total revenue	47.6	49.1	51.1	49.2	49.9	49.3	48.5	48.2
19. Gross fixed capital formation	1.9	2.0	1.7	1.6	1.8	1.7	1.6	1.7
20. Other capital expenditure	0.9	1.1	1.5	0.7	3.3	0.8	0.9	0.9
21. Total expenditure	51.9	49.1	51.1	49.3	52.3	49.2	48.7	48.5
22. Current tax burden	45.5	46.9	46.6	46.4	47.1	46.6	46.0	45.9
23. Net lending (+) or net borrowing (-)	- 4.4	0.1	0.1	0.0	- 2.3	0.2	- 0.1	- 0.2

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.2

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Germany	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	11.1	11.9	11.8	11.8	11.8	12.1	12.9	12.8
2. Current taxes on income and wealth	10.8	12.3	10.5	10.0	10.2	10.8	10.9	10.8
3. Social contributions	18.3	18.3	18.3	18.0	17.7	17.4	16.5	16.4
4. of which actual social contributions	17.3	17.3	17.2	16.9	16.7	16.3	15.5	15.4
5. Other current resources	3.6	3.0	3.0	2.8	2.9	2.8	2.6	2.6
6. Total current resources	43.9	45.6	43.6	42.6	42.6	43.1	42.9	42.6
7. Government consumption expenditure	19.6	19.0	19.3	18.8	18.7	18.5	18.1	17.9
8. of which compensation of employees	8.7	8.1	7.8	7.7	7.5	7.3	6.9	6.8
9. Collective consumption	8.4	8.1	8.0	7.9	7.7	7.5	7.2	7.1
10. Social benefits in kind	11.1	10.9	11.3	10.9	11.0	11.0	10.9	10.8
11. Social transfers other than in kind	17.6	18.4	19.8	19.4	19.2	18.6	17.7	17.3
12. Interest payments	3.5	3.2	3.0	2.8	2.8	2.8	2.8	2.8
13. Subsidies	2.1	1.7	1.4	1.3	1.2	1.1	1.1	1.1
14. Other current expenditure	1.2	1.7	1.5	1.5	1.6	1.5	1.6	1.6
15. Total current expenditure	44.0	44.0	44.9	43.9	43.4	42.6	41.3	40.7
16. Gross savings	-0.1	1.6	-1.3	-1.3	-0.9	0.6	1.6	2.0
17. Capital transfers received	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
18. Total revenue	45.1	46.4	44.5	43.4	43.5	44.0	43.7	43.4
19. Gross fixed capital formation	2.2	1.8	1.6	1.4	1.3	1.4	1.4	1.5
20. Other capital expenditure	1.4	-1.1	1.6	1.4	1.5	1.3	1.2	1.1
21. Total expenditure	48.3	45.1	48.5	47.1	46.8	45.7	44.3	43.7
22. Current tax burden	41.2	43.2	41.0	40.0	40.0	40.7	40.6	40.4
23. Net lending (+) or net borrowing (-)	-3.2	1.3	-4.0	-3.7	-3.2	-1.7	-0.6	-0.3

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.3

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Ireland	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	13.4	13.1	12.3	13.1	13.5	14.0	14.0	14.1
2. Current taxes on income and wealth	13.5	13.3	11.8	12.4	12.3	13.1	13.0	12.9
3. Social contributions	6.7	5.7	5.8	6.1	6.2	6.2	6.2	6.2
4. of which actual social contributions	5.0	4.4	4.5	4.7	4.8	4.8	4.8	4.8
5. Other current resources	2.8	2.2	2.0	2.0	1.9	2.0	2.0	2.0
6. Total current resources	36.4	34.3	31.9	33.6	33.8	35.3	35.2	35.2
7. Government consumption expenditure	16.3	13.8	15.1	15.7	15.9	15.9	16.0	16.2
8. of which compensation of employees	10.1	8.0	9.0	9.4	9.3	9.3	9.3	9.4
9. Collective consumption	6.5	5.2	5.3	5.5	5.5	5.5	5.5	5.6
10. Social benefits in kind	9.9	8.6	9.8	10.3	10.4	10.4	10.4	10.5
11. Social transfers other than in kind	11.6	8.1	9.0	9.1	8.7	8.2	8.9	8.9
12. Interest payments	5.3	2.0	1.2	1.2	1.0	1.0	1.0	1.0
13. Subsidies	1.0	0.7	0.6	0.5	0.5	0.5	0.5	0.5
14. Other current expenditure	2.1	1.9	2.2	2.4	3.0	3.1	3.2	3.2
15. Total current expenditure	36.3	26.5	28.0	28.9	29.2	28.7	29.6	29.8
16. Gross savings	0.1	7.8	3.9	4.8	4.7	6.6	5.6	5.3
17. Capital transfers received	1.8	1.4	1.3	1.3	1.1	1.1	1.0	0.9
18. Total revenue	39.1	36.2	33.9	35.5	35.5	36.9	36.6	36.4
19. Gross fixed capital formation	2.3	3.6	3.8	3.7	3.7	3.9	4.1	4.3
20. Other capital expenditure	1.6	1.0	1.0	1.0	1.1	1.0	1.0	1.1
21. Total expenditure	41.0	31.6	33.5	34.0	34.4	34.1	35.2	35.5
22. Current tax burden	34.7	32.7	30.3	31.8	32.0	33.4	33.3	33.3
23. Net lending (+) or net borrowing (-)	-2.0	4.6	0.4	1.4	1.0	2.9	1.5	1.0

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.4

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Greece	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	13.5	14.9	13.3	12.8	12.6	13.1	13.2	13.2
2. Current taxes on income and wealth	7.4	10.6	8.7	8.8	9.2	8.7	8.6	8.6
3. Social contributions	12.6	13.7	15.3	14.6	14.4	14.9	14.9	14.6
4. of which actual social contributions	10.5	11.5	13.0	12.3	12.1	12.6	12.5	12.2
5. Other current resources	4.5	3.6	2.5	2.2	2.1	2.2	2.4	2.2
6. Total current resources	38.1	42.7	39.8	38.5	38.3	38.8	39.1	38.6
7. Government consumption expenditure	15.3	17.3	16.8	16.7	16.1	15.5	15.1	15.1
8. of which compensation of employees	11.3	11.5	11.8	12.5	12.3	11.9	11.9	11.9
9. Collective consumption	9.4	11.5	10.0	9.9	9.6	9.3	10.4	10.4
10. Social benefits in kind	5.9	5.9	6.8	6.7	6.4	6.2	4.7	4.7
11. Social transfers other than in kind	15.1	16.2	17.6	17.1	17.6	17.7	18.1	18.1
12. Interest payments	12.7	8.0	5.5	5.5	4.9	4.6	4.4	4.2
13. Subsidies	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1
14. Other current expenditure	1.3	1.1	1.5	2.0	1.8	1.8	1.7	1.7
15. Total current expenditure	44.9	42.9	41.5	41.4	40.5	39.6	39.5	39.2
16. Gross savings	-6.8	-0.2	-1.8	-2.8	-2.4	-1.1	-0.4	-0.7
17. Capital transfers received	1.6	3.2	1.9	1.8	1.7	2.7	2.2	2.2
18. Total revenue	40.9	47.1	43.2	41.9	41.6	43.2	43.0	42.5
19. Gross fixed capital formation	3.2	4.0	4.2	4.2	3.5	3.6	3.5	3.5
20. Other capital expenditure	1.7	3.1	2.2	2.6	1.5	0.8	0.8	0.8
21. Total expenditure	51.0	51.2	49.5	49.8	47.3	46.1	45.5	45.3
22. Current tax burden	34.4	39.7	37.9	36.6	36.6	36.7	36.8	36.5
23. Net lending (+) or net borrowing (-)	-10.2	-4.0	-6.2	-7.9	-5.5	-2.6	-2.4	-2.7

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.5

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Spain	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	10.0	11.4	11.5	11.9	12.1	12.3	12.3	12.3
2. Current taxes on income and wealth	9.9	10.2	10.1	10.2	10.9	11.7	11.6	11.8
3. Social contributions	12.7	12.9	13.0	13.0	13.0	13.0	12.9	12.8
4. of which actual social contributions	11.8	12.0	12.2	12.2	12.2	12.2	12.1	12.0
5. Other current resources	4.2	3.4	3.3	3.1	3.0	3.2	2.9	2.9
6. Total current resources	36.8	37.8	37.9	38.1	39.1	40.2	39.7	39.7
7. Government consumption expenditure	18.1	17.2	17.4	17.8	18.0	17.9	18.1	18.3
8. of which compensation of employees	11.2	10.3	10.1	10.1	10.0	10.0	9.7	9.5
9. Collective consumption	7.9	7.3	7.4	7.5	7.5	7.5	7.7	7.7
10. Social benefits in kind	10.2	9.9	10.0	10.3	10.5	10.4	10.4	10.5
11. Social transfers other than in kind	13.6	12.0	11.7	11.7	11.6	11.6	11.8	11.8
12. Interest payments	5.1	3.2	2.3	2.0	1.8	1.6	1.6	1.5
13. Subsidies	1.0	1.1	1.0	1.0	1.0	1.0	1.0	0.9
14. Other current expenditure	0.9	1.3	1.5	1.5	1.5	1.6	1.6	1.7
15. Total current expenditure	38.7	34.8	33.9	34.1	33.9	33.8	34.0	34.2
16. Gross savings	- 1.9	3.0	3.9	4.0	5.1	6.4	5.6	5.5
17. Capital transfers received	1.4	0.6	0.7	0.9	0.8	0.6	0.5	0.5
18. Total revenue	38.0	38.1	38.2	38.6	39.3	40.3	39.7	39.7
19. Gross fixed capital formation	3.7	3.2	3.6	3.4	3.6	3.9	3.6	3.7
20. Other capital expenditure	2.2	1.3	1.1	1.7	1.3	1.3	1.2	1.2
21. Total expenditure	44.4	39.0	38.2	38.8	38.2	38.5	38.3	38.5
22. Current tax burden	33.3	35.0	34.9	35.4	36.4	37.3	37.2	37.4
23. Net lending (+) or net borrowing (-)	- 6.5	- 0.9	0.0	- 0.2	1.1	1.8	1.4	1.2

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.6

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

France	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	15.2	15.2	15.0	15.3	15.5	15.4	15.4	15.4
2. Current taxes on income and wealth	8.1	12.0	10.9	11.1	11.3	11.9	11.7	11.8
3. Social contributions	20.3	17.9	18.2	18.0	18.2	18.4	18.3	18.3
4. of which actual social contributions	18.6	16.1	16.4	16.2	16.4	16.5	16.5	16.4
5. Other current resources	4.4	3.7	3.6	3.8	3.9	4.0	4.1	4.1
6. Total current resources	48.0	48.9	47.7	48.2	48.8	49.6	49.5	49.6
7. Government consumption expenditure	23.6	22.9	23.7	23.7	23.8	23.7	23.5	23.2
8. of which compensation of employees	13.6	13.3	13.5	13.3	13.3	13.1	13.0	12.8
9. Collective consumption	9.2	8.6	8.4	8.4	8.3	8.3	8.2	8.1
10. Social benefits in kind	14.5	14.3	15.4	15.4	15.5	15.4	15.3	15.1
11. Social transfers other than in kind	17.9	17.1	17.5	17.6	17.8	17.8	17.8	17.8
12. Interest payments	3.5	2.9	2.8	2.7	2.6	2.5	2.5	2.5
13. Subsidies	1.6	1.5	1.6	1.5	1.4	1.5	1.4	1.4
14. Other current expenditure	2.2	2.3	2.7	2.8	3.0	2.9	2.8	2.7
15. Total current expenditure	48.9	46.7	48.4	48.3	48.5	48.4	47.9	47.6
16. Gross savings	-0.8	2.2	-0.7	-0.1	0.3	1.2	1.6	2.0
17. Capital transfers received	0.2	0.3	0.6	0.5	1.0	0.5	0.5	0.5
18. Total revenue	49.0	50.2	49.2	49.6	50.7	51.0	50.7	50.8
19. Gross fixed capital formation	3.2	3.1	3.1	3.1	3.3	3.4	3.4	3.4
20. Other capital expenditure	1.7	0.9	1.0	0.9	1.0	0.9	1.1	1.1
21. Total expenditure	54.5	51.6	53.3	53.2	53.7	53.5	53.2	52.7
22. Current tax burden	44.4	45.7	44.4	44.6	45.2	45.9	45.7	45.7
23. Net lending (+) or net borrowing (-)	-5.5	-1.5	-4.1	-3.6	-3.0	-2.5	-2.4	-1.9

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.7

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Italy	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	11.8	14.7	14.0	14.1	14.2	14.8	14.5	14.4
2. Current taxes on income and wealth	14.5	14.4	13.4	13.3	13.4	14.5	14.7	14.8
3. Social contributions	14.4	12.4	12.6	12.7	12.9	13.0	13.5	13.6
4. of which actual social contributions	12.7	12.1	12.4	12.4	12.6	12.8	13.3	13.4
5. Other current resources	3.9	3.4	3.4	3.6	3.5	3.5	3.5	3.5
6. Total current resources	44.5	44.9	43.4	43.6	44.0	45.8	46.2	46.3
7. Government consumption expenditure	18.0	18.4	19.7	19.9	20.4	20.3	19.9	20.0
8. of which compensation of employees	11.0	10.4	10.8	10.8	11.0	11.0	10.8	10.9
9. Collective consumption	7.6	7.6	8.2	8.4	8.5	8.4	8.3	8.3
10. Social benefits in kind	10.4	10.8	11.5	11.5	11.9	11.9	11.7	11.8
11. Social transfers other than in kind	16.3	16.4	16.8	16.9	17.0	17.1	17.3	17.3
12. Interest payments	11.6	6.3	5.1	4.7	4.5	4.6	4.7	4.8
13. Subsidies	1.4	1.2	1.1	1.0	0.9	0.9	0.9	0.9
14. Other current expenditure	1.0	1.2	1.5	1.6	1.6	1.6	1.7	1.7
15. Total current expenditure	48.3	43.6	44.2	44.1	44.5	44.5	44.5	44.7
16. Gross savings	- 3.8	1.3	- 0.9	- 0.5	- 0.7	1.2	1.8	1.6
17. Capital transfers received	0.8	0.4	1.7	0.9	0.4	0.3	0.3	0.3
18. Total revenue	45.1	45.3	44.8	44.2	44.0	45.6	46.0	46.1
19. Gross fixed capital formation	2.1	2.3	2.5	2.4	2.3	2.3	2.4	2.4
20. Other capital expenditure	2.4	0.3	1.9	1.5	1.7	3.7	1.7	1.7
21. Total expenditure	52.5	46.2	48.3	47.7	48.3	50.1	48.1	48.3
22. Current tax burden	41.3	42.0	40.3	40.3	40.7	42.6	43.0	43.1
23. Net lending (+) or net borrowing (-)	- 7.4	- 0.8	- 3.5	- 3.5	- 4.2	- 4.4	- 2.1	- 2.2

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.



Table A.1.8

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Luxembourg	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	11.0	13.5	12.4	13.5	13.5	12.6	12.1	11.7
2. Current taxes on income and wealth	15.3	14.9	14.7	13.2	14.0	13.2	13.1	13.1
3. Social contributions	11.0	10.9	11.8	11.8	11.7	11.0	10.7	10.4
4. <i>of which</i> actual social contributions	9.9	10.1	10.9	11.0	10.8	10.2	9.9	9.6
5. Other current resources	4.8	4.3	3.5	3.4	3.3	3.5	3.3	3.2
6. Total current resources	42.0	43.6	42.4	41.9	42.4	40.3	39.2	38.4
7. Government consumption expenditure	15.9	15.1	16.4	17.1	17.0	15.9	15.3	15.0
8. <i>of which</i> compensation of employees	8.5	7.5	8.1	8.2	8.1	7.7	7.5	7.3
9. Collective consumption	6.8	6.3	6.6	6.8	6.7	6.1	5.9	5.7
10. Social benefits in kind	9.2	8.9	9.8	10.3	10.2	9.7	9.4	9.3
11. Social transfers other than in kind	14.3	13.1	15.2	15.0	14.9	14.0	13.4	13.0
12. Interest payments	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1
13. Subsidies	1.6	1.5	1.5	1.6	1.7	1.6	1.6	1.5
14. Other current expenditure	2.4	2.9	2.9	3.5	3.0	2.9	2.9	2.8
15. Total current expenditure	34.6	33.0	36.2	37.4	36.7	34.6	33.4	32.5
16. Gross savings	7.4	10.7	6.2	4.5	5.7	5.7	5.8	5.9
17. Capital transfers received	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
18. Total revenue	42.1	43.6	42.5	41.9	42.6	40.5	39.4	38.6
19. Gross fixed capital formation	3.8	3.8	4.6	4.3	4.7	4.1	3.9	3.8
20. Other capital expenditure	1.3	1.0	1.3	1.6	1.5	1.8	1.7	1.7
21. Total expenditure	39.7	37.6	42.0	43.2	42.8	40.4	39.0	38.0
22. Current tax burden	38.1	39.9	39.2	38.7	39.3	37.0	36.1	35.4
23. Net lending (+) or net borrowing (-)	2.4	6.0	0.4	-1.2	-0.3	0.1	0.4	0.6

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.9

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

The Netherlands	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	10.7	11.7	12.1	12.5	12.6	12.9	12.7	12.8
2. Current taxes on income and wealth	12.3	11.6	10.7	10.5	11.6	11.8	12.1	12.4
3. Social contributions	17.1	16.4	14.7	15.0	14.1	15.3	15.0	14.9
4. of which actual social contributions	15.9	15.4	13.8	14.0	13.1	14.4	14.1	13.9
5. Other current resources	5.9	4.8	4.8	5.0	5.3	5.7	5.1	5.1
6. Total current resources	45.9	44.6	42.4	42.9	43.6	45.7	44.9	45.0
7. Government consumption expenditure	23.8	22.0	24.5	24.3	24.1	25.3	25.4	25.4
8. of which compensation of employees	10.6	9.5	10.1	10.0	9.9	9.4	9.4	9.3
9. Collective consumption	11.3	10.0	10.9	10.7	10.6	10.3	10.4	10.5
10. Social benefits in kind	12.5	12.0	13.6	13.6	13.5	15.0	15.0	14.9
11. Social transfers other than in kind	15.2	11.3	11.5	11.5	11.1	11.2	10.9	10.6
12. Interest payments	5.6	3.7	2.6	2.5	2.4	2.3	2.2	2.0
13. Subsidies	1.0	1.5	1.4	1.4	1.2	1.1	1.1	1.1
14. Other current expenditure	1.1	1.7	1.7	1.9	1.9	2.1	2.1	2.1
15. Total current expenditure	46.8	40.1	41.7	41.6	40.7	42.0	41.7	41.3
16. Gross savings	-0.8	4.5	0.7	1.3	2.8	3.7	3.2	3.7
17. Capital transfers received	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
18. Total revenue	47.2	46.1	43.9	44.5	45.2	47.2	46.3	46.3
19. Gross fixed capital formation	3.2	3.1	3.6	3.2	3.2	3.3	3.3	3.2
20. Other capital expenditure	0.7	-0.2	0.6	0.3	0.3	0.3	1.1	1.0
21. Total expenditure	51.6	44.2	47.1	46.3	45.5	46.7	47.0	46.3
22. Current tax burden	41.1	40.6	38.1	38.4	38.8	40.3	40.1	40.2
23. Net lending (+) or net borrowing (-)	-4.3	2.0	-3.1	-1.8	-0.3	0.6	-0.7	0.0

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.10

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Austria	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	13.9	14.4	14.5	14.6	14.4	14.0	13.8	13.5
2. Current taxes on income and wealth	11.6	13.1	13.6	13.4	12.9	13.2	13.1	13.1
3. Social contributions	17.1	16.6	16.3	16.1	16.1	16.0	15.8	15.7
4. of which actual social contributions	14.9	14.7	14.6	14.6	14.6	14.5	14.3	14.2
5. Other current resources	4.9	3.2	3.8	3.7	3.7	3.6	3.5	3.3
6. Total current resources	47.5	47.2	48.2	47.8	47.1	46.8	46.1	45.7
7. Government consumption expenditure	20.1	18.4	18.3	18.2	18.2	18.1	17.7	17.7
8. of which compensation of employees	12.5	10.9	9.5	9.3	9.3	9.3	9.2	9.1
9. Collective consumption	8.1	7.3	7.1	6.9	6.9	6.9	6.8	6.9
10. Social benefits in kind	12.0	11.1	11.2	11.2	11.2	11.2	10.9	10.8
11. Social transfers other than in kind	19.5	18.5	19.2	18.8	18.6	18.3	18.0	17.8
12. Interest payments	3.8	3.5	2.9	2.8	2.9	2.7	2.6	2.6
13. Subsidies	2.8	2.8	3.2	3.1	3.1	3.2	3.1	3.1
14. Other current expenditure	2.2	2.2	2.8	2.6	2.6	2.3	2.3	2.3
15. Total current expenditure	48.4	45.4	46.4	45.4	45.2	44.7	43.9	43.5
16. Gross savings	- 1.0	1.6	1.6	2.2	1.7	1.9	2.1	2.1
17. Capital transfers received	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
18. Total revenue	50.3	49.8	49.3	49.0	48.2	48.0	47.4	47.1
19. Gross fixed capital formation	3.0	1.5	1.2	1.1	1.1	1.1	1.1	1.0
20. Other capital expenditure	2.0	2.0	2.5	2.7	2.5	2.4	2.3	2.2
21. Total expenditure	56.0	51.4	51.1	50.3	49.9	49.2	48.4	48.1
22. Current tax burden	43.5	44.7	44.8	44.4	43.7	43.5	43.0	42.6
23. Net lending (+) or net borrowing (-)	- 5.6	- 1.5	- 1.6	- 1.2	- 1.6	- 1.1	- 0.9	- 0.8

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.11

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Portugal	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	12.9	13.5	14.8	14.1	14.9	15.4	15.3	15.3
2. Current taxes on income and wealth	8.4	9.8	8.6	8.5	8.6	8.9	9.2	9.3
3. Social contributions	10.4	11.2	12.2	12.2	12.5	12.5	12.5	12.4
4. of which actual social contributions	9.6	10.3	11.1	11.1	11.3	11.4	11.6	11.5
5. Other current resources	3.9	3.3	3.4	3.9	3.4	4.0	3.9	3.9
6. Total current resources	35.7	37.8	39.1	38.7	39.4	40.6	40.9	40.8
7. Government consumption expenditure	17.7	19.3	20.3	20.6	21.2	20.5	20.1	19.8
8. of which compensation of employees	12.9	14.2	14.1	14.1	14.4	13.5	13.0	12.6
9. Collective consumption	7.2	7.7	8.0	8.1	8.3	8.1	7.9	7.8
10. Social benefits in kind	10.4	11.6	12.3	12.5	12.8	12.4	12.2	12.0
11. Social transfers other than in kind	11.2	11.7	13.8	14.3	14.8	15.1	15.2	15.1
12. Interest payments	5.9	3.0	2.7	2.6	2.7	2.8	2.9	3.0
13. Subsidies	1.3	1.2	1.8	1.5	1.6	1.4	1.4	1.4
14. Other current expenditure	1.6	1.9	1.8	2.1	2.3	2.3	2.3	2.3
15. Total current expenditure	37.6	37.2	40.4	41.1	42.6	42.1	41.8	41.5
16. Gross savings	-2.0	0.6	-1.4	-2.4	-3.2	-1.5	-1.0	-0.7
17. Capital transfers received	1.8	1.4	2.7	3.6	1.3	1.0	0.9	0.9
18. Total revenue	37.6	40.2	42.5	43.1	41.4	42.2	42.3	42.3
19. Gross fixed capital formation	3.5	3.8	3.1	3.1	2.8	2.3	2.2	2.2
20. Other capital expenditure	1.5	1.2	1.1	1.4	1.4	1.1	1.2	1.2
21. Total expenditure	42.8	43.1	45.5	46.4	47.5	46.1	45.8	45.5
22. Current tax burden	32.7	35.1	35.9	35.1	36.0	36.7	37.0	36.9
23. Net lending (+) or net borrowing (-)	-5.2	-2.9	-2.9	-3.3	-6.1	-3.9	-3.5	-3.2

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.12

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Slovenia	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	16.3	16.6	16.2	16.1	15.6	15.1	14.8
2. Current taxes on income and wealth	:	7.5	8.2	8.5	9.0	9.4	9.1	8.8
3. Social contributions	:	15.0	15.0	15.0	15.1	14.9	14.7	14.6
4. of which actual social contributions	:	14.7	14.7	14.7	14.8	14.6	14.5	14.3
5. Other current resources	:	3.7	3.6	3.9	3.8	3.5	3.4	3.4
6. Total current resources	:	42.5	43.4	43.6	44.0	43.4	42.4	41.5
7. Government consumption expenditure	:	19.3	19.6	19.6	19.6	19.3	19.1	19.0
8. of which compensation of employees	:	11.6	12.1	12.0	12.0	11.7	11.5	11.3
9. Collective consumption	:	7.9	7.8	7.8	7.8	7.8	7.8	7.7
10. Social benefits in kind	:	11.4	11.8	11.8	11.8	11.4	11.3	11.3
11. Social transfers other than in kind	:	17.0	17.0	16.4	16.3	16.0	15.6	15.4
12. Interest payments	:	2.5	2.1	1.8	1.7	1.6	1.5	1.4
13. Subsidies	:	1.5	1.7	1.8	1.6	1.6	1.5	1.6
14. Other current expenditure	:	1.3	1.2	1.8	2.2	2.3	2.3	2.2
15. Total current expenditure	:	41.6	41.6	41.4	41.4	40.7	40.0	39.6
16. Gross savings	:	0.9	1.8	2.2	2.6	2.7	2.4	2.0
17. Capital transfers received	:	0.2	0.1	0.2	0.2	0.2	0.3	0.1
18. Total revenue	:	44.3	45.3	45.1	45.6	44.8	43.9	42.9
19. Gross fixed capital formation	:	3.1	3.3	3.5	3.4	3.7	3.6	3.0
20. Other capital expenditure	:	1.8	1.4	1.1	0.9	0.6	0.6	0.5
21. Total expenditure	:	48.1	48.0	47.4	47.0	46.3	45.4	44.4
22. Current tax burden	:	38.8	39.8	39.9	40.5	40.2	39.3	38.5
23. Net lending (+) or net borrowing (-)	:	-3.9	-2.8	-2.3	-1.5	-1.4	-1.5	-1.5

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.13

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Finland	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	13.5	13.5	13.9	13.8	13.9	13.6	13.5	13.5
2. Current taxes on income and wealth	17.3	21.1	17.7	17.5	17.6	17.1	16.8	16.7
3. Social contributions	14.7	12.1	11.9	11.8	12.2	12.3	12.2	12.2
4. of which actual social contributions	14.5	12.1	11.9	11.8	12.2	12.3	12.2	12.2
5. Other current resources	7.2	6.0	5.8	6.0	5.9	6.0	5.8	5.7
6. Total current resources	52.7	52.6	49.4	49.0	49.5	49.0	48.3	48.0
7. Government consumption expenditure	22.8	20.3	21.7	21.9	22.1	21.4	21.1	21.1
8. of which compensation of employees	15.1	13.0	13.6	13.5	13.8	13.3	13.0	12.9
9. Collective consumption	8.5	7.4	7.6	7.6	7.6	7.2	7.1	7.0
10. Social benefits in kind	14.3	12.9	14.1	14.3	14.6	14.2	14.1	14.1
11. Social transfers other than in kind	21.9	16.2	16.7	16.6	16.5	15.9	15.7	15.6
12. Interest payments	3.9	2.8	1.7	1.5	1.5	1.4	1.4	1.3
13. Subsidies	2.7	1.5	1.3	1.3	1.3	1.2	1.2	1.2
14. Other current expenditure	2.0	2.4	2.7	2.7	2.8	2.8	2.7	2.7
15. Total current expenditure	53.4	43.2	44.2	43.9	44.3	42.8	42.2	42.0
16. Gross savings	-0.7	9.4	5.0	4.9	5.0	6.2	6.0	6.0
17. Capital transfers received	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
18. Total revenue	55.4	55.2	52.4	52.3	53.0	52.3	51.3	50.9
19. Gross fixed capital formation	2.7	2.5	2.9	2.9	2.6	2.6	2.6	2.7
20. Other capital expenditure	2.9	0.4	0.2	0.3	0.3	0.2	0.2	0.1
21. Total expenditure	61.6	48.3	50.0	50.2	50.5	48.6	47.8	47.4
22. Current tax burden	46.2	47.1	43.9	43.3	43.8	43.3	42.7	42.6
23. Net lending (+) or net borrowing (-)	-6.2	6.9	2.5	2.3	2.7	3.9	3.7	3.6

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.14

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Bulgaria	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	12.8	13.8	16.0	17.7	18.6	19.3	19.0	19.2
2. Current taxes on income and wealth	11.8	9.4	6.8	6.3	6.0	5.6	5.2	5.2
3. Social contributions	12.0	12.2	10.6	10.5	10.3	8.8	8.7	8.7
4. of which actual social contributions	11.8	11.7	10.6	10.5	10.3	8.8	8.7	8.7
5. Other current resources	2.1	13.7	5.2	5.4	4.7	5.0	4.6	4.4
6. Total current resources	38.8	49.1	38.6	39.9	39.6	38.7	37.6	37.5
7. Government consumption expenditure	15.3	17.9	19.0	18.4	18.0	17.4	17.1	16.9
8. of which compensation of employees	9.3	10.0	9.4	9.2	8.7	8.2	8.1	8.0
9. Collective consumption	7.7	9.7	10.0	10.1	9.8	9.4	9.2	9.1
10. Social benefits in kind	7.5	8.2	8.9	8.3	8.2	8.0	7.9	7.8
11. Social transfers other than in kind	10.6	14.3	12.7	12.0	11.9	11.5	11.5	11.5
12. Interest payments	14.1	4.0	2.2	1.8	1.6	1.3	1.2	1.1
13. Subsidies	1.2	1.9	1.2	1.1	0.9	0.9	1.0	1.1
14. Other current expenditure	0.3	6.1	0.6	0.9	1.4	0.8	1.6	1.6
15. Total current expenditure	41.5	44.2	35.5	34.3	33.7	31.9	32.3	32.2
16. Gross savings	-2.7	4.9	3.1	5.7	5.9	6.8	5.3	5.4
17. Capital transfers received	0.2	0.3	0.2	0.2	0.3	0.5	1.0	1.3
18. Total revenue	:	:	40.0	41.4	41.4	39.9	39.3	39.6
19. Gross fixed capital formation	0.8	3.7	2.5	2.7	3.4	3.7	4.0	4.5
20. Other capital expenditure	0.0	2.1	1.6	1.1	0.9	0.3	0.2	0.2
21. Total expenditure	:	:	40.9	39.3	39.5	36.6	37.3	37.6
22. Current tax burden	:	36.6	33.4	34.6	34.9	33.7	33.0	33.2
23. Net lending (+) or net borrowing (-)	-3.4	-0.5	-0.9	2.2	1.9	3.3	2.0	2.0

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.15

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Czech Republic	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	12.3	11.3	11.1	11.7	11.6	11.0	10.9	10.9
2. Current taxes on income and wealth	9.6	8.3	9.6	9.7	9.3	8.8	8.8	9.0
3. Social contributions	14.4	14.2	15.1	15.1	15.1	15.0	14.7	14.5
4. of which actual social contributions	14.4	14.2	15.1	15.1	15.1	15.0	14.7	14.4
5. Other current resources	6.1	6.2	6.3	6.3	5.8	5.8	5.2	4.8
6. Total current resources	42.3	40.0	42.1	42.8	41.8	40.6	39.6	39.2
7. Government consumption expenditure	20.9	21.1	23.4	22.4	22.3	21.5	21.6	21.2
8. of which compensation of employees	7.3	7.1	8.3	8.0	8.0	7.8	7.8	7.7
9. Collective consumption	10.0	10.6	11.9	10.8	11.2	10.8	10.9	10.7
10. Social benefits in kind	10.9	10.5	11.5	11.7	11.0	10.6	10.7	10.5
11. Social transfers other than in kind	10.7	12.1	12.2	11.8	11.5	11.4	11.1	10.7
12. Interest payments	1.0	0.8	1.2	1.2	1.2	1.1	1.1	1.0
13. Subsidies	2.9	2.8	2.6	2.1	1.9	1.9	1.8	1.7
14. Other current expenditure	1.0	0.9	1.2	1.2	1.4	1.5	1.4	1.3
15. Total current expenditure	36.5	37.6	40.7	38.8	38.3	37.3	37.2	36.6
16. Gross savings	5.8	2.4	1.4	4.1	3.5	3.2	2.5	2.9
17. Capital transfers received	0.5	0.2	0.3	0.4	0.3	0.6	0.7	0.7
18. Total revenue	41.0	38.1	40.7	41.5	40.4	39.5	39.2	39.4
19. Gross fixed capital formation	5.3	3.6	4.5	4.9	4.9	5.1	5.3	5.3
20. Other capital expenditure	14.5	2.6	3.7	2.4	2.4	1.7	1.8	1.7
21. Total expenditure	54.5	41.8	47.3	44.4	44.0	42.5	43.0	42.7
22. Current tax burden	36.2	33.9	35.8	36.8	36.3	35.3	35.0	34.9
23. Net lending (+) or net borrowing (-)	- 13.4	- 3.7	- 6.6	- 2.9	- 3.5	- 2.9	- 3.9	- 3.6

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.



Table A.1.16

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Denmark	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	16.8	17.0	17.2	17.5	17.7	17.8	17.5	17.4
2. Current taxes on income and wealth	30.7	30.3	29.3	30.3	31.2	29.5	28.7	28.4
3. Social contributions	2.1	2.6	2.1	2.1	2.0	2.0	1.9	1.9
4. of which actual social contributions	1.1	1.8	1.3	1.2	1.1	1.1	1.9	1.9
5. Other current resources	5.2	4.2	4.2	4.5	4.2	4.1	3.7	3.6
6. Total current resources	54.8	54.1	52.9	54.4	55.1	53.4	51.9	51.3
7. Government consumption expenditure	25.2	25.1	26.5	26.6	25.9	25.6	25.3	25.2
8. of which compensation of employees	17.2	17.1	18.0	17.9	17.2	17.1	16.7	16.5
9. Collective consumption	8.2	8.0	8.0	8.0	7.7	7.7	7.5	7.4
10. Social benefits in kind	17.0	17.2	18.5	18.6	18.1	17.9	17.8	17.7
11. Social transfers other than in kind	19.5	16.2	17.1	16.9	16.2	15.3	15.4	15.2
12. Interest payments	5.9	3.6	2.6	2.3	1.8	1.6	1.4	1.2
13. Subsidies	2.7	2.4	2.4	2.3	2.3	2.2	2.3	2.3
14. Other current expenditure	2.4	2.8	2.7	2.7	2.7	2.7	2.5	2.5
15. Total current expenditure	55.7	50.1	51.5	51.1	49.0	47.5	46.9	46.4
16. Gross savings	-0.9	3.9	1.4	3.3	6.1	5.8	4.9	4.8
17. Capital transfers received	0.5	0.5	0.5	0.8	0.6	0.6	0.5	0.5
18. Total revenue	56.4	55.8	55.0	56.7	57.2	55.1	53.8	53.1
19. Gross fixed capital formation	1.8	1.7	1.6	1.8	1.8	1.8	1.6	1.5
20. Other capital expenditure	0.7	0.5	0.4	0.4	0.3	0.4	0.3	0.3
21. Total expenditure	59.2	53.6	55.1	54.8	52.6	50.9	50.3	49.7
22. Current tax burden	49.8	50.1	48.9	50.1	51.1	49.5	48.4	48.0
23. Net lending (+) or net borrowing (-)	-2.9	2.3	0.0	2.0	4.7	4.2	3.7	3.6

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.17

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

<b>Estonia</b>	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Taxes on production and imports	13.5	12.4	12.4	12.2	13.2	13.4	13.7	14.0
2. Current taxes on income and wealth	10.6	7.8	8.3	8.2	7.1	7.2	7.1	6.8
3. Social contributions	12.7	11.1	11.0	10.8	10.5	10.4	10.3	10.2
4. <i>of which</i> actual social contributions	12.7	11.0	10.9	10.7	10.4	10.3	10.2	10.1
5. Other current resources	8.6	3.6	4.3	4.0	3.2	4.2	4.9	4.3
6. Total current resources	45.5	34.9	35.9	35.2	34.0	35.3	36.0	35.3
7. Government consumption expenditure	26.6	19.9	18.7	18.5	17.4	16.7	16.4	16.0
8. <i>of which</i> compensation of employees	11.4	10.9	10.0	10.0	9.4	8.9	8.5	8.3
9. Collective consumption	11.6	9.2	8.8	8.5	7.9	7.7	7.7	7.6
10. Social benefits in kind	15.0	10.7	9.9	10.0	9.5	9.1	8.6	8.4
11. Social transfers other than in kind	9.8	9.6	9.1	9.6	9.2	9.0	9.1	9.1
12. Interest payments	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
13. Subsidies	0.7	1.1	0.9	0.9	0.9	1.0	1.0	1.0
14. Other current expenditure	1.3	0.5	0.8	1.3	1.8	1.6	3.2	3.0
15. Total current expenditure	38.6	31.3	29.6	30.4	29.4	28.4	29.8	29.3
16. Gross savings	6.9	3.6	6.2	4.8	4.5	6.9	6.2	6.0
17. Capital transfers received	0.0	0.4	0.4	0.4	0.7	0.9	1.2	1.3
18. Total revenue	42.8	36.2	37.4	36.6	35.5	37.0	36.2	35.9
19. Gross fixed capital formation	4.9	3.8	4.2	3.1	3.2	3.6	3.8	4.0
20. Other capital expenditure	1.7	0.4	0.4	-0.2	-0.3	0.4	-0.2	-0.1
21. Total expenditure	42.4	36.5	35.3	34.2	33.2	33.2	32.4	32.4
22. Current tax burden	36.7	31.3	31.6	31.5	31.0	31.4	31.3	31.2
23. Net lending (+) or net borrowing (-)	0.4	-0.2	2.0	2.3	2.3	3.8	3.7	3.5

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.18

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Cyprus	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	12.4	16.4	16.9	16.9	17.8	18.3	18.3
2. Current taxes on income and wealth	:	10.9	9.6	8.0	9.3	10.9	10.9	10.9
3. Social contributions	:	6.5	7.0	7.7	8.3	8.0	8.1	8.1
4. of which actual social contributions	:	6.5	7.0	7.7	8.3	8.0	8.1	8.1
5. Other current resources	:	3.1	4.0	3.7	4.0	3.4	3.0	3.0
6. Total current resources	:	33.1	37.0	36.3	38.4	40.1	40.3	40.3
7. Government consumption expenditure	:	16.1	19.8	17.9	18.1	18.0	18.0	18.0
8. of which compensation of employees	:	13.5	15.6	14.8	14.8	14.8	14.7	14.7
9. Collective consumption	:	8.2	10.9	9.8	10.0	9.9	9.9	9.9
10. Social benefits in kind	:	7.8	8.9	8.1	8.1	8.1	8.1	8.1
11. Social transfers other than in kind	:	9.0	11.3	12.0	12.7	12.3	12.8	12.8
12. Interest payments	:	3.4	3.4	3.3	3.4	3.3	3.1	3.1
13. Subsidies	:	1.4	1.2	1.1	0.7	0.5	0.5	0.5
14. Other current expenditure	:	2.2	3.6	2.6	3.3	3.7	3.7	3.7
15. Total current expenditure	:	32.0	39.3	36.9	38.2	37.8	38.0	38.0
16. Gross savings	:	1.1	-2.3	-0.6	0.3	2.3	2.3	2.3
17. Capital transfers received	:	0.1	0.1	0.8	1.0	0.1	0.1	0.1
18. Total revenue	:	34.7	38.8	38.8	41.2	42.4	42.6	42.6
19. Gross fixed capital formation	:	2.9	3.4	4.0	3.1	3.3	3.3	3.3
20. Other capital expenditure	:	0.5	0.7	0.2	0.5	0.6	0.4	0.4
21. Total expenditure	:	37.0	45.1	42.9	43.6	43.9	44.0	43.9
22. Current tax burden	:	29.9	33.0	32.8	34.7	37.0	37.5	37.5
23. Net lending (+) or net borrowing (-)	:	-2.3	-6.3	-4.1	-2.3	-1.5	-1.4	-1.4

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.19

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Latvia	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	14.1	12.3	12.1	11.7	12.4	12.7	12.6	12.3
2. Current taxes on income and wealth	7.1	7.3	7.5	7.9	7.9	8.4	8.5	8.3
3. Social contributions	12.0	10.1	9.1	8.9	8.6	8.9	8.6	8.2
4. of which actual social contributions	12.0	9.9	8.9	8.7	8.4	8.7	8.4	8.0
5. Other current resources	6.3	7.2	5.8	5.6	5.1	5.6	5.3	5.1
6. Total current resources	39.5	36.9	34.4	34.1	34.0	35.7	35.1	34.0
7. Government consumption expenditure	24.5	20.8	21.4	19.5	17.4	16.9	16.7	16.2
8. of which compensation of employees	11.2	10.8	10.7	10.5	10.0	10.1	10.2	10.0
9. Collective consumption	12.2	10.3	11.2	9.9	9.0	8.7	8.6	8.4
10. Social benefits in kind	12.3	10.5	10.3	9.7	8.5	8.2	8.1	7.8
11. Social transfers other than in kind	12.7	12.4	9.4	9.2	8.4	8.0	7.8	7.6
12. Interest payments	0.9	1.0	0.7	0.7	0.6	0.5	0.4	0.3
13. Subsidies	1.2	1.0	0.8	0.6	0.5	0.6	0.6	0.6
14. Other current expenditure	0.1	1.5	0.9	1.4	3.2	4.8	4.9	4.2
15. Total current expenditure	39.3	36.7	33.3	31.4	30.1	30.8	30.4	29.0
16. Gross savings	0.2	0.2	1.1	2.7	3.9	4.9	4.7	5.0
17. Capital transfers received	0.5	0.7	0.1	0.5	1.1	1.1	1.8	2.0
18. Total revenue	36.8	34.6	33.2	34.7	35.2	37.4	37.5	36.5
19. Gross fixed capital formation	1.9	1.3	2.4	3.1	3.3	3.4	3.8	4.2
20. Other capital expenditure	0.8	2.4	0.4	1.1	1.9	2.2	2.6	2.7
21. Total expenditure	38.8	37.3	34.8	35.8	35.5	37.0	37.3	36.4
22. Current tax burden	33.2	29.7	28.7	28.7	29.2	30.4	30.3	29.3
23. Net lending (+) or net borrowing (-)	-2.0	-2.8	-1.6	-1.0	-0.2	0.4	0.2	0.1

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.20

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Lithuania	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	12.4	12.6	11.7	11.1	11.2	11.2	11.6	11.8
2. Current taxes on income and wealth	8.7	8.5	8.0	8.7	9.1	9.7	9.9	10.0
3. Social contributions	7.5	9.4	8.6	8.7	8.6	8.8	9.2	9.1
4. of which actual social contributions	7.4	9.4	8.5	8.4	8.3	8.5	8.9	8.8
5. Other current resources	6.2	5.7	3.2	2.9	3.1	2.6	2.7	2.9
6. Total current resources	34.8	36.2	31.5	31.3	31.9	32.3	33.3	33.8
7. Government consumption expenditure	21.7	21.3	18.4	17.9	16.7	17.3	17.5	17.5
8. of which compensation of employees	10.0	12.2	10.9	10.9	10.4	10.5	11.0	11.1
9. Collective consumption	9.9	9.6	7.6	7.5	7.1	7.0	6.7	6.5
10. Social benefits in kind	11.8	11.7	10.7	10.4	9.6	10.3	10.8	11.1
11. Social transfers other than in kind	8.4	10.7	9.1	9.0	9.0	8.6	8.5	8.6
12. Interest payments	0.4	1.8	1.3	0.9	0.8	0.5	0.6	0.8
13. Subsidies	1.1	0.8	0.8	0.7	0.7	0.7	0.8	0.8
14. Other current expenditure	0.1	0.1	0.2	0.8	2.2	2.0	1.9	1.8
15. Total current expenditure	31.6	34.7	29.7	29.4	29.4	29.1	29.3	29.6
16. Gross savings	3.2	1.5	1.8	2.0	2.5	3.2	4.0	4.2
17. Capital transfers received	:	0.1	0.4	0.5	0.8	1.0	1.1	1.2
18. Total revenue	34.1	35.9	32.0	31.8	33.1	33.3	34.4	34.9
19. Gross fixed capital formation	3.3	2.4	3.0	3.4	3.5	4.2	5.1	6.0
20. Other capital expenditure	:	2.5	0.5	0.5	0.3	0.4	0.4	0.4
21. Total expenditure	35.7	39.1	33.2	33.4	33.6	33.6	34.8	36.0
22. Current tax burden	28.6	30.5	28.3	28.7	29.2	29.7	30.6	30.8
23. Net lending (+) or net borrowing (-)	-1.6	-3.2	-1.3	-1.5	-0.5	-0.3	-0.4	-1.0

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.21

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Hungary	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	17.4	16.1	15.6	16.1	15.5	15.1	15.2	14.9
2. Current taxes on income and wealth	9.1	9.5	9.4	9.0	9.0	9.4	10.0	10.3
3. Social contributions	15.2	12.9	12.6	12.4	12.6	12.8	12.9	12.7
4. of which actual social contributions	:	12.8	12.5	12.3	12.5	12.6	12.8	12.6
5. Other current resources	:	5.9	4.6	5.0	4.7	5.6	5.1	4.9
6. Total current resources	:	44.4	42.2	42.4	41.8	42.9	43.3	42.9
7. Government consumption expenditure	22.9	20.9	23.2	22.4	22.5	22.5	21.4	20.1
8. of which compensation of employees	11.9	10.5	13.1	12.6	12.6	12.1	11.3	10.4
9. Collective consumption	10.7	10.1	10.5	10.0	9.9	9.9	9.7	8.9
10. Social benefits in kind	12.2	10.8	12.7	12.4	12.6	12.6	11.7	11.1
11. Social transfers other than in kind	15.4	12.4	13.8	13.9	14.5	15.1	15.2	15.2
12. Interest payments	:	5.3	4.1	4.4	4.1	3.9	4.1	3.9
13. Subsidies	2.0	1.6	1.5	1.6	1.3	1.3	1.4	1.4
14. Other current expenditure	:	1.6	1.8	2.2	2.4	3.8	3.1	3.0
15. Total current expenditure	:	41.9	44.3	44.5	45.0	46.5	45.2	43.5
16. Gross savings	:	2.5	-2.1	-2.1	-3.2	-3.7	-2.0	-0.7
17. Capital transfers received	:	0.4	0.4	0.4	0.7	1.0	1.4	1.9
18. Total revenue	:	43.6	41.9	42.5	42.2	43.7	44.0	44.1
19. Gross fixed capital formation	:	3.2	3.5	3.5	4.0	4.5	3.6	3.3
20. Other capital expenditure	:	2.7	2.1	1.2	1.4	2.1	2.7	2.9
21. Total expenditure	:	46.5	49.1	48.9	50.0	53.0	50.9	49.0
22. Current tax burden	41.8	38.5	37.6	37.6	37.4	37.6	38.4	38.3
23. Net lending (+) or net borrowing (-)	:	-2.9	-7.2	-6.5	-7.8	-9.2	-6.8	-4.9

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.22

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Malta	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	12.6	13.1	14.8	15.0	15.5	15.9	15.9
2. Current taxes on income and wealth	:	9.1	12.0	11.8	11.6	12.3	12.2	12.1
3. Social contributions	:	7.5	8.1	8.2	8.6	8.0	8.0	7.8
4. of which actual social contributions	:	6.4	6.6	6.7	7.0	6.5	6.4	6.3
5. Other current resources	:	5.7	6.0	6.1	4.9	4.8	4.4	4.2
6. Total current resources	:	34.9	39.2	40.9	40.1	40.5	40.4	40.0
7. Government consumption expenditure	:	19.1	21.4	21.9	21.1	21.1	20.4	19.9
8. of which compensation of employees	:	13.0	15.0	15.0	14.5	13.8	13.4	13.0
9. Collective consumption	:	8.9	10.1	10.1	9.6	9.7	9.4	9.2
10. Social benefits in kind	:	10.2	11.4	11.9	11.5	11.4	11.0	10.7
11. Social transfers other than in kind	:	11.9	13.0	13.1	13.0	13.0	12.7	12.7
12. Interest payments	:	3.6	3.5	3.7	3.8	3.7	3.3	3.3
13. Subsidies	:	1.4	2.2	2.0	2.1	1.9	1.8	1.7
14. Other current expenditure	:	1.2	1.2	2.0	1.7	1.6	1.6	1.6
15. Total current expenditure	:	37.2	41.3	42.7	41.7	41.3	39.9	39.2
16. Gross savings	:	-2.3	-2.1	-1.8	-1.6	-0.8	0.5	0.8
17. Capital transfers received	:	1.1	0.5	1.9	3.8	3.1	2.6	2.8
18. Total revenue	:	34.9	38.6	41.9	42.9	42.7	42.2	41.9
19. Gross fixed capital formation	:	4.2	5.1	2.1	5.3	4.6	5.2	4.0
20. Other capital expenditure	:	0.8	3.3	3.0	0.0	0.2	0.2	1.1
21. Total expenditure	:	41.0	48.6	46.8	46.0	45.2	44.3	43.4
22. Current tax burden	:	29.2	33.2	35.1	35.7	36.1	36.3	36.1
23. Net lending (+) or net borrowing (-)	:	-6.2	-10.0	-4.9	-3.1	-2.6	-2.1	-1.6

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.23

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Poland	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	14.2	12.6	13.2	12.9	13.6	13.9	13.9	14.0
2. Current taxes on income and wealth	11.7	7.2	6.6	6.4	7.0	7.5	7.8	8.1
3. Social contributions	11.3	12.9	12.8	12.3	12.3	12.2	11.6	10.4
4. of which actual social contributions	11.3	12.9	12.8	12.3	12.3	12.2	11.6	10.4
5. Other current resources	5.7	4.7	5.3	5.0	6.0	5.7	5.4	5.0
6. Total current resources	42.9	37.4	37.9	36.6	38.9	39.3	38.7	37.4
7. Government consumption expenditure	18.7	17.4	18.1	17.6	18.1	18.1	17.3	16.4
8. of which compensation of employees	10.7	10.1	10.7	10.1	10.1	9.7	9.5	9.1
9. Collective consumption	7.3	7.3	7.8	7.7	8.0	7.9	7.6	7.3
10. Social benefits in kind	11.3	10.2	10.3	9.9	10.1	10.1	9.6	9.2
11. Social transfers other than in kind	17.0	16.0	16.9	16.0	15.7	15.4	14.7	14.4
12. Interest payments	5.7	3.0	3.0	2.8	2.8	2.4	2.6	2.6
13. Subsidies	0.9	0.5	0.3	0.6	0.6	0.8	0.7	0.9
14. Other current expenditure	1.1	0.6	1.2	1.3	2.1	2.2	2.1	1.8
15. Total current expenditure	43.4	37.5	39.5	38.3	39.2	38.8	37.4	36.1
16. Gross savings	-0.5	-0.1	-1.7	-1.7	-0.4	0.5	1.3	1.3
17. Capital transfers received	0.1	0.0	-0.2	-0.1	0.4	0.3	0.4	0.7
18. Total revenue	43.3	38.0	38.4	36.9	39.0	39.4	39.0	38.0
19. Gross fixed capital formation	3.3	2.4	3.3	3.4	3.4	4.1	4.6	4.7
20. Other capital expenditure	0.7	0.5	1.1	0.6	0.9	0.6	0.6	0.6
21. Total expenditure	47.7	41.1	44.6	42.6	43.4	43.3	42.4	41.4
22. Current tax burden	37.2	32.7	32.5	31.8	33.1	33.9	33.6	32.7
23. Net lending (+) or net borrowing (-)	-4.4	-3.0	-6.3	-5.7	-4.3	-3.9	-3.4	-3.3

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.



Table A.1.24

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Romania	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	16.4	12.5	11.8	12.9	12.2	11.6	11.6
2. Current taxes on income and wealth	:	6.6	5.7	6.3	5.3	5.2	5.8	6.2
3. Social contributions	:	12.3	9.9	9.6	10.5	10.2	10.0	9.8
4. of which actual social contributions	:	12.0	9.4	9.2	9.6	9.5	9.2	8.9
5. Other current resources	:	7.1	7.3	4.3	4.9	3.7	4.8	5.3
6. Total current resources	:	42.4	35.4	32.0	33.6	31.3	32.2	32.8
7. Government consumption expenditure	:	16.1	19.0	16.2	18.0	18.1	18.0	18.1
8. of which compensation of employees	:	8.1	8.2	8.1	8.9	8.8	9.1	9.1
9. Collective consumption	:	7.2	9.4	7.9	9.0	9.0	9.4	9.6
10. Social benefits in kind	:	8.9	9.6	8.4	9.0	9.1	8.7	8.5
11. Social transfers other than in kind	:	9.2	8.4	8.8	8.9	8.2	8.6	8.8
12. Interest payments	:	4.4	1.6	1.4	1.1	0.8	0.7	0.8
13. Subsidies	:	1.9	1.4	1.6	1.5	1.4	1.3	1.2
14. Other current expenditure	:	4.9	1.3	0.7	0.8	0.4	1.5	1.5
15. Total current expenditure	:	44.4	31.8	28.7	30.3	28.8	30.1	30.4
16. Gross savings	:	5.8	3.7	3.3	3.3	2.4	2.1	2.4
17. Capital transfers received	:	0.7	0.1	0.3	0.2	0.1	0.2	0.2
18. Total revenue	:	43.8	32.1	31.1	32.4	30.1	30.4	31.0
19. Gross fixed capital formation	:	1.9	3.2	3.0	3.8	2.9	3.8	4.1
20. Other capital expenditure	:	1.5	2.0	2.2	1.0	1.6	1.7	1.7
21. Total expenditure	:	40.6	33.6	32.6	33.7	32.0	33.6	34.2
22. Current tax burden	:	35.3	28.0	27.8	28.7	27.5	27.4	27.5
23. Net lending (+) or net borrowing (-)	:	-4.6	-1.5	-1.5	-1.4	-1.9	-3.2	-3.2

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.25

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Slovakia	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	15.1	12.8	12.2	12.3	12.7	11.5	11.2	11.1
2. Current taxes on income and wealth	11.5	7.6	7.0	6.0	5.9	5.9	5.9	5.9
3. Social contributions	14.2	13.7	14.0	13.3	12.9	12.1	11.8	11.6
4. of which actual social contributions	14.1	13.6	13.9	13.2	12.8	12.0	11.7	11.6
5. Other current resources	7.8	7.7	6.0	5.9	5.4	6.0	5.8	5.6
6. Total current resources	48.5	41.8	39.1	37.5	37.0	35.5	34.6	34.3
7. Government consumption expenditure	21.3	19.9	20.4	19.2	18.6	19.2	18.4	18.1
8. of which compensation of employees	9.3	8.7	8.8	8.1	7.3	7.5	7.2	7.0
9. Collective consumption	17.0	11.1	12.2	11.7	10.9	11.5	11.0	10.8
10. Social benefits in kind	4.3	8.8	8.2	7.5	7.6	7.7	7.4	7.3
11. Social transfers other than in kind	12.1	12.2	11.9	12.3	12.5	12.0	11.5	11.2
12. Interest payments	2.4	4.1	2.5	2.2	1.5	1.4	1.3	1.3
13. Subsidies	4.7	2.5	1.7	1.9	1.3	1.4	1.4	1.4
14. Other current expenditure	1.1	1.8	2.3	1.6	2.0	1.9	1.9	2.0
15. Total current expenditure	41.6	40.6	38.9	37.2	36.0	35.9	34.5	34.1
16. Gross savings	6.9	1.2	0.3	0.3	1.0	-0.4	0.1	0.3
17. Capital transfers received	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0
18. Total revenue	45.2	39.8	37.2	35.3	35.2	33.9	33.1	32.8
19. Gross fixed capital formation	2.3	2.8	2.6	2.4	2.1	2.2	2.2	2.2
20. Other capital expenditure	6.4	10.4	0.5	0.4	1.7	0.8	0.8	0.9
21. Total expenditure	47.0	51.7	40.0	37.7	38.1	37.3	36.0	35.6
22. Current tax burden	40.7	34.1	32.2	31.7	31.9	29.9	29.3	29.1
23. Net lending (+) or net borrowing (-)	-1.8	-11.8	-2.7	-2.4	-2.8	-3.4	-2.9	-2.8

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.26

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Sweden	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	15.4	16.3	17.0	16.9	17.0	17.1	17.1	17.0
2. Current taxes on income and wealth	19.9	22.2	18.6	19.4	20.2	20.0	18.0	18.1
3. Social contributions	13.0	14.2	14.2	14.0	13.9	13.2	13.1	13.0
4. of which actual social contributions	12.5	13.5	13.5	13.3	13.2	12.5	12.8	12.7
5. Other current resources	8.1	5.8	4.7	4.5	4.7	4.8	4.9	4.7
6. Total current resources	56.5	58.4	54.5	54.7	55.8	55.0	53.1	52.9
7. Government consumption expenditure	27.0	26.3	28.1	27.4	27.1	26.7	26.5	26.4
8. of which compensation of employees	16.6	15.6	16.5	16.3	16.1	15.6	15.4	15.4
9. Collective consumption	8.3	8.3	8.3	8.1	7.7	7.6	7.4	7.3
10. Social benefits in kind	18.7	18.0	19.8	19.3	19.4	19.2	19.1	19.0
11. Social transfers other than in kind	20.4	17.3	18.1	17.9	17.5	16.7	15.5	15.3
12. Interest payments	6.6	4.2	2.1	1.6	1.7	1.7	1.9	1.7
13. Subsidies	3.7	1.6	1.5	1.4	1.6	1.6	1.4	1.4
14. Other current expenditure	2.0	2.4	2.6	2.7	2.8	2.7	2.2	2.3
15. Total current expenditure	59.7	51.8	52.3	51.0	50.6	49.5	47.6	47.1
16. Gross savings	-3.1	6.6	1.9	3.5	5.0	5.4	5.6	5.8
17. Capital transfers received	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
18. Total revenue	59.7	60.9	57.1	57.4	58.4	57.5	55.2	54.9
19. Gross fixed capital formation	3.9	2.9	3.1	3.0	3.0	3.2	3.2	3.2
20. Other capital expenditure	0.6	0.1	0.2	0.1	0.2	0.2	0.3	0.3
21. Total expenditure	67.1	57.1	58.2	56.8	56.5	55.4	53.0	52.5
22. Current tax burden	49.0	53.1	50.2	50.6	51.4	50.5	48.5	48.5
23. Net lending (+) or net borrowing (-)	-7.5	3.8	-0.9	0.8	2.1	2.2	2.2	2.4

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.27

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

United Kingdom	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	12.9	13.3	12.9	12.9	12.7	12.7	12.8	12.9
2. Current taxes on income and wealth	14.9	16.5	15.0	15.2	16.2	17.0	17.1	17.3
3. Social contributions	7.4	7.5	7.8	8.0	8.4	8.2	8.2	8.3
4. <i>of which</i> actual social contributions	6.6	6.8	7.2	7.6	7.8	7.7	7.7	7.7
5. Other current resources	2.8	2.4	2.2	2.1	2.0	1.9	2.0	2.0
6. Total current resources	38.0	39.8	37.9	38.2	39.2	39.8	40.1	40.5
7. Government consumption expenditure	19.6	18.6	20.5	20.9	21.5	21.8	21.8	21.8
8. <i>of which</i> compensation of employees	10.7	9.8	10.7	10.9	11.2	11.3	11.0	11.0
9. Collective consumption	8.3	7.4	7.8	7.9	8.2	8.2	8.1	8.2
10. Social benefits in kind	11.3	11.2	12.7	13.0	13.3	13.6	13.7	13.7
11. Social transfers other than in kind	15.1	12.4	12.9	12.8	13.0	12.8	12.7	12.7
12. Interest payments	3.6	2.8	2.0	2.0	2.1	2.0	2.1	2.1
13. Subsidies	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5
14. Other current expenditure	1.7	2.5	2.9	3.0	3.1	2.9	3.0	3.0
15. Total current expenditure	40.8	36.7	38.9	39.2	40.2	40.1	40.0	40.1
16. Gross savings	-2.8	3.1	-1.0	-0.9	-1.0	-0.3	0.1	0.4
17. Capital transfers received	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3
18. Total revenue	38.6	40.7	39.2	39.5	40.6	41.3	41.6	41.9
19. Gross fixed capital formation	2.0	1.2	1.6	1.7	0.6	1.8	2.0	2.3
20. Other capital expenditure	1.2	-1.8	0.9	0.8	1.9	1.0	1.0	0.8
21. Total expenditure	44.3	36.8	42.4	42.7	43.7	44.1	44.2	44.3
22. Current tax burden	36.2	38.0	36.2	36.5	37.5	38.3	38.4	38.8
23. Net lending (+) or net borrowing (-)	-5.7	4.0	-3.2	-3.1	-3.1	-2.8	-2.6	-2.4

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.28

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

Euro area	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	13.3	13.1	13.3	13.4	13.6	13.7	13.7
2. Current taxes on income and wealth	:	12.7	11.5	11.4	11.6	12.2	12.2	12.3
3. Social contributions	:	15.9	15.8	15.6	15.5	15.6	15.3	15.3
4. <i>of which</i> actual social contributions	:	14.7	14.7	14.5	14.4	14.5	14.3	14.2
5. Other current resources	:	3.5	3.4	3.4	3.4	3.5	3.4	3.4
6. Total current resources	:	45.3	43.8	43.7	44.0	44.9	44.7	44.6
7. Government consumption expenditure	:	19.7	20.5	20.4	20.5	20.4	20.1	20.1
8. <i>of which</i> compensation of employees	:	10.4	10.5	10.4	10.4	10.3	10.0	10.0
9. Collective consumption	:	8.1	8.2	8.2	8.1	8.0	7.9	7.9
10. Social benefits in kind	:	11.6	12.2	12.2	12.3	12.4	12.2	12.2
11. Social transfers other than in kind	:	16.2	16.8	16.7	16.6	16.4	16.2	16.0
12. Interest payments	:	3.9	3.3	3.1	2.9	2.9	2.9	2.8
13. Subsidies	:	1.4	1.4	1.3	1.2	1.2	1.2	1.2
14. Other current expenditure	:	1.8	1.9	1.9	2.0	2.0	2.0	2.0
15. Total current expenditure	:	43.0	43.8	43.4	43.3	42.9	42.4	42.1
16. Gross savings	:	2.2	0.0	0.2	0.7	2.0	2.3	2.5
17. Capital transfers received	:	0.5	0.9	0.7	0.7	0.5	0.5	0.5
18. Total revenue	:	46.3	45.1	44.8	45.1	45.8	45.5	45.4
19. Gross fixed capital formation	:	2.5	2.5	2.5	2.5	2.5	2.6	2.6
20. Other capital expenditure	:	0.2	1.4	1.3	1.4	1.5	1.2	1.2
21. Total expenditure	:	46.3	48.2	47.6	47.6	47.4	46.5	46.2
22. Current tax burden	:	42.5	40.8	40.6	40.9	41.7	41.6	41.6
23. Net lending (+) or net borrowing (-)	:	0.0	-3.0	-2.8	-2.5	-1.6	-1.0	-0.8

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.1.29

Revenue and expenditure of general government <sup>(1)</sup>

(% of GDP)

EU-27	1995	2000	2003	2004	2005	2006	2007	2008
1. Taxes on production and imports	:	13.5	13.3	13.4	13.5	13.6	13.7	13.7
2. Current taxes on income and wealth	:	13.7	12.4	12.4	12.7	13.3	13.2	13.3
3. Social contributions	:	14.0	14.0	13.9	13.9	13.8	13.6	13.5
4. of which actual social contributions	:	13.0	13.1	12.9	12.9	12.9	12.7	12.6
5. Other current resources	:	3.5	3.4	3.3	3.3	3.4	3.3	3.3
6. Total current resources	:	44.6	43.1	43.0	43.4	44.1	43.9	43.8
7. Government consumption expenditure	:	19.8	20.8	20.7	20.9	20.8	20.6	20.5
8. of which compensation of employees	:	10.5	10.8	10.8	10.8	10.7	10.4	10.3
9. Collective consumption	:	8.0	8.2	8.2	8.2	8.1	8.0	8.0
10. Social benefits in kind	:	11.7	12.6	12.5	12.7	12.7	12.6	12.5
11. Social transfers other than in kind	:	15.5	16.0	15.9	15.8	15.6	15.3	15.1
12. Interest payments	:	3.7	3.0	2.8	2.7	2.6	2.6	2.6
13. Subsidies	:	1.3	1.3	1.2	1.1	1.1	1.1	1.1
14. Other current expenditure	:	1.9	2.1	2.1	2.2	2.2	2.2	2.2
15. Total current expenditure	:	42.1	43.1	42.7	42.7	42.3	41.8	41.5
16. Gross savings	:	2.5	-0.1	0.2	0.6	1.7	2.0	2.2
17. Capital transfers received	:	0.4	0.7	0.6	0.6	0.5	0.4	0.4
18. Total revenue	:	:	44.3	44.1	44.5	45.1	44.8	44.7
19. Gross fixed capital formation	:	2.3	2.4	2.4	2.2	2.5	2.6	2.7
20. Other capital expenditure	:	-0.1	1.3	1.2	1.4	1.4	1.2	1.1
21. Total expenditure	:	:	47.4	46.9	47.0	46.8	46.0	45.7
22. Current tax burden	:	41.7	40.1	39.9	40.4	41.0	40.8	40.8
23. Net lending (+) or net borrowing (-)	:	0.7	-3.1	-2.7	-2.4	-1.7	-1.2	-1.0

<sup>(1)</sup> The table is based on ESA 95 definitions which do not necessarily correspond with former definitions. The totals are obtained in ESA 95 as follows:

Line 6 = line 1 + line 2 + line 3 + line 5

Line 7 = line 9 + line 10

Line 15 = total of lines 9 to 14

Line 16 = line 6 - line 15

Line 18 = line 6 + line 17

Line 21 = line 15 + line 19 + line 20

Line 23 = line 18 - line 21.

Source: Commission services.

Table A.2.1

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Belgium	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	4.4	-0.1	0.0	0.1	2.4	-0.1	0.2	0.3
2. Interest payments	8.9	6.6	5.4	4.8	4.4	4.2	4.0	3.8
3. Implicit interest rate <sup>(2)</sup>	7.0	6.1	5.3	5.0	4.6	4.6	4.6	4.6
4. Nominal GDP growth rate (%)	3.6	5.7	2.6	5.4	3.1	4.9	4.6	4.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	4.4	-0.1	0.0	0.1	2.4	-0.1	0.2	
6. Contribution of nominal GDP growth	-4.6	-6.1	-2.6	-5.1	-2.9	-4.4	-3.9	-3.5
7. Stock-flow adjustment <sup>(3)</sup>	-1.5	0.3	-1.9	0.7	-0.5	0.5	0.3	0.2
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-4.5	-6.7	-5.4	-4.7	-2.0	-4.3	-3.8	-3.5
9. Snow-ball effect	4.3	0.5	2.7	-0.3	1.4	-0.2	0.0	0.3
10. Stock-flow adjustment <sup>(3)</sup>	-1.5	0.3	-1.9	0.7	-0.5	0.5	0.3	
11. Change in gross debt <sup>(5)</sup>	-1.8	-5.9	-4.6	-4.4	-1.1	-4.1	-3.5	-3.0
12. Level of gross debt (end of year)	129.7	107.7	98.6	94.3	93.2	89.1	85.6	82.6
<b>Germany</b>								
	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	3.2	-1.3	4.0	3.7	3.2	1.7	0.6	0.3
2. Interest payments	3.5	3.2	3.0	2.8	2.8	2.8	2.8	2.8
3. Implicit interest rate <sup>(2)</sup>	7.6	5.3	5.0	4.5	4.3	4.2	4.3	4.4
4. Nominal GDP growth rate (%)	3.8	2.5	0.9	2.1	1.5	3.0	4.3	3.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	3.2	-1.3	4.0	3.7	3.2	1.7	0.6	
6. Contribution of nominal GDP growth	-1.8	-1.5	-0.5	-1.3	-1.0	-1.9	-2.8	-2.0
7. Stock-flow adjustment <sup>(3)</sup>	6.2	1.6	0.0	-0.6	-0.1	0.3	-0.3	0.0
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-0.3	-4.5	1.1	0.9	0.5	-1.1	-2.2	-2.5
9. Snow-ball effect	1.7	1.7	2.5	1.5	1.8	0.9	0.0	0.7
10. Stock-flow adjustment <sup>(3)</sup>	6.2	1.6	0.0	-0.6	-0.1	0.3	-0.3	
11. Change in gross debt <sup>(5)</sup>	7.6	-1.2	3.6	1.9	2.2	0.0	-2.6	-1.8
12. Level of gross debt (end of year)	55.6	59.7	63.9	65.7	67.9	67.9	65.4	63.6

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.2

## Contributions to the change in the general government gross debt ratio

(% of GDP)

<b>Ireland</b>	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	2.0	-4.6	-0.4	-1.4	-1.0	-2.9	-1.5	-0.9
2. Interest payments	5.3	1.9	1.2	1.1	1.0	1.0	1.0	1.0
3. Implicit interest rate <sup>(2)</sup>	6.7	4.7	4.0	3.9	3.8	4.0	4.4	4.7
4. Nominal GDP growth rate (%)	13.0	16.3	6.9	6.2	9.2	9.1	8.2	6.7
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	2.0	-4.6	-0.4	-1.4	-1.0	-2.9	-1.5	
6. Contribution of nominal GDP growth	-10.2	-6.8	-2.1	-1.8	-2.5	-2.3	-1.9	-1.5
7. Stock-flow adjustment <sup>(3)</sup>	0.6	0.7	1.4	1.8	1.2	2.6	1.5	1.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-3.3	-6.6	-1.6	-2.6	-2.0	-3.9	-2.5	-1.9
9. Snow-ball effect	-4.9	-4.8	-0.9	-0.7	-1.5	-1.3	-0.9	-0.4
10. Stock-flow adjustment <sup>(3)</sup>	0.6	0.7	1.4	1.8	1.2	2.6	1.5	
11. Change in gross debt <sup>(5)</sup>	-7.6	-10.6	-1.0	-1.5	-2.3	-2.5	-1.9	-1.3
12. Level of gross debt (end of year)	81.1	37.8	31.2	29.7	27.4	24.9	23.0	21.7
<b>Greece</b>								
	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	10.2	4.1	6.3	7.8	5.7	2.9	2.5	2.8
2. Interest payments	12.7	8.1	5.5	5.3	5.0	4.9	4.5	4.3
3. Implicit interest rate <sup>(2)</sup>	13.2	7.9	5.3	5.5	4.8	4.6	4.5	4.5
4. Nominal GDP growth rate (%)	12.1	10.4	8.4	8.3	7.5	7.8	7.0	7.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	10.2	4.1	6.3	7.8	5.7	2.9	2.5	
6. Contribution of nominal GDP growth	-11.6	-10.6	-8.6	-8.2	-7.6	-7.8	-6.8	-6.8
7. Stock-flow adjustment <sup>(3)</sup>	2.2	5.8	-0.5	1.0	1.1	2.3	0.7	0.7
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-2.6	-4.0	0.7	2.5	0.6	-2.0	-2.0	-1.5
9. Snow-ball effect	1.1	-2.5	-3.1	-2.8	-2.7	-3.2	-2.4	-2.6
10. Stock-flow adjustment <sup>(3)</sup>	2.2	5.8	-0.5	1.0	1.1	2.3	0.7	
11. Change in gross debt <sup>(5)</sup>	0.8	-0.8	-2.9	0.7	-1.0	-2.9	-3.7	-3.4
12. Level of gross debt (end of year)	108.7	111.6	107.8	108.5	107.5	104.6	100.9	97.6

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.



Table A.2.3

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Spain	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	6.5	0.9	0.0	0.2	-1.1	-1.8	-1.4	-1.2
2. Interest payments	5.1	3.2	2.4	2.0	1.8	1.6	1.6	1.5
3. Implicit interest rate <sup>(2)</sup>	9.2	5.7	4.8	4.5	4.2	4.1	4.2	4.4
4. Nominal GDP growth rate (%)	7.8	8.7	7.3	7.4	7.8	7.8	6.9	6.4
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	6.5	0.9	0.0	0.2	-1.1	-1.8	-1.4	
6. Contribution of nominal GDP growth	-4.3	-4.9	-3.6	-3.3	-3.3	-3.1	-2.6	-2.2
7. Stock-flow adjustment <sup>(3)</sup>	0.7	1.8	-0.2	0.6	1.4	1.6	1.1	1.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	1.4	-2.4	-2.3	-1.9	-2.9	-3.4	-3.0	-2.7
9. Snow-ball effect	0.8	-1.7	-1.2	-1.3	-1.6	-1.5	-1.0	-0.7
10. Stock-flow adjustment <sup>(3)</sup>	0.7	1.8	-0.2	0.6	1.4	1.6	1.1	
11. Change in gross debt <sup>(5)</sup>	2.9	-2.3	-3.8	-2.5	-3.1	-3.3	-2.9	-2.3
12. Level of gross debt (end of year)	62.7	59.2	48.8	46.2	43.2	39.9	37.0	34.6
<b>France</b>								
	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	5.5	1.5	4.1	3.6	3.0	2.6	2.4	2.0
2. Interest payments	3.5	2.9	2.8	2.7	2.7	2.6	2.5	2.5
3. Implicit interest rate <sup>(2)</sup>	7.4	5.2	4.9	4.5	4.2	4.0	4.1	4.1
4. Nominal GDP growth rate (%)	3.4	5.5	3.0	4.0	3.1	4.0	4.4	4.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	5.5	1.5	4.1	3.6	3.0	2.6	2.4	
6. Contribution of nominal GDP growth	-1.6	-3.0	-1.7	-2.5	-2.2	-2.5	-2.7	-2.5
7. Stock-flow adjustment <sup>(3)</sup>	2.3	0.0	1.7	0.8	1.0	-2.2	-0.8	-0.4
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	2.0	-1.4	1.3	0.9	0.3	0.0	-0.1	-0.5
9. Snow-ball effect	1.9	-0.2	1.1	0.3	0.5	0.0	-0.2	0.0
10. Stock-flow adjustment <sup>(3)</sup>	2.3	0.0	1.7	0.8	1.0	-2.2	-0.8	
11. Change in gross debt <sup>(5)</sup>	6.2	-1.6	4.1	2.0	1.8	-2.2	-1.1	-0.9
12. Level of gross debt (end of year)	55.1	56.7	62.4	64.3	66.2	63.9	62.9	61.9

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.4

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Italy	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	7.4	0.9	3.5	3.5	4.4	4.5	2.1	2.2
2. Interest payments	11.6	6.4	5.2	4.8	4.7	4.6	4.7	4.8
3. Implicit interest rate <sup>(2)</sup>	10.3	5.9	5.0	4.7	4.4	4.5	4.6	4.7
4. Nominal GDP growth rate (%)	7.9	5.7	3.1	4.1	2.3	3.7	4.0	4.0
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	7.4	0.9	3.5	3.5	4.4	4.5	2.1	
6. Contribution of nominal GDP growth	-8.9	-6.1	-3.2	-4.1	-2.4	-3.8	-4.1	-4.0
7. Stock-flow adjustment <sup>(3)</sup>	1.2	0.7	-1.6	0.2	0.6	-0.1	0.2	-0.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-4.2	-5.5	-1.6	-1.3	-0.3	-0.1	-2.7	-2.5
9. Snow-ball effect	2.7	0.2	1.9	0.6	2.1	0.8	0.6	0.7
10. Stock-flow adjustment <sup>(3)</sup>	1.2	0.7	-1.6	0.2	0.6	-0.1	0.2	
11. Change in gross debt <sup>(5)</sup>	-0.3	-4.6	-1.3	-0.5	2.4	0.6	-1.8	-1.9
12. Level of gross debt (end of year)	121.2	109.1	104.3	103.8	106.2	106.8	105.0	103.1
<b>Luxembourg</b>								
	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	-2.4	-6.0	-0.4	1.2	0.3	-0.1	-0.4	-0.6
2. Interest payments	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1
3. Implicit interest rate <sup>(2)</sup>	8.1	5.6	3.4	2.7	2.7	2.9	2.6	2.4
4. Nominal GDP growth rate (%)	3.8	10.6	6.3	5.4	8.9	12.4	9.8	8.6
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	-2.4	-6.0	-0.4	1.2	0.3	-0.1	-0.4	
6. Contribution of nominal GDP growth	-0.2	-0.6	-0.4	-0.3	-0.5	-0.7	-0.6	-0.5
7. Stock-flow adjustment <sup>(3)</sup>	4.6	6.3	0.6	-0.6	-0.2	1.5	0.9	0.4
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-2.8	-6.3	-0.6	1.1	0.1	-0.3	-0.6	-0.8
9. Snow-ball effect	0.2	-0.3	-0.2	-0.2	-0.4	-0.5	-0.4	-0.4
10. Stock-flow adjustment <sup>(3)</sup>	4.6	6.3	0.6	-0.6	-0.2	1.5	0.9	
11. Change in gross debt <sup>(5)</sup>	1.9	-0.3	-0.2	0.3	-0.4	0.7	-0.1	-0.7
12. Level of gross debt (end of year)	7.4	6.4	6.3	6.6	6.1	6.8	6.7	6.0

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.5

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Netherlands		1995	2000	2003	2004	2005	2006	2007	2008
1.	Net borrowing <sup>(1)</sup>	4.3	-2.0	3.1	1.8	0.3	-0.5	0.7	0.0
2.	Interest payments	5.6	3.7	2.6	2.5	2.4	2.3	2.2	2.1
3.	Implicit interest rate <sup>(2)</sup>	7.8	6.5	5.2	5.0	4.6	4.6	4.6	4.5
4.	Nominal GDP growth rate (%)	5.1	8.2	2.5	2.7	3.2	4.4	4.5	4.8
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	4.3	-2.0	3.1	1.8	0.3	-0.5	0.7	
6.	Contribution of nominal GDP growth	-3.7	-4.6	-1.2	-1.4	-1.6	-2.2	-2.1	-2.2
7.	Stock-flow adjustment <sup>(3)</sup>	-0.2	-0.7	-0.4	0.2	1.5	-1.2	0.5	0.4
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	-1.3	-5.6	0.6	-0.7	-2.1	-2.9	-1.5	-2.1
9.	Snow-ball effect	2.0	-1.0	1.3	1.1	0.7	0.1	0.0	-0.1
10.	Stock-flow adjustment <sup>(3)</sup>	-0.2	-0.7	-0.4	0.2	1.5	-1.2	0.5	
11.	Change in gross debt <sup>(5)</sup>	0.4	-7.4	1.5	0.6	0.1	-4.0	-1.0	-1.8
12.	Level of gross debt (end of year)	76.1	53.8	52.0	52.6	52.7	48.7	47.7	45.9
<b>Austria</b>		<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1.	Net borrowing <sup>(1)</sup>	5.7	1.6	1.8	1.3	1.7	1.2	1.0	0.9
2.	Interest payments	3.9	3.7	3.1	3.0	3.0	2.8	2.8	2.7
3.	Implicit interest rate <sup>(2)</sup>	6.3	5.5	4.5	4.6	4.7	4.5	4.4	4.4
4.	Nominal GDP growth rate (%)	3.9	5.2	2.4	4.2	3.9	4.6	4.8	4.2
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	5.7	1.6	1.8	1.3	1.7	1.2	1.0	
6.	Contribution of nominal GDP growth	-2.4	-3.3	-1.6	-2.6	-2.4	-2.8	-2.8	-2.5
7.	Stock-flow adjustment <sup>(3)</sup>	1.3	0.8	-1.2	0.7	0.4	0.4	0.3	0.3
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	1.8	-2.0	-1.3	-1.6	-1.3	-1.6	-1.8	-1.7
9/	Snow-ball effect	1.4	0.2	1.3	0.2	0.5	-0.1	-0.2	0.1
10.	Stock-flow adjustment <sup>(3)</sup>	1.3	0.8	-1.2	0.7	0.4	0.4	0.3	1.3
11.	Change in gross debt <sup>(5)</sup>	4.6	-1.0	-1.2	-0.7	-0.4	-1.3	-1.6	-1.4
12.	Level of gross debt (end of year)	67.9	65.5	64.6	63.9	63.5	62.2	60.6	59.2

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.6

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Portugal	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	5.2	3.0	2.9	3.3	6.0	3.9	3.5	3.2
2. Interest payments	5.9	3.1	2.8	2.7	2.7	2.8	2.9	3.0
3. Implicit interest rate <sup>(2)</sup>	10.9	6.2	5.0	4.9	4.8	4.6	4.8	4.7
4. Nominal GDP growth rate (%)	7.9	7.1	2.3	4.1	3.3	4.2	4.6	4.5
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	5.2	3.0	2.9	3.3	6.0	3.9	3.5	
6. Contribution of nominal GDP growth	-4.3	-3.4	-1.3	-2.2	-1.9	-2.6	-2.8	-2.8
7. Stock-flow adjustment <sup>(3)</sup>	1.2	-0.5	-0.4	0.3	1.2	-0.2	0.0	0.0
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-0.7	-0.1	0.2	0.7	3.4	1.1	0.6	0.2
9. Snow-ball effect	1.6	-0.4	1.5	0.4	0.9	0.2	0.1	0.1
10. Stock-flow adjustment <sup>(3)</sup>	1.2	-0.5	-0.4	0.3	1.2	-0.2	0.0	
11. Change in gross debt <sup>(5)</sup>	2.1	-1.0	1.3	1.3	5.4	1.2	0.7	0.3
12. Level of gross debt (end of year)	61.0	50.4	56.8	58.2	63.6	64.7	65.4	65.8
<b>Slovenia</b>								
1. Net borrowing <sup>(1)</sup>	:	3.8	2.8	2.3	1.5	1.4	1.5	1.5
2. Interest payments	:	2.5	2.1	1.8	1.7	1.6	1.5	1.4
3. Implicit interest rate <sup>(2)</sup>	:	11.1	7.7	6.8	6.1	5.9	5.7	5.3
4. Nominal GDP growth rate (%)	28.0	9.7	8.6	7.9	5.6	7.6	7.2	6.9
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	:	3.8	2.8	2.3	1.5	1.4	1.5	
6. Contribution of nominal GDP growth	:	-2.2	-2.3	-2.1	-1.5	-2.0	-1.9	-1.8
7. Stock-flow adjustment <sup>(3)</sup>	:	1.3	-0.9	0.1	-0.5	0.1	0.0	0.0
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	:	1.4	0.7	0.5	-0.2	-0.2	0.1	0.1
9. Snow-ball effect	:	0.3	-0.2	-0.3	0.1	-0.5	-0.4	-0.4
10. Stock-flow adjustment <sup>(3)</sup>	:	1.3	-0.9	0.1	-0.5	0.1	0.0	
11. Change in gross debt <sup>(5)</sup>	:	3.0	-0.4	0.3	-0.6	-0.5	-0.3	-0.3
12. Level of gross debt (end of year)	:	27.6	28.6	28.9	28.4	27.8	27.5	27.2

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.7

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Finland	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	6.2	-6.9	-2.3	-2.1	-2.5	-3.8	-3.6	-3.5
2. Interest payments	3.9	2.8	1.9	1.8	1.7	1.5	1.5	1.5
3. Implicit interest rate <sup>(2)</sup>	7.4	6.6	4.3	3.6	3.5	3.7	3.7	3.8
4. Nominal GDP growth rate (%)	8.9	7.8	1.4	4.4	3.2	6.8	4.9	4.3
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	6.2	-6.9	-2.3	-2.1	-2.5	-3.8	-3.6	
6. Contribution of nominal GDP growth	-4.7	-3.3	-0.6	-1.9	-1.4	-2.6	-1.8	-1.5
7. Stock-flow adjustment <sup>(3)</sup>	-2.6	8.5	6.1	4.0	1.3	4.2	3.4	3.3
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	2.2	-9.7	-4.2	-3.8	-4.2	-5.3	-5.1	-4.9
9. Snow-ball effect	-0.8	-0.5	1.2	-0.3	0.1	-1.2	-0.4	-0.2
10. Stock-flow adjustment <sup>(3)</sup>	-2.6	8.5	6.1	4.0	1.3	4.2	3.4	
11. Change in gross debt <sup>(5)</sup>	-1.2	-1.7	3.1	-0.2	-2.7	-2.3	-2.1	-1.8
12. Level of gross debt (end of year)	56.7	43.8	44.3	44.1	41.4	39.1	37.0	35.2

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.

<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.

<sup>(3)</sup> Line 7 = line 10.

<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.

<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.8

## Contributions to the change in the general government gross debt ratio

(% of GDP)

<b>Bulgaria</b>	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	3.4	0.5	0.9	-2.2	-1.9	-3.3	-2.0	-2.0
2. Interest payments	14.1	4.0	2.2	1.8	1.6	1.3	1.2	1.1
3. Implicit interest rate <sup>(2)</sup>	:	5.7	4.4	4.4	4.5	5.1	5.6	5.6
4. Nominal GDP growth rate (%)	67.5	12.5	6.9	12.1	10.2	14.7	10.4	10.6
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	3.4	0.5	0.9	-2.2	-1.9	-3.3	-2.0	
6. Contribution of nominal GDP growth	:	-8.8	-3.4	-5.0	-3.5	-3.7	-2.1	-2.0
7. Stock-flow adjustment <sup>(3)</sup>	:	2.6	-5.2	-0.9	-3.3	0.6	2.3	2.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-10.7	-3.6	-1.3	-4.0	-3.4	-4.6	-3.1	-3.0
9. Snow-ball effect	:	-4.7	-1.3	-3.1	-2.0	-2.5	-1.0	-1.0
10. Stock-flow adjustment <sup>(3)</sup>	:	2.6	-5.2	-0.9	-3.3	0.6	2.3	
11. Change in gross debt <sup>(5)</sup>	:	-5.7	-7.8	-8.0	-8.7	-6.4	-1.8	-2.0
12. Level of gross debt (end of year)	:	73.6	45.9	37.9	29.2	22.8	20.9	19.0
<b>Czech Republic</b>								
	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	13.4	3.7	6.6	2.9	3.5	2.9	3.7	3.3
2. Interest payments	1.0	0.8	1.1	1.2	1.2	1.1	1.2	1.3
3. Implicit interest rate <sup>(2)</sup>	:	5.4	4.2	4.3	4.0	4.0	3.7	3.5
4. Nominal GDP growth rate (%)	16.8	5.2	4.6	7.9	6.8	7.9	6.8	7.8
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	13.4	3.7	6.6	2.9	3.5	2.9	3.7	
6. Contribution of nominal GDP growth	:	-0.8	-1.2	-2.2	-2.0	-2.2	-2.0	-2.2
7. Stock-flow adjustment <sup>(3)</sup>	:	-0.8	-3.8	0.0	-1.9	-0.8	-1.7	-1.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	12.4	2.9	5.5	1.7	2.4	1.8	2.5	2.0
9. Snow-ball effect	:	0.0	-0.1	-1.0	-0.8	-1.1	-0.9	-1.2
10. Stock-flow adjustment <sup>(3)</sup>	:	-0.8	-3.8	0.0	-1.9	-0.8	-1.7	
11. Change in gross debt <sup>(5)</sup>	:	2.2	1.6	0.7	-0.3	0.0	0.3	0.3
12. Level of gross debt (end of year)	14.6	18.5	30.1	30.7	30.4	30.4	30.6	30.9

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.9

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Denmark	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	2.9	-2.3	0.1	-1.9	-4.6	-4.2	-3.5	-3.4
2. Interest payments	5.9	3.7	2.8	2.5	2.0	1.7	1.5	1.3
3. Implicit interest rate <sup>(2)</sup>	8.1	6.6	5.7	5.3	4.4	4.6	4.8	4.8
4. Nominal GDP growth rate (%)	4.4	6.6	2.0	4.2	6.3	5.5	5.4	4.8
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	2.9	-2.3	0.1	-1.9	-4.6	-4.2	-3.5	
6. Contribution of nominal GDP growth	-3.2	-3.6	-0.9	-1.8	-2.6	-1.9	-1.6	-1.2
7. Stock-flow adjustment <sup>(3)</sup>	-3.7	0.2	-0.1	2.0	-0.4	0.0	0.0	-0.3
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-3.0	-5.9	-2.7	-4.5	-6.7	-5.9	-5.0	-4.7
9. Snow-ball effect	2.7	0.0	1.7	0.5	-0.8	-0.3	-0.2	0.0
10. Stock-flow adjustment <sup>(3)</sup>	-3.7	0.2	-0.1	2.0	-0.4	0.0	0.0	
11. Change in gross debt <sup>(5)</sup>	-4.0	-5.7	-1.0	-1.8	-7.7	-6.1	-5.2	-5.0
12. Level of gross debt (end of year)	72.5	51.7	45.8	44.0	36.3	30.2	25.0	20.0
<b>Estonia</b>								
1. Net borrowing <sup>(1)</sup>	-0.4	0.2	-2.0	-2.3	-2.3	-3.8	-3.7	-3.5
2. Interest payments	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
3. Implicit interest rate <sup>(2)</sup>	:	4.0	4.1	4.0	4.1	4.0	3.6	3.9
4. Nominal GDP growth rate (%)	37.4	13.6	9.5	10.4	18.0	18.2	17.7	15.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	-0.4	0.2	-2.0	-2.3	-2.3	-3.8	-3.7	
6. Contribution of nominal GDP growth	:	-0.7	-0.5	-0.5	-0.8	-0.7	-0.6	-0.4
7. Stock-flow adjustment <sup>(3)</sup>	:	-0.3	2.6	2.4	2.4	4.1	2.9	3.5
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-0.5	0.0	-2.3	-2.5	-2.5	-3.9	-3.8	-3.6
9. Snow-ball effect	:	-0.5	-0.3	-0.3	-0.6	-0.5	-0.5	-0.3
10. Stock-flow adjustment <sup>(3)</sup>	:	-0.3	2.6	2.4	2.4	4.1	2.9	
11. Change in gross debt <sup>(5)</sup>	:	-0.8	0.0	-0.5	-0.7	-0.4	-1.4	-0.4
12. Level of gross debt (end of year)	8.8	5.2	5.7	5.2	4.4	4.1	2.7	2.3

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.10

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Cyprus		1995	2000	2003	2004	2005	2006	2007	2008
1.	Net borrowing <sup>(1)</sup>	:	2.3	6.3	4.1	2.3	1.5	1.4	1.4
2.	Interest payments	:	3.4	3.4	3.3	3.4	3.3	3.1	3.1
3.	Implicit interest rate <sup>(2)</sup>	:	6.2	5.6	5.1	5.2	5.0	5.1	5.4
4.	Nominal GDP growth rate (%)		9.4	9.1	7.0	7.6	6.4	6.1	6.3
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	:	2.3	6.3	4.1	2.3	1.5	1.4	
6.	Contribution of nominal GDP growth	:	-4.9	-4.2	-4.9	-4.2	-4.1	-3.8	-3.6
7.	Stock-flow adjustment <sup>(3)</sup>	:	2.7	2.3	2.1	0.8	-1.3	-1.4	-4.4
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	:	-1.0	2.9	0.8	-1.1	-1.7	-1.7	-1.7
9.	Snow-ball effect	:	-1.5	-0.9	-1.6	-0.8	-0.9	-0.7	-0.5
10.	Stock-flow adjustment <sup>(3)</sup>	:	2.7	2.3	2.1	0.8	-1.3	-1.4	
11.	Change in gross debt <sup>(5)</sup>	:	0.2	4.4	1.2	-1.1	-3.9	-3.8	-6.7
12.	Level of gross debt (end of year)	:	58.8	69.1	70.3	69.2	65.3	61.5	54.8
Latvia									
1.	Net borrowing <sup>(1)</sup>	2.0	2.8	1.6	1.0	0.2	-0.4	-0.2	-0.1
2.	Interest payments	0.9	1.0	0.7	0.7	0.6	0.5	0.4	0.3
3.	Implicit interest rate <sup>(2)</sup>	:	8.7	5.7	5.8	4.7	4.8	5.0	5.0
4.	Nominal GDP growth rate (%)	14.0	10.9	11.0	16.3	21.9	24.3	21.9	17.9
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	2.0	2.8	1.6	1.0	0.2	-0.4	-0.2	
6.	Contribution of nominal GDP growth	:	-1.3	-1.3	-2.0	-2.6	-2.3	-1.8	-1.2
7.	Stock-flow adjustment <sup>(3)</sup>	:	-1.7	0.7	1.1	-0.2	0.8	0.0	0.0
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	1.1	1.8	0.9	0.3	-0.3	-0.9	-0.6	-0.4
9.	Snow-ball effect	:	-0.3	-0.6	-1.3	-2.0	-1.9	-1.4	-0.9
10.	Stock-flow adjustment <sup>(3)</sup>	:	-1.7	0.7	1.1	-0.2	0.8	0.0	
11.	Change in gross debt <sup>(5)</sup>	:	-0.2	1.0	0.1	-2.6	-2.0	-2.0	-1.3
12.	Level of gross debt (end of year)	:	12.3	14.4	14.5	12.0	10.0	8.0	6.7

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.



Table A.2.11

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Lithuania	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	1.6	3.2	1.3	1.5	0.5	0.3	0.4	1.0
2. Interest payments	0.4	1.8	1.3	0.9	0.8	0.5	0.6	0.8
3. Implicit interest rate <sup>(2)</sup>	:	8.0	6.2	4.9	4.8	2.8	3.8	4.5
4. Nominal GDP growth rate (%)	51.3	4.6	9.3	10.2	13.8	15.2	12.8	11.1
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	1.6	3.2	1.3	1.5	0.5	0.3	0.4	
6. Contribution of nominal GDP growth	:	-1.0	-1.9	-2.0	-2.3	-2.5	-2.1	-1.9
7. Stock-flow adjustment <sup>(3)</sup>	:	-1.3	-0.4	-1.4	1.1	1.8	2.0	2.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	1.2	1.5	0.0	0.6	-0.3	-0.2	-0.2	0.3
9. Snow-ball effect	:	0.7	-0.6	-1.0	-1.5	-2.0	-1.4	-1.1
10. Stock-flow adjustment <sup>(3)</sup>	:	-1.3	-0.4	-1.4	1.1	1.8	2.0	
11. Change in gross debt <sup>(5)</sup>	:	0.9	-1.0	-1.8	-0.8	-0.4	0.4	1.3
12. Level of gross debt (end of year)	11.9	23.7	21.2	19.4	18.6	18.2	18.6	19.9
<b>Hungary</b>								
1. Net borrowing <sup>(1)</sup>	:	3.0	7.2	6.4	7.8	9.2	6.8	4.9
2. Interest payments	:	5.4	4.0	4.4	4.1	3.9	4.1	3.9
3. Implicit interest rate <sup>(2)</sup>	:	10.3	8.0	8.3	7.4	6.8	6.8	6.2
4. Nominal GDP growth rate (%)	28.6	15.6	10.1	9.4	6.3	7.0	8.7	6.1
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	:	3.0	7.2	6.4	7.8	9.2	6.8	
6. Contribution of nominal GDP growth	:	-8.0	-5.1	-5.0	-3.5	-4.0	-5.3	-3.9
7. Stock-flow adjustment <sup>(3)</sup>	:	-0.1	0.2	-0.1	-1.9	-0.8	-0.4	-0.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	:	-2.4	3.2	2.1	3.7	5.3	2.7	1.0
9. Snow-ball effect	:	-2.7	-1.0	-0.6	0.6	-0.1	-1.2	0.1
10. Stock-flow adjustment <sup>(3)</sup>	:	-0.1	0.2	-0.1	-1.9	-0.8	-0.4	
11. Change in gross debt <sup>(5)</sup>	:	-5.2	2.3	1.4	2.3	4.4	1.1	1.0
12. Level of gross debt (end of year)	:	54.2	58.0	59.4	61.7	66.0	67.1	68.1

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.12

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Malta	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	:	6.2	10.0	4.9	3.1	2.6	2.1	1.6
2. Interest payments	:	3.6	3.5	3.7	3.8	3.7	3.3	3.3
3. Implicit interest rate <sup>(2)</sup>	:	7.0	5.8	5.4	5.5	5.3	5.3	5.3
4. Nominal GDP growth rate (%)		11.4	8.3	2.2	1.9	5.4	5.4	5.0
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	:	6.2	10.0	4.9	3.1	2.6	2.1	
6. Contribution of nominal GDP growth	:	-4.3	-1.3	-1.3	-3.8	-3.8	-3.4	-3.2
7. Stock-flow adjustment <sup>(3)</sup>	:	-2.3	0.9	-0.2	-0.8	-4.7	0.7	0.0
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	:	2.5	6.5	1.2	-0.7	-1.1	-1.2	-1.8
9. Snow-ball effect	:	-0.7	2.2	2.4	0.1	-0.1	-0.1	0.2
10. Stock-flow adjustment <sup>(3)</sup>	:	-2.3	0.9	-0.2	-0.8	-4.7	0.7	
11. Change in gross debt <sup>(5)</sup>	:	-0.4	9.6	3.5	-1.5	-5.9	-0.6	-1.6
12. Level of gross debt (end of year)	:	56.0	70.4	73.9	72.4	66.5	65.9	64.3
<b>Poland</b>								
	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	4.4	3.0	6.3	5.7	4.3	3.9	3.4	3.3
2. Interest payments	5.7	3.0	3.0	2.8	2.8	2.4	2.6	2.6
3. Implicit interest rate <sup>(2)</sup>	:	8.6	7.8	6.4	6.5	5.6	5.9	5.8
4. Nominal GDP growth rate (%)	36.9	11.8	4.2	9.6	6.2	7.2	8.6	8.2
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	4.4	3.0	6.3	5.7	4.3	3.9	3.4	
6. Contribution of nominal GDP growth	:	-4.1	-1.7	-4.1	-2.7	-3.3	-3.8	-3.6
7. Stock-flow adjustment <sup>(3)</sup>	:	-2.3	2.7	-2.9	-0.2	0.1	1.0	1.0
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-1.3	0.0	3.3	2.9	1.5	1.5	0.9	0.7
9. Snow-ball effect	:	-1.1	1.3	-1.4	0.1	-0.9	-1.2	-1.0
10. Stock-flow adjustment <sup>(3)</sup>	:	-2.3	2.7	-2.9	-0.2	0.1	1.0	
11. Change in gross debt <sup>(5)</sup>	:	-3.5	7.3	-1.4	1.4	0.7	0.6	0.7
12. Level of gross debt (end of year)	:	35.9	47.1	45.7	47.1	47.8	48.4	49.1

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.13

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Romania	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	:	-3.2	1.5	1.5	1.4	1.9	3.2	3.2
2. Interest payments	:	4.4	1.6	1.4	1.1	0.8	0.7	0.8
3. Implicit interest rate <sup>(2)</sup>	:	26.7	8.4	8.3	6.8	5.7	6.8	7.0
4. Nominal GDP growth rate (%)		44.9	47.3	30.4	24.8	16.9	17.2	15.0
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	:	-3.2	1.5	1.5	1.4	1.9	3.2	
6. Contribution of nominal GDP growth	:	-7.7	-5.8	-4.3	-2.7	-2.5	-1.8	-1.7
7. Stock-flow adjustment <sup>(3)</sup>	:	3.0	0.9	0.1	-1.6	-2.8	-1.0	-1.3
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	:	-7.6	-0.1	0.1	0.3	1.1	2.5	2.5
9. Snow-ball effect	:	-3.4	-4.2	-2.8	-1.6	-1.7	-1.1	-0.9
10. Stock-flow adjustment <sup>(3)</sup>	:	3.0	0.9	0.1	-1.6	-2.8	-1.0	
11. Change in gross debt <sup>(5)</sup>	:	-0.1	-3.5	-2.7	-3.0	-3.4	0.4	0.3
12. Level of gross debt (end of year)	:	23.9	21.5	18.8	15.8	12.4	12.8	13.1
<b>Slovakia</b>								
	<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Net borrowing <sup>(1)</sup>	1.8	11.8	2.7	2.4	2.8	3.4	2.9	2.8
2. Interest payments	2.4	4.1	2.5	2.2	1.5	1.4	1.3	1.3
3. Implicit interest rate <sup>(2)</sup>	:	9.4	6.4	5.7	4.0	4.4	4.9	4.7
4. Nominal GDP growth rate (%)	16.3	10.5	9.1	11.8	8.5	11.2	12.1	8.9
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	1.8	11.8	2.7	2.4	2.8	3.4	2.9	
6. Contribution of nominal GDP growth	:	-4.5	-3.9	-4.3	-3.2	-3.5	-3.3	-2.4
7. Stock-flow adjustment <sup>(3)</sup>	:	-4.7	0.3	1.0	-6.7	-3.6	-0.7	-0.6
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	-0.6	7.8	0.2	0.2	1.3	2.0	1.5	1.5
9. Snow-ball effect	:	-0.4	-1.4	-2.1	-1.6	-2.1	-2.0	-1.2
10. Stock-flow adjustment <sup>(3)</sup>	:	-4.7	0.3	1.0	-6.7	-3.6	-0.7	
11. Change in gross debt <sup>(5)</sup>	:	2.7	-0.9	-0.9	-7.0	-3.8	-1.1	-0.3
12. Level of gross debt (end of year)	22.0	50.2	42.4	41.5	34.5	30.7	29.7	29.4

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.14

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Sweden	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	7.4	-3.8	1.1	-0.6	-1.8	-2.1	-2.3	-2.4
2. Interest payments	6.6	4.2	2.3	1.8	1.9	1.8	1.8	1.7
3. Implicit interest rate <sup>(2)</sup>	9.8	7.1	4.1	3.2	3.4	3.4	4.2	4.3
4. Nominal GDP growth rate (%)	7.6	5.8	3.7	4.3	4.1	6.3	6.3	5.4
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	7.4	-3.8	1.1	-0.6	-1.8	-2.1	-2.3	
6. Contribution of nominal GDP growth	-5.2	-3.4	-1.9	-2.2	-2.1	-3.1	-2.8	-2.1
7. Stock-flow adjustment <sup>(3)</sup>	-2.5	-2.6	2.5	2.0	3.9	0.1	0.2	0.1
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	0.9	-8.0	-1.2	-2.4	-3.8	-3.9	-4.1	-4.1
9. Snow-ball effect	1.5	0.8	0.2	-0.6	-0.4	-1.4	-0.9	-0.4
10. Stock-flow adjustment <sup>(3)</sup>	-2.5	-2.6	2.5	2.0	3.9	0.1	0.2	
11. Change in gross debt <sup>(5)</sup>	-0.2	-9.8	1.5	-1.0	-0.3	-5.3	-4.8	-4.4
12. Level of gross debt (end of year)	73.0	52.3	53.5	52.4	52.2	46.9	42.1	37.7
<b>United Kingdom</b>								
	1995	2000	2003	2004	2005	2006	2007	2008
1. Net borrowing <sup>(1)</sup>	5.7	-4.0	3.2	3.2	3.1	2.8	2.6	2.4
2. Interest payments	3.6	2.7	2.0	2.0	2.1	2.1	2.1	2.2
3. Implicit interest rate <sup>(2)</sup>	8.0	6.6	5.6	5.3	5.5	5.1	5.0	5.1
4. Nominal GDP growth rate (%)	5.7	5.1	5.9	6.0	4.2	5.2	5.5	4.8
Budgetary constraint based on the deficit								
5. Deficit (net borrowing) <sup>(1)</sup>	5.7	-4.0	3.2	3.2	3.1	2.8	2.6	
6. Contribution of nominal GDP growth	-2.6	-2.1	-2.1	-2.2	-1.6	-2.1	-2.3	-2.0
7. Stock-flow adjustment <sup>(3)</sup>	0.0	3.3	0.3	0.6	0.4	0.6	0.1	0.2
Budgetary constraint based on the primary deficit								
8. Primary deficit <sup>(4)</sup>	2.1	-6.7	1.2	1.2	1.0	0.7	0.6	0.2
9. Snow-ball effect	1.0	0.7	-0.1	-0.2	0.5	0.0	-0.2	0.2
10. Stock-flow adjustment <sup>(3)</sup>	0.0	3.3	0.3	0.6	0.4	0.6	0.1	
11. Change in gross debt <sup>(5)</sup>	3.1	-2.8	1.3	1.5	1.9	1.3	0.5	0.6
12. Level of gross debt (end of year)	51.0	41.2	38.8	40.3	42.2	43.5	44.0	44.5

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.2.15

## Contributions to the change in the general government gross debt ratio

(% of GDP)

Euro area		1995	2000	2003	2004	2005	2006	2007	2008
1.	Net borrowing <sup>(1)</sup>	:	0.0	3.1	2.8	2.5	1.6	1.0	0.8
2.	Interest payments	:	3.9	3.3	3.1	3.0	2.9	2.9	2.9
3.	Implicit interest rate <sup>(2)</sup>	:	5.7	5.0	4.6	4.4	4.3	4.4	4.4
4.	Nominal GDP growth rate (%)		4.7	5.3	2.9	4.0	3.3	4.4	4.4
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	:	0.0	3.1	2.8	2.5	1.6	1.0	
6.	Contribution of nominal GDP growth	:	-3.6	-1.9	-2.6	-2.3	-3.0	-3.2	-2.8
7.	Stock-flow adjustment <sup>(3)</sup>	:	1.0	0.1	0.3	0.6	-0.1	0.1	0.2
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	:	-3.9	-0.2	-0.3	-0.5	-1.3	-1.9	-2.0
9.	Snow-ball effect	:	0.3	1.4	0.4	0.7	-0.1	-0.3	0.1
10.	Stock-flow adjustment <sup>(3)</sup>	:	1.0	0.1	0.3	0.6	-0.1	0.1	
11.	Change in gross debt <sup>(5)</sup>	:	-2.6	1.2	0.5	0.8	-1.5	-2.1	-1.8
12.	Level of gross debt (end of year)	:	69.2	69.2	69.7	70.5	69.0	66.9	65.0
<b>EU-27</b>									
1.	Net borrowing <sup>(1)</sup>	:	-0.7	3.1	2.8	2.4	1.7	1.2	1.1
2.	Interest payments	:	3.7	3.0	2.9	2.8	2.7	2.7	2.6
3.	Implicit interest rate <sup>(2)</sup>	:	6.0	5.0	4.8	4.5	4.4	4.5	4.6
4.	Nominal GDP growth rate (%)		4.3	7.2	1.6	4.9	4.0	5.1	4.8
Budgetary constraint based on the deficit									
5.	Deficit (net borrowing) <sup>(1)</sup>	:	-0.7	3.1	2.8	2.4	1.7	1.2	
6.	Contribution of nominal GDP growth	:	-4.4	-1.0	-2.9	-2.4	-3.1	-3.3	-2.7
7.	Stock-flow adjustment <sup>(3)</sup>	:	1.1	-0.5	0.5	0.7	0.3	0.2	0.2
Budgetary constraint based on the primary deficit									
8.	Primary deficit <sup>(4)</sup>	:	-4.4	0.1	-0.1	-0.3	-1.0	-1.4	-1.6
9.	Snow-ball effect	:	-0.8	2.0	-0.1	0.3	-0.4	-0.7	-0.1
10.	Stock-flow adjustment <sup>(3)</sup>	:	1.1	-0.5	0.5	0.7	0.3	0.2	
11.	Change in gross debt <sup>(5)</sup>	:	-4.0	1.6	0.4	0.7	-1.2	-1.9	-1.5
12.	Level of gross debt (end of year)	:	61.8	61.8	62.2	62.9	61.7	59.9	58.4

<sup>(1)</sup> Line 1 = line 5. A minus sign means a surplus.<sup>(2)</sup> Actual interest payments as a percentage of gross debt at the end of t-1.<sup>(3)</sup> Line 7 = line 10.<sup>(4)</sup> Net borrowing excluding interest payments; line 8 = (line 1 minus line 2). A minus sign means a primary surplus.<sup>(5)</sup> Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

Table A.3.1

## Cyclical adjustment of general government revenue, expenditure and budget balances

Belgium	1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>								
1. Actual data	47.6	49.1	51.1	49.2	49.9	49.3	48.5	48.2
2. Cyclical component	-0.2	1.0	-0.4	0.0	-0.5	-0.1	-0.1	-0.1
3. Cyclically adjusted data	47.8	48.1	51.5	49.2	50.4	49.4	48.6	48.4
<b>Total expenditure (% of GDP)</b>								
4. Actual data	51.9	49.1	51.1	49.3	52.3	49.2	48.7	48.5
5. Cyclical component	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0
6. Cyclically adjusted data	51.9	49.2	51.0	49.2	52.1	49.1	48.7	48.5
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-4.4	0.1	0.0	-0.1	-2.4	0.1	-0.2	-0.3
8. Cyclical component	-0.2	1.1	-0.5	0.0	-0.6	-0.1	-0.1	-0.1
9. Cyclically adjusted balance	-4.1	-1.0	0.5	0.0	-1.7	0.4	-0.1	-0.1
(as % of potential GDP)	-3.9	-1.0	0.5	-0.1	-1.7	0.5	0.1	0.1
10. GDP at constant prices (annual % change)	2.4	3.7	1.0	3.0	1.1	3.1	2.3	2.2
11. Potential GDP at constant prices (annual % change)	2.1	2.2	1.9	2.1	2.1	2.5	2.3	2.3
12. Gap between actual and potential GDP (% of potential GDP)	-0.8	2.0	-0.8	0.1	-1.0	-0.5	-0.5	-0.6
<b>Germany</b>								
<b>Total revenue (% of GDP)</b>								
1. Actual data	45.1	46.4	44.5	43.4	43.5	44.0	43.7	43.4
2. Cyclical component	0.2	0.8	-0.5	-0.6	-0.9	-0.5	-0.2	0.1
3. Cyclically adjusted data	44.9	45.7	45.0	44.0	44.4	44.4	43.9	43.4
<b>Total expenditure (% of GDP)</b>								
4. Actual data	48.3	45.1	48.5	47.1	46.8	45.7	44.3	43.7
5. Cyclical component	0.0	-0.2	0.2	0.2	0.2	0.1	0.0	0.0
6. Cyclically adjusted data	48.3	45.3	48.3	46.9	46.5	45.6	44.3	43.7
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-3.2	1.3	-4.0	-3.7	-3.2	-1.7	-0.6	-0.3
8. Cyclical component	0.2	1.0	-0.7	-0.8	-1.1	-0.6	-0.2	0.1
9. Cyclically adjusted balance	-3.4	0.4	-3.3	-2.9	-2.1	-1.1	-0.4	-0.4
(as % of potential GDP)	-3.2	0.6	-3.1	-2.9	-2.3	-1.5	-0.8	-0.7
10. GDP at constant prices (annual % change)	1.9	3.2	-0.2	1.2	0.9	2.7	2.5	2.4
11. Potential GDP at constant prices (annual % change)	2.1	1.6	1.3	1.2	1.1	1.2	1.7	1.8
12. Gap between actual and potential GDP (% of potential GDP)	-0.1	1.4	-1.6	-1.5	-1.8	-0.3	0.4	0.9

Source: Commission services.

Table A.3.2

## Cyclical adjustment of general government revenue, expenditure and budget balances

Ireland		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	39.1	36.2	33.9	35.5	35.5	36.9	36.6	36.4
2.	Cyclical component	-1.8	2.3	0.6	0.0	0.0	0.2	0.3	0.1
3.	Cyclically adjusted data	40.8	33.9	33.3	35.4	35.5	36.7	36.3	36.3
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	41.0	31.6	33.5	34.0	34.4	34.1	35.2	35.5
5.	Cyclical component	0.2	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	40.8	31.9	33.6	34.1	34.4	34.1	35.2	35.5
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-2.0	4.6	0.4	1.4	1.0	2.9	1.5	0.9
8.	Cyclical component	-2.0	2.5	0.7	0.0	0.0	0.3	0.3	0.1
9.	Cyclically adjusted balance	0.0	2.1	-0.3	1.4	1.0	2.6	1.2	0.9
	(as % of potential GDP)	-0.4	2.5	-0.2	1.3	1.1	3.0	1.8	1.6
10.	GDP at constant prices (annual % change)	9.8	10.2	4.3	4.3	5.5	6.0	5.0	4.0
11.	Potential GDP at constant prices (annual % change)	7.4	8.1	6.1	5.8	6.0	6.1	5.5	4.8
12.	Gap between actual and potential GDP (% of potential GDP)	-3.4	5.7	1.6	0.1	-0.3	-0.4	-0.9	-1.6
<b>Greece</b>		<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Total revenue (% of GDP)</b>									
1.	Actual data	40.9	47.1	43.2	41.9	41.6	43.2	43.0	42.5
2.	Cyclical component	-0.7	-0.2	0.4	0.6	0.4	0.5	0.3	0.3
3.	Cyclically adjusted data	41.6	47.3	42.8	41.4	41.2	42.7	42.7	42.2
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	51.0	51.2	49.5	49.8	47.3	46.1	45.5	45.3
5.	Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	51.0	51.1	49.4	49.9	47.1	45.8	45.5	45.2
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
	Actual balance	-10.2	-4.1	-6.3	-7.8	-5.7	-2.9	-2.5	-2.8
8.	Cyclical component	-0.7	-0.3	0.4	0.6	0.4	0.5	0.4	0.3
9.	Cyclically adjusted balance	-9.4	-3.8	-6.6	-8.6	-5.9	-3.1	-2.8	-3.0
	(as % of potential GDP)	-9.0	-3.4	-6.5	-8.7	-6.2	-3.4	-3.1	-3.5
10.	GDP at constant prices (annual % change)	2.1	4.5	4.8	4.7	3.7	4.3	3.7	3.7
11.	Potential GDP at constant prices (annual % change)	2.2	3.9	4.1	3.7	3.8	4.0	3.8	3.7
12.	Gap between actual and potential GDP (% of potential GDP)	-2.4	-1.3	0.6	1.5	1.4	1.7	1.5	1.6

Source: Commission services.

Table A.3.3

## Cyclical adjustment of general government revenue, expenditure and budget balances

Spain	1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>								
1. Actual data	38.0	38.1	38.2	38.6	39.3	40.3	39.7	39.7
2. Cyclical component	-0.8	0.7	0.1	0.0	-0.1	0.0	-0.1	-0.2
3. Cyclically adjusted data	38.7	37.5	38.1	38.6	39.4	40.3	39.7	39.9
<b>Total expenditure (% of GDP)</b>								
4. Actual data	44.4	39.0	38.2	38.8	38.2	38.5	38.3	38.5
5. Cyclical component	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	44.3	39.1	38.2	38.7	38.2	38.4	38.3	38.5
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-6.5	-0.9	0.0	-0.2	1.1	1.8	1.4	1.2
8. Cyclical component	-0.9	0.7	0.2	0.0	-0.1	0.0	-0.1	-0.2
9. Cyclically adjusted balance (as % of potential GDP)	-5.6	-1.6	-0.2	-0.2	1.2	1.8	1.4	1.4
10. GDP at constant prices (annual % change)	2.8	5.0	3.0	3.2	3.5	3.9	3.7	3.4
11. Potential GDP at constant prices (annual % change)	2.7	3.5	4.0	4.0	4.2	3.8	3.7	3.6
12. Gap between actual and potential GDP (% of potential GDP)	-3.2	2.2	0.1	-0.6	-1.2	-1.1	-1.0	-1.3
<b>France</b>								
<b>Total revenue (% of GDP)</b>								
1. Actual data	49.0	50.2	49.2	49.6	50.7	51.0	50.7	50.8
2. Cyclical component	-0.5	1.0	-0.1	0.0	-0.4	-0.5	-0.3	-0.3
3. Cyclically adjusted data	49.4	49.2	49.2	49.5	51.0	51.4	51.1	51.1
<b>Total expenditure (% of GDP)</b>								
4. Actual data	54.5	51.6	53.3	53.2	53.7	53.5	53.2	52.7
5. Cyclical component	0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.0
6. Cyclically adjusted data	54.4	51.7	53.3	53.2	53.6	53.4	53.1	52.7
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-5.5	-1.5	-4.1	-3.6	-3.0	-2.6	-2.4	-2.0
8. Cyclical component	-0.5	1.1	-0.1	0.0	-0.4	-0.5	-0.4	-0.4
9. Cyclically adjusted balance (as % of potential GDP)	-4.9	-2.5	-4.0	-3.6	-2.5	-2.0	-2.0	-1.6
10. GDP at constant prices (annual % change)	2.2	4.0	1.1	2.3	1.2	2.0	2.4	2.3
11. Potential GDP at constant prices (annual % change)	1.9	2.4	2.1	2.1	2.1	2.2	2.3	2.3
12. Gap between actual and potential GDP (% of potential GDP)	-1.3	2.4	-0.1	0.1	-0.8	-1.0	-0.9	-0.9

Source: Commission services.



Table A.3.4

## Cyclical adjustment of general government revenue, expenditure and budget balances

Italy	1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>								
1. Actual data	45.1	45.3	44.8	44.2	44.0	45.6	46.0	46.1
2. Cyclical component	-0.1	0.8	-0.1	-0.1	-0.7	-0.4	-0.2	0.0
3. Cyclically adjusted data	45.2	44.5	44.9	44.3	44.7	46.1	46.2	46.1
<b>Total expenditure (% of GDP)</b>								
4. Actual data	52.5	46.2	48.3	47.7	48.3	50.1	48.1	48.3
5. Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	52.5	46.2	48.3	47.7	48.1	50.0	48.1	48.3
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-7.4	-0.9	-3.5	-3.5	-4.4	-4.5	-2.1	-2.2
8. Cyclical component	-0.1	0.8	-0.1	-0.1	-0.7	-0.5	-0.2	0.0
9. Cyclically adjusted balance	-7.3	-1.7	-3.4	-3.3	-3.4	-4.0	-1.9	-2.2
(as % of potential GDP)	-7.3	-1.8	-3.3	-3.2	-3.3	-3.7	-1.5	-1.7
10. GDP at constant prices (annual % change)	2.8	3.6	0.0	1.2	0.1	1.9	1.9	1.7
11. Potential GDP at constant prices (annual % change)	1.4	1.6	1.3	1.4	1.3	1.6	1.5	1.7
12. Gap between actual and potential GDP (% of potential GDP)	-0.1	1.9	-0.3	-0.4	-1.6	-1.3	-1.0	-0.9
<b>Luxembourg</b>								
<b>Total revenue (% of GDP)</b>								
1. Actual data	42.1	43.6	42.5	41.9	42.6	40.5	39.4	38.6
2. Cyclical component	-0.9	2.0	-0.6	-0.9	-1.0	-0.1	0.2	0.5
3. Cyclically adjusted data	43.0	41.6	43.1	42.9	43.6	40.7	39.2	38.1
<b>Total expenditure (% of GDP)</b>								
4. Actual data	39.7	37.6	42.0	43.2	42.8	40.4	39.0	38.0
5. Cyclical component	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	39.7	37.6	42.0	43.1	42.8	40.4	39.0	38.0
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	2.4	6.0	0.4	-1.2	-0.3	0.1	0.4	0.6
8. Cyclical component	-0.9	2.0	-0.6	-0.9	-1.1	-0.1	0.3	0.6
9. Cyclically adjusted balance	3.3	4.0	1.0	-0.3	0.8	0.2	0.2	0.1
(as % of potential GDP)		4.1						
10. GDP at constant prices (annual % change)	1.4	8.4	1.3	3.6	4.0	6.2	5.0	4.7
11. Potential GDP at constant prices (annual % change)	4.5	4.9	4.5	4.1	4.3	4.3	4.6	4.7
12. Gap between actual and potential GDP (% of potential GDP)	-2.0	4.6	-1.8	-2.2	-2.5	-0.8	-0.4	-0.4

Source: Commission services.

Table A.3.5

## Cyclical adjustment of general government revenue, expenditure and budget balances

Netherlands		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	47.2	46.1	43.9	44.5	45.2	47.2	46.3	46.3
2.	Cyclical component	-0.7	1.5	-0.4	-0.5	-0.7	-0.5	-0.3	-0.2
3.	Cyclically adjusted data	48.0	44.7	44.3	45.0	45.9	47.7	46.6	46.4
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	51.6	44.2	47.1	46.3	45.5	46.7	47.0	46.3
5.	Cyclical component	0.3	-0.6	0.2	0.2	0.3	0.2	0.1	0.1
6.	Cyclically adjusted data	51.3	44.7	46.9	46.1	45.1	46.4	46.9	46.2
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-4.3	2.0	-3.1	-1.8	-0.3	0.5	-0.7	0.0
8.	Cyclical component	-1.0	2.0	-0.6	-0.7	-1.1	-0.7	-0.4	-0.2
9.	Cyclically adjusted balance	-3.3	-0.1	-2.6	-1.1	0.8	1.3	-0.3	0.3
	(as % of potential GDP)	-3.4	0.2	-2.1	-1.0	0.7	1.1	-0.4	0.1
10.	GDP at constant prices (annual % change)	3.0	3.9	0.3	2.0	1.5	2.9	2.8	2.6
11.	Potential GDP at constant prices (annual % change)	2.8	3.0	2.0	1.7	1.8	2.1	2.2	2.3
12.	Gap between actual and potential GDP (% of potential GDP)	-1.4	3.2	-1.7	-1.5	-1.8	-1.0	-0.4	-0.1
<b>Austria</b>		<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Total revenue (% of GDP)</b>									
1.	Actual data	50.3	49.8	49.3	49.0	48.2	48.0	47.4	47.1
2.	Cyclical component	-0.2	0.9	-0.6	-0.5	-0.5	-0.2	0.1	0.2
3.	Cyclically adjusted data	50.5	48.8	49.9	49.5	48.8	48.1	47.3	46.9
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	56.0	51.4	51.1	50.3	49.9	49.2	48.4	48.1
5.	Cyclical component	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	55.9	51.3	50.9	50.2	49.8	49.1	48.3	48.0
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-5.7	-1.6	-1.8	-1.3	-1.7	-1.2	-1.0	-0.9
8.	Cyclical component	-0.3	1.0	-0.7	-0.5	-0.6	-0.2	0.1	0.3
9.	Cyclically adjusted balance	-5.4	-2.5	-1.0	-0.7	-1.0	-0.9	-1.0	-1.1
	(as % of potential GDP)	-5.2	-2.5	-0.9	-0.6	-1.1	-1.0	-1.1	-1.2
10.	GDP at constant prices (annual % change)	1.9	3.4	1.1	2.4	2.0	3.1	2.9	2.5
11.	Potential GDP at constant prices (annual % change)	2.2	2.4	2.2	2.0	1.9	2.2	2.2	2.2
12.	Gap between actual and potential GDP (% of potential GDP)	-0.9	2.2	-1.6	-1.2	-1.1	-0.2	0.5	0.8

Source: Commission services.

Table A.3.6

## Cyclical adjustment of general government revenue, expenditure and budget balances

Portugal		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	37.6	40.2	42.5	43.1	41.4	42.2	42.3	42.3
2.	Cyclical component	-1.0	1.4	-0.1	-0.2	-0.7	-0.8	-0.8	-0.7
3.	Cyclically adjusted data	38.6	38.8	42.6	43.3	42.1	43.1	43.1	43.0
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	42.8	43.1	45.5	46.4	47.5	46.1	45.8	45.5
5.	Cyclical component	0.1	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
6.	Cyclically adjusted data	42.7	43.2	45.4	46.4	47.5	46.1	45.8	45.4
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-5.2	-3.0	-2.9	-3.3	-6.0	-3.9	-3.5	-3.2
8.	Cyclical component	-1.1	1.5	-0.1	-0.2	-0.7	-0.9	-0.9	-0.8
9.	Cyclically adjusted balance	-4.1	-4.4	-2.8	-3.1	-5.3	-3.0	-2.6	-2.4
	(as % of potential GDP)	-4.1	-4.3	-2.4	-2.7	-5.0	-2.9	-2.7	-2.6
10.	GDP at constant prices (annual % change)	4.3	3.9	-0.7	1.3	0.5	1.3	1.8	2.0
11.	Potential GDP at constant prices (annual % change)	2.7	2.8	1.6	1.6	1.3	1.3	1.3	1.5
12.	Gap between actual and potential GDP (% of potential GDP)	-2.6	3.1	-1.1	-1.3	-2.1	-2.1	-1.7	-1.2
<b>Slovenia</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	44.3	45.3	45.1	45.6	44.8	43.9	42.9
2.	Cyclical component	:	0.5	-0.6	-0.4	-0.4	0.1	0.2	0.2
3.	Cyclically adjusted data	:	43.8	45.8	45.5	45.9	44.8	43.7	42.7
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	48.1	48.0	47.4	47.0	46.3	45.4	44.4
5.	Cyclical component	:	-0.1	0.1	0.1	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	:	48.2	48.0	47.4	47.0	46.3	45.5	44.4
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	-3.8	-2.8	-2.3	-1.5	-1.4	-1.5	-1.5
8.	Cyclical component	:	0.6	-0.7	-0.4	-0.4	0.1	0.2	0.3
9.	Cyclically adjusted balance	:	-4.5	-2.1	-1.8	-1.1	-1.5	-1.8	-1.7
	(as % of potential GDP)	:	-4.4	-2.0	-1.7	-1.1	-1.5	-1.8	-1.7
10.	GDP at constant prices (annual % change)	4.1	4.1	2.7	4.4	4.0	5.2	4.3	4.0
11.	Potential GDP at constant prices (annual % change)	:	4.4	3.8	3.8	3.7	4.0	4.0	4.0
12.	Gap between actual and potential GDP (% of potential GDP)	:	1.1	-1.7	-1.2	-0.9	0.2	0.5	0.4

Source: Commission services.

Table A.3.7

## Cyclical adjustment of general government revenue, expenditure and budget balances

Finland		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	55.4	55.2	52.4	52.3	53.0	52.3	51.3	50.9
2.	Cyclical component	-2.0	1.4	-0.4	-0.2	-0.3	0.5	0.5	0.4
3.	Cyclically adjusted data	57.3	53.9	52.7	52.5	53.4	51.8	50.8	50.5
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	61.6	48.3	50.0	50.2	50.5	48.6	47.8	47.4
5.	Cyclical component	0.5	-0.3	0.1	0.0	0.1	-0.1	-0.1	-0.1
6.	Cyclically adjusted data	61.1	48.6	49.8	49.9	50.2	48.6	47.8	47.4
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-6.2	6.9	2.3	2.1	2.5	3.8	3.6	3.5
8.	Cyclical component	-2.4	1.7	-0.4	-0.2	-0.4	0.6	0.6	0.5
9.	Cyclically adjusted balance	-3.7	5.3	2.9	2.6	3.2	3.2	3.1	3.1
	(as % of potential GDP)	-4.3	5.6	3.3	2.9	3.5	3.7	3.5	3.6
10.	GDP at constant prices (annual % change)	3.9	5.0	1.8	3.7	2.9	5.5	3.1	2.7
11.	Potential GDP at constant prices (annual % change)	1.9	3.9	3.4	3.3	3.3	3.3	3.2	3.1
12.	Gap between actual and potential GDP (% of potential GDP)	-3.2	3.1	-1.7	-1.3	-1.6	0.4	0.3	-0.1

Source: Commission services.

Table A.3.8

## Cyclical adjustment of general government revenue, expenditure and budget balances

<b>Bulgaria</b>		<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	:	40.0	41.4	41.4	39.9	39.3	39.6
2.	Cyclical component	:	-1.7	-0.8	-0.1	0.4	0.7	1.0	1.4
3.	Cyclically adjusted data	:	:	40.8	41.5	41.0	39.2	38.3	38.2
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	:	40.9	39.3	39.5	36.6	37.3	37.6
5.	Cyclical component	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	:	:	40.9	39.3	39.5	36.6	37.4	37.6
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-3.4	-0.5	-0.9	2.2	1.9	3.3	2.0	2.0
8.	Cyclical component	:	-1.7	-0.8	-0.1	0.4	0.7	1.0	1.4
9.	Cyclically adjusted balance	:	1.3	-0.1	2.2	1.5	2.6	0.9	0.6
	(as % of potential GDP)	:	-1.4	-0.9	1.7	1.3	2.9	1.6	1.9
10.	GDP at constant prices (annual % change)	2.9	5.4	5.0	6.6	6.2	6.1	6.1	6.2
11.	Potential GDP at constant prices (annual % change)	:	1.1	5.0	5.5	6.2	6.2	6.4	6.6
12.	Gap between actual and potential GDP (% of potential GDP)	10.6	1.8	0.0	1.1	1.2	1.0	0.7	0.3
<b>Czech Republic</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data	41.0	38.1	40.7	41.5	40.4	39.5	39.2	39.4
2.	Cyclical component	0.8	-0.4	-1.0	-0.9	-0.2	0.3	0.4	0.5
3.	Cyclically adjusted data	40.2	38.5	41.7	42.4	40.7	39.2	38.8	38.9
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	54.5	41.8	47.3	44.4	44.0	42.5	43.0	42.7
5.	Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	54.5	41.8	47.3	44.4	44.0	42.5	43.1	43.0
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-13.4	-3.7	-6.6	-2.9	-3.5	-2.9	-3.7	-3.3
8.	Cyclical component	0.9	-0.4	-1.0	-0.9	-0.3	0.3	0.4	0.5
9.	Cyclically adjusted balance	-14.3	-3.3	-5.6	-2.0	-3.3	-3.3	-4.3	-4.2
	(as % of potential GDP)	:	-3.0	-5.4	-1.8	-3.1	-3.1	-4.1	-3.9
10.	GDP at constant prices (annual % change)	5.9	3.6	3.6	4.2	6.1	6.1	4.9	4.9
11.	Potential GDP at constant prices (annual % change)	:	1.8	3.7	4.1	4.2	4.6	4.8	4.9
12.	Gap between actual and potential GDP (% of potential GDP)	:	-1.8	-2.9	-2.8	-1.1	0.4	0.5	0.5

Source: Commission services.

Table A.3.9

## Cyclical adjustment of general government revenue, expenditure and budget balances

Denmark		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	56.4	55.8	55.0	56.7	57.2	55.1	53.8	53.1
2.	Cyclical component	0.0	1.3	-1.0	-0.9	-0.4	0.1	0.2	0.0
3.	Cyclically adjusted data	56.4	54.5	55.9	57.6	57.7	55.1	53.6	53.1
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	59.2	53.6	55.1	54.8	52.6	50.9	50.3	49.7
5.	Cyclical component	0.0	-0.4	0.3	0.3	0.1	0.0	0.0	0.0
6.	Cyclically adjusted data	59.2	53.9	54.7	54.5	52.5	51.0	50.2	49.6
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-2.9	2.3	-0.1	1.9	4.6	4.2	3.5	3.4
8.	Cyclical component	0.0	1.7	-1.2	-1.2	-0.6	0.1	0.2	0.1
9.	Cyclically adjusted balance	-2.8	0.7	1.2	3.2	5.2	4.1	3.5	3.5
	(as % of potential GDP)	-2.8	0.8	1.0	2.8	4.9	4.0	3.6	3.8
10.	GDP at constant prices (annual % change)	3.1	3.5	0.4	2.1	3.1	3.2	2.3	2.0
11.	Potential GDP at constant prices (annual % change)	2.3	2.3	1.8	1.9	2.1	2.4	2.5	2.5
12.	Gap between actual and potential GDP (% of potential GDP)	-0.1	2.6	-1.6	-1.3	-0.5	0.3	0.1	-0.4
<b>Estonia</b>		<b>1995</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Total revenue (% of GDP)</b>									
1.	Actual data	42.8	36.2	37.4	36.6	35.5	37.0	36.2	35.9
2.	Cyclical component	0.7	-0.9	-0.8	-0.8	-0.2	0.7	0.8	0.8
3.	Cyclically adjusted data	42.1	37.1	38.2	37.4	35.7	36.3	35.3	35.1
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	42.4	36.5	35.3	34.2	33.2	33.2	32.4	32.4
5.	Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	42.5	36.4	35.3	34.2	33.1	33.2	32.5	32.4
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	0.4	-0.2	2.0	2.3	2.3	3.8	3.7	3.5
8.	Cyclical component	0.7	-0.9	-0.9	-0.8	-0.2	0.7	0.9	0.9
9.	Cyclically adjusted balance	-0.4	0.7	2.9	3.2	2.5	3.1	2.9	2.6
	(as % of potential GDP)	2.4	0.4	2.3	2.8	2.4	3.3	3.5	3.8
10.	GDP at constant prices (annual % change)	4.5	7.9	7.1	8.1	10.5	11.4	8.7	8.2
11.	Potential GDP at constant prices (annual % change)	:	5.7	7.9	8.6	8.9	9.5	9.8	9.9
12.	Gap between actual and potential GDP (% of potential GDP)	-6.0	-2.1	-1.0	-1.5	-0.1	1.7	0.7	-0.9

Source: Commission services.

Table A.3.10

## Cyclical adjustment of general government revenue, expenditure and budget balances

Cyprus		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	34.7	38.8	38.8	41.2	42.4	42.6	42.6
2.	Cyclical component	:	0.5	-0.5	-0.3	-0.2	-0.1	0.0	0.1
3.	Cyclically adjusted data	:	34.1	39.3	39.1	41.4	42.5	42.6	42.5
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	37.0	45.1	42.9	43.6	43.9	44.0	43.9
5.	Cyclical component	:	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	:	37.0	45.1	42.9	43.6	43.9	44.0	43.9
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	-2.3	-6.3	-4.1	-2.3	-1.5	-1.4	-1.4
8.	Cyclical component	:	0.6	-0.5	-0.3	-0.2	-0.1	0.0	0.1
9.	Cyclically adjusted balance	:	-2.9	-5.8	-3.8	-2.2	-1.4	-1.4	-1.5
	(as % of potential GDP)	:	-3.1	-6.1	-3.8	-1.8	-1.2	-1.1	-1.1
10.	GDP at constant prices (annual % change)		9.9	5.0	1.8	4.2	3.9	3.8	3.9
11.	Potential GDP at constant prices (annual % change)	:	3.3	3.8	4.4	4.4	3.5	3.6	3.7
12.	Gap between actual and potential GDP (% of potential GDP)		0.9	2.1	-0.5	-0.7	-1.2	-1.0	-0.8
<b>Latvia</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data		36.8	34.6	33.2	34.7	35.2	37.4	37.5
2.	Cyclical component		1.0	-0.7	-0.9	-0.8	-0.2	0.6	0.9
3.	Cyclically adjusted data		35.9	35.3	34.1	35.5	35.5	36.8	36.6
<b>Total expenditure (% of GDP)</b>									
4.	Actual data		38.8	37.3	34.8	35.8	35.5	37.0	37.3
5.	Cyclical component		-0.1	0.0	0.1	0.1	0.0	-0.1	-0.1
6.	Cyclically adjusted data		38.9	37.3	34.7	35.7	35.4	37.0	37.4
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance		-2.0	-2.8	-1.6	-1.0	-0.2	0.4	0.2
8.	Cyclical component		1.0	-0.8	-1.0	-0.8	-0.2	0.7	1.0
9.	Cyclically adjusted balance		-3.0	-2.0	-0.6	-0.2	0.0	-0.2	-0.9
	(as % of potential GDP)		-0.1	-2.4	-1.3	-0.7	-0.2	0.1	0.4
10.	GDP at constant prices (annual % change)		-0.9	6.9	7.2	8.7	10.6	11.9	9.6
11.	Potential GDP at constant prices (annual % change)	:	6.1	7.7	8.7	9.7	10.2	10.2	10.0
12.	Gap between actual and potential GDP (% of potential GDP)		-5.6	-1.3	-1.0	-1.0	-0.2	1.4	0.8

Source: Commission services.

Table A.3.11

## Cyclical adjustment of general government revenue, expenditure and budget balances

Lithuania		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	34.1	35.9	32.0	31.8	33.1	33.3	34.4	34.9
2.	Cyclical component	0.2	-1.3	-0.1	0.1	0.3	0.5	0.8	0.8
3.	Cyclically adjusted data	33.9	37.2	32.0	31.7	32.8	32.8	33.7	34.2
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	35.7	39.1	33.2	33.4	33.6	33.6	34.8	36.0
5.	Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	35.7	39.1	33.2	33.4	33.6	33.6	34.9	36.0
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	-1.6	-3.2	-1.3	-1.5	-0.5	-0.3	-0.4	-1.0
8.	Cyclical component	0.2	-1.4	-0.1	0.1	0.3	0.6	0.8	0.8
9.	Cyclically adjusted balance (as % of potential GDP)	-1.8	-1.9	-1.2	-1.6	-0.8	-0.8	-1.2	-1.8
		0.1	-2.2	-1.9	-2.0	-0.9	-0.6	-0.6	-1.0
10.	GDP at constant prices (annual % change)	3.3	4.1	10.3	7.3	7.6	7.5	7.3	6.3
11.	Potential GDP at constant prices (annual % change)	:	4.0	7.0	7.7	7.9	7.6	8.1	7.0
12.	Gap between actual and potential GDP (% of potential GDP)	-6.1	-3.2	2.1	1.7	1.4	1.3	0.6	-0.1
<b>Hungary</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	43.6	41.9	42.5	42.2	43.7	44.0	44.1
2.	Cyclical component	0.6	0.0	0.1	0.5	0.6	0.8	0.3	-0.1
3.	Cyclically adjusted data	:	43.5	41.9	42.0	41.5	43.0	43.8	44.2
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	46.5	49.1	48.9	50.0	53.0	50.9	49.0
5.	Cyclical component	:	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	:	46.5	49.2	48.9	50.0	52.9	50.9	49.0
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	-3.0	-7.2	-6.4	-7.8	-9.2	-6.8	-4.9
8.	Cyclical component	:	0.0	0.1	0.5	0.7	0.8	0.3	-0.1
9.	Cyclically adjusted balance (as % of potential GDP)	:	-2.9	-7.3	-6.9	-8.5	-10.0	-7.1	-4.8
		:	-2.8	-6.8	-6.5	-8.0	-9.7	-6.9	-4.7
10.	GDP at constant prices (annual % change)	1.5	5.2	4.1	4.9	4.2	3.9	2.4	2.6
11.	Potential GDP at constant prices (annual % change)	:	4.4	4.1	4.0	3.8	3.4	3.2	3.1
12.	Gap between actual and potential GDP (% of potential GDP)	1.6	-0.3	-0.7	0.1	0.5	1.0	0.2	-0.4

Source: Commission services.



Table A.3.12

## Cyclical adjustment of general government revenue, expenditure and budget balances

Malta	1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>								
1. Actual data	:	34.9	38.6	41.9	42.9	42.7	42.2	41.9
2. Cyclical component	:	1.7	-0.7	-1.2	-0.8	-0.4	0.0	0.3
3. Cyclically adjusted data	:	33.2	39.3	43.1	43.7	43.1	42.2	41.6
<b>Total expenditure (% of GDP)</b>								
4. Actual data	:	41.0	48.6	46.8	46.0	45.2	44.3	43.4
5. Cyclical component	:	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	:	41.1	48.6	46.8	46.0	45.2	44.3	43.5
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	:	-6.2	-10.0	-4.9	-3.1	-2.6	-2.1	-1.6
8. Cyclical component	:	1.7	-0.7	-1.2	-0.8	-0.4	0.0	0.3
9. Cyclically adjusted balance	:	-7.9	-9.3	-3.7	-2.3	-2.1	-2.1	-1.9
(as % of potential GDP)	:	-8.2	-9.0	-3.5	-2.1	-2.0	-1.9	-1.6
10. GDP at constant prices (annual % change)		6.2	6.4	-2.3	0.4	3.0	2.9	3.0
11. Potential GDP at constant prices (annual % change)	:	3.7	1.8	1.8	2.0	1.8	2.1	2.1
12. Gap between actual and potential GDP (% of potential GDP)		-1.4	5.5	-2.1	-3.4	-2.5	-1.5	-0.6
<b>Poland</b>								
<b>Total revenue (% of GDP)</b>								
1. Actual data		43.3	38.0	38.4	36.9	39.0	39.4	38.0
2. Cyclical component		-1.0	0.8	-1.0	-0.6	-0.7	-0.2	0.4
3. Cyclically adjusted data		44.3	37.3	39.4	37.5	39.8	39.6	37.1
<b>Total expenditure (% of GDP)</b>								
4. Actual data		47.7	41.1	44.6	42.6	43.4	43.3	42.4
5. Cyclical component		0.2	-0.2	0.2	0.1	0.1	0.0	-0.1
6. Cyclically adjusted data		47.5	41.2	44.5	42.5	43.2	43.3	42.5
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance		-4.4	-3.0	-6.3	-5.7	-4.3	-3.9	-3.4
8. Cyclical component		-1.2	0.9	-1.2	-0.7	-0.9	-0.2	0.5
9. Cyclically adjusted balance		-3.3	-3.9	-5.1	-5.0	-3.4	-3.7	-4.0
(as % of potential GDP)		-3.4	-3.3	-5.7	-5.8	-4.1	-4.0	-3.6
10. GDP at constant prices (annual % change)		7.0	4.2	3.8	5.3	3.5	5.8	6.1
11. Potential GDP at constant prices (annual % change)	:	3.3	3.0	3.6	4.3	5.2	5.9	6.1
12. Gap between actual and potential GDP (% of potential GDP)		-2.2	0.7	-1.3	0.3	-0.4	0.1	0.4

Source: Commission services.

Table A.3.13

## Cyclical adjustment of general government revenue, expenditure and budget balances

Romania		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	43.8	32.1	31.1	32.4	30.1	30.4	31.0
2.	Cyclical component	:	-3.0	-0.8	0.2	-0.2	0.4	0.7	0.8
3.	Cyclically adjusted data	:	46.8	32.9	30.9	32.5	29.7	29.7	30.2
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	40.6	33.6	32.6	33.7	32.0	33.6	34.2
5.	Cyclical component	:	0.2	0.0	0.0	0.0	0.0	0.0	0.0
6.	Cyclically adjusted data	:	48.3	33.5	32.6	33.7	32.0	33.6	34.2
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	3.2	-1.5	-1.5	-1.4	-1.9	-3.2	-3.2
8.	Cyclical component	:	-3.1	-0.9	0.2	-0.2	0.4	0.7	0.8
9.	Cyclically adjusted balance	:	-1.5	-0.6	-1.7	-1.2	-2.3	-3.9	-4.0
	(as % of potential GDP)	:	-1.2	-0.6	-1.7	-1.2	-2.2	-3.5	-3.3
10.	GDP at constant prices (annual % change)		7.1	2.1	5.2	8.5	4.1	7.7	6.7
11.	Potential GDP at constant prices (annual % change)	:	2.1	4.1	4.8	5.4	6.1	6.7	7.1
12.	Gap between actual and potential GDP (% of potential GDP)		4.7	-7.6	-2.7	0.7	-0.5	0.9	0.9
<b>Slovakia</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data		45.2	39.8	37.2	35.3	35.2	33.9	32.8
2.	Cyclical component		-0.4	-0.7	-1.0	-0.9	-0.8	0.0	0.7
3.	Cyclically adjusted data		45.7	40.5	38.3	36.2	36.0	34.0	32.0
<b>Total expenditure (% of GDP)</b>									
4.	Actual data		47.0	51.7	40.0	37.7	38.1	37.3	35.6
5.	Cyclical component		0.0	0.0	0.1	0.1	0.0	0.0	-0.1
6.	Cyclically adjusted data		47.0	51.6	39.9	37.6	38.0	37.3	35.6
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance		-1.8	-11.8	-2.7	-2.4	-2.8	-3.4	-2.9
8.	Cyclical component		-0.5	-0.7	-1.1	-1.0	-0.8	-0.1	0.7
9.	Cyclically adjusted balance		-1.3	-11.1	-1.6	-1.4	-2.0	-3.3	-3.6
	(as % of potential GDP)	:	-10.8	-1.9	-1.6	-2.0	-3.3	-3.4	-3.4
10.	GDP at constant prices (annual % change)		5.8	0.7	4.2	5.4	6.0	8.3	8.5
11.	Potential GDP at constant prices (annual % change)	:	2.4	4.5	5.1	6.0	6.0	6.3	6.4
12.	Gap between actual and potential GDP (% of potential GDP)	:	-2.4	-2.8	-2.5	-2.4	-0.4	1.7	1.8

Source: Commission services.

Table A.3.14

## Cyclical adjustment of general government revenue, expenditure and budget balances

Sweden	1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>								
1. Actual data	59.7	60.9	57.1	57.4	58.4	57.5	55.2	54.9
2. Cyclical component	-0.4	1.3	-0.7	-0.2	-0.4	0.2	0.4	0.5
3. Cyclically adjusted data	60.1	59.6	57.8	57.6	58.7	57.3	54.8	54.4
<b>Total expenditure (% of GDP)</b>								
4. Actual data	67.1	57.1	58.2	56.8	56.5	55.4	53.0	52.5
5. Cyclical component	0.1	-0.2	0.1	0.0	0.1	0.0	-0.1	-0.1
6. Cyclically adjusted data	67.1	57.3	57.8	56.5	56.2	55.3	53.1	52.6
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-7.4	3.8	-1.1	0.6	1.8	2.1	2.3	2.4
8. Cyclical component	-0.5	1.5	-0.9	-0.3	-0.4	0.2	0.5	0.5
9. Cyclically adjusted balance	-7.0	2.3	0.0	1.1	2.5	2.0	1.7	1.8
(as % of potential GDP)	-6.4	2.8	0.2	1.2	2.5	2.1	1.9	1.9
10. GDP at constant prices (annual % change)	3.9	4.3	1.7	4.1	2.9	4.4	3.8	3.3
11. Potential GDP at constant prices (annual % change)	2.2	2.9	2.8	3.0	3.0	3.5	3.4	3.0
12. Gap between actual and potential GDP (% of potential GDP)	-1.8	1.9	-1.8	-0.7	-0.8	0.2	0.6	0.8
<b>United Kingdom</b>								
<b>Total revenue (% of GDP)</b>								
1. Actual data	38.6	40.7	39.2	39.5	40.6	41.3	41.6	41.9
2. Cyclical component	-0.3	0.5	0.0	0.2	0.0	0.0	0.2	0.2
3. Cyclically adjusted data	38.9	40.2	39.2	39.3	40.7	41.3	41.4	41.7
<b>Total expenditure (% of GDP)</b>								
4. Actual data	44.3	36.8	42.4	42.7	43.7	44.1	44.2	44.3
5. Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	44.3	36.8	42.4	42.7	43.7	44.1	44.2	44.3
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>								
7. Actual balance	-5.7	4.0	-3.2	-3.2	-3.1	-2.8	-2.6	-2.4
8. Cyclical component	-0.3	0.5	0.0	0.2	0.0	0.0	0.2	0.2
9. Cyclically adjusted balance	-5.4	3.4	-3.2	-3.4	-3.0	-2.8	-2.8	-2.6
(as % of potential GDP)	-5.6	3.5	-3.3	-3.5	-3.0	-2.7	-2.5	-2.2
10. GDP at constant prices (annual % change)	2.9	3.8	2.7	3.3	1.9	2.8	2.8	2.5
11. Potential GDP at constant prices (annual % change)	2.5	3.0	2.7	2.7	2.8	2.8	2.8	2.6
12. Gap between actual and potential GDP (% of potential GDP)	-0.5	1.3	0.0	0.5	-0.3	-0.4	-0.4	-0.5

Source: Commission services.

Table A.3.15

## Cyclical adjustment of general government revenue, expenditure and budget balances

Euro area		1995	2000	2003	2004	2005	2006	2007	2008
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	46.3	45.1	44.8	45.1	45.8	45.5	45.4
2.	Cyclical component	:	0.9	-0.2	-0.2	-0.6	-0.3	-0.2	-0.1
3.	Cyclically adjusted data	:	45.4	45.3	45.0	45.7	46.1	45.7	45.5
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	46.3	48.2	47.6	47.6	47.4	46.5	46.2
5.	Cyclical component	:	-0.2	0.1	0.1	0.1	0.1	0.0	0.0
6.	Cyclically adjusted data	:	46.5	48.1	47.5	47.4	47.3	46.5	46.2
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	0.0	-3.1	-2.8	-2.5	-1.6	-1.0	-0.8
8.	Cyclical component	:	1.0	-0.3	-0.3	-0.7	-0.4	-0.2	-0.1
9.	Cyclically adjusted balance	:	-1.0	-2.8	-2.5	-1.8	-1.2	-0.8	-0.7
	(as % of potential GDP)	:	-1.0	-2.6	-2.4	-1.8	-1.2	-0.8	-0.7
10.	GDP at constant prices (annual % change)	2.5	3.9	0.8	2.0	1.4	2.7	2.6	2.4
11.	Potential GDP at constant prices (annual % change)	:	2.3	2.0	2.0	2.0	2.1	2.2	2.3
12.	Gap between actual and potential GDP (% of potential GDP)	:	2.0	-0.7	-0.7	-1.3	-0.8	-0.4	-0.2
<b>EU-27</b>									
<b>Total revenue (% of GDP)</b>									
1.	Actual data	:	:	44.3	44.1	44.5	45.1	44.8	44.7
2.	Cyclical component	:	0.8	-0.2	-0.2	-0.4	-0.2	0.0	0.0
3.	Cyclically adjusted data	:	:	44.6	44.3	45.0	45.3	44.8	44.6
<b>Total expenditure (% of GDP)</b>									
4.	Actual data	:	:	47.4	46.9	47.0	46.8	46.0	45.7
5.	Cyclical component	:	-0.1	0.1	0.1	0.1	0.0	0.0	0.0
6.	Cyclically adjusted data	:	:	47.3	46.8	46.8	46.7	46.0	45.7
<b>Net lending (+) or net borrowing (-) (% of GDP)</b>									
7.	Actual balance	:	0.7	-3.1	-2.8	-2.4	-1.7	-1.2	-1.1
8.	Cyclical component	:	0.9	-0.3	-0.2	-0.5	-0.3	-0.1	0.0
9.	Cyclically adjusted balance	:	-0.2	-2.8	-2.5	-1.8	-1.4	-1.2	-1.1
	(as % of potential GDP)	:	-0.2	-2.7	-2.5	-1.8	-1.4	-1.1	-0.9
10.	GDP at constant prices (annual % change)	2.7	3.9	1.3	2.5	1.7	2.9	2.8	2.6
11.	Potential GDP at constant prices (annual % change)	:	2.5	2.2	2.3	2.3	2.4	2.6	2.6
12.	Gap between actual and potential GDP (% of potential GDP)	:	1.7	-0.7	-0.5	-1.1	-0.6	-0.3	-0.3

Source: Commission services.

Table A.4.1

## Current tax burden; total economy — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	45.5	46.9	46.6	46.4	47.1	46.6	46.0	45.9
DE	41.2	43.2	41.0	40.0	40.0	40.7	40.6	40.4
IE	34.7	32.7	30.3	31.8	32.0	33.4	33.3	33.3
EL	34.4	39.7	37.9	36.6	36.6	36.7	36.8	36.5
ES	33.3	35.0	34.9	35.4	36.4	37.3	37.2	37.4
FR	44.4	45.7	44.4	44.6	45.2	45.9	45.7	45.7
IT	41.3	42.0	40.3	40.3	40.7	42.6	43.0	43.1
LU	38.1	39.9	39.2	38.7	39.3	37.0	36.1	35.4
NL	41.1	40.6	38.1	38.4	38.8	40.3	40.1	40.2
AT	43.5	44.7	44.8	44.4	43.7	43.5	43.0	42.6
PT	32.7	35.1	35.9	35.1	36.0	36.7	37.0	36.9
FI	46.2	47.1	43.9	43.3	43.8	43.3	42.7	42.6
SI	:	38.8	39.8	39.9	40.5	40.2	39.3	38.5
EU-13	:	42.5	40.8	40.6	40.9	41.7	41.6	41.6
BG	:	36.6	33.4	34.6	34.9	33.7	33.0	33.2
CZ	36.2	33.9	35.8	36.8	36.3	35.3	35.0	34.9
DK	49.8	50.1	48.9	50.1	51.1	49.5	48.4	48.0
EE	36.7	31.3	31.6	31.5	31.0	31.4	31.3	31.2
CY	:	29.9	33.0	32.8	34.7	37.0	37.5	37.5
LV	33.2	29.7	28.7	28.7	29.2	30.4	30.3	29.3
LT	28.6	30.5	28.3	28.7	29.2	29.7	30.6	30.8
HU	41.8	38.5	37.6	37.6	37.4	37.6	38.4	38.3
MT	:	29.2	33.2	35.1	35.7	36.1	36.3	36.1
PL	37.2	32.7	32.5	31.8	33.1	33.9	33.6	32.7
RO	:	35.3	28.0	27.8	28.7	27.5	27.4	27.5
SK	40.7	34.1	32.2	31.7	31.9	29.9	29.3	29.1
SE	49.0	53.1	50.2	50.6	51.4	50.5	48.5	48.5
UK	36.2	38.0	36.2	36.5	37.5	38.3	38.4	38.8
EU-27	:	41.7	40.1	39.9	40.4	41.0	40.8	40.8

Source: Commission services.

Table A.4.2

**Social contributions received; general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	16.4	16.0	16.5	16.2	16.1	15.9	15.8	15.8
DE	18.3	18.3	18.3	18.0	17.7	17.4	16.5	16.4
IE	6.7	5.7	5.8	6.1	6.2	6.2	6.2	6.2
EL	12.6	13.7	15.3	14.6	14.4	14.9	14.9	14.6
ES	12.7	12.9	13.0	13.0	13.0	13.0	12.9	12.8
FR	20.3	17.9	18.2	18.0	18.2	18.4	18.3	18.3
IT	14.4	12.4	12.6	12.7	12.9	13.0	13.5	13.6
LU	11.0	10.9	11.8	11.8	11.7	11.0	10.7	10.4
NL	17.1	16.4	14.7	15.0	14.1	15.3	15.0	14.9
AT	17.1	16.6	16.3	16.1	16.1	16.0	15.8	15.7
PT	10.4	11.2	12.2	12.2	12.5	12.5	12.5	12.4
FI	14.7	12.1	11.9	11.8	12.2	12.3	12.2	12.2
SI	:	15.0	15.0	15.0	15.1	14.9	14.7	14.6
EU-13	:	15.9	15.8	15.6	15.5	15.6	15.3	15.3
BG	12.0	12.2	10.6	10.5	10.3	8.8	8.7	8.7
CZ	14.4	14.2	15.1	15.1	15.1	15.0	14.7	14.5
DK	2.1	2.6	2.1	2.1	2.0	2.0	1.9	1.9
EE	12.7	11.1	11.0	10.8	10.5	10.4	10.3	10.2
CY	:	6.5	7.0	7.7	8.3	8.0	8.1	8.1
LV	12.0	10.1	9.1	8.9	8.6	8.9	8.6	8.2
LT	7.5	9.4	8.6	8.7	8.6	8.8	9.2	9.1
HU	15.2	12.9	12.6	12.4	12.6	12.8	12.9	12.7
MT	:	7.5	8.1	8.2	8.6	8.0	8.0	7.8
PL	11.3	12.9	12.8	12.3	12.3	12.2	11.6	10.4
RO	:	12.3	9.9	9.6	10.5	10.2	10.0	9.8
SK	14.2	13.7	14.0	13.3	12.9	12.1	11.8	11.6
SE	13.0	14.2	14.2	14.0	13.9	13.2	13.1	13.0
UK	7.4	7.5	7.8	8.0	8.4	8.2	8.2	8.3
EU-27	:	14.0	14.0	13.9	13.9	13.8	13.6	13.5

Source: Commission services.

Table A.4.3

**Current taxes on income and wealth (direct taxes); general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	16.3	17.1	16.7	16.7	17.1	16.7	16.4	16.3
DE	10.8	12.3	10.5	10.0	10.2	10.8	10.9	10.8
IE	13.5	13.3	11.8	12.4	12.3	13.1	13.0	12.9
EL	7.4	10.6	8.7	8.8	9.2	8.7	8.6	8.6
ES	9.9	10.2	10.1	10.2	10.9	11.7	11.6	11.8
FR	8.1	12.0	10.9	11.1	11.3	11.9	11.7	11.8
IT	14.5	14.4	13.4	13.3	13.4	14.5	14.7	14.8
LU	15.3	14.9	14.7	13.2	14.0	13.2	13.1	13.1
NL	12.3	11.6	10.7	10.5	11.6	11.8	12.1	12.4
AT	11.6	13.1	13.6	13.4	12.9	13.2	13.1	13.1
PT	8.4	9.8	8.6	8.5	8.6	8.9	9.2	9.3
FI	17.3	21.1	17.7	17.5	17.6	17.1	16.8	16.7
SI	:	7.5	8.2	8.5	9.0	9.4	9.1	8.8
EU-13	:	12.7	11.5	11.4	11.6	12.2	12.2	12.3
BG	11.8	9.4	6.8	6.3	6.0	5.6	5.2	5.2
CZ	9.6	8.3	9.6	9.7	9.3	8.8	8.8	9.0
DK	30.7	30.3	29.3	30.3	31.2	29.5	28.7	28.4
EE	10.6	7.8	8.3	8.2	7.1	7.2	7.1	6.8
CY	:	10.9	9.6	8.0	9.3	10.9	10.9	10.9
LV	7.1	7.3	7.5	7.9	7.9	8.4	8.5	8.3
LT	8.7	8.5	8.0	8.7	9.1	9.7	9.9	10.0
HU	9.1	9.5	9.4	9.0	9.0	9.4	10.0	10.3
MT	:	9.1	12.0	11.8	11.6	12.3	12.2	12.1
PL	11.7	7.2	6.6	6.4	7.0	7.5	7.8	8.1
RO	:	6.6	5.7	6.3	5.3	5.2	5.8	6.2
SK	11.5	7.6	7.0	6.0	5.9	5.9	5.9	5.9
SE	19.9	22.2	18.6	19.4	20.2	20.0	18.0	18.1
UK	14.9	16.5	15.0	15.2	16.2	17.0	17.1	17.3
EU-27	:	13.7	12.4	12.4	12.7	13.3	13.2	13.3

Source: Commission services.

Table A.4.4

**Taxes linked to imports and production (indirect taxes); general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	11.9	12.9	12.7	13.0	13.2	13.3	13.2	13.2
DE	11.1	11.9	11.8	11.8	11.8	12.1	12.9	12.8
IE	13.4	13.1	12.3	13.1	13.5	14.0	14.0	14.1
EL	13.5	14.9	13.3	12.8	12.6	13.1	13.2	13.2
ES	10.0	11.4	11.5	11.9	12.1	12.3	12.3	12.3
FR	15.2	15.2	15.0	15.3	15.5	15.4	15.4	15.4
IT	11.8	14.7	14.0	14.1	14.2	14.8	14.5	14.4
LU	11.0	13.5	12.4	13.5	13.5	12.6	12.1	11.7
NL	10.7	11.7	12.1	12.5	12.6	12.9	12.7	12.8
AT	13.9	14.4	14.5	14.6	14.4	14.0	13.8	13.5
PT	12.9	13.5	14.8	14.1	14.9	15.4	15.3	15.3
FI	13.5	13.5	13.9	13.8	13.9	13.6	13.5	13.5
SI	:	16.3	16.6	16.2	16.1	15.6	15.1	14.8
EU-13	:	13.3	13.1	13.3	13.4	13.6	13.7	13.7
BG	12.8	13.8	16.0	17.7	18.6	19.3	19.0	19.2
CZ	12.3	11.3	11.1	11.7	11.6	11.0	10.9	10.9
DK	16.8	17.0	17.2	17.5	17.7	17.8	17.5	17.4
EE	13.5	12.4	12.4	12.2	13.2	13.4	13.7	14.0
CY	:	12.4	16.4	16.9	16.9	17.8	18.3	18.3
LV	14.1	12.3	12.1	11.7	12.4	12.7	12.6	12.3
LT	12.4	12.6	11.7	11.1	11.2	11.2	11.6	11.8
HU	17.4	16.1	15.6	16.1	15.5	15.1	15.2	14.9
MT	:	12.6	13.1	14.8	15.0	15.5	15.9	15.9
PL	14.2	12.6	13.2	12.9	13.6	13.9	13.9	14.0
RO	:	16.4	12.5	11.8	12.9	12.2	11.6	11.6
SK	15.1	12.8	12.2	12.3	12.7	11.5	11.2	11.1
SE	15.4	16.3	17.0	16.9	17.0	17.1	17.1	17.0
UK	12.9	13.3	12.9	12.9	12.7	12.7	12.8	12.9
EU-27	:	13.5	13.3	13.4	13.5	13.6	13.7	13.7

Source: Commission services.



Table A.4.5

## Other current revenue; general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	3.3	3.0	2.9	2.6	2.7	2.7	2.7	2.7
DE	3.6	3.0	3.0	2.8	2.9	2.8	2.6	2.6
IE	2.8	2.2	2.0	2.0	1.9	2.0	2.0	2.0
EL	4.5	3.6	2.5	2.2	2.1	2.2	2.4	2.2
ES	4.2	3.4	3.3	3.1	3.0	3.2	2.9	2.9
FR	4.4	3.7	3.6	3.8	3.9	4.0	4.1	4.1
IT	3.9	3.4	3.4	3.6	3.5	3.5	3.5	3.5
LU	4.8	4.3	3.5	3.4	3.3	3.5	3.3	3.2
NL	5.9	4.8	4.8	5.0	5.3	5.7	5.1	5.1
AT	4.9	3.2	3.8	3.7	3.7	3.6	3.5	3.3
PT	3.9	3.3	3.4	3.9	3.4	4.0	3.9	3.9
FI	7.2	6.0	5.8	6.0	5.9	6.0	5.8	5.7
SI	:	3.7	3.6	3.9	3.8	3.5	3.4	3.4
EU-13	:	3.5	3.4	3.4	3.4	3.5	3.4	3.4
BG	2.1	13.7	5.2	5.4	4.7	5.0	4.6	4.4
CZ	6.1	6.2	6.3	6.3	5.8	5.8	5.2	4.8
DK	5.2	4.2	4.2	4.5	4.2	4.1	3.7	3.6
EE	8.6	3.6	4.3	4.0	3.2	4.2	4.9	4.3
CY	:	3.1	4.0	3.7	4.0	3.4	3.0	3.0
LV	6.3	7.2	5.8	5.6	5.1	5.6	5.3	5.1
LT	6.2	5.7	3.2	2.9	3.1	2.6	2.7	2.9
HU	:	5.9	4.6	5.0	4.7	5.6	5.1	4.9
MT	:	5.7	6.0	6.1	4.9	4.8	4.4	4.2
PL	5.7	4.7	5.3	5.0	6.0	5.7	5.4	5.0
RO	:	7.1	7.3	4.3	4.9	3.7	4.8	5.3
SK	7.8	7.7	6.0	5.9	5.4	6.0	5.8	5.6
SE	8.1	5.8	4.7	4.5	4.7	4.8	4.9	4.7
UK	2.8	2.4	2.2	2.1	2.0	1.9	2.0	2.0
EU-27	:	3.5	3.4	3.3	3.3	3.4	3.3	3.3

Source: Commission services.

Table A.4.6

**Total current revenue; general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	47.8	49.0	48.8	48.4	49.1	48.7	48.1	48.0
DE	43.9	45.6	43.6	42.6	42.6	43.1	42.9	42.6
IE	36.4	34.3	31.9	33.6	33.8	35.3	35.2	35.2
EL	38.1	42.7	39.8	38.5	38.3	38.8	39.1	38.6
ES	36.8	37.8	37.9	38.1	39.1	40.2	39.7	39.7
FR	48.0	48.9	47.7	48.2	48.8	49.6	49.5	49.6
IT	44.5	44.9	43.4	43.6	44.0	45.8	46.2	46.3
LU	42.0	43.6	42.4	41.9	42.4	40.3	39.2	38.4
NL	45.9	44.6	42.4	42.9	43.6	45.7	44.9	45.0
AT	47.5	47.2	48.2	47.8	47.1	46.8	46.1	45.7
PT	35.7	37.8	39.1	38.7	39.4	40.6	40.9	40.8
FI	52.7	52.6	49.4	49.0	49.5	49.0	48.3	48.0
SI	:	42.5	43.4	43.6	44.0	43.4	42.4	41.5
EU-13	:	45.3	43.8	43.7	44.0	44.9	44.7	44.6
BG	38.8	49.1	38.6	39.9	39.6	38.7	37.6	37.5
CZ	42.3	40.0	42.1	42.8	41.8	40.6	39.6	39.2
DK	54.8	54.1	52.9	54.4	55.1	53.4	51.9	51.3
EE	45.5	34.9	35.9	35.2	34.0	35.3	36.0	35.3
CY	:	33.1	37.0	36.3	38.4	40.1	40.3	40.3
LV	39.5	36.9	34.4	34.1	34.0	35.7	35.1	34.0
LT	34.8	36.2	31.5	31.3	31.9	32.3	33.3	33.8
HU	:	44.4	42.2	42.4	41.8	42.9	43.3	42.9
MT	:	34.9	39.2	40.9	40.1	40.5	40.4	40.0
PL	42.9	37.4	37.9	36.6	38.9	39.3	38.7	37.4
RO	:	42.4	35.4	32.0	33.6	31.3	32.2	32.8
SK	48.5	41.8	39.1	37.5	37.0	35.5	34.6	34.3
SE	56.5	58.4	54.5	54.7	55.8	55.0	53.1	52.9
UK	38.0	39.8	37.9	38.2	39.2	39.8	40.1	40.5
EU-27	:	44.6	43.1	43.0	43.4	44.1	43.9	43.8

Source: Commission services.

Table A.4.7

## Interest general government — ESA 1995

*(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	8.9	6.6	5.4	4.8	4.4	4.2	4.0	3.8
DE	3.5	3.2	3.0	2.8	2.8	2.8	2.8	2.8
IE	5.3	1.9	1.2	1.1	1.0	1.0	1.0	1.0
EL	12.7	8.1	5.5	5.3	5.0	4.9	4.5	4.3
ES	5.1	3.2	2.4	2.0	1.8	1.6	1.6	1.5
FR	3.5	2.9	2.8	2.7	2.7	2.6	2.5	2.5
IT	11.6	6.4	5.2	4.8	4.7	4.6	4.7	4.8
LU	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1
NL	5.6	3.7	2.6	2.5	2.4	2.3	2.2	2.1
AT	3.9	3.7	3.1	3.0	3.0	2.8	2.8	2.7
PT	5.9	3.1	2.8	2.7	2.7	2.8	2.9	3.0
FI	3.9	2.8	1.9	1.8	1.7	1.5	1.5	1.5
SI	:	2.5	2.1	1.8	1.7	1.6	1.5	1.4
EU-13	:	3.9	3.3	3.1	3.0	2.9	2.9	2.9
BG	14.1	4.0	2.2	1.8	1.6	1.3	1.2	1.1
CZ	1.0	0.8	1.1	1.2	1.2	1.1	1.2	1.3
DK	5.9	3.7	2.8	2.5	2.0	1.7	1.5	1.3
EE	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
CY	:	3.4	3.4	3.3	3.4	3.3	3.1	3.1
LV	0.9	1.0	0.7	0.7	0.6	0.5	0.4	0.3
LT	0.4	1.8	1.3	0.9	0.8	0.5	0.6	0.8
HU	:	5.4	4.0	4.4	4.1	3.9	4.1	3.9
MT	:	3.6	3.5	3.7	3.8	3.7	3.3	3.3
PL	5.7	3.0	3.0	2.8	2.8	2.4	2.6	2.6
RO	:	4.4	1.6	1.4	1.1	0.8	0.7	0.8
SK	2.4	4.1	2.5	2.2	1.5	1.4	1.3	1.3
SE	6.6	4.2	2.3	1.8	1.9	1.8	1.8	1.7
UK	3.6	2.7	2.0	2.0	2.1	2.1	2.1	2.2
EU-27	:	3.7	3.0	2.9	2.8	2.7	2.7	2.6

Source: Commission services.

Table A.4.8

## Final consumption expenditure; general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	21.5	21.3	23.0	22.9	22.9	22.6	22.6	22.7
DE	19.6	19.0	19.3	18.8	18.7	18.5	18.1	17.9
IE	16.3	13.8	15.1	15.7	15.9	15.9	16.0	16.2
EL	15.3	17.3	16.8	16.7	16.1	15.5	15.1	15.1
ES	18.1	17.2	17.4	17.8	18.0	17.9	18.1	18.3
FR	23.6	22.9	23.7	23.7	23.8	23.7	23.5	23.2
IT	18.0	18.4	19.7	19.9	20.4	20.3	19.9	20.0
LU	15.9	15.1	16.4	17.1	17.0	15.9	15.3	15.0
NL	23.8	22.0	24.5	24.3	24.1	25.3	25.4	25.4
AT	20.1	18.4	18.3	18.2	18.2	18.1	17.7	17.7
PT	17.7	19.3	20.3	20.6	21.2	20.5	20.1	19.8
FI	22.8	20.3	21.7	21.9	22.1	21.4	21.1	21.1
SI	:	19.3	19.6	19.6	19.6	19.3	19.1	19.0
EU-13	:	19.7	20.5	20.4	20.5	20.4	20.1	20.1
BG	15.3	17.9	19.0	18.4	18.0	17.4	17.1	16.9
CZ	20.9	21.1	23.4	22.4	22.3	21.5	21.6	21.2
DK	25.2	25.1	26.5	26.6	25.9	25.6	25.3	25.2
EE	26.6	19.9	18.7	18.5	17.4	16.7	16.4	16.0
CY	:	16.1	19.8	17.9	18.1	18.0	18.0	18.0
LV	24.5	20.8	21.4	19.5	17.4	16.9	16.7	16.2
LT	21.7	21.3	18.4	17.9	16.7	17.3	17.5	17.5
HU	22.9	20.9	23.2	22.4	22.5	22.5	21.4	20.1
MT	:	19.1	21.4	21.9	21.1	21.1	20.4	19.9
PL	18.7	17.4	18.1	17.6	18.1	18.1	17.3	16.4
RO	:	16.1	19.0	16.2	18.0	18.1	18.0	18.1
SK	21.3	19.9	20.4	19.2	18.6	19.2	18.4	18.1
SE	27.0	26.3	28.1	27.4	27.1	26.7	26.5	26.4
UK	19.6	18.6	20.5	20.9	21.5	21.8	21.8	21.8
EU-27	:	19.8	20.8	20.7	20.9	20.8	20.6	20.5

Source: Commission services.

Table A.4.9

## Compensation of employees; general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	11.9	11.5	12.3	12.0	12.1	12.0	11.8	11.6
DE	8.7	8.1	7.8	7.7	7.5	7.3	6.9	6.8
IE	10.1	8.0	9.0	9.4	9.3	9.3	9.3	9.4
EL	11.3	11.5	11.8	12.5	12.3	11.9	11.9	11.9
ES	11.2	10.3	10.1	10.1	10.0	10.0	9.7	9.5
FR	13.6	13.3	13.5	13.3	13.3	13.1	13.0	12.8
IT	11.0	10.4	10.8	10.8	11.0	11.0	10.8	10.9
LU	8.5	7.5	8.1	8.2	8.1	7.7	7.5	7.3
NL	10.6	9.5	10.1	10.0	9.9	9.4	9.4	9.3
AT	12.5	10.9	9.5	9.3	9.3	9.3	9.2	9.1
PT	12.9	14.2	14.1	14.1	14.4	13.5	13.0	12.6
FI	15.1	13.0	13.6	13.5	13.8	13.3	13.0	12.9
SI	:	11.6	12.1	12.0	12.0	11.7	11.5	11.3
EU-13	:	10.4	10.5	10.4	10.4	10.3	10.0	10.0
BG	9.3	10.0	9.4	9.2	8.7	8.2	8.1	8.0
CZ	7.3	7.1	8.3	8.0	8.0	7.8	7.8	7.7
DK	17.2	17.1	18.0	17.9	17.2	17.1	16.7	16.5
EE	11.4	10.9	10.0	10.0	9.4	8.9	8.5	8.3
CY	:	13.5	15.6	14.8	14.8	14.8	14.7	14.7
LV	11.2	10.8	10.7	10.5	10.0	10.1	10.2	10.0
LT	10.0	12.2	10.9	10.9	10.4	10.5	11.0	11.1
HU	11.9	10.5	13.1	12.6	12.6	12.1	11.3	10.4
MT	:	13.0	15.0	15.0	14.5	13.8	13.4	13.0
PL	10.7	10.1	10.7	10.1	10.1	9.7	9.5	9.1
RO	:	8.1	8.2	8.1	8.9	8.8	9.1	9.1
SK	9.3	8.7	8.8	8.1	7.3	7.5	7.2	7.0
SE	16.6	15.6	16.5	16.3	16.1	15.6	15.4	15.4
UK	10.7	9.8	10.7	10.9	11.2	11.3	11.0	11.0
EU-27	:	10.5	10.8	10.8	10.8	10.7	10.4	10.3

Source: Commission services.

Table A.4.10

**Total current expenditure; general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	49.8	46.3	48.1	47.1	47.3	46.7	46.5	46.4
DE	44.0	44.0	44.9	43.9	43.5	42.6	41.3	40.7
IE	36.3	26.4	28.0	28.9	29.1	28.7	29.6	29.8
EL	44.9	42.9	41.6	41.3	40.7	39.9	39.5	39.3
ES	38.7	34.8	33.9	34.1	33.9	33.8	34.0	34.2
FR	48.9	46.7	48.4	48.4	48.5	48.4	47.9	47.6
IT	48.3	43.6	44.3	44.2	44.7	44.5	44.5	44.7
LU	34.6	33.0	36.2	37.4	36.7	34.6	33.4	32.5
NL	46.8	40.1	41.7	41.6	40.7	42.0	41.7	41.3
AT	48.5	45.6	46.6	45.6	45.4	44.8	44.0	43.6
PT	37.6	37.2	40.5	41.2	42.5	42.1	41.8	41.5
FI	53.4	43.2	44.3	44.2	44.5	42.9	42.3	42.1
SI	:	41.6	41.6	41.4	41.4	40.7	40.0	39.6
EU-13	:	43.1	43.8	43.4	43.3	42.9	42.4	42.1
BG	41.5	44.2	35.5	34.3	33.7	31.9	32.3	32.2
CZ	36.5	37.6	40.7	38.8	38.3	37.3	37.1	36.2
DK	55.7	50.2	51.6	51.1	49.0	47.5	47.0	46.5
EE	38.6	31.3	29.6	30.4	29.4	28.4	29.8	29.3
CY	:	32.0	39.3	36.9	38.2	37.8	38.0	38.0
LV	39.3	36.7	33.3	31.4	30.1	30.8	30.4	29.0
LT	31.6	34.7	29.7	29.4	29.4	29.1	29.3	29.6
HU	:	41.9	44.3	44.5	45.0	46.6	45.2	43.5
MT	:	37.2	41.3	42.7	41.7	41.3	39.9	39.2
PL	43.4	37.5	39.5	38.3	39.2	38.8	37.4	36.1
RO	:	36.6	31.8	28.7	30.3	28.8	30.1	30.4
SK	41.6	40.6	38.9	37.2	36.0	35.9	34.5	34.1
SE	59.6	51.8	52.6	51.2	50.8	49.6	47.5	47.0
UK	40.8	36.7	38.9	39.2	40.2	40.1	40.1	40.1
EU-27	:	42.1	43.2	42.8	42.8	42.4	41.8	41.5

Source: Commission services.

Table A.4.11

## Gross saving; general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	-1.9	2.6	0.7	1.3	1.8	2.0	1.6	1.6
DE	-0.1	1.6	-1.3	-1.3	-0.9	0.6	1.6	2.0
IE	0.1	7.8	3.9	4.8	4.7	6.6	5.6	5.3
EL	-6.8	-0.2	-1.8	-2.8	-2.4	-1.1	-0.4	-0.7
ES	-1.9	3.0	3.9	4.0	5.1	6.4	5.6	5.5
FR	-0.8	2.2	-0.7	-0.1	0.3	1.2	1.6	2.0
IT	-3.8	1.3	-0.9	-0.5	-0.7	1.2	1.8	1.6
LU	7.4	10.7	6.2	4.5	5.7	5.7	5.8	5.9
NL	-0.8	4.5	0.7	1.3	2.8	3.7	3.2	3.7
AT	-1.0	1.6	1.6	2.2	1.7	1.9	2.1	2.1
PT	-2.0	0.6	-1.4	-2.4	-3.2	-1.5	-1.0	-0.7
FI	-0.7	9.4	5.0	4.9	5.0	6.2	6.0	6.0
SI	:	0.9	1.8	2.2	2.6	2.7	2.4	2.0
EU-13	:	2.2	0.0	0.2	0.7	2.0	2.3	2.5
BG	-2.7	4.9	3.1	5.7	5.9	6.8	5.3	5.4
CZ	5.8	2.4	1.4	4.1	3.5	3.2	2.5	2.9
DK	-0.9	3.9	1.4	3.3	6.1	5.8	4.9	4.8
EE	6.9	3.6	6.2	4.8	4.5	6.9	6.2	6.0
CY	:	1.1	-2.3	-0.6	0.3	2.3	2.3	2.3
LV	0.2	0.2	1.1	2.7	3.9	4.9	4.7	5.0
LT	3.2	1.5	1.8	2.0	2.5	3.2	4.0	4.2
HU	:	2.5	-2.1	-2.1	-3.2	-3.7	-2.0	-0.7
MT	:	-2.3	-2.1	-1.8	-1.6	-0.8	0.5	0.8
PL	-0.5	-0.1	-1.7	-1.7	-0.4	0.5	1.3	1.3
RO	:	5.8	3.7	3.3	3.3	2.4	2.1	2.4
SK	6.9	1.2	0.3	0.3	1.0	-0.4	0.1	0.3
SE	-3.1	6.6	1.9	3.5	5.0	5.4	5.6	5.8
UK	-2.8	3.1	-1.0	-0.9	-1.0	-0.3	0.1	0.4
EU-27	:	2.5	-0.1	0.2	0.6	1.7	2.0	2.2

Source: Commission services.

Table A.4.12

## Gross fixed capital formation; general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	1.9	2.0	1.7	1.6	1.8	1.7	1.6	1.7
DE	2.2	1.8	1.6	1.4	1.3	1.4	1.4	1.5
IE	2.3	3.6	3.8	3.7	3.7	3.9	4.1	4.3
EL	3.2	4.0	4.2	4.2	3.5	3.6	3.5	3.5
ES	3.7	3.2	3.6	3.4	3.6	3.9	3.6	3.7
FR	3.2	3.1	3.1	3.1	3.3	3.4	3.4	3.4
IT	2.1	2.3	2.5	2.4	2.3	2.3	2.4	2.4
LU	3.8	3.8	4.6	4.3	4.7	4.1	3.9	3.8
NL	3.2	3.1	3.6	3.2	3.2	3.3	3.3	3.2
AT	3.0	1.5	1.2	1.1	1.1	1.1	1.1	1.0
PT	3.5	3.8	3.1	3.1	2.8	2.3	2.2	2.2
FI	2.7	2.5	2.9	2.9	2.6	2.6	2.6	2.7
SI	:	3.1	3.3	3.5	3.4	3.7	3.6	3.0
EU-13	:	2.5	2.5	2.5	2.5	2.5	2.6	2.6
BG	0.8	3.7	2.5	2.7	3.4	3.7	4.0	4.5
CZ	5.3	3.6	4.5	4.9	4.9	5.1	5.3	5.3
DK	1.8	1.7	1.6	1.8	1.8	1.8	1.6	1.5
EE	4.9	3.8	4.2	3.1	3.2	3.6	3.8	4.0
CY	:	2.9	3.4	4.0	3.1	3.3	3.3	3.3
LV	1.9	1.3	2.4	3.1	3.3	3.4	3.8	4.2
LT	3.3	2.4	3.0	3.4	3.5	4.2	5.1	6.0
HU	:	3.2	3.5	3.5	4.0	4.5	3.6	3.3
MT	:	4.2	5.1	2.1	5.3	4.6	5.2	4.0
PL	3.3	2.4	3.3	3.4	3.4	4.1	4.6	4.7
RO	:	1.9	3.2	3.0	3.8	2.9	3.8	4.1
SK	2.3	2.8	2.6	2.4	2.1	2.2	2.2	2.2
SE	3.9	2.9	3.1	3.0	3.0	3.2	3.2	3.2
UK	2.0	1.2	1.6	1.7	0.6	1.8	2.0	2.3
EU-27	:	2.3	2.4	2.4	2.2	2.5	2.6	2.7

Source: Commission services.



Table A.4.13

**Total expenditure; general government — ESA 1995***(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	51.9	49.1	51.1	49.3	52.3	49.2	48.7	48.5
DE	48.3	45.1	48.5	47.1	46.8	45.7	44.3	43.7
IE	41.0	31.6	33.5	34.0	34.4	34.1	35.2	35.5
EL	51.0	51.2	49.5	49.8	47.3	46.1	45.5	45.3
ES	44.4	39.0	38.2	38.8	38.2	38.5	38.3	38.5
FR	54.5	51.6	53.3	53.2	53.7	53.5	53.2	52.7
IT	52.5	46.2	48.3	47.7	48.3	50.1	48.1	48.3
LU	39.7	37.6	42.0	43.2	42.8	40.4	39.0	38.0
NL	51.6	44.2	47.1	46.3	45.5	46.7	47.0	46.3
AT	56.0	51.4	51.1	50.3	49.9	49.2	48.4	48.1
PT	42.8	43.1	45.5	46.4	47.5	46.1	45.8	45.5
FI	61.6	48.3	50.0	50.2	50.5	48.6	47.8	47.4
SI	:	48.1	48.0	47.4	47.0	46.3	45.4	44.4
EU-13	:	46.3	48.2	47.6	47.6	47.4	46.5	46.2
BG	:	:	40.9	39.3	39.5	36.6	37.3	37.6
CZ	54.5	41.8	47.3	44.4	44.0	42.5	43.0	42.7
DK	59.2	53.6	55.1	54.8	52.6	50.9	50.3	49.7
EE	42.4	36.5	35.3	34.2	33.2	33.2	32.4	32.4
CY	:	37.0	45.1	42.9	43.6	43.9	44.0	43.9
LV	38.8	37.3	34.8	35.8	35.5	37.0	37.3	36.4
LT	35.7	39.1	33.2	33.4	33.6	33.6	34.8	36.0
HU	:	46.5	49.1	48.9	50.0	53.0	50.9	49.0
MT	:	41.0	48.6	46.8	46.0	45.2	44.3	43.4
PL	47.7	41.1	44.6	42.6	43.4	43.3	42.4	41.4
RO	:	40.6	33.6	32.6	33.7	32.0	33.6	34.2
SK	47.0	51.7	40.0	37.7	38.1	37.3	36.0	35.6
SE	67.1	57.1	58.2	56.8	56.5	55.4	53.0	52.5
UK	44.3	36.8	42.4	42.7	43.7	44.1	44.2	44.3
EU-27	:	:	47.4	46.9	47.0	46.8	46.0	45.7

Source: Commission services.

Table A.4.14

## Net lending (+) or net borrowing (-); general government — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	-4.4	0.1	0.0	-0.1	-2.4	0.1	-0.2	-0.3
DE	-3.2	1.3	-4.0	-3.7	-3.2	-1.7	-0.6	-0.3
IE	-2.0	4.6	0.4	1.4	1.0	2.9	1.5	0.9
EL	-10.2	-4.1	-6.3	-7.8	-5.7	-2.9	-2.5	-2.8
ES	-6.5	-0.9	0.0	-0.2	1.1	1.8	1.4	1.2
FR	-5.5	-1.5	-4.1	-3.6	-3.0	-2.6	-2.4	-2.0
IT	-7.4	-0.9	-3.5	-3.5	-4.4	-4.5	-2.1	-2.2
LU	2.4	6.0	0.4	-1.2	-0.3	0.1	0.4	0.6
NL	-4.3	2.0	-3.1	-1.8	-0.3	0.5	-0.7	0.0
AT	-5.7	-1.6	-1.8	-1.3	-1.7	-1.2	-1.0	-0.9
PT	-5.2	-3.0	-2.9	-3.3	-6.0	-3.9	-3.5	-3.2
FI	-6.2	6.9	2.3	2.1	2.5	3.8	3.6	3.5
SI	:	-3.8	-2.8	-2.3	-1.5	-1.4	-1.5	-1.5
EU-13	:	0.0	-3.1	-2.8	-2.5	-1.6	-1.0	-0.8
BG	-3.4	-0.5	-0.9	2.2	1.9	3.3	2.0	2.0
CZ	-13.4	-3.7	-6.6	-2.9	-3.5	-2.9	-3.7	-3.3
DK	-2.9	2.3	-0.1	1.9	4.6	4.2	3.5	3.4
EE	0.4	-0.2	2.0	2.3	2.3	3.8	3.7	3.5
CY	:	-2.3	-6.3	-4.1	-2.3	-1.5	-1.4	-1.4
LV	-2.0	-2.8	-1.6	-1.0	-0.2	0.4	0.2	0.1
LT	-1.6	-3.2	-1.3	-1.5	-0.5	-0.3	-0.4	-1.0
HU	:	-3.0	-7.2	-6.4	-7.8	-9.2	-6.8	-4.9
MT	:	-6.2	-10.0	-4.9	-3.1	-2.6	-2.1	-1.6
PL	-4.4	-3.0	-6.3	-5.7	-4.3	-3.9	-3.4	-3.3
RO	:	3.2	-1.5	-1.5	-1.4	-1.9	-3.2	-3.2
SK	-1.8	-11.8	-2.7	-2.4	-2.8	-3.4	-2.9	-2.8
SE	-7.4	3.8	-1.1	0.6	1.8	2.1	2.3	2.4
UK	-5.7	4.0	-3.2	-3.2	-3.1	-2.8	-2.6	-2.4
EU-27	:	0.7	-3.1	-2.8	-2.4	-1.7	-1.2	-1.1

Source: Commission services.

Table A.4.15

## Net lending (+) or net borrowing (–) excluding interest; general government — ESA 1995

*(% of GDP at market prices (excessive deficit procedure))*

	1995	2000	2003	2004	2005	2006	2007	2008
BE	4.5	6.7	5.4	4.7	2.0	4.3	3.8	3.5
DE	0.3	4.5	– 1.1	– 0.9	– 0.5	1.1	2.2	2.5
IE	3.3	6.6	1.6	2.6	2.0	3.9	2.5	1.9
EL	2.6	4.0	– 0.7	– 2.5	– 0.6	2.0	2.0	1.5
ES	– 1.4	2.4	2.3	1.9	2.9	3.4	3.0	2.7
FR	– 2.0	1.4	– 1.3	– 0.9	– 0.3	0.0	0.1	0.5
IT	4.2	5.5	1.6	1.3	0.3	0.1	2.7	2.5
LU	2.8	6.3	0.6	– 1.1	– 0.1	0.3	0.6	0.8
NL	1.3	5.6	– 0.6	0.7	2.1	2.9	1.5	2.1
AT	– 1.8	2.0	1.3	1.6	1.3	1.6	1.8	1.7
PT	0.7	0.1	– 0.2	– 0.7	– 3.4	– 1.1	– 0.6	– 0.2
FI	– 2.2	9.7	4.2	3.8	4.2	5.3	5.1	4.9
SI	:	– 1.4	– 0.7	– 0.5	0.2	0.2	– 0.1	– 0.1
EU-13	:	3.9	0.2	0.3	0.5	1.3	1.9	2.0
BG	10.7	3.6	1.3	4.0	3.4	4.6	3.1	3.0
CZ	– 12.4	– 2.9	– 5.5	– 1.7	– 2.4	– 1.8	– 2.5	– 2.0
DK	3.0	5.9	2.7	4.5	6.7	5.9	5.0	4.7
EE	0.5	0.0	2.3	2.5	2.5	3.9	3.8	3.6
CY	:	1.0	– 2.9	– 0.8	1.1	1.7	1.7	1.7
LV	– 1.1	– 1.8	– 0.9	– 0.3	0.3	0.9	0.6	0.4
LT	– 1.2	– 1.5	0.0	– 0.6	0.3	0.2	0.2	– 0.3
HU	:	2.4	– 3.2	– 2.1	– 3.7	– 5.3	– 2.7	– 1.0
MT	:	– 2.5	– 6.5	– 1.2	0.7	1.1	1.2	1.8
PL	1.3	0.0	– 3.3	– 2.9	– 1.5	– 1.5	– 0.9	– 0.7
RO	:	7.6	0.1	– 0.1	– 0.3	– 1.1	– 2.5	– 2.5
SK	0.6	– 7.8	– 0.2	– 0.2	– 1.3	– 2.0	– 1.5	– 1.5
SE	– 0.9	8.0	1.2	2.4	3.8	3.9	4.1	4.1
UK	– 2.1	6.7	– 1.2	– 1.2	– 1.0	– 0.7	– 0.6	– 0.2
EU-27	:	4.4	– 0.1	0.1	0.3	1.0	1.4	1.6

Source: Commission services.

Table A.4.16

## General government consolidated gross debt — Excessive deficit procedure (based on ESA 1995)

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	129.7	107.7	98.6	94.3	93.2	89.1	85.6	82.6
DE	55.6	59.7	63.9	65.7	67.9	67.9	65.4	63.6
IE	81.1	37.8	31.2	29.7	27.4	24.9	23.0	21.7
EL	108.7	111.6	107.8	108.5	107.5	104.6	100.9	97.6
ES	62.7	59.2	48.8	46.2	43.2	39.9	37.0	34.6
FR	55.1	56.7	62.4	64.3	66.2	63.9	62.9	61.9
IT	121.2	109.1	104.3	103.8	106.2	106.8	105.0	103.1
LU	7.4	6.4	6.3	6.6	6.1	6.8	6.7	6.0
NL	76.1	53.8	52.0	52.6	52.7	48.7	47.7	45.9
AT	67.9	65.5	64.6	63.9	63.5	62.2	60.6	59.2
PT	61.0	50.4	56.8	58.2	63.6	64.7	65.4	65.8
FI	56.7	43.8	44.3	44.1	41.4	39.1	37.0	35.2
SI	:	27.6	28.6	28.9	28.4	27.8	27.5	27.2
EU-13	:	69.2	69.2	69.7	70.5	69.0	66.9	65.0
BG	:	73.6	45.9	37.9	29.2	22.8	20.9	19.0
CZ	14.6	18.5	30.1	30.7	30.4	30.4	30.6	30.9
DK	72.5	51.7	45.8	44.0	36.3	30.2	25.0	20.0
EE	8.8	5.2	5.7	5.2	4.4	4.1	2.7	2.3
CY	:	58.8	69.1	70.3	69.2	65.3	61.5	54.8
LV	:	12.3	14.4	14.5	12.0	10.0	8.0	6.7
LT	11.9	23.7	21.2	19.4	18.6	18.2	18.6	19.9
HU	:	54.2	58.0	59.4	61.7	66.0	67.1	68.1
MT	:	56.0	70.4	73.9	72.4	66.5	65.9	64.3
PL	:	35.9	47.1	45.7	47.1	47.8	48.4	49.1
RO	:	23.9	21.5	18.8	15.8	12.4	12.8	13.1
SK	22.0	50.2	42.4	41.5	34.5	30.7	29.7	29.4
SE	73.0	52.3	53.5	52.4	52.2	46.9	42.1	37.7
UK	51.0	41.2	38.8	40.3	42.2	43.5	44.0	44.5
EU-27	:	61.8	61.8	62.2	62.9	61.7	59.9	58.4

Source: Commission services.

Table A.4.17

## Cyclically adjusted total revenue of general government — Adjustment based on potential GDP — ESA 1995

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	48.0	48.2	51.5	49.1	50.4	49.5	48.8	48.5
DE	45.1	45.9	45.1	44.0	44.3	44.1	43.6	43.1
IE	40.5	34.2	33.3	35.4	35.6	37.1	36.9	37.0
EL	41.8	47.6	43.0	41.3	41.0	42.5	42.4	41.8
ES	39.1	37.3	38.1	38.8	39.8	40.7	40.1	40.2
FR	49.6	49.1	49.2	49.5	51.0	51.4	51.1	51.2
IT	45.2	44.4	44.9	44.4	44.8	46.3	46.5	46.6
LU	43.0	41.6	43.3	43.0	43.8	40.9	39.6	38.8
NL	47.8	44.9	44.6	45.1	45.9	47.6	46.5	46.3
AT	50.7	48.9	50.0	49.5	48.7	48.0	47.2	46.8
PT	38.5	39.0	43.0	43.6	42.3	43.1	43.0	42.8
FI	56.8	54.0	53.1	52.8	53.7	52.2	51.2	50.9
SI	:	43.9	46.0	45.6	45.9	44.8	43.7	42.7
EU-13	:	45.5	45.4	45.1	45.7	46.1	45.7	45.5
BG	:	:	40.0	40.9	40.8	39.4	39.0	39.4
CZ	:	38.7	41.8	42.5	40.8	39.4	39.0	39.2
DK	56.4	54.6	55.8	57.4	57.5	55.0	53.7	53.3
EE	44.9	36.8	37.6	37.0	35.5	36.5	36.0	36.2
CY	:	34.0	39.0	39.1	41.7	42.8	42.9	42.8
LV	38.6	34.9	33.4	35.0	35.3	37.0	37.3	36.8
LT	35.8	36.8	31.4	31.4	32.7	33.0	34.3	35.0
HU	:	43.7	42.3	42.4	42.0	43.3	44.0	44.3
MT	:	33.3	39.4	43.2	43.9	43.2	42.4	41.9
PL	44.1	37.8	38.8	36.8	39.2	39.3	38.8	38.1
RO	:	47.0	33.0	30.9	32.5	29.9	30.1	30.9
SK	:	40.6	38.0	36.0	35.9	34.0	32.6	32.3
SE	60.5	60.0	58.0	57.7	58.7	57.4	54.9	54.5
UK	38.8	40.2	39.2	39.3	40.7	41.5	41.7	42.1
EU-27	:	:	44.6	44.3	45.0	45.3	44.9	44.8

Source: Commission services.

Table A.4.18

**Cyclically adjusted total expenditure of general government — Adjustment based on potential GDP — Excessive deficit procedure**

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	51.9	49.2	51.0	49.2	52.1	49.1	48.6	48.4
DE	48.3	45.3	48.3	46.9	46.6	45.7	44.4	43.8
IE	40.9	31.8	33.6	34.1	34.4	34.0	35.1	35.4
EL	51.0	51.1	49.4	49.9	47.1	45.8	45.5	45.3
ES	44.3	39.1	38.2	38.7	38.2	38.4	38.2	38.5
FR	54.4	51.7	53.3	53.2	53.6	53.4	53.1	52.7
IT	52.5	46.2	48.3	47.7	48.1	50.0	48.1	48.3
LU	39.7	37.6	42.0	43.1	42.8	40.4	39.0	38.0
NL	51.3	44.6	46.8	46.0	45.1	46.5	46.9	46.2
AT	55.9	51.3	50.9	50.2	49.8	49.1	48.3	48.0
PT	42.7	43.2	45.4	46.3	47.4	46.1	45.8	45.4
FI	61.2	48.6	49.7	49.9	50.1	48.5	47.7	47.3
SI	:	48.2	47.9	47.4	47.0	46.3	45.5	44.4
EU-13	:	46.4	48.1	47.5	47.5	47.3	46.5	46.2
BG	:	:	40.9	39.3	39.5	36.6	37.3	37.6
CZ	:	41.8	47.3	44.4	44.0	42.5	43.1	43.0
DK	59.2	53.8	54.8	54.5	52.5	51.0	50.1	49.5
EE	42.3	36.4	35.3	34.2	33.2	33.2	32.5	32.4
CY	:	37.0	45.1	42.9	43.6	43.9	44.0	43.9
LV	38.7	37.3	34.8	35.7	35.4	37.0	37.3	36.4
LT	35.7	39.1	33.2	33.4	33.6	33.6	34.8	36.0
HU	:	46.5	49.1	48.9	50.0	52.9	50.9	49.0
MT	:	41.1	48.6	46.8	46.0	45.2	44.3	43.4
PL	47.6	41.1	44.6	42.6	43.3	43.3	42.4	41.4
RO	:	48.3	33.5	32.6	33.7	32.0	33.6	34.2
SK	:	51.6	39.9	37.6	38.0	37.3	36.0	35.6
SE	67.0	57.2	57.8	56.5	56.2	55.3	53.1	52.6
UK	44.3	36.8	42.4	42.7	43.7	44.1	44.2	44.3
EU-27	:	:	47.3	46.8	46.8	46.7	46.0	45.7

Source: Commission services.

Table A.4.19

**Cyclically adjusted net lending (+) or net borrowing (–) of general government — Adjustment based on potential GDP — Excessive deficit procedure**

(% of GDP at market prices (excessive deficit procedure))

	1995	2000	2003	2004	2005	2006	2007	2008
BE	– 3.9	– 0.9	0.5	– 0.1	– 1.7	0.5	0.1	0.1
DE	– 3.2	0.6	– 3.2	– 2.9	– 2.3	– 1.5	– 0.8	– 0.7
IE	– 0.4	2.4	– 0.2	1.3	1.1	3.0	1.8	1.6
EL	– 9.2	– 3.5	– 6.4	– 8.6	– 6.1	– 3.3	– 3.1	– 3.4
ES	– 5.1	– 1.8	– 0.1	0.1	1.6	2.3	1.8	1.7
FR	– 4.8	– 2.6	– 4.1	– 3.7	– 2.6	– 2.0	– 2.0	– 1.5
IT	– 7.4	– 1.8	– 3.4	– 3.2	– 3.4	– 3.8	– 1.6	– 1.8
LU	3.3	3.9	1.3	– 0.1	1.0	0.5	0.6	0.8
NL	– 3.5	0.2	– 2.2	– 1.0	0.7	1.1	– 0.4	0.1
AT	– 5.3	– 2.5	– 0.9	– 0.6	– 1.1	– 1.0	– 1.1	– 1.2
PT	– 4.2	– 4.2	– 2.4	– 2.7	– 5.1	– 2.9	– 2.7	– 2.6
FI	– 4.4	5.4	3.4	3.0	3.6	3.7	3.5	3.6
SI	:	– 4.3	– 2.0	– 1.8	– 1.1	– 1.5	– 1.7	– 1.7
EU-13	:	– 1.0	– 2.7	– 2.4	– 1.8	– 1.2	– 0.8	– 0.7
BG	:	– 1.4	– 0.9	1.6	1.3	2.8	1.6	1.8
CZ	:	– 3.1	– 5.5	– 1.9	– 3.1	– 3.1	– 4.1	– 3.8
DK	– 2.8	0.7	1.0	2.9	5.0	4.0	3.6	3.8
EE	2.5	0.4	2.4	2.8	2.4	3.3	3.5	3.8
CY	:	– 3.0	– 6.1	– 3.8	– 1.9	– 1.2	– 1.1	– 1.1
LV	– 0.1	– 2.4	– 1.3	– 0.7	– 0.2	0.0	0.0	0.4
LT	0.1	– 2.3	– 1.8	– 2.0	– 0.9	– 0.6	– 0.6	– 1.0
HU	:	– 2.8	– 6.9	– 6.5	– 8.0	– 9.6	– 6.9	– 4.7
MT	:	– 7.8	– 9.2	– 3.6	– 2.2	– 2.0	– 1.9	– 1.6
PL	– 3.5	– 3.3	– 5.7	– 5.8	– 4.2	– 4.0	– 3.6	– 3.3
RO	:	– 1.3	– 0.6	– 1.7	– 1.2	– 2.2	– 3.5	– 3.3
SK	:	– 11.1	– 1.9	– 1.7	– 2.1	– 3.3	– 3.4	– 3.3
SE	– 6.5	2.7	0.2	1.2	2.5	2.1	1.9	1.9
UK	– 5.5	3.4	– 3.2	– 3.4	– 2.9	– 2.6	– 2.5	– 2.1
EU-27	:	– 0.2	– 2.7	– 2.5	– 1.8	– 1.4	– 1.1	– 0.9

Source: Commission services.

Table A.5.1

## Gross domestic product at current prices

(Billion EUR)

	1995	2000	2003	2004	2005	2006	2007	2008
BE	217.4	251.7	274.7	289.5	298.5	313.2	327.6	341.3
DE	1 929.4	2 062.5	2 161.5	2 207.2	2 241.0	2 307.2	2 407.0	2 484.6
IE	51.3	104.6	138.9	147.6	161.2	175.8	190.1	202.9
EL	89.9	125.9	155.5	168.4	181.1	195.3	208.8	223.9
ES	456.5	630.3	782.5	840.1	905.5	976.2	1 044.0	1 111.3
FR	1 201.1	1 441.4	1 594.8	1 659.0	1 710.0	1 778.1	1 856.7	1 933.9
IT	861.1	1 191.1	1 335.4	1 390.5	1 423.0	1 475.4	1 534.2	1 595.7
LU	15.8	22.0	25.6	27.0	29.4	33.1	36.3	39.4
NL	320.5	418.0	476.9	489.9	505.6	527.9	551.9	578.2
AT	183.2	210.4	226.2	235.8	245.1	256.4	268.7	280.1
PT	87.0	122.3	138.6	144.3	149.0	155.3	162.4	169.7
FI	99.9	132.3	145.9	152.3	157.2	167.9	176.1	183.8
SI	15.5	20.8	24.9	26.2	27.6	29.7	31.9	34.1
EU-13	5 528.7	6 733.1	7 481.5	7 777.9	8 034.3	8 391.4	8 795.7	9 179.0
BG	10.0	13.7	17.8	19.9	21.9	25.1	27.7	30.6
CZ	42.3	61.5	80.9	87.2	99.7	113.1	122.3	132.0
DK	139.1	173.6	188.5	196.2	208.3	219.5	231.5	242.7
EE	3.0	6.1	8.5	9.4	11.1	13.1	15.4	17.7
CY	7.1	10.1	11.8	12.7	13.6	14.5	15.3	16.2
LV	3.8	8.5	10.0	11.2	13.0	16.2	19.5	22.9
LT	5.0	12.4	16.5	18.1	20.6	23.7	26.8	29.8
HU	35.1	52.0	74.7	82.3	88.8	89.2	103.5	110.5
MT	2.8	4.2	4.4	4.4	4.6	4.9	5.2	5.4
PL	106.4	185.8	191.4	204.0	243.8	269.7	296.3	321.5
RO	27.1	40.3	52.6	60.8	79.6	97.1	119.8	138.2
SK	15.1	22.1	29.2	33.9	38.1	43.9	54.5	59.8
SE	191.6	262.6	269.5	281.1	287.7	306.7	325.8	342.5
UK	868.4	1 564.0	1 604.5	1 733.6	1 792.9	1 892.2	2 011.0	2 101.5
EU-27	6 985.4	9 150.0	10 041.7	10 532.6	10 957.9	11 520.5	12 170.2	12 750.4

Source: Commission services.



Table A.5.2

## Gross domestic product at constant prices

(Annual % change)

	1995	2000	2003	2004	2005	2006	2007	2008
BE	2.4	3.7	1.0	3.0	1.1	3.1	2.3	2.2
DE	1.9	3.2	-0.2	1.2	0.9	2.7	2.5	2.4
IE	9.8	10.2	4.3	4.3	5.5	6.0	5.0	4.0
EL	2.1	4.5	4.8	4.7	3.7	4.3	3.7	3.7
ES	2.8	5.0	3.0	3.2	3.5	3.9	3.7	3.4
FR	2.2	4.0	1.1	2.3	1.2	2.0	2.4	2.3
IT	2.8	3.6	0.0	1.2	0.1	1.9	1.9	1.7
LU	1.4	8.4	1.3	3.6	4.0	6.2	5.0	4.7
NL	3.0	3.9	0.3	2.0	1.5	2.9	2.8	2.6
AT	1.9	3.4	1.1	2.4	2.0	3.1	2.9	2.5
PT	4.3	3.9	-0.7	1.3	0.5	1.3	1.8	2.0
FI	3.9	5.0	1.8	3.7	2.9	5.5	3.1	2.7
SI	4.1	4.1	2.7	4.4	4.0	5.2	4.3	4.0
EU-13	2.4	3.9	0.8	2.0	1.4	2.7	2.6	2.5
BG	2.9	5.4	5.0	6.6	6.2	6.1	6.1	6.2
CZ	5.9	3.6	3.6	4.2	6.1	6.1	4.9	4.9
DK	3.1	3.5	0.4	2.1	3.1	3.2	2.3	2.0
EE	4.5	7.9	7.1	8.1	10.5	11.4	8.7	8.2
CY	9.9	5.0	1.8	4.2	3.9	3.8	3.8	3.9
LV	-0.9	6.9	7.2	8.7	10.6	11.9	9.6	7.9
LT	3.3	4.1	10.3	7.3	7.6	7.5	7.3	6.3
HU	1.5	5.2	4.1	4.9	4.2	3.9	2.4	2.6
MT	6.2	6.4	-2.3	0.4	3.0	2.9	3.0	2.8
PL	7.0	4.2	3.8	5.3	3.5	5.8	6.1	5.5
RO	7.1	2.1	5.2	8.5	4.1	7.7	6.7	6.3
SK	5.8	0.7	4.2	5.4	6.0	8.3	8.5	6.5
SE	3.9	4.3	1.7	4.1	2.9	4.4	3.8	3.3
UK	2.9	3.8	2.7	3.3	1.9	2.8	2.8	2.5
EU-27	2.6	3.9	1.3	2.5	1.7	3.0	2.9	2.7

Source: Commission services.

Table A.5.3

## Potential gross domestic product at constant prices

(Annual % change)

	1995	2000	2003	2004	2005	2006	2007	2008
BE	2.1	2.2	1.9	2.1	2.1	2.5	2.3	2.3
DE	2.1	1.6	1.3	1.2	1.1	1.2	1.7	1.8
IE	7.4	8.1	6.1	5.8	6.0	6.1	5.5	4.8
EL	2.2	3.9	4.1	3.7	3.8	4.0	3.8	3.7
ES	2.7	3.5	4.0	4.0	4.2	3.8	3.7	3.6
FR	1.9	2.4	2.1	2.1	2.1	2.2	2.3	2.3
IT	1.4	1.6	1.3	1.4	1.3	1.6	1.5	1.7
LU	4.5	4.9	4.5	4.1	4.3	4.3	4.6	4.7
NL	2.8	3.0	2.0	1.7	1.8	2.1	2.2	2.3
AT	2.2	2.4	2.2	2.0	1.9	2.2	2.2	2.2
PT	2.7	2.8	1.6	1.6	1.3	1.3	1.3	1.5
FI	1.9	3.9	3.4	3.3	3.3	3.3	3.2	3.1
SI	:	4.4	3.8	3.8	3.7	4.0	4.0	4.0
EU-13	:	2.3	2.0	2.0	2.0	2.1	2.2	2.3
BG	:	1.1	5.0	5.5	6.2	6.2	6.4	6.6
CZ	:	1.8	3.7	4.1	4.2	4.6	4.8	4.9
DK	2.3	2.3	1.8	1.9	2.1	2.4	2.5	2.5
EE	:	5.7	7.9	8.6	8.9	9.5	9.8	9.9
CY	:	3.3	3.8	4.4	4.4	3.5	3.6	3.7
LV	:	6.1	7.7	8.7	9.7	10.2	10.2	10.0
LT	:	4.0	7.0	7.7	7.9	7.6	8.1	7.0
HU	:	4.4	4.1	4.0	3.8	3.4	3.2	3.1
MT	:	3.7	1.8	1.8	2.0	1.8	2.1	2.1
PL	:	3.3	3.0	3.6	4.3	5.2	5.9	6.1
RO	:	2.1	4.1	4.8	5.4	6.1	6.7	7.1
SK	:	2.4	4.5	5.1	6.0	6.0	6.3	6.4
SE	2.2	2.9	2.8	3.0	3.0	3.5	3.4	3.0
UK	2.5	3.0	2.7	2.7	2.8	2.8	2.8	2.6
EU-27	:	2.5	2.2	2.3	2.3	2.4	2.6	2.6

Source: Commission services.

Table A.5.4

## Gap between actual and potential gross domestic product at constant prices

(% of potential GDP)

	1995	2000	2003	2004	2005	2006	2007	2008
BE	-0.8	2.0	-0.8	0.1	-1.0	-0.5	-0.5	-0.6
DE	-0.1	1.4	-1.6	-1.5	-1.8	-0.3	0.4	0.9
IE	-3.4	5.7	1.6	0.1	-0.3	-0.4	-0.9	-1.6
EL	-2.4	-1.3	0.6	1.5	1.4	1.7	1.5	1.6
ES	-3.2	2.2	0.1	-0.6	-1.2	-1.1	-1.0	-1.3
FR	-1.3	2.4	-0.1	0.1	-0.8	-1.0	-0.9	-0.9
IT	-0.1	1.9	-0.3	-0.4	-1.6	-1.3	-1.0	-0.9
LU	-2.0	4.6	-1.8	-2.2	-2.5	-0.8	-0.4	-0.4
NL	-1.4	3.2	-1.7	-1.5	-1.8	-1.0	-0.4	-0.1
AT	-0.9	2.2	-1.6	-1.2	-1.1	-0.2	0.5	0.8
PT	-2.6	3.1	-1.1	-1.3	-2.1	-2.1	-1.7	-1.2
FI	-3.2	3.1	-1.7	-1.3	-1.6	0.4	0.3	-0.1
SI	:	1.1	-1.7	-1.2	-0.9	0.2	0.5	0.4
EU-13	:	2.0	-0.7	-0.7	-1.3	-0.8	-0.4	-0.2
BG	10.6	1.8	0.0	1.1	1.2	1.0	0.7	0.3
CZ	:	-1.8	-2.9	-2.8	-1.1	0.4	0.5	0.5
DK	-0.1	2.6	-1.6	-1.3	-0.5	0.3	0.1	-0.4
EE	-6.0	-2.1	-1.0	-1.5	-0.1	1.7	0.7	-0.9
CY	0.9	2.1	-0.5	-0.7	-1.2	-1.0	-0.8	-0.6
LV	-5.6	-1.3	-1.0	-1.0	-0.2	1.4	0.8	-1.2
LT	-6.1	-3.2	2.1	1.7	1.4	1.3	0.6	-0.1
HU	1.6	-0.3	-0.7	0.1	0.5	1.0	0.2	-0.4
MT	-1.4	5.5	-2.1	-3.4	-2.5	-1.5	-0.6	0.1
PL	-2.2	0.7	-1.3	0.3	-0.4	0.1	0.4	-0.2
RO	4.7	-7.6	-2.7	0.7	-0.5	0.9	0.9	0.2
SK	:	-2.4	-2.8	-2.5	-2.4	-0.4	1.7	1.8
SE	-1.8	1.9	-1.8	-0.7	-0.8	0.2	0.6	0.8
UK	-0.5	1.3	0.0	0.5	-0.3	-0.4	-0.4	-0.5
EU-27	:	1.7	-0.7	-0.5	-1.1	-0.6	-0.3	-0.3

Source: Commission services.



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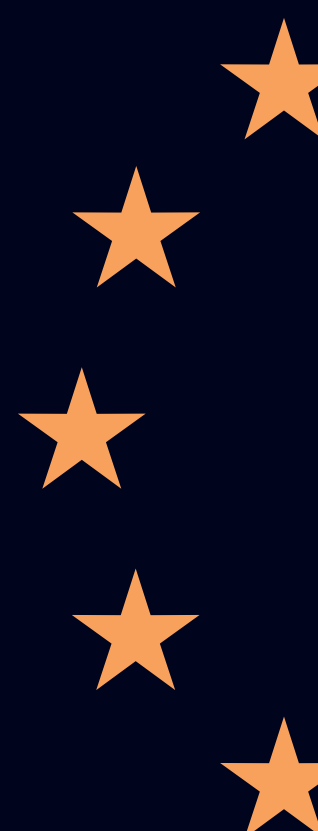
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