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Public finances in EMU 2002

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Abbreviations and symbols used

Member States

B	Belgium
DK	Denmark
D	Germany
EL	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	United Kingdom
WD	West Germany

EU	European Union
EU-15	European Community, 15 Member States
EUR-11	Group of 11 Member States participating in monetary union (B, D, E, F, IRL, I, L, NL, A, P, FIN)
Euro area (EUR-12)	Member States currently participating in monetary union (EUR-11 plus EL)

Currencies

ECU	European currency unit
EUR	euro
ATS	Austrian schilling
BEF	Belgian franc
DEM	German mark (Deutschmark)
DKK	Danish krone
ESP	Spanish peseta
FIM	Finnish markka
FRF	French franc
GBP	Pound sterling
GRD	Greek drachma
IEP	Irish pound (punt)
ITL	Italian lira
LUF	Luxembourg franc
NLG	Dutch guilder
PTE	Portuguese escudo
SEK	Swedish krona
CAD	Canadian dollar
CHF	Swiss franc
JPY	Japanese yen
SUR	Russian rouble
USD	US dollar

Other abbreviations

Bn	1 000 million
CPI	Consumer price index
EC	European Commission
ECB	European Central Bank
ECSC	European Coal and Steel Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
EMU	economic and monetary union
ERM	exchange rate mechanism
Euratom	European Atomic Energy Community
Eurostat	Statistical Office of the European Communities
FDI	foreign direct investment
GDP (GNP)	gross domestic (national) product
GFCF	gross fixed capital formation
HICP	harmonised index of consumer prices
ILO	International Labour Organisation
IMF	International Monetary Fund
LDCs	less developed countries
Mio	million
Mrd	1 000 million
NCI	New Community Instrument
OCTs	overseas countries and territories
OECD	Organisation for Economic Cooperation and Development
OPEC	Organisation of Petroleum Exporting Countries
PPS	purchasing power standard
SMEs	small and medium-sized enterprises
VAT	value added tax
:	not available
–	none

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Fiscal policies in the recent juncture: responding to the cyclical slowdown …

2001 proved to be the most challenging period for fiscal policy in the three-year history of EMU as the global slowdown provided the first real stress test of EMU's multilateral surveillance framework, and especially its budgetary dimension. The budget deficit for the euro area reached 1.3 % of GDP, up from 0.7 % in 2000. Despite this first reversal in the process of budgetary consolidation since 1993 and criticism about perceived failure to strictly adhere to the provisions of the Stability and Growth Pact (SGP), there are several grounds for considering the framework for budgetary aspects of the multilateral surveillance framework have performed well in responding to the cyclical slowdown.

Firstly, Member States had scope to let the automatic stabilisers operate so as to cushion the negative shock. This was especially the case in countries which had already achieved a budget balance or surplus. Automatic stabilisers were also allowed to work in countries that had not yet completed the transition to the close-to-balance target of the SGP. However, deficits in Germany and Portugal started to rise and approach the 3 % of GDP reference value.

Secondly, countries did not embark on unwarranted expansionary policies. Fiscal authorities came under considerable pressure to relax consolidation commitments and resort to active demand management in response to the global slowdown. The structural budget deficit in 2001 of 1.5 % of GDP is almost unchanged compared with 2000: this illustrates that the deterioration in the actual budget balances was mostly due to operation of the automatic stabilisers. Indeed, it is worth noting that despite the slowdown, actual budget balances were unchanged in Belgium, Denmark and Italy and indeed improved in Greece, Spain, Austria and Sweden.

Thirdly, Member States have been able to continue with planned tax reforms designed to remove supply side rigidities, despite claims from different quarters that the SGP was unnecessarily tying the hands of the authorities through arbitrary and inflexible rules. What EMU's budgetary rules emphasise is the need to accompany these tax reforms with appropriate measures on the spending side given the fact that tax reductions are seldom self-financing. Such measures are paramount to guarantee the sustainability of tax reforms and thus should reinforce their impact on investment and consumption.

The confirmation of the commitment to the rules and spirit of the SGP helped achieve a balanced policy mix which was supportive to growth while guaranteeing price stability. Whilst fiscal policies remained broadly neutral, monetary conditions eased markedly. Such a policy mix is appropriate not only from a cyclical standpoint, but also in a medium- and longer-term perspective, considering the need to boost private investment and potential growth and to prepare for the budgetary pressures of ageing populations. Recent short-term indicators point to a turnaround in the European economy, and thus expansionary measures may *ex post* have turned out to be pro-cyclical. This assessment of the performance of the framework for budgetary surveillance needs to be tempered with caution. Budgetary positions of 'close to balance or in surplus' are still not met in all countries, and unless such targets are rapidly achieved, a severe recession in the future could provide a much sterner test for the EU's framework for budgetary surveillance.

([1]) The Summary and main conclusions of this report have been adopted by the College of Commissioners in the form of a communication from the Commission to the Council and the European Parliament 'Public finances in EMU — 2002', COM(2002)209, adopted on 14 May 2002.

… while continuing to improve EMU's fiscal framework

In early 2002, attention has mostly focused on the cyclical response to the slowdown and on the procedures for dealing with slippage from budgetary targets, especially the debate on whether an early-warning recommendation should be issued to Germany and Portugal. However, it is important not to overlook a number of significant measures that have strengthened the quality and coverage of budgetary surveillance, and improved the analytical tools available to the Commission and Council for policy assessment. While seemingly technical, these are important advances which will help improve the coherence and effectiveness of EMU's fiscal framework.

Firstly in July 2001, the Ecofin Council revised the code of conduct on the content and presentation of stability and convergence programmes (which dated from 1998) taking into account the experiences of three years in EMU. Member States applied the code to the recently updated programmes. The revised code provides for a clustered submission of programmes with budgetary targets based on external macroeconomic assumptions that have been agreed in common. It also clarifies the interpretation as to what constitutes an appropriate medium-term target of 'close to balance or in surplus' for each Member State. Finally, it extends the coverage of programmes to include sections on the quality and sustainability of public finances in line with the Lisbon conclusions. The most important result of the application of the new code is probably the improved ability to consider the implications for the euro area as a whole of the budgetary policies outlined in the national programmes. This was particularly valuable given the high degree of uncertainty surrounding the economic situation at the end of 2001 and beginning of 2002. In time, this will also allow the euro-area dimension to be increasingly factored into national budgetary policies.

Second, the economic downturn underlined the importance of paying close attention to the cyclically-adjusted budget balances when examining the budgetary positions of Member States. While measuring the impact of the economic cycle on budget positions is complex and subject to uncertainties, it is important that all actors involved in the surveillance process have a common view on the underlying budgetary developments. *Inter alia*, the cyclical adjustment of budget balances is used when evaluating the minimum cyclical safety margins under the 3 % of GDP reference value and the respect of the 'close-to-balance or in surplus' target of the Stability and Growth Pact. In order to ensure consistency, broad agreement has been reached between the Commission and Council on a method to measure cyclically-adjusted budget balances based on a production function approach to estimating the output gap.

Third, a major extension of EU budgetary surveillance was achieved with the first systematic assessment of the sustainability of public finances in light of ageing populations. This was made on the basis of the updated stability and convergence programmes submitted in late 2001. The analysis shows the potential risk for emerging budgetary imbalances in many Member States, and emphasises the importance of achieving and sustaining the medium-term targets set down in their programmes.

The importance of the early-warning system

A critical juncture in the budgetary surveillance process was reached in January 2002, only weeks after the introduction of euro notes and coins, when the European Commission recommended that an early warning be sent to Germany and Portugal under the SGP. Both countries missed the targets for 2001 set down in their stability programmes by a wide margin (over 1 % of GDP), and there was a clear risk of deficits approaching the 3 % of GDP reference value for the budget deficit. In the face of such clear-cut slippage from agreed targets, the Commission acted to preserve credibility of the legal and political obligations of the pact. As a result of discussions in the Ecofin Council on the Commission's draft recommendation for an early warning, Germany and Portugal gave firm political commitments which responded to the substance of the Commission's concerns: the Council therefore decided to close the procedure. Both countries reiterated their willingness to avoid a breach of the 3 % of GDP reference value, to resume the process of budgetary consolidation and to reach their medium-term targets by 2004. At the same time, the Council restated the importance of the early-warning system in the overall framework for budgetary surveillance and confirmed that the Commission had acted in accordance with the provisions of the pact.

The credibility of the rules-based framework for the coordination of budget policies will have to receive particular attention in the future. A relevant distinction here is

between the process of the early-warning and its outcome. It is important to avoid a perception in public opinion that the rules can be changed or at least avoided in challenging circumstances. Commitment to the framework for budgetary surveillance was confirmed by the Council and so was the importance of the SGP. The early-warning procedure can and will be used again if the need arises. Obviously, to maintain the credibility of the SGP, it is important that the commitments of Germany and Portugal be implemented in full. Positive evidence is emerging that these commitments are being taken seriously. In particular, following the early-warning episode, an agreement on a domestic stability pact between the *Länder* and the *Bund* in Germany has been agreed, thus reinforcing the argument that the Commission's aim in activating the early-warning mechanism are being met.

Looking to the future: attaining the goal of the Stability and Growth Pact …

Maintaining credibility in the SGP also requires the Commission and Council to demonstrate a capacity to learn from this first experience with the early-warning mechanism. While the SGP has undergone the first real stress test and the economic situation is forecast to improve, there is no room for complacency. Important budgetary challenges remain to be tackled.

First of all, once economic recovery has gathered pace, the budgetary consolidation process to meet the 'close-to-balance' rule of the pact must start again and any lost ground should be quickly recovered. In the latest updates of stability and convergence programmes, Member States which still have a budget deficit confirm their commitment to reach the medium-term target of the SGP by 2003 or 2004. Moreover, the budgetary adjustment planned for coming years will be achieved via reductions in both revenue and expenditure, in line with the recommendations of the BEPGs. Meeting the budgetary commitments to reach the medium-term targets foreseen in the stability and convergence programmes is paramount to underpin the credibility of the pact. This is especially the case for the four countries still in deficit (Germany, France, Italy and Portugal).

Second, as past experience shows, budgetary mistakes tend to occur mainly in good times. The debate back in 2000 on how to distribute the so-called 'growth dividends' between tax cuts and spending increases defy, as the Commission pointed out at the time, not only the rules of the SGP, but also economic logic. It is important not to consider improvements in the budget balance due to a favourable economic juncture as permanent, thus providing scope for tax reductions or expenditure increases. The budgetary constraint affecting mainly the large euro-area countries in 2001 and 2002 have their roots in the missed opportunities of the high-growth period 1998–2000. Avoiding budgetary imbalances in upturns is probably the most daunting challenge for the SGP. Surveillance will need to ensure that countries still not complying with the requirements of the pact take the opportunity of the recovery to accelerate fiscal retrenchment while the others let automatic stabilisers operate fully. In brief, financing tax reductions and spending rises via the automatic fruit of economic growth or accelerating the tax cuts as soon as growth revives is misguided both from the point of view of fiscal prudence and cyclical stabilisation.

Third, there is a need to discuss the desirability and effectiveness of discretionary fiscal policy. If countries abide by the SGP's fiscal philosophy, they will choose a broadly balanced budget in structural terms and let automatic stabilisers play freely over the cycle. This is based on the well-known pitfalls of active fiscal management (implementation and recognition lags, model uncertainty, measure irreversibility, etc.). The circumstances under which counter-cyclical discretionary fiscal actions (going beyond the operation of the automatic stabilisers) may be both desirable and effective are very narrow: they could be envisaged in the event of large country-specific demand shocks originating domestically and entailing strong inflationary or deflationary pressures. Even in these cases, however, the risk that an *ex ante* counter-cyclical policy becomes *ex post* pro-cyclical is high. Moreover, the room for manoeuvre for the discretionary stimulus would have to be created in order not to breach the 3 % of GDP deficit ceiling. For a number of countries, this would imply going beyond the close-to-balance rule of the pact. A clear agreement between the EMU policy actors on the criteria to assess discretionary fiscal policies would increase the transparency and predictability of budgetary behaviour. While the role for discretionary fiscal policies should be confined to critical country specific shocks, this does not mean that policy coordination should be confined to exceptional circumstances. By its very nature, occasional coordination is ill-suited for implementing a consistent macroeconomic strategy in both normal and exceptional situations. Policy coordination — viewed as a system to attain a common assessment of the economic situation, agree on the orientation of the policy response and monitor their implementation — should be regular, not occasional.

Finally, several Member States are trying to improve the compatibility between their national fiscal rules and EU budgetary commitments. The Treaty and the pact leave it up to Member States to determine their own budgetary procedures to achieve SGP targets. However, the financial relevance of regional governments and other sub-sectors of the government in the budget process in federal States and strongly regionalised States (Belgium, Germany, Spain, Italy and Austria) has highlighted the necessity for Member States to find solutions to secure sustained discipline at all levels of government. To address this coordination problem, several Member States have already adopted special arrangements among government levels, in what could be termed 'internal stability pacts'. A common characteristic of these pacts is the effort to clarify and share the responsibility for budget discipline among the different levels of government.

… while addressing the long run sustainability of public finances

Fiscal discipline is not only about running sound public finances in the short to medium term. It also requires that public finances are sustainable in the long run, i.e. that current budget policies do not lead to or risk causing future budgetary imbalances in breach of SGP requirements due to the budgetary effects of ageing populations. Sustainability also requires that tax burdens remain at reasonable levels (so that an unfair financing burden does not fall on future generations), and that age-related expenditures (pensions, healthcare) do not crowd out other essential public spending such as investment and R & D which enhance the public capital stock.

The information included in the stability and convergence programmes shows that ageing populations will have a considerable budgetary impact. Public spending is projected to increase by between 4 % and 8 % of GDP in the coming four decades in most Member States, although much higher increases are projected in several countries. Increases in public spending due to ageing populations will start as of 2010 as the baby-boom generation enter into retirement, and the steepest increases will occur usually between 2020 and 2035.

The analysis shows that on the basis of current policies, there is a risk of budgetary imbalances emerging in many Member States, and these risks multiply if countries fail to reach the medium-term targets set down in their stability and convergence programmes. All countries will face a budgetary challenge posed by ageing populations, even those which appear to be well-placed to meet the growth in age-related expenditures. In high-debt countries (Belgium, Greece, Italy), sustainability is dependent upon running large budget surpluses over several decades, illustrating the continued need to give preference to debt reduction over the long run. Other Member States face a challenge of meeting the additional costs of ageing populations while at the same time pursuing other budgetary objectives, notably keeping the tax burden at reasonable levels.

Faced with this challenge, several countries have put in place comprehensive strategies, including measures to raise employment rates especially amongst women and older workers, reform of age-sensitive transfers programmes, and commitments to run sustained budget surpluses so as to achieve a rapid reduction in public-debt levels prior to the impact of ageing populations taking hold. However, the ambitious and comprehensive reforms of some Member States contrast with rather piecemeal approaches in other countries which fail to recognise the seriousness of the policy challenge. Several countries have established pension reserve funds in recent years to meet future expenditure increases. While this is a welcome development, the extent to which they will meet future costs is questionable (with the exception of Ireland) given the limited resources which have already been invested in them and uncertainty as regards the size and frequency of contributions. Overall, policy-makers need to be more aware that it is short- to medium-term budgetary choices which determine the capacity of countries to meet the budgetary costs of ageing populations.

New frontiers of budgetary surveillance and coordination: factoring in the 'quality' of public spending …

Public spending has risen sharply in the EU over the past three decades to 47 % of GDP in 2001, having declined during the Maastricht process of budgetary consolidation from over 51 % of GDP in 1995. The average size of the government sector in the EU remains well above levels in other industrialised countries and is 15 percentage points of GDP above that in the United States. The aggregate picture, however, hides considerable disparity in the size of the government spending across Member States.

Public spending on the basic function of the State and other measures to improve the allocation of resources (defence, justice, education, healthcare, R & D, economic services) has remained remarkably stable over the past 30 years, and is very similar (between 14 % and 16 % of GDP) across EU countries. The difference in

overall government spending levels in the EU compared with the United States mainly reflects spending on social protection programmes, this being a typical feature of the European social model. The largest increases in spending on social protection have been recorded in countries that had relatively immature social protection systems at the beginning of the 1980s. Conversely, countries with high levels of spending in the early 1980s have started in the last decade to reduce the amount of resources devoted to social welfare.

The stricter budget constraint facing Member States in EMU, coupled with efforts to raise the employment and growth performance as part of the Lisbon agenda, requires that greater attention be paid to how public resources are spent and how taxes are levied. However, cross-country analyses have been hampered by the lack of timely and comparable data on the functional classification of public expenditures. As a consequence, while considerable progress has already been accomplished on long-term sustainability of public finances, whereas surveillance of the quality of public finances, as required by the European Council, is still at an early stage.

The difficulty in putting in place an effective monitoring of the quality of public spending is also due to the conceptual difficulty in defining what 'quality' actually means. A certain composition of public expenditure could be considered as 'high quality' if it makes a positive contribution to the goals of the Lisbon strategy, i.e. making the Union the most dynamic, competitive, knowledge-based economy, enjoying full employment, strengthened economic and social cohesion and environmental sustainability. On this basis, Member States can promote growth and employment by redirecting public expenditure towards physical and human capital accumulation and research and development. Investment in human capital and infrastructure can have a robust effect on long-term growth and new innovative approaches to financing should be sought, including public private partnerships. Spending on social welfare can contribute to equity and can also have a positive impact on growth and economic efficiency under certain conditions and provided it remains within certain limits.

Countries appear to have been able to improve the composition of public expenditure while at the time containing the size of the public sector during the 1990s. Before drawing firm policy conclusions about the level and composition of public spending, it is essential to conduct microeconomic analysis that takes into account the specific aims of spending programmes, their design and linkages with other policy instruments. A precondition for doing so is the availability of suitable data, the elaboration of which has already been identified as a priority area by successive European Councils.

… and preparing for enlargement

Accession negotiations are currently underway with 12 of the 13 candidate countries who wish to join the EU. The Treaty provisions and secondary legislation (the *acquis communautaire*) on economic and budgetary policy will apply to these countries once they join the EU. A major policy challenge is to implement upon accession the EU framework for budgetary surveillance taking into account the specific needs and circumstances of the candidate countries. Key budgetary issues are faced by a sub-set of candidate countries, namely the 10 countries from central and eastern Europe (CEECs) as they approach entry into the EU and, differently from the other candidate countries, undergo a transition from a command to a market economy.

The overall relative level and composition of revenues and expenditures in CEECs resemble those in present EU Member States, although significant differences for individual countries and budgetary components exist at times. This is a remarkable fact since CEECs have had only 10 years to implement *ex novo* a fiscal system. While the size of CEECs governments is on average higher than in most emerging economies, this can be largely explained by underlying economic factors. There remains, however, a need to reassess the structure of budget revenues and expenditures to foster a growth-enhancing environment providing sufficient space and incentives for private sector development.

A key requirement for budgetary surveillance are reliable and timely government accounts. This has proved to be difficult for countries undergoing a transition to a market economy. From an institutional point of view, treasury departments had to be created and far-reaching modifications were required to accounting and recording procedures. Developing the capability to provide timely and reliable data with an appropriate coverage has been a lengthy task, which is not yet completed and there is scope for further improving the quality of budgetary data. From a conceptual point of view, the transition to a market economy is shifting the boundaries between the State and the private sector, making it somewhat difficult to interpret and compare government accounts in the CEECs. Many of the underlying problems, however, are

decreasing as transition advances and the *acquis communautaire* is progressively implemented.

Budgetary surveillance will also need to take into account that the CEECs are undergoing tremendous structural and institutional changes. These changes are not only driven by the completion of a move from a command to a market economy, but also by the liberalisation effects which EU membership will entail, the need to upgrade public infrastructure and the commitment to implement the *acquis communautaire*, with the related institution building requirements. All of these changes have significant budgetary implications that need to be factored into the evaluation of the budgetary situation. In addition, due consideration must be given to the constraints imposed by the fact that, on average, CEECs are characterised by a higher degree of volatility in output levels compared with EU Member States and are small open economies which rely heavily on foreign capital to finance catching up.

Since 2001, the Commission has implemented a new initiative called the pre-accession fiscal surveillance procedure (PFSP), which is designed to closely approximate the policy coordination and surveillance mechanisms of the EU while giving due regard to the accession priorities of the candidate countries. The assessment of budgetary positions in the run-up to accession should therefore be flexible enough to cater for the uncertain and fast changing circumstances facing economies undergoing rapid change, but at the same time rigorous enough to cater for the very real challenge facing the CEECs.

Accordingly, in the run-up to accession, candidate countries are required to comply with the Copenhagen criteria rather than fulfilling the Maastricht nominal convergence criteria. The primary concern in the pre-accession period is medium-term macroeconomic stability, rather than achieving any particular target for the budget balance. Medium-term budgetary policy should also pursue a structure of expenditure and revenues that effectively supports economic growth. At the same time, the emphasis on structural and institutional reform should not hide the importance of sound fiscal policies. CEECs' vulnerability to economic shocks and the external constraints they face underline the need for prudent policies. The appropriate deficit level may vary across countries and is likely to be a function of elements such as the speed of structural reforms, the relative speed of economic growth, the extent of real convergence and the level of debt.

Part I

Current developments and prospects

Summary

The year 2001 proved to be the most challenging period for fiscal policy in the three-year history of EMU as the global slowdown provided the first real stress test of EMU's budgetary framework. The budget deficit for the euro area reached 1.3 % of GDP, 0.5 % higher than in 2000, the first increase in budget deficits since 1993. This development is largely explained by the working of the automatic stabilisers in a period of slowing growth, but is also due the implementation of tax cuts which were only partially matched with expenditure reductions. In four countries (Germany, France, Italy and Portugal), underlining budget balances remain well above the medium-term target of the Stability and Growth Pact. Significant slippage from agreed budgetary targets towards levels that potentially risk breaching the 3 % of GDP reference occurred in Germany and Portugal.

At the same time, governments have not pursued fine-tuning policies which could have implied a reversal of the consolidation efforts of the last years. This is welcome not only because it strengthens the commitment to fiscal prudence, but also from a purely cyclical standpoint: as recent short-term indicators point to a turnaround in the European economy, having adopted expansionary measures may *ex post* have turned out to be procyclical. While fiscal policies remained broadly neutral, monetary conditions have eased thanks mainly to low real interest rates. All in all, the fiscal stance and the policy mix in the euro area have been overall supportive to growth.

Looking ahead, the economic situation is forecast to improve, something that should allow the budgetary consolidation process to start again and recover lost ground with less friction between policy objectives. Beyond making sure that balanced budgets are actually achieved or maintained, the more horizontal challenge will be to sustain healthy budgetary positions in 'good times' in order to support a growth-friendly monetary policy and accelerate the reduction in public debt.

In a medium-term perspective, the latest updates of the stability and convergence programmes confirm the commitment by all Member States to reach the target of 'close to balance', both in actual and structural terms, by 2003 or 2004. Moreover, the adjustment is planned to be achieved in line with the recommendations of the broad economic policy guidelines as both revenue and expenditure ratios are set to go down in most countries. However, it should be noted that the medium-term targets of Member States are based on somewhat optimistic growth assumptions. It is vital therefore that all efforts be made to achieve these goals and maintain sound positions over the medium-term. This requires that budgetary consolidation resumes vigorously as soon as growth picks up in order to achieve the agreed objectives by the deadlines in the programmes. Meeting these targets will allow all Member States to let automatic stabilisers operate freely during future cyclical downturns thereby mitigating the policy dilemma that countries in deficit faced in 2001.

A major extension of EU budgetary surveillance was achieved with the first systematic assessment of the sustainability of public finances in light of ageing populations. This was made on the basis of the updated stability and convergence programmes submitted in late 2001. The analysis shows the potential risk for emerging budgetary imbalances in many Member States, and emphasises the importance of achieving and sustaining the medium-term targets set down in their programmes.

1. Budgetary developments over the 2001–03 period

1.1. Budget balances and debt: short-term developments and prospects

In 2001, the euro-area budget position deteriorated for the first time since 1993. The deficit reached 1.3 % of GDP, 0.5 % of GDP higher than the outcome in 2000 (net of UMTS receipts) and 0.7 % of GDP above the objective set down in stability programmes. This development is largely explained by the working of the automatic stabilisers in a period of slowing growth, but is also due the implementation of tax cuts which were only partially matched with expenditure reductions (see Table I.1). The estimated euro-area cyclically-adjusted budget deficit increased slightly to 1.5 % of GDP, up from 1.3 % of GDP in 2000.

Table I.1

General government budgetary position — euro area

(% of GDP)

	1998	1999	2000 (1)	2001	2002	2003
Total receipts (1)	47.1	47.7	47.3	46.7	46.6	46.2
Total expenditure (2)	49.3	49.0	47.1	48.0	48.1	47.4
Actual balance (3) = (1) – (2)	– 2.2	– 1.3	0.2 (– 0.8)	– 1.3	– 1.4	– 1.2
Interest (4)	4.8	4.3	4.1	3.9	3.7	3.7
Primary balance (5) = (3) + (4)	2.6	3.0	4.3 (3.2)	2.6	2.3	2.4
Cyclically-adjusted balance (6)	– 2.1	– 1.3	– 1.3	– 1.5	– 1.2	– 1.2
Cyclically-adj. prim. balance = (6) + (4)	2.7	3.0	2.7	2.4	2.5	2.4
Change in actual balance:	0.4	0.9	1.5	– 1.5	– 0.1	0.2
Due to — Cycle	0.3	0.2	0.5	– 0.4	– 0.4	0.3
— UMTS	0.0	0.0	1.1	– 1.1	0.0	0.0
— Interest	0.3	0.5	0.2	0.2	0.2	0.0
— Cyclically-adjusted primary balance	– 0.3	0.3	– 0.3	– 0.3	0.1	– 0.1

(1) In brackets: outcome net of UMTS.
NB: differences are due to rounding.

Source: Commission services, 2002 spring forecast.

Budget positions at Member State level are more dispersed. As shown on Table I.2, 11 EU Member States had actual budget positions in balance or in surplus in 2001 (net of UMTS). However, the budget positions of Germany, France, Italy and Portugal remained weak with deficits ranging from 1.4 % of GDP in Italy to 2.7 % of GDP in Germany and Portugal: these deficits in the large euro-area countries explain the deficit position for the euro area as a whole.

It is also worth noting that, in spite of the slowdown in growth, actual budget balances in 2001 did not deteriorate compared to the previous year in Belgium, Denmark

Table I.2

Budget balances in the EU, 2000–03

	Budget balance, excluding UMTS				Cyclically-adjusted budget balance				Cyclically-adjusted primary balance			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
B	– 0.1	0.2	– 0.2	0.2	– 1.1	– 0.4	0.2	0.2	5.7	6.2	6.4	6.4
D	– 1.3	– 2.7	– 2.8	– 2.1	– 1.6	– 2.5	– 2.1	– 1.9	1.7	0.7	1.2	1.4
EL	– 0.8	– 0.4	0.3	0.5	– 0.9	– 0.7	– 0.1	– 0.1	6.1	5.5	5.5	5.1
E	– 0.4	0.0	– 0.2	0.0	– 1.1	– 0.7	– 0.4	– 0.2	2.2	2.4	2.5	2.6
F	– 1.3	– 1.5	– 2.0	– 1.8	– 1.7	– 1.6	– 1.9	– 1.9	1.6	1.5	1.3	1.2
IRL	4.5	1.7	0.4	0.2	2.4	– 0.1	– 0.3	– 0.3	4.5	1.4	1.3	1.2
I	– 1.7	– 1.4	– 1.3	– 1.3	– 1.9	– 1.5	– 1.0	– 1.4	4.6	4.9	4.8	4.3
L	5.8	5.0	2.0	2.5	4.2	3.6	1.8	2.2	4.5	3.8	2.0	2.4
NL	1.5	0.2	0.0	– 0.4	– 0.1	– 0.3	0.2	– 0.3	3.9	3.1	3.2	2.4
A	– 1.9	0.1	– 0.1	0.3	– 2.5	– 0.2	0.0	0.3	1.2	3.4	3.4	3.6
P	– 1.8	– 2.5	– 2.6	– 2.5	– 2.6	– 3.2	– 2.8	– 2.6	0.5	– 0.1	0.3	0.6
FIN	7.0	4.9	3.3	2.7	4.0	3.6	3.2	2.5	6.8	6.3	5.8	5.0
EUR-12	– 0.8	– 1.3	– 1.5	– 1.2	– 1.4	– 1.5	– 1.2	– 1.2	2.7	2.4	2.5	2.4
DK	2.5	2.9	2.1	2.4	1.3	2.6	2.3	2.4	5.5	6.7	5.8	5.7
S	3.7	4.8	1.7	1.9	2.1	4.2	1.8	1.7	6.4	7.6	4.9	4.6
UK	1.7	0.9	– 0.2	– 0.5	1.2	0.6	– 0.2	– 0.7	4.0	3.0	2.1	1.5
EU-15	– 0.2	– 0.7	– 1.1	– 0.9	– 0.7	– 0.9	– 0.9	– 1.0	3.1	2.8	2.6	2.4

NB: Cyclically-adjusted figures are computed with the Hodrick–Prescott (HP) filter.

Source: Commission services, 2002 spring forecast.

and Italy and even continued to improve in Denmark, Greece, Spain, Austria and Sweden. In some cases, however, this improvement was partially the result of one-off measures (for example securitisation operations in Italy) or changing patterns of tax payments between years (Austria and Sweden).

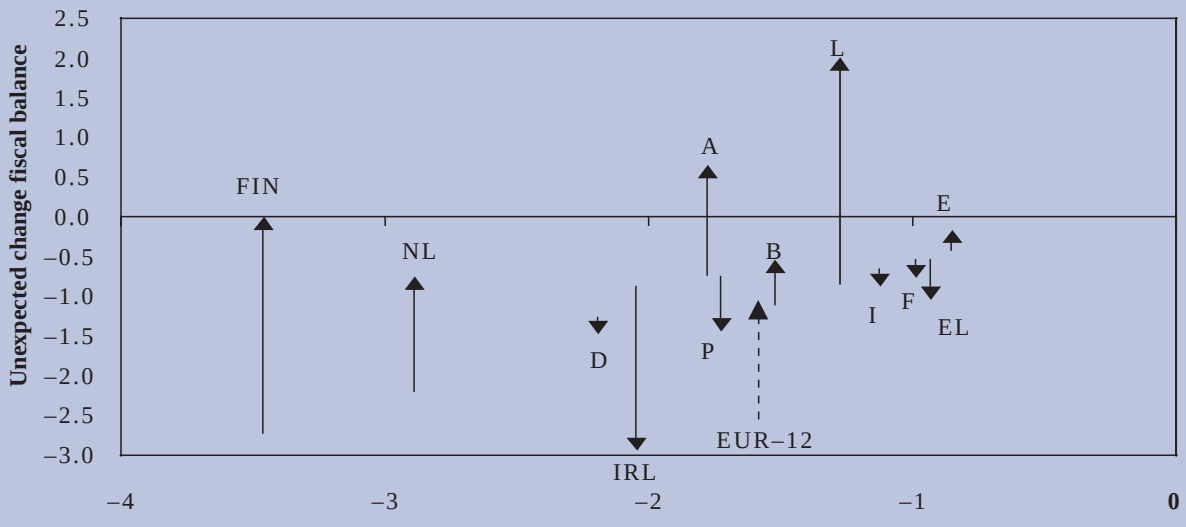
Most countries undershot the targets for 2001 set down in their stability programmes on account of growth being lower than expected. This is shown in Graph I.1, which compares the actual budget outcome for 2001 with what could have been expected had Member States stuck to the plans set down in their programmes and allowed the automatic stabilisers to work fully. The x-axis shows the unexpected shortfall in growth compared to what was assumed in the stability and convergence programmes: for example, growth in Finland during 2001 was 3.5 % below expectations.

The bottom of the arrow shows the deviation from the budget target for 2001 that could have been expected had a country let automatic stabilisers play fully in response to the shortfall in growth (e.g. given the growth shortfall, Finland could be have been expected to undershoot its budget target by 2.5 % of GDP) ([1]) The tip of the arrow shows the actual deviation from target that took place: an upward pointing arrow means that a country had a better-than-expected budgetary outcome, and vice versa.

From the graph it can be seen that in the euro area as a whole, the deterioration in the budget balance compared to target (0.7 % of GDP) can be explained by the operation of stabilisers. The same holds for Germany, France and Italy, where the budgetary slippage to target can also be largely explained by the shortfall in growth. However, the effects of the automatic stabilisers on the budget balance have been fully or partially offset in Belgium, Finland, the Netherlands, Austria and Luxembourg. The opposite is true in Greece, Ireland and Portugal (in spite of corrective action taken, see Part VI), where non-cyclical budgetary developments instead seem to have pushed the budget outcome further away from target.

([1]) This is obtained by multiplying the growth shortfall by the average budget sensitivity to the output gap (see Part II.3).

Graph I.1: **Deviation from stability and convergence programme targets and budgetary effects of growth shortfall in 2001**



The budgetary slippage in Germany and Portugal gave particular cause for concern and resulted in the Commission recommending the Council to issue an early warning under the provisions of the SGP: the reasons behind the Commission's decision and the subsequent actions of the Council and the Member States concerned are explained in detail in Part II.2 of this report.

Looking ahead to 2002 and 2003, the Commission forecast of spring 2002 projects a gradual recovery in economic growth even if on average in 2002 it will remain below trend. Nonetheless, based on the recent budget laws of Member States, the budget balance for the euro area as a whole is expected to be at 1.4 % of GDP, marginally worse than in 2001, before recovering some lost ground to reach a deficit level of 1.2 % of GDP in 2003. While revenue and expenditure ratios to GDP are basically unchanged in 2002, in 2003, due to the impact of the tax measures, government revenues as a share of GDP are projected to be reduced by 0.4 % of GDP but this is expected to be more than offset by a 0.7 % of GDP reduction in the expenditure ratio.

In other words, the adverse cyclical conditions (i.e. a negative output gap) will continue to burden the budget balance in 2002 (by 0.4 % of GDP). However, the cyclical conditions are projected to make a positive contribution again in 2003 when the recovery is expected fully under way. In cyclically-adjusted terms, the deficit of the euro area will return to its 1999/2000 level of 1.3 % of GDP in 2002, which underlines the fact that the budgetary consolidation process has stalled in recent years (although this is in part due to the effects of tax cuts, see below).

A closer look at developments in Member States shows that Belgium, Spain, Austria and the UK are expected to move into small budget deficit positions in 2002 from positions of balance or surplus in 2001. Under a no-policy change assumption, Belgium and Spain are projected to move back to balance in 2003, while the Netherlands will join the group of countries with deficit positions. Moreover, the large current budget surpluses in Ireland and Sweden are expected to be reduced substantially in coming years.

The budget deficit in Germany is forecast to increase to 2.8 % of GDP in 2002, which is a cause for concern given the very small margin to the 3 % of GDP reference value. Also, in Portugal, the deficit is expected to remain high in 2002 at 2.6 % of GDP. However, in Portugal the new government is expected to amend the current budget through a supplementary budget to be presented in May.

On the basis of current policy, the Commission projections show that Germany, France, Italy and Portugal will continue

to be away from budget balance or surplus also in 2003. This indicates that meeting the objective in their stability programmes (see below) will require additional discretionary efforts. In these circumstances, it is therefore important that the commitments made in stability and convergence programmes be rigorously adhered to, and that Germany and Portugal in particular honour the political commitments which enabled the Ecofin Council in February 2002 to close the debate on the early-warning mechanism.

The general government gross debt level of the euro area is expected to be reduced further to just below 70 % of GDP in 2003. However, the pace of debt reduction is very slow due to the negative contribution of the interest rate-growth rate differential and to stock-flow operations. This overall picture conceals very different situations across Member States. Belgium and Italy continue to have debt ratios above the 100 % of GDP level. In Greece, the debt ratio is now just below 100 % of GDP but the negative impact on the pace of debt reduction from the many financial operations of the government, as reflected in the large stock-flow component, are a matter of concern (see country chapter in Part VI).

Table I.3

Composition of changes in government-debt ratio

	Gross debt				Change in gross debt 2001–03	Change in 2001–03 due to		
	2000	2001	2002	2003		Primary balance	Interest & growth contribution	Stockflow adjustment
B	109.3	107.5	104.3	99.4	– 8.1	– 12.1	4.0	0.0
D	60.3	59.8	60.8	60.1	0.4	– 1.6	3.0	– 1.0
EL	102.8	99.7	97.8	95.1	– 4.6	– 11.5	– 8.7	9.7
E	60.4	57.2	55.5	53.5	– 3.7	– 5.6	– 1.2	0.0
F	57.8	57.7	57.4	57.2	– 0.4	– 2.5	2.2	– 0.1
IRL	39.0	36.3	33.6	31.4	– 4.9	– 3.9	– 2.7	1.7
I	110.6	109.4	107.8	105.6	– 3.8	– 8.9	2.5	2.7
L	5.7	5.5	5.2	5.1	– 0.4	– 5.0	– 0.2	4.8
NL	56.0	52.9	50.1	47.4	– 5.6	– 5.3	0.6	– 0.8
A	63.6	61.7	60.2	57.6	– 4.1	– 6.9	2.7	0.1
P	53.4	55.5	56.5	57.3	1.7	– 1.2	1.3	1.7
FIN	44.0	43.6	43.1	42.9	– 0.7	– 11.1	1.8	8.7
EUR-12	**70.3**	**69.2**	**68.6**	**67.2**	– 2.0	**– 4.7**	**2.0**	**0.7**
DK	46.8	44.7	43.3	39.8	– 4.8	– 11.2	3.0	3.4
S	55.3	56.0	52.6	49.9	– 6.1	– 9.6	1.4	2.1
UK	42.4	39.0	37.6	36.1	– 3.0	– 3.8	0.8	0.0
EU-15	**64.3**	**62.9**	**61.9**	**60.5**	– 2.4	**– 4.8**	**1.7**	**0.7**

Source: Commission services, 2002 spring forecast.

1.2. Government revenue and expenditure

The projected improvement of the overall euro-area budget position in coming years is achieved through a small decline in both revenue and expenditure ratios. As shown in Table I.4, the average government revenue ratio in the euro area is projected to decrease to 46.2 % of GDP in 2003 (both in actual and cyclically-adjusted terms). This is driven by reductions in the share of social contributions to GDP, while other revenue components are expected to grow in line with GDP. Government expenditure as a share of GDP will be reduced to 47.4 % of GDP from 48.1 % of GDP in 2001. Reductions in interest payments continue to provide a positive contribution to this development.

Table I.4

Euro-area government resources and expenditures, 1999–2003

	1999	2000	2001	2002	2003
Total resources	**47.7**	**47.4**	**46.7**	**46.6**	**46.2**
— Cyclically-adjusted	47.7	47.0	46.6	46.9	46.2
Taxes on imports and production	13.8	13.6	13.3	13.4	13.3
Current taxes on income and wealth	12.8	13.0	12.7	12.7	12.6
Social contributions	16.4	16.2	16.0	15.9	15.7
of which actual social contributions	15.2	15.1	14.9	14.8	14.6
Other resources	4.8	4.6	4.6	4.6	4.5
Total expenditure	**49.0**	**48.2**	**48.1**	**48.1**	**47.4**
— Cyclically-adjusted	49.1	48.3	48.1	48.1	47.4
Collective consumption	8.2	8.1	8.1	8.1	8.0
Social benefits in kind	11.7	11.7	11.8	11.9	11.8
Social transfers other than in kind	17.0	16.7	16.7	16.9	16.7
Interest	4.3	4.1	3.9	3.8	3.7
Subsidies	1.5	1.4	1.4	1.4	1.3
Other expenditures	6.3	6.1	6.1	6.1	6.0

Source: Commission services, 2002 spring forecast.

At Member State level, the patterns are generally similar to that of the euro area (Table I.5). Only in Germany and Portugal are revenue ratios expected to increase over the 2001–03 period (although in the case of Germany from a cyclically weak position), whereas expenditure ratios over the same period are set to increase only in Ireland and the UK as result of discretionary spending measures to improve public services and address infrastructure needs.

All in all, such a composition of the adjustment, whereby reductions in the tax pressure is accompanied by expenditure control, is in line with the recommendations in the BEPGs. This highlights the growing importance of controlling public expenditure. A majority of Member States have put in place some sort of framework guiding the evolution of expenditures (in particular central government primary expenditures) over the short to medium term. These mechanisms vary across Member States both as regards their coverage and the degree to which they are binding. For example, Belgium and Denmark (for public consumption) use growth norms applicable to individual years, whereas France and the Netherlands use average growth norms applicable over a multi-year period. Sweden and Finland apply multi-annual expenditure ceilings. Several Member State governments have also introduced or improved upon existing arrangements to enhance the control, coordination and accountability of local and regional government financial performance. This is now the case in federal or strongly regionalised countries (Belgium, Germany, Austria, Denmark, Spain, Italy, Finland and Sweden).

Other types of arrangements are the so-called internal or domestic stability pacts adopted recently by several countries (including Spain, Italy, Austria and Germany). These make a direct reference to the responsibilities of each level of government towards respecting the SGP commitments. These arrangements are helpful, but are still essentially of a voluntary nature: follow-up mechanisms and sanction systems are less developed ([1]). However, in several countries, there have been problems in respecting the self-imposed rules and targets. Primary expenditures overran targets in Greece, Portugal and Finland, whereas growth in healthcare expenditures proved difficult to control in Belgium, Germany, France, Italy and Portugal. Control of regional and local government expenditure gave cause for concern in Germany, as well as in Denmark and Finland.

([1]) These mechanisms are discussed more in detail in last year's report *Public finances in EMU — 2001* (European Commission, 2001a) and in Fischer and Giudice (2001). A detailed discussion is also found in the country chapters of Denmark, Spain, France, Italy, Portugal, Finland and Sweden in Part VI of this report.

Table I.5

Total revenue and expenditure (excluding UMTS)

	Revenue				Expenditure			
	2000	2001	2002	2003	2000	2001	2002	2003
B	49.5	49.2	48.8	48.6	49.5	49.2	48.9	48.3
D	47.1	45.7	46.1	45.8	48.4	48.5	48.9	48.0
EL	47.5	47.6	47.7	47.1	48.3	48.0	47.4	46.6
E	39.5	39.6	39.6	39.6	39.9	39.6	39.7	39.6
F	51.5	51.2	51.0	50.5	52.9	52.7	53.0	52.3
IRL	37.1	36.0	36.0	35.4	32.6	34.3	35.6	35.2
I	46.3	46.2	46.1	45.4	46.9	47.7	47.3	46.7
L	46.1	45.8	45.2	44.8	40.3	40.8	43.2	42.3
NL	47.5	45.6	44.8	44.2	46.0	45.4	44.8	44.6
A	51.2	52.4	51.4	50.9	53.3	52.5	51.6	50.6
P	42.8	43.3	43.4	43.5	44.6	46.0	46.1	45.9
FIN	55.6	54.3	53.2	52.3	48.6	49.4	49.9	49.6
EUR-12	**47.4**	**46.7**	**46.6**	**46.2**	**48.2**	**48.0**	**48.1**	**47.4**
S	56.6	56.8	55.4	54.7	54.1	54.0	53.4	52.3
DK	61.4	62.3	59.0	58.6	57.7	57.4	57.3	56.8
UK	40.9	41.0	41.0	40.6	39.3	40.1	41.2	41.1
EU-15	**46.8**	**46.3**	**46.1**	**45.7**	**47.0**	**47.0**	**47.2**	**46.6**

Source: Commission services, 2002 spring forecast.

Box I.1. Accounting issues and implications of securitisation for the budgetary surveillance

Outstanding accounting issues

In March 2002, Member States reported government deficit and debt figures to the Commission in line with the requirements of the excessive deficit procedure (CR 3605/93). In this context, Eurostat (the Commission's statistical office) issued a press release (No 35/2002 of 21 March 2002) citing a number of outstanding accounting issues which implied that Eurostat was not in a position to certify the reported figures from Greece, Austria and Portugal. In addition, Eurostat is looking into the correct ESA accounting treatment of different securitisation operations of non-financial assets and income streams. To this end, Eurostat intends to decide a set of rules to be published in the summer of 2002. This is expected to have an impact on the figures from Austria, Finland, Greece, Ireland and Italy where the government has recently engaged in a number of such operations. The importance of taking into account the specific characteristics of revenues stemming from this type of operation when assessing budgetary positions is discussed below in the section on securitisation operations.

In Greece, the main outstanding issue relates to the accounting treatment of share convertible bonds and the impact this may have on recorded gross debt figures. In Austria, tax revenues in 2001 were boosted as a new regime introduced interest charges on tax arrears. Because of this, the government collected important amount of taxes that relate to economic activity of earlier years. Referring to the accruals recording principle of the ESA, the issue is therefore whether these amounts should be recorded when collected (2001) or in the previous years. In Portugal, the government has made a number of capital injections to public corporations that have been treated as acquisition of shares and equities (i.e. financial transactions with no impact on the deficit) while they should have been recorded as capital transfers (non-financial transaction). To this end and at this stage (the figure is provisional and may be revised), the 2001 budget deficit has been revised upwards with around a quarter percent of GDP. As specified in the Eurostat press release, a further upward revision of the deficit for 2001 could be expected in the next notification of Portugal in August 2002, as the derogation for Portugal on the recording of taxes and social contributions in ESA 95 will come to an end in June 2002. According to preliminary data

(Continued on the next page)

Box I.1. (continued)

provided by the Portuguese authorities as part of the February 2002 notification, the estimated effect of this could be around 0.4 % of GDP in 2001. In Italy, securitisation operations concern the sale of real estate (over 0.3 % of GDP in 2001) and future receipts from certain State lotteries (0.2 % of GDP in 2001). These revenues significantly reduced the budget deficit in 2001 (see Part VI, Italy country chapter) but the accounting of these operations may have to be modified once Eurostat adopts rules on the matter.

Securitisation operations and the economic assessment of budgetary positions

In recent years general government units in a number of Member States (Austria, Finland, Greece, Ireland and Italy) have resorted to the securitisation of financial and non-financial assets (including the right to receive future revenue flows), notably through entities created for the purpose ('special purpose vehicles'), which in turn finance the acquisition of the publicly-owned assets by issuing securities, hence the name of the operation. The actual or planned size of some of these operations has reached significant amounts, up to several decimal percentage points of GDP.

Whereas in the past securitisation in public finances was usually confined to loans, generally mortgages, granted by public institutions, an important innovation of the new wave of securitisations is that it has been extended to other assets, such as the right to receive future receipts from the State lottery, fees or entitlements. While, in some circumstances, there is a case in favour of securitisation as a means to increase efficiency and even transparency, as for example in the sale of publicly-owned real estate or the recovery of arrears, the apparent aim of some recent securitisation operations is to achieve an immediate reduction in the general government deficit, by bringing forward future revenues. In economic terms, these securitisation operations present a strong affinity with the traditional practice of deficit spending.

In the conceptual framework of fiscal sustainability, which excludes that primary deficits can be run indefinitely, deficit spending essentially amounts to postponing revenue raising or expenditure cuts to some future period. The medium-term balanced budget objective of the SGP implements a much stronger fiscal rule than implied by the theoretical concept of sustainability. While leaving some room for interpretation about the role of active fiscal management (see Part IV), it excludes the recourse to deficit spending. However, by advancing revenue flows earmarked for the future, securitisation operations achieve the same effect of deficit spending, namely allowing higher expenditure today at the price of higher taxes in the future. In fact, any decision of bringing forward future revenues, given a sequence of public expenditure, will demand higher corrections in subsequent years in order to respect the medium-term balanced budget objective.

In terms of its effects on the economy, financing through securitisation can be expected to produce no immediate or at least a limited adverse effect on aggregate demand. More specifically, in a Keynesian or not fully Ricardian world, the securitisation would not or only partially compress domestic demand, as the additional revenue is not levied on current disposable income. This particular feature could be used by countries for which automatic stabilisers are not allowed to operate fully because of the closeness to the deficit ceiling to rationalise the recourse to securitisation in a cyclical context. It would provide for scope to comply with budgetary targets in a cyclical slowdown without producing any harm to a weakening economy. While this conclusion may be true for the period in which the securitisation is carried out, more generally it is subject to some important qualifications. Firstly, the limited negative effect on aggregate demand in the current period is bought at the price of increasing it in the future since, everything else equal, government revenue is 'sold' in advance and will therefore have to be replaced by additional revenue later on to meet the budgetary objectives. Secondly, the business cycle is generally thought to follow a stochastic process around a non-stationary trend. Hence, any attempt to smooth the adjustment over all cycles by shifting government revenues is likely to fail. Permanent negative shocks could lead to a significant shift in the underlying budgetary position, implying that the advanced revenue flow was overestimated.

Overall, securitisation would seem to help achieve budgetary targets in the current period, albeit at the cost of transferring the effort into the future. If long-run sustainability were the only constraint to fiscal policy, bringing forward future revenues would pose no conceptual problem, as it would ultimately consist in a mere intertemporal reallocation of revenue and could even be desirable under allocational considerations. To the extent that the SGP is the reference framework for fiscal policy, however, securitisation gives rise to a trade-off between flexibility and 'real' fiscal consolidation that must be taken into account in the assessment of budgetary developments.

2. The fiscal stance and policy mix

An appropriate policy mix can be defined as a combination of monetary and fiscal policies that ensures price stability and keeps economic activity close to its potential level. EMU requires a unique approach to the assessment of the policy mix given that monetary policy is centralised but fiscal policy is decentralised. In the euro area, national authorities set fiscal policy at Member State level. National budgetary policies determine endogenously the fiscal stance for the euro area as a whole. The aggregate fiscal stance deserves special attention since it affects the policy mix at the euro-area level, and therefore is one of the elements taken into account by the ECB in setting monetary policy. In turn, the policy mix for the euro area will have a feedback effect on the national policy mix via the common interest rate. This implies that the policy mix needs to be assessed both from the perspective of the euro area as a whole and from the perspective of each Member State.

2.1. Policy mix and fiscal stance in the euro area

The fiscal stance in the euro area: Commission forecasts versus stability programmes

Graph I.2 examines the fiscal stance (proxied by the changes in the cyclically-adjusted primary balance, CAPB) in relation to cyclical conditions (i.e. the size of the output gap ([1])) for the euro area. In this graph, fiscal behaviour in accordance with the general philosophy of the SGP would be represented by movement along the horizontal axis. In other words, countries would achieve and sustain broadly balanced budgets over the economic cycle and run a neutral fiscal policy ('tax smoothing'). Hence changes in the output gap would not result in movements in the CAPB. Actual budget balances would change reflecting the working of automatic stabilisers. In the transition period, to the extent that a country has yet to reach the medium-term target of the SGP, a restrictive fiscal stance — that is a rise in CAPB — would be needed ([2]).

According to the Commission forecasts of spring 2002, the fiscal stance was loosened modestly in 2001, largely because of the tax cuts decided in 2000. By contrast, a slightly restrictive fiscal stance is projected for 2002, which shows that Member States are not implementing counter-cyclical discretionary budgetary measures despite the projected negative output gap. This is welcome, as the medium-term losses of relaxing fiscal policy in the current juncture would probably outweigh the short-term gains. Moreover, given the current turnaround in the European economy, adopting expansionary measures may ex-post turn out to be pro-cyclical.

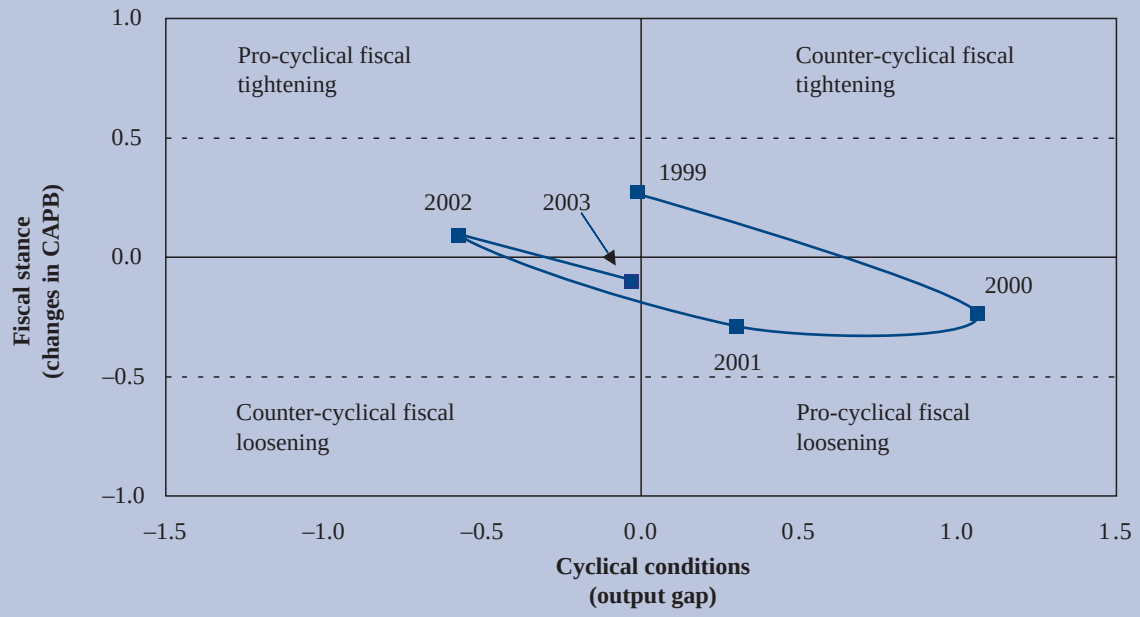
Turning to the policy-mix in the euro area, Graph I.3 shows how the fiscal stance of the last few years combined with the monetary stance, proxied by the change in the short-term real interest rates. The monetary stance was moderately tight in 1998 and in 2000, while a loosening occurred in 1999 (responding to the recession fears brought about by the Asian Crisis) and in 2001 (in the context of a sharp slowdown of the global economy).

The policy mix in the early years of EMU has been broadly appropriate to provide conditions for healthy economic growth and macroeconomic stability. In the most recent period, a combination of a growth-supportive monetary stance and a slightly looser fiscal policy underpinned the cyclical recovery. However, the lack of fiscal consolidation in 2000 when economic growth was buoyant contributed to the constraints facing high-deficit countries during the current economic slowdown.

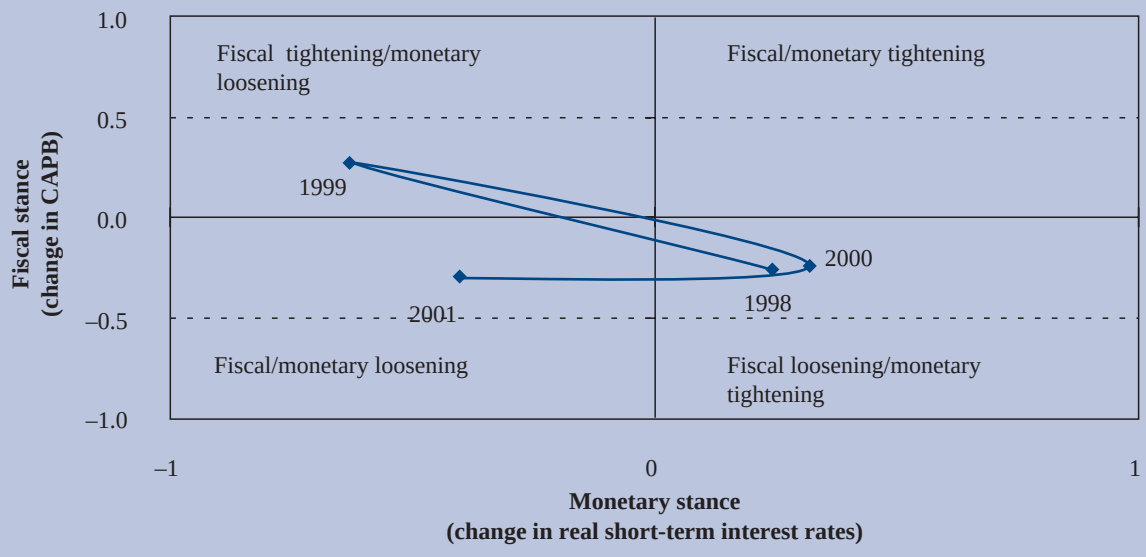
([1]) As before, the output gap used in this section is computed with the traditional HP filter.

([2]) However, part of the adjustment towards balanced budgets may be originated by reducing interest payments. The type of behaviour during the transition to the 'close-to-balance or in surplus' requirement of the pact is formalised in Box IV.1 in Part IV.

Graph I.2: **Euro-area fiscal stance and cyclical conditions**



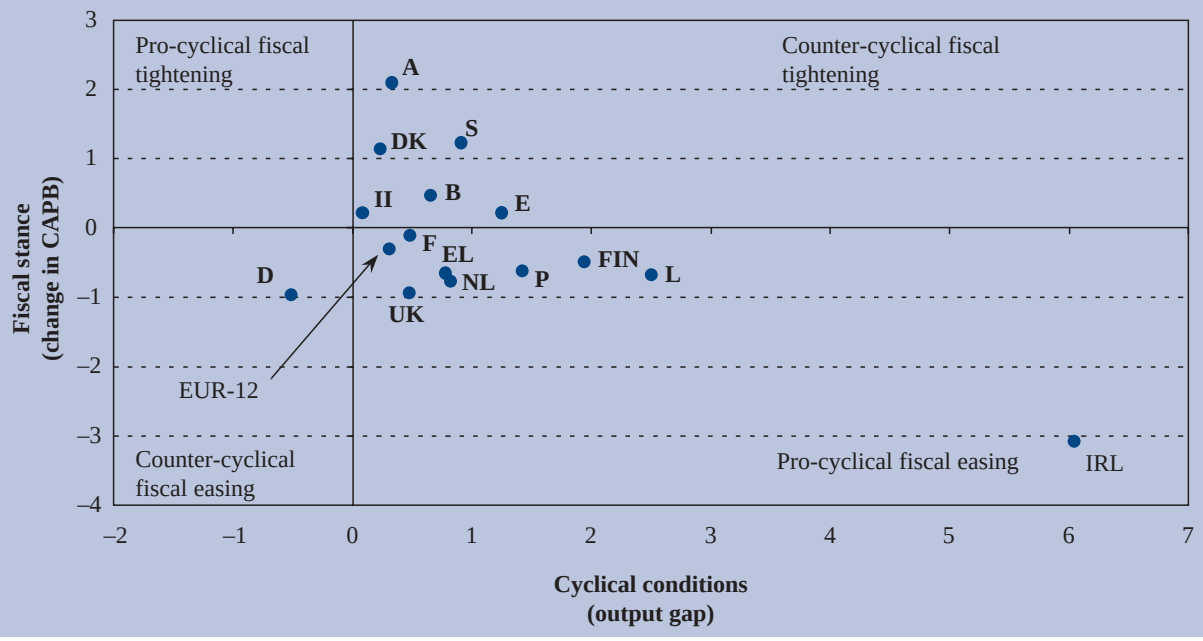
Graph I.3: **Policy mix in the euro area**



2.2. Fiscal stance and policy-mix at the national level

The aggregate fiscal stance for the euro area conceals quite disparate national responses to the economic slowdown, as illustrated in Graphs I.4 and I.5. Indeed, in some cases, the output gap and the fiscal stance of the Member States are noticeably larger than the euro-area average. Graph I.4 shows that apart from Germany, all EU countries had a positive output gap in 2001 following several years of higher-than-potential growth. In spite of the positive output gap, a number of euro-area countries loosened their stance in 2001 (above all Ireland, but also the Netherlands, Luxembourg, Portugal, Greece and Finland). Given the estimated level of the output gap, the fiscal stance in these countries appears to have been pro-cyclical. This was clearly the case in Ireland, given the large positive output gap. Outside the euro area, the UK also eased the fiscal stance, in spite of a slightly positive output gap. However, the judgment on pro-cyclicality has to take into account the uncertainty of the measure of output gap (see Part II.3) as well as the rapidly deteriorating economic conditions in 2001. Indeed, growth was substantially below trend in several countries: especially in Finland and the Netherlands, but also in Portugal and Ireland.

Graph I.4: **Fiscal stance and cyclical conditions in 2001**



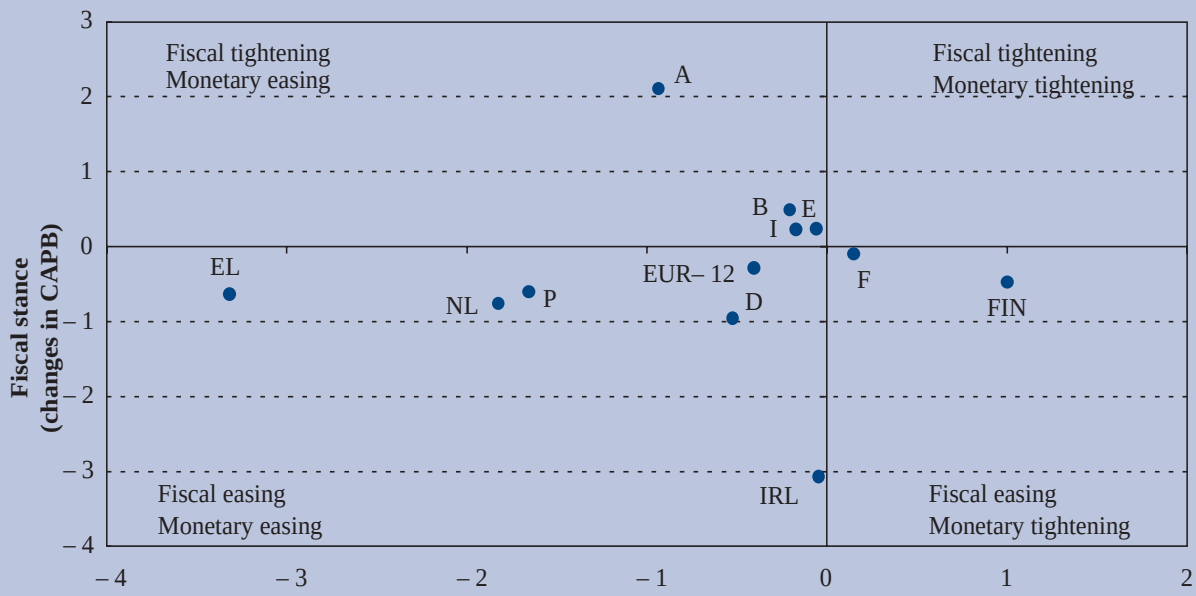
Several countries undertook a tightening of fiscal policies in a context of positive output gaps. Austria in particular made substantial progress towards a balanced budget while Belgium and Spain tightened their fiscal stance to a lesser extent. Also, the fiscal stance of Sweden and Denmark, two countries already recording large surpluses, was counter-cyclical.

Regarding countries that have not yet reached the 'close-to-balance' goal of the SGP, Italy and France had a broadly neutral stance with output gaps virtually closed. In Germany, the tax cuts decided upon in 2000 (when growth was above potential) have resulted in a loosening of the fiscal stance at a time of deteriorating growth prospects. In Portugal, the fiscal stance was looser in the context of a positive but decreasing output gap.

Graph I.5 below helps assess the policy mix at the euro-area and national level, by plotting the fiscal stance on the vertical axis and the change in the real short-term interest rate on the horizontal axis. Since the nominal interest rate is common to all euro-area countries, the difference in the monetary stance at country level is given by the inflation differentials. Countries in the top right

quadrant are tightening fiscal policy and face an increase in real interest rates, while those at the lower left quadrant are loosening the fiscal stance in a context of decreasing real interest rates. The remaining two quadrants depict situations in which the monetary stance and the fiscal stance move in opposite directions.

Graph I.5: **Policy mix in 2001**



As pointed out above, the policy mix in 2001 has been accommodative at the euro-area level. The real interest rate fell in all countries except Finland and France. However, the largest decreases took place in several smaller countries as their persistently positive output gaps went hand in hand with higher rates of inflation.

While Graph I.5 shows the changes in the real short-term interest rate, its level is also important in assessing the monetary stance. The monetary stance eased with a reduction of the real interest rate to below 2 %. The highest short-term real interest rates were registered in France and Germany. After consecutive large reductions over the last years thanks to the convergence process, the level of real interest rates in 2001 in Greece was below the average. Three countries, Portugal, the Netherlands and Ireland had negative real interest rates in 2001 ([1]).

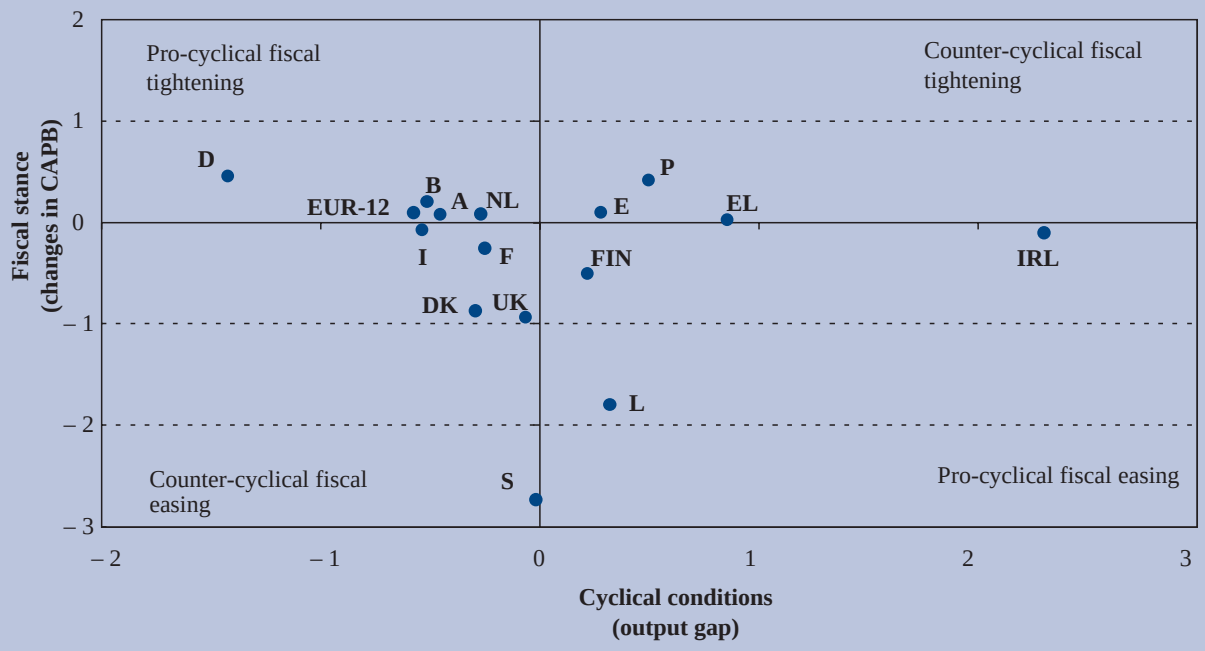
As to 2002, the fiscal stance is forecast to be broadly neutral in most members of the euro area (see Graph I.6), Luxembourg being the main exception. Germany and Portugal are expected to enact a small budgetary tightening in line with their commitments to the Council, see Part II.2. France and Italy — the other two countries still featuring budget deficits — by contrast, are not expected to make any sizeable effort to improve their budgetary positions in 2002. Luxembourg and Finland, which are benefiting from their past consolidation efforts and consequently enjoy a large safety margin, are expected to ease their fiscal stance. A broadly neutral stance is projected for 2002 in Ireland. Fiscal policy in the three countries outside the euro area is expected to turn expansionary, notably in Sweden.

2.3. What is the impact of discretionary fiscal policies in 2001 and 2002?

While the fiscal stance captures the discretionary effort of the government, it cannot be taken as a measure of the

([1]) On the pro-cyclical behaviour of real interest rates in euro-area countries, see Part IV.

Graph I.6: **Fiscal stance and cyclical conditions in 2002**



impact discretionary fiscal policy has had on the economy, because it ignores the different demand and supply effects of various policy measures. It also fails to take into account the response of the private sector to changes in fiscal policy.

In order to analyse the fiscal impact, it is necessary to distinguish between the various categories of spending and revenues, and measure the different effects of these components on economic activity. Under normal circumstances, the fiscal stance and the fiscal impact are expected to go in the same direction; however, composition effects may be important especially when a small change in the CAPB results from relatively large variations in both revenue and expenditure and the two measures could well differ significantly ([1]).

To evaluate the impact of discretionary changes in taxation and spending on economic activity in Member States, simulations were carried out using the Commission's QUEST model.

As a measure of discretionary tax changes in 2001–02, the changes in effective tax rates on labour, capital and consumption since 2000 were computed on the basis of the 2002 spring forecast of the Commission. The Economic and Financial Affairs DG's effective tax rates are synthetic tax indicators, calculated as the ratio between tax revenues from particular taxes and the corresponding tax bases ([2]). According to these indicators, on average, effective tax rates on all sources were reduced in the euro zone, in some countries substantially in 2001, but only minor tax changes are foreseen for 2002. The largest tax reductions took place in Ireland, the Netherlands and Germany, while the largest tax increases were in Austria. Similarly, on the expenditure side, changes in the major categories as a percentage of GDP compared to their 2000 levels were calculated. On average, these have been largely neutral in the euro zone in 2001, but slightly more expansionary in 2002.

([1]) Another difference between the two measures is that the fiscal stance uses estimated elasticities of cyclical sensitivities and an estimate of the output gap to calculate a cyclically-adjusted budget balance, while this analysis is based on changes in the Economic and Financial Affairs DG's effective tax rates.

([2]) For a description of the methodology used, see Martinez-Mongay (2000).

Table I.6 reports the simulation-based GDP effects of these changes in fiscal policy for 2001–02: it shows the cumulated effects in GDP levels since 2000. According to the simulations, the direct demand impact of the fiscal changes in 2001 has generally been positive, boosting growth by 0.3 % in the euro area. Fiscal policy been especially expansionary in countries that made large tax reductions (Germany, Ireland and the Netherlands). In only a few countries has fiscal policy had a negative impact on GDP, in particular in Austria.

Table I.6

GDP effects of tax and expenditure changes 2001–02 (relative to 2000)

	2001	2002
B	0.3	0.2
D	0.4	0.3
EL	0.1	0.1
E	0.1	0.1
F	0.1	0.2
IRL	0.5	0.4
I	0.2	0.2
NL	0.5	0.2
A	– 0.4	– 0.2
P	0.0	– 0.1
FIN	0.3	0.3
EUR-12	**0.3**	**0.2**
DK	0.1	0.2
S	– 0.2	0.3
UK	0.2	0.3
EU-15	**0.2**	**0.2**

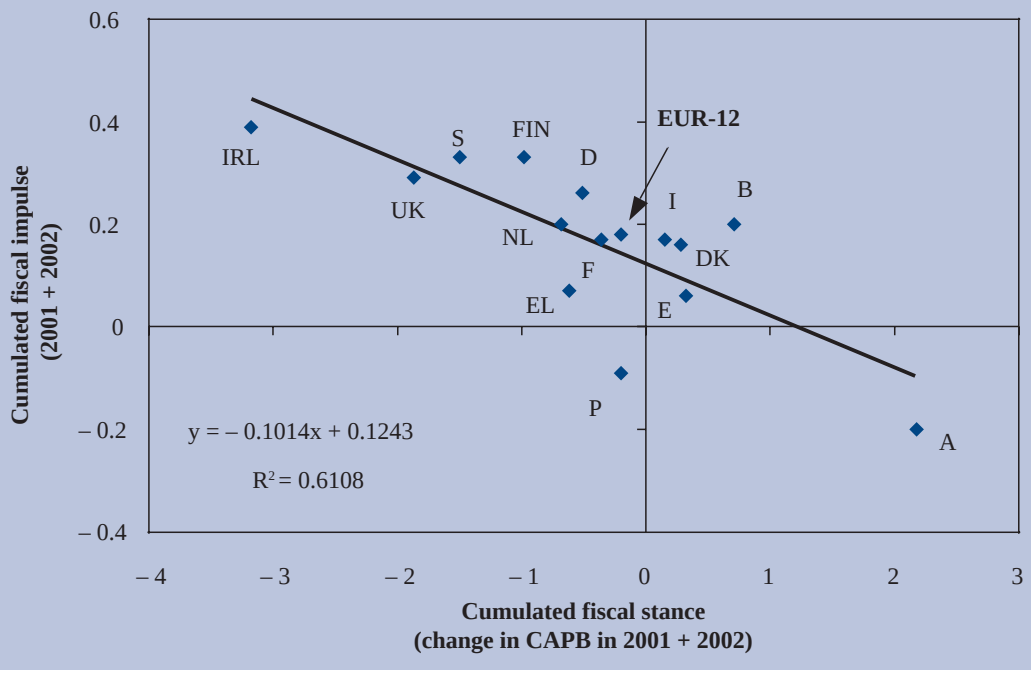
Source: Commission services.

In general, given the size of the policy measures, the positive demand and supply effects of the tax reductions have been more significant than the demand effects of the expenditure increases. Where labour income tax was cut, this has reduced disposable income, but also had a positive effect on employment. Where corporate taxes were reduced, this led to a rise in the expected future profitability of investment projects and so to higher investment spending. However, the positive effects of tax changes are slow to come through, and thus the short-run impact of this expansionary policy has been relatively modest. Of the countries that tightened their fiscal stance, some have been more successful in limiting the negative impact on growth. For example, Denmark tightened its fiscal stance in 2001 but the estimated impact on GDP is negligible, while the estimated GDP effect for Sweden with a similar tightening is negative.

In 2002, the fiscal impact is estimated to be slightly restrictive in the EU and the euro area, falling slightly in terms of GDP level. The overall effect in 2002 can be explained by the 2002 changes in the fiscal stance, but also partly by the delayed effects of discretionary measures in 2001. For most countries, the effects in terms of growth (the difference between the two columns) is slightly negative. The most notable exception is Sweden, which introduced large tax cuts in 2002. The combined effect of this, together with increases in expenditure, is estimated to have boosted growth by 0.5 %.

In overall terms, the estimated fiscal impact has been slightly expansionary in these two years, boosting growth in the EU and the euro area by 0.2 %. Graph I.7 shows the strong correlation between the cumulated changes in the fiscal stance between 2002 and 2000 with the estimated GDP effects for each of the Member States over these two years. On the whole, the changes in the fiscal stance have been growth-supporting and in the large majority of countries fiscal policy has boosted GDP. Even countries with a small fiscal tightening have had an estimated positive growth impact (upper right quadrant), due to favourable composition effects of their budgetary changes.

Graph I.7: **Cumulated changes in the fiscal stance and estimated GDP effects**



Box I.2. **The policy mix and the effectiveness of fiscal policy: a comparison between the euro area and the United States**

The international economic juncture changed dramatically in the past two years: buoyant growth has been followed by a sharp but short-lasting slowdown at the global level. How did policy-makers in the United States and the euro area respond to this evolving situation? More generally, what was the role of macroeconomic policy in redressing the recessionary shock of 2001?

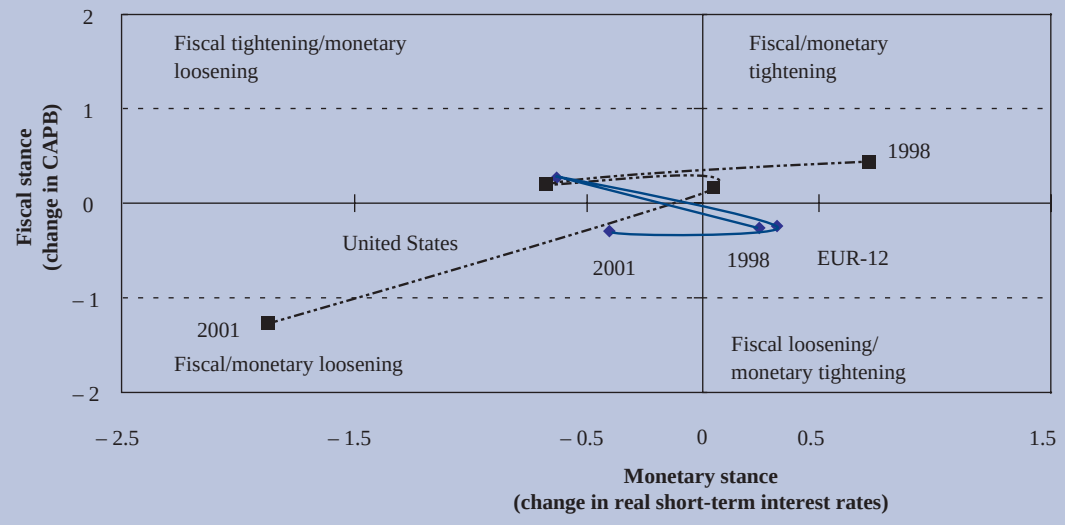
Graph I.8 below plots the fiscal and monetary stance in these two major areas, measured respectively by the changes in cyclically-adjusted primary balances (CAPBs) and in real short-term interest rates. These variables proxy the change in the policy instruments that are, to a large extent, under the control of policy authorities. Graph I.9 plots the changes in the total budget balance against the changes in the monetary conditions index (MCI). This graph attempts, in a very simplified manner, to capture what could be dubbed the policy 'thrust' or 'injection'. This depends not only on the discretionary move, but also on the development of variables that are outside the control of policy authorities, namely the automatic stabilisers on the fiscal side and the movements in the real effective exchange rates on the monetary side.

According to these graphs, the two major economic areas have experienced quite diverse budgetary and monetary stances and conditions in the last few years. During the period under review, the United States has aggressively adjusted the policy mix to cyclical conditions. The tighter stance in 1998 was followed by an easing in 1999 in response to the Asian crisis, when the economy was growing close to potential. However, as the dollar depreciated in 1998 and appreciated in 1999, this resulted in smaller variations in the monetary conditions which were broadly neutral in 1999. In 2000, when growth was clearly outstripping potential, monetary conditions turned restrictive given the continuing appreciation of the dollar. Fiscal policy was moderately tight between 1998 and 2000 and the positive output gap implied quite large improvements in the total balance. By contrast, during the recession of 2001, a significant loosening in both the fiscal and monetary stance took place. The fiscal surpluses accumulated in the United States over the 1990s created room for the discretionary fiscal policy loosening in 2001. The combination of budgetary effects of the recession, tax cuts, and increased public expenditure over 2001 and 2002 is expected to move the budget balance from a substantial surplus to a budget deficit of almost 1 % of GDP in 2002.

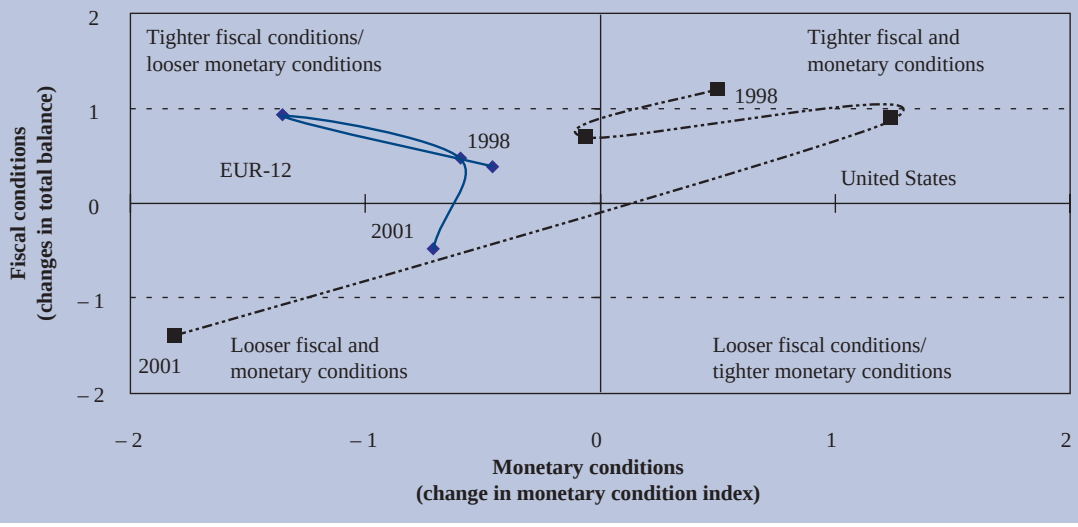
(Continued on the next page)

Box I.2. (continued)

Graph I.8: **Policy mix in the euro area and the United States**



Graph I.9: **Policy 'thrust' in the euro area and the United States**



A joint look at the graphs shows that while, the direction of change in policies in the two major economic blocs is similar over the period, the United States is characterised by larger policy shifts. These reflected the relative sharpness of the slowdown, a more active role of the US monetary authorities and a stronger trust in the effectiveness of discretionary actions in the United States.

The need for discretionary budgetary policies may in part depend upon the size and effective impact of automatic stabilisers: was the more aggressive use of discretionary fiscal policy in the United States justified by lower automatic stabilisers?

The capacity of the budget to automatically smooth the business cycle depends on two factors: the budgetary sensitivity to the cycle and the multiplier associated to the automatic changes in revenue and expenditure. The joint effect of these two factors determines the smoothing impact of the automatic stabilisers.

(Continued on the next page)

Box I.2. (continued)

The OECD estimates with the Interlink model of the relevant variables are shown in Table I.7.

Table I.7

Effectiveness of automatic stabilisers in Europe and the United States

	Budgetary elasticity	Fiscal multipliers (1)	Smoothing impact (2)	'Efficiency' (3)
Germany	0.51	1.0	36 %	70 %
France	0.46	0.6	14 %	30 %
Italy	0.48	0.9	23 %	48 %
United Kingdom	0.50	1.0	30 %	60 %
Euro area	0.50	—	25 %	50 %
United States	0.25	1.3	15 %	60 %

(1) Fiscal multiplier associated with a sustained increase in government non-wage expenditure under unchanged short-term interest rates and fixed exchange rate.
(2) The figures indicate the increase in output gap volatility which would have resulted from suppressed automatic stabilisers in the 1990s (i.e. if they had been offset by discretionary fiscal action).
(3) The 'efficiency' of automatic stabilisers is measured as the ratio of the smoothing impact (third column) to the size of stabilisers (first column).

Source: OECD (2001a) and Van den Noord (2000).

The magnitude of automatic stabilisers in general tends to increase with the size of the government sector, the progressivity of the tax system, the relative share of taxation of cyclically-sensitive tax bases, the generosity of unemployment benefit systems and the sensitivity of unemployment to fluctuations in output. The table shows that, according to the OECD, the average elasticity of the budget to growth in the EU is around 0.5, in line with the size of the public sector. That is a 1 % rise (fall) in growth broadly leads to an average improvement (deterioration) in the budget balance by 0.5 % of GDP. The elasticity is typically larger on the revenue side than on the expenditure side (0.4 and 0.1 respectively). The size of budget elasticities is broadly similar for the large EU countries (however, it varies across the other European countries). The United States has a much lower elasticity, 0.25, than the large European countries and the euro-area average.

The impact of fiscal policy on the economy depends on several factors, amongst which the openness of the economy and the flexibility of labour, product and financial markets.

The estimates in Table I.7, which are based on the assumptions of unchanged short-term interest rates and fixed exchange rates, show that the short-run multipliers of public spending in the in the euro area are smaller than in the United States. This is broadly in line with previous studies. Bryant et al. (1993), who run standardised simulations for the G3 countries across various models ranging from adaptive expectations to rational expectations, find that spending short-term multipliers associated with an unanticipated temporary rise in real government consumption would be smaller in Germany (in the 0.6–0.9 range) than in the United States (0.9–1.3). However, multipliers computed with the Commission QUEST model are lower, owing to the more accentuated forward-looking nature of the model; in contrast, tax multipliers are very similar between the United States and Europe.

The interaction of budgetary elasticities and fiscal multipliers affect the effectiveness of automatic stabilisers. The OECD simulations in the table, which are performed on the basis of the estimated shocks in the 1990s, consider each country in isolation. They suggest that the automatic stabilisers are in general more effective in European countries than in the United States (amongst the large countries, the exception being France (1)): for the euro area, the smoothing impact is estimated to be around 25 % against 15 % in the United States. In relative terms, however, the degree of smoothing extracted from a similar change in the budget balance is higher in the United States than in Europe (see the final column in the table). This is mainly due to higher external leakages in individual European countries which reduce the effectiveness of stabilisers. By the same token, in the event of symmetric shocks such as the global slowdown of 2001, simultaneous working of automatic stabilisers leads to a higher smoothing effectiveness in Europe due to the positive effects of intra-EU foreign trade spillovers.

(1) However, QUEST estimates of the smoothing impact of automatic stabilisers indicate a larger relative effect in the case of France. See Part IV.2.

3. Overview of the 2001 updates of the stability and convergence programmes

3.1. Medium-term budgetary developments

The examination of the third round of updates of stability and convergence programmes which covers the period 2001 to 2005 was completed in March 2002. After a deceleration in GDP growth to around 1.8 % in 2001 and 2 % in 2002, the updated programmes project a recovery to 2.8 % in 2003 (see Table I.8). For 2002, these growth assumptions are more optimistic than the recent forecast of the Commission, the difference being 0.4 percentage points. Such divergence can be partly explained by the fact that the national assumptions were established during the summer months of 2001 when the full extent of the slowdown was not yet apparent. For 2003, however, the rebound in economic activity is expected to be stronger in the Commission forecasts than in the stability programmes.

According to the programmes, the output gap of the euro area would close in 2001 and turn negative in 2002 ([1]). Thanks to the expected rebound this year and especially in 2003, the gap would close again in that year and become slightly positive by 2005 (see Graph I.10).

([1]) These output gaps are calculated by the Commission by applying the HP filter to the growth assumptions given in the updates by the Member States. These gaps are those used for the calculation of cyclically-adjusted balances presented in this chapter and for the assessment of the programmes, in conjunction with the Commission forecasts.

Table I.8

Macroeconomic projections for the euro area in the 2001 updates

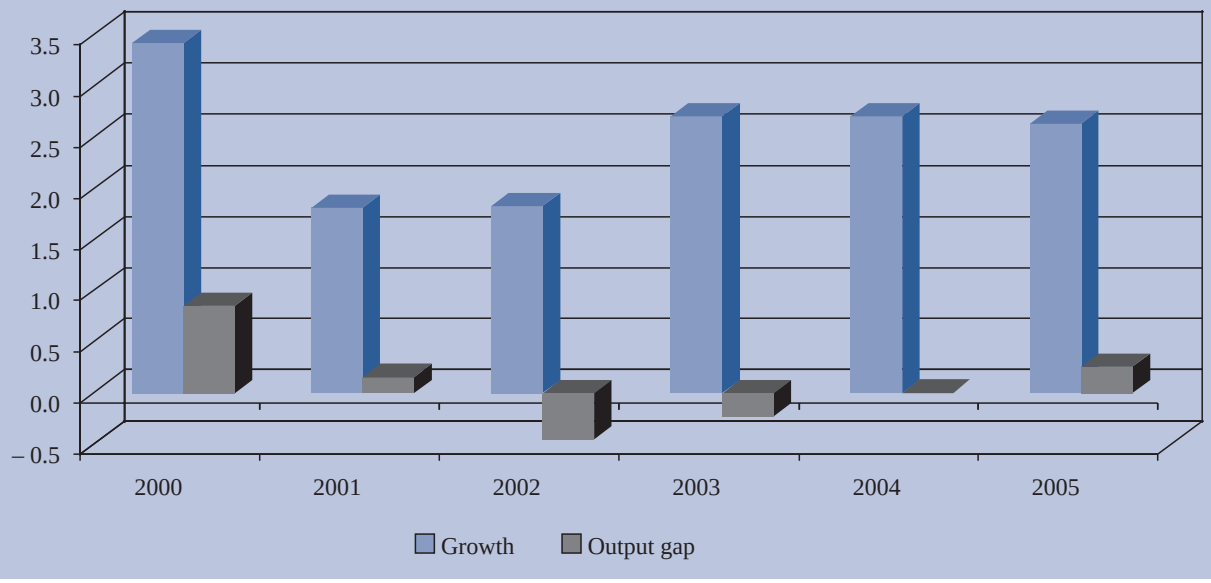
	2000	2001	2002	2003	2004
Real GDP growth	3.4	1.8	1.8	2.7	2.7
GDP deflator	1.4	2.5	2.1	2.0	1.9
HICP change	n.a.	2.8	2.0	1.7	1.6
Employment growth	1.8	1.2	0.7	0.9	1.0
Labour productivity growth	1.8	0.6	1.2	1.9	1.9
Real GDP growth in the 2000 updates	3.5	3.2	2.8	2.9	2.8
Difference	0.0	– 1.4	– 1.0	– 0.2	– 0.1
Commission spring 2002 forecast	3.4	1.5	1.4	2.9	
Difference	0.0	0.3	0.4	– 0.2	

NB: Discrepanciers are due to rounding

Source: Commission services calculations

After a marked deterioration in 2001, the first since 1993, the updated programmes project a gradual improvement in the actual budget balance of the euro area over the period (see Table I.9). Excluding UMTS proceeds, actual budget balances in the euro area are set to move from a deficit of 1.1 % of GDP in 2001 to balance in 2004, that is one year later compared to the previous programme updates. Within the euro area, Germany, France and Portugal will still show deficits above 1 % of GDP in actual terms in 2003. Based on the political commitments given to the Ecofin Council of February 2002, Germany and Portugal plan to achieve broadly balanced budgets by 2004 (see Part II.2). After sev-

Graph I.10: **Growth rate and output gap (using the Commission method) in the 2001 updates**



eral years of high surpluses, a small deficit in 2003 and 2004 is also projected for Ireland, although this is due to the inclusion of contingency provisions against unforeseen developments. Outside the euro area, the UK budget balance moves from a broadly balanced position in 2001 to a deficit slightly above 1 % of GDP in 2002–04, though this takes place on the basis of a cautious growth scenario.

Compared with the spring 2002 forecasts of the Commission (see Table I.9), the programmes of a majority of Member States contain more optimistic budget targets for 2002 and 2003 (respectively, by 0.4 % and 0.5 % of GDP for the euro area as a whole) ([1])). However, the Commission projects a more favourable outcome for Ireland (in 2003) and the UK compared with the targets of their respective programmes.

The cyclically-adjusted budget balance (CAB) of the euro area remained constant at 1.2 % of GDP in 2000 and 2001, see Table I.10. From 2002 onwards, the CAB should improve gradually, to achieve near balance in 2004. Of the eight countries showing a structural deficit in 2001, four project to still be in deficit in 2004 (Germany, France, Italy and Ireland). In 2004, Ireland posts the highest cyclically-adjusted deficit in the euro area (almost 1 % of GDP), but this includes a 1.1 % of GDP contingency provision. Outside the euro area, the UK is expected to reverse its current position and record a cyclically-adjusted deficit of 1.4 % of GDP in 2003, which should fall slightly in 2004.

According to the programmes, the aggregate euro-area cyclically-adjusted primary balance, after deteriorating by 0.3 % points of GDP in 2001, is set to improve by 0.4 % points in 2002, therefore implying a broadly neutral fiscal stance over the two-year period. Over the following years, the cyclically-adjusted primary balance is projected to rise by almost 1 % point, reaching 3.5 % of GDP in 2004.

The gross debt-to-GDP ratio in the euro area is set to fall to some 63 % of GDP in 2004 (see Table I.11). This is slower than projected in previous updates, due to smaller primary surplus and nominal GDP growth contributions, especially for 2003. The estimated stock-flow component contributes to increase the debt ratio: this could either stem from plans to build up financial assets (for example in public pension reserve funds which are invested in non-governmental assets) ([2]), or simply indi-

([1]) It should be noted that the forecasts for the year 2003 are based on the assumption of unchanged policies.

([2]) A very large positive contribution of the stock-flow over the period is identified for Greece (on average 5 % of GDP a year), Finland (on average around 4 %), Sweden and Ireland (on average around 2 %) and Spain (on average around 1 %), while there is a positive contribution by almost 2 % points in Belgium in 2001.

Table I.9

Actual budget balances in the 2001 updates and the Commission forecasts ([1])

	2001 updates of stability and convergence programmes						Commission spring 2002 forecasts	
	2000	2001	2002	2003	2004	2005	2002	2003
B	0.1	0.0	0.0	0.5	0.6	0.7	– 0.2	0.2
D	– 1.3	– 2.5	– 2.5	– 1.5	– 1.0	– 1.0	– 2.8	– 2.1
EL	– 1.1	0.1	0.8	1.0	1.2		0.3	0.5
E	– 0.3	0.0	0.0	0.0	0.1	0.2	– 0.2	0.0
F	– 1.4	– 1.4	– 1.8	– 1.5	– 0.5	0.0	– 2.0	– 1.8
IRL	4.5	1.4	0.7	– 0.5	– 0.6		0.4	0.2
I	– 1.5	– 1.1	– 0.5	0.0	0.0	0.2	– 1.3	– 1.3
L	6.2	4.1	2.8	3.1	3.4		2.0	2.5
NL	1.5	0.7	0.4	0.2	0.5		0.0	– 0.4
A	– 1.1	0.0	0.0	0.0	0.2	0.5	– 0.1	0.3
P	– 1.5	– 2.2	– 1.8	– 1.0	0.0	0.4	– 2.6	– 2.5
FIN	6.9	4.8	2.6	2.1	2.6		3.3	2.7
EUR-12	**– 0.8**	**– 1.1**	**– 1.1**	**– 0.7**	**– 0.3**		**– 1.5**	**– 1.2**
DK	2.5	1.9	1.9	2.1	2.1	2.1	2.1	2.4
S	4.1	4.6	2.1	2.2	2.3		1.7	1.9
UK ([2])	2.0	– 0.2	– 1.1	– 1.3	– 1.1	– 1.0	– 0.2	– 0.5
EU-15	**0.0**	**– 0.7**	**– 1.0**	**– 0.7**	**– 0.3**		**– 1.1**	**– 0.9**

([1]) Government balances in 2000, 2001 and 2002 exclude one-off proceeds from the sale of UMTS licences.
In the German stability programme, the target for 2004 was set at – 1 % of GDP, but at the February Ecofin Council, the German Government committed itself to a budget close to balance by 2004. For France, figures take into account the adjustments made by the French authorities to the 2001 stability programme in a letter sent to the Commission on 22 January 2002.
([2]) Financial years in the stability programme.

Source: Commission services calculations.

Table I.10

Cyclically-adjusted balances for the euro area and the Member States derived from the 2001 updates of the programmes

	2000	2001	2002	2003	2004	2005
B	– 1.0	– 0.3	0.4	0.5	0.6	0.6
D	– 1.7	– 2.3	– 1.9	– 1.1	– 0.8	– 1.0
EL	– 1.2	– 0.2	0.5	0.6	0.7	
E	– 0.9	– 0.5	– 0.2	– 0.1	0.1	0.2
F	– 1.6	– 1.5	– 1.9	– 1.6	– 0.6	– 0.1
IRL	2.2	– 0.7	– 0.3	– 1.2	– 0.9	
I	– 1.4	– 0.8	– 0.2	0.1	– 0.2	– 0.2
L	4.8	3.7	2.6	2.8	3.1	
NL	– 0.2	0.1	0.7	0.5	0.7	
A	– 1.4	0.0	0.3	0.2	0.3	0.5
P	– 2.1	– 2.5	– 1.7	– 0.8	0.1	0.5
FIN	3.6	3.4	2.3	2.1	2.7	
EUR-12	**– 1.2**	**– 1.2**	**– 0.9**	**– 0.6**	**– 0.2**	
DK	1.2	1.5	2.0	2.0	2.1	2.2
S	2.7	3.9	1.5	1.7	2.0	
UK ([1])	1.7	– 0.3	– 1.1	– 1.4	– 1.2	– 1.1
EU-15	**– 0.5**	**– 0.8**	**– 0.8**	**– 0.6**	**– 0.3**	

([1]) Financial years.

Source: Commission services calculations.

cate that a certain degree of caution has been used when setting the targets for debt. If the latter is true, the euro-area debt ratio could approach the 60 % of GDP reference value by the end of the projection period.

Table I.12 shows that all Member States will be below the 60 % of GDP ceiling in 2004, with the exception of Belgium and Greece where it will fall below 90 % of GDP in 2005, and Italy where it will still be at 95 % of GDP in 2005.

Table I.11

Euro area — Gross debt level and changes in the 2001 updates

	2000	2001	2002	2003	2004
Gross debt level	70.5	68.7	67.3	65.5	63.4
Change in gross debt		– 1.5	– 1.5	– 1.7	– 2.2
2000 updates of the programmes	71.0	67.8	66.0	63.8	61.1
Difference with 2000 updates	– 0.5	0.9	1.3	1.7	2.3
Contributions to change in gross debt:					
Primary balance	– 3.3	– 2.6	– 2.6	– 2.9	– 3.1
Interest payments	4.0	3.8	3.6	3.5	3.4
Nominal GDP growth	– 2.6	– 3.0	– 2.7	– 3.1	– 3.0
Other factors influencing the debt ratio (1)	– 0.9	0.3	0.2	0.8	0.6

(1) The programmes do not always contain enough information to identify directly the contribution from different factors to the development of the euro-area debt ratio. Therefore, it has been necessary in some cases to identify the contribution from nominal GDP growth (GDP deflator plus real GDP growth multiplied by the debt ratio). In this way, the stock-flow adjustment is derived as a residual. Differences are due to rounding.

Source: Commission services calculations.

Table I.12

Debt levels in the 2001 updates of the stability and convergence programmes

	2000	2001	2002	2003	2004	2005
B	109.3	107.0	103.3	97.7	93.0	88.6
D	60.3	60.0	60.0	59.0	57.0	
EL	102.7	99.6	97.3	94.4	90.0	
E	60.4	57.5	55.7	53.8	51.9	50.0
F		57.1	56.3	55.7	54.5	52.9
IRL	38.6	35.8	33.7	33.8	34.1	
I	110.5	107.5	104.3	101.0	98.0	95.4
L	5.3	5.0	4.6	4.2	3.9	
NL	56.1	52.0	48.0	45.0	42.0	
A	63.5	61.8	59.6	57.2	54.7	52.1
P		55.9	55.7	55.5	54.0	53.2
FIN	44.0	42.7	42.9	43.0	41.8	
EUR-12	**70.5**	**68.7**	**67.3**	**65.5**	**63.4**	
DK	46.8	43.5	42.9	40.1	37.6	35.1
S	55.6	52.3	49.7	47.3	45.2	
UK (1)	39.9	38.1	37.2	37	36.8	
EU-15	**63.9**	**62.2**	**60.8**	**59.3**	**57.5**	

(1) Financial years.

Source: Commission services calculations.

3.2. Composition of the adjustment

The updated programmes show that both revenue and expenditure ratios are expected to decline over the projection period (see Table I.13). After a halt in 2002, the euro-area total receipts are projected to fall slightly to below 46 % of GDP in 2004. This is more than compensated by reductions in the expenditure ratio which over the same period will amount to 1.6 % of GDP. Strong reductions in revenue are projected in Finland, Luxembourg, Austria, Ireland, Italy, Belgium and, outside the euro area in Sweden. France, Austria, Sweden and Denmark are the only countries with revenue ratios above 50 % of GDP in 2004. Several countries (Germany, Austria and Portugal) project reductions in the expenditure ratio of two percentage points of GDP or more. Increases are only projected in Ireland and the UK, the two countries with the lowest level of expenditure in the EU (1).

(1) Excluding the contingency provisions mentioned above would mean that the expenditure ratio in Ireland for 2004 would be broadly the same as its level in 2001.

Table I.13

Expenditure and revenue ratios in Member States

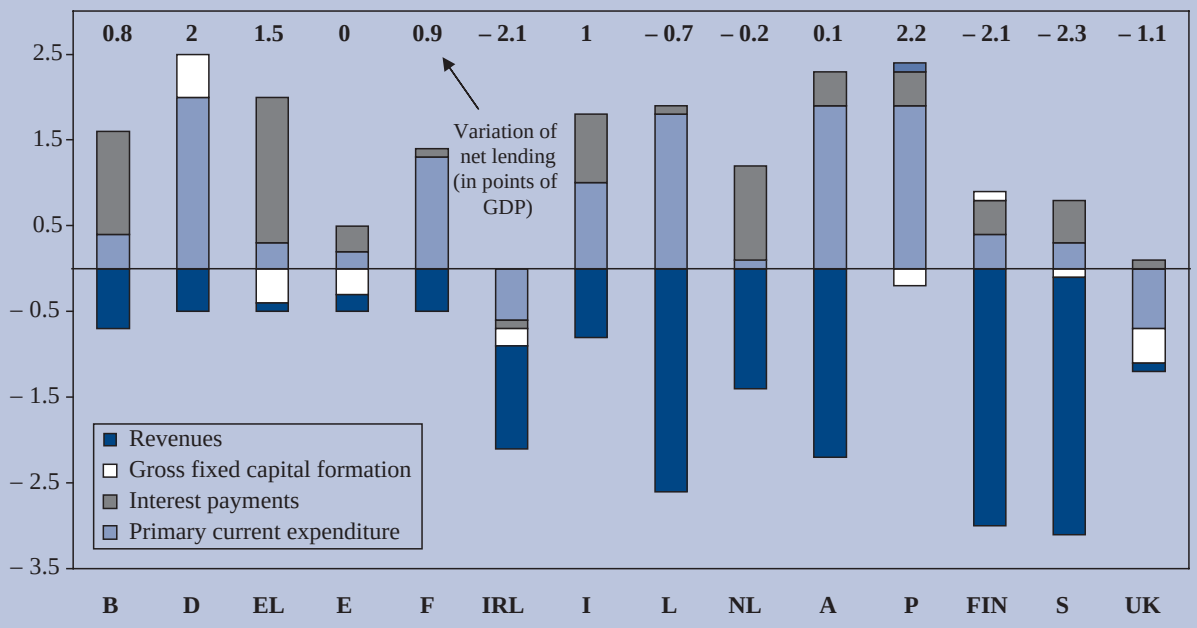
	Total revenues			Total expenditures		
	2001	2004	2001–04	2001	2004	2001–04
B	49.0	48.3	– 0.7	49.1	47.7	– 1.4
D	45.5	45.0	– 0.5	48.0	46.0	– 2.0
EL	46.9	46.8	– 0.1	47.2	45.6	– 1.6
E	39.3	39.1	– 0.2	39.3	39.1	– 0.2
F	51.1	50.6	– 0.5	52.5	51.1	– 1.4
IRL	34.8	33.6	– 1.2	33.4	34.3	0.9
I	45.8	45.0	– 0.8	46.9	45.1	– 1.8
L	44.4	41.8	– 2.6	40.3	38.4	– 1.9
NL +	46.8	45.4	– 1.4	46.1	44.9	– 1.2
A	52.6	50.4	– 2.2	52.6	50.3	– 2.3
P	44.0	44.1	0.1	46.2	44.1	– 2.1
FIN	51.8	48.8	– 3.0	47.1	46.2	– 0.9
EUR-12	**46.5**	**45.8**	**– 0.7**	**47.7**	**46.1**	**– 1.6**
DK	54.9	53.7	– 1.2	52.9	51.6	– 1.3
S	59.1	56.1	– 3.0	54.5	53.8	– 0.7
UK °	38.9	38.8 (1)	– 0.1 (2)	39.1	40.1 (1)	1.0 (2)
EU-15	**45.5**	**45.1 (1)**	**– 0.4 (2)**	**46.3**	**45.8** (1)	**– 0.5** (2)

NB: Discrepancies are due to rounding.
+ On the basis of revised data;.
° financial years.
(1) 2003.
(2) 2001–03.

Source: 2001 programme updates and Commission services calculations.

Although the information provided in the programmes on the budget components is limited, it appears that the large reduction in taxes which took place in most euro-area countries in 2001 (on average 0.8 % of GDP) will be partly reversed in 2002 mostly due to cyclical developments. Thereafter, large reductions in the tax ratio are expected in Finland, Austria and Sweden. As to expenditure components, it is worth noting that social transfers are set to remain stable over the projection period in many countries, but are expected to increase in Greece and Portugal and decrease in Germany. Interest payments will continue their downward trend, thanks to diminishing debt levels. Gross fixed capital formation is set to increase throughout the EU, with the exception of Germany where it would fall by 0.5 percentage points of GDP.

Graph I.11: **Contributions to net lending variation 2001–04 (1) in points of GDPs**



Source: 2001 updates of the stability and convergence programmes. A positive value indicates a positive contribution to net lending. A positive value in total variation of net lending (value is presented on top of columns) implies an improvement of the balance. For the UK, data refer to 2001–03. For B, F, I and L, values of primary current expenditures refer to primary expenditure.

Graph I.11 illustrates the different budgetary strategies being pursued by Member States. Countries which still have deficits in 2001 plan substantial reductions in the expenditure ratio. For example, Germany and Portugal aim at reaching balance budget position mainly through cuts in current primary expenditure, although Portugal would also benefit from a reduction in interest payments. Italy, France and Belgium which also plan to improve the budget balance by around 1 % point of GDP, would also do so via reductions in primary current expenditure and in interest payments. Greece is expected to profit from the large decrease in interest payments to move into a budget surplus while at same time increasing public investment.

Several countries (Austria, the Netherlands and to a lesser extent Spain) will sustain their current budget positions, whilst bringing about a reduction in the size of the public sector. The large fall in budget surpluses of several Member States (Luxembourg, Finland and Sweden) is explained by a strong reduction of revenue (largely due to cyclical factors) and a smaller reduction of primary current expenditure. In contrast, both Ireland and the UK plan to increase the expenditure ratios (notably public investment) from their relatively low levels ([1]).

([1]) However, excluded the contingency provisions mentioned above, the Irish expenditure ratio in 2004 would be broadly the same as in 2001.

4. The long-term sustainability of public finances

4.1. The budgetary impact of ageing

The European Council in Stockholm of March 2001 agreed that 'the Council should regularly review the long-term sustainability of public finances, including the expected strains caused by the demographic changes ahead. This should be done both under the guidelines (BEPGs) and in the context of the stability and convergence programmes'.

In line with the revised code of conduct on the content and presentation of stability and convergence programmes (see Part II.1), most Member States included a specific section on the sustainability of public finances in their programme, presenting long-term budgetary projections. This information shows that ageing populations will have a considerable budgetary impact (see Table I.14). Public spending is projected to rise by between 4 % and 8 % of GDP in the coming four decades, although much higher increases are projected in several Member States. Increases in public spending due to ageing population will start as of 2010 in some countries as the baby-boom generation enter into retirement, and the steepest rise will occur between 2020 and 2035 in most Member States.

Achieving and sustaining the medium-term targets set down in the programmes will help meet these costs by

Table I.14

Long-term projections for public finances included in stability and convergence programmes — change as a percentage of GDP between 2000 and 2040

	Source	Period	Pensions	Health	Other primary expenditures	Total primary expenditure	Revenues
B	National	2000–50	3.1	3.1	– 2.9	3.3	
DK	National	2005–50	2.5	1.9	1.1	5.5	2.1
D	EPC	2000–50	4.8	1.3			
EL	EPC	2000–50	12.2	1.8		14.0	
E	National	2000–15	– 0.2			– 0.2	
F	EPC	2000–40	3.7	1.7		5.4	
IRL	EPC	2000–50	4.4	2.7		7.1	
I	EPC	2000–50	0.4	2.0		2.4	
L	EPC	2000–50	1.9			1.9	
NL	National	2001–50	3.8	3.8	1.3	8.8	3.5
A	EPC	2000–50	2.5	2.7		5.2	
P	EPC	2000–50	2.3	0.9		3.2	
FIN	National	2000–50	5.8	2.0	– 2.3	5.5	– 2.2
S	National	2000–50	1.6	2.8	– 3.5	0.9	– 4.5
UK	National	2000–30	Figures only for total current consumption				

Source: Member States' stability and convergence programmes.

lowering the future interest burden on debt. A quantitative analysis was made to assess whether the budgetary targets set down in stability and convergence programmes are sufficiently ambitious to avoid the risk of large budgetary imbalances emerging in the future (Part II.4 describes the indicators used to make this assessment).

There are several important conclusions that can be drawn from this assessment (see Table I.15). Firstly, on the basis of current policies, there is a risk of budgetary imbalances in breach of the SGP requirement emerging in six Member States (Germany, Spain, Greece, France, Austria and Portugal). Moreover, sensitivity analysis highlights the critical importance of achieving and sustaining the medium-term budget target set down in stability and convergence programmes.

Secondly, there is a great deal of diversity as regards the emphasis given to the budget challenge posed by ageing populations. A few countries have put in place comprehensive strategies to prepare for the budgetary impact of ageing populations, including commitments to run budget surpluses up to 2010 and beyond so as to achieve a large reduction in public-debt levels prior to the impact of ageing populations taking hold. Several countries have established pension reserve funds, although the extent to which they will meet future costs is questionable given the limited resources which have so far been invested in them (with the exception of Ireland) and uncertainty as regards the size and frequency of contributions. In brief, ambitious and comprehensive strategies of a few Member States contrast with as yet rather piecemeal approaches in other countries which are not commensurate with the seriousness of the policy challenge.

Table I.15

Overview of the policy conclusions drawn by the Commission on the sustainability of public finances

	Are public finances sustainable ?	Do the budgetary measures in the programme improve sustainability ?	What are the key policy challenges ?
B	Appear to be sustainable, but conditional upon large primary surpluses being sustained for several decades.	Commitment to sustain high primary surpluses is helpful. However, the strategy is heavily dependent on debt reduction, and needs to be accompanied with measures to raise employment amongst older workers, and to restrict access to early retirement schemes. The pensions reserve fund given its size and financing arrangements may not have a major impact in meeting future pension costs.	The main challenge will be to sustain a high primary surplus over the very long-run while at the same time introducing the planned reform of the tax system.
DK	Appear to be sustainable.	Yes, comprehensive approach outlined.	Sustaining large budget surpluses up to 2010 as planned is a major challenge. The high tax burden raises concerns over long-term competitiveness and the risk of tax competition.
D	Risk of emerging budgetary imbalances.	If achieved, the goal of a balanced budget position by 2004 will help. Recent pension reform is also an important step in the right direction. However, overall there is a lack of ambition in light of the scale of the challenge.	Cannot afford further delay in reaching the SGP target. Further social security reform and measures to raise employment rates are also needed.
EL	Risk of emerging budgetary imbalances due to the big increase in public spending on pensions.	Move towards a budget surplus is welcome. However, there is no detailed presentation on the ongoing reform of the pension system which is the root of problem.	Substantial reform of the pension systems which curtails expenditure growth is a matter of urgency.
E	Risk of emerging budgetary imbalances due to the big increase in public spending on pensions.	Sustaining a position of budget balance will help. The proposed pension reserve fund given its size and uncertain financing arrangement is unlikely to have a major impact in meeting future pension costs.	Achieving a major reform of the pension system in 2004 is the key. Also, measures are needed to raise employment rates.

(Continued on the next page)

Table I.15 (Continued)

	Are public finances sustainable ?	Do the budgetary measures in the programme improve sustainability ?	What are the key policy challenges ?
F	Risk of emerging budgetary imbalances.	If achieved, the goal of a balanced budget position by 2004 will help. Pension reform and measures to raise employment rates are not dealt with. The pensions reserve fund given its size and financing arrangements may not have a major impact in meeting future pension costs. Overall, there is a lack of ambition in light of the scale of the challenge.	Cannot afford further delay in reaching the SGP target. The next phase of pension reform that has been repeatedly postponed must be undertaken. Worrying tendency to downplay the challenge and to consider that the policy measures can be postponed for several years.
IRL	Outlying country. Need to consider whether existing tax burden can finance increased spending on pensions and healthcare.	A comprehensive approach outlined. Positive features include planned debt reduction and a substantial pension reserve fund with large annual contributions. Move towards deficit in the end year of the programme is unhelpful, but this is largely due to contingency provisions.	In a good position to meet the costs of ageing populations given high degree of funding of pensions and the relatively low tax burden. However, a long-term financing challenge exists given the projected large increases in spending on pensions and healthcare (albeit from a low starting position) and a low tax burden.
I	Some risk of emerging budgetary imbalances.	Balanced budget target will help, but it is essential that it materialise. Lack of concrete information on new measures on pension system to speed up the transitional period.	Reaching the medium-term budget target should not be subject to further delays. Projected growth in spending on public pensions is based on an assumption of large increases in labour force participation rates. The acceleration of the transitional period of the pension reforms already approved is needed as well as further measures to raise employment rates.
L	Appear to be sustainable.	Yes, comprehensive approach outlined.	Sustainability is sensitive to the number of cross-border workers.
NL	Appear to be sustainable.	Yes, comprehensive approach outlined.	Achieving a fast pace of debt reduction is key to the strategy.
A	Risk of emerging budgetary imbalances, especially under less favourable circumstances.	Yes, the move towards budget balance and the recent pension reform are steps in the right direction.	Need to sustain sound public finances, and possibly consider further reform of pensions. A major challenge is the fact that pension spending is already very high, as is the tax burden.
P	Risk of emerging budgetary imbalances, especially under less favourable circumstances.	Balanced budget target will help but it is essential that it materialise. Recent pension reform is also welcome.	Cannot afford further delay in reaching the SGP target. Need to complete the reforms of the pensions and healthcare system.
S	Appear to be sustainable.	Yes, comprehensive approach outlined.	The high tax burden raises concerns over long-term competitiveness and the risk of tax competition.
FIN	Appear to be sustainable.	Yes, comprehensive approach outlined.	A model programmes in terms of dealing with the long-term sustainability of public finances. The high tax burden raises concerns over long-term competitiveness and the risk of tax competition.
UK	Appear to be sustainable.	Yes, comprehensive approach outlined.	Spending on public pensions could be higher than currently projected, as the results are largely driven by the indexation of (flat rate) entitlements to prices. The strategy is unique in the EU as it essentially relies on shifting responsibility for retirement income provision from the government towards the individual.

4.2. Country positions

The nature of the budgetary policy challenges differs across countries depending on the state of their current budgetary position, and the design of tax and welfare systems. It is possible to group countries according the main policy challenges they face.

Countries where there is a risk of emerging budgetary imbalances due to rapid growth in pension expenditure. The risk of emerging budgetary imbalances in Greece and Spain can almost entirely be attributed to the very large projected increase in spending on public pensions in coming decades, i.e. some 8 % of GDP between 2000 and 2040 in Spain and 12 % of GDP in Greece, the highest projected increase of all EU countries. Both countries are expected to reach positions of budget surplus in 2005, the end point of their respective stability programmes. Hence, the policy problem is not due to a failure to run sound public finances in the medium-term, but rather due to the characteristics of the current public pension system.

Countries where there is a risk of emerging budgetary imbalances for a variety of reasons. This group of countries would include Germany, France, Austria and Portugal. The projected risk of unsustainable public finances essentially occurs for two reasons. First, notwithstanding recent reforms, public spending on pensions and healthcare in these countries is projected to grow at or above the average rate of the EU in coming decades (albeit from very different starting levels). Secondly, the pace of debt reduction is slow as several countries (France, Germany and Portugal) have yet to reach the SGP goal of budget positions that are close to balance or in surplus (and for Ireland, the move into a deficit position). The policy challenge facing these Member States is therefore to achieve sound budget positions in line with the SGP and sustain them thereafter. In addition, further reforms to pensions and healthcare systems may be needed to curtail the future expenditure growth to keep public spending on pensions at reasonable levels and to finance retirement income on a more diversified basis, thus avoiding having to raise taxes or contribution rates.

The challenge facing high debt countries. Belgium and Italy, at first sight appear to have sustainable public finances on the basis of current policies: the reduction in future interest payments due to a fast pace of debt reduction would more than cover future expected increases in spending due to ageing populations ([1]). However, this result needs to be interpreted with caution, as it relies on the maintenance of high primary surpluses over the very long run. This will be a major challenge as it could imply running actual budget surpluses, which inevitably leads to competing budgetary pressures for tax cuts and/or increased public expenditures. In brief, the projections show that the main the budgetary policy challenge facing these countries is not to achieve more ambitious budget positions, but rather to sustain sound public finances over the long run. The strategies to meet the budgetary costs of ageing populations outlined in both programmes rely heavily, perhaps overly, on achieving rapid public-debt reduction. While debt reduction is a central element in any strategy, it will need to be accompanied with measures to raise employment rates of women and older workers (which are low relative to the EU average) and the speeding up the transitional period towards the contribution-based system.

Countries which appear to have sustainable public finances. This group of countries includes Denmark, Luxembourg, the Netherlands, Finland, Sweden and the UK ([2]). They exhibit a number of common characteristics. To begin with, they have achieved sound and sustained sound budget positions, including substantial surpluses, in recent years that has led to a fast pace of debt reduction. Moreover, three Member States (Denmark, Finland and Sweden) have an explicit budgetary objective of running budget surpluses over the coming decade, i.e. going beyond the time frame and budgetary ambition requirements of the SGP. In addition, ambitious and comprehensive reforms to pension systems have been made in recent years: *inter alia*, these reforms have strengthened the link between contributions and entitlements, and hence employment incentives, increased the share of pensions that are financed on a funded basis, and increased the capacity of pension systems to cope with demographic developments such as changes in life expectancy.

([1]) The above qualifications are particularly relevant for Italy. Firstly, Italy has yet to reach a budget position that is close to balance as required by the SGP. Secondly, it should be borne in mind that spending on pensions as a share of GDP is already high and well above the EU average. In addition, the relatively small projected increase in spending on public pension is based upon an assumption that the reforms enacted in the 1990s are implemented in full (especially the indexation of the entitlement to prices and the adjustment of benefits to increases of life expectancy). The projections were also made on the basis of the assumption of a significant increase in labour force participation rates in coming decades.

([2]) Ageing population is projected to have only a minimal impact on public spending in the UK. This largely stems from the strategy of limiting the role of the State to providing a minimum flat-rate pension (that is indexed to prices), while ensuring a legislative and fiscal framework that enables individuals to save for their own retirement income.

Notwithstanding this broadly favourable assessment, ageing populations will pose budget challenges for these countries. Firstly, the assessment is sensitive to Member States (especially in the Netherlands and Finland) achieving the planned rate of debt reduction in coming years, i.e. it is important they meet the medium-term budget targets set down in their programmes. Secondly, the sustainability of public finances depends upon high tax ratios (over 50 % of GDP) being maintained over the very long run in Denmark, Finland and Sweden. Although current tax rates in these countries are not at their historical peaks, ratios of this magnitude are nonetheless high and well above levels in other industrialised countries. As recognised in the stability and convergence programmes of these countries, the maintenance of high tax ratios raises concern about competitiveness: there is also a risk that tax bases may become more mobile in the future which may make it more difficult for countries to raise revenues ([1]).

([1]) The results for Ireland are somewhat surprising given the dramatic improvement in public finances in recent years. However, a number of qualifications are needed. First, the stability programme of Ireland projects a deficit position of 0.6 % of GDP by 2004. This may be a pessimistic forecast as it is due to the inclusion of a contingency provision worth 1.1 % of GDP. Secondly, the projected increase in age-related expenditures is starting from relatively low levels and will occur somewhat later than in other countries. Moreover, it will in part be financed by pension reserve fund established in 1999, which already has assets worth 7 % of GDP: this fund is expected to make a significant contribution towards meeting additional pension costs in the future given that there is a commitment to make an annual contribution of 1 % of GNP to the fund, the assets of which are invested in income generating assets. Thirdly, the tax ratio in Ireland is the lowest in the EU. Nonetheless, the sustainability indicators point to the need for Ireland to address a possible financing gap. Large increases in public spending on pensions and healthcare towards levels in other continental EU countries cannot be financed at the current tax ratio without risking the re-emergence of budget deficits.

Part II

Evolving budgetary surveillance and coordination

Summary

The rules-based framework for budgetary surveillance in EMU has undergone its first stress test during the global economic slowdown. Attention has mostly focused upon the procedures for dealing with slippage from budgetary targets set down in the stability and convergence programme (especially the debate on whether a so-called early-warning recommendation should be issued to Germany and Portugal). However, it is important not to overlook a number of important measures that have strengthened the quality and coverage of the surveillance framework and the tools available to the Commission and Council for policy assessment.

In July 2001, the Ecofin Council revised the code of conduct on the content and presentation of stability and convergence programmes (which dated from 1998) taking into account the experiences of three years in EMU. Member States applied the code to the recently updated programmes and several key features are worth noting. First, the revised code provides for a clustered submission of programmes in a standardised format and with budgetary targets based on external macroeconomic assumptions that have been agreed in common. Secondly, the revised code also clarified the interpretation as to what constitutes an appropriate medium-term target of 'close to balance or in surplus' for each Member State. Thirdly, it extends the coverage of programmes to include sections on the quality and sustainability of public finance in line with the so-called Lisbon process. The application of the new code to the 2001 programme updates has helped improve the quality of the Commission's assessments and has enhanced the comparability of programmes. The most important development has been the possibility to evaluate the implications of the national budgetary policies for the euro-area policy stance in a period of high economic uncertainty.

A critical juncture in the process of budgetary surveillance was reached in January 2002, when the European Commission recommended that an early warning be sent to Germany and Portugal under the Stability and Growth Pact. Both countries missed the targets for 2001 set down in their stability programmes by a wide margin (over 1 % of GDP), and there was a clear risk of deficits approaching 3 % of GDP reference value for the budget deficit. In the face of such clear-cut slippage from agreed target, the Commission acted to preserve credibility of the legal and political obligations of the pact. As a result of discussions in the Ecofin Council on the Commission's draft recommendation for an early warning, Germany and Portugal gave firm political commitments which responded to the substance of the Commission's concerns: the Council therefore decided to close the procedure. Both countries stated their willingness to implement their stability programmes in full so as to avoid a breach of the 3 % of GDP reference value, to resume the process of budgetary consolidation and to reach their medium-term targets in 2004. At the same time, the Council restated the importance of the early-warning system in the overall framework for budgetary surveillance.

Positive evidence is emerging that these commitments are being taken seriously, thus reinforcing the argument that the Commission's aim in activating the early-warning mechanism has been met. In particular, following the early-warning episode, an agreement on a domestic stability pact between the *Länder* and the *Bund* in Germany has been agreed, thus reinforcing the argument that the Commission's aim in activating the early-warning mechanism are being met. However, credibility in the SGP can only be assured by ensuring the commitments are implemented in full, and by learning the lessons from this first experience with the early-warning mechanism. The episode highlights the need for all Member States to reach the medium-term target of the SGP as soon as possible, so that automatic stabilisers can operate freely in economic downturns. It also illustrates the need to design sustainable tax reforms, which build in an appropriate control of public expenditures.

The economic downturn (and the experience with the early warning) underlined the importance of cyclically-adjusted budget balances in the process of budgetary surveillance. While measuring the impact of the economic cycle on budget positions is complex and subject to uncertainties, it is important that all actors involved in the surveillance process have a common view on the underlying budgetary developments. In order to ensure consistency, a broad agreement has been reached between the Commission and Council on a method to measure cyclically-adjusted budget balances based on a production function approach to estimating the output gap. This new method will be used to assess Member States' budget positions in the evaluation of the next round of the stability and convergence programmes, and will gradually replace the Hodrick–Prescott (HP) filter currently employed by the Commission. Estimates of the cyclically-adjusted budget balances in Member States made using the production function approach are compared with estimates produced both under the existing Commission method and by international organisations (IMF and OECD). In EMU, the cyclical adjustment of budget balances is used, *inter alia*., to evaluate the minimum cyclical safety margins under the 3 % of GDP deficit ceiling. These so-called 'minimal benchmarks' were first estimated in 1998 on the basis of the HP filter and are now re-estimated on the basis of the new method.

A major extension of EU budgetary surveillance was achieved with the first systematic assessment of the sustainability of public finances in light of ageing populations: this was made on the basis of the updated stability and convergence programmes submitted in late 2001. Making a comparable assessment is challenging, as there is no consensus in the economic literature on either the definition of sustainable public finances (and consequently the scope of the assessment to be made in the SGP) or on the best analytical methodology to be used. A pragmatic approach was followed using the sustainability indicators suggested by the Economic Policy Committee. The analysis shows the potential risk for emerging budgetary imbalances in many Member States, and that the results are sensitive to the starting position of the budget balance. This emphasises the importance of Member States achieving and sustaining the medium-term target set down in their programmes, and the fact that it is current budgetary choices which determine the capacity of countries to meet the future budgetary costs of ageing populations.

1. The Stability and Growth Pact: implementing the new code of conduct

1.1. A revised code of conduct approved in July 2001

The Stability and Growth Pact (SGP) entered into full force on 1 January 1999 to complement and strengthen the provisions of the Maastricht Treaty on budgetary discipline. It has both preventive and dissuasive elements set down in two Council regulations and resolutions of the European Council ([1]).

The core commitment of the SGP is for Member States to achieve and maintain medium-term budget positions that are 'close to balance or in surplus'. On an annual basis, all countries must submit stability or convergence programmes in which they set down their medium-term target and an adjustment path to this goal. The programmes therefore serve 'to prevent at an early stage the occurrence of excessive government deficits and to promote the surveillance and coordination of economic policies' ([2]).

To ensure the smooth functioning of the SGP, the Ecofin Council in October 1998, endorsed an opinion of the Monetary Committee on the content and format of the stability and convergence programmes (hereafter referred to as code of conduct). This code of conduct was revised by the Economic and Financial Committee (EFC) in July 2001 and endorsed by the Ecofin Council, taking account of three years' experience in implementing the SGP (the full text of the revised code of conduct can be found in Part VII.1).

The main changes to the 1998 code can be summarised as follows: (1) clustering the submission and examination of programmes; (2) improving the quality and comparability of programme contents and presentation; (3) clarifying key concepts, especially the definition of the medium-term budget targets and the use of cyclically-adjusted budget balances; and (4) extending the coverage of programmes to include information on the quality and sustainability of public finances as requested by the Lisbon and Stockholm European Councils (including long-term budgetary projections on the implications of ageing populations).

The aim of the revision was to facilitate the evaluation of programmes by the Commission and Council, and ensure that the assessment of Member States' budgetary positions and prospects feed into the broad economic policy guidelines (BEPGs) in a more appropriate manner. In addition, a clustered examination of programmes and the use of common external macroeconomic assumptions would allow for an examination of the aggregate implications of stability programmes for the euro area as a whole, thereby encouraging Member States to recognise the euro-area implications of budgetary decisions taken at national level.

1.2. How the revised code of conduct has improved the functioning of the SGP

Clustering the submission and examination of programmes

In previous years, the submission and assessment of the programmes was spread between September and March. This undermined the comparability of assessments given the substantial change in economic conditions which can take place over a six month period. It also prevented an examination of the aggregate impact for the euro area as

([1]) For a description of the SGP, see *Public finances in EMU — 2000* (European Commission, 2000). A more exhaustive assessment of its rationale and functioning is contained in Brunila, Buti and Franco (2001).

([2]) Article 1, Council Regulation (EC) No 1466/97.

a whole of the budgetary targets set down in stability programmes.

As most countries adopt their annual budget proposals before the end of the calendar year (usually in September and October), the revised code of conduct specified that stability and convergence programmes be submitted in autumn, between mid-October and 1 December. However, an exemption until 15 December was agreed the for the UK and Ireland as their budgetary process is not based on a calendar year (the latter for 2001 only prior to a reorganisation of their budgetary timetable), and for Austria and Portugal to accommodate specific institutional arrangements with their national parliament.

Table II.1 presents the dates when Member States submitted their latest updates of the programmes. There was a substantial improvement compared with last year. Seven countries respected the agreed deadlines, and all countries bar Denmark submitted the programme within two weeks of the deadline. The delay in Denmark until January 2002 was due to the late-in-the-year change in government. Overall, this meant that all programmes were submitted for examination within a two-month period.

Table II.1

Date of submission of the 2001 updates of the stability and convergence programmes

	Date of submission	Additional information ([1])
B	30 November	
DK	29 January	
D	5 December	30 January
EL	3 December	
E	9 December	
F	11 December	21 January
IRL	5 December	
I	16 November	
L	5 December	
NL	17 October	6 December
A	27 November	
P	18 December	
FIN	22 November	
S	9 November	
UK	20 December	

([1]) Additional details and/or clarification of policy intentions provided by national authorities.

Improving the content and comparability of programmes

The efficiency of budgetary surveillance and coordination under the SGP depends on the quality of information presented in the programmes. Given the wide diversity in content and quality of information presented in earlier generations of programmes, the revised code of conduct recommended three improvements as follows:

- the use of a common structure for the presentation of the programmes;
- the production of macroeconomic and budgetary information in the form of standardised tables. Some tables, for example concerning potential output estimates and long-term budgetary projections, are optional, but nonetheless provide valuable and comparable information;
- the use of a set of commonly agreed assumptions on the main extra-EU variables, and for comparability reasons, a presentation of sensitivity analysis based on the common assumptions for the variables where differences are significant.

Compared with earlier programmes, there were significant improvements in the content and coverage which helped improve the quality and comparability of the assessment made by the Commission and Council. Some programmes stand out for their completeness, such as Finland's with its very detailed discussion on ageing populations. There is, however, scope for further improvement in coming years. For example, the programmes of some countries (Belgium, Spain, France, Italy and Luxembourg) did not provide detailed projections of revenues and expenditures. Several countries did not provide the government investment expenditure, which is specifically required by the pact, while some updates (e.g. Belgium) lacked a clear division between the central government and social security accounts.

A degree of ambiguity was found in the quantitative information, notably in the programme provided by Germany due to rounding and period averaging of budgetary positions and targets. Some budgetary data reported were not in line with ESA 95 national account definitions (Ireland and Italy), and in particular for Italy as regards the treatment of the sale of real assets. The stability programme of the Netherlands only contained detailed information for the first two years of the programme. Several programmes provided insufficient

information on the quantitative impact of various budgetary measures.

Clarifying the medium-term budgetary target of the pact

One of the most important innovations of the revised code of conduct was to clarify the interpretation as to what constitutes an appropriate medium-term target of 'close to balance or in surplus' for each Member State. It also helped clarify the role which cyclically-adjusted budget balances are to play when assessing whether Member States meet the budgetary targets set down in stability and convergence programmes. These clarifications help ensure that the SGP has a more solid economic underpinning, and that the assessment of Member States' budgetary positions under the SGP is not simply limited to a verification of compliance with nominal targets.

As regards the use of cyclically-adjusted budget balances, the code explicitly states that '[...] cyclically-adjusted balances should continue to be used, in addition to nominal balances, as a tool when assessing the budgetary position'. The Council opinions on the updated programmes of six Member States (Greece, France, Portugal, Finland, Sweden and United Kingdom) explicitly mention cyclically-adjusted budget balances. Indeed, the Council opinions recognise that the actual and structural budget positions of some Member States may differ in the medium-term, as output gaps might still exist at the end of the time horizon of the programme. There is agreement between the Commission and Council that the new Commission method to measure cyclically-adjusted balances will start to be used in the assessment of the next updates of stability and convergence programmes to be submitted in autumn 2002.

As regards the medium-term target, the code requires Member States to go beyond reaching a budget position that provides a safety margin for cyclical economic developments: additional margins are required to cope with unforeseen budgetary risks (such as tax shortfalls or expenditure overruns) and to run down high debt ratios at a fast pace. In previous programmes, the Commission made reference to countries reaching so-called 'minimal benchmarks', i.e. attaining a sufficient cyclical safety margin. The revised code states that 'the Commission may continue using, where relevant, these "minimal benchmarks" as an additional working instrument, but not as a target per se according to the Stability and Growth Pact': this makes clear that reaching the minimal benchmark does not constitute compliance with the 'close-to-balance or in surplus' requirement of the pact. The Council opinions on the programmes of several countries (Denmark, France, Ireland, Italy, the Netherlands, Austria and Finland) refer implicitly to minimal benchmarks ([1]).

The revised code also introduces a neat distinction between what is required to meet the 'close-to-balance or in surplus' requirement of the SGP and what would constitute an appropriate medium-term budget target for Member States. A more ambitious budgetary target going beyond the *strictu sensu* obligations of the pact could be justified on several grounds, e.g. to reduce high levels of public debt at a faster pace, to prepare for the budgetary costs of ageing populations, to create room for appropriate discretionary fiscal polices, etc.

A more comprehensive coverage of the programmes

The revised code reflects the ongoing debate at EU level on the need to improve the quality and sustainability of public finances. It requests Member States to include a comprehensive presentation in their programmes of the developments on these issues. Regarding quality, Member States are required to present data on the main expenditure and revenue components and comment on the budgetary and economic consequence of tax and spending reforms.

Also, the code invites Member States to outline their strategies to prepare for the budgetary consequences of ageing populations and to include available long-term projections. This allowed, for the first time, a systematic assessment to be made of the sustainability of Member States' public finances. The policy conclusions of this exercise were summarised in Part I.3, and the approach used by the Commission in making a quantitative assessment is outlined in Part II.4 below.

Overall assessment

The revised code of conduct had a favourable impact on the budgetary surveillance, although there is still room for further improvement. Perhaps the most noticeable development has been the enhanced ability to consider the implications for the euro area as a whole of the budgetary targets set down in the programmes. Due to the clustered submission of the programmes, and the use of

([1]) Revised estimates of the minimal benchmarks using the new Commission cyclical adjustment method are provided in Part II.3.

common external assumptions, the Commission was able in January 2002 to carry out an *ex ante* assessment of the euro-area fiscal stance. This was discussed by the Eurogroup before the Ecofin Council issued its opinions on the individual programmes. Such an aggregate assessment was especially opportune given the higher-than-usual degree of uncertainty on economic prospects at the time.

2. Reacting to slippage from budgetary targets: the implementation of the 'early-warning' system of the SGP

2.1. Introduction

Perhaps the most high-profile event in the process of EU budgetary surveillance since the start of EMU was the recommendation of the European Commission on 30 January 2002, for the Council to issue a so-called early-warning to Germany and Portugal under the SGP. This was the first time that these preventive elements of the SGP were activated, and although the Council did not endorse the recommendation for an early warning, it nonetheless marked an important event in the rules-based framework for coordinating budgetary polices in EMU.

The remainder of this chapter explains the reasons why the Commission recommended that an early warning be issued to Germany and Portugal. Section 2 outlines the role of the early-warning system in the overall framework for budgetary surveillance in EMU. It explains how the mechanism works based on the provisions of SGP, and the criteria used by the Commission in reaching its decision to act. Section 3 analyses the degree of slippage in Germany and Portugal from budgetary targets set down in the stability programmes examined by the Council in early 2001. Section 4 summarises the reaction of Council to the recommendation of the Commission for an early warning and the political agreement reached at the Ecofin Council of 12 February 2002. Section 5 attempts to draw lessons from this experience, and suggests a number of possible avenues which could help prevent a reoccurrence of similar situations in the future and measures which could strengthen the framework for budgetary surveillance.

2.2. The role of early-warning mechanisms and how they work

The preventive and dissuasive elements of the SGP

As explained in *Public finances in EMU — 2000* (European Commission, 2000), the SGP reinforces the Treaty obligation on Member States to avoid excessive deficit positions. It consists of both preventive and dissuasive elements, with the emphasis very much on the former.

The preventive elements of the pact consist of two key steps: surveillance of respect of budgetary commitments and early warning in the event of non-respect of budgetary targets. Under the first step, Member States submit annual stability or convergence programmes in which they set down their short- and medium-term budgetary strategies to reach and sustain budget positions that are 'close to balance or in surplus'. By attaining this budgetary target, countries have sufficient room for the automatic stabilisers to operate freely during normal cyclical downturn without breaching the 3 % of GDP reference value. The programmes are subject to peer review and monitoring by the Commission and Council, with a view to identifying any 'significant divergence' either from the medium-term budget target or the adjustment path towards it. This surveillance not only consists of verifying whether nominal budgetary targets are met, it also involves a close examination of the underlying budget position taking account of cyclical economic conditions. In the event that a significant divergence from budgetary targets is identified, the second step in the preventive elements is activated, i.e. the early-warning mechanism.

The purpose of the early warning is to send a signal to the Member State concerned that the budgetary targets,

which had been endorsed by the Council, have not been adhered to. It also gives the Member States sufficient time to take corrective measures if appropriate so as to avoid budget deficits approaching the 3 % of GDP reference value. As such, it is an important signalling device on the need for enhanced vigilance. The Pact foresees a clear sequencing of events, with an early-warning being issued prior to recourse being made to the dissuasive elements of the SGP, namely the excessive deficit procedure ([1]).

Once the deficit of a Member State goes above 3 % of GDP, the Council must place the country in an excessive deficit position unless the breach is due to exceptional circumstances, is temporary and the deficit remains close to the reference value. The Member State concerned is then required to take measures that aim at bringing deficits below the 3 % of GDP reference value. A repeated failure to take corrective measures could eventually lead to the imposition of sanctions.

The growing relevance of the early-warning mechanism in EMU

Since the start of EMU, only the first step of the preventive elements have been needed, i.e. the submission of stability/convergence programmes and the regular surveillance by the Commission and Council. However, this does not imply that the second step, the early-warning mechanism, is of lesser importance. If anything, its relevance is growing over time in EMU.

With budget positions in many Member States having substantially improved in recent years, the emphasis in budgetary policy is turning towards other objectives, such as cutting taxes or raising key expenditures, for example public investment. While these measures can contribute to raising employment and growth, it is vital to ensure that they are sustainable over time and do not have to be reversed once an economic downturn occurs. The early-warning mechanism is there to ensure that the hard-earned benefits of budgetary consolidation are not jeopardised by the pursuit of other policy objectives. Prior to 1999, Member States faced strong incentives to bring deficits below 3 % of GDP in order to satisfy the entry conditions for EMU, and they continue to face strong political incentives to avoid excessive deficit positions ([2]). The early-warning mechanism will ensure that the process of budgetary consolidation continues until the medium-term target has been reached.

Credibility of EMU's fiscal framework is essential for a positive relationship between monetary and fiscal authorities. This is especially the case in EMU when the single independent monetary authority (the ECB) is faced with 12 national fiscal authorities. For this decentralised approach to work, policy cooperation must go beyond good intentions and confining budgetary ambition to the avoidance of crises. Markets are not looking for a central fiscal authority in EMU, but instead for a tangible demonstration that countries in the euro area can manage diversity. An effective implementation of the early-warning procedure would help to give reassurance that adequate account is taken of the euro-area implications of policies that essentially remain under national jurisdiction.

How the early-warning mechanism works: the legal obligations and political commitments of the SGP

The Treaty and Council Regulation (EC) No 1466/97 (Articles 6 and 10) ([3]) define how the early-warning mechanism should work:

- 'the Council shall monitor the implementation of stability and convergence programmes with a view to identify actual or expected "significant divergences" of budget positions from the medium-term objective or the adjustment path towards it. The Council monitoring is based on assessments made by the Commission and the Economic and Financial Committee.
- if the Council identifies such a significant divergence, it shall address a recommendation to the Member State concerned with a view to give an early warning in order to prevent the occurrence of an excessive deficit. The Council recommendation is adopted by qualified majority on the basis of a Commission recommendation following the procedure outlined in Article 99(4) of the Treaty.
- a second recommendation to take prompt corrective measures can be addressed to the Member States concerned if the Council judges that the divergence is persisting or worsening.'

([1]) However, the fact that an early warning has not been issued would not prevent the Council to start the excessive deficit procedure.

([2]) For a discussion on the incentive structure of the SGP, see Buti and Giudice (2002).

([3]) OJ L 209, 2.8.1997.

Aside from these specific legal obligations on the early-warning mechanism, the overall implementation of the SGP is underpinned by firm political commitments on the part of the Commission, Council and Member States. In the resolution of the Amsterdam European Council on the Stability and Growth Pact, the Council committed itself to 'a rigorous and timely implementation of all elements of the Stability and Growth Pact in its competence'. In addition, the Council 'is invited always to state in writing the reasons which justify a decision not to act if at any stage of the excessive deficit or surveillance of budgetary positions procedures the Council decided not to act on a Commission recommendation and, in such a case, to make public the votes cast by each Member State ([1])'.

The criteria used by the Commission in deciding to activate the early-warning mechanism

The SGP does not define what constitutes a 'significant divergence' from budgetary targets or the conditions under which the early-warning mechanism is to be activated. The Commission recognised the importance of the early-warning system from the inception of the SGP, and has in the past attempted to clarify the conditions under which it would be activated ([2]). To ensure consistency across Member States, the Commission took three factors on board as follows:

- the size of the budgetary slippage, i.e. extent to which budget positions diverge from the targets set down in stability or convergence programmes;
- the reason for the budgetary slippage, i.e. whether the divergence of actual balances from target can be explained by cyclical or discretionary factors;
- the risk of an excessive deficit position, i.e. whether there is a risk of breaching the 3 % of GDP reference value.

It is important to note that these criteria distinguish between slippage from budgetary targets in nominal and cyclically-adjusted terms, and secondly reflect whether or not a country has reached the medium-term target of the SGP. In brief, there is more leeway available to countries with sound budget positions. For example, slippage from both actual and cyclically-adjusted budget targets in a country that has already surpassed the medium-term target would not be deemed 'significant'. For countries that have budget positions of 'close to balance', a slippage from actual budget targets would not be deemed 'significant' provided it is due to the working of the automatic stabilisers (however, a slippage in the structural budget balance would be deemed significant as this involves moving away from the medium-term target of the SGP). For countries that have yet to reach a budget position of 'close-to-balance', slippages from actual budget targets would be deemed 'significant' if the budget balance approaches the 3 % of GDP reference value.

2.3. The budgetary situation in Germany and Portugal

The size of budgetary slippage in Germany and Portugal

Tables II.2 summarises the degree of budgetary slippage in 2001 by comparing Member States' budgetary outcome as projected at the time of the examination in the Council in February 2002 (the main source being Member States' recently updated stability/convergence programmes) with the targets set in their programmes of one year ago. Table II.3 presents estimates of the degree budgetary slippage expected at the time for 2002, by comparing the projected outcome in the Commission's autumn forecast with the targets set down in programmes one year earlier ([3]).

A key concern of the Commission was to ensure a fair and consistent assessment across Member States. Table II.2 shows that eight Member States in 2001 failed to reach their targets for budget balance. Apart from Germany and Portugal, the divergence from target was relatively large in Denmark, Greece, Ireland and the UK (ranging from 0.8 % of GDP in Denmark and the UK to 2.9 % of GDP in Ireland), whereas in Belgium, France and Italy, the difference to target was more limited (some 0.5 % of GDP). Of those countries, only France and Italy have yet to reach a budget position of close to balance or in surplus required by the pact. Their actual budget balances, however, pointed to a lesser risk, compared to

([1]) OJ C 236, 2.8.1977, pp. 3 and 4.
([2]) See Part II.4.4 of European Commission (2000).

([3]) The analysis presented in this chapter refers to the Commission forecast of autumn 2001, as they were the latest data available to the Council at their meeting of 12 February 2002. In Tables II.2 and II.3, the divergence from targets is gauged by comparing budget outturns against the previous stability/convergence programme targets (columns 1, 2 and 3). The budgetary impact of the growth shortfall (columns 4 and 5) has been estimated as the change in GDP growth in 2001 times the budget sensitivity to growth. Respect of the close-to-balance rule is checked by looking at the cyclically-adjusted balances (CABs) from the new programmes as estimated by the Commission (column 7).

Table II.2

Divergences from the target for 2001 based on outlook from the updated stability and convergence programmes (% of GDP)

	Budget balance from SP/CP from late 2001	Budget target in SP/CP of late 2000	Divergence on actual budget balance	Budget impact from growth shortfall 2001	Divergence not explained by growth	PM: revision of starting positions (2000 outcome)	Cyclically-adjusted budget balance from 2001 SP/CP exercise
	(1)	(2)	(3) = (1) – (2)	(4)	(5) = (3) – (4)	(6)	(7)
B	– 0.2	0.2	– 0.4	– 0.9	0.5	0.2	– 0.5
DK	2.0	2.8	– 0.8	– 0.4	– 0.4	– 0.2	n.a
D	– 2.6	– 1.5	– 1.1	– 1.1	0.0	– 0.3	– 2.2
EL	– 0.3	0.5	– 0.8	– 0.4	– 0.4	– 0.3	– 0.6
E	0.0	0.0	0.0	– 0.2	0.2	– 0.1	– 0.5
F	– 1.5	– 1.0	– 0.5	– 0.3	– 0.2	– 0.1	– 1.5
IRL	1.4	4.3	– 2.9	– 0.7	– 2.2	– 0.2	– 0.7
I	– 1.1	– 0.8	– 0.3	– 0.4	0.1	– 0.2	– 0.8
L	4.1	2.6	1.5	– 0.8	2.3	3.2	3.7
NL	0.7	0.7	0.0	– 2.0	2.0	0.5	0.2
A	0.0	– 0.8	0.8	– 0.4	1.2	0.3	0.0
P	– 2.2	– 1.1	– 1.1	– 0.4	– 0.7	0.1	– 2.5
FIN	4.7	4.7	0.0	– 2.5	2.5	2.4	3.3
S	4.6	3.5	1.1	– 1.2	2.3	0.7	3.9
UK	– 0.2	0.6	– 0.8	0.0	– 0.8	0.9	– 0.3

NB: Column (6) is the difference between the 2000 budget balance given in the stability/convergence and the latest one incorporated in the 2001 stability/convergence programmes. In column (7), SP stands for stability programme and CP for convergence programme.

Source: Commission services and the 2001 updated stability and convergence programmes.

Table II.3

Divergences from the target for 2002 based on outlook from the Commission autumn forecast (% of GDP)

	Budget balance from 2001 autumn forecast	Budget target in SP/CP of late 2000	Divergence on actual budget balance	Budget impact from growth shortfall in 2001/2002	Divergence not explained by growth	PM: impact from revised starting position	Cyclically-adjusted budget balance from 2001 autumn forecast
	(1)	(2)	(3) = (1) – (2)	(4)	(5) = (3) – (4)	(6)	(7)
B	– 0.2	0.3	– 0.5	– 1.5	1.0	0.2	+0.1
DK	1.6	2.6	– 1.0	– 0.5	– 0.5	*– 0.2*	+1.8
D	– 2.7	– 1.0	– 1.7	– 1.9	0.2	*– 0.3*	– 2.0
EL	0.3	1.5	– 1.2	– 1.0	– 0.2	*– 0.3*	– 0.1
E	– 0.2	0.2	– 0.4	– 0.8	0.4	*– 0.1*	– 0.3
F	– 2.0	– 0.6	– 1.4	– 1.0	– 0.4	0.0	– 1.9
IRL	1.8	3.8	– 2.0	– 1.9	– 0.1	*– 0.2*	+0.9
I	– 1.2	– 0.5	– 0.7	– 1.3	0.6	*– 0.2*	– 1.0
L	2.8	2.5	0.3	– 2.1	2.4	3.1	+2.8
NL	0.5	0.6	– 0.1	– 3.1	3.0	0.5	+0.8
A	– 0.4	0.0	– 0.4	– 0.9	0.5	0.3	– 0.2
P	– 1.6	– 0.7	– 0.9	– 1.1	0.2	0.1	– 1.8
FIN	2.9	4.4	– 1.5	– 3.6	2.1	2.4	+2.4
S	1.6	2.0	– 0.4	– 1.8	1.4	0.7	+1.5
UK	0.4	– 0.1	0.5	– 0.2	0.7	0.8	+0.6

NB: Column (6) is the difference between the 2000 budget balance given in the stability/convergence and the latest one incorporated in the 2001 stability/convergence programmes.

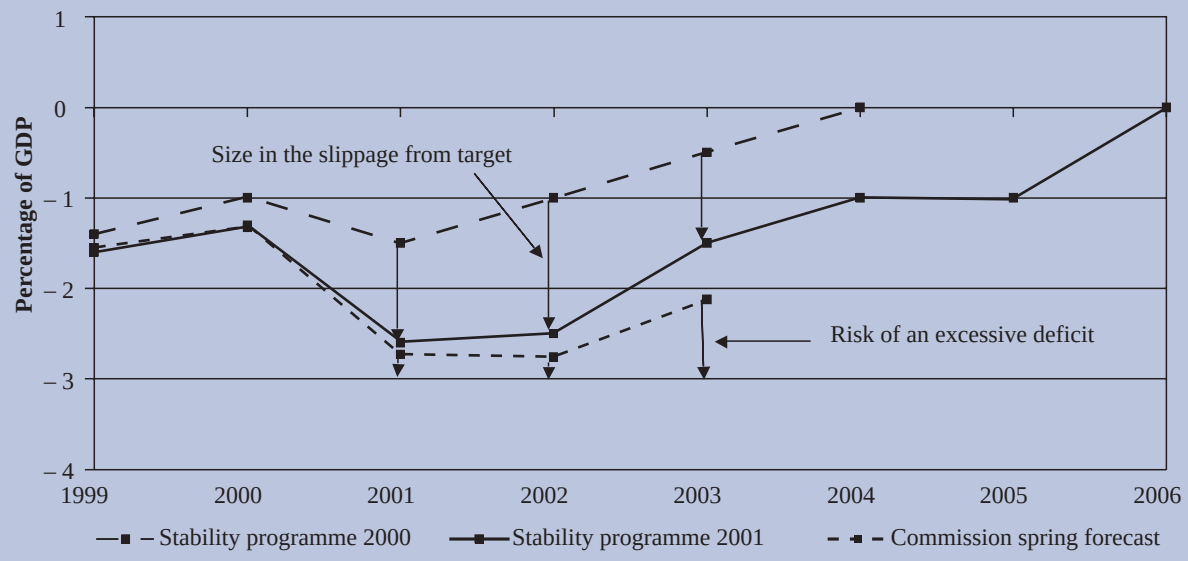
Source: Commission services and the 2001 updated stability and convergence programmes.

Germany and Portugal, of deficits approaching the 3 % of GDP reference value.

In Germany, a budget deficit of 2.6 % of GDP was expected for 2001 (later revised to 2.7 % of GDP), which is more than one percentage point of GDP above the target in the stability programme of December 2000, and clearly approaching the 3 % of GDP reference value. Almost all of this slippage was due to faltering growth (see column 4 of Table II.2). Whilst overall expenditure was broadly in line with targets, there was some slippage in expenditure in the healthcare sector and by some *Länder*. The structural budget position is weak with an estimated cyclically-adjusted deficit of 2.3 % of GDP, and thus Germany was a long way from reaching a position of 'close to balance' required by the SGP.

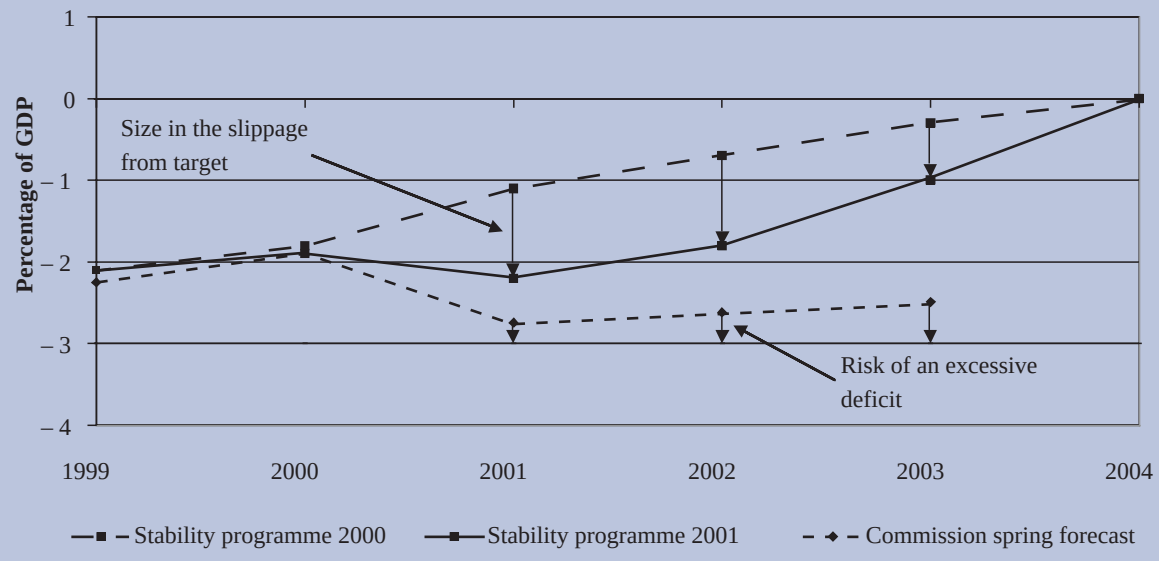
For 2002, the autumn forecast of the European Commission pointed to subdued growth of 0.7 % and a deficit of 2.7 % of GDP (a 2.8 % deficit is expected according to the 2002 spring forecast). As illustrated on Graph II.1, this would imply a widening in the divergence of the actual budget balance in 2002 compared with the target for that year set down in the earlier stability programme. Given the downside risks to growth at the time, and the possibility of unexpected budgetary overruns, the Commission considered that the risk of deficits breaching the 3 % of GDP reference value could not be fully excluded. In brief, the Commission's decision to recommend an early warning was motivated by the size of the budgetary slippage and the potential risk of an excessive deficit position.

Graph II.1: **Budgetary consolidation in Germany 1999–2006**



In Portugal, a budget deficit of 2.2 % of GDP for 2001 was expected at the time as compared to a target of 1.1 % of GDP, thus over one percentage point of GDP slippage. The deficit estimate for 2001 has later been further revised upwards, thus increasing the size of the slippage. In the Commission 2002 spring forecast, the 2001 deficit is estimated at 2.7 % of GDP (see country chapter on Portugal). This divergence from target can be only partially explained by weaker-than-expected growth. In fact, underestimation of revenue losses related to the 2001 reform of direct taxes and lower-than-projected efficiency gains in the tax collection and administration contributed negatively to budgetary developments. Moreover, despite the corrective budget adopted in June 2001 (with measures amounting to an estimated 0.6 % of GDP), current primary expenditure also exceeded the planned level set down in last year's programme. The cyclically-adjusted balance was some 2.5 % of GDP in 2001, and thus far from complying with the 'close-to-balance' requirement of the SGP. For 2002, the target in the new programme is a deficit of 1.8 % of GDP, implying that the budget position remains weak in underlying terms and far from close to balance (the Commission 2002 spring forecast now puts the 2002 deficit at 2.6 %

Graph II.2: **Budgetary consolidation in Portugal 1999–2004**



of GDP) ([1]). In brief, the Commission's decision to recommend an early warning to Portugal was largely motivated by the size of the budgetary slippage, the fact that it was partly due to structural reasons, and the failure to adhere to the policy measures recommended in the Council opinion on the earlier stability programme.

Maintaining credibility in the SGP and the framework for economic policy coordination

In deciding to recommend that an early warning be issued to Germany and Portugal, the Commission recognised that an important juncture in the process of economic policy coordination in EMU had been reached. Many commentators argued that the robustness of the framework for budgetary surveillance in EMU would only be truly tested during the first serious economic downturn experienced by the euro area.

The overriding concern of the Commission was to sustain credibility in the rules-based framework for budgetary surveillance in EMU. Indeed, it is not just the credibility of the pact which was at stake. The whole process of multilateral surveillance and economic policy coordination would have been called into question. Unless the Commission took action in such clear-cut cases of budgetary slippage where deficits come so close to the 3 % of GDP reference value, it is difficult to see when an early warning could ever be issued. Moreover, it would have meant ignoring a resolution agreed by Heads of State or Government and the President of the European Commission. At the European Council of Amsterdam in June 1997, the Commission gave a firm political commitment to act 'in a manner that facilitates the strict, timely and effective functioning of the Stability and Growth Pact'.

Credibility of course is not just about following rules to the letter of the law: policies must make economic sense and take account of specific and challenging circumstances facing the countries concerned. This is why the Commission did not suggest that countries be required to undertake a pro-cyclical tightening of fiscal policies during an economic downturn. Instead, it called for caution and urged countries not to take measures which would lead to a further deterioration in the budget balance. It also called for vigilance in the execution of budgetary plans, for the process of budgetary consolidation to resume once growth picks up, and to reach a position of balanced budget according to the agreed calendar: that way, all countries, including Germany and Portugal, will be in a

([1]) From mid-2002, Portugal will implement the Council regulation on the accruals recording of taxes and social contributions which could have a non-negligible negative impact on the budget balance (see Box I.1). Council Regulation (EC) No 2516/2000 of 7 November 2000 modifies the accruals recording of taxes and social contributions in ESA 95 with a view to ensuring that taxes and social contributions assessed but never collected do not have an impact on the budget balance. Portugal has been granted a transitional period but is expected to report figures on this new basis in the September 2002 EDP notification.

strong position to withstand any subsequent economic downturn.

2.4. The decision of the Council and subsequent actions by the Member States concerned

The explanation of the Council for closing the early-warning procedure

Following a discussion in the Eurogroup, the Ecofin Council of 12 February 2002, decided not to endorse the Commission recommendation for an early warning. The Council did, however, reaffirm that the early-warning mechanism is an integral part of the SGP, and stated that by activating the mechanism, the Commission had acted in accordance with its provisions of the pact ([1]). The reason given by the Council for not issuing an early warning is that both the German and Portuguese made commitments which 'effectively responded to the concerns expressed in the Commission recommendation'.

In the conclusions to the Ecofin Council of 12 February 2002, the German and Portuguese authorities made the following commitments ([2]):

- They confirmed their endeavours to ensure that the 3 % of GDP reference value for the general government deficit will not breached. To this end, the governments intend to closely monitor budgetary developments at all levels of government in 2002. For Germany, this includes the states (*Länder*) and the social security system.
- They will implement budgetary plans for this year carefully, avoiding to take discretionary measures that could aggravate the budgetary position and using any budgetary room for manoeuvre to reduce the deficit. For Portugal, there is an additional commitment that any revenue shortfall, other than explained by slower-than-expected growth, should be compensated by additional measures.
- They confirmed that a close-to-balance position will be reached by 2004, in accordance with previous commitments. In the case of Germany, this may require, once the economic recovery is established, discretionary measures in addition to those included in the 2001 updated stability programme.
- They noted that the debt ratio is projected to decline over the period of the programme.
- The German authorities will, through agreements with the regional authorities, make every effort to ensure that the above commitments are met.

In effect, the agreement re-ordered the three steps in the early-warning mechanism. The SGP provides that (1) the Commission assesses the situation and activates the early warning mechanism, (2) the Council takes a decision that a significant divergence from budgetary targets has occurred and issues an early warning, and (3) the Member States concerned respond and announce appropriate policy measures. The outcome of the Ecofin Council of 12 February 2002, essentially reverses the order of steps (2) and (3), with Member States announcing commitments to take appropriate action in advance of the Council decision on whether to issue an early-warning.

For its part, the Commission stood by its decision to issue a recommendation for an early-warning to Germany and Portugal, but nonetheless welcomed the statement of the Ecofin Council that the Commission acted in accordance with its responsibilities, and the reaffirmation that the early-warning system is an important element of the pact. The Commission issued the following statement which was also inserted into the official minutes of the Ecofin Council:

'1. The Commission takes note of the statement of the Council, including the decision to close the early-warning procedure.

2. The Commission welcomes the commitments of Germany and Portugal, which respond to the substance of the concerns in the Commission recommendation for an early warning.

3. The early-warning mechanism is an essential part of the preventive elements of the Stability and Growth Pact. In order to prevent the occurrence of an excessive deficit, the Commission will use the early-warning mechanism if and when the budgetary positions of Member States diverge significantly from the medium-term budgetary objective or the adjustment path towards it.'

([1]) Conclusions of the 2407th meeting of the (Ecofin) Council, Brussels, 12 February 2002, Press 6108/02 (http://ue.eu.int/Newsroom).
([2]) The full text of the Council statements is found in the respective country chapters in Part VI.

Box II.1. **How does the debate on an early warning compare with Council recommendation to Ireland under the broad economic policy guidelines**

In March 2001, the Council endorsed a Commission recommendation on Ireland for not respecting broad economic policy guidelines (BEPGs). This raises questions regarding the similarities vis-à-vis the Council decision to close the early-warning procedure for Germany and Portugal. Although the legal basis in the Treaty is the same for both decisions, namely Article 99(4), the two cases differ for institutional reasons with respect to the policy context of the recommendations, and on account of the reactions of the national authorities concerned.

As regards institutional matters, the Council may, acting by a qualified majority on a recommendation from the Commission, make the necessary recommendations to a Member State when its economic policies are not consistent with the BEPGs or if they risk jeopardising the proper functioning of economic and monetary union. In its meeting of 24 January 2001, the Council deemed the 2001 budget presented by the Irish Government on 6 December 2000 inconsistent with the BEPGs which had been agreed by the Council in June 2000.

In contrast, the early-warning mechanism falls under the Stability and Growth Pact. The Council may, acting by a qualified majority on a recommendation from the Commission, make the necessary recommendations to a Member State if it identifies an actual or expected significant divergences of budget positions from the medium-term objective or the adjustment path towards it set down in a stability or convergence programme. In brief, the Council recommendation to Ireland under the BEPGs referred to the inappropriate fiscal stance and called for policies to be adjusted immediately, whereas the proposed Commission recommendation to Germany and Portugal referred to a failure to meet agreed budgetary target. An additional important institutional feature is that whereas Article 99(4) provides the only instrument to enforce the BEPGs, additional mechanisms (e.g. under the excessive deficit procedure) are available to implement stability and convergence programmes.

As regards the reaction of national authorities, the Irish Government not only disagreed with the decision to issue the recommendation, it also refused to publicly countenance the measures advocated by it. In its conclusions of 6 November 2001 on Ireland's compliance with the recommendation, the Council, while noting that some measures introduced by the Irish Government had gone in the direction advocated by the recommendation, concluded that above all unexpected economic developments in the aftermath of the recommendation meant that the inconsistency addressed in it had lost its force, at least in part. In the case of Germany and Portugal, the Council decided to close the early-warning procedure because of the positive reaction of the German and Portuguese authorities, who made firm public commitments to avoid breaching the 3 % of GDP reference value for the general government deficit in 2002, to exercise great care in the implementation of the budget and to reach a close-to-balance position by 2004. The substance of concerns raised by the Commission were therefore addressed.

2.5. Follow-up to the decision of the Ecofin Council and lessons for the future

As stated at beginning of this chapter, the debate on the issuance of an early warning to Germany and Portugal has been the most high-profile event in the process of budgetary consolidation, coming only weeks after the introduction of euro notes and coins. Notwithstanding the commitments given by the Germany and Portuguese authorities that respond to the substance of the concerns of the Commission, the credibility of Member States' commitment to a rule-based framework for the coordination of budget polices has been called into question. There has been a widespread perception in the public opinion that the rules can be manipulated or disregarded. To maintain credibility in the SGP, it is important that the Commission and Council demonstrate a capacity to learn from this first real stress test of the SGP since the launch of the euro. To this end, the Commission and Council:

- must ensure that the commitments given by Germany and Portugal are implemented in full;
- need to consider the reasons why the budgetary slippage occurred in Germany and Portugal and what policy lessons should be drawn in order to prevent similar situations occurring in the future.

Ensuring the commitments are adhered to. Having decided not to issue an early warning, it is now up to the Council to ensure that the framework for budgetary surveillance in EMU remains effective. This can only be achieved by transforming the abovementioned political commitments into concrete actions: results and not intentions are what matter. There is, however, some

ground for optimism on this front, as the debate on the early warning raised public awareness on the importance of achieving sound and sustainable public finances. Since the Ecofin Council of 12 February 2002, the German authorities have concluded negotiations (ahead of schedule) with the *Länder* on a domestic stability pact, in line with the commitment at the Ecofin (see chapter on Germany in Part VI). This is an encouraging sign of the effectiveness of a rules-based approach to budgetary surveillance subject to peer review.

Tackling the causes of budgetary slippage. While the deterioration compared to plans was largely cyclical, it added to deficits which were already high and which were even raised by unfinanced tax cuts. A key challenge facing Member States is how to bring about sustainable reductions in the tax burden. Reforms of tax systems have, in the BEPGs, been highlighted as useful in order to raise employment and growth. Inevitably, tax reforms impact upon the budget balance with revenue losses in the short to medium term. Also, in the long run, they are not fully financed even if they are successful in enhancing potential output. This raises complex policy challenges on the extent to which tax cuts need to be matched with corresponding expenditure reductions, and whether tax cuts should be countenanced by the Council prior to a Member State reaching the budget positions of close to balance or in surplus. The recent experience in Germany, without calling into question the supply-side benefits of the reforms, points to the risks facing countries that still have sizeable deficits which may even turn out to be higher than expected at the time of the tax measures.

In 2000, the European Commission ([1]) suggested that guidelines be developed at EU level in order to assess the quality and sustainability of tax reforms. In their joint report to the Stockholm European Council of March 2001 on the quality and sustainability of public finances ([2]), the Commission and Council stated that 'experience shows that tax cuts are not fully self-financing, and need to be accompanied with spending reforms. The extent to which tax cuts should be matched with expenditure reductions should be guided by the goal not to impose any economically undesirable burden onto future generations through higher deficits. The necessary amount of expenditure reductions has to be gauged by the starting budgetary and cyclical economic position, as well as the degree to which tax cut target supply side rigidities, whether public investment in physical and human capital needs to be strengthened'. The recent experience with the early-warning mechanism suggests that it may be useful to develop operational guidelines to implement this policy consensus.

To maintain credibility in the SGP, it is vital to avoid the impression that the rules and obligations of the SGP can *de facto* be suspended during economic downturns or difficult circumstances. As outlined in its statement to the press of 12 February 2002, the Commission will activate the early-warning mechanism where appropriate in the future. Without altering the SGP regulations, a clearer understanding of the procedures to be followed and the criteria to be used when deciding whether budgetary slippage constitutes a 'significant divergence' could benefit all parties concerned.

([1]) European Commission (2000).
([2]) Report from the Commission and the Council to the European Council (European Commission, 2001d).

3. The measurement of cyclically-adjusted budget balances

3.1. Background

Cyclically-adjusted budget balances (CABs) are an important analytical tool for the surveillance of budgetary policies in EMU: this is explicitly recognised in the updated code of conduct on stability and convergence programmes. In particular, they are used to assess whether the underlying budget positions of Member States comply with the targets set down in stability and convergence programmes. Whilst these targets are established in actual terms, the 'close-to-balance or in surplus' requirement of the SGP must be respected over the economic cycle.

Although there is a broad consensus in academic and policy circles on the importance of considering underlying budgetary positions when reaching policy conclusions, opinions diverge on how in practice they should be calculated. In an ideal world with sufficient information on all budgetary developments and policy measures, it would be possible to adjust each budget item directly to reflect their 'true' structural position. However, information of such quality is usually not available. Consequently, indirect methods are used whereby the cyclical budgetary component is inferred from the co-variation of government revenues and expenditures with output fluctuations. In broad terms, the Commission (together with other producers of CABs) use an approach whereby the cyclical budget component is inferred from estimates of the cyclical position of the economy and of the budget sensitivity parameters ([1]). There is a general agreement on the magnitude of the estimated budgetary sensitivities, but less consensus on the best approach for estimating potential output and output gaps.

Until now, the Commission has used the so-called Hodrick–Prescott (HP) filter to estimate trend GDP and the output gap (European Commission, 2000). Such a statistical filter has a number of practical advantages. Firstly, only limited inputs are required, i.e. real GDP figures, and it is therefore easy to apply in an equal fashion across Member States. It is also a transparent method in the sense that it is easy for other users to replicate the results. However, the HP-filter lacks a clear link to economic theory, making it difficult understand the driving forces behind the results: this complicates its usage for economic analysis in a broader setting, for example, to assess the policy-mix, wage-setting, unemployment and inflationary pressures ([2]).

Given these limitations, Member States and the Commission agreed that it would be preferable to move to a so-called production function (PF) approach to calculate output gaps. To this end, a subgroup of the Economic Policy Committee (EPC) was set-up in 1999 to work together with the Commission on this issue. The aim was to reach agreement on a production–function approach that is reasonably simple, transparent and replicable, and which relies on a similar set of assumptions for different Member States although taking account of specific national features. The subgroup presented a production function specification to the EPC and the EFC in the course of 2001 ([3]) which was endorsed by the Ecofin Council of 6 November 2001 ([4]). The production function approach should consti-

([1]) The CAB is computed as the actual budget balance (B) adjusted by the cyclical budget component. The latter is estimated as the GDP output gap (G) times the budget sensitivity to the output gap (α). Hence, $CAB = B + \alpha * G$.

([2]) There are some other well-known methodological problems with the HP filter. Often mentioned is the sensitivity of results to the (somewhat ad hoc) choice of the de-trending parameter (usually referred to as λ). Output gap estimates from the HP filter are also affected by end-sample biases, as the estimates of trend output tend to rely excessively on the latest developments in actual output. Estimates of trend output can thus be biased when recent developments are dominated by demand shocks. The Commission has partially remedied the end-point bias by using medium-term growth projections.

([3]) Economic Policy Committee (2001a).

([4]) Council press release 6.11.2001 — Press 401 No 13474/01.

tute the reference method when assessing cyclically-adjusted budgetary position in the next round of stability and convergence programmes. However, for a transition period, HP filter-based figures would probably also be used as a backup method. The remainder of this chapter presents the new Commission method for calculating cyclically-adjusted budget balances.

3.2. The new Commission approach to calculate cyclically-adjusted budget balances

3.2.1. The Commission production function approach to estimate the GDP output gap

The new Commission method to calculate potential GDP rests on a Cobb–Douglas production function framework (see Annex 1 for details). Potential output depends on (1) the capital stock of the business sector, (2) a measure of potential labour input based on a NAIRU estimate, the working age population and the trend labour force participation rate, and (3), a measure of trend total factor productivity. The NAIRU estimate is derived from a Kalman filter Phillips curve approach, while trend participation rates and trend total factor productivity are obtained using HP filters. Output gaps are required to be symmetrical around potential GDP and sum to zero over the estimation period ([1]).

Based on the GDP figures in the Commission forecast of spring 2002, Table II.4 provides estimates of the output gap for the 2000–03 period and for potential/trend GDP growth rates for 2001 using both the HP filter and the PF technique. Differences are relatively limited for most countries, especially as regards potential/trend growth rates even though the production function seem to give slightly higher growth rates on average. The potential GDP growth rate in the euro area it is estimated to be around 2.6 % in 2001 using the PF and 2.3 % using the HP method. In the PF, the capital stock is contributing 0.7 %, potential labour inputs 0.9 % and trend growth of total factor productivity 0.9 %.

Regarding the level of the estimated output gaps, the differences can be somewhat larger, above 1 % of potential GDP (looking at 2001 figures) in Greece, Ireland, Luxembourg, Portugal and Finland. However, it should be noted that the correlation between the two series is very high (above 0.9) and in only a few cases (effectively when output gaps are close to zero) is the sign different.

3.2.2. The budget sensitivity to the output gap

The budgetary sensitivity parameters used by the Commission are based on tax and expenditure elasticities calculated by the OECD (see Van den Noord, 2000). The different tax elasticities (indirect taxes, personal income taxes, corporate taxes and social security contributions) are weighted together using their relative shares in overall tax income over the 1985–99 period. The government expenditure sensitivity parameter refers to unemployment-related expenditures ([2]). Overall, the budgetary sensitivity should be understood as an estimate of the average budgetary response to changes in the cycle ([3]).

The average budgetary sensitivity to the output gap is around 0.5, implying that if the output gap changes by one percentage point, then average impact on the budget balance is 0.5 % of GDP. Most of the budget sensitivity is on the revenue side (about 0.4) while the expenditure side is less sensitive to the cycle (about 0.1).

The degree of budgetary sensitivity is closely linked to the share of government revenues and expenditures to GDP. Graph II.3 shows that there exists a positive correlation between budget sensitivity and the share of government expenditures to GDP. However, the relationship is far from perfect as the structure of tax bases, the degree of progressivity of the tax system, the generosity of unemployment benefit systems, etc. also play a role. The Nordic countries — which are characterised by generous welfare transfers and large tax systems — typically have above average sensitivities at 0.7–0.8, while countries like Ireland, Portugal and Austria have below average sensitivities. Additional information on country-specific budgetary sensitivities and how they have been re-estimated in recent years can be found in Part II.3.5.

([1]) The implications of this feature are discussed further in Section 3.4 below.

([2]) What is the best coverage of the budgetary items included in the measurement of the cyclical component is an issue for discussion. Expenditure items other than unemployment benefits, such as social and healthcare expenditure, may fluctuate over the cycle. The interest burden may also be cycle-dependent. However, it has proven empirically difficult to find a consistent pattern. A related issue is how to deal with the different budgetary rules on expenditures and revenues that have been introduced in several Member States. For example, the Dutch budget system includes specific budgetary rules which partially offset the budgetary impact of the automatic stabilisers, making it difficult to distinguish between automatic and discretionary changes.

([3]) This also implies that tax reforms at different points in time are not reflected in changes of the budget sensitivity parameters. For example, the OECD estimates of revenue elasticities are based on the tax codes of 1996. Hence, tax reforms after 1996 will only be reflected when the tax elasticities are updated by the OECD.

Table II.4

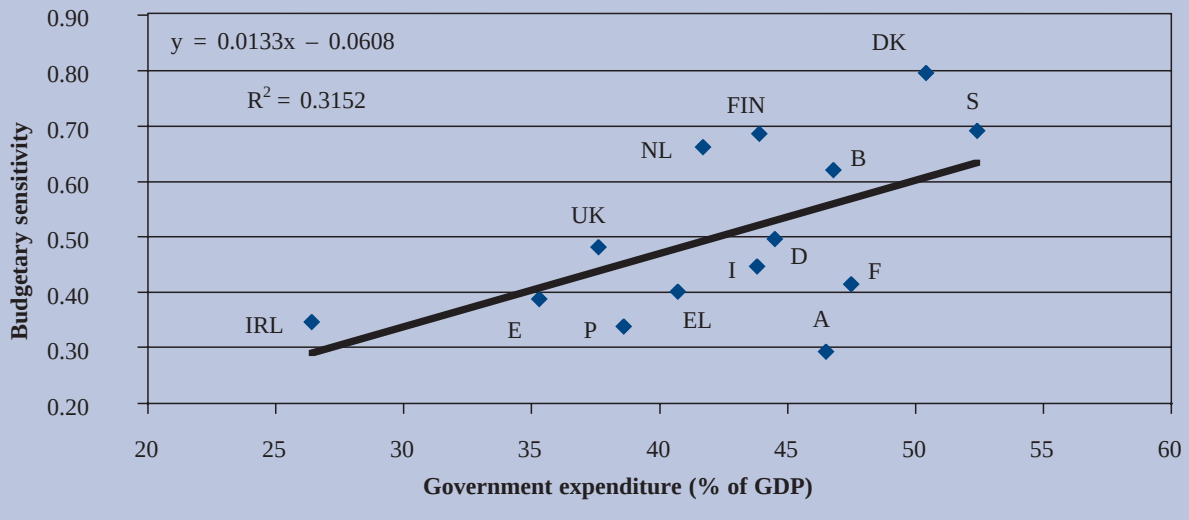
A comparison of output gaps and trend/potential GDP growth using the production function (PF) and Hodrick–Prescott (HP) methods

(% of trend GDP)

	Output gaps								Trend/potential GDP growth	
	2000		2001		2002		2003		2001	
	HP	PF	HP	PF	HP	PF	HP	PF	HP	PF
B	1.9	1.8	0.6	0.4	– 0.5	– 0.6	0.0	– 0.1	2.3	2.4
D	0.6	0.6	– 0.5	– 0.8	– 1.4	– 1.5	– 0.5	– 0.7	1.7	1.9
EL	0.2	1.2	0.8	1.9	0.9	2.6	1.4	3.5	3.5	3.3
E	1.6	1.3	1.2	0.7	0.3	– 0.2	0.4	– 0.3	3.1	3.3
F	0.8	0.9	0.5	0.4	– 0.2	– 0.6	0.2	– 0.3	2.3	2.5
IRL	6.8	5.9	6.0	4.7	2.3	0.8	1.5	– 0.3	7.5	8.0
I	0.2	0.2	0.1	– 0.3	– 0.5	– 1.2	0.1	– 0.9	2.0	2.3
L	2.6	1.2	2.5	0.5	0.3	– 2.1	0.5	– 2.5	5.2	5.8
NL	2.4	2.2	0.8	0.5	– 0.3	– 0.9	– 0.1	– 0.8	2.7	2.8
A	1.4	1.2	0.3	0.2	– 0.5	– 0.4	0.1	0.1	2.1	2.1
P	2.2	1.8	1.4	– 0.1	0.5	– 1.6	0.4	– 2.6	2.5	3.6
FIN	4.6	3.2	1.9	0.6	0.2	– 0.7	0.2	– 0.5	3.4	3.4
EUR-12	**1.1**	**0.9**	**0.3**	**0.0**	**– 0.6**	**– 0.9**	**– 0.0**	**– 0.5**	**2.3**	**2.5**
DK	1.6	1.5	0.2	0.3	– 0.3	– 0.1	0.0	0.1	2.3	2.2
S	2.3	2.2	0.9	0.7	0.0	0.1	0.2	0.4	2.6	2.7
UK	0.8	0.4	0.5	– 0.1	– 0.1	– 0.9	0.4	– 0.7	2.5	2.8
EU-15	**1.1**	**0.9**	**0.4**	**0.0**	**– 0.5**	**– 0.8**	**0.1**	**– 0.5**	**2.3**	**2.6**

Source: Commission services.

Graph II.3: **Budgetary sensitivities and size of government**



3.3. Comparing the estimates of cyclically-adjusted budget balances of the Commission with those of other international organisations

The Commission, OECD and the IMF use a broadly similar approach to compute cyclically-adjusted budget balances: they adjust actual budget balances with a cyclical budget component estimated via budgetary sensitivity parameters and output gaps. Even so, the results differ across institutions, mainly as a result of differences in the estimation of the output gaps. The OECD and IMF both use a production function method to estimate output gaps, although with different specifications.

In order to compare the results across institutions, Table II.5 below presents the estimated cyclical budget components over the 1999–2001 period as in the April 2002 forecasts by the OECD, IMF and Commission. The cyclical budget components from the OECD and the IMF have been calculated by taking the difference between the actual budget balance (net of UMTS receipts as reported by the two institutions) and the structural budget balance. The Commission figure in Table II.5 is estimated on the basis of the PF output gaps.

Table II.5

A comparison of the cyclical components in budget balances of international institutions

	1999			2000			2001		
	EC	OECD	IMF	EC	OECD	IMF	EC	OECD	IMF
B	0.1	– 0.5	– 0.9	1.1	0.5	0.3	0.2	– 0.4	– 0.3
D	– 0.2	– 0.8	– 0.8	0.3	0.0	0.0	– 0.4	– 0.7	– 0.6
EL	0.2	– 0.8	0.2	0.5	– 0.3	0.5	0.8	0.5	0.7
E	0.3	– 0.5	0.0	0.5	0.0	0.6	0.3	– 0.1	0.2
F	0.1	– 0.3	– 0.8	0.4	0.3	– 0.2	0.2	– 0.8	– 0.2
IRL	1.0	0.7	1.0	2.0	1.7	1.7	1.6	1.8	1.3
I	– 0.2	– 0.7	– 1.2	0.1	– 0.4	0.4	– 0.1	– 0.7	– 0.2
L	– 0.2	n.a	n.a	0.7	n.a	n.a	0.3	n.a	n.a
NL	1.2	1.1	1.1	1.5	1.2	1.4	0.3	0.0	0.6
A	0.1	0.2	0.0	0.4	0.3	0.2	0.1	– 0.1	– 0.5
P	0.5	0.2	0.6	0.6	0.4	0.9	0.0	0.0	0.1
FIN	0.5	– 0.1	– 0.5	2.2	1.3	– 0.1	0.4	– 0.1	– 1.2
EUR-12	**0.0**	**– 0.4**	**– 0.5**	**0.4**	**0.1**	**0.2**	**0.0**	**– 0.2**	**– 0.3**
DK	0.7	1.4	0.3	1.2	1.8	0.7	0.2	1.0	– 0.4
S	1.0	– 0.3	0.1	1.5	0.3	– 0.6	0.5	– 0.6	0.4
UK	0.2	– 0.3	– 0.1	0.2	0.1	– 0.1	0.0	– 0.4	0.1
EU-15	**0.1**	**– 0.3**	**– 0.4**	**0.4**	**– 0.2**	**0.1**	**0.0**	**– 0.2**	**– 0.1**

Source: Commission services, OECD, IMF.

Comparing the Commission's figures with those of other institutions, it is noticeable that the differences for the euro area and the EU as a whole are relatively contained (around 0.3 % to 0.5 % of GDP), but are larger in the case of some individual countries. The estimates of the cyclical budget components by the OECD and, in particular, the IMF are in general more negative than those of the Commission. As stated above, these differences in the estimates are mainly driven by the method to calculate output gaps. However, divergences relate more to the estimates of the level of potential GDP and not of potential growth rates which tend to be quite similar. This implies that the estimated changes in cyclical budget components (which are related to the difference between actual GDP growth and potential growth) are similar and highly correlated across institutions.

3.4. The need for caution when interpreting cyclically-adjusted budget balances

When assessing budgetary positions on the basis of CABs, the uncertainty of the results needs to be taken in

account. In assessing underlying budgetary positions, there are two sources of possible bias. A first source is related to the fact that the estimated cyclical component reflects the average impact of the output gap on the budget. However, the change in the output gap in any one year may be due to an atypical event, which does not have the average effect on the budgetary balance. A second bias relates to the fact that in national accounts non-financial flows are recorded independent of their nature (be it their structural/cyclical features and their degree of persistence). Both sources of bias are discussed below.

3.4.1. Issues related to the estimation of output gaps and budgetary elasticities

Pro-cyclicality of estimates of potential GDP. Being usually short-lived, demand-side shocks have no impact on potential GDP growth whereas supply-side shocks are more likely to have persistent effects and, as such, influence potential output. However, filter techniques do not distinguish between the type of shocks. This may induce a bias because all shocks, regardless of their source, affect the estimated trend GDP ([1]). For example, in the event of a positive demand shock, the estimated potential GDP growth will (wrongly) increase and thus lead to an under-estimate of the size of the (positive) output gap which, in turn, will entail an over-estimate of the strength of the underlying budgetary position. The opposite is true in the event of a negative demand shock. In order to avoid this bias, a method featuring a low degree of pro-cyclicality is preferable in the case of demand shocks. In contrast, an estimation method with a very low degree of pro-cyclicality would be biased in the opposite direction in the case of supply-side shocks. In practice, it is very difficult to determine in real-time whether a shock stems from the demand or supply side of the economy, and consequently assess its impact on potential GDP and output gaps.

Non-symmetry of output gaps over time. The Commission production function method to estimate potential GDP requires that output gaps are symmetrical, implying that gaps sum up to zero over time. The crucial issue here is the time horizon over which this symmetry constraint is expected to hold. If this time period is too long, it may lead to imprudent budgetary behaviour. For example, as a result of the downward trend in inflation, output gaps calculated by the OECD and IMF over the last 20 years have a negative mean value. However, when using output gaps for budgetary surveillance, should fiscal authorities bank on the full recovery of these growth losses? If not, adjusting current budget balances with cyclical revenues that cannot realistically be expected to materialise in the future would be questionable from the point of view of fiscal prudence.

Impact of the composition of income and demand. Domestic demand-led growth is usually more tax-rich than export-led growth. Similarly, the composition between profits and wages is important as wages are relatively higher taxed than profits. The Commission methodology — as well as that of IMF and OECD — does not take this into account since the cyclical component is estimated on the basis of the overall GDP output gap. A new method recently elaborated by the European system of central banks ([2]) takes a more disaggregated approach, calculating cyclical budget component across individual tax bases. Estimates of the split between structural and cyclical components over the last years show that the importance of the composition effect for the euro area as a whole is small, with the exception of 1999 when the estimated impact was 0.3 % of GDP ([3]). Another example is Italy in 1995 when growth was clearly above trend but unbalanced in its composition driven by revenue-poor export and investment components: in this case the composition impact was estimated to be close to 0.7 % of GDP.

3.4.2. Issues related to the measurement of actual budget balances in the national accounts

Impact of incomplete accruals recording in the national accounts. The guiding principle for the time of recording transactions in national accounts is the accruals principle, implying that flows should be recorded at the time the economic event underpinning a payment takes place, not

([1]) The Commission uses $\lambda = 100$ when de-trending annual series. Lower values of λ imply that the size of output gaps are small over the cycle. From a budget discipline perspective, this could be viewed as prudent as the negative effect of the economic cycle on the budget position is not over-estimated, i.e. a greater proportion in the slippage from actual budget positions will be attributed to structural factors. The opposite, however, is the case during economic upturns as a low λ will results in a greater proportion in the improvement in actual budget positions being attributed to structural factors. This would be highly problematic as the method would conceal structural deteriorations in cyclical upturns, which would strengthen the tendency to relax budgetary discipline in good times (see Part III.1).

([2]) Bouthevillain et al. (2001).

([3]) The atypical situation of 1999 was signalled in European Commission (2000). It is due to the fact that the slowdown was related to the effect of the Asian crisis on exports. Since changes in exports have a relatively low impact on tax revenue, the effect on the budget was much lower that what is computed by using average budget elasticities.

when cash payments are made. In practice, however, this principle cannot always be fully applied.

First, statistics must be produced in a timely way thus placing limit on lags being taken into account. Second, it is not always possible to allocate gross payments to different underlying economic events. This type of 'non-full' accruals recording can nevertheless have significant effects on the relationship between the budget balance and growth in a particular year, especially when growth conditions change substantially between years. For example, depending on the specificity of tax systems across Member States, the difference between preliminary taxes paid at time *t* and the residual final taxes paid in *t + 1* can be large (both for households and corporations). Typically, for the practical reasons listed above, the residual tax payments are recorded in *t + 1* in the national accounts.

The Swedish 2002 convergence programme contained an analysis of the structural budget position taking this type of effects into account. For example, in Sweden in 2001, growth was clearly below trend and tax reforms worth 1 % of GDP were enacted. Nonetheless, tax revenues increased as a share of GDP. However, rather than indicating a structural increase in revenues, this was mainly due to residual tax payments by households and corporations referring to the income of the previous year. The impact of this was estimated by the Ministry of Finance to be 1.2 % of GDP, in this case clearly worth considering when assessing underlying budgetary developments. The type of information necessary to make this type of adjustment in a consistent way across Member States is seldom available, but the potentially large impact of these effects should be kept in mind in assessing budgetary developments in individual years.

National accounts and the implications of budgetary operations for fiscal sustainability. In national accounts, a 'low-quality' temporary budgetary measure of similar amounts has the same budgetary impact as a 'high-quality' permanent measure. Also, contingent expenditure pressures, such as those of pension systems, are not recorded in national accounts until the date they materialise. Thus, any measure that changes future liabilities leaves no trace in today's budget balances.

These type of consideration are of course relevant if budget balances are analysed with the purpose to assess medium- and long-term developments. For example, referring to its clear one-off dimension, the Commission has consistently deducted (for 2000 and 2001 figures) the budgetary proceeds from the sale of UMTS licences. Other possible budgetary operations of the same type that could be adjusted for in the economic analysis are the revenues received from sales of government real estate or securitisation of other assets or future income flows (see chapter on Italy in Part VI).

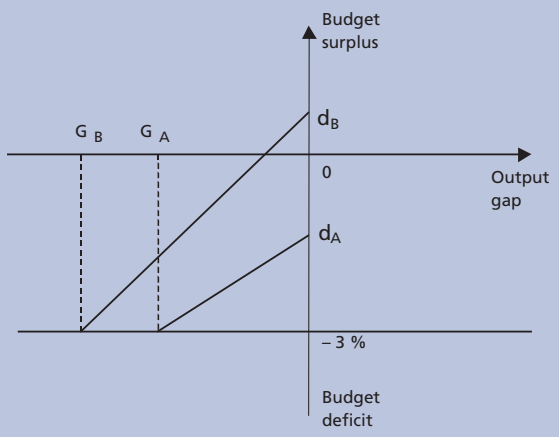
3.5. Re-estimation of the minimal cyclical safety margins under the SGP

The SGP requires that budgetary positions be in close to balance or in surplus over the cycle. This is to cater for a number of cyclical and non-cyclical risks such as unexpected revenue shortfalls or expenditure overruns. The so-called minimal benchmarks are an analytical tool to assess on a country-by-country basis, the size of the cyclical safety margin needed to withstand business cycle fluctuations without infringing the 3 % of GDP deficit limit. As stated in the July 2001 code of conduct (see Part II.1), respecting the minimal benchmark, however, is not the same as compliance with the 'close-to-balance' requirement of the SGP as the benchmark only cater for cyclical risks while other budgetary risks should also be considered ([1]).

The basis for the estimates of the minimal benchmarks is conveyed in Graph II.4. Here, the level of output gap is measured along the horizontal axis, the budget surplus or deficit ratios along the vertical. Each upward sloping line represents a country's automatic budgetary reaction to the output gap. The slope of the schedules corresponds to the budget sensitivity to output gap changes. Here, country A is assumed to have 'weak' stabilisers, while country B has 'strong' stabilisers. The SGP implies that the 3 % limit is not exceeded even in the event of adverse shocks leading to a large, negative output gap (unless exceptional circumstances prevail). In the graph, two countries are considered: a 'stable' economy A and a 'volatile' economy B. The minimal benchmark, *d*, is the structural deficit which allows automatic stabilisers to play fully while respecting the 3 % limit even in these unfavourable circumstances. Clearly, as shown in the graph, country A can afford to run a budget deficit while country B needs to pursue a more ambitious target: compare d_A with d_B.

([1]) For an analysis of the close-to-balance provision, see European Commission (2001a). In European Commission (2000), the risk of non-cyclically-related budgetary fluctuations was quantified in 0.5 to 1 % point of GDP.

Graph II.4: **Finding the appropriate (cyclical) safety margin**



The minimal cyclical safety margins were first calculated in 1998, and re-calculated by the European Commission in the report *Public finances in EMU — 2000* (European Commission, 2000) to take account of revised budgetary sensitivity parameters as well as the change-over to ESA 95 national accounts. The new estimates of the minimal benchmarks presented in Table II.6 are computed on the basis of the production function technique to estimate output gaps and include some limited changes to budgetary sensitivities.

For the sake of consistency, the same approach as the previous two exercises has been used. This implies multiplying the budgetary sensitivity to the cycle with an output gap estimate which encapsulates the size and frequency of large negative country-specific cyclical fluctuations for each Member State. As to the representative negative output gap, the mid-point of two worst output gaps from the following estimates was used: (a) the largest negative output gap recorded in each Member State between 1980 and 2000; (b) the unweighted average of the largest negative output gaps in EU Member States over the period 1980–2000 (which is 4 % of potential

Table II.6

Estimates of cyclical safety margins and minimal benchmarks

	Revised estimates			Difference with previous estimates	
	Budgetary sensitivity	Cyclical safety margin	Minimal benchmark	Revised minimal benchmarks — 2000 estimates	Revised minimal benchmarks — 1998 estimates
B	0.60	2.3	– 0.7	+0.1	+0.3
D	0.50	1.4	– 1.6	– 0.5	– 0.5
EL	0.40	1.3	– 1.7	– 0.3	– 0.3
E	0.40	1.5	– 1.5	– 0.1	– 1.1
F	0.40	1.3	– 1.7	– 0.1	– 0.2
IRL	0.35	1.7	– 1.3	– 0.1	– 0.4
I	0.45	1.5	– 1.5	+0.1	– 0.3
L	0.60	3.1	0.1	+0.2	+0.1
NL	0.65	2.3	– 0.7	– 0.6	– 0.6
A	0.30	0.9	– 2.1	– 0.1	– 0.8
P	0.35	1.8	– 1.2	+0.3	– 0.6
FIN	0.70	3.8	0.8	+0.4	– 0.5
EUR-12	**0.50**	**1.6**	**– 1.4**	**– 0.2**	**– 0.4**
DK	0.80	2.7	– 0.3	– 0.5	+0.4
S	0.70	2.2	– 0.8	– 0.4	– 1.6
UK	0.50	1.8	– 1.2	– 0.1	– 1.1
EU-15	**0.50**	**1.6**	**– 1.4**	**– 0.3**	**– 0.6**

Source: Commission services.

GDP) and (c) the average volatility of the output gap in each Member State, as measured by two times its standard deviation ([1]). As in the case of the estimates of 2000, the years in which the exceptionality clause of the SGP would have been triggered have been taken out.

The difference between the 3 % of GDP reference value for the deficit and the estimated cyclical safety margin is the country's minimal benchmark. These estimates show that, on average, in the euro area and the EU as a whole, a cyclically-adjusted budget balance at –1.4 % of GDP would provide a large enough cyclical safety margin to let automatic stabilisers work without exceeding the deficit ceiling. While this level is in the same range as previous estimations, it is nonetheless somewhat 'softer'. In this sense the estimations also remain largely in line with those computed in other studies (see European Commission, 2000).

In Belgium, Denmark, the Netherlands, Sweden and Finland, the minimal benchmark is estimated to be around – 0.3 % to – 0.7 % of GDP, whereas a small surplus is required in Luxembourg and Finland. Elsewhere, minimal benchmarks are close to the euro-area average, the exception being Austria where a somewhat smaller safety margin is needed. Compared with the calculations of 1998, the estimated safety margins have on average been reduced by about 0.5 percentage points, mainly as a result of lower estimated budgetary sensitivities but also because of the new output gap estimates. The lower estimated budgetary sensitivity is partly due to reforms in tax and benefit systems in recent years which have in most countries reduced tax progressivity and, in some cases, lowered the generosity of unemployment transfers. The difference is particularly noticeable for Spain, Austria, Sweden and the UK.

It goes without saying that these estimates have to be treated with caution. The size of the most binding output gaps, the degree of symmetry of shocks, the structure of the economy and the behaviour of the central bank all affect the volatility of the economy and, as such, the cyclical safety margin. These aspects will be different in the new EMU framework from the pre-euro era: what is embodied in the above estimates is essentially the past business cycle history of EU countries. However, a high degree of uncertainty remains on the direction and pace of changes brought about by EMU. Clearly, as evidence on these aspects emerges, the issue of the adequate cyclical safety margin will need to be addressed again.

([1]) When output gaps are normally distributed, around 95 % of the observations fall within the range of two times the standard deviation around the mean. Thus, only 2.5 % of the observations fall outside this range in the case of negative output gaps.

4. Incorporating the sustainability of public finances into the Stability and Growth Pact

4.1. Greater recognition on the need to prepare for the budgetary challenges posed by ageing populations

The need for sustainable public finances in EMU

Sound public finances are a central principle in the macroeconomic framework of EMU. Article 121 (formerly 109j) of the Treaty states that a sustainable government financial position is an entry condition for countries wishing to join the euro area. This is assessed in terms of reference values for general government deficits (below 3 % of GDP) and debt (below 60 % of GDP or on a sustained downward path). The commitment to sound public finances was strengthened in the Stability and Growth Pact (SGP) which established a medium-term objective of budget positions of 'close to balance or in surplus'. Whereas these budgetary commitments are defined in terms of short- and medium-term budget targets, there is an implicit commitment to ensure sustainable public finances given that the SGP must be respected at all times in EMU.

The need for sound and sustainable public finances is of course not unique to EMU, but the additional implications for a monetary union with decentralised fiscal policies are well documented ([1]). A Member State with unsustainable public finances could complicate the implementation of the single monetary policy by the ECB if financial markets perceive that this poses a threat to the commitment to monetary discipline (European Central Bank, 2000). Failure to prepare for the budgetary impact of ageing populations in one Member State could result in interest rates being higher than they otherwise would be, implying negative spillovers on other participating countries.

A further rationale for EU surveillance of the long-term sustainability of public finances is that it could strengthen credibility in the 'no bail-out' clause of the Treaty which ensures that Member States are not liable for the commitments of other countries. Moreover, by providing an external constraint, EU surveillance of the sustainability of public finances can help policy authorities introduce difficult but essential structural reforms at national level ([2]).

Factoring the sustainability of public finances into the SGP

The framework of the SGP with its focus on national account definitions of government deficits and debt does not provide a complete picture of the financial positions of governments, especially as regards the long-term implication of budgetary policies ([3]). This was already recognised in December 1999 by the Ecofin Council, which in a report to the Helsinki European Council on the coordination of economic policies, called for 'a broadening of the scope of public finance issues covered in the stability and convergence programmes and more emphasis on medium- to longer-term sustainability issues'.

The issue of sustainable public finances was subsequently taken up at the European Council of Lisbon in March 2000. This special summit, which is now held

([1]) See, for example, European Commission (2000a) and Buti and Costello (2001).

([2]) A recent survey of citizens in the four largest euro-area economies on the need for reform of the welfare State (Boeri, Börsch-Supan and Tabellini, 2001) finds a considerable degree of pessimism as regards the sustainability of pension systems and a widespread recognition that reforms are needed. The survey points to the possibility of designing politically viable reforms notwithstanding the fact that the willingness of voters to accept change is closely linked to their individual economic interests.

([3]) The need for an explicit reference to the sustainability of public finances in light of ageing populations was discussed during the negotiations of the SGP regulations. Member States were not receptive to suggestions to incorporate long-term sustainability into EU multilateral surveillance process at that time. See Costello (2001).

annually in spring each year to debate economic reform, explored the steps needed to improve the employment and growth performance of the European economy. In particular, the Lisbon European Council called for the emphasis of public finances at EU level to be broadened from its focus on stability to include the contribution it can make to growth and employment. To this end, the Commission and Council in a joint report to the European Council of Stockholm of March 2001 ([1]) agreed a three-pronged strategy for addressing the budgetary consequences of ageing populations, i.e. reducing public debt at a fast pace, raising employment rates especially amongst women and older workers, and reforms of pensions and healthcare systems including recourse to the funding of public pensions where appropriate.

Moreover, the European Council in Stockholm agreed that 'the Council should regularly review the long-term sustainability of public finances, including the expected strains caused by the demographic changes ahead. This should be done both under the broad economic policy guidelines (BEPGs) and in the context of the stability and convergence programmes'. This conclusion is an important extension to the framework for budgetary surveillance in EMU, in that it makes explicit the commitment to examine the long-term sustainability of public finances. Recently, the Barcelona European Council in March 2002 invited 'the Council to continue to examine the long-term sustainability of public finances as part of its annual surveillance exercise, particularly in the light of the budgetary challenges of ageing'.

A first systematic assessment of the sustainability of public finances in light of ageing populations was carried out on the basis of the updated programmes submitted in late 2001 (the main policy conclusions are presented in Part I.4) ([2]). Doing so was not straightforward, as there is no consensus in the economic literature on either the definition of the sustainability of public finances (and consequently the scope of the assessment to be made in the SGP) or the best methodology to assess it (i.e. the data and indicators to be employed). This chapter explains how the decision of the Stockholm European Council is being converted into an operational policy instrument, and in particular the recent assessment of the sustainability of public finances based on the updated stability and convergence programmes.

4.2. Defining sustainability and the scope of the assessment exercise

Fiscal sustainability ultimately requires that a government avoids bankruptcy. However, an agreement on an analytical and operational definition of sustainability has proven elusive. One possible measure is the so-called present value budget constraint (PVBC) ([3]) which requires that today's government debt has to be matched with the present value of cumulated primary surpluses: permanent primary deficits are therefore not sustainable. While conceptually important, the PVBC can hardly become an operational benchmark or guideline when determining current budget policy choices. Not only is its meaning not immediate for the general public, but the implied solvency condition is weak: to satisfy the PVBC, it is sufficient to assume that the necessary primary surpluses are generated by future (even unborn) generations, and/or that future governments will raise the necessary taxes.

In the absence of an agreed definition that is operationally feasible, a pragmatic approach was followed. The sustainability of public finances was measured in terms of compliance with the budgetary requirements of EMU, i.e. whether deficits and debt, on the basis of current budget policies, are expected to stay below the reference values defined in the Treaty.

This pragmatic approach, with sustainability implicitly defined as non-violation of pre-determined levels of deficits and debt, can be justified on several grounds. Continued compliance with the SGP requirements would *de facto* ensure sustainable public finances as it would lead to the virtual disappearance of public debt in the long run ([4]). As argued by Balassone and Franco (2000), it would also ensure compliance with other definitions of sustainable public finances developed in the economic literature, for example such as the requirement for debt to converge back to its initial level (Blan-

([1]) European Commission (2001d).
([2]) The updated code of conduct on the content and presentation of stability and convergence programmes (see Part II.1) states that 'appropriate medium-term budgetary targets, consistent with the general and country specific recommendations in the BEPGs, should also take into account the need to cater for the costs associated with population ageing'. Member States were invited to include a standardised tables containing long-term budgetary projections in the stability or convergence programme.
([3]) Formally, the present value budget constraint requires that future net tax revenues (i.e. tax revenues less transfers of current and all future generations measured in present value terms) be enough to cover the present value of future government consumption and to service the existing stock of government debt. Note that it does not assume that government debt is ever paid back in full.
([4]) See European Commission (2001a) and Buti and Costello (2001).

chard, 1990) or for the ratio of net public sector worth to output to remain constant at its starting level (Buiter, 1985). In addition, defining sustainability in terms of compliance with SGP requirements ensures that this new assessment fits directly into the existing framework for budgetary surveillance, thus providing an easily understood benchmark against which policy conclusions can be drawn.

As regards the scope of the assessment exercise, the multifaceted nature of the policy challenge underlined the need for the analysis to go beyond measuring compliance with reference levels of deficits and debt. In the joint report to the Stockholm European Council of March 2001, the Commission and Council stated that 'sustainable public finances not only require avoiding structural deficits and rising debt: they also imply keeping the tax burden (especially on labour) at levels such that employment and growth are not hindered, and also ensuring that essential public expenditures such as education and investment are not crowded-out by pressures for increased spending on pensions and health'. With this in mind, the Commission tried to answer three key questions as follows:

- *In light of the projected budgetary implications of ageing populations, is it likely that the SGP requirements will continue to be respected in the future on the basis of current budget policies?* This question considers the ambition of Member States' current budget policies, and in particular whether the pace of debt reduction implied by the medium-term target set down in a stability and convergence programme leads to a fall in interest payments that offsets future increases in age-related spending. Given the inevitable uncertainties surrounding long-term projections, the aim is not be to arrive at a clear-cut decision as to whether the public finances of a particular Member State are sustainable or not, but rather to identify whether there is a risk of serious budgetary imbalances emerging in the future.

- *Are the medium-term budgetary choices outlined in the programmes compatible with improving the sustainability of public finances?* There is a tendency in some Member States to consider that policy measures to prepare for ageing populations can be postponed because the budgetary pressure will arise only in future years. Too often in the past, inadequate account has been taken of the long-term budgetary consequences of policy decisions. Although the budgetary impact of ageing populations only becomes apparent in the long-run, it is determined by the short- and medium-term policy decisions taken within the time frame of programmes. Current policy choices such as the medium-term budget target, the pace of debt reduction and the scale and type of reforms therefore need to be assessed against the commitment to place public finances on a sustainable footing ([1]).

- *What is the nature and scale of budgetary pressures on Member States to ensure sustainable public finances*? Sustainability involves more than just avoiding deficits and debt accumulation. One cannot automatically conclude that ageing populations will pose no budgetary policy challenges for a country simply because indicators show it is in a good position to fulfil SGP requirements in the future. A good example of this is the often heard statement that high-debt countries are better placed than lower-debt countries to meet the costs of ageing populations. This 'fiscal illusion' arises because high debt Member States currently have large primary surpluses. Assuming no policy change, these large primary surpluses should continue for many years (even going beyond the time frame of programmes): this would allow them to 'absorb' increased spending on pensions and health via a lower interest burden. Hence, at first sight, public finances appear to be sustainable on the basis of current policies. However, this conclusion is based on large primary (and possibly actual) surpluses being run over the very long run: the key budgetary challenge facing such countries will be to sustain sound budget positions for say 20 years, which could prove very challenging given the competing priorities to lower taxes or raise spending ([2]). The Commission therefore agreed with the report of the Economic Policy Committee (2001b), that it is essential to consider the levels of budgetary aggregates (such as the primary surplus and the tax burden) as well as changes in budgetary aggregates over time.

([1]) Clearly, the assessment of sustainability will require taking account of pressures on public finances coming from specific expenditure and tax items, such as pension systems. However, an in-depth assessment of the quality and sustainability of pension systems and healthcare will be made in the context of the SGP. This should take place in the broader context of multilateral surveillance and in the open method of coordination on pensions.

([2]) Buti, Franco and Pench (1999) examine the factors that will affect evolution over time of budget balances in EMU. They conclude that there could be a worsening of primary balances over time due to tax competition and pressures to raise competitiveness-related expenditures, on top of the increase in expenditure due to ageing populations.

4.3. Quantitative indicators of the sustainability of public finances

4.3.1. The sustainability indicators suggested by the EPC

In their report to the Ecofin Council, the Economic Policy Committee (2001b) suggested a number of indicators which could be used to assess the sustainability of public finances. Two groups of indicators were suggested to cast light on different dimensions of the sustainability of public finances (for a formal description, see Annex B). A first set of indicators were used to verify whether existing budgetary policies can ensure continued compliance with the deficit and debt requirements of the SGP. A second set of indicators were used to gauge the scale of budgetary adjustment required for Member States to ensure sustainable public finances.

Group 1: Testing whether current policies can ensure continued compliance with the SGP. In the baseline scenario, the starting position in terms of current budget balance, level of debt, primary spending and tax revenues are the figures reported by the Member State for the final year of their stability or convergence programme. The end point of the stability and convergence programme provides a reasonable proxy for a 'steady state' budgetary position from which one can verify the sustainability of public finances on the basis of current policies.

The Commission then extrapolated the evolution of the budget balance and debt levels up to 2050 assuming (i) age-related expenditures increase in line with the projections of the EPC or alternative national projections, (ii) the tax burden and non-age-related primary expenditures remain constant as a share of GDP, and (iii) there is a positive interest-growth rate differential of 2 %. It is then possible to verify whether the projected level of debt respects the requirement to stay below 60 % of GDP reference value for public debt at all times, and whether the budget balance stays below the 3 % of GDP reference value and meets the close-to-balance or in surplus requirement of the SGP. Failure to respect the Treaty *cum* SGP requirement on deficits and debt would, *a priori*, indicate that there is a risk of budgetary imbalance emerging in light of ageing populations and that measures may be required to place public finances on a more sustainable footing.

Given the uncertainty surrounding long-term budgetary projections, and on account of a number of arbitrary assumptions used, three sensitivity or stress tests were conducted to ascertain whether public finances are sustainable under different circumstances as follows:

- *Starting budget position*: it was assumed that the starting primary budget balance was 1 % of GDP above/below the level in the base year (end point of the programme). This helps ascertain the sensitivity of results to Member States falling short/exceeding the medium-term budgetary target set down in their stability/convergence programme.
- *Growth rate of age-related public expenditures*: the change in age-related public expenditures is assumed to be 10 % higher/lower in 2050 compared with the baseline scenario.
- *Interest-growth rate differential*: the interest-growth rate differential was assumed to be one percentage point above/below that used in the baseline scenario, i.e. 3 % and 1 % respectively over the entire projection period.

Group 2: Estimating the required adjustment to ensure sustainable public finances. A set of synthetic indicators were used to provide a quantitative estimate of the degree of budgetary adjustment required for a Member State to ensure continued compliance with the SGP. The first such indicator is a financing gap, which is usually referred to as a 'tax gap' in the economic literature. This measures the difference between the current tax ratio and the constant tax ratio over the projection period necessary to achieve a pre-determined budgetary target at a specified date in the future. In making its assessment, the Commission estimated the constant tax ratio required to reach the same debt level in 2050 that would result from a balanced budget position over the entire projection period. Although arbitrary, this approach has the advantage that the target to be achieved is consistent with the budgetary framework of the SGP and the fact that the EPC projections for age-related expenditures cover the period up to 2050 ([1]).

An alternative indicator ([2]) measures difference between the projected primary surplus up to 2050 and the 'required' primary surplus necessary to ensure a bal-

([1]) An alternative approach would be not to set a cut-off date, and to calculate the financing or tax gap needed to finance expenditures to infinity whilst servicing public debt. This would require making additional assumptions on age-related expenditures after 2050, e.g. they remain constant at their 2050 level.

([2]) The Commission also estimated the net present value of the required primary surplus over the projection period and calculated the average required primary surplus over the same period.

anced budget in all years of the forecasts exercises (Bogaert, 2000). This indicator can help illustrate the budgetary pressure or effort required of Member States, as it can show whether it will be necessary to run high primary surpluses over the very long-run: as such, it can help underline the importance of sustaining sound public finances in coming years going beyond the time horizon of stability and convergence programmes.

4.3.2. The budgetary projections used to make a quantitative assessment

Table I.15 (in Part I.4) provides an overview of the long-term budgetary projections included by Member States in stability and convergence programmes. The diversity of information posed a number of challenges in attempting to make as consistent an assessment as possible across Member States. In particular, it was necessary to decide whether to run the sustainability indicators described above using (i) the budgetary projections of the EPC or the alternative national budgetary projections submitted by several Member States, and (ii) the additional national projections measuring the impact of ageing populations on other age-related expenditures (e.g. education) and tax revenues which have not yet been analysed by the EPC.

A priori, the Commission had a preference for using the EPC projections for spending on pensions, healthcare and long-term care. This is because they were produced in an open and transparent manner on the basis of a demographic projection of Eurostat and with an agreed framework for key economic parameters. Moreover, the EPC projections have been subject to a peer review and were examined by the Ecofin Council on 6 November 2001. A further consideration is that the Commission and Council only have several weeks to assess stability and convergence programmes, and there are severe practical constraints in examining national long-term budgetary projections.

Notwithstanding the preference for using EPC projections, a pragmatic approach was followed, and the quantitative assessments were made on the basis of national projections for five Member States (Belgium, Denmark, the Netherlands, Finland and Sweden), see Table II.8. The main reasons for doing so is that the national projections were more comprehensive than those of the EPC, and include a projection for spending on other age-related expenditures (e.g. child care, other social transfers) and on tax revenues ([1]).

The inclusion of these additional projections has non-negligible effects on the overall budgetary impact of ageing populations. For the most part, the projections for additional public expenditure items tend to offset the increase in spending on pensions and healthcare. Caution, however, is needed when including projections that point to potential savings in certain expenditure items due to ageing populations, as the results may not take account of important non-demographic factors that drive expenditure levels. For example, spending on education may not fall even with lower numbers of young people if there are offsetting measures taken to improve the quality of education, for example by increasing the teacher–pupil ratio or via greater focus on life-long learning programmes.

4.3.3. The outcome of the sustainability indicators and lessons for future assessment exercises

Caution is needed when interpreting results

The outcome of the quantitative indicators are presented in Table II.9 below. It shows that in the baseline scenario, a risk of emerging budgetary imbalances in breach of the SGP is identified in seven Member States (Germany, Spain, Greece, France, Ireland, Austria and Portugal).

The sustainability indicators also underline the critical importance of achieving and sustaining the medium-term budget target set down in stability and convergence programmes. The stress test which assumes that Member States miss their medium-term budget target for 2005 by 1 % of GDP and this deviation is carried over in future years thereby resulting in substantially weaker budget positions in 2050 compared with the baseline scenario: under this scenario, the deficit and debt positions of three additional Member States (the Netherlands, Finland and the UK) are projected to breach the reference values set down in the Treaty during the projection period.

As explained in Part I.4 of this report, the Commission and Council recognised the multifaceted nature of the budgetary challenge facing Member States as a result of ageing populations, and did not interpret the sustainability indicators in a mechanical or accounting fashion. For example, although public finances in high-debt countries appear to be on a sustainable footing given their high primary surpluses, the relevant Council opinions draw

([1]) A further advantage of national projections is that they are often included in official documents that feed into the budget planning process at national level. The Commission, however, did not use the national projections provided by all Member States. The projections included in the Spanish programme only covered pensions up to 2015. For the UK, the projections went up to 2030, and were defined in broad categories.

Table II.7

Assumptions used in making the quantitative assessment of the sustainability of public finances

	Starting position in 2005				Change 2005–40			
	Primary balance	Primary revenue	Non-age spending	Age-related spending	Total primary spending	Pensions	Healthcare	Primary revenues
B	5.7	48.1	16.6	25.8	4.0	3.4	2.8	
DK	5.1	53.3	0.0	51.3	5.5	2.3	1.9	3.4
D	2.5	44.0	24.0	17.5	6.5	5.1	1.4	
E	3.0	39.2	21.8	14.4	10.1	8.5	1.6	
EL	5.8	47.0	23.8	17.4	14.0	12.4	1.6	
F	3.1	50.5	28.2	19.2	5.1	3.6	1.5	
IRL	1.0	33.6	21.3	11.3	7.0	4.5	2.5	
I	5.5	44.8	19.5	19.8	1.9	0.2	1.7	
L	3.6	41.8	30.8	7.4	3.9	1.9	2.0	
NL	4.3	46.8	26.9	15.6	8.5	5.3	3.2	3.0
A	3.3	50.3	26.5	20.5	5.0	2.5	2.5	
P	3.1	44.0	24.7	16.2	3.1	2.3	0.8	
FIN	5.0	46.5	28.5	15.3	9.1	5.0	2.1	
S	4.7	55.4	32.6	18.1	4.4	1.5	2.9	
UK	1.1	39.4	26.7	11.6	1.0	– 0.9	1.9	

NB: For DK, age-related expenditure includes all primary expenditure. The change in primary revenues covers the period between 2005 and 2035.

Source: Commission assessment of Member States' stability and convergence programmes.

attention to scale of the budgetary challenge facing these Member States given the need to sustain ambitious budgetary targets over the very long run.

In addition, the identification of a budgetary imbalance does not automatically imply that a Member State should set a more ambitious medium-term budget target in its stability or convergence programme. Instead, the Council opinions take account of the source of budgetary challenge and recommend that any financing gaps be met through an appropriate balance of raising revenue, cutting non-age-related expenditures and/or introducing reforms to curb the growth in age-related expenditure growth. For example, the Council welcomed the medium-term budget targets of Spain and Greece (which are for small surpluses in 2005), but called for reform of their public pension systems given the very high projected increase in expenditures due to ageing populations.

The agreement reached by the Stockholm European Council to assess the sustainability of public finances in no way alters the goal or purpose of the SGP, that is to ensure that Member States have medium-term budget positions that are 'close to balance or in surplus'. The Commission did not attempt to quantify what constitutes an appropriate budget position for a Member State in light of the budgetary costs of ageing population. Whether countries should set more ambitious budget targets (including surpluses) in the coming years prior to the budgetary impact of ageing populations taking hold is clearly a policy issue which the Ecofin Council must address in the future. Indeed, several Member States already go beyond budget positions of 'close to balance or in surplus' and are running large surpluses with the explicit purpose of preparing for the budgetary costs of ageing populations. However, the obligation on Member States under the SGP remains unchanged.

Lessons for future years

The assessment of the sustainability of public finances described above is a first step in making this a regular feature of EU budgetary surveillance. A learning-by-doing approach is required with the aim of improving the quality and comparability of the analysis in each successive generation of stability and convergence programmes. To this end, it is important to tackle the important methodological and data limitations of the current approach.

In the short run, it might be possible to improve the information content of stability and convergence programmes with a view to improving the comparability of the assess-

Box II.2. **More comparable projections on the budgetary implications of ageing populations**

Table II.7 below presents an overview of projections for public spending on pensions, healthcare and long-term care, made by the EPC ([1]) (Economic Policy Committee, 2001b). They were made on the basis of a demographic forecast provided by Eurostat and agreed assumptions on key economic parameters (labour-force participation rates, unemployment, productivity growth and real interest rates). For pensions, national authorities used their own models or sub-contracted this work to national research institutes, whereas for healthcare and long-term care a common methodology was used. The aim of the projection exercise is to achieve broad consistency across Member States while recognising that full comparability is not possible.

Table II.8

Projected impact of ageing populations on public expenditures 2000–40 (% of GDP)

	Level in 2000				Change by 2040			
	Pensions	Health	Long-term care	Total	Pensions	Health	Long-term care	Total
B	10.0	5.3	0.8	16.1	3.7	1.3	0.7	5.7
DK	10.5	5.1	3.0	18.5	3.6	0.7	1.8	6.1
D	11.8	5.7	na	17.5	4.8	1.4	na	6.2
EL	12.6	4.8	na	17.4	11.2	1.5	na	12.7
E	9.4	5.5	na	14.9	6.6	1.5	na	8.1
F	12.1	6.2	0.7	18.9	3.8	1.2	0.4	5.4
IRL	4.6	5.9	0.7	11.2	3.6	1.9	0.1	5.6
I	13.8	4.9	0.6	19.4	1.9	1.4	0.3	3.6
L	7.4	na	na	7.4	2.2	na	na	2.2
NL	7.9	4.7	2.5	15.1	6.2	1.0	1.8	8.9
A	14.5	5.1	0.7	20.3	3.8	1.6	0.7	6.2
P	9.8	5.4	1.6	16.8	4.0	0.6	1.6	6.3
FIN	11.3	4.6	2.8	18.6	4.7	1.2	1.6	7.5
S	9.0	6.0	1.7	16.7	2.4	0.9	0.6	3.9
UK	5.5	4.6	0.0	10.1	– 0.5	0.8	0.0	0.3

NB: Pensions expenditure includes most replacement revenues to persons aged over 55 before taxes: however, the coverage is not fully comparable across countries. For DK, the figure for pensions includes the semi-funded labour-market pension (ATP). Results for Ireland are expressed as a % of GNP and not GDP. The projections for healthcare and long-term care are made under the assumption that expenditures per head grow at the same rate as GDP per capita, except for IRL where they grow in line with GDP per worker.

Source: Economic Policy Committee (2001b).

Overall, public spending on pensions, healthcare and long-term care is projected to increase by between 4 % and 8 % of GDP in most Member States as a result of ageing populations between 2000 and 2040, although much larger increases are projected in individual countries. The increase in public spending starts taking place as of 2010, when the post-war baby-boom generation enter their retirement years, and peaks in most countries around 2040

Like all long-term projections, the results are model-driven and sensitive to the assumptions on key economic parameters. The EPC report stresses the need for caution when interpreting results. As regards the projections for pension spending, it should be borne in mind that the coverage of public expenditure items is not fully comparable across countries: for example, not all Member States have included spending on early retirement pensions. Also, the projections are based on the assumption of continued increase in the labour-force participation rates of women (to between 5 and 10 percentage points

([1]) The projections were made by the Ageing Working Group established in 1999 by the EPC to examine the economic and budgetary consequences of ageing populations. It is mostly made up of officials from Economic and Finance Ministries and the European Commission, and benefits from the participation of officials from the OECD and the ECB. The EPC projections on pensions were carried in parallel with an exercise of the OCED, the results of which are presented in OCED (2001) and Dang, Antolin and Oxley (2001).

(Continued on the next page)

Box II.2. (continued)

of men by 2050), and in some countries of a reversal in the trends toward lower participation rates of older male workers aged 55 and above. Some commentators have queried the likelihood of such increases in labour-force participation rates taking place in several countries without further policy reforms, for example improving access to child-care facilities, further curtailing access to early retirement schemes, improving the incentives in tax and benefit systems for older workers to stay in the labour market. As regards the projections for healthcare and long-term care, these only capture the impact on public spending due to demographic factors. The impact of non-demographic factors (technology, changing health status of the elderly) has not been included, implying that there are both upside and downside risks to the projections.

Notwithstanding these caveats, the projections of the EPC are an important step in efforts to improve the comparability of data and indicators necessary to examine the budgetary impact of ageing populations at EU level. A comprehensive assessment of the budgetary cost of ageing would, however, also need to take into account other age-related expenditure (such as childcare, education, etc.) and the impact of ageing on tax revenues ([1]). Also, some countries with large funded pension schemes may benefit from future increases in tax revenues on income from such schemes, to the extent that taxes on contributions and income earned on investments are deferred until pension income is drawn.

([1]) Additional information can be found in the country chapters of Belgium, Denmark, the Netherlands and Sweden annexed to the EPC report (Economic Policy Committee, 2001(b). See also European Commission 2001 (b)).

Table II.9

Overview results on the sustainability of public finances

	Baseline scenario	Worst starting position
B	++	+
DK	++	++
D	– –	– –
E	– –	– –
GR	– –	– –
F	– –	– –
IRL	– –	– –
I	++	+
L	++	++
NL	0	–
A	– –	– –
P	– –	– –
FIN	0	–
S	+	–
UK	0	–

NB: '+' = SGP requirements have been exceeded with budget surplus and debt well below the reference value.
'0' = SGP requirement met with budget balance close to the medium-term target.
'–' = failure to meet SGP requirements with deficits and debt above the reference values.

Source: Commission services.

ment. Moreover, the assumptions used in running the sustainability indicators could be reviewed. Particular attention should be paid to the assumptions on the interest rate — growth rate differential as this is a key driver of debt dynamics.

Ultimately, the quality of the assessment hinges upon the reliability and comparability of the long-term budgetary projections, and the robustness of the indicators used to quantify the sustainability of public finances. A substantial investment of time and resources over the long term will be needed if the quality and comparability of the assessment is to be significantly upgraded.

As regards the budgetary projections, the EPC has agreed to undertake a new common projection exercise starting in 2004 with a view to having final results in 2005. *Inter alia*, it will consider all age-related public expenditures and revenues, and not just public spending on pensions and healthcare. Moreover, as recognised by the EPC (Economic Policy Committee, 2001b), the quality of projections could be enhanced by a better specification of the assumptions on labour-market developments, with projected increases in participation rates of women and older workers being justified on the basis of incentives in the labour market. Also, there is a need for more consistency between the assumptions on demographic developments and changes in the labour force and healthcare. For instance, one may ask whether it is reasonable to suppose that fertility rates and the labour-force participation rates of women can rise simultaneously; also, there will be a greater need for child-care facilities given the smaller family size and the increased number of women in the labour force. In addition, it would be useful to develop sensitivity tests which can

more clearly identify the risks for public finances, for example to unexpected changes in life expectancy, to variations in employment rates, etc.

As regards the methodologies used to assess and quantify the sustainability of public finances, it is important to bear in mind that the analysis presented above is a partial equilibrium exercise, and thus fails to take account of a number of important feedback mechanisms. Ideally, long-term budgetary projections need to be considered in an international general equilibrium context so as to capture the impact of demographic changes on aggregate savings and investment and thereby the potential growth rates, balance or payments flows and real exchange rates (see McMorrow and Röger, 1999).

In addition, consideration could be given to the merits and feasibility of developing other indicators that measure the sustainability of public finances. For example, as part of their regular budget planning processes, the Danish authorities apply a sustainability test which is essentially a 'constrained' present value budget constraint. This allows one to estimate budget balance required today to ensure that current tax and expenditure policies do not lead to a rise in government-debt levels. The UK authorities apply an alternative rule that shows the sustainable rate at which primary government expenditures can grow without net public debt breaching an pre-determined threshold (set at 40 % of GDP). They also are developing a set of generational accounts, which as well as providing a measure of the sustainability of public finances, also cast light on distributional issues across generations.

Finally, efforts will be required to produce more reliable and comparable data. The development of longitudinal data sets which track the changes in economic and social behaviour through time would be particularly beneficial ([1]).

([1]) See National Research Council (2001), and Boeri et al. (2001).

Annex A. Main features of the new production function method of the Commission to calculate output gaps

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 capacity utilisation (U_L, U_K) of capital and labour and adjusted for the level of efficiency (E_L, E_K) of both factors. In many empirical applications, including the Commission's QUEST II model, a Cobb–Douglas specification is chosen for the functional form. This greatly simplifies estimation and exposition. Thus GDP is given by:

(1) $Y = (U_L L\ E_L)^{\alpha}(U_K K E_K)^{1-\alpha} = L^{\alpha}K^{1-\alpha}TFP$

where total factor productivity (TFP) summarises the efficiency and the utilisation of both factors of production. With the Cobb–Douglas production function TFP summarises utilisation and efficiency of both factors. TFP is implicitly defined as:

(2) $TFP = (E_L^{\alpha}E_K^{1-\alpha})(U_L^{\alpha}U_K^{1-\alpha})$.

Factor inputs are measured in physical units. An ideal physical measure for labour would be hours worked. Unfortunately, this information is not available for all Member States and the statistical information is not easily comparable across countries. Therefore, we measure labour input simply by the number of employees. This implies that any changes in working time will be reflected in the efficiency index. 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 this assumption 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 α and $(1-\alpha)$ respectively. Under the assumption of constant returns to scale and perfect competition, these elasticities can be estimated from the wage share. The same Cobb–Douglas specification is assumed for all countries, with the mean wage share for the EU-15 over the period 1960–2000 being used as the estimate for the output elasticity of labour, which gives a value of 0.63 for α 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 of individual Member States, such differences should not seriously bias the potential output results.

In moving from actual to potential output (YP), trend TFP and potential factor use must be determined. No particular theoretical model for determining trend TFP is used, instead an HP filter (with λ =100) is applied in order to extract a

smooth trend for TFP. No distinction is made between actual and potential capital since a normal level of capacity utilisation is already implicitly defined by the TFP trend. The definition of the potential output contribution of employment is more developed since it is more difficult to assess the 'normal' degree of utilisation of this factor of production. Since there is no strict physical limit, the definition that we therefore apply is the level of employment consistent with non-accelerating (wage) inflation (*NAWRU*).

The starting point for the determination of potential employment is the population of working age (POP^W). The trend labour force is obtained by multiplying population of working age with the trend participation rate ($PART^T$). Potential employment (*LP*) is then given by:

(3) $LP_t = POP_t^W PART_t^T (1 - NAWRU_t)$

For determining the trend participation rate, the HP filter is used while the unemployment trend is determined by using information on the change of wage inflation. The NAWRU is obtained as a Kalman filter estimate under the hypothesis that the deviation of unemployment from the NAWRU is negatively related to the change of wage inflation if one controls for other temporary shocks to wage inflation such as terms of trade shocks, for example. Thus, a Phillips curve relationship is postulated which links the change in wage inflation ($\Delta\pi_t^W$) to the unemployment gap or the cyclical component of unemployment (C^U) plus other exogenous or predetermined variables (X_t). Other unobserved shocks are captured by the error term u_t which is allowed to be autocorrelated:

(4) $\Delta\pi_t^W = \mu + \gamma X_t + \beta C_{t-1}^U + u_t$ with $u_t = \sum_{i=0}^{I} \theta_i \varepsilon_{t-i}$

where $C_t^U = U_t - NAWRU_t$.

Besides having predictive power for wage inflation, the cyclical component of unemployment must also obey certain business cycle restrictions:

- it should be an autocorrelated process, preferably second order;
- it should be stationary;
- it should have a sample mean of zero.

Such a process is characterised by the following equation:

(5) $C_t^U = \phi_1 C_{t-1}^U + \phi_2 C_{t-2}^U + v_t$

where stationarity requires $\phi_1 + \phi_2 < 1$. This specification follows Kuttner (1994). This property of cyclical unemployment, together with the HP filtered series for trend participation and trend TFP guarantee that the output gap has a mean of zero over the sample. This property is regarded as important since it limits judgmental interventions in modelling trend GDP.

After the determination of trend participation, the NAWRU and trend TFP, potential output can be calculated as:

(6) $YP_t = (POP_t^W PART_t^T (1 - NAWRU_t))^{\alpha} K_t^{1-\alpha} TFP_t^T$

and the output gap (*YGAP*), defined as the percentage deviation of actual GDP from potential can be decomposed into the deviation of the participation rate from trend, the unemployment gap and a TFP gap as follows:

(7) $YGAP_t = \alpha[(PART_t - PART_t^T) + (NAWRU_t - U_t)] + TFP.GAP_t$

As can be seen from this expression, in contrast to an output gap which is entirely based on a statistical filtering procedure, the output gap based on a production function provides more information about the sources of deviations from trend.

Annex B. The indicators to assess the sustainability of public finances

Projecting the evolution of budget balance and government debt

Public debt (b_t) and the budget balance (d_t) are projected forward as follows:

$$b_t = \frac{b_{t-1}}{(1 + y_t + \pi_t)} + d_t \text{ and } d_t = g_t^a + \bar{g}_t^{NA} - \dot{t}_t + \dot{i}b_{t-1}$$

based on the profile for growing age-related expenditures g_t^a, non-age-related expenditures g_t^{NA} and the tax burden t_t remain constant at their 2000 level. The interest rate, i_t, is set at 6. Inflation and growth (y_t, π_t) are each set at 2, so that their sum is 4. The identities are:

$$t_t = g_t^{NA} + g_t^a + \dot{i}b_{t-1} - \bar{d}_t \text{ and } g_t^{NA} = \bar{d}_t - g_t^a + \dot{t}_t - \dot{i}b_{t-1}$$

Calculation of the tax gap

Once a debt ratio has been defined for the end of the projection period, a useful indicator of the fiscal effort required is to calculate the **constant** tax rate consistent with the achievement of a given end-point debt. The tax gap is defined as the difference between this 'sustainable' tax rate and the current tax rate.

The initial debt (at the end of 2005) satisfies the following condition:

$$B_{2005} = \sum_{i=1}^{45} \frac{T_{2005+i}}{(1+r)^{i-1}} - \sum_{i=0}^{45} \frac{G_{2005+i}^{NAR}}{(1+r)^{i-1}} - \sum_{i=0}^{45} \frac{G_{2005+i}^{AR}}{(1+r)^{i-1}} + \frac{B_{2050}}{(1+r)^{45}}$$

where G_s^{AR}, G_s^{NAR} and T_s refer to age-related expenditure, non-age-related expenditure and taxes, r is the nominal interest rate and n is the nominal growth rate.

In terms of GDP ratio, this yields:

$$b_{2005} = t^* \sum_{i=1}^{45} (1+r-n)^{-i+1} - \sum_{i=1}^{45} (1+r-n)^{-i+1} g_{2005+i}^{NAR} - \sum_{i=1}^{45} (1+r-n)^{-i+1} g_{2005+i}^{AR} + b_{2050}(1+r-n)^{-45}$$

t^* being the sustainable tax rate.

Hence, for $\rho = r - n$

$$t^* = \frac{b_{2005} - b_{2050}(1+\rho)^{-45} + \sum_{i=1}^{45}(1+\rho)^{-i+1} g_{2005+i}^{NAR} + \sum_{i=0}^{45}(1+\rho)^{-i+1} g_{2005+i}^{AR}}{\sum_{i=1}^{45}(1+\rho)^{-i+1}}$$

Finally,

$$t^* = \frac{\rho}{1+\rho} \times \frac{1}{1-(1+\rho)^{-45}} \times \left[b_{2005} - b_{2050}(1+\rho)^{-45} + \sum_{i=1}^{45}(1+\rho)^{-i+1} g_{2005+i}^{NAR} + \sum_{i=0}^{45}(1+\rho)^{-i+1} g_{2005+i}^{AR} \right]$$

It is then possible to calculate the sustainable tax rate for a given condition imposed on the debt ratio in 2050 and for given assumptions on the path of non-age-related expenditure.

If the end-point debt in 2050 is the debt ratio consistent with maintained budget balance, then:

$$b_{2050} = \frac{b_{2005}}{(1+n)^{45}}$$

In the particular case where you suppose that non-age-related expenditure make up a constant share in GDP, g_s^{NAR} is constant and t^* is given by:

$$t^* = \frac{\rho}{1+\rho} \frac{b_{2005} - b_{2050}(1+\rho)^{-45} + \sum_{i=1}^{45}(1+\rho)^{-i+1} g_{2005+i}^{AR}}{1-(1+\rho)^{-45}} + g^{NAR}$$

Under the assumption of a balanced budget in 2004 and 2005, the initial tax rate is:

$$t = g_{2005}^{AR} + g_{2005}^{NAR} + r b_{2004} = g_{2005}^{AR} + g_{2005}^{NAR} + r(1+n) b_{2005}$$

Hence the expression of the tax gap is:

$$t^* - t = \frac{\rho}{1+\rho} \times \frac{1}{1-(1+\rho)^{-45}} \times \left\{ \left[1 - r(1+n)\frac{1+\rho}{\rho}[1-(1+\rho)^{-45}] \right] b_{2005} - b_{2050}(1-\rho)^{-45} + \sum_{i=1}^{45}(1+\rho)^{-i+1}(g_{2005+i}^{AR} - g_{2005}^{AR}) \right\}$$

Part III

Public expenditure in EU countries

Summary

Public spending has risen sharply in the EU over the past three decades attaining a historical high of 53 % of GDP in 1993. Thereafter, thanks to the Maastricht process of budgetary consolidation, it has started to decline. In 2001, at 47 % of GDP, the average size of the government sector in the EU remains well above levels in other industrialised countries and is 15 percentage points of GDP higher than that in the United States. The aggregate picture, however, hides considerable disparity across Member States. A large proportion of the differences in size both between Member States, and between the EU and other industrialised countries is explained by the amount of public resources devoted to social protection, reflecting a higher preference for redistribution. Increased spending on social welfare also accounts for a large share in the rise in government spending in recent decades, a trend which was partly offset by falling levels of government investment and more recently a lower interest burden on debt. Although Member States differ as regards their preference for the size of the public sector, there is a considerable degree of similarity in the composition of expenditure. The degree of similarity appears to have increased over time, which could be relevant in the context of EMU since it might result in a more uniform response to economic shocks.

A variety of economic and institutional factors offer some explanation for the rise in public spending. Part of the increase could be attributed to rising levels of prosperity. This is because the demand for some public goods and services such as education and healthcare rises with disposable income. A second explanation is that the political process results in a bias in budgetary behaviour in EU countries: government spending has risen during economic downturns, but unlike the United States, did not fall back when growth resumed. Expenditure as share of GDP therefore ratcheted upwards during successive economic cycles. This trend, however, appears to have been broken in the early 1990s indicating that the Maastricht convergence process represents a structural break with past behaviour. A third possible explanation is that the price or cost of providing goods and services has risen faster in the public sector compared with the private sector. Evidence here is mixed, with different trends across countries. Finally, institutional factors related to national constitutional and voting arrangements may have allowed certain sectors of the population or organised interest groups to successfully persuade governments into establishing public expenditure programmes from which they benefit particularly (while contributing only partly to the cost through taxation).

A full analysis of the quality of public expenditure requires going beyond the macroeconomic trends and to consider in detail the functional uses to which resources are put. In broad terms, government spending can be justified to pursue economic or redistribution goals. Evidence shows that public spending on the basic function of the State and other measures to improve the allocation of resources (defence, justice, education, healthcare, R & D, economic services) has been remained remarkably stable over the past 30 years, and is nowadays very similar in EU countries (between 14 % and 18 % of GDP). In contrast, the difference in overall government expenditure across countries is determined by programmes that essentially pursue redistribution objectives. However, a certain convergence is taking place in redistribution-oriented programmes: the largest increases in spending on social protection have taken place in countries that had relatively immature social protection systems at the beginning of the 1980s, as welfare entitlements and levels were extended.

The stricter budget constraint facing Member States in EMU, coupled with efforts to raise the employment and growth performance as part of the so-called Lisbon process, requires that greater attention be paid to how public resources are spent. However, cross-country analyses of the ‘quality’ of public spending have been hampered by a lack of timely and comparable data on the functional classification of public expenditures. An in-depth policy debate at EU level has been held back also by a lack of

indicators which are easy to compute and comparable across countries.

As a first step, a synthetic indicator of the efficiency effects of public expenditures is presented. A certain composition of public expenditure could be considered to be efficiency-enhancing if it is geared towards policies that contribute to the goals of the Lisbon strategy, i.e. making the Union the most dynamic, competitive sustainable knowledge-based economy, enjoying full employment and strengthened economic and social cohesion. Member States can promote the quality of public spending, and in particular its contribution to growth and employment, by redirecting towards physical and human capital accumulation and research and development. Infrastructure investments can have a robust effect on long-term growth and new innovative approaches to financing should be sought, including public–private partnerships. Spending on social welfare can also have a positive impact on growth and economic efficiency under certain conditions and within certain limits.

A view of government akin to the European social model recognises that, beside spending programmes which provide public goods or correct market failures, some spending on social welfare can contribute to economic efficiency. The results of the analysis suggest that the composition of public spending tended to ameliorate during the 1990s: many EU countries have improved the composition of public spending while starting to reduce the size of the public sector.

These results need to be interpreted with caution and are illustrative only. In order to draw meaningful policy conclusions about the level and composition of public expenditures, the approach proposed here needs to be complemented with microeconomic analyses that take into account the specific aims of spending programmes, their design and linkages with other policy instruments. A pre-condition for doing so is the availability of suitable data, the elaboration of which has already been identified as a priority by successive European Councils.

1. Introduction

Increased attention is being paid at EU level to the so-called 'quality' of public finances. The Lisbon European Council of March 2000 called for the emphasis of public finances to be broadened from its focus on stability to include the contribution they can make to growth and employment. This is in part due to the stricter budget constraint facing Member States in EMU that requires greater attention to be paid to how public resources are spent. Moreover, with budget positions in most Member States having reached or approaching 'close to balance or in surplus', as required by the Stability and Growth Pact (SGP), there is scope for focus of budgetary policy to shift towards other policy priorities.

Efforts at EU level to examine the quality of public finances have until now been mainly limited to analyses of tax and benefit systems ([1]). No systematic examination has been made of the quality of public expenditure on account of conceptual difficulties in defining what quality means and data limitations.

Regarding conceptual issues, there is no objective definition of the quality of public spending as it encompasses a number of desirable characteristics. *Inter alia,* it refers to a achieving a good composition of public expenditures, with adequate resources being devoted to policies that enhance the employment and growth potential of the economy, for example public investment, R & D, education and active labour market policies. It also involves ensuring that government expenditure is limited to areas where there are clear advantages towards public provision of goods and services and thus do not crowd out more productive private sector activity.

Data limitations continue to be a major constraint on cross-country analysis on the quality of public spending. No comprehensive data are available that provide a functional distribution of public expenditures in all EU countries over a reasonably long time span. If improving quality of public finances is to become a meaningful policy goal of the EU, investment is needed to develop timely and reliable data on the breakdown of public expenditure in Member States.

Notwithstanding these difficulties, this chapter is a first attempt to examine some issues related to the quality of public expenditures. Section 2 provides an overview on the size and composition of public spending in Member States. It also analyses the factors which could explain the dramatic growth in the scale of government expenditures that has taken place until mid-1990s and the following reduction.

Section 3 goes beyond an examination of the broad trends of public spending and takes a closer look at the functional distribution of public spending, i.e. the uses to which public resources are put. In particular, it seeks to break down public spending between programmes that pursue 'economic' objectives (e.g. to correct market failures) and those where the primary aim is redistribution. A more detailed examination is provided of the fastest growing component of public expenditures, namely spending on social protection.

Finally, Section 4 attempts to develop a synthetic indicator of the adequacy of the composition of public expenditure in fostering growth and employment. This is a first step towards building aggregate indicators which would complement sectoral indicators to benchmark best practices across Member States and provide a means to gauge progress towards meeting the objectives of the so-called Lisbon process in the public finance area.

As mentioned above, data limitations act as a major constraint in carrying out timely and comparable analysis. It has been necessary throughout this chapter to draw upon a variety of data sources, which differ in terms of definition used, coverage and reliability. Due caution should therefore be exercised when assessing the results of the analysis and drawing policy conclusions.

([1]) European Commission (2000 and 2001a).

2. The size and the composition of public expenditure

2.1. A comparison with the United States and Japan

General government spending in the EU was over EUR 4 100 billion in 2001, which is equivalent to 47 % of GDP or the combined annual income of Germany, France and the Netherlands ([1]). This is some 5 and 14 percentage points above the levels in Japan and the United States respectively, see Graph III.1. With similar levels of public spending as a share of GDP on interest payments and public investment (at least between the EU and United States) ([2]), the higher level of spending in the EU is explained by primary current expenditure. In particular, EU countries show a higher preference for redistribution with spending on social transfers amounting to 16 % of GDP, compared to some 11 % of GDP in both the United States and Japan.

At the beginning of the 1970s, public spending in EU Member States ranged between 35 % and 40 % of GDP, compared with 20 % in Japan and some 30 % in the United States, see Graph III.2. In the EU, it rose sharply following the two oil price shocks of the 1970s. After stabilising in the second half of the 1980s when high GDP growth was recorded, it thereafter rose to a peak of almost 53 % of GDP in 1993. The Maastricht Treaty and the subsequent convergence process forced governments to regain control of public spending which as a share of GDP fell by seven percentage points between 1993 and 2000.

The evolution of public expenditure in the United States over the same period was different. As a share of GDP, public spending rose by some four percentage points in the two years after the first oil price shock, but thereafter fell back to its original level. It also rose after the second oil price shock and hovered around 35 % of GDP during the 1980s and early 1990s. However, a continuous downward trend occurred during the 1990s thanks to sustained economic growth.

In Japan, public spending as a share of GDP rose continuously during the 1970s and reached the US level at the beginning of 1980s. This was largely due to spending on social protection which doubled from under 5 % to over 10 % of GDP. Also, public investment increased from 4.4 % of GDP in 1970 to 6 % of GDP at the beginning of 1980s. The economic crisis of the 1990s led to pressure for increased government intervention, pushing up public expenditure to a peak 43 % of GDP in 1998.

In brief, the size of the government sectors in the three largest economic areas followed different patterns: a broadly stable level in the United States; a substantial increment in Japan, concentrated between the two oil shocks of the 1970s and from the second half of the 1990s onwards; a substantial increase in Europe until the early 1990s, followed by some reduction in the subsequent period.

2.2. The composition of public spending in EU Member States

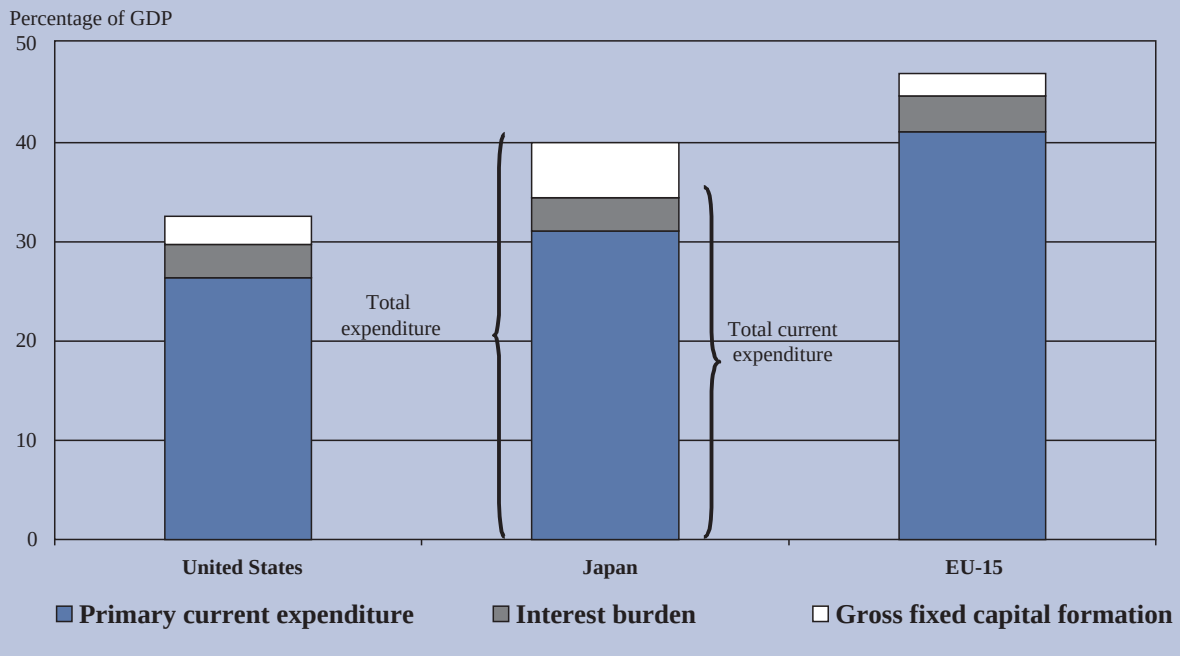
There is a considerable dispersion in the level of government expenditures amongst EU countries, ranging from below 40 % of GDP in Ireland and to over 57 % in Sweden in 2001 (see Graph III.3).

Differences in primary current spending are mainly behind the country disparities. Interest payments are still high in Italy, Greece and Belgium (above 6 % of GDP), but in the other countries they do not exceed 3.5 % of

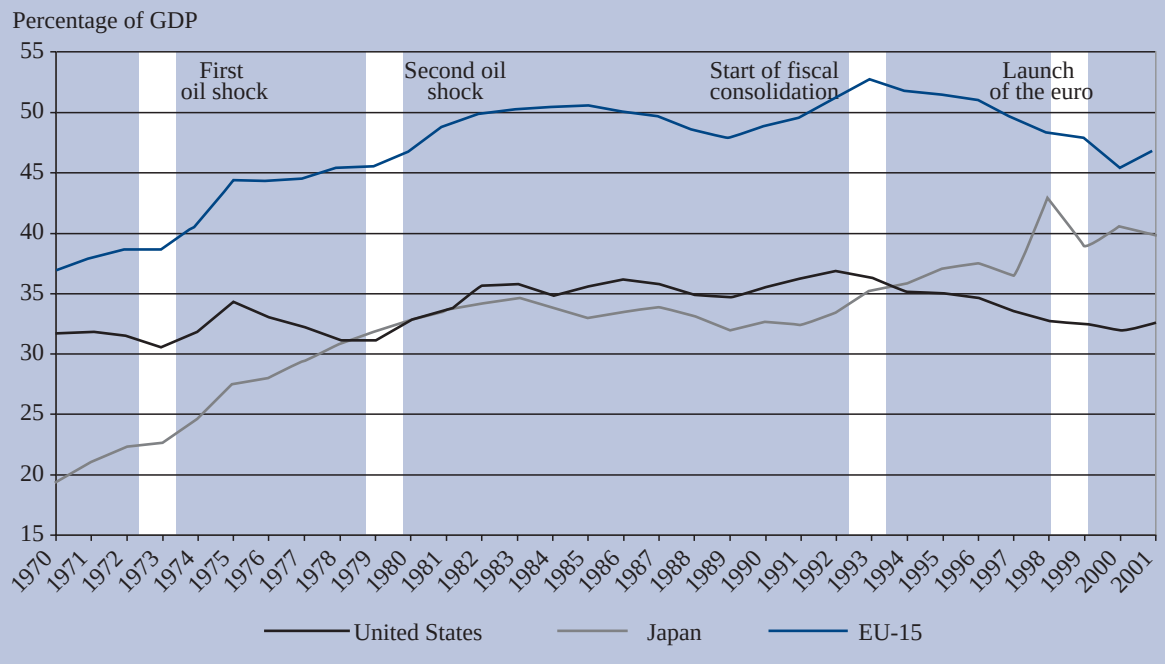
([1]) Government spending as a share of GDP is the most commonly used indicator of the size of the government sector, see Martinez-Mongay (2002) and Persson and Tabellini (2001). However, this definition has a number of limitations. For example, it does not take into account the regulatory activity of the government.

([2]) In Japan, a huge increase in public investment has taken place in recent years and now accounts for 5.5 % of GDP. In a historical perspective, however, the level of public investments was close to that of the EU and United States.

Graph III.1: **A comparison of the size of government expenditures in the EU, United States and Japan in 2001**

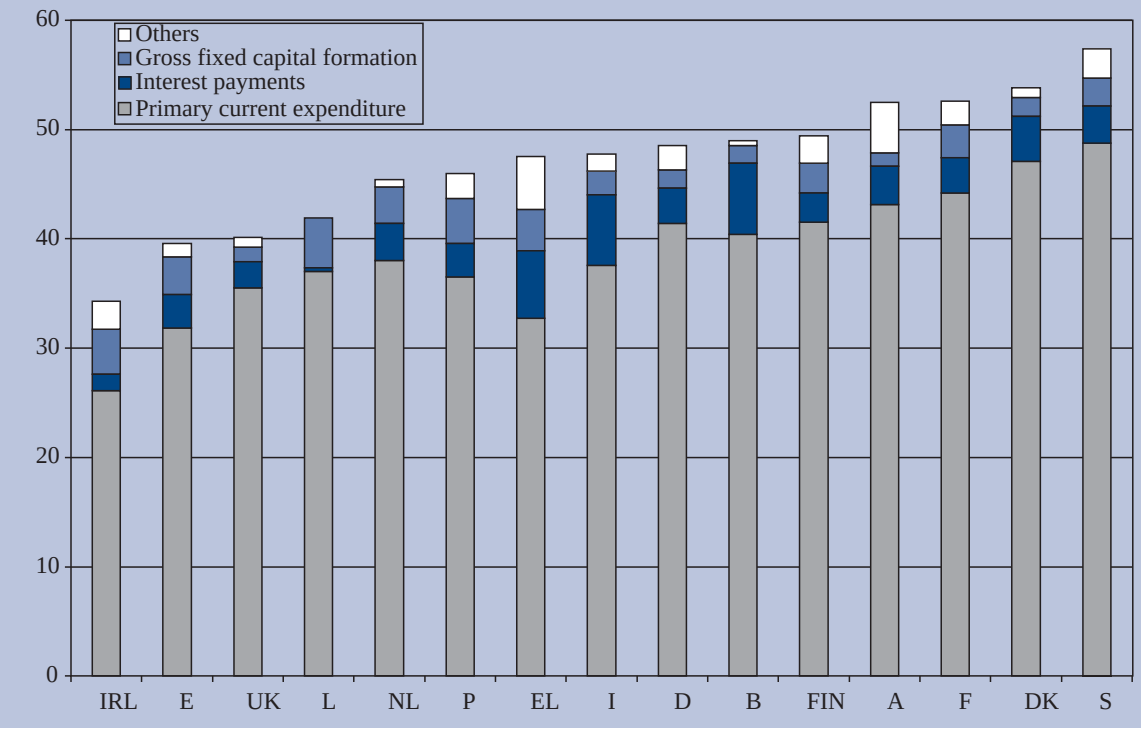


Graph III.2: **The evolution of public expenditure**



GDP. High interest burdens do not explain the large cross-country differences in the size of public spending: of the seven Member States with the highest level of expenditures to GDP, only two (Belgium and Denmark) have an above-average expenditures on interest payments. Public investment accounts for more than 4 % of GDP in Ireland, Greece, Portugal and Luxembourg whereas for the majority of countries the level is below 3 % of GDP.

Graph III.3: **Public expenditure as a share of GDP in EU Member States, 2001**



The present composition of public expenditure is the result of a different evolution of its components. Primary current expenditure rose by 10 percentage points of GDP over the 1970s and 1980s. A large proportion of this is explained by the increase in spending on social transfers from 10 % of GDP in 1970 (one third of total expenditure) to 16 % of GDP in 1980 (two fifths of total expenditure). This increase is mostly due to measures that extend welfare benefits to a larger proportion of the population while the rise in old-age dependency ratio played a minor role. From the mid-1980s onwards, a less pronounced pattern is evident as regards primary current expenditure, even if social transfers increased by a further two percentage points of GDP.

In contrast, public investment has been on a downward path since mid-1970s, falling as a share of GDP from 4 % of GDP in 1975 to less than 2.5 % of GDP in 1998. In particular, it was reduced by 0.8 percentage points of GDP points during the 1993–97 period of budgetary consolidation accounting for around one fifth of the total correction of public spending. However, this downward path seems to have stopped and a slight increase has been registered in the early years of EMU.

Despite the large differences in the size of the government across EU countries, there is a considerable deal of similarity as regards the allocation of resources across the main expenditure categories. For example, the compensation of public employees accounted for a similar share of total current expenditure in most Member States (around 30 %), with the exception of Germany and the UK where it accounted for a lower share (20 %). The same holds for the share of public spending on the purchase of goods and services (20 %) and spending on social transfers (almost 40 %) ([1]). This suggests that

([1]) The degree of similarity is particularly striking for social protection. The variance in its share in total primary expenditures across member States is very low, with a variation coefficient (the ratio of the standard deviation to the mean) equal to 0.1 in 2001.

Member States differ more in their preferences for the size of governments rather than in their preferences as to how public resources should be allocated.

The degree of similarity in the composition of public spending in EMU is relevant since the way individual countries are affected by external shocks on growth, employment and inflation depends at least in part by this composition. In a single currency area, it could be argued that a higher similarity is desirable to the extent that it results in a more symmetric response to economic shocks. On the other hand, countries with more volatile economies may need a higher response of the spending components which react automatically to the cycle.

An interesting question is whether the large increase in public expenditures experienced since the 1970s until the early 1990s and the subsequent fall have altered the degree of cross-country similarity ([1]). Table III.1 presents an index which measures the similarity in the composition of public expenditures across EU countries for six categories of spending. The index equals zero when there is perfect homogeneity across countries and increases with divergences among countries ([2]).

Results are presented for five key periods separated by the four main episodes relevant to explain the dynamic of public expenditure in Europe: the two oil price crises of 1973–74 and 1979–80, the start of the budgetary consolidation process in 1993 and the launch of the euro in 1999. The analysis shows that similarity has increased over time with the total index falling from 0.31 at the beginning of 1970s to 0.26 today. This occurred mainly during the budgetary consolidation of the 1990s and covered all components of public spending except public investment. For the latter, a sharp increase in divergence has occurred in the last three years. This effect can be explained by the fact that countries which had achieved sound budget positions have had enough room to increase public investment. Instead, countries that have yet to reach the close-to-balance requirement of the SGP and/or have high interest burdens are still subject to fiscal constraints and thus have been less able to allocate resources to public investment.

2.3. Explaining the increase in government expenditure

An extensive literature has examined the economic, institutional and political reasons behind the increase in government spending ([3]). This section reviews the main arguments under four headings. Three economic justifications are considered, namely the increase per-capita incomes, a hysteresis effect with the size of the government ratcheting up over time, and a price effect. Political economy arguments are also considered, namely the capacity of interest groups to promote particular expenditure programmes, and the interaction between national voting arrangements and income distribution. Clearly, the analysis presented below is not exhaustive and does not attempt to deal with important country-specific factors. Moreover, the explanations are not mutually exclusive and it is likely that a combination of factors explains the increase in public spending over time.

Increasing income levels. Some public goods and services (such as education, healthcare, etc.) exhibit a high income elasticity of demand. Therefore, as disposable income increases, voters demand a higher level of provision of these goods and services which leads to a higher government spending as a share of GDP. This is the so-called Wagner's law ([4]). Evidence in the literature on the relevance of Wagner's law is mixed, largely due to measurement problems which make the causality relationship somewhat unclear. Nevertheless, there is some evidence that Wagner's law may be at work in the EU ([5]).

([1]) The analysis is partly based on the approach suggested by Sanz and Velazquez (2001).

([2]) Formally, for each category of spending f the indicator I for year t is computed as follows:

$$I_f = \frac{1}{n}\sum_{i=1}^{n}\left(\frac{G_{fit}\Big/\sum_{f=1}^{6} G_{fit}}{\sum_{i=1}^{n} G_{fit}\Big/\sum_{f=1}^{6}\sum_{i=1}^{n} G_{fit}}\right) - 1$$

where: f is the category of expenditure (subsidies, intermediate consumption, etc.); I is the country; n is the number of countries (15); t is the year of reference.

([3]) Cameron (1978), Lybeck (1988) and Martinez-Mongay (2002) examine a variety of economic, institutional and political factors. For a longer-term perspective, see Tanzi and Schuknecht (2000).

([4]) The original version of Wagner's law linked the expansion of public expenditure with the process of industrialisation and urbanisation experienced by countries at the end of the 19th century.

([5]) When Wagner's law is tested across countries, there is evidence that different levels of per capita income are correlated with public expenditure, see Martinez-Mongay (2002). Sestito and Ca' Zorzi (2001) find a positive correlation between total social expenditure and GDP per capita in PPP. Evidence of Wagner's law at work in the candidate countries of central and eastern Europe is found in Part V.

Table III.1

Index of similarity of public expenditure

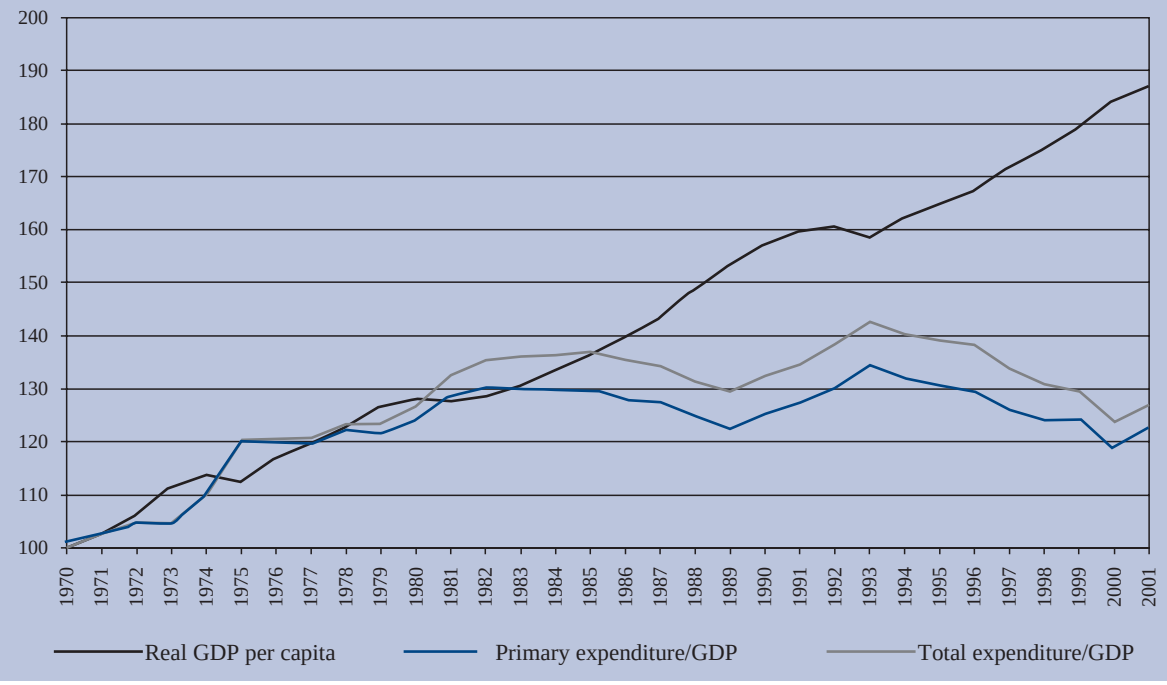
	1970–72	1973–79	1980–92	1993–98	1999–2001
Social transfers	0.15	0.11	0.09	0.07	0.09
Subsidies	0.48	0.45	0.46	0.34	0.30
Gross fixed capital formation	0.30	0.31	0.36	0.32	0.46
Intermediate consumption	0.22	0.18	0.22	0.25	0.24
Compensation of employees	0.17	0.16	0.13	0.14	0.17
Interest payments	0.54	0.55	0.47	0.38	0.27
Total	0.31	0.29	0.29	0.25	0.26

Source: Commission services.

Graph III.4 pictures the increase of real GDP per capita in the EU against total expenditure to GDP ratio and the ratio of primary expenditure to GDP from 1970 to 2001 (in index form, 1970 = 100). The indexes show a similar pattern until the mid — 1980s. Thereafter, however, per capita income continued to grow while levels of public expenditure appear to have reached a peak and have started to decline as from 1993. This may support the conclusion by Cameron (1978) who pointed out there may be an upper limit on the size of the government, and that the relationship between economic growth of the size of the level of public spending could disappear from a certain point onwards.

Hysteresis effects. Another strand of literature argues that the growth in size of government spending is due to extraordinary events such as wars or natural calamities that require additional public spending (see Peacock and Wiseman, 1961). More recently, the emphasis has been

Graph III.4: **Real GDP per capita growth and public expenditure (1970 = 100)**



put on the rise in government spending during recessions. Once the extraordinary circumstances or the recession come to an end, however, the size of public sector fails to revert to its previous level. Government spending as a share of GDP therefore tends to ratchet upwards. Evidence of the possible existence of such hysteresis effects in EU countries can be gauged by looking at Graph III.5 which contrasts the output gap during the last 30 years (left scale) and total public expenditure as a share of GDP (right scale). The graph shows that public expenditure has gone up after the two oil price shocks, but has remained stable once the crisis had been overcome ([1]). This trend appears to have been broken in the 1990s with the Maastricht-induced consolidation.

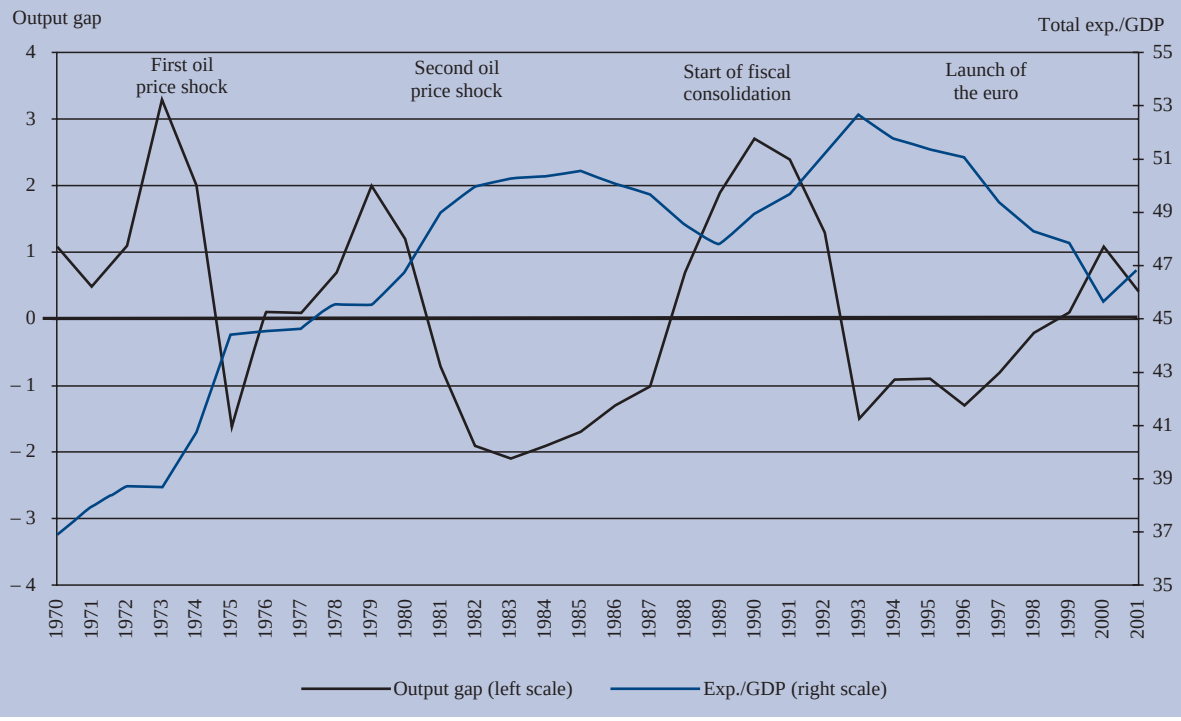
Price effects. Total government spending is determined by the cost as well as the amount of goods and services offered by the public sector (prices and quantities). The share of government spending in GDP will rise if the cost of providing public goods and services is higher and rising faster than the cost of similar services being provided by the private sector. Graph III.6 examines whether such price effect has contributed to the growth in the size of the government sector. It presents an indicator of relative domestic prices in Italy, France and the UK. It is computed as the ratio of the price of goods and services of the public sector (resulting from prices of public consumption which comprises compensation of employees and intermediate consumption, and public investment) to the general consumer price index ([2]).

Different patterns emerge for the three countries. There is clear evidence of a price effect in Italy, with the cost of public-sector goods having increased much faster than consumer prices during the 1970s and 1980s. At the beginning of 1990s, public prices were 80 % higher than consumer prices comparing with 1970. However, budgetary consolidation during the 1990s has benefited from a reversal of this trend: public prices started to increase

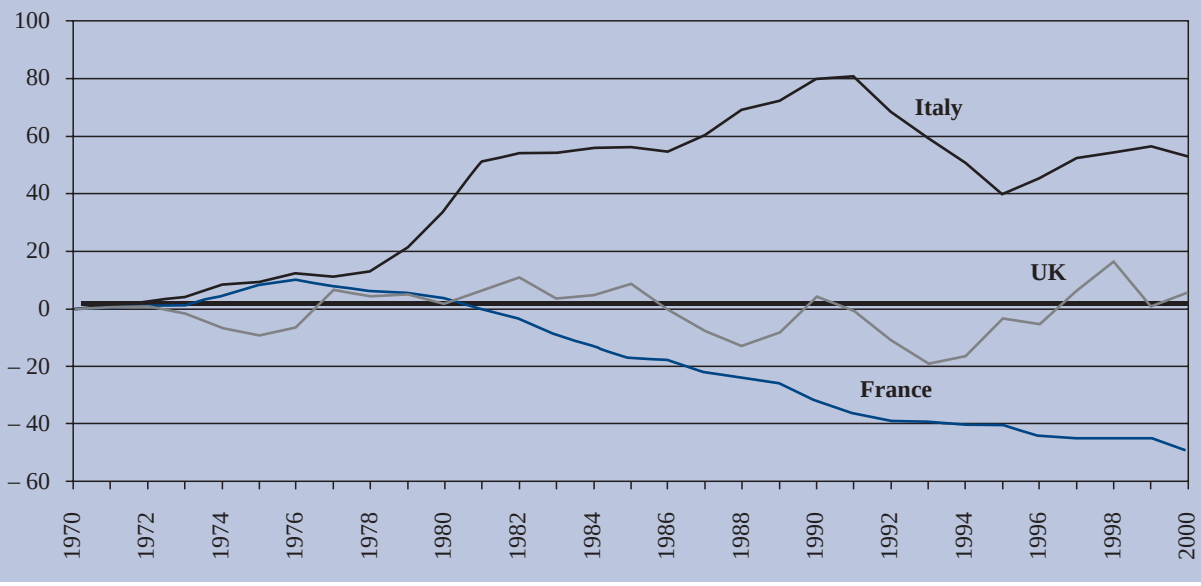
([1]) This conclusion is consistent with the findings in Part IV, Table IV.1.

([2]) To obtain an index of prices of public expenditure, expenditure in real terms of compensation of employees, intermediate consumption and gross fixed capital formation were measured using the appropriate deflator. The sum of the same components in nominal terms were divided by the sum of these components in real terms, to obtain an index of public-sector prices.

Graph III.5: **Public expenditure and output gap**



Graph III.6: **Price effect**



less than consumer prices and this contributed to the reduction of the public expenditure to GDP ratio. There has been a little or no price effect in the UK. In France, public prices have increased less in relative terms than consumer prices, which has helped keep down total public spending as a share of GDP. Country-specific factors (the dynamic of wages, the cost of public investment relative to private investment, the price of goods and services bought by the public administration) probably explain the divergence of results, and as such it is difficult to draw general conclusions on the role of price effects for the EU as a whole.

Political economy explanations. The literature on political economy highlights the role of interest groups in raising public expenditure levels in the EU. Organised interest groups lobby politicians to provide specific public goods and services from which they benefit disproportionately (as they do not bear all the financing costs through taxes). Persson and Tabellini (2001) show how different institutional arrangements affect the impact of pressure groups on the government budget. Two factors should be taken into account: the electoral rule (majoritarian *v* proportional electoral system) and the political regime (presidential *v* parliamentarian). It is argued that public spending tends to be higher in proportional electoral systems and in parliamentarian regimes where pressure from organised groups for additional public expenditures appears more likely to succeed.

A related argument concerns the interaction between electoral rules and income distribution (see, e.g. Meltzer and Richard, 1981). If income distribution is skewed to right (i.e. there is a higher degree of income inequality), then the median income earner has a below-average income level. In a majoritarian electoral system, the median income earner is also the median voter, and *de facto* determines the result: he/she will vote for taxes and public expenditures that increase his/her income throughout a higher level of social transfers. Hence, the higher the degree of income inequality is, the higher the spending on social transfers will be. The median voter model may, at least in part, be behind the growth of social transfers experienced in EU countries. However, it is difficult to disentangle this effect from Wagner's law: a higher level of per capita income can (regardless of the income distribution) determine an increasing role of the State in delivering those social programmes that have a high income elasticity of demand.

3. An examination of the functions of public spending

3.1. The functional distribution of public spending

This section goes beyond an examination of the broad trends of public spending to take a closer look at the actual uses to which public resources are put. In particular, it seeks to understand the rationale for having large public expenditure programmes, and whether changes in underlying economic circumstances and/or political preferences can explain the rapid growth in the size of the government sector in recent decades.

According to Musgrave (1959), the economic policies of governments pursue three goals, namely achieving a more efficient allocation of resources, redistributing income and stabilising output fluctuations around its potential level. Government spending (which is only one of the policy instruments available to achieve these goals) essentially pursues allocation and redistribution goals, as stabilisation is usually a by-product rather than an explicit policy objective.

Government spending to improve the allocation of resources can be justified when public provision yields a more efficient outcome in terms of welfare compared with private provision. First, governments provide 'public goods', i.e. those 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 ([1]). These include public expenditures on defence, law and order, and the provision of an effective legislative and regulatory framework. Second, expenditure programmes may be required to correct various forms of market failures arising from externalities, economies of scale and scope, asymmetric information, etc. In all those cases, the level of the good or service provided by the market tends to be sub-optimal from a social point of view. State intervention may be able to achieve a better allocation of resources in fields such as education, healthcare, R & D and infrastructures investment ([2]).

However, in determining whether government expenditures benefit the economy as a whole, it is necessary to take into account the distortionary impact of taxes used to finance expenditures. Also, one has to consider the risk of crowding out of private provision with the result that the overall level of supply (private and public) ends up being too low. According to the analysis of Mc Mullen (1978), there may be an optimal level of public expenditure beyond which additional spending would have negative welfare effects due to a combination of diseconomies of scale, the distortionary effects of taxes and/or crowding out of private investments.

Government spending is also undertaken to redistribute income. Beside progressive income taxes, social transfers are the most important policy instruments used to achieve redistribution goals. In practice, many social programmes have both allocative and redistributive effects (Buti, Franco and Pench, 1999). This is particularly true in the case of those expenditures that act as insurance against specific events, as for instance unemployment, where the market is not efficient in providing such insurance.

The classification of public expenditure according to the ESA 95 system of national accounts does not give information about which kind of goods and services are provided.

([1]) Formally, a pure public good is one whether there is complete 'non-rivalness' and 'non-exclusiveness' in consumption, Samuelson (1954). In practice, pure public goods are rare.

([2]) The intervention can be of the type of direct provision of the goods and services, or alternatively through the financing of private bodies that have the duty to deliver these goods. A third case is that of the subsidisation of demand by citizens, who can then buy the goods from private suppliers.

A different classification is the functional one (COFOG) ([1]) that allows to look deeper inside the public spending and the different functions covered by the government.

Public expenditures in COFOG are classified according to 10 categories: (1) general public services, (2) defence, (3) public order and safety, (4) economic affairs, (5) environment protection, (6) housing and community amenities, (7) healthcare, (8) recreation, culture and religion, (9) education, and (10) social protection. Unfortunately, there is a serious lack of data, since a comparable functional classification does not exist for all the EU countries and with sufficiently long time series.

Nevertheless, for 2000, comparable data coherent with other databases are available from a unique source (Eurostat COFOG database) on the first nine categories for 10 EU countries. These data are presented in Table III.2. A cursory observation of the table provides a number of interesting indications. Expenditure for general public services, that comprises the general administration of the State, including the cost of legislative and executive organs, account for around 3 % of GDP, with some extreme cases as Germany (with less than 1 GDP point) and Sweden (where general public services absorb more than 6 % of GDP). Economic affairs, which comprise subsidies to several sectors as transport, communication, agriculture, fuel and energy, accounted in 2000 for something around 4 to 5 points of GDP. The level of these expenditures depends of many factors, in particular the structure of regulation in several key sectors and the relative weight of State-owned companies. Health and education represent around 10 % of GDP, with some countries (Sweden and Austria) that dedicate to investment in human capital around 14 % of GDP.

([1]) See www.un.org/Depts/unsd/class/class.htm for a detailed description of the COFOG classification.

3.1.1. An interpretation

In line with the previous analysis, government spending can be allocated to four broad categories: (a) provision of pure public goods that are essential in the basic functioning of a country, (b) provision of goods and services which aim at correcting market failures, (c) programmes that redistribute income and, finally, (d) interest payments on public debt.

Based on the approach suggested among others by Atkinson and van den Noord (2001) ([2]), Table III.3 presents a classification of public spending into these four categories between 1970 and 2000, as follows ([3]):

(a) *Basic functions of the State and pure public goods*: these comprise public spending on defence, public order and general administrative costs (including costs for running the justice and the operational costs of the central bank). Spending is relatively low (around 6 % of GDP) and tends to be stable over time, with a slight decrease in several countries in the last years, due to a rationalisation of general services of the State that determined an increase in efficiency. It is worth noting

([2]) See also Heitger (2001) and Gwaltrey et al. (1998).

([3]) Whereas in the case of Section III.2 data came from a unique source (the national accounts), for the functional distribution of public expenditures different sources are needed. This implies that there could be some overlapping in the classification. Data relative to allocation programmes (a) and (b) come from the Eurostat COFOG database used in Table III.2 for 2000 and on the OECD classification of government outlays by function and type for the previous years. The sources for redistribution programmes (c) are Eurostat social protection database (Esspros, European system of integrated social protection statistics) and OECD social expenditure database (SOCEX). Data on interest payments (d) are from the national accounts (AMECO database).

Table III.2

The functional distribution of public spending in 2000 (as % of GDP)

	B	D	EL	IRL	L	NL	A	P ([1])	FIN	S ([1])
General public services	3.5	0.5	2.8	2.5	4.3	4.6	4.5	3.2	3.3	6.2
Defence	1.2	1.2	3.3	0.8	0.3	1.5	1.0	1.7	1.5	2.4
Public order and safety	1.6	1.6	1.1	1.4	0.9	1.4	1.5	2.0	1.4	1.4
Economic affairs	4.7	4.2	0.2	6.9	4.4	4.4	4.4	5.8	4.8	4.8
Environment protection	0.7	0.7	0.5	0.0	1.1	0.7	0.3	0.7	0.3	0.2
Housing and community amenities	0.4	1.1	0.2	1.9	1.1	1.5	0.9	1.0	0.8	1.2
Health	6.4	6.3	3.9	5.4	4.2	4.0	8.0	6.3	5.8	6.8
Recreation, culture and religion	1.0	0.7	0.4	0.5	1.6	1.0	0.9	1.2	1.1	1.9
Education	6.0	4.3	4.2	4.0	4.6	4.7	6.0	6.9	6.3	7.5

([1]) Data refer to 1999.

Source: Eurostat.

that even in the years of growing public expenditure (e.g. between 1980 and 1985), resources allocated to this category did not substantially change.

(b) *Programmes that improve the allocation of resources (dubbed here as other core economic expenditures)*: these consist of education expenditures, economic affairs, R & D and healthcare ([1]). Expenditures on these items accounted for between 10 % and 15 % of GDP in 2000. They increased slightly during the last 20 years especially in those countries that had low levels of intervention at the beginning of the 1980s: it is the case of Portugal, Belgium and Greece that have witnessed an increase of some five percentage points of GDP ([2]).

(c) *Public spending to redistribute income*: it consists of social protection expenditures and accounts for the greatest share of public expenditures. While there is a very wide diversity in spending levels across countries, there has been an upward trend in most EU countries until the mid-1990s, with a deflection in the most recent years.

(d) *Interest payments on public debt*: these are classified separately as they cannot be attributed to a specific goal of the State. They accounted for something less than 3 % of GDP at the beginning of 1980s for many European countries, increased during the 1980s and the beginning of the 1990s, then fell strongly in the run-up to EMU.

The interesting feature of this approach is that it breaks down public spending into programmes that essentially pursue 'economic' objectives (i.e. basic government functions and other efficiency-oriented expenditure) and programmes where the main policy objective is redistribution. The main result is that the size of the 'core' functions of public expenditure is fairly similar across European countries, between 14 % and 18 % of GDP. It shows that these levels of expenditure allow to accomplish the basic functions and cope with market failures in R & D, education and health. This confirms the results of similar analyses: for example Gwartney, Holcombe and Lawson (1998) reached a similar estimate of almost 14 % of GDP for the United States in 1992 ([3]).

Graph III.7 presents the long-term evolution (between the 1980s and 1990s) in allocation-oriented (categories (a) and (b)) against redistribution-oriented expenditure (category (c)). The initial (final) point of each arrow in the graph represents the start (end) of the period. The graph shows that there is a converging level of public spending across Member States allocation-oriented activities: countries that had the highest level of spending on these features (Sweden, Denmark, the UK and to a certain extent Germany) reduced their intervention, via a shift to more regulatory activity and/or a more efficient use of resources. The other countries increased their spending: there is some evidence of sustained growth of spending in countries which have enjoyed more rapid increase of GDP per capita, in a sort of catching-up process.

On the redistribution side, all countries moved towards a higher level of spending, with the strongest increase registered in those countries with the lowest levels at the beginning of the 1980s (see also Graph III.7).

Finally, it is noteworthy that in most countries, overall public spending increased on both programmes that pursue 'economic' objectives and programmes that are mainly redistribution-oriented, with little evidence of substitution between the two main functions.

3.2. A closer look at spending on social protection

3.2.1. Overall trends

The previous two sections clearly show that a substantial proportion in the growth in the size of government spending over the past three decade concerns social protection. According to Eurostat, social expenditure in EU countries accounted at the end of 1990s for over 26 % of GDP, two and half times its level in 1960 ([4]). It is also over 10 percentage points of GDP above spending levels in the United States and Japan, a divergence which has persisted at a more or less stable level since 1980. This difference arises not only because of the level of public-pension transfers in the EU, but also thanks to a complex set of welfare programmes that includes healthcare, labour market policies, family allowances, etc. ([5]).

([1]) This follows Bleneay, Kneller and Gemmel (1999) that include health in the group of 'productive' expenditures.
([2]) Demographic changes appear to play an important role, as public spending on these items has increased most in countries where there has been largest increase in population aged 55 and above, and in countries which had a strong rise in school-age population.
([3]) See also Atkinson and van den Noord (2001) and Heitger (2001).
([4]) Tanzi and Schuknecht (2000).
([5]) What distinguishes EU Member States from the United States and Japan is essentially the less intensive use of private provision of social services and the higher coverage of social programmes. Healthcare and long-term care providers are also frequently private entities in Europe; the important difference is whether such services are paid for by the users or through social programmes.

Table III.3

Government spending by function (as % of GDP)

		Basic goods	Other core functions	Redistribution	Interest payments			Basic goods	Other core functions	Redistribution	Interest payments
B	1980	6.8	8.8	24.2	6.6	I	1980	5.3	8.3	18.4	6.1
	1985	6.5	11.4	27.0	11.1		1985	6.5	8.9	21.3	8.9
	1990	5.4	13.1	24.6	11.8		1990	6.5	9.6	23.9	10.5
	1995	5.8	14.0	25.1	9.2		1995	6.2	9.1	23.8	11.5
	2000	6.3	13.9	26.3	6.8		2000	n.a.	n.a.	24.4	6.5
DK	1980	5.4	13.3	28.0	3.8	NL	1980	n.a.	n.a.	27.3	3.7
	1985	5.0	12.4	27.0	9.6		1985	n.a.	n.a.	27.4	6.1
	1990	5.0	12.4	27.9	7.3		1990	n.a.	n.a.	27.9	5.9
	1995	4.4	12.0	31.3	6.4		1995	4.6	11.2	25.9	5.9
	2000	n.a.	n.a.	28.6	4.2		2000	4.8	11.3	26.4	3.9
D	1980	6.4	11.0	20.3	2.0	A	1980	5.0	9.1	23.3	2.4
	1985	6.6	11.4	21.0	3.2		1985	5.2	9.6	25.1	3.5
	1990	5.5	9.9	24.2	2.8		1990	4.6	9.5	25.0	4.1
	1995	6.1	11.1	26.7	3.7		1995	7.5	10.3	27.9	4.4
	2000	3.3	10.0	28.6	3.4		2000	7.0	12.6	27.7	3.5
EL	1980	9.6	3.8	11.5	1.7	P	1980	n.a.	n.a.	11.6	2.6
	1985	11.8	4.8	17.9	4.3		1985	5.3	7.6	12.3	7.5
	1990	11.3	5.4	21.6	8.7		1990	5.8	8.5	13.8	7.9
	1995	8.4	7.5	21.5	11.0		1995	6.8	10.7	17.5	6.3
	2000	7.2	8.3	24.7	7.2		2000	6.9	13.0	19.9	3.1
E	1980	n.a.	n.a.	15.8	0.4	FIN	1980	4.4	10.1	18.5	1.0
	1985	4.9	7.0	18.0	1.9		1985	4.7	11.1	22.9	1.8
	1990	4.8	7.7	19.3	3.8		1990	4.5	11.6	24.8	1.4
	1995	5.6	9.1	20.9	5.2		1995	6.3	12.5	31.2	4.0
	2000	n.a.	n.a.	19.5	3.3		2000	6.2	11.8	26.0	2.8
F	1980	6.4	9.7	21.1	1.4	S	1980	6.9	14.7	29.0	3.9
	1985	6.6	9.7	26.6	2.8		1985	6.5	14.7	30.2	8.1
	1990	6.0	9.1	26.5	2.9		1990	6.6	13.6	31.0	4.8
	1995	6.6	9.8	29.0	3.8		1995	6.5	11.8	33.0	6.9
	2000	n.a.	n.a.	28.8	3.3		2000	n.a.	n.a.	32.3	4.3
IRL	1980	n.a.	n.a.	16.9	6.4	UK	1980	7.6	10.8	18.2	4.9
	1985	n.a.	n.a.	22.0	9.9		1985	7.7	10.2	21.3	5.2
	1990	n.a.	n.a.	19.0	7.9		1990	7.0	10.2	21.6	3.8
	1995	6.7	22.2	18.9	5.4		1995	6.4	11.3	25.8	3.7
	2000	4.7	16.3	14.7	2.1		2000	n.a.	n.a.	25.8	2.9

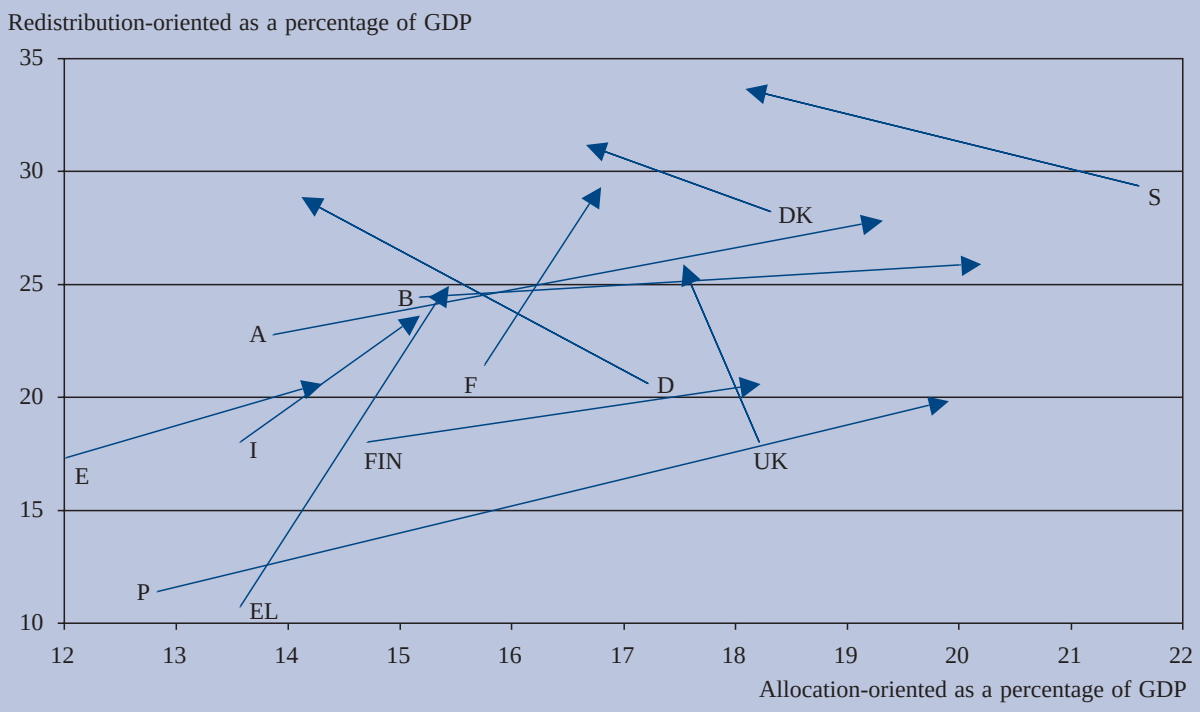
NB: The reference year is the one indicated in the table or the closest available.

Source: OECD, Eurostat and AMECO.

Table III.4 breaks down the changes in public spending on social protection as a share of GDP into four periods. At the beginning of the 1980s, social protection expenditures in five Member States were around 20 % of GDP or less and no country spent more than 30 % of GDP. By the early 1990s, only two Member States spent less than 20 % of GDP on social protection whereas four countries were around or above 30 % of GDP. The upsurge in spending was due to increased generosity in welfare schemes but was also the effect of the economic slowdown in early 1990s, with spending in unemployment benefits and pre-retirement schemes that increased in several countries. This trend has been partially reversed in recent years, as shown by the latest available figures.

The pattern of spending has differed considerably between Member States, often due to institutional factors. Nevertheless, as Graph III.8 shows, there seems to

Graph III.7: **The dynamics of allocation-oriented and redistribution-oriented expenditures between the 1980s and 1990s (as % of GDP)**



Note: For the missing countries, data were not available over the two decades. For B, D, EL, A, P, FIN the final date is 2000; for the other countries it is 1995.
Source: Commission services.

be some long-term convergence. When the change of the social expenditure over the last 20 years is plotted against the starting level of expenditure in 1980, it appears that the biggest increase over that period has taken place in countries which had the least developed social welfare systems in 1980 (i.e. Portugal, Greece and to a lesser extent Spain), as the coverage and level of welfare benefits was extended in line with higher per-capita income. At the other end of the spectrum, several countries with the highest level of spending on social protection in 1980 actually moved into a consolidation phase and lowered spending as a share of GDP. Interestingly, demographic trends appear to have had a very weak influence on long-term trend in social expenditure.

The evolution in the size of the welfare state has gone hand in hand with a change in its composition. The welfare state is in fact a composite set of programmes with different aims: sustain the worker when some event linked with labour activity arises (unemployment), provide an income to retired and old people, supply all the citizens with some basic services (healthcare, family allowances, etc.). The weight that each EU country ascribes to these different functions depends on many factors, including the composition of the population by age, the female participation in the labour market and the level of structural unemployment.

On average, EU countries devoted around 40 % of their welfare spending to pensions (old age and survivor). In the case of less mature welfare systems, the share of social spending devoted to pensions is higher, while spending on other social protection programmes is below average. In the case of countries sharing the so-called 'Mediterranean model' (see Ferrera, 1996), pensions explain around two thirds of the total social expenditure in Italy, more than half in Greece and a bit less than half in Spain. By contrast, in the universal welfare state, such as that in the Nordic countries, the share of pensions is less significant (see Table III.5).

These unbalances could have important consequences. The obvious one is on the dynamic of total government expenditure given the social and political resistance to

Table III.4

The size of the welfare state in European countries ([1]) (% of GDP)

	1980–84	1985–89	1990–94	1995–99	Difference end 1990s - beginning 1980s
B	27.8	26.4	26.3	26.6	– 1.2
DK	28.8	27.6	29.9	29.8	1.0
D	28.3	27.3	26.1	28.4	0.1
EL	11.6	14.5	21.0	22.8	11.2
E	18.2	18.8	21.5	20.6	2.4
F	25.9	26.8	27.9	29.1	3.2
IRL	21.6	21.0	18.8	16.0	– 5.6
I	20.3	21.6	24.6	24.2	3.9
L	25.5	21.7	22.4	22.1	– 3.4
NL	29.3	30.2	30.9	27.7	– 1.6
A	24.1	25.1	27.1	28.0	3.9
P	12.6	13.2	16.1	19.2	6.6
FIN	20.1	23.3	30.5	28.5	8.4
S	29.8	30.4	36.3	33.3	3.5
UK	22.6	22.2	25.7	26.5	3.9
Unweighted average	21.3	22.6	25.7	25.5	
Standard deviation	5.0	4.3	5.2	4.6	
Coefficient of variation	0.2	0.2	0.2	0.2	

([1]) It includes the following programmes: sickness/healthcare, invalidity, old age, survivors, family/children allowances, unemployment transfers, housing, social exclusion.

Source: Eurostat, OECD.

Graph III.8: **The dynamics of social expenditure and its starting point**

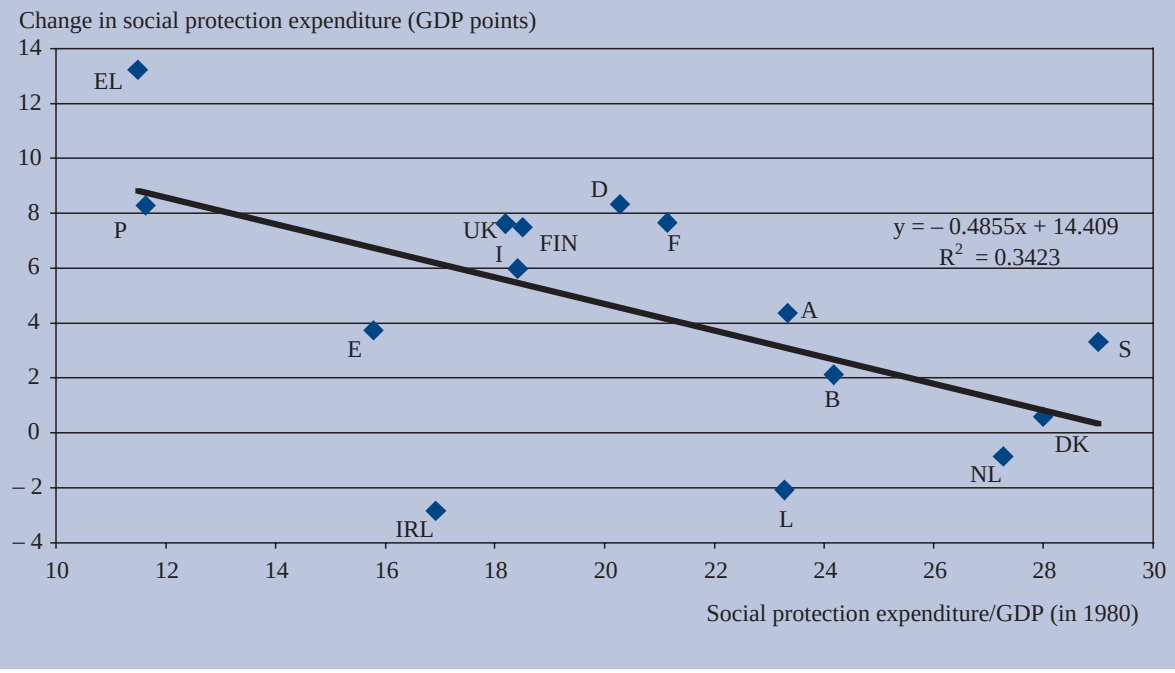


Table III.5

The composition of welfare state in European countries (as a percentage of total social expenditure)

		Pensions	Others
B	First half 1980s	37.4	62.6
	Second half 1990s	39.6	60.4
DK	First half 1980s	35.2	64.8
	Second half 1990s	:	:
D	First half 1980s	46.1	53.9
	Second half 1990s	39.4	60.6
EL	First half 1980s	51.4	48.6
	Second half 1990s	52.2	47.8
E	First half 1980s	41.3	58.7
	Second half 1990s	44.8	55.2
F	First half 1980s	44.5	55.5
	Second half 1990s	42.1	58
IRL	First half 1980s	32.5	67.5
	Second half 1990s	21.6	78.4
I	First half 1980s	51.2	48.7
	Second half 1990s	62.3	37.7
L	First half 1980s	42.8	57.1
	Second half 1990s	41.2	58.8
NL	First half 1980s	26.7	73.2
	Second half 1990s	28.7	71.3
A	First half 1980s	50.5	49.5
	Second half 1990s	47.8	52.2
P	First half 1980s	36.3	63.6
	Second half 1990s	42.2	57.8
FIN	First half 1980s	30.8	69.3
	Second half 1990s	29.3	70.7
S	First half 1980s	25.9	74.1
	Second half 1990s	26.2	73.9
UK	First half 1980s	37.1	62.9
	Second half 1990s	:	:

Source: OECD, Eurostat.

reduce pension expenditure. The other important consequence is that there could be a lack of resources for the other functions of the welfare state, such as those that can enhance labour market efficiency or reduce poverty ([1]).

The trends and the economic implications of pension expenditure have been already analysed in a number of European Commission's reports ([2]) and not repeated here. In what follows, two other important categories of social protection expenditures are briefly analysed, namely healthcare and active labour market policies.

3.2.2. Healthcare

Developments in the health sector in Member States have received increased attention in recent years. This is because the health sector represents a larger share of the economy. Moreover, expenditure on healthcare has shown a long-term trend of increase — this is of concern for public budgets as over three quarters of total expenditure on healthcare in the EU is public. Finally, there are fears that the public spending on healthcare is set to increase markedly in the coming decades as populations age in the EU.

In the second half of the 20th century, public expenditure on health services grew rapidly. Up until the late 1980s beginning 1990s, the growth in health expenditure was quite rapid reflecting a number of different factors. These include: increased coverage of public provision or public health insurance; a long-run tendency of populations to increase consumption of healthcare in line with increased prosperity; supply-side factors such as increased use of new and more expensive technology; and medical price inflation that outstripped general inflation.

However, the rate of growth of health expenditures did start to slow down, showing some signs of stabilisation in the 1990s. In some Member States, total expenditure on health even fell as a share of GDP in the late 1990s. Whilst in some part this reflects the economic upswing in the latter part of the 1990s, expenditure data also indicate some genuine stabilisation in the dynamics of expenditure.

In recent decades, the average public share in total health expenditure in the EU has been relatively stable at just over three quarters. However, the EU average conceals varying trends across Member States in the 1990s. For example, in Italy, there has been a fall in the public share of around 10 percentage points between 1990 and 1998. The public share has also fallen notably in Greece (throughout the 1990s) and in the Netherlands (in the second half of the 1990s). On the other hand, the public share of expenditure in Portugal has been rising since a trough in 1992.

To an important extent, the stabilisation of public expenditure on healthcare reflects cost-containment efforts pursued by Member States. In fact, cost containment has been a key element of health policy since the 1970s. In particular, policy measures in the 1990s have emphasised budget shifting (towards private

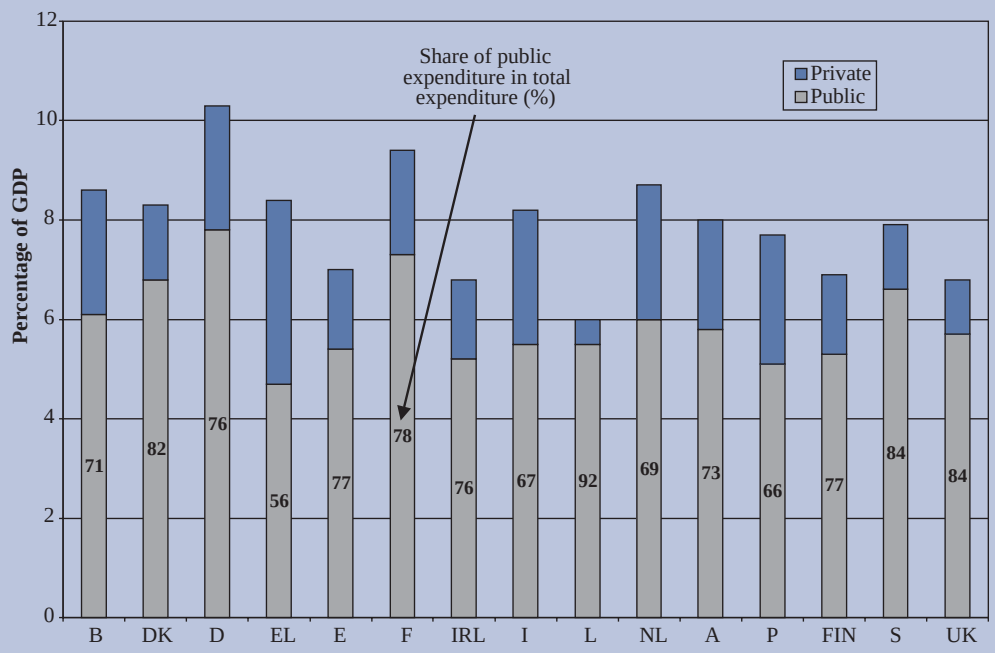
([1]) With reference to Italy, Boeri and Perotti (2001) argue that pensions have poor redistributive properties and crowd out resources that can be used to fight poverty.

([2]) See Part IV in *Public finances in EMU — 2001* (European Commission, 2001a) and Chapter 5 of *The EU economy 2001 review* (European Commission, 2001b).

expenditure), rationing, and evidence-based purchasing decisions. Indirect control mechanisms such as assessment of health technology, and the introduction of management and information systems, have also been used increasingly in the 1990s. While these measures appear to have been relatively successful in containing costs, there is insufficient information to assess their long-term effects. For example, macro-level policy decisions can often have important repercussions for the micro-level efficiency of healthcare provision. Finally, budget shifting measures (i.e. through increased use of co-payment and out-of-pocket funding) in some Member States have had implications for the public–private mix in health expenditure.

Graph III.9 reveals considerable variation between Member States in terms of overall expenditure levels, as well as the public share of total expenditure on healthcare. Total expenditure on healthcare as a share of GDP in Germany (at 10.6 % of GDP) is almost double that in Luxembourg (less than 6 %). Moreover, the public share in expenditure varies from 57 % in Greece (where out-of-pocket payments are an important source of healthcare funding) to 92 % in Luxembourg. To some extent, the large differences in expenditure levels reflect important differences in the organisation of healthcare systems across Member States. Health systems are by their very nature extremely complex, meaning that even small differences in organisational structure between Member States can lead to vastly different outcomes in terms of expenditure pressures.

Graph III.9: **Total and public expenditure on healthcare in 1998 (% of GDP)**



3.2.3. Active labour market policies

Active labour market policies (ALMPs) constitute an integrated part of both national labour market policies in the Union and in the European employment strategy in the fight against high and persistent unemployment. They usually cover a great number of different activities, such as job-search assistance, training programmes, and employment subsidies (either to the private sector, like incentives to business start-ups, or as direct job creation measures in the public sector).

Generally, Member States have advocated an increased emphasis on active measures as opposed to passive handouts in recent years. However, this strong political endorsement has not been followed by a marked increase in public spending on ALMPs (measured as a percentage of GDP). On average, Member States spent

around 1 % of GDP on ALMPs in 1985–2000 without evident increases. Since total spending in labour market policies decreased between 1985 and 2000, the share spent on active polices increased from 29 % to 40 %, albeit with marked differences across Member States, see Table III.6.

Table III.6

Spending on unemployment and on ALMPs 1985–2000

	Total spending (% of GDP)				Spending on ALMPs (% of GDP)				Spending on ALMPs (% of total spending)			
	1985	1989	1993	2000	1985	1989	1993	2000	1985	1989	1993	2000
B	4.7	3.9	4.2	3.7	1.3	1.3	1.2	1.3	28	32	29	34
DK	5.4	5.5	7.1	4.5	1.1	1.1	1.7	1.5	21	21	25	34
D	2.2	2.3	4.1	3.1	0.8	1.0	1.6	1.2	36	46	39	40
EL	0.5	0.8	0.7	0.8	0.2	0.4	0.3	0.4	33	48	43	43
E	3.1	3.0	3.8	2.2	0.3	0.9	0.5	0.9	11	28	13	40
F	3.0	2.6	3.3	3.2	0.7	0.7	1.2	1.3	22	28	38	41
IRL	4.9	4.0	4.2	3.2	1.5	1.4	1.4	1.5	30	34	34	48
I	na	na	2.5	na	na	na	1.4	na	na	na	54	na
L	1.4	0.9	0.8	0.9	0.5	0.3	0.2	0.3	35	31	21	30
NL	4.6	3.9	4.3	3.7	1.2	1.3	1.5	1.6	27	34	35	43
A	1.2	1.2	1.7	1.6	0.3	0.3	0.3	0.5	23	23	18	31
P	0.7	0.7	1.7	1.7	0.3	0.5	0.8	0.8	47	67	48	49
FIN	2.2	2.1	6.6	3.3	0.9	1.0	1.7	1.1	41	46	26	33
S	3.0	2.2	5.7	2.7	2.1	1.5	2.9	1.4	71	71	52	51
UK	2.9	1.6	2.2	0.8	0.8	0.7	0.6	0.3	26	44	26	40
EU15	**2.8**	**2.4**	**3.4**	**2.6**	**0.8**	**0.9**	**1.2**	**1.0**	29	39	36	40

NB: The OECD's labour market programme (LMP) database includes public outlays for unemployment. However, it does not include general macroeconomic policies, such as a general payroll-tax reduction. It distinguishes between passive spending (i.e. unemployment benefit + early retirement schemes for labour market reasons) and active spending.

Source: Martin and Grubb (2001) and Commission services' calculations.

Intuitively, the principle of an increased emphasis on active measures rather than passive handouts seem appropriate. Why should public funds be used as mere income support, when they could improve both an individual's capacity, and the functioning of the labour market in general? However, the evidence on the effects of different types of ALMPs is mixed, both in terms of raising the employment (and/or income) prospects for the participants and of improving the functioning of the labour market ([1]).

Based on the limited evidence available today, for the unemployed person, it seems that subsidised employment programmes are most successful in terms of the share in regular jobs after the programme period. This might be explained partly by the relatively short-term approach in most evaluations available. The evaluations suggest that some programmes work better than others do, and for some groups of the labour force more than others. In general, it seems as if broad-targeted programmes are not very effective.

For the economy in general and the labour market in particular, the net effect of ALMPs is difficult to establish because it depends on the specific design of the programme. In principle, ALMPs contribute to raising the human capital of the programme participants and they improve the matching process. They also appear to maintain the unemployed person's attachment to the regular labour market and they might raise the participation rate in the labour force. However, if they are badly designed, can have several negative side effects, such as creating disincentives to work for programme participants, which contribute to lower job-search intensity and a higher reservation wage. There is then the need for a strict control of specific design, to ensure their effectiveness and an efficient use of public spending.

([1]) See Martin (1998).

It is important that the ALMPs meet the needs of the labour market, which might require further efforts to *inter alia* limit the scale of individual programmes, target them to those with a very weak position in the labour market, and encourage a systematic evaluation. The current impact evaluation of the European employment strategy is important in this respect, as it is has triggered national impact evaluation studies by all Member States: so far only a few have a tradition of undertaking rigorous evaluations of ALMPs. Having said that, properly designed ALMPs are likely to continue to be a crucial element in the fight against long-term unemployment.

4. The composition of public expenditure: a synthetic indicator

4.1. The debate on the 'quality' of public spending

At EU level, growing attention has been paid in recent years to the quality of government spending. In part, this debate has been driven by a desire to ensure that essential budgetary consolidation be compatible with broader goals of employment creation and growth: in brief, reaching the targets of the SGP should not be achieved at the expense of the most 'productive' public expenditures ([1]). There has also been a realisation that Member States can learn a great deal from the experiences of other countries, and that there are considerable benefits in peer review, where best practices are identified and progress towards quantifiable policy goals are regularly assessed.

At the request of the Lisbon European Council of March 2000, the Commission and the Ecofin Council prepared a joint report on the contribution of public finances to growth and employment (6997/01) which was examined by the Stockholm European Council of March 2001. This joint report identified channels through which public expenditures can enhance growth and employment, for example via the accumulation of productive factors (investment in physical and human capital, R & D and innovation) and by providing the right incentives to work through the tax and benefit system.

The BEPGs formulate several general recommendations to Member States to achieve a better composition of public expenditures. In particular, it is recommended to redirect public expenditure towards physical and human capital accumulation, ensure that unemployment benefits systems enhance employability and job opportunities, and allocate adequate public funding for R & D ([2]).

The debate on public expenditure and growth also involves social spending that, while coping with its main objectives of reducing inequality and increasing social cohesion, should be also growth-enhancing. In the specific field of labour-market policies, the employment guidelines policies underline the need for a move from passive to active measures so as to promote labour participation and an easier transition from unemployment to employment. Particular attention is devoted to pension expenditures. The Commission publication *EU employment and social policy 1999–2001* stresses the importance of long-term financial sustainability of pension schemes and argues that pension expenditure should be kept under control to avoid in the future an unbearable weight on public expenditure that can entail a distortionary level of taxation.

The code of conduct on the content and format of stability and convergence programmes asks Member States to submit in the updates of the programme those measures aimed at improving the quality of public finances ([3]).

Parallel to the institutional debate, a large economic literature has explored the links between the composition of public spending and economic growth, employment, etc. The main empirical findings of the literature are summarised in Table III.7.

([1]) There is a growing literature on the composition of budgetary retrenchment and the way it affects growth and durability of the consolidation. For a survey, see European Commission (2000) also the joint Commission/ Council report the Stockholm European Council of March 2000 on the contribution of public finances to growth and employment (European Commission, 2001d) .

([2]) See Part VII.2.

([3]) See Part II, Chapter 1 of this report.

Table III.7

Main findings in macroeconomic links between public expenditure items and economic goals: selected studies

Expenditure items	Main findings
Public investment	• Aschauer (1989): **strong positive** effect on economic growth in G7 countries. • Easterly and Rebelo (1993): **positive** impact on growth depends on the quality of public investment. Positive correlation only for transport and communication investments. • De la Fuente (1997): **non-linear effects**. Positive effects on growth for levels up until 2 % of GDP. • Heitger (2001): **positive impact** on the accumulation physical capital. Current levels of public investment do not entail crowding out effects in OECD countries.
R & D	• Guellec and van Pottelsbergh de la Potterie (1997): **increasing positive impact** of public funded R & D on private R & D up to a ceiling, after which public spending crowds out private R & D. • David, Hall and Toole (2000): public funded R & D can **displace private sector investment**.
Education	• Wolf and Gittleman (1993): **positive** effect on economic growth only for investment in tertiary education. • De la Fuente and Domenech (2000): **positive** effect of schooling on total factor productivity in OECD countries. • Barro (2000): **positive** and significant impact of public expenditure on long-run economic growth. • Bleaney and Gemmel (2001): **mixed** effect of variation of public spending on growth during 1990s in EU countries: positive in DK, F, UK; negative in NL, S. • Buysse (2002): **positive** effect of public expenditure in OECD countries on productivity growth, after controlling for demographic differences.
Healthcare	• Bleaney, Kneller and Gemmel (2001): **positive** and significant effect on growth in OECD countries for the period 1970–94.
ALMPs	• Martin (1998): **mixed results** depending on the type and the design of the policy. Training policies are generally more effective at reducing unemployment.
Social expenditures	• Korpi (1985): significant **negative** effect. • McCallum and Blais (1987): **negative non-linear effect** on growth. Higher level of expenditure reduces savings and investments. • Hansson and Henrekson (1994): **no significant positive** effect in OECD countries for the period 1970–87. • Persson and Tabellini (1994): **significant positive** effect on GDP growth in OECD countries during the period 1960–85. • Feldstein (1976): **negative** effect of pension transfers in PAYG systems on national savings and private investments. • De la Fuente (1997): **no significant** effect on growth.
Public employment	• Algan, Cahuc and Zylberberg (2002): **negative** effect on labour-market performance. Public employment crowds out private employment when the public sector offers attractive wages and/or benefits.
Unemployment benefits	• Acemoglu and Shimer (1999): moderate unemployment benefits **raise output** by improving the composition of jobs. • Millard and Mortensen (1997): **negative** effect of increasing unemployment benefits on unemployment duration.

In general, there is no consensus as 'evidence is found to admit no conclusion on whether the relation is positive, negative or non-existent' (Agell, Lindh and Ohlsson, 1997). Within certain limits, public spending may have a positive impact on growth, but this trend reverses once expenditure exceeds a maximum level (Mc Mullan, 1978, Folster and Henrekson, 1998). This inverted-U shape holds for many spending items, but the reversal point differs across expenditure items.

Pure public goods — that include national defence and those general services as administration, legislation and regulation (Atkinson and van den Noord, 2001) — render the production of goods and services by the private sector more efficient and thus always have a positive impact on economic activity (Samuelson, 1954).

Other kinds of goods and services supplied by the public sector can also enhance the efficiency of the economy. In endogenous growth models (Lucas, 1988, and Romer, 1990), growth is driven by factor accumulation, and thus any positive impact of the investment in human capital, technology or machines helps long-run growth. The rea-

son for having public provision of such goods is that there could be market failures which would result in a level of investments below the social optimum.

Lamo and Strauch (2002) review the main findings of the empirical literature and find that public infrastructure investment, education and R & D investment have a positive effect on growth, even if it the magnitude of the impact is questionable. Differences in empirical estimations show that the specific composition within each spending item is important: for example, in the field of infrastructure investment, road construction and basic infrastructure provision in transportation and communication seem to have the most robust effect on growth. Education expenditures have higher return (both private and social) if focused on primary education.

The debate on the relations between social expenditure and growth and employment is even more controversial. For instance, Lindbeck (1999) and Atkinson (1999) take opposite views: while the former emphasises the widespread negative effects on efficiency of European welfare states, the latter in reviewing the empirical literature, concludes that there is still no clear evidence of a negative impact.

Again, the general finding that, within certain limits, public spending can have positive effects on efficiency seems to apply also to social protection programmes. Buti, Franco and Pench (1999) argue that certain welfare expenditures can help achieve a better allocation of production factors. For instance, Layard, Nickell and Jackman (1991) claim that well-designed unemployment benefits can increase the efficiency of the labour market by allowing a better match between job-seekers and available vacancies. However, an excess of protection can lead to labour-market rigidity with negative implications on unemployment. A displacement effect can occur in the case of high pension transfers, that reduce savings and private-sector accumulation, with an overall negative effect on growth.

All in all, the economic literature gives a nuanced message: the effect of public spending on growth and employment varies according to the type of expenditure; however, while the effect is likely to be positive if public spending remains moderate, it could be expected to decrease rapidly and may even become negative if expenditure exceeds certain levels.

4.2. The challenge of developing synthetic indicators of the composition of public expenditure

In-depth policy debates on the quality of public spending have been held back by a lack of consensus on its precise definition and indicators which are easy to compute and comparable across countries. This chapter is a first attempt at developing quantified synthetic indicators of the composition of public expenditure ([1]). Essentially, the suggested indicators are based on an analysis as to whether the composition of public expenditure is geared towards policies that are generally considered to be efficiency-enhancing and thereby improving growth and employment, in line with the goals of the Lisbon strategy. Like all synthetic indicators, considerable caution should be exercised when interpreting results. A number of caveats are worth stressing at the outset:

- Assumptions have been made as to whether public spending on a particular good or service positively contribute to 'efficiency'. While the analysis draws upon links identified in the economic literature between particular categories of public spending and growth and employment, these assumptions involve an inevitable degree of arbitrariness since empirical results are not univocal (see above).
- The composition of public spending is solely assessed in terms of attaining economic policy goals rather than in terms of maximising overall welfare ([2]), in line with the approach proposed by Atkinson (1995).
- The composition of public spending is gauged on the basis of the level of financial resources devoted to each particular good or service (input). However, in measuring the quality of spending programmes account should be taken of the intrinsic efficiency of the expenditure programme in terms of reaching its objectives (output). Clearly, comparable cross-country evaluations of this kind are much more difficult to conduct given the difficulty in defining the output of several public programmes.

([1]) For more details on the construction of the indicators, see Montanino (2002).
([2]) These difficulties are evident in Ferrera (1996b) who presents four different welfare states models of EU countries, that reflect social preferences and hence the quality of which cannot be judged by efficiency considerations alone.

- The proposed approach does not take into account the differences in the design of each policy. It is well-known for example that the same share of GDP devoted to active labour-market policies can have a very different impact on the labour market depending on the quality of each programme ([1]). It is then mainly a matter of microeconomic evaluation, that asks for different instruments (microeconometrics) and kind of data (individual data). This approach is therefore a complement rather than a substitute for micro-evaluations.

- Indicators focusing exclusively on public spending do not take into account the important interactions (either as complements or substitutes) between public spending and the regulatory activity of the State ([2]). Low public spending on a particular item does not necessarily mean that there is little government intervention in a particular policy domain. It may imply that the same goal is pursued through different policy means. Moreover, the efficiency of certain public expenditures can be influenced by the existence of an appropriate regulatory framework.

- Changes in spending can also be the effect of exogenous trends as variation in income inequality, structural unemployment or demographic factors. The impact on quality could then be at least in part the result of such exogenous trends rather than specific government actions.

- The benchmark against which composition is assessed is the same for each country. This is an obvious limitation because countries may have different 'optimal' levels of public-spending programmes. The clearest example is that of in catching-up countries where the optimal level of infrastructural investment is probably higher than that in more mature economies. Whilst defining country-specific benchmarks for each expenditure item is unfeasible, this limitation should nonetheless be kept in mind when doing cross-country comparisons.

- Finally, the indicators represent a snapshot on the composition of public spending at a given point in time. As such, they do not capture the disequilibria encompassed by the existing entitlements which will arise in the future. For instance, countries may have relatively low levels of age-related spending but high implicit liabilities which will show up in the future ([3]).

In the light of the above caveats, to draw policy conclusions, the approach proposed here needs to be complemented with microeconomic analyses that take into account the specific aims of spending programmes, their design and linkages with other policy instruments.

4.3. Developing an indicator of the composition of public spending

4.3.1. Data requirements

A first step in developing a synthetic indicator is to obtain a comparable picture of the composition of public expenditures across Member States. To do this, a complete functional classification of total expenditure would be necessary but, as already discussed in part III.3, the lack of availability of these data for all EU countries makes this difficult. The only possible alternative is to develop a hybrid classification, that uses both national accounts and functional classification. However, it implies some double counting, since several functional items cannot be clearly addressed in national accounts (for example, education expenditures are a mix of collective consumption, compensation of employees and public investment). As this problem cannot be avoided at this stage, in the following analysis, all efforts have been made to limit the double counting to the minimum.

Tables III.8 decomposes overall public spending at the beginning and at the end of the 1990s into eleven separate components ([4]): (1) collective consumption, (2) compensation of employees, (3) public investment, (4) research and development, (5) education, (6) healthcare, (7) active labour market policies, (8) unemployment benefits, (9) old-age and survivor transfers, (10) other social protection expenditures (housing, maternity, family allowances), and (11) interest payments.

([1]) See for example Martin (1998) for an overall evaluation of labour-market programmes.
([2]) See Buti, Pench and Sestito (1999).
([3]) See the analysis of pension and other age-related spending in Part I and II.
([4]) The data in Table III.8 usually refer to 1990 and 1999, but for some expenditure items they refer to 1998. All variables are expressed as a share of GDP. As spending on unemployment benefits is influenced by the business cycle, they have been corrected by the cycle. Luxembourg is not covered due to lack of data.

Table III.8

Composition of public expenditures in Member States (% of GDP)

Early 1990s											
	Educ.	Health	ALMP	R & D	Invest.	Other social prot.	Un. ben. (1)	Compens. of empl.	Coll. cons.	Old age and surv.	Int. pay.
B	5.0	6.1	1.2	0.6	1.3	4.7	3.4	11.1	7.6	10.5	11.8
DK	5.5	7.0	1.1	0.8	1.6	7.8	4.1	17.7	8.2	10.2	7.3
D	3.8	6.7	1.0	1.0	2.3	4.0	1.5	9.7	8.7	11.2	2.8
EL	3.0	4.7	0.4	0.2	2.8	4.1	0.9	12.5	9.4	11.3	8.7
E	3.0	5.2	0.8	0.5	4.9	2.0	3.5	10.7	9.4	8.5	3.8
F	4.7	6.6	0.8	1.4	3.5	5.2	2.3	13.0	9.4	11.3	2.9
IRL	5.6	4.8	1.4	0.3	2.0	3.7	2.3	9.8	6.6	5.4	7.9
I	4.9	6.4	0.7	0.8	3.3	2.9	0.6	12.6	7.9	13.8	10.5
NL	6.0	5.7	1.4	0.8	2.0	8.0	2.1	9.3	11.9	11.6	5.9
A	3.9	5.2	0.3	0.6	3.2	5.0	1.2	11.9	7.6	13.0	4.1
P	4.5	4.1	0.6	0.4	3.2	3.4	0.4	11.8	7.9	5.8	7.9
FIN	5.3	6.4	0.6	1.0	3.7	7.7	1.1	14.4	7.4	8.2	1.4
S	5.3	7.6	1.7	1.3	2.3	10.3	3.8	18.1	8.2	12.8	4.8
UK	4.2	5.1	0.6	0.9	2.3	5.5	1.3	11.5	9.0	9.9	3.8
Un-weighted average	4.5	5.8	1.0	0.7	2.9	5.3	2.0	12.3	8.5	10.3	6.0
Standard deviation	1.0	0.9	0.7	0.3	1.0	2.2	1.2	2.6	1.2	2.3	3.0

Late 1990s											
	Educ.	Health	ALMP	R & D	Invest.	Other social prot.	Un. ben. (1)	Compens. of empl.	Coll. cons.	Old age and surv.	Int. pay.
B	5.2	6.1	1.1	0.6	1.8	5.2	2.9	11.6	7.9	10.9	7.0
DK	8.3	6.8	1.7	0.7	1.7	9.0	3.3	17.3	8.1	11.2	4.6
D	4.6	7.8	1.0	0.8	1.9	5.8	2.3	8.4	8.0	12.0	3.5
EL	3.5	4.7	0.3	0.3	4.0	4.4	1.4	11.8	9.3	12.5	7.6
E	4.5	5.4	0.5	0.6	3.3	2.3	2.4	10.6	7.5	9.6	3.5
F	6.0	7.1	1.0	1.0	2.9	5.5	1.8	13.6	9.4	12.7	3.3
IRL	4.5	5.2	0.9	0.3	3.1	3.4	1.4	8.3	4.9	3.6	2.4
I	4.9	5.5	0.6	0.6	2.5	2.4	0.4	10.7	7.2	16.0	6.7
NL	4.9	6.0	0.7	0.8	3.0	6.2	1.0	10.2	11.0	11.0	4.5
A	6.3	5.8	0.3	0.6	1.8	5.6	1.5	11.5	7.8	13.2	3.5
P	5.7	5.1	0.3	0.5	4.1	4.0	0.6	14.4	8.5	8.7	3.2
FIN	6.2	5.3	1.1	1.1	2.9	8.2	1.7	13.7	8.1	8.9	3.1
S	8.0	6.6	2.3	0.8	2.8	9.1	2.1	16.4	7.5	12.9	5.0
UK	4.9	5.7	0.5	0.7	1.1	7.0	0.6	7.2	7.3	11.4	2.9
Un-weighted average	5.5	5.9	0.9	0.7	2.6	5.6	1.7	11.8	8.0	11.0	4.3
Standard deviation	1.3	0.9	0.6	0.2	0.9	2.2	0.9	3.0	1.4	2.9	1.7

(1) Cyclically-adjusted.

Sources: Eurostat, OECD, AMECO.

4.3.2. The contribution of public spending items to efficiency

The next step in constructing the indicator is to define how each component of public spending contributes to efficiency. This inevitably requires making a number of assumptions on the role and impact of government policies. According to the recent debate on the quality of public spending surveyed above, public-spending programmes providing public goods or aiming at correcting market failures are efficiency-enhancing. Also some social expenditures, provided that they remain at reasonable levels, can contribute to economic efficiency and therefore can be seen as a productive factor. This view of government spending appears to reflect the revealed preferences of the EU policy-makers as evidenced in European Council conclusions, BEPGs, employment guidelines, etc. ([1]).

To translate this view into an operational indicator, the 11 components of public spending are divided into four different categories, according to their presumed impact on economic efficiency (see Graph III.10 and Table III.9):

- Category 1, interest payments, is represented by the line AF in the graph. Spending always negatively affects growth and employment as these resources could be used for more productive purposes.

- Category 2 consists of old-age and survivor expenditures, collective consumption and compensation of public employees and is represented by the line AE. Although some public spending is likely to be efficiency-enhancing, the decreasing effects arise beyond a certain level of spending. There are several reasons for this negative effect. High levels of spending may crowd out other efficiency-enhancing expenditures. As to pensions, the literature shows that very high levels of spending have a negative impact on savings and capital accumulation. To the extent that it reflects early retirement, high pension expenditure also has negative effects on employment. Very high compensation of employees may have negative effects on inflation and, more generally, on the functioning of the labour market (due to imitation effects in the bargaining process etc.).

- Category 3 includes social expenditures on disability, social exclusion, housing, family/children allowances and unemployment transfers, and is represented by the line CD. Public spending on these items can have a positive impact on efficiency provided it is kept within certain limits. Very high levels of spending are likely to have a negative impact on efficiency due to moral hazard problems and benefit dependency. However, public spending below a minimum level is also considered harmful for efficiency, because some additional spending can help to increase participation rates (especially of women) and reduce extreme levels of poverty which facilitates the re-integration of excluded persons into the active life. Moreover, very low levels of unemployment transfers may hinder efficiency by affecting job search activities and giving rise to a less-than-optimal allocation of labour ([2]).

- *Category 4* includes the expenditures in education, active labour market policies, health, R & D and gross fixed capital formation, and are represented by the line AB. As shown in the literature reviewed in Table III.7, they are considered to have a positive effect on economic efficiency ([3]) up to a certain limit, beyond which additional spending has negative impact. However, in line with the empirical literature, it is assumed that the negative effect on growth starts at higher levels than those prevailing in EU countries ([4]).

([1]) However, there is a strand of academic literature which is much more sceptical of the role of public spending and supports a minimum intervention of the government in the economy which does not correspond to the EU commitment for an active welfare state. According to Adam Smith (1776), the role of the governments encompasses three duties: protecting the society from violence and external aggressions, protecting the individual from injustice and erecting and maintaining certain public work or institutions that are not of interest of any single person but of the society as a whole. Whereas the first two functions are clearly identified, the third function could in principle embrace many activities. In a minimal view of the government, the third function has a very limited role. In particular, a large part of social spending is seen as efficiency-decreasing and only a limited number of expenditure items can affect positively efficiency and growth.

([2]) As shown in Buti, Pench and Sestito (1998), excessively low unemployment benefits tend to be associated with high employment protection legislation which is a combination that is efficiency-decreasing.

([3]) For a lack of data, pure public goods are not considered. However, as shown in Section III.3, the size of pure public goods is very similar across countries and over time. This component of public expenditure should not affect substantially the construction of such indicators that are only ordinal and not cardinal.

([4]) In a minimal government intervention referred to in footnote 1 on page 110 only spending on education, R & D and public investment make a positive contribution to economic efficiency, but only up to a ceiling where diminishing returns and crowding-out effects prevail. Other expenditures are considered to have a negative effect on efficiency because they have to be financed via distortionary taxes and/or they crowd out more efficient private-sector activities.

Graph III.10: **A graphic illustration of the links between efficiency and spending**

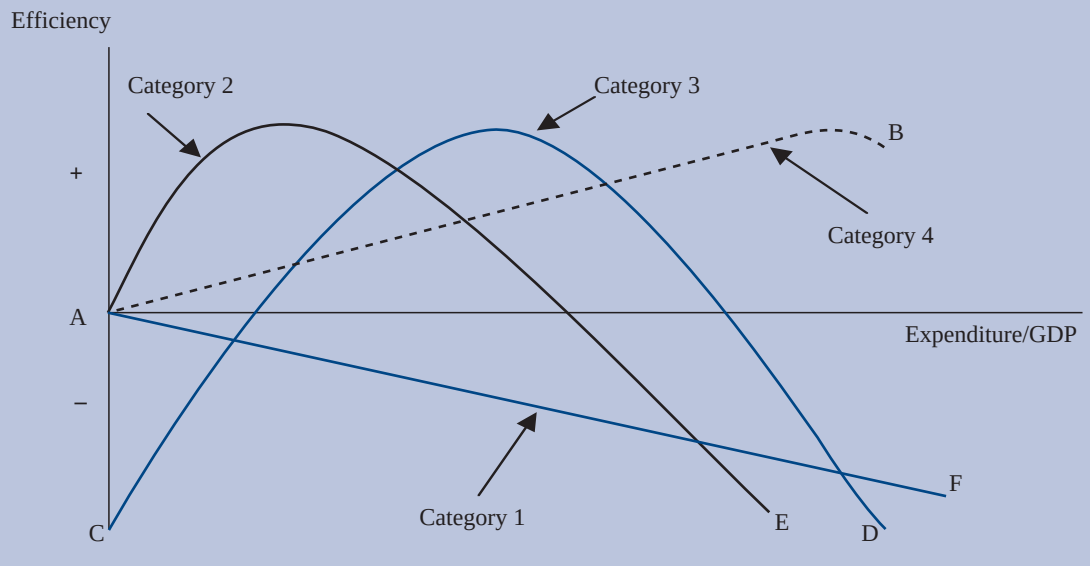


Table III.9

How each component of public expenditures contributes to growth and employment

Categories of spending	Efficiency effects
Interest payments	Always bad for efficiency
Old age and survivor, compensation of employees, collective consumption	Good if expenditures are contained, bad otherwise
Unemployment benefits, other social protection expenditures	Good if they are not too low or too high
Education, R & D, public investment, healthcare, active labour-market policies	Always good, provided that they do not exceed a high value

4.4. Results

The final step is to construct the synthetic indicators by combining the data in Table III.8 on the amount of public spending for each expenditure component with its efficiency profile identified above. The annex formalises the proposed indicators in detail: the first indicator measures how the composition of public expenditure has changed during the 1990s for each Member State; the second indicator looks at the composition of Member States' public spending relative to other countries at the end of the last decade.

Developments during the 1990s

Table III.10 presents the change in the composition of public spending during the 1990s according to the two models of government. A plus (+) sign indicates an improvement in the efficiency effect of expenditure over the period from the standpoint of its contribution to growth and employment whereas a negative sign (–) indicates a deterioration. The variation over the 1990s is presented for the total expenditure and for the primary expenditure. The table shows also the variation during this period of the cyclically-adjusted level of spending (total and primary).

The main conclusion is that the composition of public spending in terms of its contribution to efficiency improved in a majority of countries and, contrary to the public's perception, the budgetary consolidation process was accomplished without widespread negative effects.

Table III.10

The change in the composition of public spending during the 1990s

	Total expenditure	Change in cyclically-adjusted total expenditure/GDP (1990–2000) (1)	Primary expenditure	Change in cyclically-adjusted primary expenditure/GDP (1990–2000) (1)
Belgium	+	– 3.6	none	1.4
Denmark	++	– 2.4	+	0.7
Germany	none	1.1	none	0.5
Greece	++	– 2.2	+	2.0
Spain	+	– 5.0	none	– 3.1
France	none	1.9	none	1.5
Ireland	+	– 10.4	none	– 4.6
Italy	–	– 6.3	– –	– 2.3
Netherlands	++	– 8.7	+	– 6.7
Austria	+	0.2	none	0.6
Portugal	++	0.4	+	3.5
Finland	none	– 1.1	none	– 2.5
Sweden	++	– 14.1	+	– 12.3
United Kingdom	– –	– 3.1	– –	– 2.1

(1) For D, the variation is between 1991 and 2000; for S between 1993 and 2000; for P, EL and E from 1995 and 2000. 2000 data are net of UMTS.

Source: Commission services.

Clearly, the Maastricht convergence led to a general reduction of interest payments which directly improved the value of the indicator in both models. However, albeit less starkingly, similar conclusions can be drawn if one focuses on primary expenditure: five Member States registered an improvement when interest payments are excluded and only two had a deterioration. Moreover, as the results of the Netherlands and Sweden show, it is possible to improve the composition of public expenditure while at the same time reducing its level.

Only the United Kingdom and Italy experienced a worsening of the composition of primary expenditure during the 1990s. In the UK, it was due to the strong reduction in the level of public investment, unemployment benefits and, to a certain extent, compensation of employees. However, it has to be considered that the lower level of spending on unemployment benefits has been accompanied by other policies which aim at increasing employability (the so-called 'welfare-to-work' programmes) (1). As mentioned in the caveats above, this type of internal shifts needs to be taken into account in interpreting the results in specific cases. Italy also reduced public investment (from above to below the EU average level) and in addition presents at the end of the 1990s a more unbalanced welfare state, with a larger share of pensions squeezing other social protection expenditures (2).

Comparing the efficiency effect of the composition of public expenditure across EU countries

Table III.11 ranks the Member States at the end of 1990s. The higher is the position of a country, the better is the composition relative to other Member States. The table also shows, for each country, the cyclically-adjusted total and primary expenditure. Given the fact that the underlying values of the indicator are relatively close for a number of countries, the breaking points in the ranking are indicated in the table with bold lines (3).

As shown in the table, France, Germany, Finland and Sweden are ranked at the top (4). A high ranking does

(1) Hence, spending on other social protection expenditures increased from 5.5 % of GDP to over 7 % of GDP during the 1990s, Table III.8.

(2) According to a minimal government view, the UK and Italy show an improvement in the composition of public expenditure, since several social expenditures were reduced during the 1990s.

(3) It goes without saying that country ranking should be read with great care as the comparison across countries does not take account of different societal choices.

(4) Not surprisingly, countries with a low level of public spending (such as Ireland and the United Kingdom) would be ranked high in a minimal view of government.

not necessarily go hand in hand with a large share of public spending in GDP: countries with contained overall spending can have a composition with high efficiency effects and thereby occupy a relative high position in the ranking. For instance, looking at the primary component of expenditure at the end of the 1990s, Germany and Finland have a higher value of the indicator than other countries with similar or even higher level of expenditure. This is to say that it is possible to have a model where the welfare state has an efficiency-enhancing role and at the same time keep a cap on the level of public expenditure. Countries which score well enjoy a mix of relatively low current expenditures, a well-balanced welfare state and high levels of investment in physical and human capital, but not necessarily high total expenditure.

Table III.11

Country ranking at the end of the 1990s

Total expenditure		Primary expenditure	
Ranking	Level of expenditure (1)	Ranking	Level of expenditure (1)
F	52.9	F	49.6
D	48.4	D	45.0
FIN	49.4	FIN	46.6
S	58.1	S	56.9
A	53.3	A	49.6
NL	46.7	B	42.9
E	40.0	NL	42.8
IRL	33.1	E	36.7
P	45.3	DK	50.3
B	49.7	P	42.1
DK	54.5	IRL	31.0
UK	39.3	EL	41.3
EL	48.3	UK	36.5
I	48.1	I	41.6

(1) Cyclically-adjusted (% trend GDP).
NB: The higher is the position of a country, the better is the composition relative to other Member States.

Source: Commission Services.

Countries at the bottom of the ranking show some imbalances in one or more components of spending. In Denmark, the main reason for the low ranking is the very high level of compensation of employees and unemployment benefits (1). In the case of Belgium, high unemployment benefits as well as low public investment negatively affected the indicators. Italy has very low level of unemployment benefits and high pension expenditure. For Greece, apart from the very low level of unemployment benefits, there is a limited amount of resources devoted to R & D and active labour-market policies.

* * *

To summarise, the most important result of the analysis is that the composition of public spending — contrary to what is sometimes stated in the debate — has generally improved its efficiency effects between the beginning and the end of 1990s during the Maastricht convergence process. The reduction of interest payments in most EU countries has certainly contributed to a better allocation of available resources. However, the composition of primary spending has also improved in many countries. The presence of a binding budget constraint forced Member States to improve their allocation capacity in order to manage the needs of their citizens. The analysis also shows that a model that embraces the European social model is not inconsistent with a contained size of the public sector.

It goes without saying that these results should be evaluated with care and more in-depth analysis of the links between efficiency and public expenditures is required

(1) However, for the latter category it has been pointed out in European Commission (2001a) that Denmark has introduced stricter eligibility rules in the direction of more employment-friendly unemployment benefits.

before drawing policy conclusions. Also, the proposed indicators are just some of the possible indicators of composition, and a careful analysis is needed to assess the properties of other options.

However, over and above the intrinsic properties of the indicators, more accurate data are needed to analyse the quality of public expenditure. Member States should submit data on the functional distribution of public spending in their stability and convergence programmes. It would then be possible to develop an approach to measure the composition of public expenditure which could be used in the context EU multilateral surveillance.

Annex A. The synthetic indicators of expenditure composition

Any synthetic indicator of the composition of public spending needs to be easy to calculate and transparent. In addition, the indicator needs to ensure that small expenditures items are not be squeezed out by large expenditure items. This is because even small programmes (as R & D) may have a potentially sizeable impact on efficiency and potential output. Therefore, each expenditure has to be standardised to some value to eliminate size effects and, as a result, even variations of relatively small expenditures can affect the indexes.

The indicators developed in this chapter are based on the relation between efficiency and government expenditure depicted in Section 4.3.2 ([1]).

Cross-country comparisons

In the indicator used for rank countries, each spending component has a range of 2 points between the best and the worst performer: in this way, all items enter into the indicator with the same weight.

The indicator of Table III.11 reflects the categorisation of graph III.10. Formally:

[1]

$$I_A^{cc} = \sum_{X=a}^{e}\left(\frac{2(X_A - X_{\min})}{X_{\max} - X_{\min}}\right) + \frac{2(m_{\min} - m_A)}{m_{\max} - m_{\min}} + \begin{cases} +\sum_{X=f}^{h}\left(1 - \frac{2(X_A - \bar{X} + X_{sd})}{X_{\max} - \bar{X} + X_{sd}}\right) \text{if } X_A > \bar{X} - X_{sd} \\ +\sum_{X=f}^{h}\left(1 + \frac{\bar{X} - X_{sd} - X_A}{X_{\min} - \bar{X} + X_{sd}}\right) \text{if } X_A \le \bar{X} - X_{sd} \end{cases} + \begin{cases} +\sum_{X=i}^{l}\left(-1 + \frac{2(X_A - X_{\min})}{\bar{X} - X_{\min}}\right) \text{if } X_A \le \bar{X} \\ +\sum_{X=i}^{l}\left(1 + \frac{2(\bar{X} - X_A)}{X_{\max} - \bar{X}}\right) \text{if } X_A > \bar{X} \end{cases}$$

where the specific spending components are respectively
a = Education
b = R & D
c = Gross fixed capital formation
d = Healthcare
e = Active labour-market policies
f = Compensation of employees

([1]) For more comprehensive discussion, see Montanino (2002).

g = Collective consumption
h = Old age and survivor
i = Unemployment benefits
l = Other social expenditures (housing, social exclusion, disability, family/children allowances)
m = Interest payments
and:
$\bar{X}$ indicates the unweighted average value of the specific spending component

X_{sd} indicates the standard deviation;

$X_{\max}$ indicates the maximum value amongst the 14 countries of the specific spending component;

$X_{\min}$ indicates the minimum value amongst the 14 countries of the specific spending component;

X_A indicates the value of each spending component for country *A*.

The first term of equation [1] indicates that for categories from *a* to *e* (education, R & D, public investments, healthcare and active labour-market policies) quality improves when expenditure increases. The crowding-out effect arises only at high level of expenditures, that is supposed to be above the current EU level of spending. So, the indicator equals zero when expenditure is at its minimum and + 2 when it is at its maximum. In the second term of the equation, the impact of interest payments (*m*) is always negative; it equals zero for the best performer (the country with the lowest level of expenditure) and – 2 for the worst performer. In the case of compensation of employees, collective consumption, old age and survivor (categories from *f* to *h*), the indicator is a linear approximation of the pattern of category 2 of Graph III.10: it reaches its maximum (+ 1) at EU average less one standard deviation and equals – 1 for the country with the highest expenditure and zero for the country with the lowest level. The fourth term shows the impact of other social protection expenditures and unemployment benefits (categories *i* and *l*). The specific country value X_A enters in the index positively around the EU average (where there is the maximum), and negatively for very high or very low values. The minimum is in fact both at the highest and the lowest value (see category 3, Graph III.10).

If the minimal government view — referred to in a number of footnotes in the text — were to be translated in an operational indicator, the assumption is that the value for each country of public expenditures apart from education, R & D and public investment is compared with the country having the lowest level of spending (see first term of equation [2]). The higher the level of expenditure compared with this level, the worse is the quality of expenditure: when the level of spending of country *A* in item *X* is the highest amongst the 14 EU countries, the indicator for that component equals – 2, whereas when it is at the minimum it equals zero. For R & D, education and public investment, the second term of the equation shows that the indicator equals zero when the expenditure is at the minimum, it has its maximum in $\bar{X} + X_{sd}$ (the average EU level plus one standard deviation) and a crowding-out effect appears for higher value. For the worst performer (the country with the highest expenditure), the indicator for that specific component equals – 1. Formally, the indicator *I* for country *A* used for cross-country comparison (*cc*) can be written as follows:

[2]
$$I_A^{cc} = \sum_{X=d}^{m}\left(\frac{2(X_{\min}-X_A)}{X_{\max}-X_{\min}}\right) + \begin{cases} \sum_{X=a}^{c}\left(1+\dfrac{\bar{X}+X_{sd}-X_A}{X_{\min}-\bar{X}-X_{sd}}\right) & \text{if } X_A \le \bar{X}+X_{sd} \\ \sum_{X=a}^{c}\left(-1+\dfrac{2(X_A-X_{\max})}{\bar{X}+X_{sd}-X_{\max}}\right) & \text{if } X_A > \bar{X}+X_{sd} \end{cases}$$

Intertemporal comparisons

The improvement or the deterioration of the composition of public expenditure for each country over time is assessed with a different set of indexes, where the value of each category at the beginning of the 1990s is compared with the correspondent value at the end of the 1990s.

Expenditure related to investment in physical and human capital (categories from *a* to *e*) has a positive impact when increased during the decade as in the first term of equation [3]. When other current expenditures (categories from *f* to *h*) increase, they improve quality only if the level at the beginning of 1990s was very low (lower than the EU average less one standard deviation); in all other cases, an increase worsens the composition of public spending. Also, for other social protection expenditures and unemployment transfer the effect on the composition depends on the starting level at the beginning of the 1990s: when a country had a level of spending in these items lower than EU average, then an increase implies a higher value of the indicator. Formally, the indicator is computed as follows:

[3]
$$I_A^{ts} = \sum_{A=a}^{e}\left(\frac{X_A^{end90s}-X_A^{beg90s}}{\overline{X_A}}\right)\pm\sum_{X=f}^{h}\left(\frac{X_A^{end90s}-X_A^{beg90s}}{\overline{X_A}}\right)\text{if } X_A^{beg90s}\underset{>}{<}\left(\bar{X}^{beg90s}-X_{sd}^{beg90s}\right)+$$
$$\pm\sum_{X=i}^{l}\left(\frac{X_A^{end90s}-X_A^{beg90s}}{\overline{X_A}}\right)\text{if } X_A^{beg90s}\underset{>}{<}\bar{X}^{beg90s}-\frac{m_A^{end90s}-m_A^{beg90s}}{\overline{m_A}}$$

where:

X_A^{beg90s} indicates the value of component *X* in country *A* at the beginning of 1990s

X_A^{end90s} indicates the value of component *X* in country *A* at the end of 1990s

$\bar{X}^{beg90s}$ indicates the EU average value at the beginning of 1990s of component *X*

X_{sd}^{beg90s} indicates the EU standard deviation at the beginning of the 1990s of component *X*

$\bar{X}_A$ indicates the average value of component *X* in country *A*.

In the minimal government model, a reduction of public expenditure should be considered positively for all functions but education, R & D and public investment (see first term of equation [4]). In latter cases, if the initial level was very low (say below the EU average less one standard deviation), an increase of the level of spending affects positively the quality, as depicted by the second term of the equation. The time-series (*ts*) indicator *I* for country *A* is:

[4]
$$I_A^{ts} = \sum_{X=d}^{m}\frac{X_A^{beg90s}-X_A^{end90s}}{\bar{X}_A}+\begin{array}{l}+\sum_{X=a}^{c}\frac{X_A^{beg90s}-X_A^{end90s}}{\bar{X}_A}\ \text{if } X_A^{beg90s}>(\bar{X}^{beg90s}+X_{sd}^{beg90s})\\ -\sum_{X=a}^{c}\frac{X_A^{beg90s}-X_A^{end90s}}{\bar{X}_A}\ \text{if } X_A^{beg90s}>(\bar{X}^{beg90s}-X_{sd}^{beg90s})\end{array}$$

Part IV

Is there a role for discretionary fiscal policy in EMU?

Summary

It is widely recognised that in EMU fiscal policy plays a key role in macroeconomic stabilisation to compensate for the loss of monetary and exchange-rate autonomy. This is particularly the case for peripheral economies for which the aggregate monetary policy may imply inappropriate monetary conditions at national level. In the event of normal cyclical fluctuations, the operation of automatic stabilisers can be expected to provide a relatively high degree of stabilisation. However, the question arises whether automatic stabilisers on their own are sufficient in the face of strong asymmetric shocks or whether a discretionary fiscal policy should also be considered.

According to the standard neo-Keynesian framework, discretionary fiscal action would be called for to the extent that macroeconomic imbalances cannot be corrected by the sole use of automatic stabilisers. However, the recent literature as well as evidence based on the fiscal failures in the pre-EMU era strongly qualify this view. Political economy and institutional constraints tend to limit considerably the scope for active fiscal management and counter-cyclical measures can easily turn out to be pro-cyclical as policy-makers do not have perfect foresight of future (and even ongoing) economic developments.

Reflecting these considerations, the underlying philosophy of the SGP is sceptical on fiscal fine-tuning: stabilisation should be achieved by the operation of automatic stabilisers and discretionary fiscal policy, while not ruled out altogether, should be confined to a limited set of circumstances where its usefulness is well established. Hence, it should be subject to a careful case-by-case examination by the country concerned and by the Eurogroup given the potential spillovers. This assessment has to address both the desirability and effectiveness of discretionary fiscal policy.

As to desirability, the analysis of the macroeconomic mechanisms at work shows that counter-cyclical fiscal policy which supplements the operation of the automatic stabilisers ought to be restricted to the case of large, country-specific, domestically-driven demand shocks. In the event of persistent supply-side shocks which affect the level of potential output, there may be a case for offsetting the automatic stabilisers via discretionary measures. Even in these cases, however, the difficulty in identifying the nature of the economic shocks and putting in place an adequate fiscal package considerably limit the scope for active fiscal policy. In the case of symmetric demand shocks, monetary policy has a clear comparative advantage over fiscal policy which should then be limited to the free operation of automatic stabilisers. In other cases (such as demand shocks originating from the foreign sector), adjustment by market forces seems warranted.

As to effectiveness, simulations performed with the Commission econometric model QUEST show that the impact of fiscal actions on macroeconomic imbalances such as inflation divergences, output gaps or external trade disequilibria, is rather limited. In particular, they suggest that cuts in income taxes would not bring about a significant amount of stabilisation in the event of shocks. Changes in indirect taxes can be effective in changing the timing of investment or consumption decisions. By the same token, however, they risk producing strong pro-cyclical effects if the timing of their implementation is wrong. Expenditure measures tend to have larger multipliers than tax changes. However, as past experience shows, higher spending as a response to negative shocks tends to become permanent thereby implying adverse supply-side effects which would more than outweigh the stabilisation gains.

In most circumstances, discretionary fiscal policy cannot be expected to provide a very effective smoothing of country-specific macroeconomic divergences. In particular, it cannot act as a substitute for increased markets flexibility along the lines of the BEPGs and the so-called Lisbon process. A promising policy avenue for policy

analysis could be to consider the reinforcement of the effectiveness of the automatic stabilisers as well as a strengthening of the cyclical responsiveness of a number of budgetary items. This, however, could prove difficult to implement in practice, as most of these items (mainly affecting tax and benefit systems) do not pursue macroeconomic stabilisation as their primary objective and strengthening their cyclical responsiveness may have negative implications on economic efficiency.

To summarise, the norm for fiscal policy is to let automatic stabilisers play freely while discretionary policy should be confined to critical country specific shocks. Relying mainly on automatic stabilisers also reduces the importance of coordinated fiscal actions. However, this does not mean that policy coordination should be confined to exceptional circumstances. By its very nature, occasional coordination is ill-suited for implementing a consistent macroeconomic strategy in both normal and exceptional situations. Policy coordination — viewed as a system to attain a common assessment of the economic situation, agree on the orientation of the policy response and monitor their implementation — should be regular, not occasional.

1. Introduction

The policy assignment and institutional arrangements of EMU are based on a widespread consensus that responsibility for smoothing country-specific shocks and diverging cyclical conditions falls to national fiscal policies as the single monetary policy only responds to area-wide price developments. The feasibility of this policy assignment rests on the assumption that fiscal policy is an effective stabilisation tool. Last year's report, *Public finances in EMU — 2001*, analysed the smoothing effectiveness of automatic stabilisers ([1]). It found that in Europe, letting the automatic stabilisers operate freely is generally beneficial although their smoothing impact depends on the origin of shocks: their effectiveness is higher in the event of consumption shocks, but is much lower in the case of shocks to investment or exports.

This chapter examines the desirability, feasibility and effectiveness of discretionary fiscal policy. It attempts to provide answers to the following questions: in what circumstances could governments envisage policies which supplement (or offset) automatic stabilisers? Can discretionary fiscal policy be designed and implemented without falling in the Keynesian 'fine-tuning trap'? What smoothing impact can be expected from discretionary fiscal policy and how can the efficiency of fiscal policy in EMU be enhanced?

As recalled in last year's report, support for the use of discretionary fiscal policy for stabilisation purposes has declined in popularity both among academics and policy-makers. The shift in the focus from short-term stabilisation towards a medium-term framework for fiscal policy has gained support from theoretical contributions stressing the relative ineffectiveness and institutional constraints characterising discretionary fiscal policy. A new approach to macroeconomic policy which Taylor (2000) has dubbed 'new normative macroeconomics' has gained ground. According to this strand of literature, fiscal policy, like monetary policy, is most efficient when it is based on predictable and stable rules to which policy-makers are strongly committed. Such norms limit the scope for discretionary action.

Despite the increasing unpopularity of fiscal fine-tuning in recent years, the reaction of US fiscal policy to the 2001 cyclical downturn has spurred again a debate about the role and effectiveness of discretionary fiscal policies (a description of the contrasting policy responses in the EU and United States to the slowdown is provided in Part I.2 of this report).

The purpose of this chapter is to shed light on the possible use (and misuse) of discretionary fiscal policy in EMU. Section 2 explains why this issue is of particular relevance in the EMU context. Section 3 looks into the philosophy underlying the Stability and Growth Pact (SGP) *vis-à-vis* the use of discretionary fiscal policy. Section 4 analyses the cases in which discretionary fiscal policy may prove desirable in EMU. Section 5 presents results from simulations on the effectiveness of a number of discretionary fiscal measures for stabilisation purposes.

([1]) European Commission (2001a), Part III.

2. Reassessing the role of discretionary fiscal policy in EMU

2.1. Fiscal stabilisation in EMU: the standard textbook analysis

The standard Keynesian analysis of the policy-mix views monetary and fiscal policies as broad substitutes for stabilising aggregate demand shocks. When monetary policy is available to react to national cyclical developments, a neutral fiscal stance (i.e. no discretionary fiscal policy) combined with a flexible monetary stance are compatible with a high degree of macroeconomic stabilisation. Empirical evidence tends to confirm that fiscal policy and monetary policy have acted as 'strategic substitutes' in individual Member States in the pre-EMU era: looser fiscal policy tended to go hand in hand with tighter monetary policy while a restrictive monetary policy generally triggered an expansionary fiscal policy ([1]).

Barring special circumstances in which monetary policy becomes impotent (e.g. the so-called 'liquidity trap'), monetary policy is thought as having clear advantages over fiscal policy for stabilisation purposes. The aspect of fiscal policy which more closely resembles monetary policy is automatic stabilisers which are free of the typical pitfalls of discretionary fiscal management (implementation lags, measure irreversibility, etc.). To the extent that fiscal policy can limit itself to the free operation of automatic stabilisers, it would cushion economic shocks without jeopardising long-term macroeconomic stability.

The question arises as to whether this hands-off approach can also apply to countries belonging to a currency area such as EMU. The answer is not straightforward as arguments run in both directions.

Some arguments point to scope for more active use of fiscal policy for stabilisation purposes. Having lost control over monetary policy and the nominal exchange rate, governments may find themselves unable to correct country-specific macroeconomic imbalances. This is the case in particular of small economies experiencing cyclical divergences with average for the euro area as a whole. In the same direction, it could also be argued that fiscal policy at national level may be more efficient in the EMU framework than in the past for several reasons. First, crowding-out effects of fiscal policy through interest rates and exchange rates will be lower, leaving national monetary conditions virtually unaffected, especially in the case of a small country. Second, participation in EMU will entail lower country-specific risk premia on interest rates: unlike fiscal policy prior to the launch of the euro, fiscal expansion cannot fuel expectations of exchange rate depreciation of the national currency. Finally, better stabilisation at national level could have positive spillover effects at EMU level by facilitating the task of the ECB of guaranteeing price stability. Indeed, if fiscal policy can limit inflationary or deflationary pressures at national level, it would also help stabilise euro-area inflation.

Everything else being equal, these considerations advocate a more active use of fiscal policy to compensate for the loss of monetary and exchange-rate autonomy.

However, even within this basic Keynesian framework, there are a number of arguments pointing in the opposite direction. First, if sharing a single currency brings about higher trade integration, foreign trade spillovers will increase, thereby reducing the effectiveness of domestic fiscal policy ([2]). Second, the possibility of free-riding (gaining from expansionary discretionary fiscal policy while not

([1]) See Mélitz (2002) and Wyplosz (1999). See Buti, Röger and in't Veld (2001) for a review of the empirical literature.

([2]) Notice, however, that this applies also to the effectiveness of automatic stabilisers.

bearing its costs) at national level may induce an expansionary bias. As a result, the public-debt level in the euro area may rise above sustainable levels, crowd out productive capital and, from a longer-term perspective make it more difficult to tackle the budgetary consequences of ageing ([1]). Third, inappropriate fiscal policies in several countries, if carried out simultaneously, are likely to have significant spillovers effects throughout the euro-area price developments and could therefore trigger countervailing action by the ECB. Again, the resulting policy mix would not be appropriate from a medium- and long-term standpoint.

Of course, if one goes beyond this Keynesian framework to incorporate more recent macroeconomic thinking and political economy considerations, other arguments against fiscal activism appear, as will be discussed in Section 3.

2.2. Country-specific needs for stabilisation in EMU

The case for discretionary fiscal policy only holds if national cyclical stabilisation is a major concern in EMU. During the first three years of EMU, the area has been hit by highly symmetric shocks (Asian crisis in 1999, oil price hike in 2000, global slowdown in 2001). However, there has not been a tendency for increased synchronisation of cyclical developments. In particular, inflation differentials across euro-area countries have tended to widen in the initional years of EMU (see Buti and Sapir, 2001). This can be considered a natural development to the extent that, in the absence of nominal exchange-rate adjustments, domestic prices fluctuations are the only way to change intra-zone real exchange rates. If, however, inflation differentials go beyond what market adjustment requires, a need for stabilisation may arise.

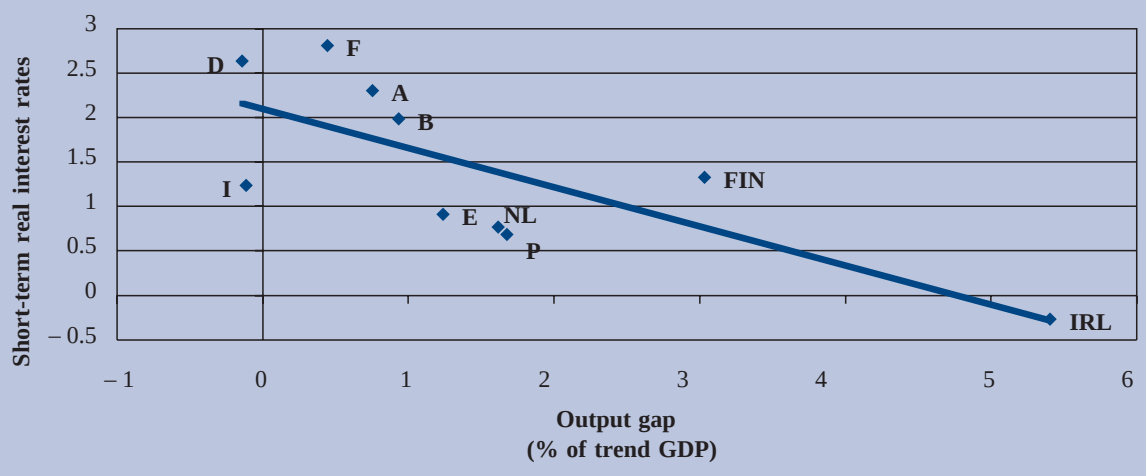
Large inflation differentials *vis-à-vis* the euro-area average are more likely to emerge in small open economies. In these countries, national monetary conditions may entail a procyclical bias to the extent that country-specific inflation rates are positively related to the national output gap while the prevailing nominal interest rate is the same across euro-area countries (apart from small risk and liquidity premia). As a result, as shown in Graph IV.1, real short-term interest rates (i.e. nominal rates deflated by *ex post* changes in CPI) tend to be negatively correlated with the output gap ([2]).

This state of play invites policy-makers to find a strategy to tackle national macroeconomic imbalances, bearing in mind that overheating in one country is a matter of common concern: by making more difficult the achievement

([1]) Beetsma et Uhlig (1999).

([2]) An in-depth discussion about the possible implication of the single monetary policy for individual country adjustment in EMU can be found in European Commission (2001b).

Graph IV.1: **Real short-term interest rates/output gaps in the euro-area countries (average figures, 1999–2001)**



of price stability, individual country imbalances may imply potentially sizeable spillovers to the other Member States. For example, higher-than-average inflation rates in Ireland, the Netherlands, Finland and Spain in summer 2001 may have limited the room for manoeuvre for the ECB to adjust interest rates, although the euro-area economy was already showing clear signals of a slowdown. Similarly, a country-specific recession (or a protracted slowdown) should also be considered a matter of common concern since it could diffuse deflationary pressures throughout the euro area.

As the use of monetary policy at country level is no longer available, there may be a role for fiscal policy in correcting these macroeconomic imbalances. Discretionary fiscal policy, however, should be considered only to the extent that automatic stabilisers and other adjustment mechanisms prove insufficient in absorbing the shock.

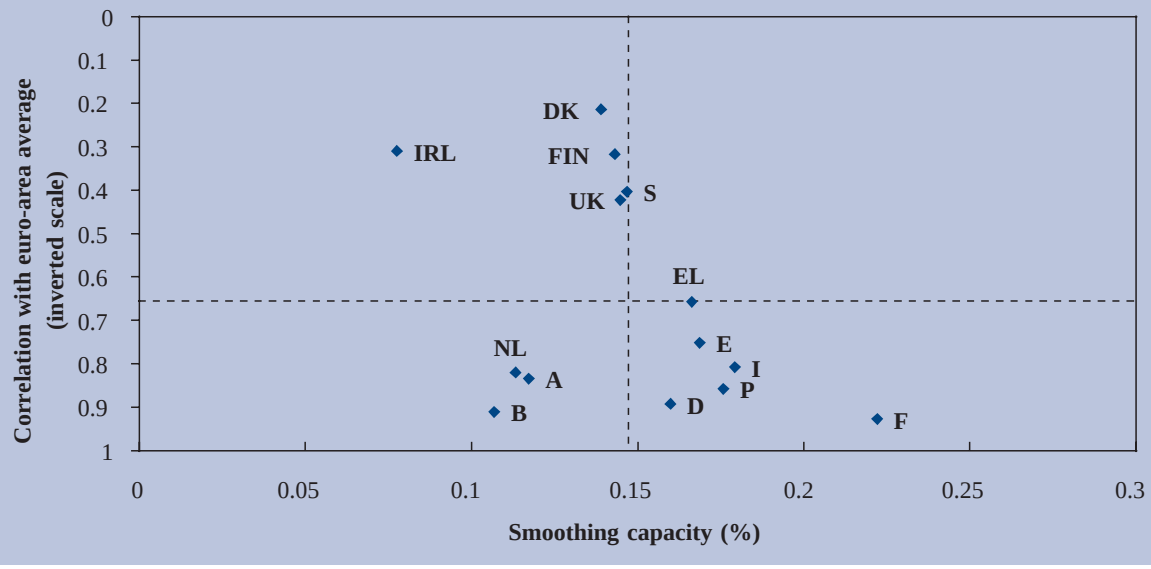
2.3. What degree of cyclical smoothing can be attained via automatic stabilisers?

A number of studies have attempted to quantify the dampening impact provided by the operation of automatic stabilisers. The main conclusions are that the smoothing capacity of automatic stabilisers varies across countries and depends *inter alia* on the openness of the economy, the overall size of government and the structure of the tax and benefit systems.

Graph IV.2 illustrates the estimated smoothing capacity of automatic stabilisers against the correlation of national output gaps with average euro-area output gap ([1]). The graph confirms that the economic cycles in countries of the former narrow-ERM area (Germany, France, the Netherlands, Belgium, Austria) are highly correlated with the euro-area average. If this pattern were to be confirmed in EMU, the single monetary policy would most of the time prove adequate for these countries also from the standpoint of national cyclical stabilisation. The graph shows that Spain and Portugal also have had a high correlation with the euro-area average. However, due to catching up effects, divergences in the future cannot be excluded. Conversely, Ireland appears to have both a cycle that is poorly correlated with the euro-area average and small smoothing capacity of automatic stabilisers.

([1]) European Commission (2001a) showed that automatic stabilisers are larger in the case of a consumption shock than in the case of an export-driven shock or an investment-driven shock. Accordingly, the estimates of the smoothing capacity of automatic stabilisers in Graph IV.2 try to capture the composition of growth over the period 1997–2000. The estimated effects of stabilisers in the event of consumption, investment and exports shocks are weighted with the relative share in GDP of these components and their volatility over the 1980–2000 period.

Graph IV.2: **The smoothing capacity of automatic stabilisers in EMU**



However, these conclusions are subject to a number of qualifications. First, the measure of the smoothing capacity varies according to the model used in the simulations. The smoothing capacity in Graph IV.2 is estimated with the Commission QUEST model. Analyses based on other models arrive at different ranking of countries, reflecting different estimates of the cyclical sensitivity of the budget to economic activity, different typology of shocks underlying the simulations and model differences. For example, according to simulations performed with NiGEM, automatic stabilisers would generally prove less effective than the above estimates suggest; in contrast, simulations performed with the OECD, more Keynesian Interlink model show higher smoothing capacity on average ([1]). However, it shows a particularly low effectiveness of automatic stabilisers for Ireland and Greece. In the specific case of Finland, the two studies provide diametrically opposed answers: while NiGEM finds a very low smoothing capacity of automatic stabilisers, Interlink's estimates point to the highest cushioning effects in the whole EU ([2]). In the case of France, while the above estimates by QUEST show a particularly high smoothing capacity, both NiGEM and Interlink point to a below-average outcome.

Second, countries with average or lower smoothing capacity of automatic stabilisers — notably Ireland in the QUEST simulations — can count on swifter market adjustment to respond to country-specific disturbances. Indeed, on the basis of OECD indicators of labour and product-markets flexibility, they rank high amongst EU countries ([3]). This could compensate for the relatively low effectiveness of automatic stabilisers.

Third, the output gap estimates used in computing the correlations in Graph IV.2 do not distinguish between supply and demand shocks. Only a low correlation in demand shocks should be matched by a high smoothing capacity because automatic stabilisers may not be the optimal response to supply shocks (see Section 4).

Finally, while automatic stabilisers are not affected by many pitfalls of discretionary policies (see below), they are inherently backward-looking as a number of tax bases (e.g. personal income tax and corporate tax) respond to economic developments with a significant lag. Also, on the expenditure side, unemployment insurance is triggered after workers have been laid off. Therefore, automatic stabilisers cannot be counted upon as a preventive measure to tackle the economic consequences of (largely expected) fluctuations in economic activity ([4]).

([1]) See Barrell and Pina (2000) for the NiGEM simulations and van den Noord (2002) for the Interlink simulations.

([2]) The difference appears to be due in part to the different assessment of the typology of shocks that hit Finland in the 1990s: supply shocks in the case of NiGEM, demand shocks in the case of Interlink.

([3]) See Buti and Sapir (2001). This applies also to the UK and, to a certain extent, to Denmark and Sweden, should these countries decide to join the euro area.

([4]) Some revenue items may shrink during a downturn although this is not directly related to cyclical developments in output. This was probably the case in the early 1990s in Nordic countries which experienced a dramatic fall in revenues from capital taxes following the burst of stock and housing-market bubble. This effect is difficult to capture in standard econometric simulations which assess the effectiveness of automatic stabilisers.

3. Discretionary fiscal policy in the light of the Stability and Growth Pact

3.1. Arguments against the use of discretionary fiscal policy

Developments in macroeconomic thinking over the last two decades, as well as experience with fiscal fine-tuning, challenge the use of discretionary fiscal policy as envisaged in the above analysis. These qualifications were largely taken into account when the fiscal architecture of EMU was elaborated in the 1990s. The criticisms broadly fall into two categories.

One strand of criticism calls into question altogether the capacity of fiscal policy to support economic activity. The general move towards theoretical models based on explicit microeconomic foundations and intertemporal optimisation by economic agents has led to a reappraisal of the effectiveness of a discretionary fiscal policy. More specifically, active demand management is deemed to have a low impact in the short term while having a potentially negative medium- to long-term effect due to adverse supply-side developments. Under certain circumstances, so-called non-Keynesian effects may already materialise even in the short term ([1]).

Another strand of the literature focuses on political economy and institutional constraints on the conduct of discretionary fiscal policy ([2]).

First, discretionary fiscal policy generally entails large implementation lags. In case a discretionary policy is being implemented in the course of the year, the government must elaborate a special budget bill. Then the proposed legislation must be submitted to Parliament, which in turn will debate, pass, modify or reject the proposal. In the end, the package may well impact on economic activity long after the downturn has bottomed out ([3]). As a result, an *ex ante* counter-cyclical discretionary fiscal policy could well become pro-cyclical *ex post*. To the extent that policy measures change the time allocation of private spending decisions, the pro-cyclical effects of implementation lags can be severe.

Second, as argued by Taylor (2000), discretionary fiscal policy could make the central bank's task more difficult because it may create an additional element of uncertainty in the face of cyclical fluctuations.

Third, discretionary fiscal policy actions are difficult to reverse. To avoid debt accumulation, discretionary easing during slowdowns should be matched by discretionary tightening in upturns. The political difficulties with discretionary tightening measures could entail a deficit bias. In the specific case of EMU, a country undertaking expansionary fiscal measures could rapidly squander years of efforts to achieve a budget position of close-to-balance or in surplus.

Fourth, like monetary policy, discretionary fiscal policy is subject to time inconsistency, i.e. there is a temptation for governments to announce one policy now and follow another one later. Regarding monetary policy, the mainstream answer to correct this policy bias has been to put an independent authority (the central bank) in charge of setting interest rates. Some authors have suggested to transfer this approach to fiscal policy-making, by creat-

([1]) See European Commission (2001a) for a review of the literature.

([2]) According to Wren-Lewis (2000), these issues, rather than the intrinsic ineffectiveness of active fiscal policy, lie behind the reluctance of many economists to advocate discretionary fiscal stabilisation.

([3]) A case in point is provided by the most recent US experience: while the Bush administration decided to launch a massive recovery package a few days after the September 2001 terrorist attacks, the bill was delayed by the Congress because no agreement could be reached on its details. It was eventually approved when signs of a strong recovery of the US economy were apparent.

ing an independent fiscal agency which is charged with the task of designing discretionary fiscal measures ([1]). However, democratic concerns make such a move difficult because fiscal policy, unlike monetary policy, serve goals other than macroeconomic stabilisation, including redistribution, provision of public goods and it is not clear how externalising the stabilisation function would affect such tasks.

In the case of European countries, an illustration of the above institutional constraints burdening discretionary fiscal policy is provided by historical evidence on budgetary behaviour. A typical feature of the reaction of fiscal policy to the cyclical position of the economy is its asymmetry, which confirms the procyclical bias identified in a number of studies ([2]). Table IV.1 shows that for most countries, discretionary fiscal policy has often been countercyclical when the output gap was negative while being procyclical or neutral when the output gap was positive ([3]): in 11 out of the 15 countries, fiscal policy has been expansionary in the majority of episodes of negative output gaps, while only four countries have conducted discretionary tightening in the majority of episodes of positive output gaps. Moreover, as shown in the third column, in all countries but two, the balance of episodes is negative. As a result, public debt has tended to increase over the cycle. In the case of four countries (Belgium, Ireland, Italy and the UK), a pro-cyclical policy has been conducted in both bad and good times.

Table IV.1

Asymmetry of discretionary fiscal policy (1970–95)

	Countercyclical discretionary policy (in %)		
	Episodes with negative output gap	Episodes with positive output gap	Difference
	(1)	(2)	(2) – (1)
B	10	14	4
DK	**67**	**58**	– 9
D	**56**	**53**	– 3
EL	**58**	33	– 15
E	**67**	33	– 14
F	**58**	17	– 41
IRL	23	9	– 14
I	38	27	– 11
NL	**55**	**62**	7
A	**58**	25	– 33
P	**70**	**50**	– 20
FIN	**62**	45	– 17
S	**73**	38	– 35
UK	46	9	– 37

NB: The figures indicate the percentage of episodes in which the fiscal stance (measured by the change in the cyclically-adjusted budget balance) was countercyclical (i.e. tightening when the output gap is positive, easing when the output gap is negative). In bold are the figures where in more than half of the episodes a counter-cyclical policy was conducted.

Source: Commission services.

3.2. An operational reading of the SGP

The Maastricht Treaty and the SGP encompass a rules-based fiscal framework combining discipline, flexibility and coordination. The explicit goal of these provisions is to make fiscal policies contribute to the objective of price stability in the euro area while ensuring enough room for manoeuvre for addressing asymmetric shocks at national level.

Fiscal discipline is important to enhance the credibility of the price-stability oriented framework of monetary policy. This objective is pursued via the setting of a ceiling of 3 % of GDP for budget deficits and the commitment to achieve and maintain a budget position of close to balance or in surplus over the cycle.

Fiscal flexibility is required to meet the stabilisation concerns at national level as recalled in Section 2. Under the pact, this is pursued through several provisions:

— The achievement of the medium-term target is assessed not only in actual but also in cyclically-adjusted terms. This derives from the SGP itself ([4]) and has been confirmed in the code of conduct endorsed by the Ecofin in July 2001 (see Part II.1).

([1]) The creation of such an authority has been suggested by Wyplosz (2001), Wren-Lewis (2000, 2002) and Eichegreen et al. (1999). A mild version of an independent fiscal agency has also been suggested by the Swedish Government's Committee for Stabilisation Policy in EMU (2002).

([2]) See for example Buti, Franco and Ongena (1998) and Brunila and Martinez-Mongay (2002).

([3]) The table uses data from 1970 to 1995 in order not to rely on data from the convergence process of the 1990s when fiscal behaviour was atypical in most EU countries.

([4]) Council Regulation (EC) No 1466/97 (Preamble, § 14) states that 'the Council, when examining and monitoring the stability programmes and in particular their medium-term budgetary objective or the targeted adjustment path towards this objective, should take into account the relevant cyclical and structural characteristics of the economy of each Member State'.

— As confirmed by empirical analysis of past fiscal behaviour ([1]), in most cases, adhering to the close-to-balance target of the SGP creates enough room for manoeuvre to allow automatic stabilisers to operate fully without jeopardising the 3 % of GDP deficit threshold.

— The 3 % of GDP deficit ceiling may be breached in exceptional circumstances such as a severe recession: a fall of GDP over 2 % is automatically dubbed severe; if GDP falls between 0.75 % and 2 %, the Council has room for interpretation.

Last but not least, coordination is necessary to avoid free-riding behaviour and arrive at an appropriate policy mix at euro-area level. The SGP itself is a policy coordination device:

— By ensuring fiscal prudence, the pact supports the task of the ECB in achieving price stability is thus conducive to a balanced macroeconomic policy mix.

— The pact explicitly states that fiscal policies, like all economic policies must comply with the broad economic policy guidelines (BEPGs), which are intended to promote coordination. This also implies that the risk of free-riding identified above remains limited since each country is subject to peer pressure.

— The yearly submission and examination of stability and convergence programmes help Member States to take into account a euro-area perspective in their national fiscal policies.

What do the above provisions imply for the conduct of discretionary fiscal policy in EMU?

An operational reading of the SGP requires distinguishing between the conduct of fiscal policy in the transition period (i.e. when there is still some way to go before achieving the close-to-balance target) and in the steady state (i.e. when the medium-term objective has been reached).

In the transition period, the SGP unambiguously puts the emphasis on the achievement of medium-term targets of close to balance or in surplus. This implies that the orientation of fiscal policy should remain restrictive from one year to another. If negative surprises occur, automatic stabilisers would be allowed to play freely provided the consolidation path (i.e. the improvement in the cyclically-adjusted budget balance) to which the Member State is committed is not put into question. Only if the actual budget balance gets uncomfortably close to the 3 % of GDP ceiling should an unexpected negative shock imply additional fiscal tightening. Of course, in the event of positive surprises, the same reasoning would imply a more-ambitious-than-announced out-turn for the actual budget balance (see Box IV.1).

The role of discretionary fiscal policy in the steady state is not addressed explicitly by the pact. However, two elements provide a framework for such a policy. First, the pact states that fiscal policy should support the objective of price stability, which may imply discretionary measures to hold inflationary/deflationary pressures in check. Second, countries with a preference for active fiscal management should create the necessary room for manoeuvre ([2]). Third, as recalled above, the pact requires that such a policy should comply with the BEPGs. To summarise, the SGP, while putting the emphasis on the working of automatic stabilisers, leaves some room for interpretation to policy-makers on the desirability and appropriateness of conducting discretionary fiscal policy in EMU.

([1]) See for example Artis and Buti (2000), Barrell and Dury (2001) and Dalsgaard and de Serres (2001).

([2]) See the July 2001 code of conduct (Part VII.1). This principle was restated at the European Council conclusions of Barcelona in March 2002.

Box IV.1. **Discretionary fiscal stance and automatic stabilisers during the transition to close to balance or in surplus**

A country that does not yet meet the close-to-balance rule of the SGP is expected to strive for that objective. This implies that its cyclically-adjusted budget balance should improve over time. Assume that, starting from a cyclically-adjusted budget deficit d^s_{t-1} in t – 1, a Member State in a 'transition period' commits itself to a cyclically-adjusted budget deficit d^s_t in t such that $d^s_t < d^s_{t-1}$

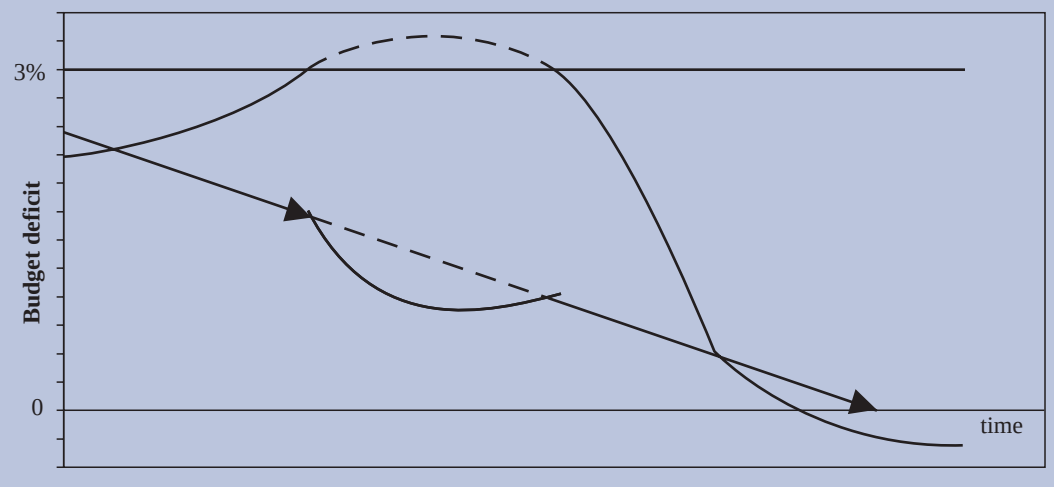
Given a forecasted output gap G^*_t in the stability programme, the actual budget position is $d^s_{t-1} = d^s_t - aG^*_t$,

where *a* is the cyclical sensitivity of the budget to the output gap (estimated to be around 0.5 in the euro-area average). Now, assume that an unexpected surprise on output ε_t occurs, which spontaneously brings the actual budget deficit to

$$d_t = d^s_t - a(G^*_t + \varepsilon_t) = d^*_t - a\varepsilon_t$$

Provided d_t is not too close to the 3 % of GDP ceiling — which has to be assessed by the Commission and the Ecofin — the Member State concerned would be allowed to reach this position instead of the d^*_t announced in its programme. This would imply sticking to the announced consolidation path in cyclically-adjusted terms while using the automatic stabilisers fully to cushion the unexpected shock. As shown in the graph below, a restrictive discretionary fiscal policy is maintained throughout the period. An acceleration of the consolidation (implying a less-than-full working of automatic stabilisers within the year) would occur only in the event of a risk of exceeding the 3 % of GDP deficit ceiling.

Graph IV.3: **Fiscal stance in the transition to the medium-term target**



4. How and when to use discretionary fiscal policy in EMU

In view of past fiscal failures and the stability-oriented framework provided by the SGP, any attempt at running discretionary fiscal policy for stabilisation purposes at the national level should be subject to careful examination. More specifically, it should be assessed, first, whether such a policy move would be desirable and, second, whether and under which conditions it would be effective.

4.1. Assessing when discretionary fiscal policy may be desirable

Country-specific macroeconomic imbalances, such as inflationary or deflationary pressures and/or current-account desequilibria, do not necessarily call for a fiscal response. Identifying cyclical overheating and its origin is required prior to decide whether a corrective fiscal action is warranted. As evidenced in a number of studies, this issue is far from clear-cut: measurement of output gaps are surrounded with a large degree of uncertainty (see Part II.3); external imbalances do not necessarily reflect cyclical developments, especially in rapid-growth countries; large swings in real exchange rates do not automatically signal pervasive macroeconomic imbalances since they may result from the over- or under-valuation of the real exchange rate at the start of EMU ([1]).

In order to assess the appropriateness of fiscal policy to address these imbalances, a first step consists of distinguishing between 'bad' and 'good' country-specific imbalances. Only in the first case a policy action should be envisaged.

First, it is important to disentangle cyclical and structural macroeconomic imbalances. In the case of catching-up countries, an above-average inflation rate can, at least partly, be attributed to the so-called Balassa–Samuelson effect, which is of a non-cyclical nature ([2]). The ensuing higher inflation, however, is not worrying since the country concerned does not incur any loss of competitiveness in the tradable sector. Recent studies conclude that some Member States are subject to this effect ([3]). In such a case, no specific macroeconomic policy is warranted. However, the distinction between normal and excessive inflation differentials is difficult as permanently lower real interest rates can easily shift catching-up countries into a situation of overheating. Therefore, it is particularly important that these countries avoid a pro-cyclical expansionary policy which may heighten inflationary pressures.

Second, in the case of a demand shock, when it originates essentially from the outside, a national inflation rate above or below euro-area average, allowing for real exchange rate change, is likely to be part of an optimal markets-based adjustment process ([4]). In contrast, if the cause of the macroeconomic imbalance is a shock to domestic demand, the government should stand ready to fight inflationary or deflationary pressures. In this context, if the shock is severe, an active fiscal stance may be the right policy.

([1]) This issue is addressed at length both in Hoeller et al. (2002) and European Commission (2001b).

([2]) If one distinguishes between tradable (mainly manufacturing and agricultural goods) and non-tradable sectors (mainly services), the following mechanism is at work: in the tradable sector, international competition prevents inflation. However, the catching-up of productivity in this sector implies rapid rises in real wages, which spill over to the non-tradable sector, although the latter experiences lower productivity growth. As a result, the average price index rises more rapidly than in the developed countries.

([3]) While De Grauwe and Skudelny (2001) estimate the contribution of the Balassa–Samuelson effect on inflation differentials not to have exceeded 1 percentage point so far, Sinn and Reuttner (2001) find significantly stronger effects of up to nearly 3 percentage points. For estimates of the Balassa–Samuelson effect in accession countries, see Annex A in Part V.

([4]) See Alesina et al. (2001) for an application to a number of peripheral EU economies. An exception to this general conclusion are measures aiming at boosting competitiveness by changing the so-called 'internal terms of trade' (see below).

In the case of a supply-side disturbance, a crucial element in assessing the desirability of discretionary fiscal policy is the degree of persistency of the shock. If it is temporary, no action is required: automatic stabilisers may drive inflation away from target, but this effect is likely to be small ([1]). Changes in taxation which would moderate the impact of the shock on inflation could nonetheless be envisaged if the shock is particularly severe. This could involve changes in indirect taxation or tax changes in exchange for wage moderation. If the shock is permanent and thereby affects potential output, a discretionary fiscal response may be warranted, but it should not be counter-cyclical. Instead, it should aim at offseting the working of automatic stabilisers which tend to keep output close to its old potential level.

While the above classification is conceptually useful, its practical implications should not be overstated as the identification of shocks (origin, persistence, etc.) is easier *ex post* than *ex ante*. Indeed, recognition lags is a typical shortcoming of discretionary fiscal policy.

4.2. Designing an efficient stabilisation policy

Once it has been recognised that inflationary or deflationary pressures at work at national level are a matter of concern, it should be assessed whether a discretionary countercyclical fiscal policy would be effective in reducing the macroeconomic imbalances. Clearly, a discretionary fiscal action is warranted only to the extent that it can correct the underlying imbalances and does not have longer-term negative effects.

The extent of external leakages due to the openness of the economy affect the impact of fiscal policy. Arguably, fiscal policy is not always an effective tool to cool off (or boost) the economy. In the case of small open economies, a fiscal restraint is likely to have only limited impact on output and prices due to external leakages.

Given the different effects of alternative options, any discretionary attempt at stabilising the economy needs to take into account the composition of the fiscal package since fiscal policy, unlike monetary policy, offers a large diversity of demand management instruments.

In general, the economic literature provides the following indications when designing a discretionary fiscal package:

(a) The purpose being cyclical stabilisation, measures should be temporary rather than permanent; however, past experience shows that urgent measures announced as temporary prove difficult to reverse.

(b) The fiscal multipliers of temporary public spending are usually larger than multipliers of temporary tax changes; however, if spending increases become permanent, the medium-term negative supply effects more than offset the short-term stabilisation gains.

(c) Amongst tax measures, changes in indirect taxes which affect the timing of investment or consumption decisions are more effective than changes in direct taxation which do not affect permanent income; by the same token, however, in the case of indirect taxes, getting the timing of implementation wrong may imply strong pro-cyclical effects.

(d) When the source of the economic imbalance can be clearly identified, targeted fiscal measures may be more effective than general demand-management measures for stabilising the economy.

Until now, fiscal policy has been analysed as a demand-management instrument. However, in view of its multi-dimensional nature, fiscal policy operates also via the supply side and its impact on competitiveness.

On the first count, targeted fiscal measures tackling specific supply-side rigidities at source may prove useful. For instance, moderate wage-setting in the public sector could help tame wage-push inflation. Similarly, the phasing-out of tax relief for residential dwellings may prevent a real estate bubble (see e.g. Wren-Lewis, 2000).

On the second count, a fiscal package involving a switch of expenditure between foreign and domestic output (just like an exchange rate change), could be considered along the lines suggested by Calmfors (1998) who argues that fiscal policy could aim at changing the so-called internal terms of trade. For example, in a recession, the real exchange rate can be depreciated through a cut in payroll taxes (which lower labour cost, hence export prices) compensated by a rise in the VAT rate (which does not impact on export prices). Such a shift would have similar output and employment effects as a nominal exchange-rate depreciation in a short-run macro

([1]) See QUEST simulations in European Commission (2001a), Part III.

model with a fixed capital stock ([1]). However, the practical difficulties of such a policy (slow decision-making process, technical complexities, consequences on income distribution) make it difficult to design and implement this kind of fiscal package.

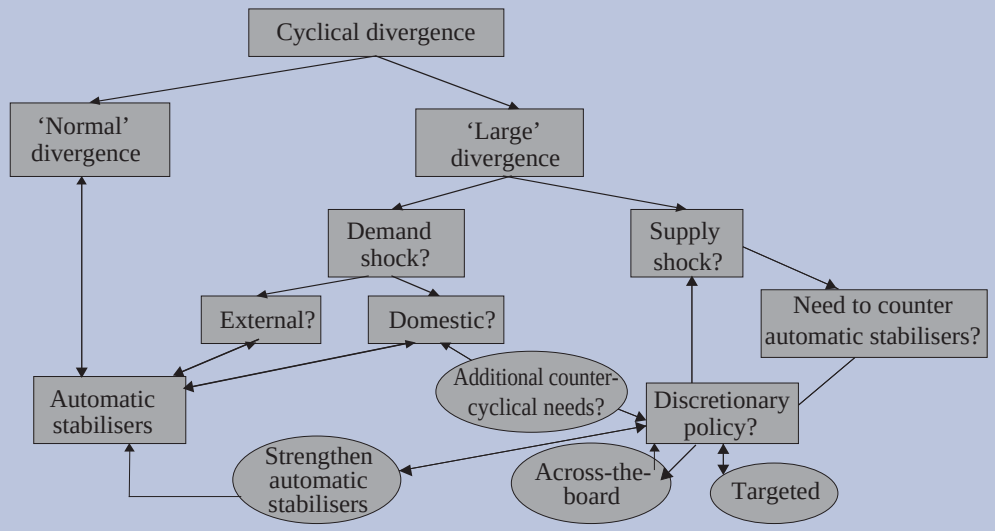
([1]) According to Calmfors (1998), there exist some successful experiences of internal exchange-rate changes via fiscal policy in Scandinavian countries: Denmark in 1988, Sweden in 1993. Singapore also took a similar action in 1998–99.

To summarise, even in the cases in which a discretionary policy may be desirable, designing an optimal fiscal package and implementing it successfully remains a serious challenge for policy-makers.

4.3. Discretionary fiscal policy: a roadmap

To sum up, the use of discretionary fiscal policy as a stabilisation device at national level in the context of EMU raises a number of challenges. The general conceptual framework which can be derived from the above analysis is illustrated in Graph IV.4:

Graph IV.4: **Discretionary fiscal policy for stabilisation: a roadmap**



- In view of the institutional constraints and economic inefficiencies characterising discretionary fiscal policy, letting the automatic stabilisers work should be the norm in the event of 'normal' divergences, the latter being associated with structural differences (Balassa–Samuelson effect) or small shocks.
- Discretionary fiscal action may be useful for addressing large, country-specific demand shocks (which lead to large divergences with euro-area average), when automatic stabilisers fall short of providing a sufficient degree of stabilisation.
- Fiscal policy is more appropriate in the case of domestic-demand shocks while is not warranted in the event of external-demand shocks.
- Counter-cyclical fiscal policy is not appropriate to tackle supply-side shocks. Indeed, in some circumstances, it may be necessary to limit the operation of automatic stabilisers via offsetting discretionary measures if the supply shock proves persistent.
- Targeted fiscal measures may prove efficient, provided the source of the imbalance is clearly identified.
- Across-the-board fiscal measures need to be temporary and reversible. In order to avoid the typical pitfalls of discretionary policy, it may be desirable to strengthen the smoothing capacity of automatic stabilisers, rather than resorting to active fiscal management. The challenge here, however, is to attain this goal without increasing the supply-side inefficiencies of tax and benefit systems.

5. How effective is discretionary fiscal policy in EMU? Results of QUEST model simulations

5.1. Simulation strategy

Now that some light has been shed on the conditions under which discretionary fiscal policy could be envisaged in EMU, it is necessary to evaluate whether the above conceptual framework is supported by results from model simulations.

To assess the effectiveness of various fiscal measures in stabilising the economy, simulations performed with the Commission services QUEST model are presented. This model is a modern version of the neoclassical-Keynesian synthesis. Behavioural equations in the model are based on intertemporal optimisation of households and firms with forward-looking expectations. Prices adjust sluggishly and the nominal wages response is delayed because of overlapping wage contracts. The model has Keynesian features in the short run, but the effectiveness of fiscal policy is more limited than in the traditional econometric models because of the built-in intertemporal budget constraints. More specifically, total consumption is represented as the aggregation of the responses of two groups of households, one forward-looking group which follows the optimal consumption rule given by the life cycle/permanent income hypothesis, and a liquidity-constrained group whose consumption depends on current disposable income ([1]).

A temporary fiscal expansion in QUEST basically operates through three standard channels in the short run. First, some expenditure categories (i.e. public investment and government consumption) boost GDP as they directly enter its definition. Second, aggregate demand is further stimulated via the increase in consumption of the liquidity-constrained households which see their current disposable income rise as wages and employment are boosted. However, the non-liquidity-constrained households tend to reduce their consumption as interest rates rise and they anticipate the reversal of the fiscal expansion in a near future. Third, in the opposite direction, fiscal expansion has a crowding-out effect through induced changes in interest rates and exchange rates which lower the size of fiscal multipliers but, in general, do not change their sign.

In this exercise, it is assumed that the fiscal authority is well behaved and thus measures are reversed in the second or third year in order to capture the fact that they are only implemented to smooth out cyclical fluctuations. As a result, they do not affect the medium- to long-term path of public debt, which avoids the negative crowding-out effects of expectations of a future rise in tax burden. It is also assumed that the single monetary authority holds the ensuing surge in inflation in check by raising interest rates. The simulations are performed for three representative countries: Germany (a large country whose policy stance has potentially large spillovers effects via foreign trade and its impact on monetary policy), Ireland (a small, very open and flexible economy) and Greece (a small but less open and rather inflexible economy).

Five discretionary fiscal measures have been envisaged:

— a temporary increase in government purchases of goods and services;

— temporary reduction in income taxes;

— an increase in government employment;

— a temporary reduction in VAT;

— a permanent ‘tax swap’ between income tax and VAT.

([1]) For a presentation of QUEST II model, see Roeger and in’t Veld (1997).

5.2. Results

Increase in government purchases of goods and services

It is assumed that purchases of goods and services are increased by 1 % of GDP only for one year. GDP will increase by 0.6 % in Germany and 0.4 % in Ireland and Greece. The impact on inflation is small or negligible. Higher interest rates counterbalance the positive impact of fiscal expansion on aggregate demand. The increase in interest rates is larger if the fiscal expansion takes place in one of the large economies, here Germany. The smaller economies (Greece and Ireland) have such a low weight in the ECB reaction function that interest rates are hardly raised in response to expansions there. The temporary and reversed nature of the shock implies that the fiscal expansion is not associated with a large fall in domestic demand, as would be the case with permanent fiscal measures.

While the crowding-out by domestic demand is relatively moderate, trade openness implies that part of the boost to output is leaking abroad through higher imports. This effect is stronger for open economies like Ireland than for less open ones like Germany and Greece.

Table IV.2

Impact of an increase in government purchases of goods and services

Deviations from baseline (in %) in the first year	Germany	Ireland	Greece
GDP	0.6	0.4	0.4
Trade balance/GDP	– 0.2	– 0.6	– 0.1
CPI	0.1	0.0	0.0
Short-term interest rates	0.4	0.0	0.0

Source: Commission services.

Temporary reduction in income taxes

The fiscal measure involves a reduction in income taxes by 1 % of GDP reversed in the second year. Unlike government consumption, a temporary reduction in income taxes does not lead to a direct boost to output but acts indirectly via increased consumer spending. However, a temporary tax reduction will not lead to sensibly higher consumption by forward-looking households who will smooth their net income gain and raise their savings rate. But, this measure raises disposable income for liquidity-constrained consumers who increase their spending. Aggregate consumption rises but part of this leaks abroad through higher imports. Again, this leakage is stronger for more open economies like Ireland, whose GDP is hardly affected at all. The impact on output is however small also in Germany and Greece.

Another important difference compared to an increase in government consumption is that a reduction in taxes is not a pure demand shock but has also a supply-side effect in the long term (not shown in the tables as only stabilisation properties of the fiscal expansion is considered). Lowering labour income taxes boosts employment, albeit temporarily, and hence raises potential output. This means that the inflationary consequences of this type of shock are much smaller than for those of expenditure increases.

Table IV.3

Impact of a temporary reduction in income taxes

Deviations from baseline (in %) in the first year	Germany	Ireland	Greece
GDP	0.2	0.1	0.2
Trade balance/GDP	0.0	– 0.2	– 0.1
CPI	0.0	0.0	0.0
Short-term interest rates	0.0	0.0	0.0

Source: Commission services.

Increase in government employment

In these simulations, government employment is raised so that public wage bill increases by 1 % of GDP. The measure is assumed to be reversed after three years. The table shows the multipliers in the first three years. The increase in government employment has a direct effect on GDP, as measured in the national accounts. Hence the effect on GDP in the first year is very strong. However, it also crowds out some private sector employment because of the higher wage pressure resulting from the initially lower total unemployment. The multipliers turn negative from the second year on in Ireland and Greece and from the third year in Germany. This illustrates the detrimental medium-term effects of such a fiscal action. The medium-term negative effects would be stronger if the rise in public employment were to become permanent.

Table IV.4

Impact of an increase in government employment

		Germany	
Deviations from baseline (in %)	1	2	3
GDP	0.8	0.3	– 0.1
Trade balance/GDP	0.0	0.0	0.0
CPI	0.2	0.6	0.9
Short-term interest rates	0.1	0.2	0.1
		Ireland	
Deviations from baseline (in %)	1	2	3
GDP	1.0	– 0.2	– 1.0
Trade balance/GDP	– 0.2	0.1	0.2
CPI	0.1	0.1	– 0.1
Short-term interest rates	0.0	0.0	0.0
		Greece	
Deviations from baseline (in %)	1	2	3
GDP	1.0	– 0.3	– 0.9
Trade balance/GDP	0.1	0.0	– 0.1
CPI	0.2	0.1	– 0.3
Short-term interest rates	0.0	0.0	0.0

Source: Commission services.

Temporary reduction of VAT

The simulations involve a reduction in VAT of 1 % of GDP, reversed in the second year. The reduction in VAT mechanically lowers inflation in the first year, while boosting private consumption, in particular because households have a strong incentive to front-load their consumption plans. To summarise, this measure has a larger effect and seems to be a more effective stabilisation tool than income tax reduction. However, private investment is negatively affected due to the crowding-out effect of rising interest rates. Again, leakages considerably lower the size of fiscal multipliers in the case of Ireland.

Table IV.5

Impact of a temporary reduction of VAT

Deviations from baseline (in %) in the first year	Germany	Ireland	Greece
GDP	0.5	0.2	0.5
Trade balance/GDP	– 0.3	– 0.6	– 0.2
CPI	– 1.5	– 1.7	– 1.2
Short-term interest rates	0.3	0.0	0.1

Source: Commission services.

Tax swap: reduction in income tax offset by increase in VAT (permanent)

This exercise attempts to simulate the effect of a change in the 'internal terms of trade'. A permanent tax shift from labour income to indirect taxes (by 1 % of GDP in the simulations) has sizeable positive long-run effects. Indeed, consumption taxes are less distortionary than labour income taxes because they not only fall on labour but also are shared by all economic agents. The table shows that positive effects on output could be expected from this measure in the case of Germany. This would not be the case, however, for the two other countries.

The size of the long-run GDP gains depends on the distortionary nature of the benefit system per country. The long-run gain is larger for Germany than for Ireland and Greece since the indexation of benefits to taxes is lower in Germany where the effect is close to nil. However, even in the case of Germany, these effects come only gradually and, as such, this measure appears unsuitable to respond to negative temporary shocks. Therefore, it belongs to the realm of structural reforms rather than to that of stabilisation policies.

Table IV.6

Impact of a tax swap

		Germany	
Deviations from baseline (in %)	1	2	3
GDP	0.1	0.3	0.3
Trade balance/GDP	– 0.1	– 0.2	– 0.2
CPI	1.6	1.8	1.8
Short-term interest rates	0.1	0.1	0.0
		Ireland	
Deviations from baseline (in %)	1	2	3
GDP	– 0.1	– 0.1	0.0
Trade balance/GDP	0.1	– 0.1	– 0.1
CPI	1.7	1.7	1.7
Short-term interest rates	0.0	0.0	0.0
		Greece	
Deviations from baseline (in %)	1	2	3
GDP	0.0	0.0	0.0
Trade balance/GDP	0.0	– 0.1	– 0.1
CPI	1.4	1.6	1.6
Short-term interest rates	0.0	0.0	0.0

Source: Commission services.

* * *

Although these above results are clearly model-dependent and should be viewed as an illustration rather than as hard evidence, a number of lessons can nonetheless be drawn from the simulations.

First, in line with most economic literature, the short-term fiscal multipliers are larger in the case of spending increases than in the case of tax cuts and, within the latter, are smaller for income taxes than for indirect taxes. Unsurprisingly, the smaller and the more open the country, the smaller the multipliers due to external leakages.

Second, the highest short-term multipliers are associated with budgetary items which are the most likely to be irreversible (i.e. public employment) and thus have negative effects in the medium term (generally from the second year on).

Third, the impact on the euro-area interest rates are sizeable when a large country (here Germany) embarks on discretionary fiscal policy. This emphasises the need for discussing such policy actions in the Eurogroup prior to their implementation.

Fourth, the impact on inflation appears to be limited, especially in the case of small open economies. This casts doubts on the ability of discretionary fiscal policy to temper inflationary or deflationary pressures, unless the fiscal impulse is of a very large, somewhat unrealistic magnitude. Only a lower VAT would significantly mitigate inflation in the short term. However, it does not impact on core inflation. Similarly, discretionary fiscal actions have only a modest impact on the trade balance, which confirms the inability of fiscal policy to correct externally driven macroeconomic imbalances.

Finally, a tax swap does not have a significant short-term impact either on the terms of trade or on the trade balance for small countries. Therefore, there is not much to be expected from this measure in terms of macroeconomic stabilisation, although it may be considered as part of a larger structural reform.

Part V

Key budgetary issues for the candidate countries of central and eastern Europe

Summary

Accession negotiations are currently underway with 12 of the 13 candidate countries who wish to join the EU. The Treaty provisions and secondary legislation (the *acquis communautaire*) on economic and budgetary policy will apply to these countries once they join the EU. A major policy challenge is to implement upon accession the EU framework for budgetary surveillance taking into account the specific needs and circumstances of the accession countries.

This chapter examines some of the key budgetary issues faced by a sub-set of candidate countries, namely the 10 countries from central and eastern Europe (CEECs) as they approach entry into the EU and, differently from the other candidate countries, undergo a transition from a command to a market economy.

The overall relative level and composition of revenues and expenditures in CEECs resemble those in present EU Member States, although significant differences for individual countries and budgetary components exist at times. This is a remarkable fact since CEECs have had only 10 years to implement *ex novo* a public finances system. While the size of CEECs governments is on average higher than in most emerging economies, this can be largely explained by underlying economic factors, such as GDP per capita, trade openness and demographic developments. There remains, however, a need to reassess the structure of budget revenues and expenditures to foster a growth-enhancing environment providing sufficient space and incentives for private-sector development.

A key requirement for budgetary surveillance are reliable and timely government accounts. Achieving this has proved difficult for countries undergoing a transition to a market economy. From an institutional point of view, treasury departments had to be created and far-reaching modifications were required to accounting and recording procedures. Developing the capability to provide timely and reliable data with an appropriate coverage has been a lengthy task, which is not yet completed and there is scope for further improving the quality of budgetary data. From a conceptual point of view, the transition to a market economy is shifting the boundaries between the State and the private sector, making it somewhat difficult to interpret and compare government accounts in the CEECs. Many of the underlying problems, however, are decreasing as transition advances and the *acquis communautaire* is progressively implemented.

Budgetary surveillance will also need to take into account that the CEECs are undergoing tremendous structural and institutional changes. These changes are not only driven by the completion of the transition from a command to a market economy, but also by the liberalisation effects which EU membership will entail, the need to upgrade public infrastructure and the commitment to implement the *acquis communautaire*, with the related institution-building requirements. All of these changes have significant budgetary implications that need to be factored into the evaluation of budgetary developments. In addition, due consideration must be given to the constraints imposed by the fact that, on average, CEECs are characterised by a higher degree of output volatility compared with EU Member States and are small open economies which rely heavily on foreign capital to finance catching up.

Since 2001, the Commission has implemented a new initiative called the pre-accession fiscal surveillance procedure (PFSP) which is designed to closely approximate the policy coordination and surveillance mechanisms of the EU while giving due regard to the accession priorities of the candidate countries. The assessment of budgetary positions in the run-up to accession should therefore be flexible enough to cater for the uncertain and fast-changing circumstances facing economies undergoing rapid change, but at the same time rigorous enough to cater for the very real challenge facing the CEECs.

Accordingly, in the run-up to accession, candidate countries are required to comply with the Copenhagen criteria rather than fulfil the Maastricht nominal convergence criteria. The primary concern in the pre-accession period is medium-term macroeconomic stability, rather than achieving any particular target for the budget balance. Medium-term budgetary policy should also aim at attaining a structure of expenditure and revenues that effectively supports economic growth. At the same time, the emphasis on structural and institutional reform should not hide the importance of sound fiscal policies. The CEECs' vulnerability to economic shocks and the external constraints they face underline the need for prudent policies. The appropriate deficit level may vary across countries and is likely to be a function of the speed of structural reforms, the relative speed of economic growth, the extent of real convergence, and the level of debt.

1. Introduction

Accession negotiations are currently underway with 12 of the 13 candidate countries who wish to join the EU. The Treaty provisions and secondary legislation (the so-called *acquis communautaire*) on economic and budgetary policy will apply to these countries once they join the EU. A major challenge facing policy-makers is to implement upon accession the EU framework for budgetary surveillance taking into account the specific needs and circumstances of the accession countries. This chapter examines some of the key budgetary issues faced by a sub-set of candidate countries, namely the 10 countries from central and eastern Europe (hereafter referred to as CEECs), as they approach entry into the EU and, differently from the other candidate countries, undergo a transition from a command to a market economy.

Section 2 compares the size and composition of government revenues and expenditures in the CEECs with those of EU Member States. Particular attention is paid the size of the government sector in light of the transition to market economies.

Section 3 addresses the budgetary challenges for the CEECs. It first considers the difficulty in developing a reliable set of government accounts, and the complexities in interpreting budgetary aggregates (such as the budget deficit) in countries experiencing tremendous structural and institutional reform. It then looks at the role which fiscal policy can play in providing a stable macroeconomic environment in those economies. A key issue is the strong external constraint on the budgetary policies of the CEECs given the high volatility of output and the strong reliance on foreign capital for investment financing.

Section 4 describes the pre-accession fiscal surveillance procedure implemented since April 2001 to prepare for future participation in the policy coordination and surveillance mechanisms of the EU.

Section 5 concludes stressing that, in the run-up to accession, candidate countries are not required to fulfil the Maastricht nominal convergence criteria but should instead aim for medium-term fiscal sustainability in line with the so-called Copenhagen criteria ([1]).

([1]) In June 1993, the European Council in Copenhagen setting out the criteria for joining the EU concluded that membership required:
- that the candidate country had achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities;
- the existence of a functioning market economy, as well as the capacity to cope with competitive pressure and market forces within the Union;
- the ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union.

Macroeconomic stability is considered a key aspect of a functioning market economy.

2. Main features of public finances in the CEEC

Before considering the budgetary situation of the CEECs, it is worthwhile noting some basic figures on the macroeconomic situation, see Table V.1. Most CEECs recorded higher rates of GDP growth than EU countries in 2001, with declining inflation rates. With the exception of Bulgaria and Estonia, budget deficits are close to, or higher than, 3 % of GDP for most CEECs. Current-account deficits are relatively large, although they have been mainly financed through foreign direct investment (FDI). A worrying aspect is the high level of unemployment in most CEECs, although this may be partly the dynamics of transition ([1]).

([1]) On the working of this mechanism see footnote ([1]), page 153.

Table V.1

Main macroeconomic indications of central and east European countries, 2001

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Slovak Republic	Slovenia
Real GDP growth	4.7	3.6	5.0	4.2	7.9	5.1	2.3	5.1	3.1	3.1
CPI inflation	9.2	4.7	5.7	9.4	2.6	2.6	6.5	34.5	7.3	7.3
Budget balance % GDP	– 0.7	– 3.6	– 0.5	– 4.3	– 2.8	– 3.3	– 3.5	– 3.8	– 6.7	– 2.3
Current acc./GDP	– 5.4	– 3.6	– 5.0	– 2.2	– 7.1	– 3.3	– 5.3	– 4.3	– 7.6	– 3.3
Public debt/GDP	76.9	17.3	4.9	55.0	14.1	23.6	40.9	22.9	32.4	25.8
Foreign debt/Public debt	91.4	10.5	67.4	n.a.	60.9	77.8	48.8	44.9	49.0	48.8
Unemployment rate	16.5	8.9	12.0	5.7	13.3	16.5	18.2	7.7	19.3	6.9

Source: Commission services.

2.1. Government revenues and expenditures in the CEECs

As shown in Table V.2, at 40 % of GDP the ratio of public expenditure to GDP in most CEECs countries remains relatively high. This level is similar to that observed in EU Member States. However, total government expenditure in the CEECs declined on average by about five percentage points of GDP between 1993 and 2000. This is explained by the transition from central planning to a market economy which involves a reduction in the activities carried out by the government sector. In addition to State ownership of enterprises, the governments in the formerly command economies played a large redistribution role with a complex net of taxes and subsidies that were meant to equalise incomes across different firms and sectors. This was one of the main traits of the so-called soft budget constraint, as it implied that *ex ante* and *ex post* profitability of firms were completely disconnected ([2]).

At least in principle, a large share of revenue and expenditure in GDP gives much more impact to fiscal policy in the event of large shocks to the economy. To achieve certain targets for fiscal variables in relation to GDP, it is necessary to implement relatively small changes in percentage terms. In other words, the larger is the size of governments, the smaller is the volatility of fiscal accounts. Data seem to support this view. Indeed, the volatility of budget deficits in CEECs is of an order of magnitude that is similar to the volatility observed in EU countries ([3]).

([2]) Kornai (1980).

([3]) The standard deviation of budget deficits in CEECs during the period 1993–2001 was slightly above 2, while in EU countries during the period 1990–2000, it was also close to 2.

Table V.2

Size of government spending and per capita GDP levels in 2000

	Government spending (1)	Per capita GDP (2)
Bulgaria	41.7	28.0
Czech Republic	43.0	58.8
Estonia	39.1	38.5
Hungary	46.5	51.1
Latvia	40.6	29.9
Lithuania	33.0	33.3
Poland	42.7	39.4
Romania	35.6	23.3
Slovakia	42.8	47.9
Slovenia	43.4	69.4
CEECs		38.7
EU	45.7	100.0

(1) As % of GDP.
(2) As % of EU per capita GDP in purchasing power parities.

Source: Commission services.

Although significant differences for individual countries and items exist at times, the composition of revenues and expenditures in CEECs by and large resembles those in other EU countries, see Tables V.3 and V.4. This is remarkable as CEECs have had only 10 years to implement *ex novo* a public finance system.

Two aspects of the structure of the expenditure and revenue raise concern. On the expenditure side, it is estimated that up to 80 % of government expenditure is rigid, in the sense that it is determined by rules outside the budget bill process (1). These are mainly expenditures in the areas of defence, old-age and disability pensions, and transfers to local governments. Such rigidity is often compounded by indexation clauses for pensions and the wages of public-sector employees. This implies that on the expenditure side there is little flexibility to respond to unexpected shocks, and that automatic stabilisers will not be very powerful. Empirical evidence seems to confirm this. For instance, Kutan and Pautola-Mol (2002) find that for Baltic States, the effects of budget variations on output are very small, with budget shocks explaining only 2 % of movements in the output gap in Latvia and 8 % in Estonia. Furthermore, a large component of non-rigid expenditure which in theory could be used for stabilisation purposes is related to public investment. Large fluctuations in public investment levels could have negative implications for growth given the poor state of infrastructure in the CEECs.

On the revenue side, the financing of social expenditure of a similar magnitude to EU countries is obtained from a much smaller tax base. As a result, social security contributions as a share of labour costs are exceptionally high (2). The distortions introduced by these high rates of taxation of labour are a serious impediment to a job-intensive growth (3). They also encourage an underground economy, leading to a vicious circle whereby high tax rates reduce the tax base via a shift in activity to the underground economy, which in turn leads to higher tax rates. On the other hand, many CEECs have already put in place obligatory funded

(1) World Bank (2001). This is a common trait in many emerging economies including Latin American countries.
(2) Boeri (2001) argues that the prospects of accession to the EU has resulted in the CEECs developing institutions that are not typical of countries at their stage of economic development. This especially applies to social welfare systems.
(3) On the other hand, the catching up process is likely to increase the social security tax base.

Table V.3

Structure of general government revenue as a share of GDP in 2000 (1)

	Bulgaria	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Romania	Slovak Rep.	Slovenia	Euro zone
Current revenue	40.0	39.2	38.7	41.8	36.8	30.4	31.4	36.6	41.5	45.0
Tax	31.5	36.7	35.8	36.2	31.3	28.5	29.6	34.1	39.2	44.9
Personal income tax	4.3	5.0	7.8	7.2	6.0	7.8	3.4	4.6	7.6	9.9
Corporate income tax	2.9	3.9	1.0	2.2	1.7	0.7	2.6	3.0		3.0
Social security contributions	8.8	14.7	12.4	9.8	10.7	7.1	10.9	13.0	13.6	15.9
Property tax	0.0	0.5	0.4	0.9	1.0	0.6	0.0	n.a.	2.3	1.5
Indirect tax	15.5	12.6	14.2	16.0	11.9	11.7	11.4	13.5	15.7	13.6

(1) Poland is excluded for lack of comparable data.

Source: IMF.

Table V.4

Structure of general government expenditure as a share of GDP in 2000 ([1])

	Bulgaria	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Romania	Slovak Rep.	Slovenia	Euro zone
Current expenditure	36.2	38.4	36.3	39.9	36.6	30.4	32.0	38.2	39.2	43.8
Government consumption	17.0	8.7	24.6	14.4	16.1	16.6	12.6	17.6	17.6	19.8
Interest payments	4.3	1.1	0.3	6.1	1.1	1.7	4.9	2.7	1.5	3.7
Subsidies and current transfers	14.9	28.6	11.4	19.4	18.9	12.1	14.5	17.9	20.1	19.8
Subsidies	1.0	8.1	0.8	2.8	5.0	0.2	2.2	4.0	1.5	1.4
Current transfers	13.9	20.5	10.6	16.6	13.9	11.9	12.3	13.9	17.9	18.4
Capital expenditure	5.3	5.9	3.2	7.1	4.0	1.9	3.1	3.9	4.1	1.0

([1]) Poland is excluded for lack of comparable data.

Source: IMF.

pension schemes in order to improve the long-term sustainability of social expenditures. Building upon the steps already taken, therefore, CEECs should implement further public finance reforms in order to foster a growth-enhancing environment providing sufficient space and incentives for private sector development.

2.2. The size of the government sector in the CEECs

A separate issue from the composition of public expenditures in CEECs concerns the overall size of the government sector. With public expenditure and revenue levels on a par with EU Member States but well above those in other emerging economies, several observers have questioned whether the size of CEECs' government is higher than what is explained by underlying economic factors. This argument is mainly based on the cross-country comparison of public expenditure in relation to income levels, measured by GDP per capita. To test this argument, Graph V.1 below compares the actual size of their governments with a projected size estimated on the basis of four explanatory variables as follows ([1]):

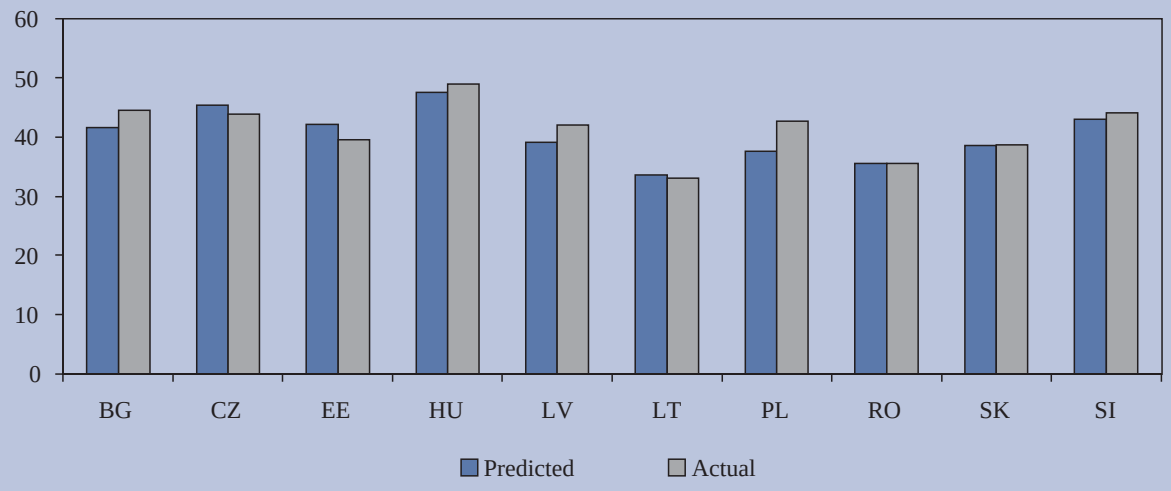
- ***Income levels:*** according to Wagner's law, the income elasticity of demand is high for certain 'luxury' public goods and services (e.g. healthcare, education, pensions), and government spending as a share of GDP rises as per capita income levels increase. The relatively low levels of per capita income in the CEECs would suggest that governments should be small relative to EU Member States.
- ***Trade openness*** increases the exposure of a country to external shocks, and consequently to asymmetric changes in real incomes across sectors of activity. In the presence of imperfections in the functioning of labour and capital markets, this can lead to transitory unemployment and changes in relative incomes ([2]). A government that aims at smoothing such effects as well as avoiding increases in income inequality, would play a larger redistributive role the more open is the economy. Although country size and trade openness are correlated, empirical analysis on OECD countries shows that trade openness remains an important explanatory factor ([3]). The high degree of openness of the economies of the CEECs would augur in favour of a large government.
- ***Government debt:*** the *ex ante* stock of government debt can be viewed as an indicator of future tax pressure, in line with the inter-temporal budget constraint of the government. In empirical work, the

([1]) Using coefficients of Begg and Wyplosz (1999) and Martinez-Mongay (2002) for the four variables identified below, the size of government in the CEECs is projected by multiplying such coefficients with the values of the relevant variables for each candidate country. Furthermore, to neutralise scale effects, the analysis is based on deviations of variables for CEECs from the average OECD, and then computed as the cumulative deviation due to different variables (multiplied by the respective coefficients). The average level of OECD government expenditure is added at the end of the sample period to compute the predicted value.

([2]) Aghion and Blanchard (1994) and Chadha and Coricelli (1997) have examined this reallocation process as part of the transition to a market economy.

([3]) Rodrik (1998) finds trade openness to be a strong determinant of public expenditure. Alesina and Wacziarg (1998) argue that the relationship between openness and public expenditure simply reflects the effect of country size. To take into account the pure size effect, the analysis in this chapter also considers the size of the country in term of total population as a proxy for the size of the government sector.

Graph V.1: **A comparison of the actual and predicted size of the government sector in 2000**



sign of the debt variable is negative and highly significant (Martinez-Mongay, 2002 and Begg and Wyplosz, 1999). On average, the debt ratio is lower in CEECs than in OECD countries, which would serve to push up the projected size of government.

- ***Demographic variables:*** a large share of old-age people in total population is likely to be associated with higher public expenditure due to spending on public pensions and healthcare. As noted in several analyses of demographic trends (Oksanen, 2001), the population structure of CEECs is skewed towards the old, which would imply a high share of government spending as a share of GDP.

The results presented in Graph V.1 are interesting in that the predicted size of governments in the CEECs is relatively close to actual levels, and thus does not deviate significantly from what is predicted on the basis of underlying economic variables ([1]). This differs from the results that would be obtained taking into account only GDP per capita: given that GDP per capita in the CEECs is on average less than 50 % of EU average, the analysis projects that CEECs government size should on average be 10 percentage points lower than for EU countries. However, this explanatory factor is offset by the low debt-to-GDP ratio; the high share of elderly persons in total population and, more important, the high degree of trade openness.

Nevertheless, the average result hides a heterogeneous situation at the country level, although point estimates should be taken with due caution. The largest discrepancy is found for Poland, where the actual level of expenditure is more than five percentage points of GDP above the predicted one. Bulgaria and Latvia also have larger expenditure relative to predicted values. For the others, differences are not very large, and Estonia and the Czech Republic show levels below those predicted.

([1]) The analysis has two limitations. First, it does not try to assess whether the actual size of CEECs government is more or less optimal from a theoretical point of view. Secondly, it does not take into account political factors which can also be important determinants, as noted in Part III.2 which examines the growth in the government spending in EU Member States over the past thirty years. Political factors have been excluded from this analysis due to lack of data. Begg and Wyplosz (1999) consider several political indicators, but in projecting public expenditure for CEECs they use political indicators based on average values for OECD countries.

3. Budgetary challenges for countries undergoing a transition to a market economy

3.1. Developing accurate and reliable government accounts

A key requirement for budgetary surveillance are reliable and timely governments accounts. This has proved to be a difficult condition to fulfil for countries undergoing a transition to a market economy for both institutional and conceptual reasons.

Regarding institutional factors, the CEECs in the early stages of transition were faced with the difficult task of establishing a proper set of government accounts that effectively covered all fiscal activities and levels of government. Significant changes have been needed, for instance, through the creation of treasury departments and far-reaching modifications in accounting and recording procedures. This was made even more complex by the parallel process of fiscal decentralisation undertaken by many of the candidate countries.

More recently and as a result of the pre-accession process, the CEECs are moving towards the implementation of the European system of accounts (ESA 95), which is the obligatory statistical standard for Member States and forms the basis of EU multilateral surveillance. The main principles of ESA 95 are:

- the general government sector comprises central government, local authorities and social security ([1]);
- the exclusion of financial transactions from the calculation of government net borrowing/net lending balances (and therefore the treatment of privatisation proceeds as financing items instead of government receipts);
- the recording of transactions on an accruals (and not a cash) basis, that is when economic value is created or when claims and obligations arise. The difference between cash and accrual recording may be significant, in particular for taxes and social contributions and for interest payments.

The shift to ESA 95 can lead to fairly significant changes in the reported deficit of the CEECs, and requires acquiring the institutional capacity to implement the new standards ([2]). Although significant advances have been made, considerable scope remains to improve quality and timeliness of information collected in many of the CEECs.

Regarding conceptual issues, defining what should be regarded as a fiscal activity has proved to be particularly problematic for economies undergoing a switch to a market economy as the boundaries of the government sector are altering rapidly. The ESA 95 definition of the general government sector excludes the central bank, the state-owned enterprises and the public financial institutions. However, in transition countries, all of these public institutions are to a varying but diminishing extent involved in quasi-fiscal activities ([3]). While this is at times true also for advanced market economies, the extent of the phenomenon has been more significant for the transition countries. The larger the share of policy left to public institutions, the less straightforward it is to interpret budgetary aggregates, and their comparability across countries and

([1]) The concept is also used by the government finance statistics (GFS) system of the International Monetary Fund. In those countries which do have comprehensive economic accounts system, GFS statistics often provide a useful basis for approximating the ESA 95 figures, although a whole series of adjustments remain necessary.

([2]) See Chapter 4 for further details.

([3]) For example, the central bank can assume the non-performing loans of troubled private institutions or public banks can extend credit to favoured sectors at below-the-market rate of interest. Further details on the quasi-fiscal activities of central banks can be found in Robinson et al. (1993), Fry (1993) and Markiewicz (2001). For an analysis of the main issues concerning public financial and non-financial enterprises, see Stella (1993), Mackenzie et al. (1996), and Livitian (1993).

Box V.1. **Romania, an example of the difficulty in developing budget indicators in countries undergoing transition**

More than a decade after the start of the transition process, in Romania, data availability is still somewhat limited. No data are available on expenditures financed through grants, extra-budgetary funds or the overall financing of the general government balance (see IMF, 2001a). The exact quantification of the budget balance is also problematic. In Romania's first pre-accession fiscal notification to the European Commission in 2001, the difference between the GFS-based general government deficit and the preliminary estimates of the corresponding figure on the basis of ESA 95 methodology averaged nearly one percentage point of GDP over the 1997–2000 period.

Most importantly, the general government deficit figures fail to capture the significant quasi-fiscal role played at different times by the central bank and State-owned financial institutions and by the public utilities (see IMF 2001b for an extensive description). The empirical results of Budina et al. (2001) confirm the importance of this point. Between 1992 and 1994, the GFS-based general government deficit averaged below 2 % of GDP. However, once the accounts of the central bank are consolidated with those of the government, the average real deficit is estimated to equal some 7.5 % of GDP. Since most of the quasi-fiscal deficit was financed through money creation, the high inflation of the time clearly had fiscal roots. Fiscal retrenchment was therefore a necessary condition for disinflation but to what extent? Budina et al. (2001) show that a deficit correction of just above two percentage points of GDP would have seemed sufficient to reduce inflation to 10 % per year (from 62 % in 1994) if only the general government sector was taken into account. If, however, the central bank quasi-fiscal activities and the revenues from seignorage were also considered, an adjustment of more that 5.5 percentage points of GDP would have been necessary to achieve the same result. Given that public enterprises were also extensively involved in quasi-fiscal activities at the time, the amount of fiscal retrenchment needed to sustain dis-inflation was probably even higher.

over time is affected (see box above) ([1]). Finally, it should be stressed that flow measures of the fiscal position, like the general government budget deficit, are poorly equipped to reflect the impact of key transition events such as privatisation, assumption of bad debts, re-capitalisation operations and relative price changes ([2]).

All of the factors identified above have made it somewhat difficult to interpret and compare government accounts in the CEECs. In particular, the budget balance may not be a fully reliable indicator of the underlying fiscal situation that can help determine the sustainability of macroeconomic policies ([3]). Many of these problems, however, are decreasing as transition advances. As one-off events and systemic changes give way to more continuous economic trends the informative content of the fiscal balance is increasing, allowing a more straightforward interpretation of the traditional indicators. In addition, quasi-fiscal activities should decrease as the process of transition nears its completion and as the *acquis communautaire* is progressively implemented, most notably in the areas of statistics, state aids, and economic and monetary union. Finally, a catalytic role is played by the pre-accession fiscal surveillance procedure described in Part 4.

3.2. Determining the appropriate role for fiscal policy in a fast-changing macroeconomic environment

Aside from developing a reliable and timely set of governments accounts which accurately reflect underlying fiscal conditions, an effective framework for budgetary surveillance requires determining the appropriate role for fiscal policy that reflects the specific needs and circumstances of the CEECs. Like in existing EU Member States, sound fiscal policies play an important role in bringing about a stable macroeconomic economic environment that is conducive to sustained growth and employment creation. However, the norms for determining the appropriate fiscal stance need to reflect the fact than CEECs are undergoing tremendous

([1]) For example, an unchanged fiscal deficit could actually hide fiscal retrenchment (when quasi-fiscal operations are cut back or brought on budget) as well as an expansion (when expenditures are brought off-budget or quasi-fiscal activities intensified).

([2]) The consequences of these events on the public-sector inter-temporal budget constraint are more readily appreciated within a framework based on the net worth of the public sector rather than on the flow of revenues and expenditures. For a detailed exposition of the government balance-sheet approach, see Buiter (1985); for the accounting problems raised by banks re-capitalisation, Daniel et al. (1997); for a review of the fiscal implications of privatisation, Hemming et al. (1987) and Davis et al. (2000).

([3]) These limitations are not unique to countries undergoing transition. The limitations of the budget balance as an indicator of fiscal policy are extensively analysed in Blejer and Cheasty (1993).

structural and institutional changes. The changes not only relate to the completion of a move from a command to a market economy, but also the full liberalisation effects which EU membership will entail, the need to upgrade public infrastructure and the commitment to implement the *acquis communautaire*, with the related institution-building requirements. Moreover, these changes have to be managed at a time when the economies of the CEECs are somewhat more vulnerable to external economic shocks compared with existing EU Member States.

3.2.1. Structural changes and the budget balance

As described, CEECs are undergoing tremendous structural changes as they establish a market economy and make progress towards EU entry. All of these changes have significant budgetary implications that need to be factored into the evaluation of the budgetary situation.

The early stages of transition provide a clear illustration of this observation. Slow reformers tended to preserve the level of fiscal and quasi-fiscal subsidies. Fast reformers, instead, cut subsidies more aggressively in line with the hardening of budget constraints, but had to increase social expenditures to compensate those affected by market reforms. More generally, a considerable body of literature has examined the impact of different transition strategies on the budget, concluding that a high fiscal deficit may be an inevitable by-product of successful transition, rather than necessarily an indicator of irresponsible fiscal policy ([1]).

While the effects of the transition to a market economy on the budget balance will diminish over time, many other competing demands on CEECs' public finances are likely to persist in the medium term. They must be able to take in the residual costs of transition-related reforms, the costs associated with the Community *acquis* including institution-building, and the costs of public infrastructure investments.

3.2.2. Constraints on fiscal policy

The argument developed in Part 3.2 indicates that a certain amount of deficit financing would seem to be appropriate in the case of CEECs. This general observation, however, must be qualified by taking into account the constraints facing fiscal authorities in the CEECs. These countries, in fact, are characterised by a higher degree of volatility in output levels compared with EU Member States ([2]). They are also small open economies which rely heavily on foreign savings to finance growth. The high degree of openness exposes them to external shocks. Their financial sectors are still at an early stage of development ([3]), and a large component of public debt is made up by foreign debt ([4]).

These features of the economies of CEECs have important implications for fiscal policy. High volatility of output suggests that fiscal policy should play a role through countercyclical movements of the budget balance. Depending upon the specific exchange-rate regime of each country, fiscal policy also has a key role in responding to external shocks originating in export or international financial markets ([5]).

Contrary to what is suggested above, however, fiscal policy often seems to have played a pro-cyclical role, thus contributing directly to output volatility, rather than limiting it. Graph V.2 plots the change in real GDP and the budget deficit for two key episodes, namely the initial collapse in output at the beginning of the 1990s, and the period of sustained growth that started in the second half of the 1990s ([6]).

It is striking that at the start of transition when output collapsed, budget deficits were moderate or even balanced. One can thus infer that fiscal policy initially played a procyclical role and did not provide cushioning for the output fall to a significant extent. In contrast, during the subsequent period of output growth, budget deficits increased or did not significantly decline, and thus fiscal policy contrib-

([1]) In the model of Aghion and Blanchard (1994), the State sector contracts at a rate 's', which is a policy variable. The rate of growth of the new private sector depends on profitability, current and expected, of production in such sector. Because of market imperfections, resources released by the State sector are not instantaneously absorbed by private firms, and thus unemployment rises during the transition process. Transition ends when the private sector absorbs all resources. During transition, public expenditure for unemployment benefits increases initially. This is financed through taxation of both State and private firms, under the assumption of a balanced budget. Taxation of private firms reduces the incentives for growth in the private sector and thus adversely affects transition. Coricelli (1998) extended the Aghion and Blanchard model to the case of budget deficits, showing that for given tax rates, the budget deficit deteriorates along the successful transition path. A tighter budget constraint on the government, in the form of limits to budget deficits may in fact derail the transition process impeding the take off of the private sector. A similar result is obtained in Chadha and Coricelli (1997) in a transition model with investment and endogenous growth.

([2]) Even abstracting from the sharp decline in output at the start of transition process, the variability of output in CEECs in the last 10 years has been twice as large as in EU countries. The standard deviation of GDP changes is above 4 in CEECs during the period 1993–2001, whereas it was less than 2 in EU countries.

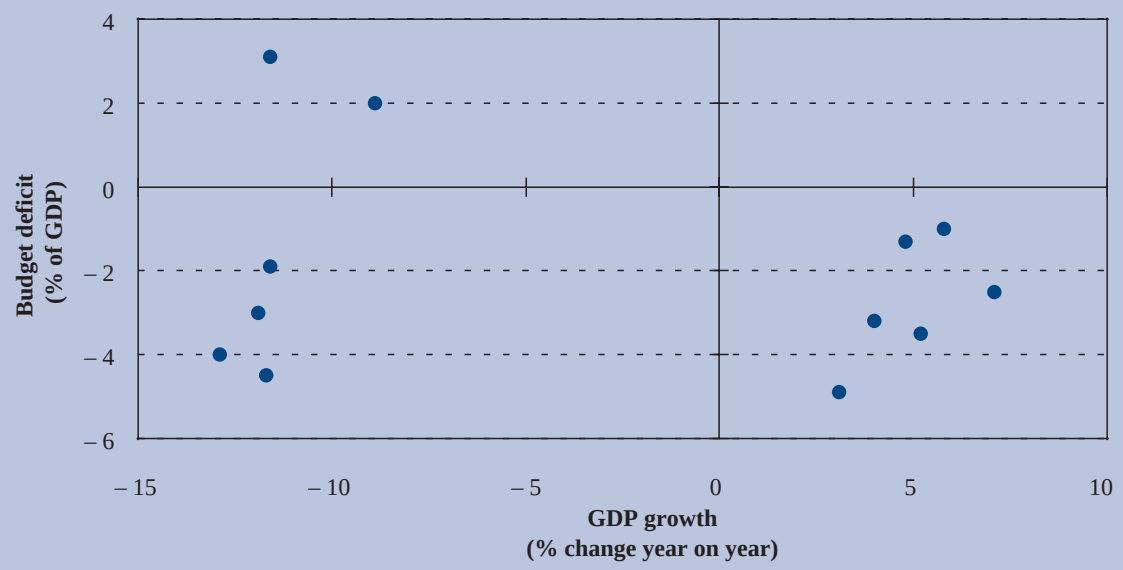
([3]) Financial markets have less depth compared with EU countries, although it has increased sharply during the disinflation process of the recent years. The ratio of M2 over GDP ranges from slightly above 25 % in Latvia and Lithuania to above 70 % in the Czech Republic.

([4]) With the exception of the Czech Republic, the share of foreign debt in total public debt is very large, ranging from 90 % in Bulgaria to levels around 50 % in most CEECs. The level of public debt, however, varies considerably among CEECs and can be relatively very low in a few cases.

([5]) The latter, in particular, can be due to market imperfections that cause the availability and the cost of external finance to change abruptly by more than justified by a country's fundamentals.

([6]) Because of data availability, the countries considered were: Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovenia.

Graph V.2: **Deficit and GDP changes (in six CEECs)**



uted to increase demand during the period of growth. An additional indication of the pro-cyclical stance of fiscal policy can be inferred from the fact that tentative estimates of structural balances indicate that deficits have remained high during the period of growth, see box below.

Several factors can explain this pro-cyclical behaviour. Political economy considerations suggests that, in order to gain political support, governments tend to use the temporary improvement in revenues during periods of high growth to increase expenditures, which cannot be easily reduced once the economic boom ends ([1]).

Imperfections in the international capital markets provides an additional explanation for the pro-cyclical behaviour of fiscal policy. CEECs have easier access to external financing during 'good times', and this leads them to raise expenditure. During 'bad times', access to international markets becomes harder and more expensive, and countries are forced to adjust their fiscal accounts. An important implication of this view is that fiscal policy itself can be destabilising, see Gavin et al. (1996). By increasing demand during good times, fiscal policy induces higher current-account deficits which negatively affect the assessment of credit worthiness of the country as soon as this is faced by a negative shock.

This line of reasoning would imply that CEECs have a limited capacity to smooth shocks to the current account by borrowing abroad at reasonable cost when needed. In advanced industrial economies, large external shocks that result in currency and financial crises tend to be associated with a worsening of the current account because these countries can resort to foreign borrowing, see Calvo et al. (2001). However, the experience of emerging markets is rather different. In periods of large external shocks and crises, the current account of the balance of payments tends to improve, indicating access to foreign capital markets is severely constrained.

Graph V.3 shows that the correlation between the volatility of budget deficits and that of the current-account deficits in CEECs during the last 10 years was close to 1. This seems to indicate that CEECs have tended to fall in the emerging market categories, at least in the past ([2]).

This result could be significant since the CEECs' need to rely on foreign capital to finance the catch-up process naturally raises the issue of the sustainability of their external position. This clearly calls for a prudent and flexible fiscal policy, especially since a change in the fiscal stance is usu-

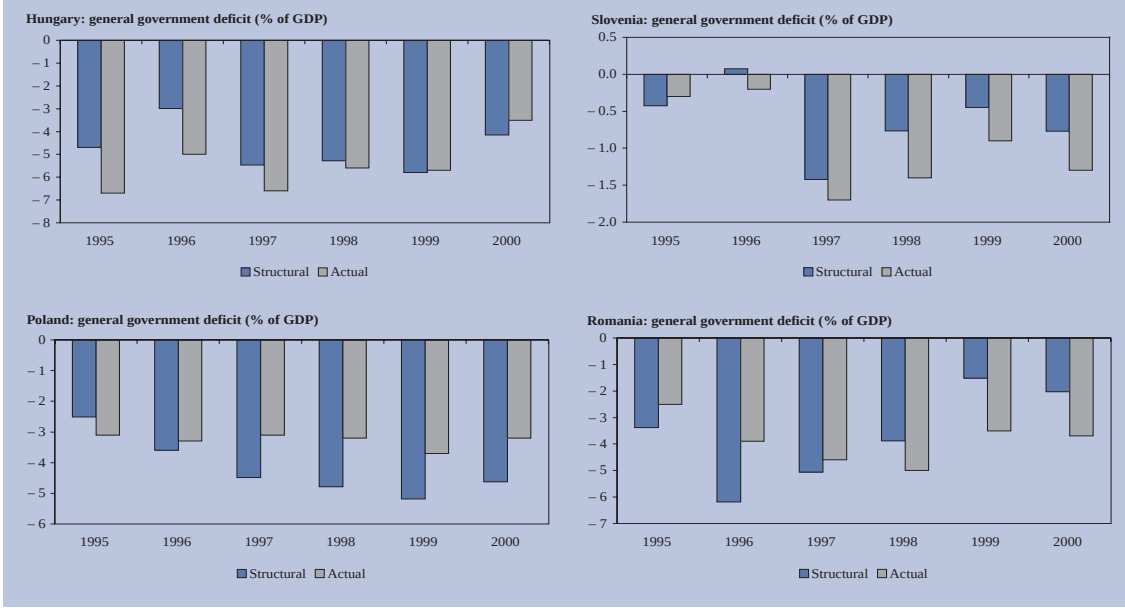
([1]) See Talvi (1996) and Buti and Giudice (2002) for the experience of Latin America.

([2]) This high correlation could be explained by a third factor, for instance output volatility, affecting both volatilities. In fact, this is not the case as the correlation between output volatility and current-account or budget deficits is below 0.4.

Box V.2. **Estimates of structural budget balance for transition economies**

Part II.3 of this report explains the usefulness of looking at cyclically-adjusted budget balances (CABs) for the purposes of policy analysis. There are several methodological issues that make the calculation of CABs problematic in the case of CEECs, not least with respect to the availability of meaningful data given the important structural breaks implied by transition. The graphs below compare preliminary estimates of the CABs with actual deficits in several CEECs. The output gaps were calculated using the methodology currently used by the European Commission (Hodrick–Prescott filter). Values for growth rates of trend output seem to be in line with estimates obtained through growth equations for several countries (for Hungary, see Simon and Darvas, 2000). Results should be interpreted with caution given the limitations mentioned above. Overall, the effect of the economic cycle on the budget positions of the CEECs are not very strong. Looking at the CAB, the budgetary adjustment in Hungary after 1995 appears much smaller than indicated by the change in the actual deficit level. A persistent structural deficit above 4 % of GDP emerges in Poland. The actual deficit in Romania reflects the disappointing growth performance for most of the second half of the 1990s. Finally, Slovenia displays a remarkable stability of output growth and of budget deficit, and the structural deficit does not deviate significantly from balance.

Graph V.3: **Budget position in transition economies**

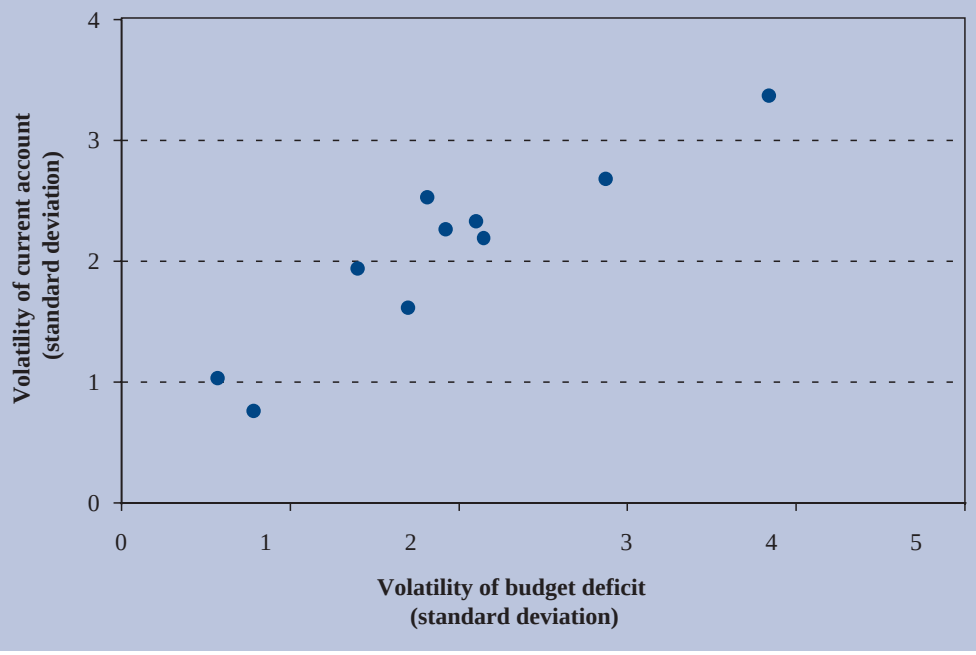


ally an effective instrument to influence the external position in the short term ([1]). Annex 1 provides an analysis of CEECs' external sustainability in terms of specific external-debt targets. It shows that, unless one extrapolates into the future, the exceptionally large inflows of foreign direct investments of the last years, several CEECs would need to reduce their current-account deficits. These results, however, need to be interpreted with caution since no specific level of external debt can be defined *ex ante* as the correct benchmark for sustainability ([2]). In addition, the estimates do not explicitly take into consideration the interactions between capital inflows and potential output.

([1]) Full Ricardian equivalence, would imply that fiscal policy is irrelevant for the current-account balance. Empirical estimates for OECD countries have found large offset coefficients of around 0.9, meaning that a 1 % change in net public savings is matched by a change of 0.9 % in net private savings in the opposite direction. For lower income countries, estimated coefficients have been much lower, at about 0.5.

([2]) 'Safe' levels of foreign debt are, however, often used as rule of thumbs for emerging economies. The IMF (2001) assumes a ratio of 45 %, derived from a non-linear association between debt ratios and income per capita. Reisen (1998) assumes 50 % as the 'normal' debt-to-GDP ratio for Latin American countries. Appendix 1 looks at several benchmark levels.

Graph V.4: **Correlation between the volatility of the budget balance and that of the current account in CEECs during the last 10 years.**



4. Fiscal policy in the institutional framework of accession to EU

As accession draws near, the candidate countries need to prepare for participation in the multilateral surveillance and economic policy coordination procedures currently in place for existing Member States. *Inter alia*, this will involve the six monthly submission of data on government accounts according to ESA 95 standard, as well as the submission of a convergence programme in accordance with the Stability and Growth Pact.

In view of these future requirements, a new initiative called the pre-accession fiscal surveillance procedure (PFSP) was implemented in spring 2001. It was designed to closely approximate the policy coordination and surveillance mechanisms of the EU while giving due regard to the accession priorities of the candidate countries. The PFSP aims to strengthen the technical, statistical, institutional and analytical capacity within each candidate country ([1]). In addition, it provides an opportunity for the candidate countries to present in a multilateral context a coherent policy programme aimed at achieving the reforms leading to accession. Finally, the PFSP forms a basis for the strengthened economic dialogue between candidate countries and Member States.

The PFSP comprises of three components or steps as follows (1) notification of budget positions, (2) the submission and examination of annual pre-accession economic programmes (PEP), and (3) discussions in a multilateral context.

Notification of budget positions

As argued in the previous section, the calculation of general government figures for the candidate countries is subject to a number of uncertainties and complications. In the PFSP framework, candidate countries are on an annual basis asked to complete notifications of general government deficits and debt in the same format as that used by existing Member States and to transmit them to the Commission ([2]). The Commission services evaluate the notifications, monitor countries' fiscal positions, determine compliance of the data with ESA 95 standards, and assess their quality as a basis for fiscal analysis. The evaluation plays an important role in identifying remaining weaknesses, and helps target any technical assistance that may be required.

On 1 April 2001, all candidate countries submitted their first notification. Ministries of Finance and statistical services of the CEECs had to devote substantial time and resources to achieve this goal and, in doing so became more familiar with the EU methodology for the calculation of deficit and debt positions. The data provided showed a broadly stable average general government deficit of around 3.5 % of GDP for a group of eight candidate countries over the years 1998 to 2001 ([3]). Between 1997 and 2001, the reported average debt ratio hovered around 45 % of GDP. Individual situations were, in any case, relatively diversified.

However, the data provided by the CEECs did not respect all the technical requirements, and thus only provided an approximate indicator of the underlying budgetary situation in candidate countries. The degree of precision varied across countries. In some cases, figures were not provided for 2001 or even 2000. Data homogeneity over time was generally weak, as definitional

([1]) The development of the institutional capacity to coordinate between the various ministries, government agencies and the central bank will be particularly important in this respect.

([2]) The Ministry of Finance in each candidate country has the ultimate responsibility for the notification but is expected to work closely with other government agencies, most notably the statistical services and the central bank, to ensure that the notification reaches the highest possible technical standards.

([3]) Generally, the notified deficits were larger than the nationally most prominent figures, largely because the ESA 95 definition of the general government sector is usually wider than the national budget definition.

adjustments were often not applied retroactively. In some countries, the notified government balances were still entirely on a cash basis. Moreover, the ongoing transition process meant that the following policy measures continued to have a significant effect on the recorded size of the government balance (measured according ESA 95 rules):

- In some countries, the government provides significant and regular financial lending to the private sector. Although financial transactions are deducted from the calculation of the budget balance in ESA 95, the question arises whether part of recurring government loans should be recorded as current or capital transfers to the private sector (and which would therefore affect the recorded budget balance).
- The government accounts of several countries register large amounts of receivables due of tax arrears and social security contribution arrears. At some point, a judgment must be made about the share of the tax and social security debt, that will never be paid. Such amounts must then be recorded as transfers which would influence the government balance.
- Some countries are still confronted with large costs associated with the restructuring of their banking sector and the realisation of large contingent liabilities. When governments assume debt and when government-guaranteed loans are called up, capital transfers must generally be recorded and the government balances must be adjusted accordingly.
- New pensions schemes may no longer have to be classified in the social security sub-sector of general government, but rather as private pension funds.

Table V.5 shows a comparison for the years 1997 to 1999 of the reported figures with the general government balance figures presented in the regular reports 2000 ([1]). The general government balance in the regular reports is an approximation of the national accounts definition done by the Commission services, based on adjustments to the IMF GFS methodology. The newly reported data somewhat alter the reading of the fiscal positions ([2]). However, due to the many remaining problems, final appraisal had to be postponed. It is hoped that many pending issues will be solved in the April 2002 notifications.

([1]) The regular reports are annual assessments of the progress made by candidate countries towards the fulfilment of the Copenhagen criteria.

([2]) The notified deficits were distinctly larger than the regular report figures for the Czech Republic, Hungary, Latvia and Slovakia, while they were identical for Bulgaria and remain relatively close for Estonia and Poland. Because of the lack of data in the regular reports, meaningful comparisons could not be possible for the other countries.

Table V.5

Comparison of budget balances (% GDP)

	Regular Report 2000			April 2001 fiscal notification		
	1997	1998	1999	1997	1998	1999
Bulgaria	– 0.3	1.3	0.2	– 0.3	1.3	0.2
Cyprus	– 5.3	– 5.5	:	:	– 3.7	– 4.0
Czech Republic	– 2.1	– 2.4	– 1.6	– 2.7	– 3.8	– 4.0
Estonia	2.6	– 0.2	– 4.6	2.0	– 0.4	– 4.1
Hungary	– 5.4	– 7.2	– 3.7	– 6.8	– 7.8	– 5.4
Latvia	1.8	0.1	3.9	:	– 0.7	– 5.3
Lithuania	– 0.7	– 3.4	:	– 1.1	– 3.1	– 5.7
Malta	– 6.6	:	:	– 10.7	– 10.8	– 7.8
Poland	– 2.4	– 2.1	– 2.7	– 4.7	– 2.4	– 2.1
Romania	– 4.4	:	:	– 4.5	– 4.4	– 2.1
Slovakia	– 3.6	– 4.8	– 3.4	– 5.7	– 4.9	– 5.7
Slovenia	– 1.2	– 0.8	– 0.6	:	:	– 1.3
Turkey	– 7.9	:	:	– 13.4	– 11.9	– 21.8

Source: Commission services.

The pre-accession economic programmes (PEPs)

The second step in the PFSP procedure is the requirement for each candidate country to submit a pre-accession economic programme (PEP) on an annual basis ([1]). Similarly to the stability and convergence programmes, PEPs are expected to play a key role in setting the framework for policy-making in candidate countries. Unlike the stability and convergence programmes, PEPs focus upon the economic requirements needed in the period running up to accession and therefore concentrate predominately on the Copenhagen criteria, rather than the nominal convergence criteria. Each PEP follows the same basic format and addresses the same issues. It consists 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. It should identify the main macroeconomic policy objectives with the corresponding intermediate goals for key variables. The five-year time frame envisaged for this scenario is particularly suited to address the structural nature of transition measures and their medium-term impact on the fiscal position, and the economy in general.

The Commission services evaluate each programme, focusing on the institutional and analytical preparations for future participation in EMU and assessing whether the outlined policies are adequate to this scope ([2]).

All candidate countries submitted their first PEP in 2001 ([3]). Overall, the programmes reflected the main challenges facing candidate countries and their economies on the road to accession ([4]). In most cases, a good effort to develop a credible medium-term macroeconomic and fiscal framework was clearly undertaken. The PEPs also identified concrete policy measures aimed at strengthening competitiveness and economic stability. Naturally, the degree of detail differed across countries and policy areas, as did the specificity and credibility of the medium-term economic and fiscal scenarios.

According to the evaluation of the Commission services, more work needs to be done and further capacity building is required. A general problem was that the costs of structural reforms were insufficiently quantified and integrated into the budgetary framework. Moreover, data provision was patchy and underlying assumptions only partially explained. This impaired a rigorous assessment of the feasibility of the macroeconomic framework and of the outlined policy proposals. Candidate countries have therefore been requested to include a more exhaustive set of standardised data tables in their 2002 updates.

The PFSP multilateral context

The PFSP procedure explicitly envisages a multilateral dimension ([5]). To this end, high-level meetings are organised between members of the Economic and Financial Committee and their counterparts from the candidate countries to discuss the result of the pre-accession procedure. The first two high-level meetings were held in Stockholm on 27 June 2001 and Brussels on 27 November 2001. The Stockholm meeting discussed horizontal issues raised by the first six PEPs, the fiscal notifications of the 13 candidate countries, and the future organisation of the economic policy dialogue. The Brussels meeting discussed the second group of seven PEPs and the Commission's report on all 13 PEPs.

The meetings also served to prepare the economic dialogue at ministerial level which took place on 4 December 2001. Importantly, participants agreed to publish the PEPs and the Commission's evaluations of the individual programmes. Fiscal notifications, together with their Commission's evaluation, will become public as of 2002.

([1]) The PEPs are the successors to the joint assessment of medium-term economic policy priorities that were prepared jointly by the countries' authorities and the Commission services. The joint assessments provided an opportunity for developing the institutional and analytical capacity of the budgetary authorities of the CEECs to undertake medium-term macroeconomic policy planning.

([2]) This, however, is different from the evaluation of a country's progress towards meeting the Copenhagen criteria which is provided by the annual Commission's regular report on progress towards accession.

([3]) http://europa.eu.int/comm/economy_finance/about/activities/activities_thirdcountrieseconomic_pep_en.htm

([4]) For the text of the Commission's evaluation of the first round of PEPS, see European Commission (2001f).

([5]) See the Ecofin Council statement of 26 November 2000.

5. Implications for the assessment of budgetary positions in the CEECs

This chapter has identified the difficulties in developing and interpreting reliable government accounts, and the challenge in determining the appropriate role for fiscal policy given the structural and institutional changes underway in the candidate countries. The assessment of budgetary positions in the run-up to accession reflects these considerations. CEECs are not required to fulfil the Maastricht nominal convergence criteria, but rather to comply with the Copenhagen criteria. The primary fiscal concern in the pre-accession period is medium-term budgetary sustainability, rather than achieving any particular target for the government balance. As noted above, setting of specific budgetary targets could be misleading and the priority should remain on improving the functioning of the budgeting process, carrying out structural reforms, implementing the *acquis communautaire*, and supporting catching up.

However, the emphasis on structural and institutional reform should not hide the importance of sound fiscal policies. CEECs' vulnerability to economic shocks and the external constraints they face underline the need for prudent policies. The appropriate deficit level may vary across countries, and it is likely to be a function of the speed of structural reforms, the relative speed of economic growth, and the extent of real convergence. CEECs should also avoid pro-cyclical fiscal policies. In brief, the assessment of budgetary positions in the run-up to accession needs to be flexible enough to cater for the uncertain and fast changing circumstances facing economies undergoing unprecedented changes, but at the same time rigorous enough to cater for the very real challenge facing the CEECs. In particular, medium-term budgetary policy should pursue a structure of expenditure and revenues that effectively supports economic growth. Moreover, once they become members of the Union, CEECs will have an obligation to maintain budget deficits below 3 % of GDP. To avoid last-minute adjustments, likely to be costly and inefficient, a medium-term framework providing for a convergence to the required targets upon accession would help management of fiscal policy, with a view to prevent pro-cyclical fiscal behaviour.

Annex A. Estimating a sustainable current account of the balance of payments

Starting from a simple identity between the current account deficit and its source of financing (namely the change in the stock of foreign debt, the depletion of foreign reserves and the flow of foreign non-debt-generating capital, using FDI as a proxy), one can compute a steady state value of the current account as a ratio to GDP. Assuming that foreign reserves are kept constant in terms of imports, and taking into account the impact of changes in the real exchange rate on the real value of the stock of debt and of foreign reserves, one can obtain the following equation for the steady state value of current account.

$$[1]\ CAD = \frac{\gamma + \varepsilon}{1 + \gamma} d - \frac{\eta + \varepsilon}{1 + \gamma} FX + FDI$$

where CAD = steady rate value of current account deficit
γ = real GDP growth
ε = real exchange rate appreciation
η = rate of growth of real imports
d = external debt to GDP
FX = foreign reserves to GDP

Sustainability of current-account deficits can then be analysed by considering targets on the stock of foreign debt, assuming that one can identify a 'safe' level for such a debt. The ratio of foreign debt to GDP *d* is thus set at its target level. Two cases are examined:

- the current account balance required to stabilise the external debt-to-GDP ratio at its current level;
- a target level for the stock of foreign debt derived from two main determinants, namely the level of GDP per capita and the degree of openness.

Having established these targets, a five-year adjustment to the target level of the stock of debt is considered. From a simple regression between the stock of debt to GDP and GDP per capita and the degree of openness, a projected level of foreign debt is obtained. GDP per capita affects negatively the stock of debt, as poorer countries tend to borrow during the phase of catching up. In contrast, the degree of openness (share of foreign trade over GDP) tends to raise external debt, mainly for supply reasons as the higher degree of openness implies lower incentives to default and reduce potential liquidity problems of the borrowing country (as a more open country can more easily generate the foreign exchange needed to service foreign debt). Foreign currency reserves are set at a target level that keeps the ratio of reserves to imports constant over time.

The annual current account deficit during the adjustment period would be as follows:

$$[2]\ \frac{1}{5}CAD = \frac{1}{5}\left\{ d^* - \frac{1 - \gamma - \varepsilon}{1 + \gamma} d - \left[FX^* - \frac{1 - \eta - \varepsilon}{1 + \gamma} \right] FX \right\} + FDI$$

To obtain [1] and [2] estimates are needed of the real growth of GDP; trend real appreciation (or Balassa–Samuelson effect), the estimated rate of growth of imports or the import elasticity to GDP.

FDIs (which is considered in the first simulation as non-debt generating) also affect the level of sustainable current account.

Different scenarios are considered. One without FDIs as in Reisen (1998). One with FDIs that remain at the same level observed in 2000. Import elasticity is assumed equal to 2.

Note first the simple extrapolation of the current situation, considering the projected rate of growth of GDP contained in the pre-accession economic programmes (PEPs) and an estimate of the Balassa–Samuelson effect of 2 % per annum. In other words, it is assumed a real appreciation of 2 % per annum due to the higher productivity growth of the tradable sector relative to the non-tradable sector. It is also assumed that trade partners of CEECs are not subject to such effect, or, in other words, they are assumed to be in steady state ([1]). If, in addition, one extrapolates FDI flows of the year 2000, assuming that FDIs are non-debt-generating flows, CEECs do not face any need for adjustment. In fact, the combined effect of real growth and real appreciation creates room for larger current-account deficits (Table V.6). Positive values of the difference between projected and actual values indicate that there is room for a higher current-account deficit. This holds both with respect to the actual values for the year 2000 and for the forecast for 2004 contained in the PEPs.

Table V.6

Steady state current account balance ([1])

	Estimated 2000	Actual in 2000	Difference	Forecast PEP 2004	Difference
	(A)	(B)	(A – B)	(C)	(A – C)
Bulgaria	12.0	5.9	6.1	4.6	7.4
Czech Rep.	9.8	4.8	5.0	3.5	6.3
Estonia	9.0	6.8	2.2	6.6	2.4
Hungary	5.1	3.9	1.2	1.3	3.8
Latvia	8.9	6.8	2.1	5.2	3.7
Lithuania	4.9	6.0	– 1.1	5.9	– 1.0
Poland	6.9	6.3	0.6	4.7	2.2
Romania	3.8	3.7	0.1	4.8	– 1.0
Slovakia	12.3	3.7	8.6	5.2	7.1
Slovenia	1.1	3.3	– 2.2	1.9	– 0.8

([1]) Positive values indicate deficit. A negative difference between estimated and actual indicates the required adjustment.

Source: Commission services.

Before looking at target values for debt and foreign reserves, it is worth noting that such a scenario crucially depends on the extrapolation of FDI flows. Such extrapolation may not be warranted for four main reasons. First, FDI flows are bound to decline in most CEECs after completion of the privatisation process. Second, even when they are not associated with privatisation of domestic firms, FDIs cannot be considered entirely different from other sources of capital inflows. Indeed, as long as firms repatriate their profits, it is like the country is paying an equivalent rate of interest on the capital imported. Third, FDIs may set in a process in which multinational firms tend to borrow primarily abroad, thus increasing external debt of the country. Finally, in the case of an incipient currency crisis foreign investors can borrow domestically and invest abroad, giving rise to a capital-flow reversal similar to the that would arise in the case of portfolio investments.

([1]) These estimates for the Balassa–Samuelson effect are in line with empirical results in Halpern and Wyplosz (2001) and Coricelli and Jazbec (2001).

Therefore, the difference between FDIs and other forms of capital inflows may be blurred. Especially in countries like CEECs, where the initial investment may be small compared to the flow of income generated by it, FDIs tend to be similar to portfolio investments as changes in the perception of return to investment in the country can trigger sudden stops in FDI flows. For these reasons, calculations that assume away the impact of FDIs in the medium-term outlook are relevant. Therefore, we also provide projections excluding FDI flows as a source of sustainable financing.

Table V.7 contains the projected yearly current account in a five-year adjustment to the target values of debt and foreign reserves.

The ratio of foreign reserves to imports is assumed constant at its level in the year 2000, and a conservative estimate for import elasticity to GDP of 2 is used ([1]). Furthermore, FDI flows are assumed to remain constant at their level esti-

Table V.7

Estimates of current account ([1])

	Estimated 2000	Actual in 2000	Difference	Forecast PEP 2004	Difference	Actual external debt (2000)	Target external debt
	(A)	(B)	(A – B)	(C)	(A – C)		
Bulgaria	– 1.5	5.9	– 7.4	4.6	– 6.1	86	63
Czech Rep.	6.6	4.8	1.8	3.5	3.1	43	49
Estonia	7.4	6.8	0.6	6.6	0.8	61	71
Hungary	– 1.8	3.9	– 5.7	1.3	– 3.1	67	52
Latvia	2.1	6.8	– 4.7	5.2	– 3.1	66	54
Lithuania	7.4	6.0	1.4	5.9	1.5	43	56
Poland	1.7	6.3	– 4.6	4.7	– 3.0	43	39
Romania	7.1	3.7	3.4	4.8	2.3	27	52
Slovakia	5.0	3.7	1.3	5.2	– 0.2	56	59
Slovenia	0.8	3.3	– 2.5	1.9	– 1.1	34	36

([1]) Positive values indicate deficit. A negative difference between estimated and actual indicates the required adjustment.

Source: Commission services.

mated for 2001. Results indicate a highly heterogeneous picture. Sizeable adjustment is implied for Bulgaria, Hungary, Latvia and Poland. A smaller adjustment seems necessary for Slovenia. Estonia, Lithuania and Slovakia are close to equilibrium, while additional room for increasing external debt is found for the Czech Republic and Romania.

These results indicate how all countries have so far relied on FDI inflows to finance their current accounts and how this masked in some cases large underlying imbalance. Table V.8 excludes FDIs as financing items and shows extremely large adjustment needed to achieve targets on debt ratios. Although these figures are excessively pessimistic, they illustrate that the need to contain within safe bounds the current account should be a key element in designing medium-term fiscal programmes for CEECs.

([1]) Actual observations are not very revealing, as import elasticity is very volatile in CEECs. However, the value of the elasticity is an increasing function of the distance from potential output and of the scope for catching up. Thus, a value of 2 may be reasonable for the more advanced countries, such as Hungary and Slovenia, but higher elasticity, around 3 to 4 appears more relevant for the other countries. This implies that our simulations underestimate the need for current-account adjustment.

Table V.8

Adjustment in the current account (FDI as debt generating items): transition in five years to predicted debt ratio

	Estimated 2000	Actual in 2000	Difference	Forecast PEP 2004	Difference
	(A)	(B)	(A – B)	(C)	(A – C)
Bulgaria	– 6.1	5.9	– 12.0	4.6	– 10.7
Czech Rep.	– 0.2	4.8	– 5.0	3.5	– 3.7
Estonia	1.1	6.8	– 5.7	6.6	– 5.5
Hungary	– 4.3	3.9	– 8.2	1.3	– 5.6
Latvia	– 2.3	6.8	– 9.1	5.2	– 7.5
Lithuania	2.4	6.0	– 3.6	5.9	– 3.5
Poland	– 1.3	6.3	– 7.6	4.7	– 6.0
Romania	4.8	3.7	1.1	4.8	0.0
Slovakia	– 0.3	3.7	– 4.0	5.2	– 5.5
Slovenia	– 0.7	3.3	– 4.0	1.9	– 2.6

Source: Commission services.

Part VI

Member State developments

1. Belgium

Recent developments

Due to the deterioration in the macroeconomic context, the government budgetary adjustment was suspended in 2001 and 2002. In 2000, a general government surplus equal to 0.1 % of GDP was achieved; in 2001, while the objective was a government surplus of 0.2 % of GDP, excluding the receipts from the UMTS licences, only a balance was reached, also excluding the UMTS receipts.

In 2001, the budgetary strategy continued to be centred on maintaining a high primary surplus, estimated at 6.6 % of GDP. The increase in primary expenditure in real terms last year was limited to 1 % of GDP, taking into account, however, non-recurrent operations which are recorded as negative expenditure, such as the sale of real estate and UMTS licences, estimated at 0.3 % of GDP.

The government-debt ratio was estimated at 107.6 % of GDP at the end of 2001 as against to 109.3 % in 2000.

Table VI.1

Composition and balances of general government, Belgium ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		– 0.6	0.1	0.2	– 0.2	0.2
— Total revenue		49.7	49.5	49.2	48.8	48.5
Of which:	— current taxes	30.3	30.4	29.9	29.9	29.9
	— social contributions	16.4	16.1	16.1	16.1	15.8
— Total expenditure ([2])		50.3	49.5	49.0	48.9	48.3
Of which:	— collective consumption	7.6	7.6	7.7	7.8	7.7
	— social transfers ([3])	29.0	28.5	28.8	29.1	28.9
	— interest expenditure	7.0	6.8	6.5	6.2	5.8
	— gross fixed capital formation	1.8	1.8	1.6	1.4	1.4
Primary balance ([2])		6.4	6.8	6.7	6.1	6.0
Pm Tax burden		46.0	45.9	45.4	45.4	45.1
Government debt		115.0	109.3	107.5	104.3	99.4
Pm Cyclically-adjusted balance		– 0.7	– 1.1	– 0.4	0.2	0.2
Pm Cyclically-adjusted primary balance		6.3	5.7	6.2	6.4	6.4

([1]) Commission 2002 spring forecast.
([2]) Data for 2001 (except cyclically-adjusted) include UMTS receipts of 0.2 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

This decline in the government-debt ratio is considerably less significant than the 4.8 percentage points of GDP reduction projected in the 2000 update of the stability programme; the divergence from the objective was attributable to lower nominal GDP growth than expected, but also to ad hoc factors, namely the incorporation in the general government sector of the debt, guaranteed by the State, of the former Central Office of Mortgage Credit (OCCH): exogenous, ad hoc, factors increased the debt ratio by 1.9 percentage points of GDP.

According to the 2002 budget and the 2001 update of the stability programme, under the assumption of 1.3 % real GDP growth, the general government accounts are

expected to be in balance in 2002; the increase in primary expenditure in real terms in the federal government will be limited to 0.5 % and in the social security sector to 2.6 %; a primary surplus of 6 % of GDP is projected for the general government. The sharp slowdown in economic activity in 2001 and the subdued prospects for 2002 are expected to have an adverse impact on tax revenue. For this reason, the government intensified control on the increase in expenditure in the context of the budgetary control exercise of March 2002. However, the Commission forecasts foresee some deterioration in the general government accounts in 2002 to a small deficit, as a result of persisting sluggish economic activity, real GDP growth being expected to reach 1.1 %. In 2003, according to the Commission forecasts, the government accounts should turn into a small surplus.

The 2001 update of the stability programme states that the departure, registered in 2001 and 2002, from the previously projected path for budgetary consolidation will be temporary and justified by the cyclical deceleration in activity. Budgetary adjustment in the general government is expected to resume as from 2003 provided an economic recovery would materialise already in the course of 2002 and real GDP growth would reach 3 % in 2003. In the period up to 2005 covered by the 2001 update, the general government surplus is projected to increase to 0.7 % of GDP in 2005, as it was expected in the 2000 update of the stability programme. The government-debt ratio should decline to 88 % of GDP, i.e. by about 18 percentage points of GDP during the period from 2002 to 2005.

Table VI.2

Key figures of the Belgian stability programme (1) **(2001–05)**

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	4.0	1.1	1.3	3.0	2.5	2.4
Gen. gov. budget balance (% of GDP)	0.1	0.0	0.0	0.5	0.6	0.7
Primary surplus (% of GDP)	6.8	6.5	6.0	6.1	5.9	5.7
Government debt (% of GDP)	109.3	107.0	103.3	97.7	93.0	88.6

(1) UMTS receipts excluded (0.2 % of GDP in 2001).

Source: 2001 update of the stability programme of Belgium

The challenge of reducing a high government-debt ratio

As a result of cumulating large general government deficits during a long period, the debt ratio in Belgium peaked at 138 % of GDP in 1993. Since then, it has declined by 30 percentage points of GDP due to budgetary consolidation efforts.

The 2001 update of the stability programme reaffirmed the commitment of the government to pursue the debt-reduction effort based on a budgetary strategy which was successful in the past, the key to which are high primary surpluses of some 6 % of GDP. Furthermore, according to the 2001 update, the projected reductions in interest payments should create the necessary budgetary margins for meeting the implications of the ageing population. The Ageing Fund created in 2001 is also expected to contribute to meet the medium-term budgetary challenges while facilitating the reduction in the debt ratio.

Some observers (1) argue that Belgium does not need to change drastically its budgetary strategy in order to meet the budgetary cost of population ageing: however, taking into account the high level of the government debt, the key challenge will be to be able to sustain large primary surpluses over the very long run. Fatigue in severe budgetary adjustment is unavoidable after a number of years; apart from the ageing population budgetary costs, the necessity to implement some reduction in taxes and to allocate resources to expenditures in priority areas, after a long period of restraint, will emerge in the near future. This explains why, in the 2001 update of the stability programme the government primary surplus, though remaining high, is projected to be reduced progressively from 6.8 % of GDP in 2000 to 5.7 % of GDP in 2005, the decline being expected to be compensated by the reduction in interest payments.

(1) See, for example, the 2001 report of the National Bank of Belgium.

As noted above, ensuring high primary surpluses can result in continuous reduction in the debt ratio, even in years when nominal GDP growth is weak, or when exogenous ad hoc factors such as financial operations have an increasing effect on the debt ratio; to be successful however, it is necessary that this budgetary strategy continues to be based on a clearly defined mechanism of control of primary expenditure in real terms.

Table VI.3

Factors contributing to changes in the government-debt ratio

	1996	1997	1998	1999	2000	2001	2002 (1)	2003 (1)	2004 (1)	2005 (1)
Change in debt ratio	**– 3.8**	**– 5.4**	**– 5.4**	**– 4.3**	**– 5.7**	**– 1.7**	**– 3.7**	**– 5.6**	**– 4.7**	**– 4.4**
Primary balance	– 5.1	– 6.0	– 6.7	– 6.4	– 6.8	– 6.7	– 6.0	– 6.1	– 5.9	– 5.7
Interest and nominal GDP dynamics	5.6	1.7	2.9	2.1	0.8	3.1	2.3	0.5	1.3	1.3
Exogenous factors	– 4.3	– 1.1	– 1.6	0.0	0.3	1.9	0.0	0.0	– 0.1	0.0
p.m. gov.debt ratio	130.1	124.7	119.3	115.0	109.3	107.6	103.3	97.7	93.0	88.6

(1) Based on projections of the 2001 updated stability programme of Belgium.

Source: Commission services

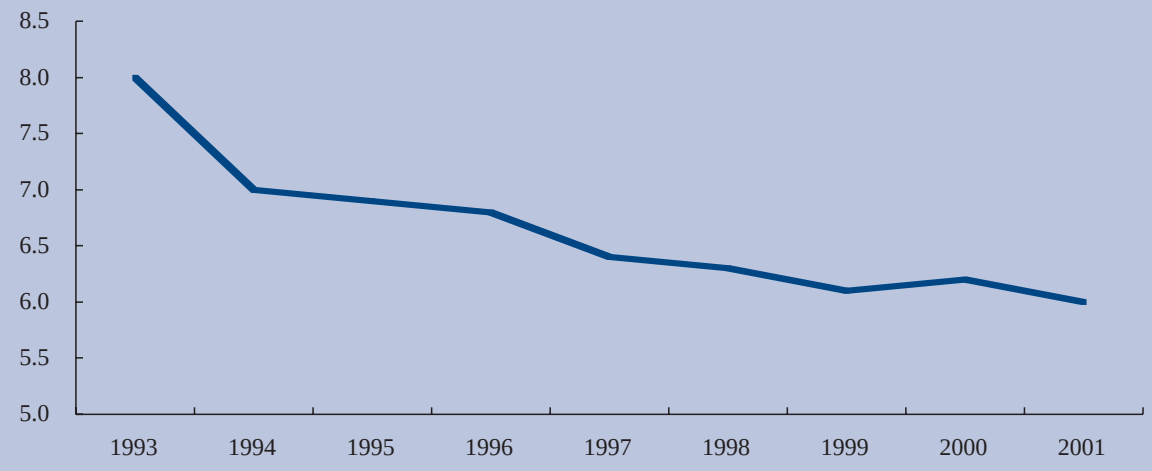
To maintain high primary surpluses, containment of primary expenditure in all parts of government is essential, and more particularly encompasses the necessity to control and limit spending in the social security sector. Control of primary expenditure in the so-called Entity I (federal government and social security) requires a formal and quantified norm for the increase in spending in real terms which should be closely respected within the framework of the annual budgetary projections of stability programme updates. Moreover, respect of the budgetary objectives by Entity II (regions, communities and local authorities) requires widespread consensus and discipline.

In recent years, lower interest payments have also contributed considerably to improved budgetary outcomes. Their contribution is expected to be important also in future, as the government-debt ratio continues diminishing. Interest payments were reduced by 4.3 percentage points of GDP between 1993 and 2001; a significant part of this reduction was due to lower borrowing costs, a development reflected in the movement of the implicit interest rate on government debt.

As shown in Graph VI.1, below, the implicit interest rate has fallen by about two percentage points during the period from 1993 to 2001, a development reflecting a decline in average borrowing costs for the government. Improved debt management and better functioning of financial markets on government debt are important contributors to reduced borrowing costs. Indeed, a systematic effort has been made in recent years by the Belgian authorities in improving the government-debt management through a number of actions including widening of the customer base of government securities, reducing foreign exchange exposure, increasing average maturity and enhancing liquidity in the government securities market. The share of non-resident investors increased to about 47 % for OLO's and Treasury certificates at the end of September 2001.

However, in the future, there appears to be little scope for further compression of borrowing costs. This is because both short- and long-term interest rates seem to be close to historical lows, and opportunities for savings via further improvement in debt management may be limited. In order to prepare for future budgetary challenges stemming from an ageing population, the Ageing Fund was created in September 2001 by the 'Law ensuring a continuous reduction in the public debt and the creation of an Ageing Fund'. The objective of the Ageing Fund, which is part of the general government, is to accumulate reserves to finance additional pension expenditures during the period 2010 to 2030. The reserves will be constituted from proceeds from the sale of UMTS licences, surpluses of the social security and by budgetary surpluses: the precise amount of financial resources to become available to the fund will be decided each year within the context of the budgetary process.

Graph VI.1: **Belgium: implicit interest rates on government debt**



No expenditures will be made by the Ageing Fund before 2010. Moreover, any expenditure after that date will be subject to the requirement that the government-debt ratio is lower than 60 % of GDP; recourse to fund resources must not result in a rise in the debt ratio above 60 %. As long as the debt ratio is higher than 100 % of GDP, the reserves of the fund will be invested exclusively in securities of the Belgian State; once the debt ratio is below that level, the fund reserves may be invested in assets which would imply a reduction in the government-debt ratio. According to the law, an 'ageing note' will be prepared on an annual basis in which the government policy in relation to population ageing will be determined; the note should provide, in particular, information on the estimated supplementary pension and social security cost from demographic and other developments, and on medium- and long-term budgetary policy taking account of such developments.

The creation of the Ageing Fund can be considered a positive development although the annual amount that will be allocated to it has not been quantified. However, it should be considered as a complement and not as a substitute for policy measures and reforms aimed at ensuring the long-term sustainability of public finances; to this end, a comprehensive reform of the pension system should provide a more lasting solution; in the long run, positive effect might also result from raising the employment rate, particularly for older workers.

Council opinion on the updated stability programme of Belgium, 2002–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002 the Council examined the 2001 update of the stability programme of Belgium, which covers the period 2002–05.

In 2000, real GDP growth was particularly strong, reaching 4 %, driven by domestic demand and buoyant

([1]) OJ L 209, 2.8.1997.

exports; the general government accounts reached a surplus of 0.1 % of GDP ahead of schedule, while the government debt was reduced by 5.7 % percentage points to 109.3 % of GDP.

In 2001, the economy suffered from the general economic slowdown and real GDP growth decelerated to 1.1 %. The initial general government budgetary target, a surplus of 0.4 % of GDP (including the receipts from the UMTS licenses) could not be met in 2001, but a surplus of 0.2 % of GDP was achieved; the government-debt ratio is expected to decline to 106.9 % of GDP.

The 2001 updated stability programme is based on a macroeconomic scenario assuming a sustained economic recovery from the second quarter of 2002; real GDP growth is not expected to exceed 1.3 % in 2002. Real GDP growth is projected to accelerate in 2003 returning to potential in the final years of the programme. Due to the 2001–02 economic slowdown the updated programme targets a general government balance in 2002 instead of a surplus of 0.3 % of GDP which was projected in the previous update; then, from 2003, the budgetary adjustment path is expected to be resumed, a government surplus of 0.5 % of GDP being forecast for 2003, increasing to 0.7 % of GDP in 2005. The government debt is projected to decline to 88 % of GDP in 2005 as expected in the previous update.

The Council considers that the temporary departure from the budgetary adjustment path projected in the 2000 update is not significant and can be justified by a cumulated loss in real GDP growth reaching 2.6 percentage points over the years 2001 and 2002. The Council notes that such departure took place in the context of a government surplus in 2000. The Council considers, however, that a balanced fiscal position should be achieved in 2002. The Council notes, moreover, that returning to the course outlined in the 2001 update of the stability programme from 2003 depends on strong economic recovery in the second half of 2002. The Council urges the Belgian Government to ensure that the previously projected budgetary adjustment path is resumed in 2003. Given the still very high level of the government debt and in view of the challenges in the long term induced by the ageing population, the Council recommends that all additional revenues which might stem from better-than-expected real GDP growth are allocated to debt reduction, a recommendation already made in its previous opinion ([1]).

The Council notes with satisfaction that the projected general government accounts remain close to balance or in surplus throughout the period of the programme and are therefore in conformity with the requirements of the Stability and Growth Pact.

The Council notes that achieving government primary surpluses above 6 % of GDP per year has been particularly appropriate in the case of Belgium, taking into account that the government debt is still at a very high level; therefore, the Council welcomes the commitment to maintain a high level of primary surpluses of around 6 % throughout the period to 2005. The Council considers that, in order to achieve this objective, strict budgetary surveillance of all parts of government should be enforced, particularly in the social security sector and in Entity II, and that clear binding norms for expenditure control are instrumental for the budgetary adjustment. The Council notes that the limit of 1.5 % for the increase in real terms of primary expenditures in Entity I (federal government and social security) has been referred to in the updated programme. It therefore recommends that this limit continues to be firmly adhered to in the coming years.

The Council notes that the programme does not provide more detailed projections of revenues and expenditures, in particular government investment expenditures, as it was recommended in its opinion of 12 March 2001 ([2]); in addition, separate accounts for federal government and social security were not provided as required under the code of conduct for assessing general government budgetary developments.

The Council welcomes the structural reforms envisaged in the 2001 update, particularly the tax reforms aimed at reducing the tax burden and increasing employment as well as the policies aimed at ensuring the long-term sustainability of public finances.'

([1]) OJ C 109, 10.4.2001.
([2]) OJ C 109, 10.4.2001.

Box VI.1. **2002 BEPG's recommendations to Belgium on budgetary policy** ([1])**:**

'[…] Considering that Belgium is a member of the euro area, budgetary policy should aim to:

i. in 2002, do not allow a deterioration in the government balance compared to 2001, notably through containment of government current expenditure;

ii. resume budgetary consolidation in 2003 and achieve a 0.5 % of GDP general government surplus by adhering to the 1.5 % limit on real expenditure growth for Entity I and by strict budgetary surveillance of all parts of government; and

iii. strengthen the existing strategy in order to prepare for the bugetary implications of population ageing; in particular by further reducing the debt level and by pursuing further the reform of the pension system, by better addressing the low average effective retirement age and quantifying more clearly the budgetary resources to be allocated annually to the Ageing Fund.'

([1]) Adopted by the Council on 21 June 2002.

2. Denmark

Recent developments and medium-term prospects

A high surplus on the general government budget balance was maintained in 2001. The surplus was 2.5 % of GDP ([1]) (excluding UMTS revenues of 0.2 percentage points). This is unchanged from 2000.

In the 2000 update of the convergence programme, a surplus of 2.8 % of GDP was expected. The slightly lower-than-expected outcome is primarily due to a shortfall in revenue from the pension fund yield tax, which was linked to the downturn in the stock market. The taxation on pension fund yields was changed in 2000 ([2]). This change has resulted in the revenues being far more volatile. It is estimated that the revenues can fluctuate by slightly more than 1 % of GDP on average, leading to increased volatility of the surplus on public finances of the same amount, and changes are very difficult to predict. Overall, the tax burden fell by almost 0.5 percentage points of GDP in 2001.

([1]) Statistics Denmark has decided to treat the UMTS proceeds as an annuity over the next 20 years, which is not in line with Eurostat's recommendation. The surplus in the table is in line with Eurostat's recommendation and therefore 0.2 percentage point higher at 2.8 % of GDP.

([2]) The tax rate on yields on equities was increased and the tax rate on yields on bonds was reduced to ensure the same tax rate on yields from the two types of assets. As the development in prices on equities is far more volatile than on bonds, the volatility of the revenues from this tax has increased markedly. Given the poor performance of the stock market in 2001 this resulted in lower revenues.

Table VI.4

Composition and balances of general government, Denmark ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		3.1	2.5	3.1	2.1	2.4
— Total revenue		59.2	56.6	56.8	55.4	54.7
Of which:	— current taxes	48.7	46.1	46.2	46.0	45.6
	— social contributions	3.2	3.3	3.3	2.7	2.7
— Total expenditure ([2])		56.1	54.1	53.8	53.3	52.3
Of which:	— collective consumption	8.1	7.8	7.9	7.9	7.8
	— social transfers ([3])	35.4	34.4	34.6	34.5	34.0
	— interest expenditure	4.7	4.2	4.1	3.5	3.2
	— gross fixed capital formation	1.7	1.7	1.7	1.8	1.8
Primary balance ([2])		7.8	6.7	7.1	5.5	5.7
Pm Tax burden		51.2	48.8	48.9	48.2	47.7
Government debt		52.7	46.8	44.7	43.2	39.8
Pm Cyclically-adjusted balance		2.5	1.3	2.6	2.3	2.4
Pm Cyclically-adjusted primary balance		7.2	5.5	6.7	5.8	5.7

([1]) Commission 2002 spring forecast.
([2]) Data for 2001 (except cyclically-adjusted) include UMTS receipts of 0.2 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

The ratio of primary expenditure to GDP was largely unchanged in 2001. Government consumption rose in real terms by 1.4 %. This was lower than expected at the time of the adoption of the budget, but well above the previous government's target of restricting real growth in government consumption to 1 % annually. The consolidated gross debt continued to decline and fell by almost 2.5 percentage points to 44.4 % of GDP at the end of 2001.

As part of the budget for 2002, a change to the 'special pension contribution' has been proposed ([1]). This results in revenues, the surplus on public finances and the tax burden being lowered by approximately 0.5 percentage points of GDP. The change is also made retroactive for 2001, but in line with the intentions of Statistics Denmark's treatment of the change, this has not been reflected in data for 2001.

Apart from the change in the 'special pension contribution' the Commission's spring 2002 economic forecasts project a largely unchanged general government surplus from 2001 till 2002. For 2003, the surplus is expected to increase, primarily as a result of stronger GDP growth.

([1]) The special pension contribution consists of 1 % of the wage bill for all employees being paid into a special pension scheme where the benefits were paid out as a lump sum. The change implies making the pay-out of the benefits in accordance with contributions, thereby removing the redistributive element. In national accounts terms this means that the pension scheme has been changed from being a tax into a private (mandatory) savings scheme. The proposal has the majority needed in the Parliament.

The tax burden should fall by one percentage point over the forecast horizon, the bulk however being due to the change to the 'special pension contribution'. The projections by the Danish authorities are in line with the Commissions forecast. The debt-to-GDP ratio is expected to continue to decline and reach 40 % by the end of 2003.

The new government, which took office in late November 2001, has introduced a tax freeze to stop the upward drift in the tax burden and to help curb the tendency for a rise in real expenditures compared with the budgets. The tax freeze implies that no direct or indirect tax should be raised and a ceiling has been imposed on the nominal property value tax.

Apart from introducing the tax freeze, the main medium-term policy objectives of keeping high surpluses on government finances while slowly reducing expenditure and tax-to-GDP ratios were kept unchanged in the latest update of the convergence programme. The government's medium-term strategy is to run budgetary surpluses of between 1.5–2.5 % of GDP in order to reduce the debt-to-GDP ratio substantially to prepare for the impact of an ageing population. Sustainability calculations show that the public finances are in a good position to handle the impact of rising expenditures due to the ageing population. However, in order to make room for the targeted 1 % average annual growth in real public consumption, increases in labour force participation rates are needed in order to maintain sustainability.

Table VI.5

Key figures of the Danish convergence programme (2001–05) ([1])

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.0	1.1	1.4	2.4	1.9	1.9
Gen. gov. budget balance (% of GDP)	2.5	1.9 ([1])	1.9	2.1	2.1	2.1
Primary surplus (% of GDP)	4.3	3.3	3.2	3.3	3.2	3.1
Government debt (% of GDP)	46.8	43.5	42.9	40.1	37.6	35.1

([1]) UMTS receipts excluded (0.2 % of GDP in 2001).
([2]) Government surplus excluding net interest payments.

Source: January 2002 update of the convergence programme of Denmark.

Controlling government expenditure

The ratio of general government expenditure to GDP in Denmark is the second highest in the EU. In 2001, the ratio was 53.5 %, more than six percentage points above the EU average. Whereas this level to a large extent reflects the choice of a welfare system with strong redistributive characteristics and a broad provision of public services, an area where there is a clear scope for improvement is the control of government expenditure.

In 1993, the previous government set a target of holding back real growth in government consumption to 1 % annually. The new government (that took office late November 2001) has kept this target but reformulated it slightly to restraining the real increase in government consumption to 1 % on average between the years 2002 and 2005.

The record shows that slippage from this budgetary target has been frequent. Between the years 1994–2001, real expansion of public consumption was clearly above the objective in six of eight years. The accumulated real increase over these years amounted to 17.5 %, more than nine percentage points on top of what would have been the case had the 1 % target been respected.

Expenditure overruns have been present at the level of central government, but the bulk have come about at the level of regional and local governments. Counties and municipalities, which govern some two thirds of government consumption, have frequently contributed to breaching the target.

The upcoming ageing burden and the recently introduced tax freeze, makes it even more compelling to achieve an effective control of government expenditure. Both the central government budget process and, perhaps more importantly, the system for budgetary coordination with counties and municipalities can be improved.

The central government's budget bill is normally being prepared in the first half of the year and presented to the parliament in August. Given the Danish tradition with coalition, but still minority governments, negotiations with other political parties constitute a central phase in the budget process where the government needs to gather the support required to pass the bill in the parliament. As a consequence, the final budget has often encompassed significant changes from the original budget proposal. Expenditure has often been allowed to exceed the initial 'ceiling' included in the budget bill, as long as revenues have been raised to uphold the intended budget balance.

The political priorities in this respect could change with the tax freeze in place. Given that sources for additional income would be quite limited, expenditure restraint would be even more crucial in order for the budget balance not to deteriorate. It remains to be seen, however, whether the tax freeze will be sufficient in order to contain government expenditure. If this proves not to be the case, measures would need to be taken to limit the risk of overruns.

As regards lower levels of government, counties and municipalities have a high degree of autonomy in setting both taxes and expenditure. There is a system for budgetary coordination, in which the central government enters yearly agreements with the counties' and the municipalities' associations. These agreements typically cover the overall level of expenditure and taxation as well as the key priorities on the expenditure side. The block grants from the central government to the counties and the municipalities are also included in these deals.

It should be noted that these agreements are not legally binding, but rather represent an expression of 'intent' from the associations' side. Thus, it has been quite feasible for an individual county or municipality to exceed the agreed (collective) expenditure ceiling or tax rate without having any formal requirement for another county or municipality to compensate for the overrun. In fact, this has frequently been the case in the past where overshooting of public expenditure targets have been financed by an upward drift in taxes beyond the agreed levels.

The previous government tried to counter this slippage by putting in place a four-year agreement for the period 1999–2002, emphasising the need to stick to the 1 % target. In addition, quarterly meetings between the central and lower levels of government have been established in order to make an overhaul of the budgetary developments. In fact, local governments' budgets have come closer to the agreed levels in recent years whereas the same progress cannot really be seen at the regional government level.

Compliance with the introduced tax freeze at lower levels of government will constitute a challenge, and it will further reinforce the need to respect the agreements also on the expenditure side. To ensure this, binding commitments from the part of individual counties and municipalities would be desirable. In the case of non-compliance — either with the tax freeze or with the expenditure target, another instrument that could be considered is economic sanctions.

As regards medium-term planning, the annual budget includes detailed expenditure estimates for the three subsequent years. These multi-annual estimates reflect

political agreements in some areas, but are merely passive forecasts in others. The estimates are not binding, and one could consider strengthening the multi-annual framework.

Council opinion on the updated convergence programme of Denmark, 2001–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 9(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 5 March 2002 the Council examined Denmark's updated convergence programme, which covers the period 2001–05. The macroeconomic scenario assumed in the updated convergence programme projects real GDP growth to increase from 1 % in 2001 to 1.5 % in 2002 and 2.5 % in 2003 and then level off to around 2 % in both 2004 and 2005. Inflation is expected to remain below 2 % and unemployment to remain low. The Council notes that this economic scenario seems plausible and is in line with the Commission's 2001 autumn forecast.

The Council notes with satisfaction that Denmark has continued to fulfil the convergence criteria on inflation, long-term interest rate and on the exchange rate.

Regarding public finances, the Council notes, that while the outcome for the government surplus for 2001 was below expectations, mainly due to shortfall in revenue linked to the downturn in the stock market, a comfortable surplus was still achieved. The Council welcomes the maintenance of the objective of keeping surpluses between 1.5–2.5 % of GDP over the programme period, during which the general government debt is expected to be reduced to 35 % of GDP by 2005. As a result, Denmark continues to fulfil, comfortably, the requirement of the Stability and Growth Pact of a budgetary position of 'close to balance or in surplus' over the entire period covered by the programme. Denmark is also expected to be able to withstand a normal cyclical downturn without breaching the 3 % of GDP deficit reference value.

The budgetary consolidation strategy including a declining primary expenditure to GDP ratio and tax burden over the programme period outlined in the previous update of the programme is upheld. The strategy has been further strengthened by the government's commitment to freeze all taxes and excise duties in order to put a halt to the upward drift in the tax burden. The Council welcomes this measure, while noting that it should not prevent reductions of marginal taxes on labour.

The Council notes that expenditure control has had a rather mixed record in recent years as the target of restraining real public consumption growth to 1 % has frequently been overstepped. The need for expenditure control, especially in local government and counties is even more important now that the decision to freeze taxes has been taken, if high general government surpluses are to be assured. The Council therefore calls on all levels of general government to make efforts to control expenditure such that the real increase in public consumption fulfils the target of an average annual growth of 1 %. It also invites the Danish Government to strengthen the institutional framework to avoid further slippage in the future, as already recommended in the Council opinion last year ([2]).

The focus on longer-term sustainability issues in the programme is welcomed. The Council notes with satisfaction that the objective to substantially lower the ratio of gross debt to GDP enhances the sustainability of the public finances, thereby rendering the Danish economy in a good position to handle the projected expenditure rises due to the ageing of the population and still continue to be in compliance with the Stability and Growth Pact. It notes that these results are conditional on the continued realisation of the high surpluses. The projections also assume a continued high tax ratio to GDP between 2005 and 2050. The Council notes that such a high tax ratio to GDP may be difficult to achieve in a framework of

([1]) OJ L 209, 2.8.1997.

([2]) OJ C 77, 9.3.2001.

increased mobility of certain tax bases as a result of the globalisation.

Increase in the labour force participation rates in Denmark is an important assumption of the projections in the programme. A large part of this increase is likely to come from reforms already undertaken, where the full effect has not yet set in. Further structural reforms are, however, needed on the functioning of the labour market, including reductions in taxes on labour which might help increase the labour supply. The Council therefore encourages the authorities to proceed with these measures, while of course maintaining adherence to the Stability and Growth Pact requirements.'

Box I.2. **2002 BEPG's recommendations to Denmark on budgetary policy** ([1])**:**

'[…] budgetary policy should aim to:

i. ensure that the government's target of restraining real growth in government consumption to 1 % a year on average is reached, implying that the increase in 2003 preferably should not exceed the authorities' forecast of 0.7 % in order to offset the rise of 1.3 % included in the budget for 2002; and

ii. secure implementation of the tax freeze by all levels of government, possibly by binding commitments from the part of counties and municipalities in the agreements related to the budget for 2003.'

([1]) Adopted by the Council on 21 June 2002.

3. Germany

Recent developments

The overall general government deficit is currently estimated to have reached 2.7 % of GDP in 2001 (1), compared to a 2000 figure of 1.3 % (excluding UMTS proceeds). The 2001 figure is also well above the deficit projection of 1, 0.5 % of GDP in the October 2000 update of the German stability programme. This significant deterioration is mainly due to the stronger-than-expected slowdown in 2001 and the effects of statistical revisions to past figures. Expenditure overruns, however, occurred in the healthcare sector, where the financial deficit is now estimated to have reached slightly more than EUR 2.9 billion, due not least to the lifting of the expenditure ceiling on the consumption of pharmaceuticals at the beginning of 2001. Furthermore, some of the regional authorities (*Länder*) did not respect the expenditure targets agreed upon in the framework of the Finanzplanungsrat (Financial Planning Council).

(1) This second 2001 deficit estimate by the Statistical Office could not yet incorporate the final outcome for most of the social security systems and the fourth quarter results of local levels of government (*Gemeinden*). The next revision of past deficit figures is due in August 2002.

Table VI.6

Composition and balances of general government, Germany (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		– 1.6	1.2	– 2.7	– 2.8	– 2.1
— Total revenue		47.4	47.1	45.7	46.1	45.8
Of which:	— current taxes	24.2	24.6	23.1	23.5	23.5
	— social contributions	19.0	18.7	18.6	18.6	18.5
— Total expenditure (2)		48.9	45.9	48.5	48.9	48.0
Of which:	— collective consumption	8.0	7.9	7.9	7.9	7.8
	— social transfers (3)	30.1	29.9	30.1	30.4	29.9
	— interest expenditure	3.5	3.4	3.2	3.3	3.2
	— gross fixed capital formation	1.9	1.9	1.7	1.7	1.6
Primary balance (2)		2.0	4.5	0.5	0.5	1.1
Pm Tax burden		43.0	43.0	41.4	41.8	41.6
Government debt		61.3	60.3	59.8	60.8	60.1
Pm Cyclically-adjusted balance		– 1.3	– 1.6	– 2.5	– 2.1	– 1.9
Pm Cyclically-adjusted primary balance		2.3	1.7	0.7	1.2	1.4

(1) Commission 2002 spring forecast.
(2) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 2.5 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

Regarding the year 2002, the October 2000 update of the German stability programme had projected a further improvement in the nominal deficit to 1 % of GDP. However, given the worse 2001outcome and the clearly lower projections for GDP growth in 2002, the German Government now forecasts a general government deficit of 2.6 % of GDP for 2002. Current Commission services' estimates point to a rise in the 2002 deficit compared to the 2001 outcome, due not only to the implementation of measures which raise some benefits but also to the higher than budgeted payments resulting from rising unemployment.

Table VI.7

Key figures of the German stability programme (2001–05)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.0	3/4	1.25	2.5	2.5	2.5
Gen. gov. budget balance (% of GDP)	1.2 (– 1.3)	– 2.5	– 2.5	– 1.5	– 1	– 1
Primary surplus (% of GDP)	2	1	1	2	3	3
Government debt (% of GDP)	60.3	60.0	60.0	59.0	57.0	55.5

NB: UMTS receipts excluded (1.2 % of GDP in 2000). In the German stability programme, the target for 2004 and 2005 was set at – 1 % of GDP, but at the February 2002 Ecofin Council, the German Government committed itself to a budget close to balance from 2004 on.

Source: 2001 update of the stability programme of Germany.

Furthermore, the projected growth pattern (weak private consumption and an important growth contribution from stocks) would not be tax-friendly. Government consumption is forecast to rise by more than 2 % in nominal terms on the back of higher spending on internal and external security, a more important average increase in public-sector salaries and rising health expenditure. Assuming growth of 0.8 % for the year as a whole, the cyclically-adjusted balance would improve slightly, due also to the tax rises implemented at the beginning of 2002.

In 2003, the nominal deficit should clearly improve notwithstanding the implementation of the next step of income tax reform (tax relief of around 0.3 % of GDP). Based on the forecast acceleration of growth in the second half of 2002, employment is expected to rise strongly, with positive effects on both direct and indirect taxes and on social security contributions and payments. The forecast improvement in the nominal deficit, however, is based on the assumption that there will be no decline in social security contributions, that the rise in health expenditure will decelerate and that wage agreements in the public sector will be very moderate. The 2003 deficit projection clearly underlines that if Germany wants to stand a real chance of reaching a close-to-balance budgetary position by 2004, additional measures will have to be implemented in line with the agreements on expenditures reached between *Bund* and *Länder* in the special Finanzplanungsrat of 21 March 2002 (see below).

Towards a close-to-balance position in 2004?

Following the Commission recommendation to the Council to give an early warning to Germany in line with the provisions of Council Regulation (EC) No 1466/97 (the so-called 'Stability and Growth Pact'), the Ecofin Council on 12 February 2002 declared that given the commitments made by the German Federal Government, 'the Council considers that the German Government has effectively responded to the concerns expressed in the Commission recommendation and therefore the recommendation is not put to vote' (see also Part II.2).

In particular, Germany committed itself to ensure that the 3 % of GDP reference value for the general government deficit would not be breached in 2002 and not to take any discretionary measures that could deteriorate its budgetary position. The commitment to the close-to-balance budgetary position in 2004 was reconfirmed, in spite of the worse-than-originally expected economic developments. Furthermore, given the expenditure overruns in some *Länder* in the more recent past, the government committed itself to make every effort to ensure that the budgetary targets are met through agreements with regional authorities, in line with the Council opinions on the last three updates of the German stability programme.

Not least as a consequence of the Ecofin Council meeting of 12 February 2002 and its insistence on the need for a kind of national stability pact, a special meeting of the Finanzplanungsrat (Financial Planning Council) took place on 21 March 2002. Following a very intense debate, a declaration was agreed upon which makes some progress on the most pressing issues.

In particular, the implementation of the changes to Article 51 of the Haushaltsgrundsätzegesetz ([1]) is to be

([1]) Given the repeated request by the Ecofin Council to address potential budgetary problems resulting from this highly decentralised system, on 20 December 2001 the Bundesrat (Federal Council, chamber of the *Länder*) had already adopted changes to Article 51 of the Haushaltsgrundsätzegesetz ('law on budgetary procedures'). These changes were, however, only to be implemented from 2005 onwards.

advanced from 2005 to the lifetime of the current Parliament (i.e. up to 22 September of this year). This law now clearly states that the federal and regional level will strive to reduce their deficits with the aim of reaching balanced budgets. This is to be achieved in the framework of the Finanzplanungsrat, which is to discuss the developments of expenditure and deficits of the different levels of government and will give recommendations on the expenditure line to follow. In case budgetary developments are not 'sufficiently' in line with the agreed rules, the Finanzplanungsrat will discuss the reasons thereof and issue recommendations.

Moreover, Bund and *Länder* — 'in order to assure the respect of the German commitments resulting from the European Stability and Growth Pact' — agreed that for the planning of the budgets for 2003 and for 2004, the federal level will on average decrease its spending by 0.5 % per year and that regional and local levels will limit their annual expenditure growth to 1 % on average.

All in all, the advancing of the implementation of the Haushaltsgrundsätzegesetz which is meant to increase peer pressure is to be welcome. Furthermore, the agreed ambitious expenditure targets render the attainment of a close-to-balance position in 2004 more credible. However, there is no sanction mechanism in case the agreed targets are not met ([1]). Furthermore, there is no rule on how deficits are to be distributed between different *Länder* nor between *Länder* and *Gemeinden*. Finally, the attainment of a close-to-balance position in 2004 seems still contingent upon a real GDP growth rate of 2.5 % of GDP in both 2003 and 2004.

In 2001, the debt ratio will probably have declined to slightly less than 60 % of GDP but is expected to rise again to 60.8 % in 2002 as a consequence of the combined effect of a relatively high nominal deficit and weak nominal GDP growth. With the nominal deficit projected to decrease clearly in 2003 and nominal GDP growth forecast to come close to 4 %, the debt ratio should again come close to the Treaty's reference value in 2003.

It remains of utmost importance for Germany to reduce the general government debt not least to face the challenges posed by the foreseeable rapid ageing of the population. Even with the recent pension reform and assuming that a reform of the healthcare system is implemented in the near future, Germany might in the medium term still be faced with the unpleasant choice between clearly higher contribution rates or another rise in the already high public subsidies to social security systems.

Given these medium-term challenges, the attainment of a close-to-balance budgetary position in 2004 becomes even more essential and should not be postponed; due to the important tax relief of the 2005 income tax reform (around 1.3 % of GDP), the non-achievement of the close-to-balance position in 2004 would normally imply that a balanced budget would be difficult to attain even in 2006.

To implement further far-reaching reforms in the social security systems (healthcare, old-age care and unemployment in particular) could not only facilitate the attainment of the medium-term budgetary targets, but could at the same time be an important contribution in the authorities' efforts to encourage employment creation and to raise the so-far low growth potential of the German economy. This potential could grow even more if the reforms of the social security systems and the tax reforms were combined in such a way as to increase incentives to take up a job, as was the case in the year 2000.

Council opinion on the updated stability programme of Germany for the period 2001–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([2]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined the updated stability programme for Germany which covers the period 2001–05. The Council notes that the new update broadly

([1]) In its assessment of the updated stability programme of December 2001, which already incorporated the changes to Article 51 of the Haushaltsgrundsätzegesetz, the Commission had already emphasised that the new rules did not incorporate any sanction mechanism similar to those existing at the European level or in other federally organised Member States.

([2]) OJ L 209, 2.8.1997.

complies with the requirements of the revised "code of conduct on the content and format of stability and convergence programmes" ([1]), although there is some need for improvement, notably regarding the use of rounding.

The Council notes that the estimated deficit outcome for 2001 (2.6 % of GDP) is clearly higher than projected in the October 2000 update (1.5 % of GDP). The Council acknowledges that this important nominal divergence can be explained by the weakening in growth, with 2001 GDP growth more than two points below the projections of the October 2000 update of the programme. While the federal government implemented the budget as planned, the Council notes that the deficit outcome of other levels of government, including social security, is higher than estimated.

The baseline macroeconomic scenario of the updated programme expects annual output growth of 1.25 % in 2002; for the period 2003–05 annual average output growth is estimated to accelerate to some 2.5 %; the general government finances are expected to improve from a deficit of 2.5 % of GDP in 2001 to a balanced position in 2004 and 2005. The Council notes that with the presentation of the annual economic report on 30 January 2002, the German authorities now consider the alternative scenario contained in the programme to be realistic. It is in line with the Commission autumn forecast for 2001 and 2002. For the years 2003 to 2005 it assumes an annual growth rate of 2.25 % on average. The Council concurs that this lower-growth scenario is plausible. Even this scenario is conditioned on a favourable external and internal environment, notably the expected pick-up of world economic growth, continued wage moderation and enhanced structural reform efforts, especially in the labour market.

The Council considers that, if growth turns out lower than expected, there is a risk that the general government deficit in 2002 comes even closer to the 3 % of GDP reference value than in 2001. Therefore, the Council welcomes the German Government's determination to ensure that the 3 % of GDP reference value will not be breached. To this end, the government intends to closely monitor budgetary developments at all levels of government in 2002, including the States (*Länder*) and the social security system; and to implement the budgetary plans for this year carefully in order to avoid any further deterioration in the deficit. It is also prepared to find the most appropriate ways to counter any shortfall; and to avoid any measures likely to lead to a further deterioration in the government deficit.

The German Government has confirmed its intention to take all appropriate measures to reach a close-to-balance budget position by 2004, in accordance with previous commitments, so as to comply with the requirements of the Stability and Growth Pact from that year onwards. This may require, once the economic recovery is established, discretionary measures in addition to those included in the 2001 updated stability programme.

Sound public finances should be supported by the decisive implementation of structural reforms geared at improving the growth potential of Germany, in particular in the labour market and in social security and benefit systems. This is all the more important as the German economy is still burdened with the financing of the reunification process, and, despite its large size, remains highly vulnerable to external shocks.

The Council urges the German authorities to ensure strict budgetary implementation at all levels of government. As shown once again by the budgetary outcomes for 2001, this will be crucial to attain the projected deficit targets. While the Council welcomes the recently implemented change to the law on budgetary principles, stating that all levels of government should contribute to the achievement of the medium-term budgetary targets, the mechanism enshrined therein is not yet sufficient to guarantee compliance with mutually agreed objectives by all levels of government. The Council therefore welcomes the intention of the federal government, through agreements with the regional authorities, to make every effort to ensure that the abovementioned budgetary objectives are met.

The Council notes with satisfaction that the German authorities will continue in their efforts to bring the debt level down below the Treaty's reference value. However, in view of the significant pressures for increased public spending due to an ageing population, the slow decline in the debt ratio remains a source of concern given the need to ensure the sustainability of public finances. If debt reduction is to make a noticeable contribution towards meeting the budgetary cost of ageing populations, a balanced budget position must be reached as soon as possible. In addition to intensified budgetary consolidation efforts the recently implemented reform of the pension system is a step in the right direction. This needs to be complemented by structural reforms geared towards a rise in labour market participation rates, particularly of women and older workers. Such measures should be enacted as

([1]) 'Revised opinion of the Economic and Financial Committee on the content and format of stability and converge programmes' endorsed by the Ecofin Council on 10 July 2001.

soon as possible, given that the budgetary impact of ageing populations will take hold soon.

The 2001 update does not contain projections on the long-term sustainability of public finances in line with the revised code of conduct. The programme provides detail on the recent pension reform. While these reforms are a step in the right direction, further reforms may be needed in the future. Raising employment rates, especially amongst women and older workers, will form a key part of any overall strategy to prepare for ageing populations. The key challenge facing Germany is to achieve a position of budget balance and thereafter to sustain it over the very long-run.'

Statement by the Council on the budgetary situation of Germany

'1. The Council considers that the early-warning mechanism is an essential part of the Stability and Growth Pact. The Commission, when issuing on 30.1.2002 a recommendation for a Council recommendation with a view to giving early warning to Germany in order to prevent the occurrence of an excessive deficit, has thereby acted in accordance with the provisions of the Stability and Growth Pact.

2. The Council welcomes the commitments of the German Government; it

- confirms its endeavour to ensure that the 3 % of GDP reference value for the general government deficit will not be breached; to this end, the government intends to closely monitor budgetary developments at all levels of government in 2002, including the States (Länder) and the social security system;
- will implement budgetary plans for this year carefully, avoiding to take discretionary measures that could aggravate the budgetary position and using any budgetary room for manoeuvre to reduce the deficit;
- confirms that a close-to-balance position will be reached by 2004, in accordance with previous commitments; this may require, once the economic recovery is established, discretionary measures in addition to those included in the 2001 updated stability programme;
- will, through agreements with the regional authorities, make every effort to ensure that the above commitments are met;
- notes that the debt ratio is projected to decline over the period of the programme.

3. In the light of these commitments by the German Government, the Council considers that it has effectively responded to the concerns expressed in the Commission recommendation, and therefore the recommendation is not put to vote and the procedure is closed.

4. The Council is unanimous in taking this decision.'

Box VI.3. **2002 BEPG's recommendations to Germany on budgetary policy** ([1]):

'[…] considering that Germany is a member of the euro area, budgetary policy should aim to:

i. ensure that the 3 % of GDP reference value for the general government deficit will not be breached. Use any potential growth dividend to reduce the 2002 deficit below the 2.5 % of GDP targeted in the last updated stability programme;

ii. aim at a sufficient decline of the 2003 deficit to ensure that a close-to-balance position in 2004 can be achieved. To this end, continue expenditure restraint and ensure that any budgetary room for manoeuvre be used to reduce the deficit;

iii. implement the necessary reform of the healthcare system in order to reduce expenditure pressures and to contribute to improving the quality and economic efficiency of medical care; and

iv. adopt in the current parliamentary term the agreed changes to the Haushaltsgrundsätzegesetz and enable an effective control of the agreements reached in the special session of the Finanzplanungsrat of 21 March 2002.'

([1]) Adopted by the Council on 21 June 2002.

4. Greece

Recent developments

In 2001, the general government accounts recorded a deficit of 0.4 % of GDP and a small surplus of 0.1 % of GDP when including receipts from the sale of mobile phone licences (UMTS). The government gross debt continued its downward path initiated in 1996, but remained at a high level, close to 100 % of GDP.

A general government surplus of 0.5 % of GDP targeted in the 2001 State budget and in the 2000 stability programme was not achieved, mostly as a result of a shortfall in tax revenues. The unexpected deceleration in activity and technical reasons related with the collection of corporate taxes were the main contributing factors; the sharp decline in the Athens Stock Exchange as well as the fall in interest rates on bank deposits which reduced the interest income had also a negative impact on total tax revenues.

In fact, the overall improvement in the budgetary position of the general government in 2001 as compared with 2000 (equal to 0.4 percentage points of GDP) was almost exclusively due to lower interest payments while buoyant non-tax revenues (namely, increased income from the entrepreneurial activities of the State) compensated for lower tax revenues. The primary surplus declined (by 0.4 percentage points of GDP, excluding the UMTS licences receipts), to 5.8 % of GDP.

The State budget for 2002 targets a deficit for the central government consistent with a surplus of 0.8 % of GDP for the general government. The State budget deficit, is expected to be reduced as against 2001; a surplus in the ordinary budget is foreseen as a result of further reduc-

Table VI.8

Composition and balances of general government, Greece (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		– 1.7	– 0.8	0.1	0.3	0.5
— Total revenue		46.3	47.5	47.6	47.7	47.1
Of which:	— current taxes	24.9	25.9	25.2	25.0	24.9
	— social contributions	13.7	13.6	13.4	13.4	13.4
— Total expenditure (2)		48.0	48.3	47.5	47.4	46.6
Of which:	— collective consumption	9.3	9.8	9.9	9.8	9.8
	— social transfers (3)	22.0	22.5	22.2	22.4	22.6
	— interest expenditure	7.3	7.0	6.2	5.6	5.1
	— gross fixed capital formation	3.7	3.7	3.8	3.9	4.0
Primary balance (2)		5.6	6.2	6.3	5.8	5.7
Pm Tax burden		37.3	38.3	37.6	37.4	37.3
Government debt		103.8	102.8	99.7	97.8	95.1
Pm Cyclically-adjusted balance		– 1.6	– 0.9	– 0.7	– 0.1	– 0.1
Pm Cyclically-adjusted primary balance		5.7	6.1	5.5	5.5	5.1

(1) Commission 2002 spring forecast.
(2) Data for 2001 (except cyclically-adjusted) include UMTS receipts of 0.5 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

tion in interest payments (amounting to 1.0 percentage point of GDP) and a small decline in primary spending, concentrated in cuts in consumption expenditure other than compensation of employees and pensions, as well as in general operational costs of the State; in contrast, the reduction in public-sector wages and grants is expected to be quite marginal. A small increase in the investment budget deficit is expected in 2002.

According to the Commission forecasts, the objective set in the budget for 2002 may be missed due to a shortfall in revenues and to an overrun in current primary expenditure. While revenues appear to have been overvalued in the projections included in the budget, there is a risk of lack of control on those categories of spending that usually overshoot the budgetary projections.

The 2001 update of the Greek stability programme projects further improvement in the budgetary position of the general government in 2003 and 2004, but at a slower pace than expected in the initial stability programme. The government surplus is projected to reach 1.2 % of GDP in 2004 instead of 2 % of GDP and the government-debt ratio should decline from close to 100 % of GDP in 2001 to 90 % of GDP in 2004 instead of 84 % of GDP projected previously. Yet, from 2002 to 2004, no further genuine budgetary adjustment results from the projections as, basically, the improvement in the government surplus almost mirrors the steady decrease in interest payments; the primary surplus should reach more than 6 % of GDP, but declines throughout the period. Moreover, the recent persistence of the high stock-flow adjustment in debt developments raises concerns about the quality of the budgetary adjustment.

Table VI.9

Key figures of the Greek stability programme (1) **(2001–04)**

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	4.3	4.1	3.8	4.0	4.0	n.a.
Gen. gov. budget balance (% of GDP)	– 1.1	0.1	0.8	1.0	1.2	n.a.
Primary surplus (% of GDP)	6.1	6.6	6.4	6.2	6.0	n.a.
Government debt (% of GDP)	102.7	99.6	97.3	94.4	90.0	n.a.

(1) UMTS receipts excluded (0.5 % of GDP in 2001).

Source: 2001 update of the stability programme of Greece.

The enhanced importance of primary current expenditure retrenchment in a context of decelerating fiscal revenues

Maintaining macroeconomic stability, furthering budgetary consolidation aimed at reducing the still high government-debt ratio, while strengthening structural reform are the challenges faced by economic policy in Greece in the coming years. The 2001 update of the stability programme states that budgetary policy will remain prudent, aiming at reaching its objectives mainly through expenditure restraint while total resources of the general government are projected to decline. However, the bulk of the budgetary adjustment falls on a substantial reduction in debt-servicing costs while real primary spending, including investment spending, is projected to remain broadly unchanged during the period covered by the programme and above the level reached in 2000; the primary surplus is projected to remain at the level reached in 2000 as a share of GDP.

When compared with the initial stability programme, the 2001 update results less ambitious with respect to both the government balance and the government-debt ratio; the latter is projected to represent still 90 % of GDP in 2004, as against 84 % of GDP projected previously, while the government balance will reach 1.2 % of GDP the same year instead of 2 % of GDP. The slow reduction in the debt ratio continues to be due to inadequate control of those autonomous factors other than the net position of the general government (the stock-flow adjustment) which average above 4 % of GDP and absorb each year a considerable part of the high primary surplus. Among these, financial operations like equity participation of the State in the shares of public enterprises under restructuring amount to over 1 % of GDP each year. The stock-flow adjustment would be even higher

if privatisation receipts projected to represent around 1 % of GDP each year would be excluded.

In addition, while, to some extent, the revision in the budgetary targets results from the downward revision of the projections for real GDP growth, the underlying adjustment path reveals some lack of ambition in restraining current primary expenditure, the main components of which have become quite inelastic in recent years. Indeed, wages and grants which represent around 80 % of expenditure in the ordinary budget of the State, remained constant in real terms in 2001; according to the State budget they are projected to hardly decline in 2002 as a share of GDP. This rigidity may be partly attributed to the social policy of the government which results in favouring spending in specific areas such as national health, education and defence. However, the high and non-declining level of grants to both the social security funds and to public enterprises indicates that the efforts undertaken to reduce the size of the public sector and to rationalise spending of the wider public sector may have recorded only a limited success. In addition, these categories of expenditure record significant overruns in recent years, in particular public-sector wages and pensions.

On the other hand, tax revenues, after a period of rapid increase during the stabilisation phase of the 1990s, are already declining in real terms. Tax revenues in the ordinary budget have increased their share of GDP, from 21.6 % in 1992 to 26.6 % of GDP in 2000, but fell to 25.5 % of GDP in 2001 and they are projected to represent 25.3 % of GDP in 2002. Direct taxes, as a result of the successive reforms of the tax system and of successful tax-evasion combating, represented 11.3 % of GDP in 2000 from 6.3 % in 1992–93. Their share declined to 10.4 % in 2001 and is projected to remain at that level in 2002. While this reflects the impact of the tax measures adopted in late 2000 and in 2001, the margins for further gains from the improvement in the efficiency of the tax-collection system or from further combating of tax evasion may be limited.

Against this background, and given the urgency to rapidly reduce the debt burden, it is necessary to keep expenditure under strict control, namely through adopting and implementing clear and binding norms for current primary spending as recommended by the Council both in 2001 and 2002 in its opinions on the stability programme of Greece and its 2001 update. The government has announced its intention to create a mechanism of norms to be respected for primary spending and the 2002 budget should have formed the pilot basis for its implementation; in addition, the State budget was intended to be presented on a multi-annual basis. Although the commitment for a better control and evaluation of primary expenditure is still affirmed by the government, no concrete plan or measure has accompanied the 2002 budgetary preparation. Finally, the impact on the central government budget of grants to the public-sector bodies outside the general government remains almost unchanged, despite the implementation of a wide-range privatisation plan and justifies the continuation of a wide-range structural reform.

Council opinion on the stability programme of Greece, 2001–04

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002, the Council examined the 2001 update of the stability programme of Greece, which covers the period 2001–04.

Real GDP growth remained robust in 2001, at 4.1 %, although lower than projected in the 2000 stability programme, as a result of the deterioration in the external environment. Inflation resurgence under the impact of increasing energy prices in 2000 started to decelerate since the summer 2001 but the improvement might weaken in the coming months. The general government accounts are estimated by the updated programme to reach a 0.1 % of GDP surplus in 2001 (including non-budgeted UMTS receipts of 0.4 % of GDP) instead of

([1]) OJ L 209, 2.8.1997.

0.5 % of GDP as projected in the 2000 stability programme.

The updated stability programme projects annual real GDP growth of around 4 % in yearly average for the period 2002–04 as against 5.4 % in the 2000 stability programme. The Council considers the projected real GDP growth, which should be underpinned by high private and public investment, as attainable. The Council notes that the budgetary projections remain in surplus throughout the period of the programme in both actual and cyclically-adjusted terms and that they respect the close-to-balance or surplus requirement of the Stability and Growth Pact.

The Council notes that the government-debt ratio is currently expected to decline from 99.6 % of GDP in 2001 to 90.0 % of GDP in 2004 instead of 84.0 % of GDP as projected in the 2000 stability programme. The Council also notes that the improvement in the government balance in the period from 2002 to 2004 primarily relies on the steady reduction in interest payments; in contrast, no retrenchment in current primary expenditure is expected. Furthermore, the ratio of the general government primary surplus to GDP, although reaching a high level until 2004, progressively declines throughout the period. The Council strongly encourages the Greek authorities to set promptly a clear binding norm for current primary expenditure as it was recommended in its opinion on the 2000 stability programme ([1]).

The Council considers it is appropriate to keep high primary surpluses above 6 % of GDP and to pursue, if necessary, further budgetary adjustment effort, taking into account the high level of debt. In the short-term, vigilance should be maintained regarding price developments in particular with respect to the forthcoming wage negotiations. Furthermore, taking into consideration the still very high level of the government-debt ratio, as well as the perspective of increasing budgetary costs stemming from the ageing population, the Council urges the Greek government to take advantage of the current favourable macroeconomic situation to reduce the government debt as fast as possible. The Council notes that the debt reduction foreseen in the programme is much slower than what would be warranted by expected GDP growth and the projected primary surplus. The Council invites the authorities to provide more detailed information on financial operations in future programme updates in order to allow a better understanding of debt developments.

The Council notes that strengthening structural reforms is a key economic policy objective of the updated programme; the Council considers that although considerable progress has been made in recent years in this area, implementation of structural reforms must continue in the product, services and labour markets in order to enhance the efficiency of markets and the competitiveness of the economy; the Council encourages the government to proceed to the necessary reforms rapidly. The Council welcomes the intention of the government to implement reforms in the area of budgeting and management of expenditure in the public sector.

The Council welcomes the information provided in the updated programme on long-term sustainability of public finances. The Council considers that there is a serious risk of budgetary imbalances emerging in the future due to the ageing population and that there is a need to reform the public pension system. The Council notes that no progress was made in this area in 2001 and that the updated programme does not include any specific plans or timetable for pension reform. The Council recommends that the government proceeds to the reform of the pension system with no further delay.'

([1]) OJ C 77, 9.3.2001.

Box VI.4. **2002 BEPG's recommendations to Greece on budgetary policy** ([1])**:**

'[…] considering that Greece is a member of the euro area, budgetary policy should aim to:

i. ensure that the budgetary stance in 2002 and 2003 does not contribute to inflationary pressures, also taking into account the outcome of the forthcoming 2002 national wage agreement in the private sector;

ii. comply with the guideline already issued in the 2000 BEPG asking for the application of clearly defined and binding norms for current expenditure increase in real terms;

iii. ensure that the government debt-to-GDP ratio declines in line with the projected reduction in the government deficit as well as with the increase in nominal GDP and limit the use of financial operations influencing negatively the level of the government debt; and

iv. accelerate the reform of the social security systems and in particular proceed to the reform of the pension system from 2002 in order to avoid serious budgetary imbalances which might emerge in future years from the ageing populations.'

([1]) Adopted by the Council on 21 June 2002.

5. Spain

Recent developments

Since the mid-1990s, fiscal consolidation has made clear progress in reducing the general government deficit from 6.6 % of GDP in 1995 to 0.3 % in 2000. This achievement has been based on expenditure restraint, although the brisk economic growth registered in recent years has given rise to strong receipts. Despite weakening growth, these positive results continued in 2001 when the general government sector was in balance. The debt-to-GDP ratio decreased by around three percentage points, falling below the 60 % reference value.

A balanced budget in 2001 was reached due to the strength of social contributions and current expenditure restraint. These two items partially offset a shortfall in indirect and corporate tax revenues caused by the economic slowdown. Civil service pay was increased below the effective CPI inflation, helping to moderate public consumption. In addition, interest payments increased only slightly, reflecting a falling debt burden and contributing to fiscal consolidation.

As a result, total current resources remained stable in 2001, recording a figure of 38.9 % of GDP while total current expenditure decreased to 34.9 % compared to 35.3 % in 2000. This current expenditure moderation was accompanied by an increase in gross fixed capital formation, which increased by 0.2 percentage points to 3.4 % of GDP.

In the baseline scenario of the 2002–05 updated stability programme, the target of a general government balanced budget is extended to 2002 and 2003 (compared with the previous update's projection of slight surpluses in the

Table VI.10

Composition and balances of general government, Spain (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		– 1.1	– 0.3	0.0	– 0.2	– 0.0
— Total revenue		39.5	39.4	39.6	39.6	39.6
Of which:	— current taxes	21.9	22.2	21.9	22.1	22,2
	— social contributions	13.1	13.3	13.5	13.5	13.4
— Total expenditure (2)		40.6	39.7	39.6	39.7	39.6
Of which:	— collective consumption	7.4	7.7	7.6	7.6	7.6
	— social transfers (3)	22.5	22.0	21.9	22.0	21.9
	— interest expenditure	3.5	3.3	3.1	2.9	2.8
	— gross fixed capital formation	3.4	3.2	3.4	3.5	3.6
Primary balance (2)		2.5	2.9	3.1	2.8	2.8
Pm Tax burden		35.1	35.7	35.6	35.5	35.4
Government debt		63.1	60.4	57.2	55.5	53.5
Pm Cyclically-adjusted balance		– 1.3	– 1.1	– 0.7	– 0.4	– 0.2
Pm Cyclically-adjusted primary balance		2.2	2.2	2.4	2.5	2.6

(1) Commission 2002 spring forecast.
(2) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 0.1 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

context of higher growth). Targets for 2004 and 2005 are for marginal surpluses of 0.1 % and 0.2 % of GDP respectively. The primary surplus is set to remain broadly unchanged at close to 3.0 % of GDP throughout the programme period. These targets appear to be based on rather cautious growth assumptions for the 2003–05 period. In contrast, however, the deterioration in the short-term economic outlook implies that meeting the target of balance in 2002 will be more testing. Finally, the debt-to-GDP ratio is projected to continue to decline, although at slower pace than in the previous update, reaching 50 % of GDP by 2005. The Commission's forecasts are broadly in line with the government's projections. The slight deficit foreseen for 2002 stems from a less buoyant macroeconomic scenario than the one envisaged by the Spanish authorities.

Table VI.11

Key figures of the Spanish stability programme (2001–05)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	4.1	3.0	2.4	3.0	3.0	3.0
Gen. gov. budget balance (% of GDP)	– 0.3	0.0	0.0	0.0	0.1	0.2
Primary surplus (% of GDP)	2.9	3.1	2.9	2.9	2.8	2.9
Government debt (% of GDP)	60.4	57.5	55.7	53.8	51.9	50.0

NB: UMTS receipts excluded (0.1 % of GDP in 2000).

Source: 2001 update of the stability programme of Spain.

The fiscal strategy remains unchanged compared to the previous programmes. It relies on a restraint of primary current expenditure, supported by lower interest payments, which should allow for an increase in capital expenditure. In turn, the programme envisages a new reform of personal income tax to take effect from 2003 with an estimated cost of 0.3 % of GDP in the first two years after its implementation. According to the update, this reform is to be supply-side oriented, aiming at promoting saving and labour supply and while yielding a reduced tax burden it should be consistent with the maintenance of fiscal consolidation.

The programme incorporates the new financial system for territorial governments, which has involved the decentralisation of tax and spending powers (see below). In parallel with the start of this new system, the law of budgetary stability was approved, which aims at ensuring the commitment of all general government sub-sectors to the respect of the close-to-balance objective.

The new financing system for regional governments

Regional governments in Spain are responsible for a wide variety of functions, mainly in the social field. Additionally, they carry out a substantial share of public investment. The financing system of regional governments ([1]) is based on the constitution and the framework law for the financing of autonomous communities (LOFCA). Within the legal framework of the LOFCA, an official body is responsible for coordinating economic policy and negotiating agreements between the State and regional governments: the Fiscal and Financial Policy Council (Consejo de Política Fiscal y Financiera). In June 2001, the central government and regional authorities negotiated a new financial system for territorial government to be implemented from 2002. This new system of indefinite duration, replaces previous five-year agreements.

Under the preceding 1997–2001 arrangements, regional governments were mainly dependent on transfers from the central government. The cost of healthcare and social assistance, to the extent they were provided by regions authorities, was covered entirely by the State ([2]). Finance

([1]) The agreement applies to regional governments with 'common status' (*comunidades de régimen común*). It excludes the two regional governments with 'special status' (*comunidades de régimen foral)*, the Basque Country and Navarre, which have almost full fiscal autonomy. The latter are entitled to their own system of general taxation (excluding social security contributions and tariffs), provided the effective tax burden is not lower than elsewhere in Spain; in turn, the two regions contribute to central government for common services such as defence and foreign affairs.

([2]) These transfers were made through the social security system, which operated as a mere intermediary.

of other services was ensured by two transfer mechanisms:

- *Share of personal income tax and indirect taxes and fees*: regional governments were directly imputed an income tax share equivalent to 15 % of the 1997 total (first year covered by the agreement) with the right to modify the tax rates and deductions thereafter. Additionally, regional governments were entitled to receive 15 % of personal income tax collected by the State. Indirect taxes and fees transferred to regional governments included wealth tax, inheritance and gift tax, stamp and registration duties and fees on lotteries, gambling and betting.
- *Share of State revenues*: for 1997, a share of State revenues covered the remaining gap between the estimated costs of transferred services and partially-transferred revenues from personal income tax and indirect taxes and fees.

To ensure that regional governments had sufficient financial resources, the total resources received by each region in 1997 had to match those available under the 1992–96 system; in subsequent years, these resources increased at least in line with nominal GDP. Given these 'guarantees', the extent of joint fiscal responsibility of regions within the common financial regime was rather limited.

Table VI.12

Spain: financial system for regional governments

Previous agreement 1997–2001		New system	
Expenditure	**Financing**	**Financing**	**Expenditure**
Common services (other than healthcare and social services)	Indirect taxes (excluding VAT) and fees, and 15 % of personal income tax, directly imputed to regional budgets 15 % of personal income tax transferred by the State Shares in the State revenues. In the initial year, this part was calculated to ensure for each regional government a balance between revenues and expenditure	Indirect taxes and fees transferred hitherto 33 % of personal income tax 35 % of VAT 40 % of excise duties on hydrocarbons, tobacco, beer and alcohol 100 % of excise duties on electricity and car registration Compensatory transfers from the sufficiency fund (*Fondo de suficiencia*)	Financing of all services
Healthcare and social services	Transfer via the social security sub-sector of all healthcare and social services costs to those regional governments with delegated powers		

Source: Commission services

The differences between the new and preceding systems are summarised in the table above. The main features of the new agreement are:

1. Global expenditure for all territorial governments is disaggregated into three blocks (common services, healthcare and social services) and distributed among regions according to indicators of relative needs ([1]).
2. Regional governments receive a significantly larger percentage of total tax revenue (see table above). Indirect tax revenues are distributed among regions according to a territorial consumption index.
3. By type of taxes, rates of personal income tax can be modified ([2]) provided the structure retains progressivity and the number of tax brackets remains that set by the State; a part of the deduction for investment in dwellings can be modified. Taxes on wealth and inheritances and gifts tax, registration duties and fees on lotteries and gambling are totally assigned to

([1]) These are calculated using the following indices (weight of each index in brackets):
— Common services: population (94 %), land (4.2 %), population dispersion (1.2 %) and insularity (0.6 %). A further correction is made based on a relative income index.
— Healthcare: protected population (75 %), population over 65 (24.5 %) and insularity (0.5 %).
— Social assistance: population over 65.

([2]) The 33 % share in the table refers only to the base year. This percentage could evolve if regional governments change tax rates or the deduction for investment in dwellings or if regional governments create new deductions and rebates.

territorial governments with almost complete jurisdictional powers. The tax on electricity consumption and the car-registration tax can be partially modified. Shares of VAT, excise duties and other consumption taxes are assigned to territorial governments but without jurisdictional powers.

4. As under the previous agreement, for the base year (in this case, 1999) each region receives sufficient resources to cover estimated expenditure. If the estimated expenditure exceeds potential revenues, the regional government receives a compensatory transfer from the State (from the so-called sufficiency fund, *Fondo de suficiencia*). The fund is to be increased annually in line with the State's retained tax revenues (revenues excluding those transferred to regions).

5. Guarantees have been established to avoid sharp disparities between regions' resources and to ensure minimum social expenditure coverage. Thus, the growth rate of revenues corresponding to common services cannot exceed in any region the average growth rate for all regions by more than 75 %. By contrast, this growth rate cannot fall below the average recorded for regions with income per head below 70 % of the national average. Additionally, expenditure on healthcare and social assistance has to at least equal estimated expenditure in the base year, increased in line with the State's retained tax revenues. The State guarantees that between 2002 and 2005 resources assigned to these expenditures increase by at least the rate of nominal GDP.

Although this new system should be neutral for general government finances, its implementation had significant implications for the 2002 budget law. The 2002 budget figures are not strictly comparable with those of the previous year and from an accounting point of view, the new system implies important changes. Transfers from the State to the regions to finance healthcare and social assistance, which previously transited through the social security budget, are no longer recorded either in the State or social security budgets ([1]). Thus, current transfers (revenues and expenditure) are reduced accordingly in the 2002 budget. Likewise, since 'common status' regions responsible for healthcare are entitled to receive revenues from VAT and excise duties, the corresponding percentage of estimated revenues is reduced in State receipts. In addition, the previous current transfers from the State to regional authorities, such as the 15 % of personal income tax collected by the State and the regions' shares in the State revenues, are replaced by the new sufficiency fund.

The new system is stable and is of unlimited duration compared to the previous arrangements which was subject to revision every five years. It is more homogeneous for all regions belonging to the common regime. On the expenditure side, the new system encompasses all expenditure whereas previously, healthcare expenditure was financed separately. For revenues fiscal joint responsibility is now wider, especially due to the jurisdictional powers transferred to regional governments. As a result, the resources available to territorial authorities will depend less on 'guaranteed' transfers from the State and more on tax revenues. Such tax revenues will in turn depend more on indirect taxes than on direct taxes and thus their variability will be reduced, since the tax base is less volatile ([2]). At the same time, solidarity is ensured through the sufficiency fund and the guarantees established to avoid sharp disparities between different regions' financial resources.

Council opinion on the updated stability programme of Spain, 2001–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([3]), and in particular Article 5(3),

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

([1]) The social security budget returned the transfers earmarked for the Basque Country and Navarre to the State, given these territories' special financial relations. These flows are no longer recorded in either the social security or State budgets.

([2]) In general, resources linked to consumption expenditure should be more stable than those stemming from income.

([3]) OJ L 209, 2.8.1997.

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined Spain's updated stability programme covering the 2001–05 period. The information provided in the updated programme is broadly in line with the revised code of conduct on the content and format of stability and convergence programmes ([1]). Nevertheless more complete information regarding long-term projections would have been desirable.

The Council notes with satisfaction that implementation of the previous update has been broadly on track despite weaker growth. After a deficit of 0.3 % of GDP in 2000, the target of a general government balanced budget in 2001 is expected to have been reached and the debt ratio objective overachieved. The achievement of the fiscal targets for 2001 was helped by stronger than planned containment of expenditure and higher-than-expected nominal GDP. Taking into account the worsening in the international environment, the update centrally projects GDP growth slowing to 2.4 % in 2002 but to resume at a 3 % rate, close to potential, from 2003. Although somewhat optimistic in the short term, the medium-term outlook is plausible, given recent performance and the ongoing catching-up process. The inflation projection also seems attainable, helped by the recent agreement among social partners aimed at wage moderation, though it would be advisable to end indexation in wage bargaining in line with last year's Council opinion.

Budgetary consolidation for the period 2002–05 is based on primary current expenditure restraint and lower interest charges while government investment is set to increase and the tax burden to moderate slightly. Despite the current economic slowdown, the update extends a balanced budget target to 2002 (and 2003) and targets small surpluses in 2004 and 2005, of 0.1 % and 0.2 % of GDP respectively. The debt ratio is set to continue declining, reaching 50 % of GDP by 2005.

The medium-term budgetary projections overall appear prudent, with cautious estimates of revenue growth and reductions in interest charges, giving some room of manoeuvre in case less positive developments materialise; intentions on implementing the necessary control of primary current expenditure are not, however, detailed.

The targets in the programme, including their evaluation in cyclically-adjusted terms, respect the "close-to-balance or surplus" objective of the Stability and Growth Pact throughout the period. The Council therefore considers that the updated stability programme is in conformity with the provisions of the Stability and Growth Pact, with the targets indicating respect of the objective with an increasingly comfortable margin. The fiscal stance, defined as the change in the cyclically-adjusted balances, implies a mild tightening, broadly in line with the recommendations in the 2001 broad economic policy guidelines.

The Council welcomes important developments in Spain's institutional budgetary setting, notably the recently approved general law of budgetary stability and the 2002 budget reforms which have transferred important tax and spending powers to regional authorities. Although the Council does not advocate any specific form regarding the necessary internal coordination between central and territorial governments, the involvement of all government subsectors in maintaining budgetary discipline is welcome, and it is important that the existing coordination should also operate efficiently under the new arrangements.

Structural reforms implemented in 2001 essentially stem from the package approved in June 2000 aiming at further deregulating markets and strengthening the competition authority.

The Council notes that the updated programme does not give more detailed information on measures to be taken to strengthen the long-term sustainability of the public finances. This is of particular concern given Spain's exposed demographic profile and the adverse budgetary consequences of ageing. The risk of serious imbalances in the long term cannot be excluded unless appropriate measures are implemented. The budgetary impact of ageing is not adequately reflected in the update's projections of pension expenditure and social security contributions which extend only to 2015. The announced intention to reform the pension system lacks a detailed calendar. The Council considers that the pension system measures adopted in April 2001 did not represent the significant positive reforms advocated in its opinion on the previous update. The main measure recently adopted to deal with ageing is the social security fund created in 2000, assets of which are planned to reach at least 1 % of GDP by 2004.

([1]) 'Revised opinion of the Economic and Financial Committee on the content and format of stability and converge programmes' endorsed by the Ecofin Council on 10 July 2001.

Finally, the Council welcomes the important role to be played by other structural policies, particularly in the market for goods and services, in ensuring non-inflationary employment-oriented growth. These measures are consistent with the broad economic policy guidelines. Those implemented so far should be closely monitored and if necessary strengthened.'

Box VI.5. **2002 BEPG's recommendations to Spain on budgetary policy** ([1]):

'[…] considering that Spain is a member of the euro area, budgetary policy in Spain should aim to:

i. ensure restraint of primary current expenditure as planned, so as to maintain the balanced budget position in accordance with the updated stability programme;
ii ensure that the reform of personal income tax to be legislated in 2002 enhances incentives to work and save, and does not put at risk medium-term stability objectives; and
iii. review the public pension system in a comprehensive way so as to promote its long-term viability. Give priority to the introduction of incentive to raise the effective retirement age and the use of the surpluses registered in the social security sub-sector to further increase the pension reserve fund.'

([1]) Adopted by the Council on 21 June 2002.

6. France

Recent developments

The process of budgetary consolidation came to a halt in 2001, when the general government deficit increased to 1.5 % of GDP (1.4 % including UMTS revenues), from 1.3 % in 2000. The initial target fixed in the finance law was a deficit of 1 %, based on a real GDP growth assumption of 3.3 %. The non-achievement of the deficit target fixed in the 2001 finance law can be partly attributed to cyclical conditions which affected tax revenues, and partly to a higher-than-planned increase in nominal expenditures. The general government-debt ratio was reduced to 57.2 % of GDP, down for the third consecutive year from a peak of 59.5 % in 1998.

According to preliminary results, general government expenditures in real terms increased by 1.9 % in real terms (excluding UMTS revenues), i.e. a slightly higher rate than 1.8 % planned in the finance law for 2001. Due to a higher-than-expected inflation rate, expenditures increased more rapidly than planned in nominal terms. As in recent years, the most dynamic components of expenditures were the social security sector, in particular healthcare expenditures, and expenditures of local authorities. Tax cuts and social contributions rebates worth 1.0 percentage point of GDP were implemented in 2001. Consequently, the tax burden continued decreasing to 44.9 % of GDP, down from 45.1 % in 2000.

The increase in the general government deficit projected by the Commission in 2002 is mainly due to slow real GDP growth and to the increase in expenditures, set to grow by 2.2 % in real terms in the budget law for 2002 ([1]); also tax cuts and social contribution rebates worth roughly 0.5 % of GDP will be implemented.

([1]) A small part of this increase is attributable to a bringing forward of the implementation of the Berlin agreements on the EU budget. The increase in the fourth resource contribution (in national accounting, this is an expenditure) will be concentrated in 2002. This modification is however neutral on the deficit, a symmetric increase in VAT revenues compensating for the increase in expenditures.

The projections are subject to a number of downside risks. In particular, the elasticity of receipts to tax bases was unexpectedly high in the recent past, and thus revenues could be affected by the slowdown in economic activity more than currently planned. On the expenditure side, the main risks stem from the impact of the reduction of working time on public payrolls and from an eventual further slippage in healthcare expenditures.

For 2003, despite an acceleration in real GDP growth and a relatively moderate projected increase in real expenditures, the Commission forecasts a marginal reduction in the general government deficit. This is due to the implementation of the last step of the multi-annual plan of tax cuts decided in 2000 and by a return towards more sustainable levels for non-fiscal revenues.

The projections by the French authorities for 2002 and 2003 are very much in line with those of the Commission. The general government deficit is indeed projected to reach 1.8–1.9 % of GDP in 2002 and to decrease to 1.7–1.8 % in 2003. For the medium term, the French authorities reaffirmed the target of a balanced underlying budgetary position by 2004 or 2005 as set in the 2001 updated stability programme. It seems, however, that in order to achieve this objective, a stronger deficit reduction in 2003 than currently planned would be necessary. Given that tax cuts are already planned for next year, this result could be achieved through an increased restraint in real general government expenditure.

A budgetary strategy based on norms for the increase in real general government expenditures

Since 1998, when the original stability programme was presented, the French authorities have implemented a budgetary strategy based on the definition of multi-annual norms for the evolution of general gov-

Table VI.13

Composition and balances of general government, France (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		– 1.6	– 1.3	– 1.4	– 1.9	– 1.8
— Total revenue		51.8	51.5	51.2	51.0	50.5
Of which:	— current taxes	28.2	27.8	27.7	27.6	27,3
	— social contributions	18.3	18.3	18.1	17.9	17.7
— Total expenditure (2)		53.4	52.9	52.6	52.9	52.3
Of which:	— collective consumption	9.4	9.3	9.1	9.1	9.0
	— social transfers (3)	32.2	32.2	32.2	32.6	32.1
	— interest expenditure	3.3	3.3	3.2	3.1	3.1
	— gross fixed capital formation	2.9	3.0	3.0	3.0	3.0
Primary balance (2)		1.7	1.9	1.8	1.2	1.3
Pm Tax burden		45.5	45.1	44.9	44.6	44.2
Government debt		58.5	57.4	57.2	57.4	57.2
Pm Cyclically-adjusted balance		– 1.6	– 1.7	– 1.7	– 1.9	– 1.9
Pm Cyclically-adjusted primary balance		1.7	1.6	1.5	1.3	1.2

(1) Commission 2002 spring forecast.
(2) Data for 2001 and 2002 (except cyclically-adjusted) include UMTS receipts of 0.1 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

Table VI.14

Key figures of the French stability programme (1) **(2001–05)**

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.1	2.3	2.5	2.5/3.0	2.5/3.0	2.5/3.0
Gen. gov. budget balance (% of GDP)	– 1.4	– 1.4	– 1.4	1.3	– 0.5/0.0	0.0/0.3
Primary surplus (% of GDP)	6.1	6.6	6.4	6.2	6.0	n.a.
Government debt (% of GDP)	57.6	57.1	56.3	55.7/55.3	54.5/53.6	52.9/51.8

(1) UMTS receipts excluded (0.1 % of GDP in 2001 and 2002). Before the examination of the 2001 updated stability programme by the Council, the French authorities revised these projections. In the new projections, real GDP growth in 2001 and 2002 is respectively at 2.0 % and 1.5 %. The deficit reaches 1.8–1.9 % of GDP in 2002, before declining by 0.1 GDP points in 2003. The objective of a balanced budget by 2004/05 is maintained.

Source: 2001 update of the stability programme of France.

ernment expenditures in real terms (1). Expenditures are supposed to increase slower-than-potential GDP, creating budgetary margins that are allocated to the reduction in general government deficit and tax relief.

The target is set for aggregate general government expenditures in real terms, without any constraint on the composition by category of expenditures. In particular, the norms are not split between current and capital expenditures: moreover, cyclically-sensitive items such as unemployment benefits are not excluded from the aggregate. However, a decomposition of the objective by sub-sector is provided (central government, local authorities and social security, divided by branches).

The multi-annual norms set in the stability programme and its updates, although presented to Parliament, are not legally binding: in every update of the stability programme, a new norm is fixed for a three-year period. The

(1) Each year, when elaborating the finance law, the growth rate of expenditures in real terms is converted in a nominal value using the official inflation forecast. The price index used to deflate nominal expenditures is the national index of consumer prices excluding energy.

periods overlap and growth rates set for the same year can differ among successive programmes. No special rule has been introduced to insure the respect of the norm nor to compensate for overspending across years.

The French authorities stress the appropriateness of a multi-year plan for public spending in achieving two objectives: (i) stabilisation, through the use of automatic stabilisers on the revenue side, and (ii) increase in efficiency, both considering a longer time horizon and diminishing unexpected variation in public intervention. The strategy is supported by economic literature which stresses the advantages of fixing expectations and enhancing the transparency of the budgetary framework.

The choice of setting spending limits has positive aspects. Expenditure rules do not encompass a pro-cyclical bias in the conduct of budgetary policy, as automatic stabilisers are allowed to work fully on the revenue side; they help containing pressures on the expenditure side during upturns, when strong fiscal revenues can stimulate claims for higher expenditures. A second positive aspect is that expenditure norms represent commitments by the government on that part of public finances which are under its direct control. Indeed, cyclically-sensitive expenditures, such as unemployment benefits, constitute in general a small part of total expenditures, and the impact of exogenous trends (in particular demographic trends) on public expenditures are generally foreseeable.

However, the stability and growth pact focuses on general government deficit and not on its components. In this respect, following expenditure rules is not without risk. In particular, they can be inefficient in reducing the deficit if large tax cuts are decided upon. Moreover, the choice of the aggregate influences the efficiency of the strategy. Targeting government expenditures at large can induce a distortion towards the reduction of less politically-sensitive spending categories, for example capital spending. Targeting nominal expenditures can prove more helpful in stabilising the economy, in case demand-pull inflation would emerge.

Three years after the implementation of this strategy, a preliminary assessment of its functioning can be done. A first point to note is that the objective for the multi-annual increase in real expenditures has been adjusted over time. The norm set by the French authorities in the 1998 stability programme targeted an increase in real expenditures by 3.5 % for the period 2000–02. This norm was then increased to 4 % in 1999 for the period 2001–03 and to 4.5 % in 2000 for the period 2002–04. It was reduced to 4 % in the 2001 update concerning the period 2003–05.

Table VI.15

Increase in real expenditures projected by stability programmes and finance laws

	2000	2001	2002	2003	2004	2005
1998 stability programme	Cumulated 3.0 % (1)					
1999 updated programme		Cumulated 4.0 %				
2000 updated programme			Cumulated 4.5 %			
2001 updated programme				Cumulated 4.0 %		
Growth in real expenditures	1.7 (2)	1.9 (2)	2.2 (3)	—	—	—

(1) This figure is in ESA 79 accounting system. It corresponds to roughly 3.5 % in ESA 95.
(2) Budget laws projected 1.0 % and 1.8 % real expenditures growth (excluding UMTS revenues) for 2000 and 2001 respectively.
(3) Plans of the budget for 2002 (a small part of this increase is due to accounting reasons).

Source: Commission services

Despite these adjustments, expenditures increased less than GDP between 1999 and 2002, both in nominal and real terms. Assuming that budgetary plans for 2002 are respected, the annual growth rate of real expenditures should average 1.7 % over the period 2000–02. This rate is below the average real GDP growth rate of 2.3 % observed during the same period and the potential growth of the French economy, usually estimated in a range 2.25– 2.5 %. Moreover, the reduction in the expenditure to GDP ratio was not accompanied by a significant distortion between current and capital public expenditures.

Another positive element is that this strategy has made the government more accountable to the general public. Indeed, commitments by the government on public spending are discussed by the public at large and their implementation is closely monitored. The specification of objectives by sub-sector facilitates the control. However, the presentation of norms in real terms and the overlap of successive multi-annual norms makes the monitoring by the public more difficult.

Despite these positive indications, some elements are a source of concern. In particular, the initial norm fixed in the 1998 stability programme for the period 2000–02 will not be respected (see table below). Respect of this norm would have meant that the target reduction in deficit for the period 2000–02 was broadly met, i.e. an additional 0.7 percentage points of GDP over the period, even accommodating for the tax cuts implemented during the period.

This underlines the limits of the non-binding character of the medium-term framework and highlights the need for a mechanism that compensates excessive spending across years. Indeed, most of the deviations from the multi-annual norms between 2000 and 2002 reflect the fact that yearly targets fixed in successive budget bills were not fully consistent with the corresponding multi-annual norm. *Ex post* overruns in the spending limits concerned the healthcare sector and the increase in public payrolls, despite the efforts made by the authorities. Finally, the behaviour of real expenditures seems to be asymmetric with respect to unexpected changes in inflation rates: when actual inflation turned out to be lower than expected, norms were overshot; yet, the reverse happened only very partially when actual inflation was higher than expected.

In conclusion, the budgetary strategy has had some positive results, even if the respect of spending limits was not fully ensured so far. In a period when the deficit remains far from balance, and when the reduction in the tax burden still constitutes one of the major objectives of economic policy, a strict control of expenditures is of primary importance.

Council opinion on the updated stability programme of France, 2003–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined the updated stability programme of France which covers the period 2002–05.

The 2001 update of the stability programme projects real GDP growth at 2.3 % in 2001 and 2.5 % in 2002. From 2003 to 2005, the projections are based on two macroeconomic scenarios: a "cautious" scenario in which GDP growth averages 2.5 %, considered to be the current level of potential growth, and a "favourable" scenario where real GDP growth accelerates to 3 %. The general government deficit is estimated to remain unchanged in 2001 and in 2002 at 1.4 % of GDP, the level reached in 2000. From 2003 to 2005, according to the cautious scenario, the government deficit should decline to 1.3 % of GDP in 2003 and 0.5 % of GDP in 2004; the government balance is expected to be attained in 2005. The budgetary adjustment would be faster should the favourable scenario materialise, a government balance being expected in 2004, turning into a 0.3 % of GDP surplus in 2005. The general government debt estimated at 57.1 % of GDP in 2001 is projected to be lowered in 2005 to 52.9 % of GDP in the cautious scenario and to 51.8 % of GDP in the favourable scenario.

The Council considers that the macroeconomic projections encompass downside risks in the short term: in more recent forecasts, real GDP growth is expected not to exceed 2 % in 2001 and 1.5 % in 2002; consequently, the Council notes that the government deficit in 2002, the starting year of the projections is likely to be less favourable than initially expected. Regarding following years, the Council considers the "cautious" scenario, in

([1]) OJ L 209, 2.8.1997.

which real GDP growth averages 2.5 % from 2003 to 2005, as the more plausible one.

The Council notes that, in the cautious scenario, the general government deficit is projected to be reduced significantly only from 2004; the reduction projected for 2003 is marginal and the deficit for that year will stay rather at the same level as in 2000. The deficit remains roughly unchanged in 2000–03 also in cyclically-adjusted terms. In spite of a higher-than-expected deficit in the first few years, a balanced position is still reached in 2005. Nevertheless, this is one year later than recommended in the opinion of last year. The Council therefore urges the French authorities to use every opportunity to reach a balanced position in 2004.

The budgetary objectives included in the 2001 update of the stability programme respect the requirement of close to balance or in surplus of the Stability and Growth Pact in 2004 and 2005, although only in the latter year a balance in cyclically-adjusted terms is expected. However, the underlying budgetary position provides a safety margin to avoid breaching the 3 % of GDP threshold as from 2001 despite the downside risks in the macroeconomic projections.

The French budgetary strategy is based on predetermined multi-annual spending norms, in real terms; the Council commends such a strategy, considering that a clear binding norm for expenditure secures a transparent budgetary adjustment. However, the Council notes that, with macroeconomic developments in line with official expectations, respect of the spending norm as it was set in the 1998 stability programme for the period 2000–02 would have broadly ensured the projected reduction in the general government deficit for the same period, despite the implementation of the tax reform. In particular, the Council notes that, in 2002, expenditures are planned to increase slightly faster than recommended in the 2001 broad economic policy guidelines. The Council welcomes, however, that the multi-annual spending norm for the period 2003–05 has now been reduced to 4 %. The Council encourages the French authorities to fully respect this norm.

The Council welcomes the intention to make any reduction in the tax burden after 2003 conditional on real GDP growth and on the attainment of a close-to-balance or in surplus budgetary position.

The target of moving towards a budgetary balanced position is a necessary step to placing public finances on a more sustainable footing in view of the budgetary burden arising from ageing population in France. The Council notes that the strategy outlined in the 2001 updated programme to prepare for this challenge needs more ambition. The Council considers it necessary that France makes as soon as possible further progress in the reform of the pension system.'

Box VI.6. **2002 BEPG's recommendations to France on budgetary policy** ([1])**:**

'[…] considering that France is a member of the euro area, budgetary policy should aim to:

i. ensure that the 3 % of GDP reference value for the general government deficit will not be breached in 2002; to this end, the government shall closely monitor budgetary developments and ensure that any future tax cuts are deficit-neutral;

ii. aim at a sufficient decline of the 2003 deficit to ensure that a close to balance position in 2004 can be achieved; and

iii. conduct without delay a comprehensive policy of structural reforms designed for enhancing the growth potential and reducing in the medium term the general level of public expenditure; in particular, define without delay a comprehensive reform of the pension system, allowing to secure its sustainability in the context of ageing populations.'

([1]) Adopted by the Council on 21 June 2002.

7. Ireland

Recent developments

After a record budget surplus in 2000 of 4.5 % of GDP, the outturn for 2001 fell to 1.7 % of GDP, some 2.5 percentage points lower than the original target of 4.3 % of GDP ([1]). A major tax undershoot is the main reason for this outcome, although some expenditure overruns were also recorded ([2]). Contrary to the experience of previous years, tax revenue growth was far less buoyant than budgeted — tax receipts were 8.3 % lower than envisaged at budget time. In addition to the economic downturn (growth was probably some two percentage points below the 8.8 % anticipated in the 2001 budget), special factors may partly account for the weakness in indirect taxes ([3]). There seems to be no clear explanation for the large undershoot of direct taxes. Overall, it cannot be ruled out that the cost of the tax concessions in the budget for 2001 was underestimated. Given the achievement of a surplus and high nominal growth, the debt ratio fell by some 2.5 percentage points to some 36 % of GDP at end-2001, the second-lowest level in the EU.

The cyclically-adjusted balance is estimated to have deteriorated considerably in 2001 — by some 2.5 percentage points of GDP. Although calculations of the output gap are subject to a particularly large margin of error in Ireland, this points to a significant discretionary easing of fiscal policy in 2001.

In February 2001, the Council found that the 2001 budget was expansionary and pro-cyclical and therefore inconsistent with the broad economic policy guidelines agreed in 2000, which had urged a stability-oriented budget. The Council issued a recommendation to end this inconsistency, asking for countervailing budgetary measures during 2001. In November 2001, reviewing economic and budgetary developments in Ireland, the Council concluded that the implementation of the budget had reflected some of the concerns underlying the recommendation but that, above all, unexpected economic developments were such that the inconsistency underlying the recommendation had lost part of its force. The Council stressed the need for continued vigilance on the fiscal stance given the experience of overheating.

For 2002, the Irish authorities project the general government surplus to decline to 0.6 % of GDP ([4]). The budget for 2002 implements further direct tax relief for households and companies, the revenue implications of which are more than offset by various increases in indirect tax rates and a gradual advancement of the date of payment of corporation tax. Significant increases in current and capital spending are planned, albeit on a smaller scale than in 2001.

The budgetary outcome for 2002 is subject to a number of risks. On the one hand, the buoyancy of (indirect) tax receipts may have been underestimated in the budget. On the other hand, the uncertain outcome of the benchmarking process ([5]) and the possibility of general expenditure overruns might result in

([1]) The headline numbers for 2000 and 2001 incorporate one-off receipts flowing from an inquiry into the non-retention of deposit interest retention tax on bogus non-resident accounts over the period 1986–2001, but for both years these are of similar magnitude (some 0.2 % of GDP).

([2]) For the 2001 budget, the government decided not to adhere to its self-imposed norm of a ceiling of 4 % nominal growth in net current expenditure (to be reached on average over the government's lifetime 1997–2002). The annual increase in this spending aggregate was 16.4 % in 2001, after 4.3 % on average over the period 1997–2000.

([3]) Such as the impact on cross-border trade of extensive restrictions on movement to contain foot-and-mouth disease and the sharp fall-off in revenue-intensive car sales after a record turnover in 2000.

([4]) Planned outcome taken from the March 2002 reporting of government deficits and debt levels in accordance with Council Regulation (EC) No 3605/93, as amended by Council Regulation (EC) No 475/2000. This includes the discounted projected proceeds from the allocation of UMTS licences (0.2 % of GDP) and a transfer from the central bank corresponding to the profit arising from non-exchange of Irish pound notes into euro notes (another 0.2 % of GDP). The eventual treatment of the latter transaction under ESA 95 rules is unclear at the time of writing.

([5]) The benchmarking body will make recommendations in June 2002 on appropriate rates of pay in the public sector having regard to private-sector norms and conditions. A quarter of any increase will be paid retrospectively from December 2001.

Table VI.16

Composition and balances of general government, Ireland (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		2.3	4.5	1.7	0.6	0.2
— Total revenue		37.2	37.1	36.0	36.0	35.4
Of which:	— current taxes	26.9	26.6	25.0	25.4	25,1
	— social contributions	5.7	5.7	5.7	5.7	5.7
— Total expenditure (2)		34.8	32.6	34.3	35.4	35.2
Of which:	— collective consumption	4.9	4.7	5.0	5.3	5.3
	— social transfers (3)	18.0	16.9	18.0	19.2	19.2
	— interest expenditure	2.4	2.1	1.5	1.6	1.5
	— gross fixed capital formation	3.1	3.6	4.1	4.3	4.3
Primary balance (2)		4.7	6.6	3.2	2.2	1.7
Pm Tax burden		32.2	32.0	30.3	30.6	30.2
Government debt		49.6	39.0	36.3	33.6	31.4
Pm Cyclically-adjusted balance		1.3	2.4	– 0.1	– 0.3	– 0.3
Pm Cyclically-adjusted primary balance		3.6	4.5	1.4	1.3	1.2

(1) Commission 2002 spring forecast.
(2) Data for 2002 (except cyclically-adjusted) include projected UMTS receipts of 0.2 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

a worse-than-expected outturn. Excluding the Central Bank transfer relating to note issuance (0.2 % of GDP), the Commission services' spring 2002 economic forecast also projects a small surplus for 2002, corresponding to a broadly neutral fiscal stance. On a no-policy-change basis, the balance is expected to remain in surplus in 2003.

According to the updated stability programme 2002–04, small general government deficits are projected for 2003 and 2004 after six years of uninterrupted surpluses. The desire to improve public services and to address infrastructural needs has given rise to growth rates of discretionary spending well into double-digits (1). Developing a norm-based framework to guide public expenditure in the medium term would be helpful to ensure sustainable spending growth. A review of the practice of undertaking multi-year tax and spending commitments in social partnership agreements also seems warranted given the evolution to much more limited budgetary resources and conditions approaching full employment.

(1) The growth rate of 'voted' (day-to-day) spending was 11.9 % in 2000 and 22.9 % in 2001. According to the *2002 revised estimates for public services* published end-February, voted expenditure is planned to rise by 14.4 % in 2002.

Table VI.17

Key figures of the Irish stability programme (2001–04)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	11.5	6.8	3.9	5.8	5.3	n.a.
General government budget balance (% of GDP)	4.5	1.4	0.7 (1)	– 0.5 (2)	– 0.6 (2)	n.a.
Primary surplus (% of GDP)	6.6	3.0	2.3 (1)	1.3 (2)	1.1 (2)	n.a.
Government debt (% of GDP)	38.6	35.8	33.7	33.8	34.1	n.a.

(1) UMTS receipts excluded.
(2) Including contingency provisions against unforeseen developments of 0.8 % of GDP in 2003 and 1.1 % of GDP in 2004.

Source: December 2001 update of the stability programme of Ireland.

Reform of the pension system

A prominent theme in the debate on budgetary policy in recent years has been the need to prepare pension systems for the effects of ageing populations. The Irish pension system consists of two main pillars. The first is the social welfare system, which delivers a flat-rate public pension to some 90 % of those aged over 66 ([1]). The second consists of (i) PAYG public-service pension schemes for civil servants, (ii) funded occupational pension schemes for employees and (iii) personal pensions mainly contributed to by the self-employed. These second-pillar schemes are voluntary in that there is no obligation on the employer to establish a scheme or on individuals to make contributions.

In 1995, a study by the Economic and Social Research Institute ([2]) revealed that occupational and personal pensions coverage was below 50 % of the workforce and fairly static or declining. In response, the government and the Pensions Board launched the national pension policy initiative in October 1996 ([3]). The Pensions Board was charged with producing recommendations to develop the national pensions system. Its report, *Securing retirement income*, published in May 1998, made recommendations to strengthen the first pillar and to increase coverage under the second pillar to 70 % of the workforce aged over 30, which it considered necessary to ensure an adequate level of income in retirement. The following paragraphs give a short summary of the Pensions Board's main recommendations and the government's response to them.

Firstly, regarding the first pillar, the Pensions Board recommended increasing the level of the social welfare old-age pension to 34 % of average industrial earnings (in the preceding year) over a five- to 10-year period. Further, it advocated adjusting pensions in line with price inflation as a minimum, with indexation to earnings desirable in the medium term ([4]).

The government has so far refrained from explicitly endorsing either benchmarking or indexation, preferring instead to adjust social welfare rates in each budget as economic and budgetary circumstances permit. The social welfare pension stands at EUR 147 per week in 2002, which represents around 31 % of 2001 gross average weekly industrial earnings ([5]). Over the last decade, the pension increases in successive budgets have always been in excess of CPI inflation in the preceding year. Since 1998, they have also outpaced industrial earnings growth in the preceding year ([6]).

Secondly, while Ireland is better placed than most other EU countries on account of more favourable demographics, the Pensions Board recommended, in the interests of intergenerational smoothing of expenditure, to move away from complete reliance on PAYG financing and introduce part-funding of future first pillar liabilities.

In response, the government established the national pensions reserve fund in 2001. In addition to privatisation receipts in 1999–2000 amounting to EUR 4.6 billion, the fund has benefited from an annual Exchequer contribution equivalent to 1 % of GNP since 1999. At end-2001, the fund totalled EUR 7.7 billion or 6.7 % of GDP. Legislation on the fund requires that an annual 1 % of GNP contribution be made until at least 2055, while drawdowns from the fund are prohibited before 2025. The fund will help the Exchequer bear the future cost, not only of first pillar pensions (as recommended by the Pensions Board), but also that of public-service pensions (part of the second pillar). Long-term projections prepared for the EPC report on ageing ([7]) show that the cost of providing these two categories of pensions would rise from 4.6 % of GNP in 2000 to 6.7 % in 2020 and 9.0 % in 2050, owing mainly to the first pillar. According to actuarial projections, the new pensions fund is expected to meet around one third of these liabilities between 2025 and 2055.

The fund has a strictly commercial investment mandate. It is controlled and managed by an independent Commission. For the first 10 years of the fund's existence, the

([1]) There are two public-pension rates. The first is the contributory pension (a social insurance benefit), entitlement to which is conditional on having made sufficient pay-related contributions. The second, lower rate is the non-contributory pension (a social *assistance* benefit), which is conditional on passing a means test.

([2]) Economic and Social Research Institute (1995).

([3]) The Pensions Board is a statutory body set up in 1990 to regulate occupational pension schemes and advise the government on pensions issues in general. Its 15 members represent various government departments, the employers' organisation and trade unions as well as the pensions, life insurance and accountancy industries.

([4]) These issues (benchmarking and indexation) have been studied in greater detail for social welfare payments in general by the Social Welfare Benchmarking and Indexation Group (a tripartite advisory body set up under the current national agreement, the programme for prosperity and fairness). Completing its work in September 2001, the group failed to reach a consensus on whether to recommend setting explicit benchmarks or indexation mechanisms.

([5]) This is well above the EUR 127 per week the government had committed itself to at the start of its term in 1997. The pensions level mentioned here is the personal rate (no dependants) of contributory pension for those under 80.

([6]) 'Final report of the Social Welfare Benchmarking and Indexation Group', September 2001, Chapter 6.

([7]) Economic Policy Committee, *Budgetary challenges posed by ageing populations: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators of the long-term sustainability of public finances*, October 2001.

National Treasury Management Agency (NTMA), which is responsible for the management of the national debt, has been appointed as the manager of the fund to act as an agent for the Commission. The Commission has decided that 80 % of the fund will be invested in equities (40 % euro area and 40 % non-euro area) and 20 % in euro-area bonds. The fund has been split into 16 portfolios, which will be invested by 15 recently appointed investment managers and the NTMA. As it is not allowed to invest in Irish Government securities, the fund cannot be used to support government borrowing, thus contributing to a faster reduction in net than gross government debt.

Thirdly, the Pensions Board recommended introducing a new pension savings vehicle, the personal retirement savings account (PRSA), as the main instrument to arrive at improved second pillar coverage. A PRSA is a contract between an individual and a PRSA provider ([1]) in the form of an investment account.

In response, the government published new pensions legislation in 2001, introducing PRSAs broadly along the lines suggested by the Pensions Board and making the Pensions Board responsible for the regulation and supervision of the new PRSA regime. The pensions bill was enacted in April 2002 and enters into force on 1 June. The standard PRSA's main features are ([2]):

- *Easy and universal access*: In contrast to existing second-pillar instruments, PRSAs are available to all, irrespective of employment status. Thus seasonal, part-time and other atypical workers, as well as the unemployed and people outside the labour force can also contribute to a PRSA. Employers without occupational pensions schemes are obliged to offer their employees access to at least one PRSA. Accessibility also benefits from the relatively low entry level (the minimum annual contribution cannot exceed EUR 300).
- *Portability and flexibility*: PRSAs are freely transferable from job to job ([3]). Transfers from other pension vehicles to PRSAs, or from one PRSA to another, are also possible ([4]). Contributions to a PRSA may be suspended or reactivated without penalty. PRSA benefits may be taken at any time from the contributor's 60th birthday (or earlier in the event of death or permanent incapacity).
- *Low and transparent cost structure*: Charges must be expressed as a percentage of paid contributions and/or PRSA assets and are capped at 5 % of contributions or 1 % of assets.
- *Concessionary tax regime*: Tax relief is granted on contributions subject to earnings-related limits which rise with the contributor's age. For those between 30 and 50 years of age, the earnings ceilings for PRSAs are somewhat higher than for other second-pillar instruments (occupational pension schemes and personal pensions), favouring the new PRSA vehicle ([5]).

The new legislation does not make contributions by either employees or employers compulsory, in line with the suggestion of the Pensions Board. Should progress towards the 70 % coverage target be unsatisfactory (which may well be the case in the next few years given strong competition from the government-sponsored special savings incentive scheme ([6])), the Pensions Board recommended introducing an element of compulsion at a later stage.'

Council opinion on the 2000 update of Ireland's stability programme, 2002–04

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

([1]) The Pensions Board mentioned as possible PRSA providers: banks, building societies and credit unions; life insurers, the post office and fund management companies, but also non-financial enterprises with large distribution networks (such as large supermarket chains). However, the legislation now in place restricts PRSA provision to financial institutions.

([2]) A non-standard PRSA, which is a second type of PRSA, does not have charges capped.

([3]) In a similar vein, the legislation also reduces the vesting period for occupational pension schemes from five years to two.

([4]) In order to prevent large-scale switching from existing instruments, an amendment to the original draft legislation provides that employees with more than 15 years of service who are leaving occupational pension schemes cannot transfer their funds into PRSAs. Like personal pensions, PRSAs do not carry the obligation to buy an annuity at retirement, whereas occupational pension schemes do.

([5]) The tax treatment of contributions to occupational pension schemes and personal pensions was equalised under the Finance Act 2002, in line with another recommendation of the Pensions Board, namely to simplify the tax regime of pension contributions.

([6]) The special savings incentive scheme aims to encourage the saving habit. It started in May 2001 and closed at the end of April 2002. Subject to lower (EUR 13) and upper (EUR 254) monthly limits, the scheme provides, for a five-year period, a 25 % Exchequer top-up to the amounts saved. In case of withdrawal after five years, only the difference between the total value of the assets and the amounts invested (including the Exchequer contribution) is liable to tax, rather than the full amount, as is the case with earlier withdrawals.

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined the 2001 update of Ireland's stability programme, which covers the period 2002–04. The update broadly complies with the revised code of conduct on the content and format of stability and convergence programmes ([2]), although some data are not in line with EU standards. The Council notes that the macroeconomic scenario in the update envisages a deceleration from record real GDP growth of 11.5 % in 2000 to just under 7 % in 2001 followed by below 4 % in 2002 and a recovery to Ireland's medium-term sustainable growth rate of about 5 to 6 % thereafter.

The general government surplus for 2001 is expected to be close to 1.5 % of GDP, more than 2.5 percentage points lower than budgeted, and this is largely blamed on the economic downturn. The Council regrets that this under-performance has apparently resulted in a downward shift in the projected path for the general government balance in the new update from 2002 onwards. The Council notes that the budgetary path in the new update does not follow the previous approach of high surpluses and a further reduction of the debt ratio. The update targets a surplus of 0.7 % of GDP in 2002 (0.2 % of GDP excluding the transfer from the Central Bank, which seems unlikely to qualify as a credit item) and small deficits in 2003 and 2004 of 0.5 % and 0.6 % of GDP respectively. The debt ratio is expected to broadly stabilise at the very low level of 34 %. The Council notes with concern that the move to a small deficit in 2003–04 coincides with the recovery to the medium-term sustainable growth rate. However, the Council acknowledges that these deficits incorporate important conditional "technical provisions" for unspecified future budget measures and increasingly large contingency provisions "against unforeseen developments".

The Council observes that, according to the projections in the stability programme, the overall revenue ratio falls over the period (in spite of a broadly stable tax burden), while the expenditure ratio shows a steady increase (including contingency provisions). The Council notes that the recent rates of increase in current and capital spending, motivated by a desire to tackle infrastructural needs and public service deficiencies, cannot be sustained without appropriate action on the revenue side.

While the Council found that the budgetary projections in previous stability programmes fully respected the requirements of the Stability and Growth Pact, it notes with concern that the projections in the new update, including their evaluation in cyclically-adjusted terms, might not respect the close-to-balance requirement of the pact from 2003. In the event that the contingency provisions incorporated in the targets for 2003–04 are not used, the close-to-balance objective would be broadly respected throughout the programme period. The Council therefore urges the Irish authorities to ensure that compliance with the pact is continued throughout the programme period. The Council notes that there is a margin to avoid breaching the 3 % of GDP deficit threshold throughout the programme period.

The Council recalls that, on 6 November 2001, in its conclusions on economic and budgetary developments in Ireland in the wake of the recommendation of 12 February 2001 ([3]), it had stressed the need for continued vigilance on the fiscal stance, given the experience of overheating. In particular, it had advocated a broadly neutral budget for 2002. Based on the targets in the updated programme, the change in the cyclically-adjusted balance for 2002 points to a broadly neutral fiscal stance, in line with its November conclusions. The Council notes that the targeted outcome for the general government balance in 2002 is subject to a number of risks. The Council urges the Irish authorities to ensure that the budgetary stance for 2002 is broadly neutral.

The Council welcomes further progress in the important areas of tax reform and infrastructural investment to relieve supply constraints, as described in the update.

([1]) OJ L 209, 2.8.1997.
([2]) 'Revised opinion of the Economic and Financial Committee on the content and format of stability and converge programmes' endorsed by the Ecofin Council on 10 July 2001.
([3]) OJ L 69, 10.3.2001.

However, it regrets that the new update does not present any plans to introduce a medium-term framework to guide public spending or to improve expenditure control. The Council recommends that the Irish authorities address these issues urgently, as requested in the broad economic policy guidelines agreed for 2001.

The Council considers that Ireland is in a good position to meet the budgetary costs of ageing populations. However, the long-term sustainability of public finances should not be taken for granted as public spending on pensions and healthcare is expected to rise significantly in coming decades. The move towards a structural deficit in the programme, if confirmed, would imply a halt to the recent strong gains in the long-term sustainability of the public finances. The Council nevertheless notes with satisfaction the broad-based strategy to prepare for ageing populations, and in particular that 1 % of GNP continues to be set aside as the annual contribution to the National Pensions Reserve Fund.'

Box VI.7. **2002 BEPG's recommendations to Ireland on budgetary policy** ([1])**:**

'[…] considering that Ireland is a member of the euro area, budgetary policy should aim to:

i. ensure that the budgetary stance for 2002 is broadly neutral;

ii. ensure continued compliance with the close-to-balance requirement of the Stability and Growth Pact after 2002; and

iii. improve expenditure control through setting norms and ensure in the 2003 budget and beyond that expenditure priorities and resource generation are targeted at a sustainable budgetary and economic outcome.'

([1]) Adopted by the Council on 21 June 2002.

8. Italy

Recent developments

In 2001, the general government deficit was 1.4 % of GDP, down from 1.7 % of GDP in 2000 (0.5 % including receipts from the sale of UMTS licences). The initial official target for 2001 was a deficit of 0.8 % of GDP, based on real GDP growth of 2.9 %. The projection was subsequently revised and stood at 1.1 % of GDP in the November update of the stability programme, based on a real GDP growth assumption of 2 %.

The divergence between the budgetary outturn and the objective in part reflects a higher expenditure base on healthcare in 2000, which has led to a revision in that year's deficit by 0.2 % of GDP. It is also partly explained by the cyclical slowdown and by higher-than-expected government expenditure in 2001, principally healthcare expenditure and government investment expenditure.

The general government-debt ratio decreased to 109.4 % of GDP, well above the original target of 106.6 % of GDP and the updated stability programme's projection of 107.5 %. The achievement of the latter objective was *inter alia* also hampered by a marked slowdown in the privatisation process and a significant increase in settlements of past debts.

The 2001 outcome benefited from sales of public real assets of 0.4 % of GDP, largely through securitisation, and from the securitisation of future net proceeds from the State lottery, which was recorded as reducing the deficit by a further 0.2 % of GDP. The issue of how securitisation operations are recorded in the public accounts is currently being investigated by Eurostat together with the Member States, with a view to reaching a decision by July 2002. According to Commission calculations, the cyclically-adjusted primary balance did improve com-

Table VI.18

Composition and balances of general government, Italy ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		– 1.8	– 0.5	– 1.4	– 1.3	– 1.3
— Total revenue		47.1	46.3	46.2	46.1	45.4
Of which:	— current taxes	30.3	29.8	29.8	29.4	29.1
	— social contributions	12.7	12.7	12.7	12.7	12.6
— Total expenditure ([2])		48.9	46.9	47.7	47.3	46.7
Of which:	— collective consumption	7.1	6.9	6.9	6.7	6.5
	— social transfers ([3])	28.0	28.0	28.2	28.7	28.5
	— interest expenditure	6.8	6.5	6.4	5.8	5.7
	— gross fixed capital formation	2.4	2.4	2.2	2.0	2.0
Primary balance ([2])		5.0	5.9	4.9	4.5	4.4
Pm Tax burden		43.2	42.8	42.8	42.6	42.0
Government debt		114.5	110.6	109.4	107.8	105.6
Pm Cyclically-adjusted balance		– 1.5	– 1.9	– 1.5	– 1.0	– 1.4
Pm Cyclically-adjusted primary balance		5.3	4.6	4.9	4.8	4.3

([1]) Commission 2002 spring forecast.
([2]) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 1.2 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

pared to 2000, but the underlying budgetary position deteriorates slightly if the one-off operations are netted out in both years.

The update of the stability programme, covering the period 2001–05, targets a sizeable reduction in the deficit ratio to 0.5 % of GDP in 2002 and a balanced budget in 2003 leading to a small surplus in 2005, while the debt ratio is to fall below 100 % of GDP by 2004. The budgetary projections in the stability programme are based on legislation in force at the end of 2001, including the budget law for 2002 ([1]).

([1]) Amongst the measures adopted in 2001 are a tax incentive scheme for investment, provisions encouraging the surfacing of the underground economy, a tax amnesty for undeclared financial activities held abroad and an agreement on healthcare expenditure between the government and the regions. The Budget Law for 2002 increases expenditure for pensions and public-sector wages, raises family allowances and introduces expenditure-reducing provisions, in particular in the framework of the so-called domestic stability pact (see following section).

Table VI.19

Key figures of the Italian stability programme ([1]) (2001–05)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	2.9	2.0	2.3	3.0	3.0	3.1
General government budget balance (% of GDP)	– 1.5	– 1.1	– 0.5	0.0	0.0	0.2
Primary surplus (% of GDP)	4.8	4.9	5.2	5.5	5.2	5.3
Government debt (% of GDP)	110.5	107.5	104.3	101.0	98.0	95.4

([1]) UMTS receipts excluded (1.2 % of GDP in 2000).

Source: 2001 update of the stability programme of Italy.

The Commission's spring forecasts, covering the period to 2003, project considerably higher, though still diminishing, actual deficits in both years compared to the official targets. The debt ratio also remains distant from the targeted values, although it decreases over the forecast period. The difference between the Commission's forecasts and the targets in the stability programme are in part due to a markedly lower assumption for real GDP growth in 2002, in part to a more cautious evaluation of the fiscal policy measures.

The Commission forecasts do not differ from the official projections with respect to the programmed sales of public real assets, in the light of the government's firm commitment to achieve such sales. However, risks exist that the sales of real assets may not yield the full amounts projected in 2002 and especially 2003, as the bulk of the saleable public property has still to be identified and valued. More generally, the recourse to one-off operations (which could be justified in the event of a marked slowdown in the cycle) affects the fiscal adjustment path, particularly as no clarification is provided on any measures of a more permanent nature to replace them. The fiscal consolidation process and the achievement and maintenance of the medium-term balanced budget target in Italy are thus subject to a high degree of uncertainty.

Even if the sales of real assets proceed as planned, the Commission's forecast suggest actual budgetary outcome in 2003 would still be quite distant from the medium-term objective. According to Commission calculations, the cyclically-adjusted primary balance would remain largely stable in 2002, signalling a broadly neutral fiscal stance, and deteriorate distinctly in 2003. Beyond the effects of temporary measures, the fiscal challenge facing the Italian authorities, given the stated objective of reducing the tax burden, is that of securing additional and lasting reductions in the primary expenditure-to-GDP ratio, while improving the quality of expenditure. In this context, the government has sought power from Parliament to reform taxation and the social security system.

The experience of the domestic stability pact in Italy

In Italy sub-national governments (regions, provinces, municipalities) are responsible for the provision of an increasingly wide array of services ([2]) and carry out a

([2]) Regions are directly or indirectly responsible for most expenditure in the areas of healthcare, transportation, welfare, agriculture, tourism, environment, public housing and vocational training. Provinces are assigned more limited expenditure responsibilities (in environmental protection, education of provincial interest and road infrastructure), coordinating between the regions and the municipalities. Municipalities oversee local police, social welfare, public transportation, waste collection, urban planning, supply of energy, etc. The constitutional amendments of 2001 allow further devolution of functions previously advocated to the central state, for example in education.

substantive share of public expenditure (about a third of general government primary expenditure or around 14 % of GDP in 2001). In 2001, own revenues covered over 55 % of their expenditures. Although a recent constitutional amendment places strong emphasis on local administrations' own revenues and on revenue-sharing of national taxes generated in their territory, limits exist to the administrations' tax-levying capacity and they remain dependent on government transfers ([1]).

Since the late 1990s, Italy has striven to solve the problem of ensuring consistency between the country's obligations in the framework of the Stability and Growth Pact (SGP) and financial management at a decentralised level. At the end of 1998, a 'domestic stability pact' was adopted with a view to involving the regions, provinces and municipalities in the effort of meeting the general government net borrowing objectives stemming from Italy's SGP commitments ([2]). In fact, it has been argued that the word 'pact' is a misnomer, as the provision did not result from a concerted agreement between centre and periphery, but came into force through legislation adopted in connection with the budget law for 1999, later amended through subsequent budget laws. Although its name suggests a strong connection with the SGP requirements, the domestic stability pact's links with the SGP are *de facto* slim and indirect.

The provisions in the pact aim at improving the balances (deficits) of the local governments. Such an improvement is to be achieved by fixing targets for the reduction of their trend deficits. The Treasury is to monitor cash flows during the year ([3]) and report on a quarterly basis to the conference for relations between region and State and the conference for State-municipalities, which are expected to indicate measures to achieve the targets in case of divergence. Incentives for meeting the objectives consist in rebates on interest rates of loans granted by the *Cassa depositi e prestiti* (the public deposits and loans fund). No specific sanctions are applied in case of non-compliance, except in the case of EU sanctions following a breach on the part of Italy of the 3 % of GDP deficit threshold. In this case fines are to be levied on the local authorities which have failed to meet their targets, in proportion to the overshoot for which they are responsible.

In the original formulation of the domestic stability pact, the relevant deficit was defined in cash terms as the difference between revenues (net of transfers from the State ([4]) and of receipts from the sale of financial activities, but including revenue from sale of real estate) and current primary expenditure. The exclusion of State transfers from the definition of the relevant deficit, together with the existence of limits to the increase in the tax-levying power, implies that local governments are spurred to pursue efficiency gains and improve own tax collection. The required improvement in 1999 was of the order of 1 % of trend current primary expenditure in 1998. This was expected to bring about a reduction of 0.1 % of GDP in the trend deficit (in cash terms) of the local government sub-sector in 1999, and likewise in 2000, with the understanding that any overrun in 1999 would have to be compensated in 2000.

Subsequent reformulations of the domestic stability pact changed its features. Amendments made in 1999 redefined the budgetary ceilings, allowing for larger deficits. Continued healthcare overruns, resulting also from the practice of systematic underfunding of the healthcare system on the part of the central government, in a context in which the central government retained key decision-making powers, provoked criticism of the pact from the regions. Following an agreement between the government and the regions, in August 2000, healthcare outlays were excluded from the definition of the relevant deficit for the domestic stability pact and became the object of a separate agreement ([5]). Legislation adopted in November 2001 and the budget law for 2002 have further introduced expenditure ceilings for regions, provinces and municipalities, and provisions in case of non-compliance for provinces and municipalities

([1]) Legislation adopted in 2000 replaces most transfers from the central State with co-participation in government tax revenue, in particular VAT. The phase-in period of the new system spans 14 years.

([2]) The expressions 'sub-national governments', 'local governments', 'local authorities' are used here interchangeably to designate the subset of regions, provinces and municipalities (excluding the social security administration).

([3]) The monitoring is carried out by comparing the expenditure and borrowing requirement of the local authorities recorded in a given period with those recorded in the same period of the previous year. Following changes in the budget law for 2000, the monitoring exercise takes place on a quarterly basis for regions, autonomous provinces and municipalities with more than sixty thousand inhabitants. Monitoring requirements have been tightened with the budget law for 2002 and it is now conducted on a monthly basis.

([4]) Assimilated to transfers are also the (regional) business value added tax (IRAP) and the sharing of the personal income tax produced in the region or municipality.

([5]) The agreement was renegotiated in August 2001 and further supplemented by the introduction of the LEA (essential standards of healthcare provision). The August 2001 agreement establishes an increase in the ceiling on transfers from the government to the regions in 2001 and new ceilings for 2002–04, and confirms the principle that any deficits are to be covered by the regions, through own resources or by expenditure cuts, but it does not explicitly exclude the possibility of bailouts. In 2001, healthcare expenditure ended up around EUR 3 billion higher than established in the agreement of August 2001.

(cuts in transfers to local authorities overshooting the deficit and current expenditure limits).

The pact also requires the local governments to reduce the ratio of their accumulated debt to GDP, providing incentives for compliance in terms of the possibility to anticipate the reimbursement of loans obtained through the *Cassa depositi e prestiti*. In the absence of clear parameters, the provision was interpreted as a secondary objective, to be achieved primarily through the improvement of the balances.

While there is widespread agreement on the need to involve the sub-national governments in the effort of respecting the SGP and to improve their balances, the pact has been criticised on a number of grounds.

Firstly, the weak sanctions and incentives have reduced the pact's effectiveness. The application of sanctions in case of non-compliance was always only a theoretical possibility. Steps to address these limitations have been taken in the budget law for 2002, but their effectiveness is as yet untested. Second, probably to facilitate monitoring on the part of the Treasury, the deficit is expressed in cash terms. This creates difficulties in pursuing the stated objective of ensuring consistency between Italy's sub-national fiscal arrangements and European budgetary rules, since the SGP requirements are formulated in ESA 95, which is a largely accruals-based system. Another source of complication lies in the fact that budgetary rules for the local authorities are defined and *de facto* implemented in accrual terms, distinct from ESA 95 ([1]). Third, healthcare expenditure, which accounts for over two thirds of regional expenditure, has been removed from the scope of the pact and is subject to a separate agreement. The combination of different rules has not increased transparency.

More generally, monitoring budgetary developments of the sub-national governments is made difficult by the erratic availability of the data and by the heterogeneous quality of accounting practices. Rules to facilitate monitoring and sanctions for non-provision of required information have been introduced in the framework of the budget law for 2002 and of the August 2001 agreement on healthcare. Budget management and accountability of the sub-national administrations remains a crucial issue. Budgetary practices should be improved markedly, first and foremost by establishing uniform standards for transparent budgetary classification.

The domestic stability pact has been revised almost every year of its existence and has so far consistently failed to achieve its stated objective. Yet as the process of fiscal decentralisation evolves, not least following the revision of the Constitution in 2001, and Italy continues to observe its commitments under the SPG, the issue of fiscal responsibility of the local administrations will remain the lynchpin of public finances.

Council opinion on the updated stability programme of Italy, 2001–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([2]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined Italy's updated stability programme, which covers the period 2001–05.

The new update broadly complies with the requirements of the revised code of conduct on the content and format of stability and convergence programmes ([3]), although some minor inconsistencies exist in the aggregation of expenditures and revenues in ESA 95 terms.

The Council welcomes Italy's commitment to continue to secure high primary surpluses throughout the programme period, while allowing for some easing in the tax burden. It further notes with satisfaction the confirmation of the previous updated programme's objectives for the general government balance in 2002 and 2003. It welcomes in particular the balanced budget in the latter year. Notwithstanding lower-than-expected growth and

([1]) From 1980 to 1995, a cash budget existed alongside the accrual budget for the local authorities, but it was discontinued because it was not considered a reliable instrument for regulating expenditure of the sub-national governments.

([2]) OJ L 209, 2.8.1997.

([3]) 'Revised opinion of the Economic and Financial Committee on the content and format of stability and converge programmes' endorsed by the Ecofin Council on 10 July 2001.

in compliance with the 2001 BEPGs, the projected deficit for 2001 only slightly exceeds the original objectives. While acknowledging the market-related difficulties in meeting the privatisation objectives, the Council regrets, that the reduction of the debt ratio below 100 % of GDP is now postponed by one year in contrast with Italy's commitments since 1998.

The programme's macroeconomic scenario assumes an acceleration of real GDP growth already at the end of 2001, with a further strengthening in 2003 and beyond, when economic growth is expected to steady at around 3 %. This is supported by structural reforms. However, in the short term, the macroeconomic scenario is based on external assumptions which do not sufficiently reflect the deterioration in the global economic outlook observed during 2001. Hence, the Council observes that the risks to the macroeconomic scenario are mainly on the downside.

The budgetary targets in 2002 and 2003 rely heavily on one-off measures, in particular the sale of publicly-owned real assets, while few details are provided on the planned sizeable reduction in non-interest expenditure in percentage of GDP over the programme period. The Council remarks that the extensive recourse to one-off operations in a cyclical downturn should be complemented by measures aimed at restraining primary current expenditures, which need to be clarified.

The Council observes that the projected medium-term budgetary position of close to balance or in surplus from 2003 onwards is in line with the requirements of the Stability and Growth Pact. The Council notes that there is a margin to avoid breaching the 3 % of GDP deficit threshold throughout the programme period.

The Council considers it essential that the balanced fiscal position over the medium term is achieved as planned and that the required high levels of primary surpluses in the order of 5 % of GDP are secured by measures aimed at a lasting reduction of primary current expenditures. The careful design and timely implementation of such measures is all the more important in the light of the challenges arising from the planned reform of taxation, which should result in a further significant reduction of the tax burden. The Council urges Italy to adopt rules allowing for a more effective monitoring and control of current outlays at all levels. It further recommends that Italy stand ready to keep fiscal consolidation on course after 2003 in the event that the programme's high trend growth assumptions are not supported by actual developments.

The Council observes that Italy's capacity to absorb age-related imbalances depends crucially on maintaining high primary surplus over the long-term and large increases in labour force participation rates. Reforms of the pension system so far helped to contain the growth in pension expenditures. The Council encourages Italy to accelerate the implementation of the pension reform to control expenditure and to promote supplementary private pension provisions, as stated in the programme. Moreover it notes the key importance of labour-market reforms and of accelerating the reduction in the debt ratio, in view of the necessity to increase participation ratios and provide in advance for competing claims on public resources.'

Box VI.8. **2002 BEPG's recommendations to Italy on budgetary policy** ([1])**:**

'[…] considering that Italy is a member of the euro area, budgetary policy should aim to:

i. ensure in 2002 and 2003 the respect of a steady path of deficit reduction, in order to achieve the objective of a close to balance budget in 2003, by securing primary surpluses at the high levels projected in the updated stability programme, notably thanks to improved control of expenditures;

ii. ensure that the timing and the scope of the reform of taxation, outlined in the enabling act presented to Parliament and aimed at reducing the tax burden, simplifying taxation and narrowing the tax wedge, are consistent with the achievement and maintenance of a budgetary position close to balance or in surplus; and

iii. ensure that the changes to the social security system, for which the government has requested delegated powers from Parliament, address the critical aspects of the present pension system and implement the measures aimed at promoting supplementary privately-funded pension schemes, clarifying the possible related budgetary costs.'

([1]) Adopted by the Council on 21 June 2002.

9. Luxembourg

Recent developments

The general government accounts have been in surplus for many years in Luxembourg. The budgetary strategy, confirmed in the 2001 update of the stability programme, is based on three major principles enshrined in the current coalition agreement, namely that the general government balance should continue to be in net lending position, that the State balance should remain at least in equilibrium and that the State current expenditure should increase less than its total expenditure.

In the last two years, the general government surplus rose to record levels, from 3.8 % of GDP in 1999 to 5.8 % in 2000 and 5.0 % in 2001, outcomes which are very high even by the country's standards. In 2000, this record surplus was mostly, if not exclusively, due to a very strong rise in revenues, boosted by very dynamic activity (GDP rose by 7.5 %). As in previous years, expenditure increased rapidly too: current expenditure rose by 7.4 % in 2000 and total expenditure by 7.3 % but total current resources climbed by 12.6 %, above all indirect taxes and social security contributions, due to very strong job creation and an acceleration in wages increase.

Table VI.20

Composition and balances of general government, Luxembourg (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		3.8	5.8	5.0	2.0	2.5
— Total revenue		45.7	46.1	45.8	45.2	44.8
Of which:	— current taxes	29.9	30.4	29.4	28.5	28.4
	— social contributions	11.4	11.5	12.2	12.4	12.3
— Total expenditure (2)		41.9	40.3	40.8	43.2	42.3
Of which:	— collective consumption	7.0	6.7	7.2	7.3	7.2
	— social transfers (3)	24.7	23.6	24.7	25.2	24.8
	— interest expenditure	0.3	0.3	0.3	0.3	0.2
	— gross fixed capital formation	4.6	4.3	4.6	4.8	4.6
Primary balance (2)		4.1	6.0	5.3	2.2	2.7
Pm Tax burden		41.0	41.5	41.0	40.4	40.1
Government debt		6.0	5.6	5.5	5.2	5.1
Pm Cyclically-adjusted balance		3.5	4.2	3.6	1.8	2.2
Pm Cyclically-adjusted primary balance		3.8	4.5	3.8	2.0	2.4

(1) Commission 2002 spring forecast.
(2) UMTS receipts excluded.
(3) In kind and other than in kind.

Source: Commission services

In 2001, revenues decelerated considerably, although according to most recent data, real GDP growth was much stronger (5.1 %) than could have been expected taking into account the slowdown in neighbouring countries. Total current resources of the general government rose by 5.3 % but declined from 46.6 % of GDP in 2000 to 46.3 % in 2001. Indirect taxes rose by only 1.2 %, due for a large part to the decrease in the price of oil products, while direct taxes increased by 3.3 %, mostly as a result of the implementation of the first step of a large tax reform. This

reform included significant cuts in personal income tax, amounting *ex ante* to about 1.2 % of GDP in 2001 and to 2.0 % of GDP in 2002, as well as a reduction in corporate tax. On the contrary, receipts from social security contributions kept increasing fast (12.5 % against 13.4 % in 2000) as job creation was even marginally stronger than the year before and wage increases accelerated.

In contrast, the rise in current expenditure which had been strong in recent years, accelerated in 2001, reaching 10.8 %. The main causes of this acceleration were public consumption, which rose by 11.1 % and social transfers in cash, which increased by 12.6 %. Government investment grew sharply by 14.6 % but other general government capital expenditure turned negative in 2001, due to a financial transaction concerning the satellite company ASTRA, which was recorded as the sale of a non-produced non-financial asset, i.e. as a negative capital expenditure (like e.g. the auction of UMTS licences) and amounted to EUR 407 million (1.9 % of GDP). This is the reason why the general government surplus declined only moderately, from 5.8 % of GDP in 2000 to 5.0 %: without this exceptional revenue, it would have decreased to about 3 %. The public-debt ratio has been fluctuating for years around 5 or 6 % of GDP, declined slightly to 5.5 % in 2001.

In 2002, the general government account is expected to remain comfortably in surplus, which should, however, decrease significantly as a result of the economic slowdown, the effects of the second step of the tax reform and also because of the one-off character of the exceptional revenue recorded in 2001. In 2003, the surplus should increase again in line with accelerating GDP growth, but it will most likely not reach the record levels registered in 2000 and 2001 as employment (and consequently revenues from social security contributions) will probably, as usual, lag somewhat behind the recovery in economic activity.

Table VI.21

Key figures of the Luxembourg stability programme (1) **(2001–04)**

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	8.5	3.9	5.3	5.7	5.6	n.a.
General government budget balance (% of GDP)	6.2	4.1	2.8	3.1	3.4	n.a.
Primary surplus (% of GDP)	6.5	4.4	3.3	3.4	3.6	n.a.
Government debt (% of GDP)	5.3	5.0	4.6	4.2	3.9	n.a.

(1) UMTS receipts excluded.

Source: 2001 update of the stability programme of Luxembourg.

Public finance is sound but the fast rise in expenditure might become a concern

Luxembourg has recorded large government surpluses for 20 years (the last deficit was registered in 1982) and the public debt is negligible: it hardly exceeded 6 % of GDP in 1996 and has slightly decreased in relative terms since then. It might even have been totally paid back in one single year, in 2000, when it amounted to 5.6 % of GDP while the general government surplus reached 5.8 % of GDP. Clearly, with all the surpluses accumulated for years, the net asset position of Luxembourg is certainly positive and most likely sizeable: according to the 2000 update to the stability programme, the assets of the social security system amounted to 22.4 % of GDP in 2000, of which 20.4 % for the general pensions regime, and should increase to about 24.3 % in 2003.

Extremely low government debt and large surpluses go together with a low share of government expenditure in GDP: in 2000, total general government expenditure amounted to 40.3 % of GDP in Luxembourg as against an average of 45.6 % for the whole EU and 47.0 % for the euro zone, while, for current expenditure, the corresponding figures were 35.7 % for Luxembourg, 42.9 % for the EU and 43.6 % for the euro zone. Similarly, taxes are relatively low, even if the difference with other EU Member States is less sizeable: the tax burden amounted to 41.4 % of GDP in 2000 as against 42.2 % for the EU and 41.8 % for the euro zone (respectively 42.2 %, 43.2 % and 42.9 % including imputed social security contributions). However, the EU average is influenced by low taxes countries (e.g. Spain, Ireland, Portugal or the UK) and the tax burden is significantly lower in Luxembourg than in neighbouring Member States, like Bel-

gium (45.9 % in 2000), Germany (42.9 %) or France (45.2 %). Moreover, these data probably overestimate the effective tax burden borne by the Luxembourg taxpayer as a significant part of taxes collected in the Grand-Duchy are actually paid by non-residents, many of them frontier workers but also other non-residents, attracted by the low level of excise duties on alcohol, tobacco and vehicle fuel.

Public finances in Luxembourg are thus indisputably a paragon of good health. However, some potential risk factors should not be underestimated. First, building up reserves in the social security sector is justified by the general problem of ageing population that all Member States will be facing in the coming decades but also by the fact that employment growth was extremely strong in Luxembourg in the past 15 years: it rose by an average 3.3 % a year and a cumulative 72.6 % over the period 1986–2001, by far the highest rate in the EU. Job creation even accelerated in the second part of the 1990s, reaching at times more than 5 % a year. This impressive increase in employment implies a proportional rise in the number of pension recipients at a certain moment in the future. In the event that the increase in employment (thus in the number of contributors) and/or in productivity (thus in wages and in the level of contributions) would be significantly lower at that moment than now, the burden of pensions payments on the active population would rise dramatically. Building-up of reserves in the social security sector is thus totally justified and should be continued.

Moreover and in a shorter-term perspective, it should be noted that the rise in government expenditure has been strong in Luxembourg in recent years: total expenditure by the general government rose by an average 6.8 % a year and a cumulative 49.0 % over the period 1996–2001: this fast increase was not chiefly due to rapid rise in government investment, which, indeed, rose by more than 10 % in three out of these six years, since current expenditure also soared by 7.2 % a year and 54.6 % in total over the same period. Government consumption rose by 6.5 % a year between 1996 and 2001, of which 5.7 % for the general government wage bill, and social transfers in cash by the same high rate, although unemployment has been the lowest in the EU during this whole period. Clearly, as long as strong growth in activity and dynamic job creation generate buoyant revenues, this fast increase does not represent a problem, as confirmed by the recurrent and substantial surpluses as well as the lower than average tax burden. However, fast rise in government expenditure might well become a matter of concern, should growth decelerate significantly for a longer period than the relatively short current slowdown. This is even more true taking into account the legally binding character of a large part of current expenditure.

Council opinion on the updated stability programme of Luxembourg, 2000–04

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002 the Council examined the 2001 update of the stability programme of Luxembourg, which covers the period 2001–04.

The Council notes that sound management of public finances continues to be the guiding principle of the 2001 update; the budgetary strategy of the updated programme is based on continued net lending position of general government, a balanced budgetary position of central government and rise in ordinary expenditures lower than the overall budget.

In 2000, real GDP growth was particularly strong, at 8.5 %, driven by dynamic domestic demand and buoyant exports; in 2001, despite the general economic slowdown entailed by external factors, economic growth in Luxembourg remained relatively robust at around 4 %; real GDP growth is projected to accelerate in 2002 and

([1]) OJ L 209, 2.8.1997.

remain strong in the following two years covered by the programme.

The Council notes that the general government surplus reached 6.2 % of GDP in 2000, clearly above that projected in the 2000 update, resulting from buoyant tax revenues which more than compensated significant increases in expenditure; decelerating activity and the effects of the tax reform are expected to lower the government surplus in 2001; overall, the projected budgetary surplus over the period of the programme is somewhat higher than in the 2000 update, due to better initial conditions and improved growth prospects from 2003 onwards. The public finance projections presented in the 2001 update to the stability programme of Luxembourg are thus in compliance with the requirements of the Stability and Growth Pact as the government's budgetary position remains close to balance or in surplus all along the period covered.

The Council notes that current expenditures of central government continued to grow rapidly in 2001 and are expected to accelerate to 10.5 % in 2002, faster than the total budget expenditure; although the situation of public finance in Luxembourg is extremely sound, the rigidity of current expenditure acknowledged by the update itself might become a factor of risk should growth slow significantly in the medium term.

The Council commends the continued orientation of government expenditure towards investment spending aimed at improving infrastructure, the technological level of activities and human capital; it welcomes the reduction of the tax burden through the implementation of tax reform while maintaining sound budgetary position.

The Council notes that Luxembourg is in a good position to meet the budgetary consequences of ageing population; however, readiness to adapt policy in case of adverse developments is required. The Council notes the very low level of government-debt ratio in Luxembourg, resulting from healthy public finances and budgetary surpluses over a number of years.'

Box VI.9. **2002 BEPG's recommendations to Luxembourg on budgetary policy** ([1]):

'[…] considering that Luxembourg is a member of the euro area, budgetary policy should aim to:

i. contain current government expenditure in 2003 in order to ensure that the increase will not exceed that of total budget expenditure and to this aim endeavour to overcome rigidities in specific kinds of current expenditure.'

([1]) Adopted by the Council on 21 June 2002.

10. The Netherlands

Recent developments

The general government surplus which had reached in 2000 1.5 % of GDP (2.2 % including receipts from the auction of UMTS licences), declined sharply in 2001. Already in the 2001 budget, as well as in the 2000 update of the stability programme, a reduction of the surplus to 1 % of GDP was expected, as a result of the tax reform which entered into force on 1 January 2001 (the cost of which was estimated *ex ante* at about 0.75 % of GDP). However, mostly due to the impact of cyclical factors at the end of the year, the government surplus in 2001 fell to 0.2 % of GDP.

Under the 1998 coalition agreement, the yearly rise in central government expenditure, as well as in social security and healthcare spending, was limited on average to 1.5 % in real terms; in the spring of 2001, the government, taking advantage of the room for manoeuvre created inside these ceilings by the faster-than-expected decline in interest payments and social security outlays (unemployment had kept declining rapidly until April/May), decided additional spending for 0.7 % of GDP in priority areas such as education, healthcare and security. Government investment kept rising rapidly in 2001, by 11 % in nominal terms. In November, the government bought for about 0.3 % of GDP the stake of the chemical company DSM in the energy concern EBN. The UMTS revenues (0.7 % of GDP) had been registered as a negative capital spending, the level of which was thus artificially lowered in 2000, while it was boosted in 2001 by the EBN operation. Consequently, total capital expenditure by the government rose from 2.8 % of GDP in 2000 to 3.7 % in 2001.

Table VI.22

Composition and balances of general government, the Netherlands ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		0.4	2.2	0.2	0.0	– 0.4
— Total revenue		47.5	47.5	45.6	44.8	44.2
Of which:	— current taxes	24.4	24.3	24.8	25.1	24.7
	— social contributions	17.2	17.2	15.2	14.4	14.4
— Total expenditure ([2])		47.1	45.4	45.4	44.8	44.6
Of which:	— collective consumption	11.0	10.8	10.9	11.1	11.0
	— social transfers ([3])	24.5	23.9	23.8	24.1	24.1
	— interest expenditure	4.5	3.9	3.4	3.0	2.7
	— gross fixed capital formation	3.0	3.2	3.3	3.3	3.4
Primary balance ([2])		4.9	6.1	3.6	3.0	2.3
Pm Tax burden		41.7	41.6	40.3	39.9	39.5
Government debt		63.1	56.0	52.9	50.1	47.4
Pm Cyclically-adjusted balance		– 0.7	– 0.1	– 0.3	0.2	– 0.3
Pm Cyclically-adjusted primary balance		3.8	3.9	3.1	3.2	2.4

([1]) Commission 2002 spring forecast.
([2]) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 0.7 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

Until last autumn, it seemed that the immediate effects of the slowdown in activity on government revenues would remain limited, as faster-than-expected rising prices and wages compensated for slower than forecast real GDP growth: at the beginning of November, both the Centraal Planbureau and the Commission services were still projecting the general government surplus at about 1.3 % of GDP in 2001. However, in the last months of the year, significant shortfalls finally occurred in VAT, income tax, corporate tax, social contributions and even estate duties ([1]), amounting altogether to about 0.7 % of GDP. In total, taxes and social contributions declined from 41.5 % of GDP in 2000 to 39.7 % of GDP in 2001. The deceleration in government revenues was so sudden that, according to estimates made by the Ministry of Finance, the general government surplus, which still amounted to 1.3 % of GDP over the 12-month period from November 2000 to October 2001, fell to 0.2 % over the year 2001.

In 2002, the general government account is currently expected to be broadly balanced. Due for a part to new tax cuts but mostly to the lagged effects of the cyclical slowdown, revenues should continue to decline in percentage of GDP, reflecting the slower growth in the tax basis registered as from 2001, while the increase in unemployment will raise social transfers. The 2002 budget targets a rise in expenditure amounting to about 1 % of GDP, mostly in the same areas as the additional spending decided in the spring of 2001, taking advantage of the room for manoeuvre created by favourable developments in interest payments and social transfers. The budget also includes further cuts in taxes and social contributions for about 0.3 % of GDP, aimed essentially at improving labour participation by increasing after tax income from labour and at supporting business, essentially through a reduction from 35 % to 34.5 % in the corporate tax rate. However, the government refrained from applying strictly the rule decided in the 1998 coalition agreement for the allocation of unexpected fiscal revenues: according to this rule, as soon as the general government deficit would drop below 0.75 % of GDP, windfalls in revenues (with respect to initial projections) would be allocated on a 50–50 basis between public-debt reduction and tax cuts. From 1998 to 2000 government revenues exceeded initial projections by a cumulative EUR 12 billon, while the government decided only EUR 3.6 billion cuts in taxes and contributions from 1999 to 2001: as far as 2002 is concerned, should the coalition agreement have been carried out strictly, tax cuts in this year would thus have amounted to EUR 2.4 billion (0.6 % of GDP) instead of EUR 1.3 billion.

In 2003, at unchanged policy, and despite the expected recovery in the economy, a small deficit, reaching about 0.5 % of GDP, is currently forecast by the Centraal Planbureau and by the Commission; while the increase in government revenues is projected to accelerate somewhat, a slightly faster rise is forecast in expenditures, essentially because unemployment should still increase in yearly average. Such projections assume that, apart from the respect of the norm for expenditure, the automatic stabilisers will be fully at play as far as revenues are concerned. As a general election will take place in May 2002, the budgetary strategy and the medium-term objectives of the new government are currently unknown.

The 2001 tax reform: a first assessment

A large fiscal reform had been decided in the 1998 coalition agreement and was implemented on 1 January 2001.

([1]) The latter, which amounted to 0.1 % of GDP, was, however, purely incidental, being due to problems related to a change in the collection system.

Table VI.23

Key figures of the Netherlands stability programme ([1]) (2001–04)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.5	2.0	2.0	2.25	2.25	n.a.
General government budget balance (% of GDP)	2.2 (1.5)	1.0	1.0	1.0	1.0	n.a.
Primary surplus (% of GDP)	5.7	4.5	4.0	n.a.	n.a.	n.a.
Government debt (% of GDP)	56.1	51.8	47.7	45.0	42.0	n.a.

([1]) UMTS receipts excluded (0.7 % of GDP in 2000).

Source: 2001 update of the stability programme of the Netherlands.

Its main features were an increase in indirect taxes, especially in the standard VAT rate, which was raised from 17.5 % to 19 %, and a substantial decrease in income taxation, through cuts both in income tax and in social security contributions paid by households. While the rise in indirect taxation was expected to yield additional revenues for about 0.7 % of GDP, the reduction in direct taxes and social contributions were projected at about 1.3 % of GDP, the total *ex ante* cost for public finance amounting to about 0.6 % of GDP. The tax reform implied thus both an important shift from direct taxation of households income to indirect taxation and a significant reduction in the total tax burden.

The reform was basically intended to foster labour supply and to raise the activity rate by increasing after-tax labour income and, in the case of the lower paid, by increasing the difference with unemployment, disability and assistance benefits. It was not fundamentally designed to support economic activity since the Dutch authorities favour a structural fiscal policy. Moreover, it seemed, when the reform was designed, that no boost to demand was necessary as growth prospects were expected to remain broadly favourable in 2001 and 2002. On the contrary, there were concerns that the reform would prove pro-cyclical by fuelling private consumption and pushing prices up in an economy operating close to full employment, while prices and wages were already accelerating significantly. On the other hand, supporters of the reform claimed it might help moderating wage claims by reducing the tax wedge and boosting households after-tax disposable income. Indeed, tax cuts had probably encouraged the long lasting wage moderation policy in the past, especially in the mid-1990s.

As expected (and perhaps even more than expected), the increase in indirect taxation acceleration the increase in prices, the rise in the HICP jumping from 2.3 % in 2000 to 5.1 % in 2001, while the national CPI accelerated from 2.5 % to 4.5 %. Cuts in income tax and social contributions, together with still strong job creation and fast wage increases, boosted households' disposable income, which rose by about 10 % in nominal and 5 % in real terms over the year. This, however, did not really moderate wage increases (at least until now), which even accelerated, from 4.6 % in 2000 to 5 % in 2001: despite the slowdown in the economy, the labour-market situation remains tense, the number of vacancies, while diminishing, being still higher than registered unemployment.

Moreover, far from accelerating, private consumption rose by a meagre 1.2 % in yearly average (against 3.8 % in 2000), its lowest growth rate since 1993. It seems that households anticipated much more than generally expected the effects of the rise in the VAT rate and, consequently, massively brought forward purchases of durable goods to the latest months of 2000: the positive impact of the reform on private consumption was thus probably felt for a large part before it was actually implemented. Other factors may also explain the rather subdued pattern of private consumption in 2001, like wealth effects related to the fall in the stock exchange and the halt in the rise of housing prices as well as the decline in consumer confidence all along the year 2001.

However, the 2001 tax reform should not be judged principally on its short-term effects. Its objectives (fostering labour supply and reducing the taxation of labour income) were totally commendable and should be continued. Moreover, as already stated, the reform was not specifically designed at supporting economic activity in the short run. Due to the economic slowdown, the reform proved much less pro-cyclical than was generally feared, even if its effect on consumer price inflation was unfortunate (but this effect was consciously accepted and should fade progressively away). Finally, while contributing to the decline in the general government surplus in 2001, the reform did not significantly jeopardise the situation of public finance, which is fundamentally sound. General government finance should remain broadly balanced in 2002, despite the economic slowdown; the small deficit which is currently forecast for 2003 is not due to the 2001 tax reform or to the new tax cuts decided for 2002: it is essentially a lagged effect of the current economic slowdown, which should result in lower revenues from the corporate tax — as enterprises recorded big losses in 2001 and have the right to deduct these losses from their future profits to some extent — as well as in increasing unemployment expenditure, as unemployment, while declining throughout the year 2003, is expected to remain higher than in 2002 in yearly average.

Council opinion on the updated stability programme of the Netherlands for the period 2000–04

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002, the Council examined the updated stability programme of the Netherlands, which covers the period 2000–04.

Real GDP growth decelerated sharply in 2001 to about 1 % from 3.5 % in 2000; the deterioration in the general government balance, although significant, but partly due to the implementation of the tax reform as from 1 January 2001, was less dramatic, the surplus falling from 1.5 % to an estimated 0.7 % of GDP; besides the contribution of these surpluses, the government-debt ratio continued to decrease due to developments in nominal GDP.

The Council notes that, since the presentation of the 2001 updated stability programme on 17 October 2001, the macroeconomic projections for 2001 and 2002 have been significantly revised downwards by the Netherlands Bureau for Economic Policy Analysis, in order to take into account the full impact of the international economic downturn and the estimated effects of the 11 September events. The Dutch authorities, acknowledging the economic slowdown and its impact on budgetary conditions, have presented revised figures reflecting the latest information (December) available on economic growth, resulting in budgetary surpluses of 0.7 % of GDP in 2001 and 0.4 % in 2002.

The Council notes that for 2003 and 2004, which are beyond the term of office of the present government, the budgetary estimates in the updated programme are technical projections based on a cautious macroeconomic scenario under the assumption of unchanged policy.

The Council notes that despite the economic slowdown, a general government surplus is projected for 2002; the Council expects that surpluses will continue to be projected for the remaining years of the programme implying that they will be in line with the Stability and Growth Pact objective of a fiscal position close to balance or in surplus; the Council considers that the progress already made by the Netherlands in improving the general government budgetary position provides adequate margin in order to cope with the budgetary impact of normal macroeconomic fluctuations without breaching the 3 % of GDP deficit threshold.

The Council notes the modification in the 2002 budget, in favour of debt reduction, of the fifty–fifty rule of allocation of additional revenues to debt reduction and tax alleviation. It acknowledges that this was done in order to comply with the Council recommendation of March 2001 as well as with the broad economic policy guidelines, but also in view to strengthen the budgetary position and better prepare for the consequences of the ageing population. The Council notes that the implementation of overall expenditure targets made possible increased government spending in priority areas and reduction in the tax burden, while respecting the requirements of the Stability and Growth Pact. The Council welcomes the structural reforms underway, which aim at improving the efficiency of government expenditure in particular in healthcare, education and social infrastructure, as well as increasing the participation rate and competitiveness which should reduce the tightness of the labour markets and help to moderate wage pressures.

The Council welcomes the clear strategy for improving the sustainability of public finances and meeting the consequences of population ageing; it encourages the government to maintain the effort towards reducing the debt ratio and improving labour supply and employment rate in order to achieve these objectives.'

([1]) OJ L 209, 2.8.1997.

Box VI.10. **2002 BEPG's recommendations to the Netherlands on budgetary policy** ([1])**:**

'[…] considering that the Netherlands is a member of the euro area, budgetary policy should aim to:

i. ensure that the budgetary stance in 2002 does not contribute to inflationary pressures, should they persist notably as a result of excessive wage increases; and

ii. avoid a deterioration in the government balance in 2003 and, to this end, contain current government expenditure within clearly defined ceilings set in real terms.'

([1]) Adopted by the Council on 21 June 2002.

11. Austria

Recent developments and medium-term prospects

In 2001, general government finances in Austria improved significantly. After a deficit of 1.5 % of GDP in 2000, a position of a small surplus was achieved despite the fact that output growth decelerated to 1 %, from 3 % in 2000. This compares with an initial deficit target of 0.75 % set in the December 2000 stability programme based on a real growth assumption of 2.8 %. Likewise, the debt ratio improved significantly, falling by 1.8 percentage points to some 62 % of GDP.

Excluding the proceeds from UMTS and one-off real estate sales ([1]) in 2000, the balance improved even by 2.3 % of GDP in nominal terms and by 2.6 % of GDP in cyclically-adjusted terms. Most of the consolidation is of a structural nature.

([1]) In 2000: UMTS revenues amounted to EUR 0.83 billion or 0.4 % of GDP, real estate sales amounted to Bundimmobiliengesellschaft amounted to EUR 0.55 billion or 0.3 % of GDP.

Table VI.24

Composition and balances of general government, Austria ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		– 2.2	– 1.5	0.1	– 0.1	0.3
— Total revenue		51.8	51.2	52.4	51.4	50.9
Of which:	— current taxes	28.4	28.2	30.0	29.6	29.5
	— social contributions	17.3	17.1	17.1	17.0	16.8
— Total expenditure ([2])		54.2	52.8	52.5	51.6	50.6
Of which:	— collective consumption	7.8	7.7	7.4	7.1	6.9
	— social transfers ([3])	30.7	30.5	30.4	30.5	30.4
	— interest expenditure	3.7	3.7	3.5	3.4	3.3
	— gross fixed capital formation	1.7	1.5	1.3	1.2	1.2
Primary balance ([2])		1.3	2.0	3.4	3.3	3.6
Pm Tax burden		44.5	43.9	45.8	45.1	44.9
Government debt		64.9	63.6	61.7	60.2	57.6
Pm Cyclically-adjusted balance		– 2.6	– 2.5	– 0.2	– 0.0	0.3
Pm Cyclically-adjusted primary balance		1.1	1.2	3.3	3.4	3.6

([1]) Commission 2002 spring forecast.
([2]) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 0.4 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

The budgetary improvement in 2001 stemmed predominantly from the revenue side and is linked to two factors: First, a number of predominantly base-broadening tax measures yielded considerably higher tax revenues despite the dampening effect of the growth slowdown. Second, tax pre-payments increased significantly in reaction to the introduction of interest charges on tax arrears as of October 2001. While in its revenue projec-

tions the Ministry of Finance had anticipated some additional receipts due to this measure, the response to the new regime was much stronger than expected. According to estimates by the Ministry of Finance, the unexpected part of these tax payments amounts to some EUR 1 billion or 0.5 % of GDP ([1]). As a consequence, the revenue-to-GDP-ratio increased by 1.8 percentage points in 2001, to 53.2 %. The budgetary improvement in 2001 was thus achieved at the expense of a significant increase in the tax burden.

On the expenditure side, structural savings stemmed from two main areas of reform. First, the public pension system was modified with a view to raising the effective retirement age. Second, the public administration is being reformed, with a significant reduction of government employment as a central element. However, in 2001, savings from these measures (0.4 % of GDP) were more than offset by a sharp increase in temporary 'miscellaneous' expenditure ([2]) (0.7 % of GDP). In net terms, therefore, spending in 2001 increased by 0.3 % of GDP.

The November 2001 update of the stability programme projects that the balanced budget position will be maintained until 2003, while a small surplus should be reached in 2004 and 2005. The debt ratio should fall below the 60 % reference value in 2002 and decline further to 52.1 % of GDP by 2005. For the years 2002–03, these projections are fairly close to those by the Commission services although, due mainly to the assumption of unchanged policies, the Commission services foresee a slight surplus already in 2003.

The consolidation measures remain unchanged from the previous programme, focusing first and foremost on measures at the federal government level. In contrast to the year 2001, consolidation in 2002 and 2003 stems above all from the expenditure side. In addition, the *Bundesländer* (regional authorities) have committed themselves, in the framework of a national stability pact, to achieve annual surpluses of 0.7 % of GDP over the medium term.

Lowering the tax burden while maintaining budgetary balance

When the present Austrian Government took office in February 2000, it had inherited a challenging budgetary situation. It was faced with the budgetary cost of a generous income tax reform, adopted by the outgoing government and amounting to some 1.2 % of GDP, which was not counterbalanced by savings measures on the expenditure side. In addition, following the delays in forming a new government after general elections in October 1999, it had to quickly adopt the budget for the year 2000, providing only limited time to implement the required structural savings measures. In order to prevent a strong slippage from the target the budget included, in addition to some ad hoc tax measures (particularly the increase of excise taxes), substantial one-off revenues such as the sale of real estate and the UMTS licences. As a consequence, the underlying budgetary position changed little in 2000. Although strong output growth helped to decrease the deficit to 1.1 % of GDP, from 2.4 % in the year before, net of one-off revenues the deficit amounted to some 1.7 % in nominal terms and in structural terms the balance even worsened.

([1]) Since due to the introduction of this measure the time profile of tax revenues has changed the question can be raised whether, in accordance with ESA 95 rules, part of the additional tax revenue in 2001 should be time-adjusted and attributed to years other than 2001. The issue is currently being discussed between Eurostat and the national authorities and could lead to a revision of the revenue figures. However, any such revision is likely to be small and would not change the overall picture of a strong budgetary improvement in 2001.

([2]) Due to one-off expenditure on (in billion EUR): R&D (0.22), capital transfers to Austrian Railways (ÖBB) (0.94), payments for forced labour and restitution of confiscated Jewish property during WW II (0.29).

Table VI.25

Key figures of the Austrian stability programme ([1]) (2001–05)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.0	1.3	1.3	2.4	2.8	2.8
General government budget balance (% of GDP)	– 1.1	0.0	0.0	0.0	0.2	0.5
Primary surplus (% of GDP)	2.4	3.4	3.3	3.1	3.1	3.3
Government debt (% of GDP)	63.5	61.8	59.6	57.2	54.7	52.1

([1]) UMTS receipts excluded (0.4 % of GDP in 2000).

Source: 2001 update of the stability programme of Austria.

One-off measures constituted also a main element of the budgetary strategy for the period 2000–03 as presented in the March 2000 update of the Austrian stability programme. The Ecofin Council stated in its opinion ([1]) that net of these measures the programme was 'not fully in line with the requirements of the Stability and Growth Pact'.

Following this critical Council opinion, budgetary policy occupied a central role in the national political debate. The December 2000 stability programme for 2001–04 represented a major policy shift and contained a series of genuine consolidation measures. In particular, the planned improvement in the budget balance for 2001 was exclusively based on structural measures.

Expenditure savings and tax measures were worth some 1.7 % of GDP, while an unexpected additional tax intake (see above) amounted to another 0.5 % of GDP, thus offsetting roughly the negative impact of the slowdown in GDP growth. In the event, a small budgetary surplus was achieved. As a consequence, the requirement of the Stability and Growth Pact of a budgetary position close to balance or in surplus was attained one year ahead of the original schedule.

This was also a major achievement in a historical perspective as the last time Austrian Government finances were in surplus was the year 1974. However, it was achieved through a considerable increase in the tax burden, which rose by close to 2 % of GDP. The Austrian Government therefore rightly acknowledged that lowering the tax burden should be one of the economic policy priorities in the medium term. It announced, in late 2001, that the tax burden is to be brought down to 40 % of GDP by 2010, corresponding to a decline of some five percentage points.

Against the background of the projections of the updated stability programme, and despite the fact that taxes and social contributions are forecast to increase on average by 0.9 percentage points less than nominal GDP until 2005, the target of lowering the tax burden by five percentage points by 2010 will require substantial additional expenditure cuts. Extrapolating from the scenario of the stability programme, the estimated increase in taxes and social charges would need to be curbed by roughly EUR 1.4 billion or some 0.6 % of nominal GDP annually ([2]), starting as of the year 2003. In real terms, the required savings would have to total 5.5 % of GDP over the following eight years.

Reconciling the goals of maintaining budgetary balance or moving to a surplus and reducing the tax burden will thus prove challenging. All the more so as risks to the expenditure targets could already affect the year 2003. In particular, government employees might require compensation for their considerable losses in real earnings in 2001 and 2002, which could result in a costly wage agreement for the public sector in 2003. Moreover, at the level of the *Bundesländer*, significant surpluses are required to comply with the agreements in the framework of the national stability pact. In 2001, higher-than-anticipated tax revenues as well as some spin-off measures and the sell-off by the *Länder* of claims related to subsidised housing loans are likely to ensure that the budgetary commitments were achieved. These measures of a mainly one-off nature will have to be replaced by structural savings measures in the coming years. Such measures have, however, not been defined yet.

On the revenue side, in view of general elections in the year 2003, pressures are mounting to implement a tax reform, as promised in the government's programme when it took office. While such a reform would be in line with the envisaged target of reducing the high tax burden, a generous tax relief as implemented in the year 2000 could clearly put the target of a balanced budget at risk. As a consequence, any tax relief in 2003 — and in later years — should be made contingent on clearly defined and equivalent compensatory savings on the expenditure side. Such a fiscal tightening would also be appropriate in view of the projected upswing in the economy from the second half of 2002 onwards and would help to break with the pro-cyclical stance of budgetary policy prevailing in recent years.

Council opinion on the updated stability programme of Austria, 2001–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

([1]) Council opinion of 8 May 2000 on the updated stability programme of Austria for the period 2000 to 2003, OJ C 162, 10.6.2000.

([2]) The scenario until 2005 is based on the estimates of the November 2001 stability programme. From 2006–10, nominal GDP as well as taxes and social contributions are assumed to grow by an annual average rate of 4 % and 3.2 % respectively, which corresponds to the average growth rates for 2002–05 projected in the stability programme. Similarly, annual real GDP growth is 2.3 % for 2006–10.

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002 the Council examined the updated stability programme for Austria which covers the period 2001–05.

The updated programme projects general government finances to improve from a deficit of 1.1 % of GDP in 2000 to a balanced position in 2001–03, and to move to a small surplus in the following years. The government gross debt is expected to decrease from 61.8 % of GDP to slightly below the 60 % reference value in 2002 and further to 52.1 % in 2005. The Council notes with satisfaction that, in spite of lower-than-projected growth, the government deficit was reduced more rapidly than projected, i.e. one year ahead of the schedule presented in the previous programme.

The Council welcomes that important structural savings measures, notably in the fields of pensions and public administration, were realised in 2001; they contributed to bring down the government accounts to balance in 2001 and will continue to impact positively on spending over the programme period. This is in line with the Council's recommendations in the broad economic policy guidelines. The Council notes, however, that the deficit reduction in 2001 relied heavily on revenue side measures. As a consequence, the already high tax burden in Austria has risen more strongly than anticipated, thereby more than offsetting the effects of the 2000 income tax reform.

The budgetary projections of the programme are based on a macroeconomic scenario expecting annual output growth to resume from its cyclical trough of 1.3 % in 2001 and 2002 to 2.4 % in 2003 and to increase further to 2.8 % in the following years, amounting to an annual average growth of 2.25 % over the forecast period. The Council considers that the expected growth is feasible given that no significant macroeconomic imbalances prevail and provided that social partners continue their policy of setting wages in line with maintaining international competitiveness.

The projected medium-term budgetary position of close to balance or in surplus from 2001 onwards is in line with the requirements of the Stability and Growth Pact. Also in cyclically-adjusted terms these projections indicate that government finances in Austria should be able to withstand a normal cyclical downturn without breaching the 3 % of GDP reference value for the deficit ratio.

The Council urges the Austrian authorities to ensure strict budgetary implementation at all levels of government. This is crucial to preserve budgetary balance, in particular in view of uncertainties regarding the impact of the economic slowdown. Moreover, at the level of the *Bundesländer* expenditure cuts are necessary to achieve the sustainable structural surpluses required by the national stability pact.

The Council considers that attaining a budgetary surplus in 2004–05, as projected in the programme, is appropriate for Austria. A budgetary surplus in the medium term is central in bringing down the debt level decisively, which appears necessary in view of the long-term expenditure pressures resulting from population ageing.

The Council notes that the government finance projections rely on a revenue-to-GDP ratio which is clearly higher than that of most other Member States. Therefore, the Council encourages the Austrian authorities to consider a stronger-than-planned reduction in the revenue ratio, accompanied by an equivalent reduction in the expenditure ratio. A decisive decline in the tax burden, especially on labour, would be instrumental in rendering government finances more conducive to employment and output growth. In the short-term, the Council invites the Austrian Government to implement the reduction in non-wage labour cost, already postponed by one year, as planned in 2003.

The Council furthermore considers that the Austrian Government should continue the ongoing structural reforms and enhance its efforts in the pension system and the healthcare sector, as recommended in the broad economic policy guidelines. In particular, the Council

([1]) OJ L 209, 2.8.1997.

invites the Austrian Government to consider measures with a view to further raising the low effective retirement age and to encouraging labour-market participation, in particular of older workers and women. The Council also encourages the Austrian Government to continue with the reforms of product, labour and capital markets, with a view to enhancing competition, fostering the provision of risk capital and improving entrepreneurial dynamism.'

Box VI.11. **2002 BEPG's recommendations to Austria on budgetary policy ([1]):**

'[…] considering that Austria is a member of the euro area, budgetary policy should aim to:

i. implement measures leading to structural expenditure savings, especially at lower levels of government, so as to meet the target of a balanced budget in 2002 and 2003 set in the updated stability programme of December 2001;

ii. ensure that the planned reduction in the high tax burden enhances incentives to work and invest and does not conflict with the target of maintaining budgetary balance; this requires additional savings efforts at all levels of government; and

iii. review the public pension system to ensure the sustainability of public finances, addressing in particular the low average effective retirement age through the reduction of incentives for early retirement.'

([1]) Adopted by the Council on 21 June 2002.

12. Portugal

Budgetary balance by 2004 will prove challenging for the new government

According to the February 2002 notification, the general government deficit in 2001 was 2.2 % of GDP and the debt ratio was 55.9 %. Both these outcomes are considerably above their initial targets of 1.1 % and 53.4 %, respectively, set in the stability programme of December 2000. The deficit target for 2002 is 1.8 % of GDP, while the indebtedness ratio is projected to decline to 51.5 %.

The growth rate of total expenditure is projected to decelerate significantly from about 8.5 % in 2001 to about 5 % in 2002 and an average value of around 4.25 % in the period covered by the current stability programme update (2002–05). This will reduce the expenditure ratio by approximately 2.75 percentage points of GDP between 2002 and 2005, reaching 43.6 % in 2005. In order to curb total expenditure growth, a two-pillar strategy is to be implemented. First, the growth of primary current expenditure (in the central government) is capped in nominal terms at 4 % per year until 2000, i.e. about $1\frac{3}{4}$ percentage points below average nominal GDP growth. Second, structural policies are to be pursued in various areas with a direct impact on public finances, namely on healthcare, and public pensions.

Given the cyclical position of the economy and the pro-cyclical behaviour of tax elasticities ([1]), the forecast rise in the revenue-to-GDP ratio might prove optimistic. Furthermore, in statistical terms, revenues will be

([1]) In the past, tax elasticities in Portugal varied strongly with the cycle. In particular, company taxes show a high variation due, *inter alia*, to the fact that tax evasion tends to increase during cyclical troughs. Moreover, the factors of economic growth are shifting towards net exports and away from domestic demand, which will tend to depress tax elasticities.

Table VI.26

Composition and balances of general government, Portugal ([1])

		1999	2000	2001	2002	2003
Government balance ([2])		– 2.2	– 1.5	– 2.5	– 2.6	– 2.5
— Total revenue		42.7	42.8	43.3	43.4	43.5
Of which:	— current taxes	25.1	25.2	24.9	24.8	24.8
	— social contributions	11.4	11.7	12.0	12.1	12.1
— Total expenditure ([2])		45.0	44.3	46.0	46.1	45.9
Of which:	— collective consumption	8.0	8.3	8.4	8.4	8.3
	— social transfers ([3])	23.6	23.7	24.2	24.1	24.0
	— interest expenditure	3.2	3.2	3.1	3.1	3.2
	— gross fixed capital formation	4.1	3.7	4.2	4.2	4.3
Primary balance ([2])		1.0	1.6	0.4	0.5	0.7
Pm Tax burden		35.7	36.3	36.0	36.1	36.0
Government debt		54.2	53.4	55.5	56.5	57.2
Pm Cyclically-adjusted balance		– 2.7	– 2.6	– 3.2	– 2.8	– 2.6
Pm Cyclically-adjusted primary balance		0.5	0.5	– 0.1	0.3	0.6

([1]) Commission 2002 spring forecast.
([2]) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 0.3 % of GDP.
([3]) In kind and other than in kind.

Source: Commission services

reduced by the new (national accounts') treatment of non-recoverable tax arrears ([1]).

The year 2002 assumes a pivotal role in the planned retrenchment of current primary expenditure, according to the adjustment strategy outlined in the stability programme update. A new government is not likely to be formed before May 2002. Moreover, the consolidation strategy is partly based on the urgent need to pursue with the implementation of a number of structural reforms in some key areas with a direct incidence on public finance (e.g. pensions, healthcare, tax reform, tax administration). Most of these reforms require the approval of laws, which can now be expected to be voted only after the new Parliament's summer break (i.e. in the fall of 2002).

In Portugal, the ratio of compensation of public employees to GDP has increased significantly in the second half of the 1990s, reaching about 15 % in 2001, while the EU average is only 10 %. The evolution of the wage bill in Portugal results from a number of factors, namely employment developments, particularly in the education and health sectors, combined with a persistent rise in wages per employee in the public sector above the private sector of the economy. According to the number individuals enrolled in the pension system of the general government sector ([2]), employment in the general government increased at annual average of 3.25 % between 1995 and 2001, after a near stagnation between 1990 and 1995. In comparison, total employment in the economy is estimated to have risen by less than 0.5 % per year in the period 1995–2001. The rise in per capita wages in the general government sector above private sector wages reflects policy of improving pay and conditions in the general government (i.e. the so called policy of 'restructuring careers').

In a recent study published in the Bank of Portugal's *Economic Bulletin* ([3]), a large wage gap favourable to the public sector was found in Portugal. Using panel data for households in the EU area, a harmonised survey coordinated by Eurostat, the wage gap between the public and private sectors of the economy was highest in Portugal. Although the existence of a wage premium favourable to the public sector is common across Europe, what is specific about the Portuguese case is the magnitude of this premium. After correcting for fringe benefits (e.g. health insurance coverage), employment protection and expected pensions, compensation conditions in the general government become even more favourable than in the private sector of the economy.

In the period 1970–98, Portugal was among the OECD countries with the highest growth rates of expenditure in healthcare. Real health expenditure per capita, deflated by GDP prices and using economic wide purchasing power parity (PPP), rose by 7.4 % in Portugal which compares with 4.1 % on average across the OECD. The growth rate in per capita real expenditure on pharmaceuticals was particularly dynamic, having risen by 10.3 % in the period 1970–97 (3.8 % in the OECD).

In the future, the impact of population ageing will put additional pressures on healthcare expenditure. As regards expenditure on subsidised pharmaceuticals, the authorities plan to limit chronic budget overruns in this area by introducing annual ceilings and by promoting a widespread use of generic drugs. The Portuguese authorities plan also to increase the accountability of healthcare units and hospital managers, and enhance the role of the private sector as a provider of healthcare services.

([1]) Implementation of Regulation (EC) No 2516/2000. Portugal has been given a temporary derogation up to 30 June 2002 in order to adapt its accounting systems to the requirements of the regulation.

([2]) Caixa Geral de Aposentações.

([3]) See Portugal and Centeno (2001).

Table VI.27

Key figures of the Portuguese stability programme ([1]) (2001–05)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.3	2.0	1.8	2.5	3.0	3.0
General government budget balance (% of GDP)	– 1.5	– 2.2	– 1.8	– 1.0	0.0	0.4
Primary surplus (% of GDP)	n.a.	0.9	1.9	1.3	2.7	3.1
Government debt (% of GDP)	n.a.	55.9	55.7	55.5	54.0	53.2

([1]) UMTS receipts excluded (0.3 % of GDP in 2000).

Source: 2001 update of the stability programme of Portugal.

Council opinion on the updated stability programme of Portugal, 2002–05

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined the updated stability programme for Portugal which covers the period 2002–05. The updated programme projects general government finances to improve from a deficit of 2.2 % of GDP in 2001 to a balanced position in 2004, with a small surplus is expected in 2005. The government gross debt is expected to decrease from 55.9 % of GDP in 2001 to 51.9 % in 2005. The Council notes that the new update broadly complies with the requirements of the revised code of conduct on the content and format of stability and converge programmes ([2]).

The Council notes that the estimated deficit outcome for 2001 (2.2 % of GDP) is clearly higher than projected in the January 2001 update (1.1 % of GDP). The Council acknowledges that this important nominal divergence is partly due to the slowdown in the economy, with 2001 real GDP growth around 1.25 percentage points below projections of the January 2001 update of the programme. However, the Council also notes that lower growth can explain only a part of the shortfall relative to the target. Factors not related to the growth slowdown contributed to this, notably an underestimation of the revenue losses implied by the reform of direct taxes implemented in 2001 and lower-than-projected efficiency gains in tax collection and administration, as well as less favourable developments in current primary expenditure. The Council acknowledges that the Portuguese Government took, in a corrective budget adopted in June 2001, measures with a view to curtailing expenditure growth. These measures, which amounted to 0.6 % of GDP, were, however, not sufficient to offset the shortfall in tax revenues in order to meet the deficit target set in the previous update of the programme.

The baseline macroeconomic scenario of the updated programme expects output growth to accelerate from 1.75 % in 2002 to 3 % in the last two years of the programme, yielding annual average growth of some 2.5 %. This seems realistic in view of the current imbalances in the Portuguese economy, with the necessary adjustment process likely to dampen output growth in the medium term. Given the strong rise in unit labour cost in recent years and its adverse effects on the external competitiveness of the Portuguese economy, the needed increase in export growth is not likely to be strong enough to make up for the shortfall in domestic demand. The Council considers that, for these reasons, the cautious line taken by the programme regarding the medium-term outlook for the Portuguese economy appears appropriate.

The Council notes that the Portuguese authorities maintain their intentions to balance the budget by 2004, as planned in last year's update and as recommended in the BEPGs. In cyclically-adjusted terms, the government accounts would move into a small surplus in 2004. Portugal would thus comply with the requirements of the Stability and Growth Pact from 2004 on. The Council welcomes the confirmation of a balanced budget target for 2004. While acknowledging that achieving a balanced budget target in 2004 requires a considerable effort, the Council considers it necessary and encourages the Portuguese Government to pursue it with determination. Once economic recovery is established, the Portuguese Government should strengthen its efforts to move rapidly towards its medium-term objective of a zero deficit in 2004. This will require strict respect in the budgets for 2003 and 2004 of the 4 % capping rule for growth of nominal current primary expenditure in general government, and may also require additional discretionary measures.

The Council notes that the budgetary outcome for 2001 departed from the Portuguese budgetary path towards a "close-to-balance or in surplus" position. The Council

([1]) OJ L 209, 2.8.1997.
([2]) 'Revised opinion of the Economic and Financial Committee on the content and format of stability and converge programmes' endorsed by the Ecofin Council on 10 July 2001.

welcomes the intentions of returning to such a path in 2002 and considers that the budgetary objective for that year must be met. The Portuguese Government should closely monitor budgetary developments in 2002. It should implement its budgetary plans for this year carefully in order to secure an improvement in the deficit. Therefore, any measures likely to lead to a further deterioration in the government deficit should be avoided, and any revenue shortfall other than explained by slower-than-expected economic growth should be compensated by additional measures. Given that Portugal has not yet achieved a sufficient safety margin against breaching the 3 % of GDP deficit threshold, deviations from the objective must be timely addressed.

The Council urges the Portuguese authorities to ensure strict budgetary implementation for all sectors of government. Moreover, a number of important reforms have been announced in the programme update, particularly in some areas with a direct impact on public finances, whose timely and determined implementation will be paramount for a successful implementation of the budgetary consolidation strategy.

The Council notes that the debt ratio remains clearly below the 60 % ceiling, but has been revised upwards throughout the programme period. Only part of this revision can be explained by the developments of the government deficit and GDP growth. The Council invites the authorities to provide more detailed information on financial operations in future programme updates in order to allow a better understanding of debt developments.

The Council notes that the sustainability of government finances should be strengthened in light of the budgetary costs of ageing populations. If debt reduction is to make a noticeable contribution towards the sustainability of government finances, the target of a balanced budget position by 2004 must be reached. In addition, structural reforms are necessary to strengthen the financial sustainability of the pension system. The Council notes with satisfaction that the reform of the pension system recently agreed by the social partners goes in the right direction. The main challenge facing Portugal is to complete the process of pension reform and to continue with the reforms of the healthcare sector.'

Statement by the Council on the budgetary situation of Portugal

'1. The Council considers that the early-warning mechanism is an essential part of the Stability and Growth Pact. The Commission, when issuing on 30.1.2002 a recommendation for a Council recommendation with a view to giving early warning to Portugal in order to prevent the occurrence of an excessive deficit, has thereby acted in accordance with the provisions of the Stability and Growth Pact.

2. The Council welcomes the commitments of the Portuguese Government; it

- confirms its endeavour to ensure that the 3 % of GDP reference value for the general government deficit will not be breached; to this end, the government intends to closely monitor budgetary developments at all levels of government in 2002 in order to meet the budgetary targets as set down in the stability programme;
- will implement the budgetary plans for this year carefully, avoiding to take discretionary measures that could aggravate the budgetary position and using any budgetary room for manoeuvre to reduce the deficit; any revenue shortfall, other than explained by slower-than-expected growth, should be compensated by additional measures;
- confirms that a balanced position will be reached by 2004, in accordance with previous commitments;
- notes that the debt ratio is projected to decline over the period of the programme.

3. In the light of these commitments by the Portuguese Government, the Council considers that it has effectively responded to the concerns expressed in the Commission recommendation, and therefore the recommendation is not put to vote and the procedure is closed.

4. The Council is unanimous in taking this decision.'

Box VI.12. **2002 BEPG's recommendations to Portugal on budgetary policy ([1]):**

'[…] considering that Portugal is a member of the euro area, budgetary policy should aim to:

i. ensure that the 3 % of GDP reference value for the general government deficit will not be breached in 2002. To this end implement strictly the rectifying budget, which aims at a deficit of 2.8 % of GDP and use all opportunities to achieve a better than targeted budgetary outcome; and strengthen budgetary surveillance at all levels of government;

ii. achieve a balanced budgetary position by 2004; this will require discretionary measures in addition to those included in the 2001 updated stability programme;

iii. implement the measures announced in the budget for 2002 to rein in expenditure with determination with a view to reducing the expenditure dynamics of general government; and

iv. continue the process of pension reform by implementing measures in addition to those contemplated by the 2001 reform to ensure sustainability of the pension system in the medium and longer term; introduce effective measures to curb the unsustainable pace of healthcare expenditure, particularly for the consumption of pharmaceuticals.'

([1]) Adopted by the Council on 21 June 2002.

13. Finland

Recent developments and medium-term prospects

Following an abrupt slump of foreign demand in the ICT sector, accompanied by weakness in other export sectors, GDP growth came to a near standstill in 2001 at only 0.7 % compared with 5.6 % in 2000. With domestic demand also easing the general government financial balance deteriorated by 2.1 percentage points of GDP, to a still healthy surplus of 4.9 % of GDP, which is close to the target set in the stability programme of September 2000.

Although much of the deterioration of the financial balance can be attributed to the cyclical effect, the fading of exceptionally strong corporate tax revenue in 2000 as well as higher-than-planned central government expenditure added to the weakening of government finances. Furthermore, owing to high investment and consumption expenditure, local government finances returned to their customary imbalance in their finances, posting a deficit of 0.3 % of GDP in contrast to a surplus of 0.1 % of GDP the year before. Only social security institutions have maintained their position, thanks also to the ongoing preparation for age-related future expenditure pressures, with a surplus of 3.3 % of GDP.

In spite of still good capital and income tax revenue, the general government revenue ratio decreased by 0.7 percentage points to an estimated 49.5 % of GDP in 2001. This was mainly the result of revenue shortfalls due to discretionary income tax cuts as well as the slowdown in economic activity. Furthermore, government income from sales of property collapsed.

Table VI.28

Composition and balances of general government, Finland ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		1.9	7.0	4.9	3.3	2.7
— Total revenue		54.0	55.6	54.2	53.2	52.3
Of which:	— current taxes	32.8	34.6	32.8	32.4	31.6
	— social contributions	13.1	12.2	12.5	12.2	11.7
— Total expenditure ([2])		52.1	48.6	49.4	49.9	49.6
Of which:	— collective consumption	8.1	7.6	7.7	7.8	7.7
	— social transfers ([3])	31.6	29.4	30.1	30.6	30.2
	— interest expenditure	3.1	2.8	2.7	2.6	2.5
	— gross fixed capital formation	2.9	2.6	2.7	2.7	2.6
Primary balance ([2])		5.0	9.8	7.6	6.0	5.2
Pm Tax burden		46.8	47.6	46.2	45.4	44.1
Government debt		46.8	44.0	43.6	43.1	42.9
Pm Cyclically-adjusted balance		0.3	4.0	3.6	3.2	2.5
Pm Cyclically-adjusted primary balance		3.4	6.8	6.3	5.8	5.0

([1]) Commission 2002 spring forecast.
([2]) UMTS receipts excluded.
([3]) In kind and other than in kind.

Source: Commission services

On the expenditure side, slippage in central government spending contributed to a marked rise of general government expenditure by 0.5 percentage points to 44.25 % of GDP. This was due to discretionary increases in permanent expenditure in many areas of the budget and led to a marked deviation from the medium-term spending guidelines. According to the budget for 2002, the deviation from the spending guidelines is expected to continue with the anticipated increase of central government expenditure being more than 4 % above the 2001 budget in real terms. In light of this, the central government's aim of achieving a structural surplus in the medium term has become more challenging. Furthermore, the higher than planned rise in expenditure makes the aim of continued income tax cuts as an instrument to boost employment more difficult to achieve.

Due to a still strong primary surplus of 5.6 % of GDP, the general government-debt ratio fell to 43.6 % in 2001 from 44 % in the previous year. However, the updated stability programme of November had predicted the debt ratio to fall to 42.75 % in 2001. The discrepancy is mostly explained by financial operations of pension funds which restructured their assets by shifting large parts of their Finnish Government bonds to bonds issued in other countries of the euro area. Although the government's aim of pushing the central government-debt ratio to below 50 % of GDP ([1]) by 2003 (45.7 % of GDP in 2001) appears feasible, the safety margin against age-related expenditure pressures has shrunk as both the actual debt and the debt ratio are expected to rise again after 2002.

([1]) Excluding income from sales of government property.

Table VI.29

Key figures of the Finnish stability programme ([1]) (2001–04)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	5.7	0.6	1.6	2.7	3.0	n.a.
General government budget balance (% of GDP)	6.9	4.7	2.6	2.1	2.6	n.a.
Primary surplus (% of GDP)	7.9	5.4	2.9	2.3	2.8	n.a.
Government debt (% of GDP)	44.0	42.7	42.9	43.0	41.8	n.a.

([1]) UMTS receipts excluded.

Source: 2001 update of the stability programme of Finland.

The November 2001 update of the stability programme foresees a general government surplus of 2.6 % of GDP in 2002. Recently, this estimate was revised to 3.5 %, close to the Commission services estimate of 3.25 %, due to a certain lag in central government corporate tax revenue from 2001. Also, the finances of social security institutions appear more positive due to the exclusion of certain small private-like funds from the calculation in finances of the social security institutions. This projection is predicated on a tight budgetary execution in 2002.

Based on the government's budgetary policy strategy of reaching, through expenditure restraint, a structural surplus in the central government finances of the order of 1.5–2 % of GDP in the medium term, the stability programme of November 2001 foresees the general government surplus to improve from just over 2 % of GDP in 2003 to some 2.5 % in 2004. However, in the light of the experience of expenditure slippage in the recent past, for this to materialise renewed efforts of controlling central government spending seem to be required.

Continued deficits in local government finances

The 448 municipalities in Finland are obliged by law to provide a large number of statutory services (e.g. education and healthcare, social welfare and infrastructure as well as rescue services). They enjoy a fairly large independence in the public administration and in the financing of their activities. In recent years, central government transfers have been increased owing to extended functions of municipalities and corresponding cost-sharing agreements between the central and local government. However, growth in expenditure of local governments has exceeded that of income. Moreover, differences among individual municipalities' financial positions have remained large.

After benefiting from a robust corporate tax yield in 2000, resulting in a surplus of 0.1 % of GDP, the municipalities returned to a deficit position of 0.3 % of GDP in 2001. This imbalance in finances is expected to continue at least until 2003, with the risk of creating a trend analogous to that experienced in the late 1990s.

In 2001, total revenue of local governments increased by 3.5 %. Income taxes increased due to a rise in the wage sum and to a slight increase in the average municipal tax rate. In addition, transfers received from the central government reached a post-recession record high. On the other hand, corporate tax yield of the local government decreased compared to the record high level in 2000. Moreover, total expenditure increased nominally by 7 %, following an upswing in investments and an increase in consumption. In addition to a rise of salaries, consumption expenditure increased due to a hike in spending on service provision, especially on those services which were purchased from other producers.

In 2002, the increase in total revenue of local governments is still expected to be buoyant owing to a further rise in central government transfer payments. However, this is mostly due to a change in the system of VAT refund redemption from local government which was abolished at the beginning of 2002. Furthermore, the net revenue from the central government following from the introduction of new statutory functions (in particular in healthcare, education and social assistance for the poorest) is estimated to boost local government finances by some EUR 250 million (0.2 % of GDP) in 2002. On the other hand, other income is anticipated to decrease due to continued income tax cuts and to a further cut in the local governments' share in corporate tax yield. Also, total expenditure is estimated to continue to increase at a rapid pace owing to new statutory services and an expected expansion of local government employment.

Abstracting from the surplus of 0.1 % of GDP in 2000, local government finances have posted a deficit in their finances since 1997 and, according to the updated stability programme of 2001, this trend is to continue at least up to 2003. In contrast to the 2000 update of the programme, local government finances are now expected to move into a marked deficit during the period 2001–03. Due to the large share of basic services provided to citizens by the municipalities, local governments are particularly challenged by future expenditure pressures stemming from the healthcare and the long-term care of the elderly. Budgetary discipline at general government level could be enhanced by recently adopted legislation requiring local governments to aim for budgetary balance in their finances in the medium term from 2002 onwards. However, in the absence of an enforcement mechanism in the legislation, it remains to be seen whether the hoped-for results can be achieved.

Developments of central and local government finances in 2000–02 have been strongly influenced by the cyclical movement of capital and corporate tax revenues. In view of the corporate sector's expected poorer economic performance, in the short term, the task of improving the budget balance of local government risks to become challenging due to the nature of local government expenditure. The basic services will still have to be provided, but with much less cyclical income. As a consequence, investments would seem to represent the main item of expenditure which municipalities are able to reduce in the short term.

In the medium term, supplementary measures to create savings in the local government expenditure are required in order to reach the aim of balanced budgets. For example, the cost efficiency of local governments' service provision could be enhanced by increasing competition between external producers but also by improving cooperation between municipalities. Furthermore, economies of scale could be reaped, for instance, by raising the average size of the municipalities. It is estimated that the unit costs of producing a service in the local government sector would be lowest in a municipality of around 20 000 inhabitants (currently the average is just over 11 000). In addition, revamping production procedures by investing in new technologies could bring higher efficiency to public services. On the revenue side, municipalities have the theoretical possibility of raising income tax rates but this option is limited by the interregional mobility of tax bases.

Council opinion on the updated stability programme of Finland for the period 2001–04

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordina-

tion of economic policies ([1]), and in particular Article 5(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002 the Council examined Finland's updated stability programme, which covers the period 2001–04. The Council notes with satisfaction that the general government surplus, which exceeded expectations in 2000, is projected to remain at a fairly high level throughout the programme period. The general government debt-to-GDP ratio is expected to continue to decline, although more moderately than previously projected. The Council considers that the updated programme is consistent with the broad economic policy guidelines.

The macroeconomic scenario presented in the 2001 updated stability programme expects a strong deceleration of economic growth in 2001, mainly due to the sharp decline in the external balance. In the following years, GDP is assumed to gradually accelerate attaining a rate close to potential at the end of the period. Although considerable risks regarding the short-term outlook prevail at the moment, most recent data suggest that the economy has bottomed out in the second half of 2001. As a consequence, the assumption of a revival from 2002 on appears plausible. However, this crucially hinges on the expected upturn of employment growth which, in order to materialise, needs to be supported by wage moderation.

The Council notes that the programme foresees a decline in the general government surplus from its exceptionally high level in 2000 to a level of somewhat above 2 % of GDP over the period 2002–04. This must be seen in the light of the high surpluses reached in 2000 and 2001. The projected reduction in the surplus partly results from the strong downward revision of GDP growth. But it is also due, in 2002, to tax cuts and to higher than originally foreseen spending, thus deviating from the medium-term central government spending ceilings. Such a deviation had also occurred in 2001. The Council recommends that the spending ceilings are firmly adhered to in coming years and that some of the lost ground is regained in the spring 2002 review of the spending ceilings. The Council, furthermore, welcomes the recent adoption of legislation requiring local governments to balance their budgets in the medium term. The Council recommends close surveillance of this regulation in order to ensure that its aims are achieved. In the light of Finland's particular exposure to expenditure pressures related to population ageing the Council considers it essential that high government surpluses are maintained in the medium term allowing the government-debt ratio to decline at a sufficient pace.

The Council notes that the projected surplus in the government accounts is fully in line with the requirements of the Stability and Growth Pact throughout the programme period. Moreover, the estimated cyclically-adjusted government balance of more than 2 % of GDP should provide a sufficient safety margin against a breach of the 3 % of GDP reference value for the government deficit in normal cyclical fluctuations.

The Council welcomes the updated stability programme's commitment to continued structural reforms. Planned government action to start the reform of the unemployment benefit system is welcome in the light of rising unemployment. Also, the planned reform is welcome in order to complement the favourable outcome of continued labour tax cuts aimed at reducing the current heavy overall tax burden on labour to boost employment creation. Further structural reforms in the private service sector and in the labour market would also support employment creation. Moreover, the reform of the pension system should be finalised as scheduled.'

([1]) OJ L 209, 2.8.1997.

Box VI.13. **2002 BEPG's recommendations to Finland on budgetary policy ([1]):**

'[…] considering that Finland is a member of the euro area, budgetary policy should aim to:

i. avoid a significant deviation from the medium-term spending guidelines of keeping government expenditure in real terms at the level of 1999; to this end adhere tightly to the budget's expenditure target for 2002 and adopt the necessary expenditure reducing measures in the budget for 2003;

ii. improving the budgetary discipline at local government level by establishing an enhanced surveillance mechanism to the recently adopted regulation requiring local governments to aim for budgetary balance in their finances in the medium term; and

iii. continue with determination the ongoing process of pension reform, in particular adopt and implement at an early stage the envisaged changes in the pension formula by taking into account the increased life expectancy and extending the period of calculation for pensionable earnings to the whole work career.'

([1]) Adopted by the Council on 21 June 2002.

14. Sweden

Recent developments and medium-term prospects

The Swedish Government finances have been in surplus since 1998, and in 2001 the surplus rose markedly to 4.8 % of GDP (4.6 % expected in last convergence programme), compared with 3.7 % of GDP in 2000. This was achieved due to both a fall in the expenditure-to-GDP ratio and higher-than-expected tax revenue. Total expenditure decreased by 0.6 percentage points of GDP, mainly as a result of lower interest payments. Total revenue increased by 0.5 percentage points of GDP due to mainly buoyant tax revenue, in spite of the tax cuts implemented in 2001, resulting in an increase of the tax burden. Carry-over effects from 2000 also contributed to the strong tax revenues. The general government primary surplus increased from 7.9 % of GDP in 2000 to 8.2 % of GDP in 2001.

As in previous years, the favourable position in public finances was aided by strict expenditure control. The strategy of setting ceilings on central government expenditure three years ahead has proven to be an effective tool in medium-term budget planning. Expenditure covered by the ceiling in 2001 came out below projections (by 0.2 % of GDP). The cyclically-adjusted balance rose to 4.2 % of GDP from 2.14 % of GDP in 2000 and the cyclically-adjusted primary balance rose to 7.6 % of GDP from 6.4 % of GDP in 2000.

The general government-debt ratio was 55.9 % of GDP in 2001, virtually unchanged from 2000, despite the large surplus in 2001 noted above. This can be attributed to a substantial — and larger-than-expected — reduction in the public pension funds' (*AP fonder*) holdings of government debt, from 13 % of GDP in 2000 to 4 % of

Table VI.30

Composition and balance of general government, Sweden ([1]) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance ([2])		1.5	3.7	4.8	1.7	1.9
— Total revenue		61.6	61.4	61.9	59.0	58.6
Of which:	— current taxes	38.7	36.7	38.0	35.5	35.4
	— social contributions	13.7	15.8	16.3	16.1	16.0
— Total expenditure ([2])		60.3	57.7	57.1	57.3	56.8
Of which:	— collective consumption	7.5	7.3	7.4	7.5	7.5
	— social transfers ([3])	38.1	37.1	37.3	37.7	37.6
	— interest expenditure	5.0	4.2	3.4	3.1	2.9
	— gross fixed capital formation	2.7	2.5	2.6	2.6	2.6
Primary balance ([2])		6.3	7.9	8.2	4.8	4.8
Pm Tax burden		52.6	52.6	54.3	51.6	51.4
Government debt		65.0	55.3	55.9	52.6	49.9
Pm Cyclically-adjusted balance		0.5	2.1	4.2	1.8	1.7
Pm Cyclically-adjusted primary balance		5.4	6.4	7.6	4.9	4.6

([1]) Commission 2002 spring forecast.
([2]) UMTS receipts excluded.
([3]) In kind and other than in kind.

Source: Commission services

GDP in 2001. Since 2000, the AP funds are required to hold less of their assets in government debt. About half of the decrease was related to the third transfer from the pension fund to central government and half due to the funds' portfolio allocation choice.

In 2002, the surplus in government finances is expected by the Commission services to fall substantially, to 1.7 % of GDP, despite a higher GDP growth forecast of 1.7 %. The expenditure-to-GDP ratio is expected to remain virtually unchanged, aided by expenditure control by means of the previously-set ceiling on central government expenditure. However, tax revenues are expected to fall as a result of lower corporate and capital gain tax revenue. Moreover, the tax cuts implemented in 2002 result in lower tax revenue. The cyclically-adjusted surplus is expected to fall by 2.4 percentage points, whereas the cyclically-adjusted primary surplus is expected to fall by 2.7 percentage points.

In the budget for 2002, a surplus of 2.1 % of GDP was projected. This is somewhat above the Commission's forecast, and is mainly due to a slightly more optimistic view on tax revenue and private consumption.

The Commission's spring forecast suggest a gradual return towards a general government surplus of 2 % of GDP in 2003 and a decline in the debt ratio to below 50 % of GDP in 2003. This is expected to be achieved with some further falls in both the revenue- and expenditure-to-GDP ratios.

The overriding goal of fiscal policy as set down in its 2001 updated convergence programme is to maintain sound public finances. To achieve this, Sweden's medium-term budgetary strategy is three-fold and consists of: (i) nominal ceilings on central government expenditure set annually for three years ahead, (ii) a medium-term balanced budget constraint for local governments and (iii) a 2 % of GDP surplus target for general government finances on average over the business-cycle. The latter forms an integral part of Sweden's strategy to cope with the budgetary consequences of ageing populations.

In the 2002 Spring Fiscal Policy Bill, the general government surplus is projected to be close to 1.8 % of GDP in each year between 2002 and 2004. These budgetary projections are based on real GDP growth of 1.4 % in 2002 and 2.8 % in 2003 and 2.5 % in 2004. The government debt-to-GDP ratio fell below 60 % of GDP in 2000 and is expected to fall further, to 48.4 % of GDP by 2004. From January 2000, a balanced budget requirement for local governments was introduced. Calculations in the budget point to a surplus in this sector in 2002 and the achievement of balance in 2003 and 2004. The targets set for public finances are in accordance with the requirements of the Stability and Growth Pact.

Table VI.31

Key figures of the Swedish convergence programme ([1]) (2001–04)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.6	1.7	2.4	2.6	2.3	n.a.
General government budget balance (% of GDP)	4.1	4.6	2.1	2.2	2.3	n.a.
Primary surplus (% of GDP)	7.5	7.6	5.0	4.8	4.8	n.a.
Government debt (% of GDP)	55.6	52.3	49.7	47.3	45.2	n.a.

([1]) UMTS receipts included.

Source: 2001 update of the convergence programme of Sweden.

Expenditure control in the medium-term — the test for the expenditure ceilings on central government

The Swedish Government introduced a procedure of expenditure ceilings on central government to be set three-years ahead with the 1996 budget law. This procedure has proven useful in that it limits the risk for slippage in the budget, as it imposes institutional restrictions on increased spending. It has also been successful in the sense that these ceilings have been adhered to since 1997, when they where first introduced, and also in the sense that expenditure in relation to GDP has been on a declining trend. It can therefore be said that the respect

of the ceilings has been instrumental in strengthening the credibility of public finances.

Sweden experienced remarkable economic growth between 1998 and 2000, averaging 3.9 %, accompanied by strong employment growth and a reduction of the unemployment rate. This has acted in the direction of limiting the demand and need for expenditure increases beyond projections.

However, Swedish economic growth, as in most other economies, is set to be much lower in 2001 and likely to remain relatively subdued in 2002. Moreover, with the unemployment rate being widely regarded as being near the NAIRU, there is not much scope for a continuation of the strong employment growth observed in recent years.

In the budget for 2002, the contingency reserves (the buffers within the ceilings) were narrowed further for the coming three years. Moreover, it is possible that there may be overruns in some expenditure areas if the economy comes out below the government's expectations (which are rather high, as the macroeconomic scenario was finalised prior to the 11 September disaster). The government has declared on several occasions that it stands ready to take restraining measures on expenditure, in order to ensure adherence to the ceilings set overall, which is in line with the budget law. This commitment was reiterated in the 2002 spring policy bill published on 15 April, despite a downward revision of the GDP growth forecast in 2002 ([1]).

The budget law states that the government should twice a year report to Parliament (this has been done when presenting the fiscal policy bill in the spring and the budget bill in the autumn in the past) if signs of overruns emerge, and to propose measures to correct these overruns if the overall ceiling is threatened. However, Parliament may decide on changing the ceilings, which illustrates that the procedure has some flexibility.

The issue at this stage is whether discretionary cuts in spending will take place, in the case of worse than projected economic growth, particularly as unemployment may rise in 2002 (low unemployment continues to be the central objective for the government) or whether other routes will be explored.

To this end, a temporary cut in indirect wage costs for local authorities in 2002 was proposed last autumn. In addition, if local authorities hire new personnel, the indirect wage costs for these would be suppressed altogether in 2002. The proposal totals 0.1 % of GDP. It could be argued that these measures are grants to the local authorities sector, couched in terms of lower revenue. This because it is a targeted measure towards one particular sector and the fact that it is temporary. Subsequently, the proposal was changed so that private companies who provide services to local governments (outsourcing) should not be excluded from the 'tax rebate' ([2]).

In addition, an exemption for social security contributions for Swedish sailors was introduced and booked as a reduction in tax revenues. Arguably this, too, could be seen as sector-specific subsidy and an expenditure increase.

This type of operation may adversely affect the credibility of the expenditure ceiling procedure as a means to avoid slippage. Indeed, in the report published on 12 March 2002 by the government-appointed Committee on Stabilisation Policy for Full Employment if Sweden joins the Monetary Union, the use of the expenditure ceilings in Sweden is being addressed in the context of ensuring maintained expenditure control in 'good times'. The report notes that '[…] the so-called budget margin — the difference between the government expenditure ceiling and estimated expenditure — has come to be viewed more as a 'room for new expenditure increases' than as a safety margin for dealing with uncertainty in expenditure forecasts.'

In order to ensure a successful use of expenditure, ceilings on central government as a means to contain expenditure in the medium-term could therefore gain from a stricter implementation of the so-called budget margin to reflect an adequate margin for forecast errors.

([1]) It should be noted that with the 2002 spring fiscal policy bill, the government no longer includes a proposal for an expenditure ceiling at t + 3, i.e. for 2005. Instead, such a ceiling will be proposed when presenting the budget for 2003, to be released in the autumn of 2002.

([2]) Technically, the local governments' tax accounts are credited with a total of 0.1 % of GDP, with the shares among local governments determined by the size of wage costs (including outsourced activities).

Council opinion on the updated convergence programme of Sweden, 2001 to 2004

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 9(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 22 January 2002, the Council examined Sweden's updated convergence programme, which covers the period 2001–04. The Council notes with satisfaction that the updated programme envisages continued government surpluses throughout the period to 2004 as Sweden maintain their medium-term objective of a budget surplus of 2 % of GDP on average over the business cycle. The strategy of lowering the expenditure ratio is supported by a commitment to adhere to the ceilings for central government expenditure, which have been instrumental in strengthening the credibility of sound public finances in recent years, and a balanced budget constraint for local governments. This is accompanied by a lowering of the tax ratio, now extended with additional tax cuts proposed for 2002. The Council considers this budgetary strategy appropriate and it is in line with the previous Council opinion ([2]) and the broad economic policy guidelines. The Council further notes with satisfaction that the debt ratio fell below the reference value of 60 % of GDP in 2000, and is expected to continue to fall substantially over the remainder of the programme period.

The macroeconomic scenario presented in the programme, with GDP growth of 1.7 % in 2001 and 2.4 % in 2002 appears optimistic and the Council considers that there are considerable downside risks to growth, especially in 2002, as the global outlook has worsened since the macroeconomic scenario in the programme was finalised. On the other hand, a low-growth scenario is presented in the programme update, which shows that the budget is in surplus despite a substantially lower growth in 2002. For 2003 and 2004, the projections in the programme appear sensible.

The Council notes with satisfaction that with the budgetary surpluses targeted in the updated programme, Sweden continues to fully respect the Stability and Growth Pact's requirement of a fiscal position "close to balance or in surplus". This remains valid in case that economic growth should be weaker and result in lower surpluses in the public finances than projected in the programme, as the Commission's autumn 2001 economic forecasts suggest. Furthermore, the Council welcomes the attention given in the programme to the sustainability of public finances. The Council notes that Sweden's strategy on this hinges on maintaining a surplus of 2 % of GDP in the long term. By lowering debt and interest payments, this will make room to cover much of the costs related to ageing to be faced in later years. Given the relatively high tax ratio in Sweden compared to other industrialised countries, the Council encourages Sweden to continue to reduce it further.

The Council notes that Sweden at present fulfils the convergence criterion on price stability and is expected to continue do so in the years to 2004. After several years of low inflation, a sharp rise occurred in the spring 2001 and it has remained relatively high since. Inflationary pressures are, nevertheless, expected to be lower in 2002 and beyond, underpinned by the expected subdued economic activity and continued wage moderation.

Long-term interest rates in Sweden have remained at historically low levels, even though they have generally fallen less than in many other Member States during 2001, possibly linked to the weakening of the krona and increased uncertainty about global economic prospects. Sweden is expected to continue to fulfil the interest rate convergence criterion. Sweden does still not fulfil the exchange rate convergence criterion. The krona has been volatile since the submission of the previous update and the Council reiterates that Sweden needs to demonstrate its ability to stay in line with an appropriate parity between the krona and the euro over a sufficient period of time without severe tensions. To

([1]) OJ L 209, 2.8.1997.
([2]) OJ C 73, 6.3.2001.

this end, the Council, as stated in its opinion on the updated 2000 convergence programme ([1]), "[…] expects Sweden to decide to join the ERM2 in due course". In order to obtain high and sustainable economic growth, the strategy of previous programmes is continued and structural measures in this regard have been implemented. Among these measures, the lowering of the, still, high tax burden will provide better incentives to encourage people to work, consistent with the broad economic policy guidelines. The Council welcomes these structural measures and encourages the Swedish Government to implement these initiatives with determination.'

([1]) OJ C 73, 6.3.2001.

Box VI.14. **2002 BEPG's recommendations to Sweden on budgetary policy ([1]):**

'[…] budgetary policy should aim to:

i. continue with the strategy of lowering taxes for low and medium wage earners in 2002 and at the same time ensure adherence to the central government expenditure ceiling; and

ii. achieve in 2003 a general government surplus in accordance with the government's medium-term surplus target of 2 % of GDP over the cycle for the government finances while maintaining tight expenditure control.'

([1]) Adopted by the Council on 21 June 2002.

15. United Kingdom

Recent developments and medium-term prospects

The government finances in 2001 again achieved a substantial surplus. The latest estimated outturn for the general government balance was a surplus of 0.9 % of GDP following a surplus of 4.1 % in 2000 though the latter was boosted by UMTS receipts; excluding these, the surplus in 2000 was 1.8 % of GDP. In financial year 2001–02, the outturn was a deficit of 0.2 % of GDP as expected in the latest convergence programme. The reason for the lower surplus in 2001, was the result of some stimulatory taxation measures and planned rises in government expenditure in excess of GDP growth, but also receipts were lower than expected due, in part, to the effects of the global economic slowdown on financial markets and companies. The tax burden is estimated to have decreased from 39 % of GDP in 2000 to 38.9 % in 2001. In particular, taxes on income grew little due, in part, to the aforementioned effect on the financial sector. A rise in current consumption and capital expenditure as a percentage of GDP was partly offset by a fall in interest payments as UK gross debt continued to fall. The cyclically-adjusted primary surplus, as a percentage of GDP, fell in 2001. The general government debt fell to 39 % of GDP at the end of 2001 from 42.4 % at the end of 2000.

The public finances are expected to weaken in 2002 and the general government finances are expected to show a small deficit of 0.2 % of GDP in that year. The authorities, in the budget announced in April, expect a deficit of 1 % of GDP in 2002–03. This weakening in the government finances is due to planned expenditure rises over the period to financial year 2002–03 and some tax cuts

Table VI.32

Composition and balance of general government, United Kingdom (1) (as % of GDP)

		1999	2000	2001	2002	2003
Government balance (2)		1.1	4.1	0.9	– 0.2	– 0.5
— Total revenue		40.4	40.9	41.0	41.0	40.6
Of which:	— current taxes	30.0	30.6	30.4	30.4	30.2
	— social contributions	7.5	7.4	7.7	7.6	7.6
— Total expenditure (2)		39.3	36.9	40.1	41.2	41.1
Of which:	— collective consumption	7.3	7.5	7.6	7.8	7.9
	— social transfers (3)	24.5	24.6	25.4	25.8	25.7
	— interest expenditure	2.9	2.8	2.4	2.3	2.2
	— gross fixed capital formation	1.1	1.1	1.3	1.5	1.7
Primary balance (2)		4.0	6.7	3.3	2.1	1.7
Pm Tax burden		37.7	38.3	38.2	38.2	37.8
Government debt		45.2	42.4	39.0	37.6	36.1
Pm Cyclically-adjusted balance		1.0	1.2	0.6	– 0.2	– 0.7
Pm Cyclically-adjusted primary balance		3.9	4.0	3.0	2.1	1.5

(1) Commission 2002 spring forecast.
(2) Data for 2000 (except cyclically-adjusted) include UMTS receipts of 2.4 % of GDP.
(3) In kind and other than in kind.

Source: Commission services

that have been announced in earlier budgets and pre-budget reports. In addition, the finances will continue to be affected, albeit temporarily, by a continuation of lower-than-expected tax receipts resulting from financial market factors. To summarise, the fall in the cyclically-adjusted balance is around 0.8 % of GDP between 2001 and 2002 on the Commission services projections. This expansionary stance is not expected to present problems in the UK where inflation is amongst the lowest in the EU and indeed, rises in general government consumption should help maintain respectable GDP growth of 2.0 % in 2002.

The public finances look sound in the short term and the Commission services are projecting a deficit of 0.5 % of GDP in 2003. However, the latest budget projections show the public finances moving into deficit 1 % of GDP in 2002–03 which rises to 1.5 % of GDP in 2006–07. This deficit of 1 %, or more, of GDP persists as the result of a cautious trend growth assumption, for GDP, and as a result of addressing the low level of government investment.

Gross debt as a percentage of GDP is expected to be around 37 % in 2006–07 in the budget projections. With a low debt-to-GDP ratio, the UK is in a good position to meet the consequences of ageing populations and the public finances are sustainable on current policies.

Table VI.33

Key figures of the UK convergence programme (1) **(2001–05)**

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	2 3/4	2.0	2.25	2.5	2.25	2.25 (6)
Gen. gov. budget balance (% of GDP)	2.0	– 0.2	– 1.1	– 1.3	– 1.1	– 1.0 (6)
Primary surplus (% of GDP)	3.5	0.9	– 0.1	– 0.3	n.a.	n.a.
Government debt (% of GDP)	39.9	38.1	37.2	37.0	36.8	36.6 (5)

(1) UMTS receipts excluded (2.4 % of GDP in 2000).

Source: 2001 update of the convergence programme of United Kingdom.

Delivering high-quality public services

The government has set out its fiscal rules. These are aimed at achieving a balance or surplus on the public finances current account over the economic cycle (the so-called golden rule) and ensuring that net public-sector debt relative to GDP is maintained at a stable and prudent level over the cycle. Within the achievement of these rules, the government has promoted many individual policies on both expenditure and taxation that have been designed to address economic and social reform. These have been introduced to meet principal elements in its strategy for meeting its long-term goals — combining a stronger more enterprising economy with a fairer more just society. One principal element in that strategy is 'delivering high-quality public services'. This will ensure tax payers receive real value for money.

In terms of resources made available to public services, it is important to note that in several important areas, the UK devotes relatively less than many other EU/OECD economies. The recent OECD survey on the UK (OECD economic surveys 2001–02 United Kingdom), noted that while public expenditure is roughly on a par with the OECD average, it is some seven percentage points of GDP below the EU average. On merit goods (education, health and social services) public expenditure is a little below the EU average, at around 11 % of GDP though well below that of France and Germany at around 14 %. On economic services (transport, infrastructure, housing, etc.) public expenditure, at around 3 % of GDP, is below the OECD and EU average of around 4 %. In particular, public investment as a share of GDP was, in 1999, the lowest in a broad sample of OECD economies and this picture holds in general when one allows for the private finance initiative (PFI) addressed below, and the privatisation of State-owned companies.

The achievement of the government's own fiscal rules (described above) has allowed resources to be made available to increase public expenditure with the inten-

tion, of course, of strengthening public services. The spending framework is underpinned by those fiscal rules. Resources are allocated through bi-annual spending reviews that set departmental spending plans over three-year periods. These departmental expenditure limits (DELs) cover expenditure in the areas where it can be sensibly controlled and are intended to provide departments with greater certainty over their budgets and give incentives to plan over the medium term. There is a firm division between capital and resource budgets ensuring that funding for long-term investment cannot be used to resource current pressures. Further, departments are allowed to keep resources not fully spent at end of the year. As well as providing resources for such spending the government has introduced public service agreements (PSAs) which, for each department set out the key outcomes that the government is committed to achieve, for example, better health, lower crime rather than inputs. Funding is linked to delivery.

To ensure achievement, the PSAs have been underpinned by a delivery mechanism that includes elements such as departments securing 'ownership' (of targets) by consulting those responsible directly for delivery, for example hospitals, schools, police, establishing performance-management systems, monitoring progress and ensuring accountability by those responsible for delivery.

The government have recently given some examples of target achievement where the above approach has already had an impact. To illustrate this, for example, 71 % of children recently achieved level 4 in mathematics compared to 59 % in 1998. The average delay between arrest and sentence for persistent young offenders was reduced from 142 days in 1996 to 66 days in August 2001. Following creation of a rough sleepers unit, there has been a 62 % reduction in the number of people sleeping rough compared with 1998.

The PSA approach is intended to evolve with experience and the 2000 spending review reduced the number of targets from around 300 to 160 to focus effort clearly on priority areas for action.

As noted above, recent fiscal policy and associated developments has made more money available for 'frontline' services. The growth of social security payments has slowed to, a projected, 2.1 % a year in real terms between 1997–98 and 2002–03 compared with 4.1 % a year between 1991–92 and 1996–97. Debt interest payments which rose by over 6.6 % a year between 1991–92 and 1996–97 are projected to have fallen by 8.6 % a year in real terms between 1997–98 and 2002–03. Accordingly, the 2000 spending review allowed much, in the way of additional resources, to be allocated to priority areas and real expenditure, between 1997–98 and 2002–03 is expected to have risen by 6.3 % a year for health, 5.1 % a year for education. Further, much has been done, and is planned to be done to address long-term improvements in infrastructure including a more than doubling of net investment as a share of GDP over the period 2000–01 to 2002–03. The 2002 budget made more resources available for expenditure, both current and capital. While details are to be announced in the 2002 spending review, health spending is planned to rise by 7.5 % a year to 2007–08.

The 2002 spending review is expected to look at the effectiveness of existing programmes, how departments are delivering PSA targets and to release funds to spend on priority services.

One aspect of the initiative to improve delivery of public services is the private finance initiative (PFI). Under this, the public sector buys services from a private sector partner. The private sector partner undertakes the capital investment and its ability to manage risks allocated to it, can result in the provision of a service at a price that represents value for money. Approval of a PFI scheme depends on an assessment of the lifetime costs of providing and maintaining the underlying asset (a school say) and the running costs of delivering the required service.

From the 2002 budget report, since 1997, projects with a combined capital value of GBP 18 billion have been signed in a variety of areas such as schools, colleges, hospitals, local authorities, defence and property management. From 2002–03 to 2004–05 some GBP 26 billion of new investment by the private sector is expected as a result of PFI and Public Private partnerships (PPP). Estimated payments by the public sector, flowing from private investment in signed projects, are estimated to be around GBP 5 billion a year; equivalent to 0.5 % of GDP.

The OECD notes that the PFI 'concept' is not new and is used in Europe and elsewhere; but there, it has been almost exclusively used for transportation infrastructure. The PFI, itself, is unique in that it extends the operation 'of structures for public services, such as hospitals, schools and prisons although transport still accounts for two thirds of deals'. Further, the OECD notes that the overall volume of comparable contracts concluded in the UK in 2000, at

2.3 % of GDP, far exceeded those of other countries for which data were available. The OECD further notes that private PFI investment in 2000–01 was equivalent to 0.4 % of GDP and corresponded to one third of net investment by the public sector and the PFI taken together.

The important initiatives undertaken by the government in recent years are likely to be monitored closely in terms of the resulting efficiency and effectiveness in delivering public services.

Council opinion on the updated convergence programme for the United Kingdom, 2000–01 to 2006–07

'THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community,

Having regard to Council regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies ([1]), and in particular Article 9(3) thereof,

Having regard to the recommendation of the Commission,

After consulting the Economic and Financial Committee,

HAS DELIVERED THIS OPINION:

On 12 February 2002 the Council examined the updated convergence programme of the United Kingdom which covers the period 2000–01 to 2006–07. The programme envisages a government deficit of 0.2 % of GDP in 2001–02, a deficit of 1.1 % in 2002–03 rising to 1.3 % of GDP in 2003/04 before falling to 1 % of GDP in the two final years of the programme; 2005–06 and 2006–07. The Council considers it appropriate that the programme stresses the securing of macroeconomic stability supported by sound monetary and fiscal policies and continued structural reform.

The programme is built upon a macroeconomic framework showing GDP growth of 2.25 % in 2001 and the same in 2002, rising to 3 % in 2003 before returning to growth, at trend, of 2.5 % in 2004. The Council considers the macroeconomic forecasts and the trend growth assumption of 2.5 % to be realistic. It notes, the projections in the programme for the public finances are, for reasons of caution, based on a lower assumption for trend growth namely 2.25 %.

With respect to inflation and interest rates, the United Kingdom continues to fulfil the convergence criteria with some margin. The Council notes that the monetary framework of inflation targeting, with operational responsibility for interest rate changes given to the Bank of England, has been an important condition for securing low inflation expectations. The Council notes that under the current policy framework, the programme projects the UK inflation target to be achieved over the programme period. The United Kingdom has fulfilled the convergence criterion on the long-term interest rate for some time. This helps confirm the credibility given to the UK's stability-oriented framework for macroeconomic policy. The Council recommends that the United Kingdom continue with the stability-oriented policies with a view to securing exchange-rate stability which, in turn, should help reinforce a stable economic environment.

The general government finances are, in the current year, 2001–02, expected to be close to balance, in actual and also in cyclically-adjusted terms, thus fulfilling the requirements of the Stability and Growth Pact. However, the Council notes that a projected deficit of a little more than 1 % of GDP emerges in 2002–03 and persists, around that level, in the remaining years of the plan to 2006–07. A deficit of around 1 % of GDP now emerges one year earlier than in the previous update, largely as the result of temporary economic factors (including a lower level of GDP than previously projected, and lower financial company profits). The Council acknowledges that, in the medium term, this 1 % of GDP deficit persists in the projections, both unadjusted and cyclically-adjusted, as a result of the use of a very cautious trend growth assumption of 2.25 % per annum from 2003–04 onwards and as a result of addressing the low level of government investment — as suggested in the 2001 BEPGs. However, in view of a sustained deficit of 1 % of GDP, or thereabouts, which is based on a very cautious growth assumption, it notes the requirements of "close to bal-

([1]) OJ L 209, 2.8.1997.

ance or surplus in the medium term" contained in the Stability and Growth Pact. Therefore, the Council encourages the government to be alive to any deterioration in public finances that would take them away from the terms of the Stability and Growth Pact and, if necessary, to take remedial action. The Council appreciates that the debt-to-GDP ratio is low and falling. Gross debt relative to GDP falls from 40 % in 2000–01 to the low level of 36.3 % by 2006–07.

The Council notes that the programme provides an assessment of the long-term outlook of the public finances and a description of policies that could be addressed to minimise the impact of ageing. The Council considers that the UK, with a low and falling debt-to-GDP ratio, is in a good position to meet the consequences of ageing populations and welcomes that the public finances are sustainable on current policies.

The Council welcomes the structural reforms included in the programme. It notes, with approval, that the progress on economic reforms should help to raise productivity performance and secure further improvements in the labour market.'

Box VI.15. **2002 BEPG's recommendations to the United Kingdom on budgetary policy** ([1]**):**

'[…] budgetary policy should aim to:

i. allow public investment, net of depreciation, to rise between 2001 and 2002, as projected in the convergence programme, and as suggested in the 2001 BEPGs; and

ii. be alive to any deterioration in the public finances that would take them away from the terms of the Stability and Growth Pact and, if necessary, take remedial action'.

([1]) Adopted by the Council on 21 June 2002.

Part VII

Resources

1. Opinion on the content and format of stability and convergence programmes ([1]) (2001 code of conduct)

This opinion updates and replaces the opinion of 12 October 1998 of the Monetary Committee to the Council. The Stability and Growth Pact entered fully into force on 1 January 1999. It requires Member States to submit stability or convergence programmes which are at the basis of the Council's strengthened surveillance of budgetary positions and its surveillance and coordination of economic policies. The Commission's and the Council's role is considerably enhanced by the pact. The Council, on a recommendation from the Commission, and after consulting the Economic and Financial Committee, delivers an opinion on each programme and if it considers that its objectives and contents should be strengthened, it invites the Member State concerned to adjust its programme.

A fundamental element of the stability and convergence programmes is the medium-term objective for the budgetary position of close to balance or in surplus (see Articles 3(2) and 7(2) of the regulation). The Amsterdam European Council declared in its resolution of 17 June 1997: 'adherence to the objective of sound budgetary positions close to balance or in surplus will allow all Member States to deal with normal cyclical fluctuations while keeping the government deficit within the reference value of 3 % of GDP'. It is therefore clear that the assessment of the appropriateness of Member States' medium-term objectives and the examination of their fulfillment have to take explicit account of the cyclical position and its effect on the budget. Cyclically-adjusted balances should continue to be used, in addition to nominal balances, as a tool when assessing the budgetary position.

The time frame for interpreting the medium term would be the length of the business cycle. In practice, one has to adopt an approximate approach when assessing how actual and expected budgetary developments compare with the requirement of medium-term budgetary positions close to balance or in surplus. In particular, one has to assess the likely impact of cyclical effects on current and future developments in budgets. This exercise requires some kind of method.

Obviously, each method has its strengths and weaknesses and therefore its results need to be interpreted with caution. Bearing this in mind, the Committee for the time being and pending further analysis of alternative methods, takes the present Commission services' cyclical adjustment method as a useful approach for assessing the budgetary position. Using that method, the Commission estimated 'minimal benchmarks' to allow for a sufficient cyclical margin under the 3 % reference value. The Commission may continue using, where relevant, these 'minimal benchmarks' as an additional working instrument, but not as a target per se according to the Stability and Growth Pact. The pact should not be changed. The medium-term budgetary position which respects the close-to-balance-or-in-surplus rule of the Stability and Growth Pact has to take account of several elements, as described in the appendix under 'objectives'.

([1]) Revised 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.

The Committee considers that since 1999 the stability and convergence programmes and their annual updates have been instrumental to the consolidation of public finances. To complete this process, it is important to prevent the medium-term budgetary position of close to balance or in surplus from becoming a moving target. The programmes should show the medium-term objective of the Stability and Growth Pact as being achieved and maintained in accordance with the budgetary recommendations in the broad economic policy guidelines.

In view of the fundamental role of the stability and convergence programmes in the process of multilateral surveillance, it is important that their information content is suitable and allows for comparison across Member States. Whilst acknowledging that the programmes are the responsibility of national authorities and that the possibilities and practices differ across countries, Council Regulation (EC) No 1466/97 sets out the essential elements of these programmes.

The Economic and Financial Committee considers that these essential requirements might usefully be incorporated into the guidelines on the content and format of the programmes developed in the 'code of conduct' presented in the Monetary Committee's opinion endorsed by the Council on 12 October 1998. The experience gathered during the first three years of implementation of the pact with the stability and convergence programmes shows that such guidelines not only assist the Member States in drawing up their programmes, but also facilitate their examination by the Commission, the Economic and Financial Committee and the Council. Building on such experience, and drawing upon useful contributions by Commission staff, the Committee has discussed possible improvements and complementary guidelines and agreed upon the suggestions set out in the appendix to this opinion. These are indicative and may be developed further over time, building upon the best practice emerging.

Appendix
Format and content of stability and convergence programmes

Status of guidelines

The Economic and Financial Committee proposes that the guidelines set out in this paper should be adopted as a code of good practice and checklist to be used by Member States in preparing stability or convergence programmes. This will facilitate the examination and discussion of the programmes.

The Committee suggests that the guidelines be followed as far as possible, and any departure would have to be justified by the Member States concerned.

Political commitment

In accordance with the provisions of Council Regulation (EC) No 1466/97 ([1]) the Member States will submit stability or convergence programmes or updates. It is therefore clear that the governments assume responsibility for them. Each programme might usefully indicate its status in the context of national procedures, notably with respect to the national parliament. In particular, the state of implementation of the measures presented in the programme should be indicated.

Status of data

The status of the quantitative information in the programmes should be clearly established. In order to facilitate assessment, the concepts used should be in line with the standards established at European level, notably in the context of the European system of accounts. This information may be complemented by a presentation of specific accounting concepts that are of particular importance to the country concerned.

Content

Articles 3 and 7 set out the basic information to be covered by stability and convergence programmes.

Objectives

The programmes should present the medium-term objective for the budgetary position of close to balance or in surplus and, where appropriate, the adjustment path to it, as well as the projected path for the debt ratio (Articles 3(2a) and 7(2a)). The objectives of the SCP updates should be consistent with the budgetary recommendations of the broad economic policy guidelines.

The time frame for interpreting the medium term would be the length of the business cycle. The medium-term budgetary position which respects the close-to-balance-or-in-surplus rule of the SGP has to take account of several elements, such as the possibility to deal with adverse cyclical developments and other unforeseen risks whilst respecting the government deficit reference value, the need to take account of other sources of variability and uncertainty in budgets, and the need to ensure a rapid decline in high debt ratios. Furthermore, appropriate medium-term budgetary targets, consistent with the general and country-specific recommendations in the BEPGs, should also take into account the need to cater for the costs associated with population ageing. Important budgetary consequences of measures aimed at improving the quality of public finances should also be considered. Moreover, Member States that would wish to make use of discretionary policy should create the necessary room for manoeuvre.

Member States should specify and explain the factors underpinning their choice of the medium-term budgetary objectives. Where appropriate, government investment objectives might be specified.

Convergence programmes shall also present the medium-term monetary policy objectives and their relationship to price and exchange-rate stability.

To permit a fuller understanding of the paths of the government balance and the debt ratio and of the budgetary strategy in general, information should be provided on

([1]) The articles referred to in this appendix are the articles of Council Regulation (EC) No 1466/97.

expenditure and revenue ratios and on their components separately identified, as well as on factors influencing the debt ratio, such as privatisation receipts, interest payments and others. Obviously, the further forward the year considered, the less accurate the information will be.

The budget balances should be broken down by sub-sector of general government (central government, local authorities, social security).

The information requirements should be presented following a standardised set of tables agreed by the Economic and Financial Committee (Annex 1). The tables distinguish between information requirements which follow from the Stability and Growth Pact and the code of conduct (bold characters), and other information which is optional but highly desirable. The tables could be complemented by further information wherever deemed useful by Member States.

In preparing the programme updates, Member States are invited to follow the model structure for the programmes annexed to this opinion (Annex 2).

The standardisation of the format and content of the programmes along the lines set by the code of conduct will substantially improve the conditions for equality of treatment.

Assumptions

The programmes should present the main assumptions about expected economic developments and important economic variables which are relevant to their realisation such as government investment expenditure, real GDP growth, employment and inflation (Articles 3(2b) and 7(2b)). The assumptions on real GDP growth should be underpinned by an indication of the expected sources of growth. The possible upside and downside risks to the outlook should be brought out. Furthermore, the programmes should provide sufficient information about GDP developments to allow an analysis of the cyclical position of the economy. The growth projections and associated factors underlying the programmes should be clearly specified in a standardised table (see Table 1 in Annex 1) and the Commission should draw attention to any significant differences from their own projections, the Member State concerned standing ready to justify its projections.

Member States should endeavour to use either common basic assumptions on the main extra-EU variables or, for comparability reasons, present sensitivity analysis based on the common assumptions for these variables where these differences are significant. The assumptions are to be provided by the Commission (after consultation with national experts), on the basis of the table in Annex 3, for discussion by the EFC in June/July each year.

Member States should transmit to the EFC and the Commission, together with the programme update, their basic assumptions (including purely technical assumptions on interest rates and exchange rates), presented on the basis of the table in Annex 3, and, if needed and not included in the SCP updates, the sensitivity analysis mentioned above.

Reflecting the general point made above on the standardisation of quantitative information presented in the tables, inflation assumptions should be presented in terms of the GDP deflator and, if a Member State considers it useful, the harmonised index of consumer prices (HICP).

Measures

The programmes should describe the budgetary and other economic policy measures being taken or proposed to achieve the objectives of the programme, and, in the case of the main budgetary measures, an assessment of their quantitative effects on the budget (Articles 3(2c), 7(2c), 5(1) and 9(1)). The measures should be consistent with the broad economic policy guidelines. Measures having significant 'one-off' effects should be explicitly identified.

Member States have committed themselves to take the corrective action they deem necessary to meet the objectives of their stability or convergence programmes, whenever they have information indicating actual or expected significant divergence from those objectives. Structural reforms should be covered where they could contribute to the achievement of objectives of the programmes. Spill-over effects on other Member States should be dealt with by the Commission in its analysis, which does not preclude the Member States from dealing with these effects in their programmes. The programmes should describe, in summary form, measures introduced to improve expenditure control, tax collection efficiency, and other measures aimed at improving the quality of public finances, also taking into account of recommendations of the broad economic policy guidelines on this issue. Where appropriate, the programmes should

also indicate other possible institutional reforms especially in the budget process.

Furthermore, the programmes should outline the countries' strategies and provide summary information on the countries' short- to medium-term concrete measures to tackle the longer-term budgetary implications of ageing.

Sensitivity analysis

The programmes shall provide an analysis of how changes in the main economic assumptions would affect the budgetary and debt position (Articles 3(2d) and 7(2d)). This analysis should be complemented by a sensitivity analysis of the impact of different interest rate assumptions on the budgetary and debt position. In addition, countries which do not use common external assumptions should endeavour to provide a sensitivity analysis also on main extra-EU variables, where differences are significant (see paragraph on assumptions).

Time horizon

The information about paths for the general government surplus/deficit ratio and debt ratio and the main economic assumptions shall be on an annual basis and shall cover, as well as the current and preceding year, at least the three following years (Article 3(3) and Article 7(3)), leaving it open to Member States to cover a longer period if they so wish.

Given the impact of longer-term demographic developments on the sustainability of public finances, information over a longer period should be included in the annual updates of the programmes in summary form. However, more detailed information should be included and updated regularly, at least every three years, where Table VII.6 of Annex 1 could serve as a useful framework.

Updating of programmes

In order to promote the efficiency of the budgetary and economic surveillance and achieve a better interaction between different procedures, submissions of SCP updates should take place shortly after national governments have presented their budget proposals to parliaments, but not earlier than mid-October and not later than 1 December ([1]) ([2]) ([3]). This should increase the comparability of the programmes, the consistency of the assessments and the equality of treatment. The EFC and the Ecofin should examine the SCP updates in a maximum of two sessions each, possibly by December/January. The whole process should in any case be completed before the end of February each year.

Annual updates of stability and convergence programmes should show how developments have compared with the programme objectives. When substantial deviations occur, the update should include the steps to be taken to rectify the situation.

([1]) While Ireland expects to be able to comply with this schedule as from 2002, the date of its next budget and publication of its stability programme has already been set for 5 December 2001.

([2]) In the case of the UK, which has a different fiscal year, submission should be as close as possible to the presentation of the autumn pre-budget report.

([3]) Austria and Portugal cannot comply at this stage with this schedule, but they will submit their budget proposals no later than 15 December.

Annex 1
Tables to be contained in the SCP updates

Provision of data on variables in bold characters is a requirement.
Provision of data on other variables is optional but highly desirable.

Table 1

Growth and associated factors

	ESA code	Year X – 1	Year X	Year X + 1 (1)	Year X + 2 (2)	Year X + 3 (2)
GDP growth at constant market prices (7 + 8 + 9)	B1g					
GDP *level* at *current* market prices	B1g					
GDP deflator						
HICP change						
Employment growth (3)						
Labour productivity growth (4)						
Sources of growth: percentage changes at constant prices						
1. Private consumption expenditure	P3					
2. Government consumption expenditure	P3					
3. Gross fixed capital formation	P51					
4. Changes in inventories and net acquisition of valuables as a % of GDP	P52 + P53					
5. Exports of goods and services	P6					
6. Imports of goods and services	P7					
Contribution to GDP growth						
7. Final domestic demand (1 + 2 + 3)						
8. Change in inventories and net acquisition of valuables (= 4)	P52 + P53					
9. External balance of goods and services	B11					

(1) Forecasts.
(2) Trend values or period averages.
(3) Occupied population, domestic concept, persons, national accounts definition.
(4) Growth of GDP at market prices per person employed at constant prices.

Table 2

General government budgetary developments

% of GDP	ESA code	Year X – 1	Year X	Year X + 1	Year X + 2	Year X + 3
Net lending (B9) by sub-sectors						
1. General government	S13					
2. Central government	S1311					
3. State government	S1312					
4. Local government	S1313					
5. Social security funds	S1314					
General government (S13)						
6. Total receipts	ESA					
7. Total expenditures	ESA					
8. Budget balance	B9					
9. Net interest payments						
10. Primary balance						
Components of revenues						
11. Taxes	D2 + D5					
12. Social contributions	D61					
13. Interest income	D41					
14. Other						
15. Total receipts	ESA					
Components of expenditures						
16. Collective consumption	P32					
17. Social transfers in kind	D63					
18. Social transfers other than in kind	D62					
19. Interest payments	D41					
20. Subsidies	D3					
21. Gross fixed capital formation	P51					
22. Other						
23. Total expenditures	ESA					

Table 3

General government-debt developments

% of GDP	ESA code	Year X – 1	Year X	Year X + 1	Year X + 2	Year X + 3
Gross debt level						
Change in gross debt						
Contributions to change in gross debt						
Primary balance						
Interest payments	D41					
Nominal GDP growth	B1g					
Other factors influencing the debt ratio						
Of which: Privatisation receipts						
p.m. implicit interest rate on debt						

Table 4

Cyclical developments ([1])

% of GDP	ESA code	Year X – 1	Year X	Year X + 1	Year X + 2	Year X + 3
1. GDP growth at constant prices	B1g					
2. Actual balance	B9					
3. Interest payments	D41					
4. Potential GDP growth						
5. Output gap						
6. Cyclical budgetary component						
7. Cyclically-adjusted balance (2 – 6)						
8. Cyclically-adjusted primary balance (7 – 3)						

([1]) Member States can fill-in lines 4–8 using either own figures or Commission figures.

Table 5

Divergence from previous update

% of GDP	ESA code	Year X – 1	Year X	Year X + 1	Year X + 2	Year X + 3
GDP growth						
previous update	B1g					
latest update	B1g					
Difference						
Actual budget balance						
previous update	B9					
latest update	B9					
Difference						
Gross debt levels						
previous update						
latest update						
Difference						

Table 6

Long-term sustainability of public finances ([1])

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure						
Old-age pensions						
Healthcare (including care for the elderly)						
Interest payments						
Total revenues						
of which: from pensions contributions						
National pension fund assets (if any)						
Assumptions						
Labour productivity growth						
Real GDP growth						
Participation rate males (aged 20–64)						
Participation rates females (aged 20–64)						
Total participation rates (aged 20–64)						
Unemployment rate						

([1]) Information in this table, if provided, should be updated at least every three years.

Annex 2
Model structure for the stability and convergence programmes

1. Overall policy framework and objectives

2. Economic outlook
(on the basis of Table VII.1)

- Cyclical developments and current prospects
- Medium-term scenario

3. General government balance and debt
(on the basis of Tables VII.2, VII.3, VII.4)

- Policy strategy
- Actual balances and implications of forthcoming budget
- Structural balance and fiscal stance (optional)
- Debt levels and developments
- Medium-term objectives
- Balance by sub-sectors of general government

4. Sensitivity analysis and comparison with previous update
(on the basis of Table VII.5)

- Alternative scenarios and risks
- Sensitivity of budgetary projections to different scenarios and assumptions
- Comparison with previous update

5. Quality of public finances
(on the basis of Table VII.2)

- Policy strategy
- General government expenditure
  Actual developments and the budget for next year
  Medium-term trends
- General government revenue
  Actual developments and the budget for next year
  Medium-term trends

6. Sustainability of public finances
(on the basis of Table VII.6)

- Policy strategy
- Long-term budgetary prospects, including the implications of ageing populations

7. Horizontal issues affecting public finances

- Budgetary implications of structural reforms
- Institutional developments, in relation with public finances
- Spill-over effects on other Member States (optional)

Annex 3

Table 7

Basic assumptions ([1])
(to be transmitted to the EFC and the Commission together with the SCP update ([2])**)**

	Year X – 1	Year X	Year X + 1	Year X + 2	Year X + 3
Short-term interest rate ([3]) (annual average)					
Long-term interest rate ([3]) (annual average)					
United States: short-term (three-month money market)					
United States: long term (10-year government bonds)					
USD/EUR exchange rate ([3]) (annual average)					
Nominal effective exchange rate (euro area)					
Nominal effective exchange rate (EU)					
(for non-euro countries) **exchange rate *vis-à-vis* the EUR** (annual average) ([3])					
World GDP growth, excluding EU					
United States , GDP growth					
Japan, GDP growth					
EU-15 GDP growth					
Growth of relevant foreign markets					
World import volumes, excluding EU					
World import prices, (goods, in USD)					
Oil prices, (Brent, USD/barrel)					
Non-oil commodity prices (in USD)					

([1]) Provision of data on variables in bold characters is a requirement. Provision of data on other variables is optional but highly desirable.
([2]) Member States may include their basic assumptions in their SCP updates if they so wish.
([3]) Purely technical assumptions.

2. 2002 BEPGs policy recommendations on budgetary policy: general part ([1])

Ensure growth and stability-oriented macroeconomic policies

Macroeconomic policies play a key role in sustaining growth and employment and in preserving price stability. They should aim at supporting a well-balanced economic expansion and the full realisation of current growth potential, and it should contribute to the establishment of the framework conditions that promote adequate levels of saving and investment to position the economy on a sustained, higher, non-inflationary, growth and employment path.

Member States should achieve and preserve a sound budgetary position as agreed in the context of the Stability and Growth Pact. All Member States need to ensure that cyclically-adjusted budgetary positions move towards, or remain close to balance or in surplus in the coming years.

Regarding the euro area, the primary objective of the ECB's monetary policy is to maintain price stability. Without prejudice to this objective, it supports the general economic policies in the Community.

In general, the euro-area Member States should:

(i) orient and implement their budgetary policies so as to achieve or maintain budgetary positions of close to balance or in surplus over the economic cycle; if budgetary positions of close to balance or in surplus are not yet achieved, take all the necessary action — in the context of the implementation of the budgets for 2002 and the preparation of budgets for 2003 — to ensure that such medium-term objectives are respected by 2004 at the latest;

(ii) ensure that tax reforms are financed appropriately in order to safeguard the commitment to sound public finances; avoid pro-cyclical fiscal policies thus contributing to an appropriate macroeconomic policy mix at the national and euro-area level; allow automatic stabilisers to operate in full as the recovery gets underway; ensure a rigorous execution of their budgets so as to prevent slippage from the stability programme targets; and

(iii) further strengthen public finances with a view to secure their long-term sustainability by making use of the limited window of opportunity prior to the demographic changes taking hold.

Regarding the **non-euro-area Member States**, monetary policy in Denmark is guided by the fixed-exchange rate policy toward the euro in the framework of ERM2, which is seen as instrumental to achieve price stability. In Sweden and the United Kingdom, monetary policies aim at price stability through targeting inflation. Their successful achievement will help create the conditions for exchange rate stability.

In general, non-euro-area Member States shall also maintain sound budgetary positions in accordance with the Stability and Growth Pact. In general, they should:

(i) orient and implement their budgetary policies so as to maintain budgetary positions of close to balance or in surplus over the economic cycle;

(ii) ensure that tax reforms are financed appropriately in order to safeguard the commitment to sound public finances; avoid pro-cyclical fiscal policies thus contributing to an appropriate macroeconomic policy

([1]) Adopted by the Council on 21 June 2002. This chapter presents excerpts from Sections 3.1 and 3.2 of the 2002 Broad Economic Policy Guidelines which deal with budgetary policy.

mix at the national level; allow automatic stabilisers to operate in full as the recovery gets underway; ensure a rigorous execution of their budgets so as to prevent slippage from the convergence programme targets; and

(iii) further strengthen public finances with a view to secure their long-term sustainability by making use of the limited window of opportunity prior to the demographic changes taking hold.

Improve the quality and sustainability of public finances

To maximise the contribution of public finances to growth and employment and the achievement of the objectives agreed in Lisbon and Stockholm, all Member States must achieve and sustain sound budgetary positions. This is especially important in countries that have yet to achieve budget positions that are 'close to balance or in surplus' as required by the Stability and Growth Pact. An appropriate balance and sequencing have to be drawn between running down public debt, cutting taxes and continuing to finance public investment in key areas. Countries with a high level of public debt and/or that have not yet reached the medium-term budgetary target of the Pact should give priority to budgetary consolidation: this will help countries prepare for the additional budgetary costs of ageing populations. The assessment of the sustainability of public finances on the basis of updated stability and convergence programmes confirms that, if no far-reaching reform is undertaken, there is a substantial risk of budgetary imbalances emerging in the future due to ageing populations in many Member States.

To this end Member States should:

(i) pursue efforts to make tax and benefit systems more employment friendly, including, where appropriate, a reduction of the overall tax burden, targeted reforms of the tax and benefit systems, especially with respect to low-wage labour, within continued fiscal consolidation, and by improving the efficiency of tax systems (see also section 3.3 of the BEPGs); ([1])

(ii) promote the quality of public expenditure by redirecting funds towards physical and human capital accumulation and research and development;

(iii) enhance the efficiency of public spending by institutional and structural reforms; in particular introduce or enhance the mechanisms that help assess and control spending, including budgetary procedures;

(iv) improve the long-term sustainability of public finances by pursuing the comprehensive three-pronged strategy, of raising employment rates, reducing public debt and adapting pension systems, agreed by the Stockholm European Council. This involves a suitable combination of measures, to be determined by the Member States, to run down public debt at a fast pace, modernise labour markets to raise employment rates (especially amongst women and older workers), reform pension and healthcare systems for the elderly with a view to placing them on a sound financial footing. In that framework, public pension reserve funds could also contribute to improving the sustainability of public finances, provided they receive substantial contributions. Member States should strengthen their capacity to evaluate the long-term sustainability of public finances and factor these analyses into medium-term budgetary planning processes. This will help reinforce examination in the context of multilateral surveillance as asked by the Barcelona European Council;

(v) reform pension policies towards the broad common goals agreed by the Gothenburg and Laeken Councils so as to secure the long-term financial sustainability, and meet changing societal needs; develop a comprehensive strategy that takes due account of the balance between these broad objectives and challenges faced by individual countries; in particular introduce measures that aim at increasing the effective retirement age; greater reliance on funding should also be considered; and

(vi) pursue tax coordination further so as to avoid harmful tax competition and implement effectively the Council agreement of November 2000 on the tax package with a view to meeting the December 2002 deadline for agreement.

3. Glossary

Active labour-market policies (ALMP): Non-passive measures to improve the functioning of the labour markets and *inter alia* include training, employment subsidies, and job-search assistance.

Automatic stabilisers: Various 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.

Balassa–Samuelson effect: A situation in which countries in a catching-up process experience higher inflation rates than mature economies. It is due to higher wage growth in the tradeable sector which spills over the non-tradable sector resulting in pressures on CPI.

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 balance*, *primary balance*, and *primary structural balance*.

Budgetary rules: Rules and procedures through which policy-makers decide on the size and the allocation of public expenditure as well as on its financing through taxation and borrowing.

Budgetary sensitivity: The variation in the budget balance in percentage of GDP brought about by a change in the output gap. In the EU, it is estimated to be 0.5 on average.

Candidate countries: Countries which wish to accede to the EU and include Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey.

Central and east European countries (CEECs): The candidate countries except Cyprus, Malta and Turkey.

Close-to-balance rule: A rule contained in the *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.

Code of conduct on the format and content of the stability and convergence programmes: Policy document endorsed by the Ecofin Council in July 2001 setting down the information requirements and key definitions to be followed by Member States in preparing their stability or convergence programmes (see Part VII.1).

Convergence programmes: Medium-term budgetary and monetary strategies presented by each of those 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*.

Copenaghen criteria: In June 1993, the European Council setting out the criteria for joining the EU concluded that membership required:

— that the candidate country had achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities;
— the existence of a functioning market economy, as well as the capacity to cope with competitive pressure and market forces within the Union (macroeco-

nomic stability is considered a key aspect of a functioning market economy);

— the ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union.

Crowding-out effects: Offsetting effects on output due to changes in interest rates and exchange rates triggered by a loosening or tightening of fiscal policy.

Cyclical component of budget balance: That part of the change in the *budget balance* that follows automatically from the cyclical conditions of the economy, due to the reaction of public revenue and expenditure to changes in the *output gap*. See *automatic stabilisers*, *tax smoothing* and *structural budget balance.*

Cyclically-adjusted budget balance: See *structural budget balance.*

Demand and supply shocks: Disturbances which 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 which, 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 aiming at stabilising the economy. 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 SGP, and 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, renamed the Economic and Financial Committee as from January 1999. Its main task is to prepare and discuss (Ecofin) Council decisions with regard to economic and financial matters.

Economic Policy Committee (EPC): A group of senior officials whose main task is to prepare discussions of the (Ecofin) Council on structural policies. It plays a large role in the preparation of the BEPGs, and 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 from the year 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 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*.

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' model *QUEST*.

Fiscal stance: A measure of the discretionary fiscal policy component. 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.*

Hodrick–Prescott (HP) filter: A statistical techniques used to calculate trend GDP and output gaps by filtering actual GDP. See also *output gaps.*

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 value added tax (VAT), excise duties, import levies, energy and other environmental taxes.

Inflation targeting: Monetary policy regime aimed at targeting directly an inflation objective. The European Central Bank does not have an explicit inflation target but an inflation ceiling set at 2 % (see also *price stability*). Most central banks have shifted to inflation targeting in recent years.

Interest burden: *General government* interest payments on public debt as a share of GDP.

Maastricht reference values for public debt and deficits: Respectively, a 60 % *general government* debt/GDP ratio and a 3 % *general government* deficit/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. See also *interest rate shock.* 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.*

Minimal benchmarks: Values indicating a budgetary position which would provide a cyclical safety margin for the *automatic stabilisers* to operate freely during economic slowdowns without leading to excessive deficits. The minimal benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks and should not be confused with the 'close-to-balance or in surplus' medium-term requirement of the pact.

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).

Optimal currency area: Geographic area in which it is optimal to have a single currency (thus a single monetary policy). The primary assumptions for a geographic area to form an optimal currency area have been put forward by Mundell (1971). They include mobility of production factors (labour and capital) and a high degree of symmetry of shocks.

Output gap: The difference between actual output and estimated potential output at any particular point in time. See also *cyclical component of fiscal policy.*

Pay-as-you-go pension system (PAYG): Pension system in which current pension expenditures are financed by the contributions of current employees.

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 which provides 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.

Price stability: A situation characterised by low average inflation. The European Central Bank has defined price stability as an annual increase in prices of less than 2 %.

Primary budget balance: The *budget balance* net of interest payments on *general government* debt.

Primary structural budget balance: The *structural (or cyclically-adjusted) budget balance* net of interest payments.

Pro-cyclical fiscal policy: A *fiscal stance* which amplifies the economic cycle by increasing the *structural primary deficit* during an economic upturn, or by decreasing it in a downturn. It can be contrasted with (discretionary) counter-cyclical policy which has the opposite effects. 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 means to estimate the potential level of output of an economy on taking inputs on labour and capital as well as trend factor productity into account. This is used to estimate the *output gap* which is a key input in the estimation of cyclical budget component.

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: Those 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.

Quasi-fiscal activities: Activities promoting public-policy goals carried out by non-government units. These are important items in CEECs.

QUEST: The Economic and Financial Affairs DG's macroeconomic model of the EU Member States plus the United States and Japan.

Ricardian equivalence: Under fairly restrictive theoretical assumptions on the consumer's behaviour (*inter alia* infinite horizon for decision-making), 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 budget balance over the targets in the stability or convergence programmes, that triggers the *early-warning procedure* of the SGP.

'Snow-ball' effect: The self-reinforcing effect of public-debt accumulation or decumulation arising from a positive or negative differential between the interest rate paid on public debt and the growth rate of the national economy. See also *government budget constraint.*

Social security contributions (SSC): Mandatory contributions paid by employers and employees to a social insurance scheme to cover for pension, healthcare and other welfare provisions.

Stability and Growth Pact (SGP): Approved in 1997, 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 *budgetary surveillance* and *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* adjusted for its *cyclical component.* The structural balance gives a measure of the underlying trend in the budget balance, when taking into account the automatic effect on the budget of the economic cycle. It is referred to also as the cyclically-adjusted budget balance. See also *primary structural budget balance.*

Sustainability: A combination of budget deficits and debt which ensure that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

Tax gaps: These are 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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5. Useful Internet links

European Commission

European Commission	http://europa.eu.int/comm
Directorate-General for Economic and Financial Affairs	http://europa.eu.int/comm/dgs/economy_finance

European Council

European Council	http://ue.eu.int/

European Parliament

European Parliament	http://europarl.eu.int/

Economic and Finance Ministries

Belgium	http://treasury.fgov.be/interthes	Trésorerie — Ministère des Finances Belge Thesaurie — Belgisch Ministerie van Financen
Denmark	http://www.fm.dk	Ministry of Finance
Germany	http://www.bundesfinanzministerium.de	Bundesministerium der Finanzen
Spain	http://www.mineco.es/	Ministerio de Economía y Hacienda
France	http://www.finances.gouv.fr	Ministère de l'Économie, des Finances et de l'Industrie-République Française
Ireland	http://www.irlgov.ie/finance	Department of Finance
Italy	http://www.tesoro.it	Ministero dell'Economia e delle Finanze
Luxembourg	http://www.etat.lu/FI	Ministère des Finances
Netherlands	http://www.minfin.nl	Ministerie van Financien
Austria	http://www.bmf.gv.at	Bundesministerium für Finanzen
Portugal	http://www.min-financas.pt	Ministério das Finanças
Finland	http://www.vn.fi/vm	Ministry of Finance
Sweden	http://finans.regeringen.se	Finansdepartementet
United Kingdom	http://www.hm-treasury.gov.uk	Her Majesty's Treasury
Japan	http://www.mof.go.jp	Ministry of Finance
United States	http://www.ustreas.gov	Department of the Treasury

Central Banks

European Union	http://www.ecb.int	European Central Bank
Belgium	http://www.nbb.be	Banque Nationale de Belgique / Nationale Bank van België

Denmark	http://www.nationalbanken.dk	Danmarks Nationalbank
Germany	http://www.bundesbank.de	Deutsche Bundesbank
Greece	http://www.bankofgreece.gr	Bank of Greece
Spain	http://www.bde.es	Banco de España
France	http://www.banque-france.fr	Banque de France
Ireland	http://www.centralbank.ie	Central Bank of Ireland
Italy	http://www.bancaditalia.it	Banca d'Italia
Luxembourg	http://www.bcl.lu	Banque centrale du Luxembourg
Netherlands	http://www.dnb.nl	De Nederlandsche Bank
Austria	http://www.oenb.co.at	Oestereichische Nationalbank
Portugal	http://www.bportugal.pt	Banco de Portugal
Finland	http://www.bof.fi	Suomen Pankki
Sweden	http://www.riksbank.com	Sveriges Riksbank
United Kingdom	http://www.bankofengland.co.uk	Bank of England
Japan	http://www.boj.or.jp	Bank of Japan
United States of America	http://www.federalreserve.gov	Board of Governors of the Federal Reserve System

Statistical Offices

European Union	http://europa.eu.int/comm/eurostat	Eurostat
Belgium	http://www.bnb.be	National Bank of Belgium
Denmark	http://www.dst.dk	Danmarks Statistik
Germany	http://www.statistik-bund.de	Statistisches Bundesamt Deutschland
Greece	http://www.statistics.gr	National Statistical Service of Greece
Spain	http://www.ine.es	Instituto Nacional de Estadística
France	http://www.insee.fr	Institut National de la Statistique et des Etudes Economiques
Ireland	http://www.cso.ie	Central Statistics Office
Italy	http://petra.istat.it	Istituto nazionale di statistica
Luxembourg	http://statec.gouvernement.lu	Service Central de la Statistique et des Etudes Economiques
Netherlands	http://www.cbs.nl	Centraal Bureau voor de Statistiek
Austria	http://www.oestat.gv.at	Österreichisches Statistisches Zentralamt
Portugal	http://www.ine.pt	Instituto Nacional de Estatística
Finland	http://www.stat.fi	Tilastokeskus / Statistics Finland
Sweden	http://www.scb.se	Statistiska Centralbyrån / Statistics Sweden

United Kingdom	http:// www.statistics.gov.uk	Office for National Statistics
Japan	http://www.stat.go.jp/english/index.htm	Statistics Bureau / Statistics Center
United States of America	http://www.fedstats.gov/	Federal Statistical Agencies

International organisations

Bank for International Settlements	http://www.bis.org
ERBD	http://www.ebrd.com
IMF	http://www.imf.org
OECD	http://www.oecd.org
United Nations	http://www.un.org
World Bank	http://www.worldbank.org
World Trade Organisation	http://www.wto.org

Statistical annex

Statistical annex

Table of contents

Table A.1.1

Resources and expenditure of general government, Belgium

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	12.2	12.0	12.1	12.0	12.0
2.	Current taxes on income and wealth	18.0	19.1	16.6	16.2	16.1
3.	Social contributions	14.9	17.1	16.7	17.4	17.6
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	2.6	2.3	1.8	1.9	1.8
6.	**Total current resources**	**47.6**	**50.4**	**47.1**	**47.4**	**47.4**
7.	Government consumption expenditure	17.3	16.7	13.8	14.2	14.1
8.	Of which compensation of employees	13.4	13.0	11.1	11.5	11.5
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	23.6	24.8	22.9	23.9	24.2
12.	Interest payments	5.9	10.3	10.3	10.0	10.6
13.	Subsidies	3.6	3.7	2.8	2.9	2.6
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**51.3**	**56.2**	**50.7**	**51.9**	**52.4**
16.	Gross savings	– 3.7	– 5.8	– 3.6	– 4.4	– 5.0
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**47.6**	**50.4**	**47.1**	**47.4**	**47.4**
19.	Gross fixed capital formation	4.4	2.5	1.3	1.3	1.4
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**56.1**	**59.3**	**52.5**	**53.6**	**54.3**
22.	Tax burden	46.1	49.3	46.5	46.6	46.8
23.	**Net lending (+) or net borrowing (–)**	**– 8.6**	**– 8.9**	**– 5.4**	**– 6.2**	**– 6.9**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.3	12.7	12.2	12.2	12.7	12.8	12.8	13.2	13.1	12.5	12.4	12.6
16.2	17.5	17.8	16.7	16.6	17.1	17.6	17.1	17.3	17.4	17.4	17.3
18.1	17.6	17.3	16.8	16.7	16.5	16.5	16.4	16.1	16.1	16.1	15.8
:	:	:	14.8	14.7	14.4	14.4	14.3	14.1	14.1	14.1	13.9
1.8	1.5	1.5	3.1	3.2	3.0	3.0	2.8	2.9	3.0	2.6	2.7
48.3	**49.2**	**48.8**	**48.7**	**49.3**	**49.4**	**49.9**	**49.5**	**49.4**	**49.0**	**48.6**	**48.4**
14.6	14.6	14.5	21.4	21.7	21.2	21.1	21.2	21.2	21.4	21.7	21.6
12.0	12.1	12.1	11.9	11.9	11.7	11.6	11.6	11.4	11.6	11.5	11.3
:	:	:	7.9	7.8	7.8	7.8	7.9	7.9	8.0	8.1	8.0
:	:	:	13.5	13.9	13.4	13.4	13.3	13.2	13.4	13.7	13.6
24.6	24.2	24.2	16.6	16.6	16.2	16.1	15.7	15.3	15.4	15.5	15.4
10.6	10.0	8.8	9.3	8.9	8.0	7.6	7.0	6.8	6.5	6.2	5.8
2.6	2.4	2.4	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.4
:	:	:	2.0	2.1	2.2	2.1	2.2	2.0	2.1	1.9	2.0
53.4	**52.2**	**50.8**	**50.7**	**50.7**	**48.9**	**48.3**	**47.6**	**46.8**	**46.9**	**46.8**	**46.1**
– 5.1	– 3.0	– 2.0	– 2.0	– 1.5	0.5	1.6	1.9	2.6	2.0	1.8	2.3
:	:	:	0.4	0.4	0.6	0.4	0.6	0.5	0.6	0.5	0.5
48.3	**49.2**	**48.8**	**48.5**	**49.1**	**49.4**	**49.8**	**49.7**	**49.5**	**49.2**	**48.8**	**48.6**
1.6	1.6	1.4	1.8	1.6	1.6	1.6	1.8	1.8	1.6	1.4	1.4
:	:	:	1.0	1.1	1.5	1.3	1.4	1.3	0.8	1.1	1.1
55.5	**54.0**	**52.7**	**52.8**	**52.9**	**51.4**	**50.7**	**50.3**	**49.5**	**49.0**	**48.9**	**48.3**
47.7	48.9	48.4	46.7	47.0	47.4	47.9	47.6	47.5	47.0	46.9	46.6
– 7.2	**– 4.8**	**– 3.9**	**– 4.4**	**– 3.8**	**– 2.0**	**– 0.9**	**– 0.6**	**0.0**	**0.2**	**– 0.2**	**0.2**

Table A.1.2

Resources and expenditure of general government, Denmark

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	18.0	17.8	17.0	16.7	16.6
2.	Current taxes on income and wealth	25.1	27.8	28.3	28.5	29.0
3.	Social contributions	1.6	2.5	2.3	2.3	2.4
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	6.1	7.1	7.5	7.2	8.0
6.	**Total current resources**	**50.8**	**55.3**	**55.1**	**54.7**	**56.0**
7.	Government consumption expenditure	27.0	25.6	25.6	25.7	25.8
8.	Of which compensation of employees	18.0	17.4	17.7	17.7	17.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	16.3	15.9	18.0	18.7	19.2
12.	Interest payments	3.7	9.3	7.3	7.3	6.7
13.	Subsidies	3.0	2.8	3.3	3.2	3.8
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**50.0**	**54.4**	**54.9**	**55.7**	**56.3**
16.	Gross savings	0.7	0.9	0.2	– 1.0	– 0.4
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**50.8**	**55.3**	**55.1**	**54.7**	**56.0**
19.	Gross fixed capital formation	3.3	2.1	1.6	1.5	1.9
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**53.1**	**56.4**	**56.1**	**57.1**	**58.2**
22.	Tax burden	44.7	48.0	47.6	47.5	48.0
23.	**Net lending (+) or net borrowing (–)**	**– 3.2**	**– 2.0**	**– 1.0**	**– 2.4**	**– 2.2**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions ([1])								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
16.9	17.3	17.2	16.9	17.3	17.5	18.2	18.0	17.0	16.9	16.8	16.4
30.1	30.6	30.3	30.4	30.6	30.3	29.9	30.6	29.1	29.4	29.3	29.2
2.5	2.8	2.6	2.6	2.6	2.6	2.6	3.2	3.3	3.3	2.7	2.7
:	:	:	1.6	1.6	1.6	1.6	2.2	2.3	2.3	1.7	1.7
8.4	7.5	6.8	6.8	7.1	6.7	6.6	6.0	5.8	6.0	5.4	5.3
57.9	**58.1**	**57.0**	**56.8**	**57.7**	**57.1**	**57.4**	**57.8**	**55.2**	**55.6**	**54.2**	**53.6**
26.8	25.9	25.7	25.8	25.9	25.5	26.0	25.9	25.1	25.5	25.6	25.3
18.1	17.5	17.3	17.3	17.3	17.1	17.5	17.3	16.7	16.9	16.9	16.8
:	:	:	8.4	8.5	8.3	8.6	8.1	7.8	7.9	7.9	7.8
:	:	:	17.4	17.4	17.1	17.4	17.7	17.3	17.6	17.7	17.5
20.3	21.7	20.8	20.4	19.8	18.8	18.3	17.7	17.1	17.0	16.9	16.6
7.3	6.7	6.4	6.4	6.1	5.7	5.3	4.7	4.2	4.1	3.5	3.2
3.9	3.7	3.6	2.5	2.6	2.4	2.3	2.4	2.2	2.0	1.9	1.8
:	:	:	2.2	2.4	2.4	2.6	2.5	2.6	2.6	2.6	2.6
58.9	**58.8**	**57.4**	**57.3**	**56.8**	**54.9**	**54.6**	**53.2**	**51.1**	**51.2**	**50.5**	**49.5**
– 1.0	– 0.7	– 0.5	– 0.5	0.9	2.2	2.8	4.6	4.1	4.4	3.7	4.1
:	:	:	0.6	0.4	0.5	0.5	0.6	0.6	0.5	0.4	0.4
57.9	**58.1**	**57.0**	**58.0**	**58.8**	**58.4**	**58.8**	**59.2**	**56.6**	**56.8**	**55.4**	**54.7**
1.8	1.8	1.8	1.8	2.0	1.9	1.7	1.7	1.7	1.7	1.8	1.8
:	:	:	0.5	0.3	0.4	0.5	0.4	0.4	0.1	0.3	0.3
60.7	**60.7**	**59.2**	**60.3**	**59.8**	**58.0**	**57.6**	**56.1**	**54.1**	**53.8**	**53.4**	**52.3**
49.5	50.7	50.1	50.2	50.7	50.7	51.0	52.1	49.6	49.7	49.0	48.5
– 2.8	**– 2.6**	**– 2.2**	**– 2.3**	**– 1.0**	**0.4**	**1.1**	**3.2**	**2.5**	**3.0**	**2.1**	**2.4**

Table A.1.3

Resources and expenditure of general government, Germany (1)

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	13.1	12.6	12.5	12.2	12.4
2.	Current taxes on income and wealth	12.8	12.6	11.2	11.3	11.6
3.	Social contributions	16.9	17.6	16.9	17.5	17.8
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	2.3	3.2	2.7	2.6	3.1
6.	**Total current resources**	**45.1**	**46.0**	**43.3**	**43.5**	**44.9**
7.	Government consumption expenditure	20.3	20.1	18.3	19.0	19.5
8.	Of which compensation of employees	11.0	10.6	9.7	10.1	10.4
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	17.2	16.8	15.8	16.7	17.3
12.	Interest payments	1.9	3.0	2.6	2.6	3.2
13.	Subsidies	2.3	2.3	2.2	2.4	2.1
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**42.7**	**43.4**	**42.0**	**42.3**	**43.4**
16.	Gross savings	2.4	2.6	1.3	1.2	1.4
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**45.1**	**46.0**	**43.3**	**43.5**	**44.9**
19.	Gross fixed capital formation	3.6	2.4	2.3	2.6	2.8
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**48.0**	**47.2**	**45.3**	**46.8**	**47.6**
22.	Tax burden	42.8	42.8	40.6	40.8	41.5
23.	**Net lending (+) or net borrowing (–)**	**– 2.9**	**– 1.2**	**– 2.1**	**– 3.2**	**– 2.8**

(1) From 1991 including former East Germany
(2) System is based on ESA 95 definitions which does not necessarily correspond with the former definitions:
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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [2]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.7	13.1	12.7	11.4	11.4	11.4	11.6	12.2	12.1	11.9	12.0	11.9
11.2	10.8	11.1	11.1	11.5	11.2	11.5	12.0	12.5	11.2	11.5	11.6
18.4	18.9	19.1	18.8	19.4	19.7	19.3	19.0	18.7	18.6	18.6	18.5
:	:	:	17.7	18.3	18.6	18.2	18.0	17.6	17.6	17.6	17.5
3.0	3.0	2.7	3.5	3.4	3.2	3.1	3.0	2.8	3.1	3.0	2.9
45.3	**45.9**	**45.6**	**44.8**	**45.7**	**45.5**	**45.5**	**46.3**	**46.1**	**44.8**	**45.1**	**44.9**
19.6	19.4	19.5	19.8	20.0	19.5	19.2	19.2	19.0	19.1	19.1	18.7
10.6	10.3	10.2	9.0	8.9	8.7	8.5	8.4	8.1	8.0	7.9	7.7
:	:	:	8.4	8.4	8.1	8.0	8.0	7.9	7.9	7.9	7.8
:	:	:	11.4	11.6	11.3	11.2	11.2	11.1	11.2	11.1	11.0
18.4	18.6	19.0	18.1	19.3	19.3	19.0	19.0	18.8	18.9	19.2	18.9
3.2	3.3	3.7	3.7	3.7	3.6	3.6	3.5	3.4	3.2	3.3	3.2
2.1	2.1	2.1	2.1	2.0	1.8	1.9	1.8	1.7	1.7	1.6	1.5
:	:	:	1.2	1.3	1.4	1.4	1.7	1.7	1.7	1.8	1.8
44.8	**44.9**	**45.6**	**44.9**	**46.2**	**45.6**	**45.0**	**45.1**	**44.6**	**44.6**	**45.0**	**44.3**
0.5	1.0	0.0	– 0.1	– 0.5	– 0.1	0.5	1.2	1.5	0.2	0.1	0.6
:	:	:	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4
45.3	**45.9**	**45.6**	**46.1**	**46.9**	**46.6**	**46.6**	**47.4**	**47.1**	**45.7**	**46.1**	**45.8**
2.7	2.6	2.3	2.3	2.1	1.9	1.9	1.9	1.9	1.8	1.7	1.6
:	:	:	1.6	1.2	1.2	1.3	1.3	– 1.1	1.6	1.6	1.5
48.8	**48.4**	**49.0**	**49.6**	**50.3**	**49.4**	**48.8**	**48.9**	**45.9**	**48.5**	**48.9**	**48.0**
42.0	42.5	42.5	42.3	43.1	43.1	43.1	43.9	43.9	42.3	42.6	42.5
– 3.5	**– 2.6**	**– 3.4**	**– 3.5**	**– 3.4**	**– 2.7**	**– 2.2**	**– 1.6**	**1.2**	**– 2.7**	**– 2.8**	**– 2.1**

Table A.1.4

Resources and expenditure of general government, Greece

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	10.5	12.5	13.9	14.6	15.3
2.	Current taxes on income and wealth	4.6	4.6	5.4	5.5	5.4
3.	Social contributions	9.4	11.6	11.5	11.1	11.0
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	1.9	1.7	1.7	2.2	2.5
6.	**Total current resources**	**26.3**	**30.3**	**32.5**	**33.4**	**34.2**
7.	Government consumption expenditure	13.5	16.1	15.1	14.2	13.8
8.	Of which compensation of employees	9.4	11.4	12.5	11.5	10.9
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	9.4	14.2	15.0	14.9	14.8
12.	Interest payments	2.0	4.9	10.0	9.3	11.5
13.	Subsidies	2.2	5.2	4.0	3.5	3.6
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**26.4**	**37.7**	**41.9**	**39.8**	**41.2**
16.	Gross savings	– 0.1	– 7.4	– 9.4	– 6.4	– 7.0
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**26.3**	**30.3**	**32.5**	**33.4**	**34.2**
19.	Gross fixed capital formation	2.1	3.7	2.8	3.1	3.5
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**29.0**	**42.0**	**48.4**	**44.7**	**46.8**
22.	Tax burden	24.6	28.9	31.0	31.4	31.9
23.	**Net lending (+) or net borrowing (–)**	**– 2.6**	**– 11.6**	**– 15.9**	**– 11.4**	**– 12.6**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
14.7	14.3	14.2	13.6	14.0	14.3	14.4	15.0	15.0	14.7	14.6	14.6
5.7	6.8	7.2	7.4	7.1	7.8	9.5	9.9	10.8	10.5	10.4	10.3
11.9	12.1	12.4	12.6	12.9	13.3	13.6	13.7	13.6	13.4	13.4	13.4
:	:	:	10.5	10.8	11.1	11.5	11.4	11.4	11.4	11.4	11.4
3.1	3.8	4.2	2.9	2.9	3.4	2.9	3.0	3.0	3.4	3.0	3.0
35.4	**36.9**	**38.1**	**36.5**	**36.9**	**38.8**	**40.3**	**41.6**	**42.5**	**42.0**	**41.4**	**41.2**
14.3	13.8	15.3	15.3	14.5	15.1	15.3	15.3	15.4	15.4	15.3	15.2
10.9	10.6	11.3	11.3	10.7	11.6	11.6	11.6	11.6	11.5	11.5	11.5
:	:	:	9.5	8.5	8.8	9.3	9.2	9.2	9.3	9.2	9.2
:	:	:	5.9	6.0	6.3	6.0	6.1	6.2	6.2	6.1	6.1
15.1	15.2	15.5	15.1	15.4	15.6	15.8	15.9	16.3	16.0	16.3	16.5
12.6	13.9	12.8	11.2	10.5	8.2	7.8	7.3	7.0	6.2	5.6	5.1
3.9	3.6	3.3	0.4	0.5	0.2	0.1	0.2	0.2	0.2	0.1	0.1
:	:	:	1.3	1.3	1.1	1.3	1.2	0.8	1.0	0.9	0.9
43.4	**44.0**	**45.1**	**43.3**	**42.2**	**40.2**	**40.2**	**39.9**	**39.7**	**38.9**	**38.2**	**37.9**
– 7.9	– 7.1	– 7.1	– 6.8	– 5.2	– 1.5	0.1	1.7	2.7	3.1	3.2	3.3
:	:	:	2.7	0.0	0.0	0.0	3.5	:	:	:	:
35.4	**36.9**	**38.1**	**40.3**	**38.1**	**40.0**	**41.5**	**46.3**	**47.5**	**47.6**	**47.7**	**47.1**
3.3	3.1	3.3	3.2	3.2	3.4	3.6	3.7	3.7	3.8	4.0	4.0
:	:	:	2.8	– 0.6	– 0.2	– 0.4	3.3	3.7	3.6	3.4	3.3
49.0	**46.8**	**48.5**	**50.5**	**45.9**	**44.7**	**44.6**	**48.0**	**48.3**	**47.5**	**47.4**	**46.6**
32.6	33.4	34.0	34.4	34.8	36.0	38.2	39.3	40.2	39.4	39.1	38.9
– 13.6	**– 9.9**	**– 10.5**	**– 10.2**	**– 7.8**	**– 4.7**	**– 3.1**	**– 1.7**	**– 0.8**	**0.1**	**0.3**	**0.5**

Table A.1.5

Resources and expenditure of general government, Spain

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	6.3	9.1	10.3	10.3	10.9
2.	Current taxes on income and wealth	6.7	8.2	11.6	11.6	12.0
3.	Social contributions	12.7	12.7	12.9	13.2	14.0
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.9	4.2	3.7	4.1	4.0
6.	**Total current resources**	**29.6**	**34.2**	**38.4**	**39.2**	**40.9**
7.	Government consumption expenditure	12.9	14.2	15.0	15.6	16.4
8.	Of which compensation of employees	9.4	10.2	10.7	11.1	11.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	11.8	13.8	13.9	14.7	15.5
12.	Interest payments	0.4	1.9	3.9	3.7	4.3
13.	Subsidies	1.9	2.4	2.4	2.6	2.5
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**27.7**	**33.9**	**36.8**	**38.0**	**40.2**
16.	Gross savings	0.6	0.3	1.7	1.2	0.7
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**29.6**	**34.2**	**38.4**	**39.2**	**40.9**
19.	Gross fixed capital formation	1.8	3.6	4.9	4.8	4.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**31.7**	**40.4**	**42.6**	**43.5**	**44.9**
22.	Tax burden	26.1	30.6	35.4	35.7	37.5
23.	**Net lending (+) or net borrowing (–)**	**– 2.5**	**– 6.2**	**– 4.2**	**– 4.3**	**– 4.0**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
10.1	10.6	10.3	10.2	10.2	10.5	11.1	11.7	11.7	11.4	11.6	11.7
11.5	11.0	11.0	10.1	10.3	10.5	10.2	10.2	10.5	10.5	10.5	10.6
14.3	14.0	13.1	13.0	13.2	13.1	13.0	13.1	13.3	13.6	13.5	13.4
:	:	:	12.0	12.2	12.2	12.1	12.2	12.5	12.7	12.6	12.6
5.0	4.2	3.6	4.1	4.2	4.0	3.7	3.7	3.3	3.5	3.4	3.4
40.9	**39.8**	**38.0**	**37.4**	**37.8**	**38.0**	**38.0**	**38.6**	**38.9**	**38.9**	**39.0**	**39.0**
16.9	16.2	16.0	18.1	18.0	17.5	17.5	17.4	17.4	17.3	17.3	17.3
11.8	11.3	11.2	11.3	11.3	10.9	10.7	10.6	10.4	10.2	10.2	10.2
:	:	:	8.0	7.8	7.7	7.5	7.4	7.7	7.6	7.6	7.6
:	:	:	10.1	10.1	9.9	9.9	10.1	9.8	9.7	9.7	9.7
16.2	15.8	15.1	13.9	13.8	13.3	12.8	12.4	12.3	12.2	12.3	12.2
5.0	4.7	5.3	5.2	5.3	4.8	4.3	3.5	3.3	3.1	2.9	2.8
3.1	2.9	3.0	1.1	1.0	0.9	1.1	1.2	1.1	1.1	1.1	1.1
:	:	:	0.9	1.0	1.1	1.2	1.2	1.3	1.2	1.2	1.2
42.6	**41.3**	**40.3**	**39.2**	**39.1**	**37.6**	**36.8**	**35.8**	**35.4**	**34.9**	**34.9**	**34.6**
– 1.7	– 1.5	– 2.3	– 1.8	– 1.2	0.5	1.2	2.9	3.5	4.0	4.1	4.4
:	:	:	1.4	1.4	1.3	1.4	1.5	1.1	1.1	1.1	1.1
40.9	**39.8**	**38.0**	**38.4**	**38.8**	**39.0**	**39.1**	**39.7**	**39.5**	**39.6**	**39.6**	**39.6**
4.1	3.9	3.7	3.7	3.1	3.1	3.3	3.4	3.3	3.4	3.5	3.6
:	:	:	2.5	2.0	1.9	1.8	2.0	1.7	1.8	1.8	1.9
47.6	**45.9**	**45.0**	**45.0**	**43.8**	**42.2**	**41.6**	**40.8**	**39.9**	**39.6**	**39.7**	**39.7**
36.5	36.1	35.0	34.0	34.4	34.8	35.0	35.6	36.2	36.1	36.0	35.9
– 6.7	**– 6.1**	**– 7.0**	**– 6.6**	**– 5.0**	**– 3.2**	**– 2.6**	**– 1.1**	**– 0.4**	**0.0**	**– 0.2**	**0.0**

Table A.1.6

Resources and expenditure of general government, France

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	14.9	15.6	14.9	14.5	14.3
2.	Current taxes on income and wealth	8.2	8.9	8.7	9.2	8.8
3.	Social contributions	19.1	20.8	20.6	20.7	20.9
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.2	3.8	4.0	3.9	4.1
6.	**Total current resources**	**45.3**	**49.1**	**48.2**	**48.2**	**48.0**
7.	Government consumption expenditure	17.7	19.1	17.7	17.9	18.5
8.	Of which compensation of employees	13.4	14.4	13.0	13.1	13.4
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	18.6	21.7	20.9	21.4	22.0
12.	Interest payments	1.4	2.8	2.9	2.9	3.2
13.	Subsidies	2.5	3.0	2.1	2.2	2.2
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**41.7**	**48.6**	**45.7**	**46.7**	**48.4**
16.	Gross savings	3.7	0.5	2.4	1.4	– 0.4
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**45.3**	**49.1**	**48.2**	**48.2**	**48.0**
19.	Gross fixed capital formation	3.3	3.2	3.5	3.5	3.5
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**45.4**	**52.0**	**49.7**	**50.2**	**51.8**
22.	Tax burden	42.9	46.3	45.1	45.4	45.0
23.	**Net lending (+) or net borrowing (–)**	**0.0**	**– 2.8**	**– 1.5**	**– 2.0**	**– 3.9**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
14.3	14.7	14.9	15.4	16.1	16.0	16.0	15.9	15.5	15.2	15.2	15.1
9.0	9.2	9.4	8.5	8.9	9.5	11.7	12.2	12.3	12.5	12.4	12.2
21.1	20.7	21.0	20.5	20.7	20.3	18.1	18.3	18.3	18.1	17.9	17.7
:	:	:	18.7	18.9	18.4	16.3	16.5	16.4	16.3	16.1	15.9
4.1	3.7	3.8	3.7	4.0	3.9	3.7	3.6	3.9	3.7	3.9	3.7
48.4	**48.3**	**49.0**	**48.1**	**49.7**	**49.7**	**49.5**	**50.1**	**49.9**	**49.5**	**49.4**	**48.7**
19.4	19.2	19.0	23.9	24.2	24.2	23.4	23.4	23.3	23.2	23.3	23.0
14.0	14.0	14.1	13.7	13.9	13.8	13.7	13.6	13.6	13.6	13.8	13.6
:	:	:	9.8	9.9	10.0	9.4	9.4	9.3	9.1	9.1	9.0
:	:	:	14.1	14.3	14.2	14.1	14.0	14.0	14.1	14.2	14.0
23.2	22.9	23.0	18.5	18.7	18.8	18.4	18.2	18.2	18.1	18.5	18.1
3.3	3.5	3.7	3.8	3.9	3.7	3.6	3.3	3.3	3.2	3.1	3.1
2.5	2.3	2.3	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.3
:	:	:	1.6	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.6
50.7	**50.4**	**50.4**	**49.2**	**50.0**	**49.8**	**48.4**	**48.0**	**47.7**	**47.4**	**47.8**	**47.0**
– 2.2	– 2.1	– 1.4	– 1.1	– 0.3	– 0.1	1.1	2.1	2.2	2.1	1.6	1.7
:	:	:	0.4	0.3	0.8	0.3	0.4	0.4	0.5	0.5	0.5
48.4	**48.3**	**49.0**	**49.7**	**51.4**	**51.9**	**51.2**	**51.8**	**51.5**	**51.2**	**51.0**	**50.5**
3.2	3.1	3.2	3.3	3.2	3.0	2.9	2.9	3.0	3.0	3.0	3.0
:	:	:	1.5	0.9	0.9	1.1	1.2	0.9	0.9	1.0	1.1
54.1	**54.0**	**53.8**	**55.2**	**55.5**	**55.0**	**53.9**	**53.4**	**52.9**	**52.6**	**52.9**	**52.3**
45.6	46.0	46.6	45.2	46.4	46.5	46.4	47.1	46.7	46.5	46.1	45.7
– 5.6	**– 5.7**	**– 4.8**	**– 5.5**	**– 4.1**	**– 3.0**	**– 2.7**	**– 1.6**	**– 1.3**	**– 1.4**	**– 1.9**	**– 1.8**

Table A.1.7

Resources and expenditure of general government, Ireland

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	15.3	16.7	15.6	15.2	15.2
2.	Current taxes on income and wealth	11.5	13.1	13.1	13.7	14.1
3.	Social contributions	4.4	5.1	5.0	5.2	5.3
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.3	3.9	2.3	2.5	2.5
6.	**Total current resources**	**34.5**	**38.8**	**35.9**	**36.6**	**37.0**
7.	Government consumption expenditure	18.2	16.9	14.2	15.1	15.4
8.	Of which compensation of employees	11.8	11.5	9.9	10.5	10.6
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	11.6	15.2	13.4	14.1	14.6
12.	Interest payments	6.0	9.3	7.4	7.2	6.7
13.	Subsidies	7.2	7.4	5.6	5.5	4.7
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**39.5**	**45.1**	**36.7**	**37.8**	**38.2**
16.	Gross savings	– 4.9	– 6.2	– 0.8	– 1.2	– 1.2
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**34.5**	**38.8**	**35.9**	**36.6**	**37.0**
19.	Gross fixed capital formation	5.4	3.7	2.0	2.1	2.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**46.2**	**49.0**	**38.0**	**38.9**	**39.4**
22.	Tax burden	31.1	34.9	33.5	34.0	34.4
23.	**Net lending (+) or net borrowing (–)**	**– 11.6**	**– 10.2**	**– 2.2**	**– 2.3**	**– 2.4**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
14.4	15.3	14.6	13.5	13.7	13.5	13.2	13.1	13.2	12.2	12.7	12.6
14.8	15.2	13.5	13.6	14.1	14.0	13.9	13.8	13.4	12.8	12.7	12.5
5.3	5.1	4.7	6.8	6.3	6.0	5.7	5.8	5.7	5.8	5.7	5.7
:	:	:	5.0	4.6	4.4	4.2	4.4	4.4	4.5	4.4	4.4
2.4	2.1	1.8	2.8	2.9	2.7	2.5	2.2	2.1	2.5	2.4	2.3
36.9	**37.6**	**34.6**	**36.7**	**37.0**	**36.1**	**35.2**	**34.9**	**34.4**	**33.2**	**33.5**	**33.0**
15.3	15.2	14.2	16.4	15.8	15.2	14.5	14.0	13.4	14.2	15.0	15.0
10.8	10.4	9.6	10.2	9.7	9.2	8.7	8.3	8.6	9.2	9.7	9.6
:	:	:	6.1	5.8	5.5	5.3	4.9	4.7	5.0	5.3	5.3
:	:	:	10.4	9.9	9.6	9.2	9.1	8.7	9.2	9.7	9.7
14.5	14.4	13.6	11.8	11.5	10.6	9.9	9.0	8.2	8.8	9.5	9.5
6.3	5.6	5.0	5.4	4.6	4.2	3.4	2.4	2.1	1.5	1.6	1.5
4.9	4.5	4.1	1.0	1.0	1.0	0.8	0.7	0.8	1.2	0.8	0.8
:	:	:	2.1	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0
38.0	**37.0**	**34.8**	**36.7**	**35.3**	**33.2**	**30.8**	**28.2**	**26.4**	**27.6**	**28.9**	**28.7**
– 1.0	0.6	– 0.2	– 0.1	1.7	2.9	4.4	6.7	7.9	5.6	4.5	4.3
:	:	:	1.8	1.7	1.8	1.6	1.6	1.4	1.5	1.3	1.2
36.9	**37.6**	**34.6**	**39.4**	**39.4**	**38.6**	**37.5**	**37.2**	**37.1**	**36.0**	**36.0**	**35.4**
2.2	2.3	2.4	2.3	2.4	2.5	2.7	3.1	3.6	4.1	4.3	4.3
:	:	:	1.6	1.2	1.1	1.0	2.9	1.2	1.2	1.0	1.1
39.2	**39.2**	**36.7**	**41.5**	**39.7**	**37.5**	**35.2**	**34.8**	**32.6**	**34.3**	**35.4**	**35.2**
34.4	35.5	32.8	35.0	35.0	34.2	33.6	33.4	33.1	31.5	31.8	31.4
– 2.3	**– 1.6**	**– 2.1**	**– 2.2**	**– 0.2**	**1.2**	**2.3**	**2.3**	**4.5**	**1.7**	**0.6**	**0.2**

Table A.1.8

Resources and expenditure of general government, Italy

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	9.3	9.5	11.3	11.8	11.8
2.	Current taxes on income and wealth	9.7	13.0	14.3	14.4	14.6
3.	Social contributions	12.9	13.5	14.3	14.6	14.9
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	2.4	2.9	2.9	3.0	3.3
6.	**Total current resources**	**34.4**	**39.0**	**42.8**	**43.8**	**44.5**
7.	Government consumption expenditure	15.0	16.6	17.4	17.4	17.5
8.	Of which compensation of employees	11.1	11.8	12.7	12.6	12.5
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	14.5	17.3	18.3	18.4	19.5
12.	Interest payments	5.5	8.0	9.4	10.1	11.4
13.	Subsidies	3.5	3.4	2.5	2.6	2.3
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**39.0**	**45.9**	**48.5**	**49.5**	**51.6**
16.	Gross savings	– 4.6	– 6.9	– 5.7	– 5.7	– 7.1
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**34.4**	**39.0**	**42.8**	**43.8**	**44.5**
19.	Gross fixed capital formation	3.2	3.7	3.3	3.2	3.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**43.0**	**51.5**	**53.8**	**53.8**	**54.0**
22.	Tax burden	31.7	36.1	40.0	40.9	41.5
23.	**Net lending (+) or net borrowing (–)**	**– 8.7**	**– 12.5**	**– 11.0**	**– 10.0**	**– 9.5**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.7	12.4	12.4	12.1	11.8	12.4	15.3	15.1	15.0	14.5	14.7	14.6
16.1	14.8	14.5	14.8	15.4	16.2	14.5	15.1	14.8	15.2	14.8	14.5
15.4	14.8	14.7	14.8	15.0	15.3	12.8	12.7	12.7	12.7	12.7	12.7
:	:	:	13.0	14.6	14.9	12.5	12.4	12.4	12.4	12.4	12.4
3.6	3.6	3.7	3.1	3.2	3.2	3.2	3.3	3.1	3.2	3.2	3.1
47.7	**45.5**	**45.3**	**44.8**	**45.5**	**47.2**	**45.9**	**46.3**	**45.6**	**45.7**	**45.3**	**44.8**
17.5	17.0	15.9	17.9	18.1	18.2	17.9	18.0	18.2	18.4	18.3	18.0
12.4	11.9	11.3	11.2	11.5	11.6	10.7	10.6	10.5	10.6	10.5	10.4
:	:	:	7.3	7.3	7.2	7.2	7.1	7.0	6.8	6.6	6.4
:	:	:	10.6	10.8	11.0	10.8	10.9	11.3	11.6	11.7	11.6
19.7	19.7	19.1	16.7	16.9	17.3	17.0	17.1	16.8	16.7	17.0	16.9
12.0	10.9	11.3	11.5	11.5	9.4	8.3	6.8	6.5	6.4	5.8	5.7
2.7	2.4	1.9	1.5	1.5	1.2	1.3	1.2	1.2	1.2	1.1	1.1
:	:	:	1.1	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
53.1	**51.0**	**49.1**	**48.6**	**49.2**	**47.4**	**45.8**	**44.6**	**44.1**	**44.0**	**43.7**	**43.1**
– 5.4	– 5.4	– 3.9	– 3.8	– 3.7	– 0.2	0.1	1.7	1.5	1.7	1.6	1.7
:	:	:	0.9	0.4	1.0	0.7	0.5	0.4	:	:	:
47.7	**45.5**	**45.3**	**45.8**	**46.1**	**48.4**	**46.8**	**47.1**	**46.3**	**46.2**	**46.1**	**45.4**
2.6	2.3	2.2	2.1	2.2	2.2	2.4	2.4	2.4	2.2	2.0	2.0
:	:	:	2.5	1.6	1.3	1.5	1.6	0.1	1.2	1.4	1.3
57.1	**54.6**	**52.9**	**53.4**	**53.2**	**51.1**	**49.9**	**48.9**	**46.9**	**47.7**	**47.3**	**46.7**
44.2	42.1	41.9	42.3	42.9	44.4	43.2	43.5	43.0	43.0	42.7	42.3
– 9.4	**– 9.1**	**– 7.6**	**– 7.6**	**– 7.1**	**– 2.7**	**– 3.1**	**– 1.8**	**– 0.6**	**– 1.5**	**– 1.3**	**– 1.3**

Table A.1.9

Resources and expenditure of general government, Luxembourg

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	12.4	14.8	15.0	15.1	15.5
2.	Current taxes on income and wealth	15.6	17.5	:	:	:
3.	Social contributions	13.3	12.3	:	:	:
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	6.3	5.6	:	:	:
6.	**Total current resources**	**47.6**	**50.2**	**:**	**:**	**:**
7.	Government consumption expenditure	14.4	13.6	12.6	12.4	12.4
8.	Of which compensation of employees	10.1	9.7	:	:	:
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	21.6	20.6	:	:	:
12.	Interest payments	1.2	1.0	0.4	0.4	0.3
13.	Subsidies	2.9	3.0	3.0	3.1	2.9
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**40.5**	**39.1**	**:**	**:**	**:**
16.	Gross savings	7.1	11.1	:	:	:
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**47.6**	**50.2**	**:**	**:**	**:**
19.	Gross fixed capital formation	6.4	4.0	4.4	4.6	5.1
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**48.0**	**44.0**	**:**	**:**	**:**
22.	Tax burden	39.9	43.0	:	:	:
23.	**Net lending (+) or net borrowing (–)**	**– 0.4**	**6.2**	**4.7**	**1.8**	**0.7**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
16.1	16.2	16.2	12.6	12.6	12.7	12.9	13.9	14.4	13.8	13.9	14.0
:	:	:	17.5	17.9	17.2	16.4	16.0	16.0	15.6	14.7	14.4
:	:	:	12.5	12.1	11.4	11.2	11.4	11.5	12.2	12.4	12.3
:	:	:	11.2	11.0	10.4	10.2	10.5	10.7	11.3	11.5	11.4
:	:	:	5.7	5.5	5.3	5.2	4.9	4.7	4.7	4.7	4.5
:	**:**	**:**	**48.3**	**48.1**	**46.7**	**45.8**	**46.2**	**46.6**	**46.3**	**45.6**	**45.2**
12.2	11.9	12.6	18.5	18.9	17.8	16.8	17.0	16.2	17.0	17.3	16.9
:	:	:	9.7	9.7	9.2	8.8	8.5	8.0	:	:	:
:	:	:	8.0	8.0	7.6	7.1	7.0	6.7	7.2	7.4	7.2
:	:	:	10.5	10.9	10.2	9.7	10.0	9.5	9.8	10.0	9.7
:	:	:	16.5	16.2	15.4	14.8	14.7	14.1	15.0	15.3	15.1
0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2
2.8	2.8	2.1	1.8	2.1	1.9	1.8	1.6	1.7	1.6	1.6	1.6
:	:	:	2.7	2.7	3.4	3.3	3.4	3.5	3.5	3.5	3.4
:	**:**	**:**	**39.8**	**40.2**	**38.7**	**37.1**	**37.0**	**35.7**	**37.3**	**37.9**	**37.1**
:	:	:	8.5	7.9	8.0	8.7	9.1	10.9	9.0	7.7	8.1
:	:	:	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
:	**:**	**:**	**47.8**	**47.5**	**46.2**	**45.4**	**45.7**	**46.1**	**45.8**	**45.2**	**44.8**
5.1	4.2	4.5	4.6	4.7	4.2	4.5	4.6	4.3	4.6	4.8	4.6
:	:	:	1.5	1.3	1.2	1.2	1.0	1.1	– 0.5	1.1	1.1
:	**:**	**:**	**45.1**	**45.4**	**43.4**	**42.2**	**41.9**	**40.3**	**40.8**	**43.2**	**42.3**
:	:	:	43.7	43.7	42.5	41.5	41.8	42.2	41.9	41.2	41.0
1.6	**2.7**	**1.8**	**2.7**	**2.1**	**2.9**	**3.2**	**3.8**	**5.8**	**5.0**	**2.0**	**2.5**

Table A.1.10

Resources and expenditure of general government, Netherlands

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	11.7	11.7	11.9	11.9	12.3
2.	Current taxes on income and wealth	15.2	12.3	14.9	16.2	15.3
3.	Social contributions	17.5	19.8	16.4	17.3	17.8
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	6.4	8.8	4.9	5.2	4.8
6.	**Total current resources**	**50.7**	**52.5**	**48.1**	**50.6**	**50.2**
7.	Government consumption expenditure	16.8	15.2	14.0	13.9	14.1
8.	Of which compensation of employees	12.4	10.6	9.3	9.2	9.4
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	25.4	26.4	26.2	26.3	26.8
12.	Interest payments	3.7	6.2	5.8	5.9	6.0
13.	Subsidies	3.0	3.5	2.9	3.1	3.1
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**49.4**	**51.7**	**49.6**	**50.3**	**51.1**
16.	Gross savings	1.3	0.9	– 1.6	0.3	– 0.9
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**50.7**	**52.5**	**48.1**	**50.6**	**50.2**
19.	Gross fixed capital formation	3.2	2.3	2.0	2.1	2.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**54.8**	**56.1**	**53.0**	**53.4**	**54.0**
22.	Tax burden	43.9	43.4	42.8	45.0	45.0
23.	**Net lending (+) or net borrowing (–)**	**– 4.1**	**– 3.5**	**– 4.9**	**– 2.8**	**– 3.8**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.4	12.4	12.3	10.7	11.2	11.4	11.6	12.2	12.2	12.6	12.7	12.6
16.1	13.6	12.5	12.4	12.9	12.4	12.2	12.2	12.1	12.2	12.4	12.1
17.8	18.4	18.2	17.2	16.6	16.6	16.4	17.2	17.2	15.2	14.4	14.4
:	:	:	16.0	15.5	15.5	15.3	16.1	16.1	14.2	13.5	13.5
4.6	4.1	3.7	6.0	5.8	5.5	5.0	4.7	4.8	4.9	4.6	4.3
50.9	**48.4**	**46.6**	**46.3**	**46.5**	**45.9**	**45.2**	**46.2**	**46.2**	**44.9**	**44.1**	**43.5**
14.3	13.9	13.8	24.0	23.1	22.9	22.7	23.0	22.7	23.2	23.6	23.5
9.6	9.3	9.3	10.8	10.4	10.2	10.1	10.2	10.0	10.0	10.1	10.2
:	:	:	11.6	11.3	11.0	10.8	11.0	10.8	10.9	11.1	11.0
:	:	:	12.5	11.9	11.9	11.9	12.0	12.0	12.3	12.5	12.5
26.9	26.0	25.1	15.3	14.8	13.9	13.0	12.5	11.9	11.4	11.6	11.6
6.0	5.7	5.7	5.9	5.6	5.2	4.9	4.5	4.0	3.4	3.0	2.7
2.9	2.5	1.8	1.1	1.2	1.5	1.5	1.6	1.5	1.4	1.4	1.4
:	:	:	1.1	1.2	1.3	1.3	1.4	1.6	1.9	1.7	1.8
51.3	**49.4**	**47.7**	**47.4**	**45.9**	**44.7**	**43.4**	**42.9**	**41.7**	**41.4**	**41.3**	**41.0**
– 0.3	– 1.0	– 1.1	– 1.1	0.6	1.3	1.8	3.3	4.5	3.5	2.8	2.5
:	:	:	0.3	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4
50.9	**48.4**	**46.6**	**47.3**	**47.8**	**47.1**	**46.5**	**47.6**	**47.5**	**45.6**	**44.8**	**44.2**
2.0	2.0	1.9	3.0	3.1	2.9	2.9	3.1	3.2	3.3	3.3	3.4
:	:	:	0.4	– 0.1	– 0.2	0.0	0.2	– 0.4	0.4	– 0.1	– 0.1
54.0	**52.1**	**50.5**	**51.4**	**49.6**	**48.2**	**47.2**	**47.1**	**45.4**	**45.4**	**44.8**	**44.6**
45.9	43.9	42.5	41.5	41.7	41.5	41.1	42.5	42.4	40.9	40.4	40.1
– 3.1	**– 3.6**	**– 3.8**	**– 4.2**	**– 1.8**	**– 1.1**	**– 0.8**	**0.4**	**2.2**	**0.3**	**0.0**	**– 0.4**

Table A.1.11

Resources and expenditure of general government, Austria

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	15.8	16.3	15.7	15.5	15.6
2.	Current taxes on income and wealth	12.5	14.0	11.6	12.2	12.7
3.	Social contributions	14.4	14.6	15.5	15.6	16.2
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	2.8	2.9	4.4	4.4	4.8
6.	**Total current resources**	**45.6**	**47.8**	**47.1**	**47.7**	**49.2**
7.	Government consumption expenditure	17.4	18.4	18.4	18.7	19.1
8.	Of which compensation of employees	11.6	12.4	11.7	11.8	12.0
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	18.4	19.8	19.5	19.7	19.9
12.	Interest payments	2.4	3.5	4.0	4.2	4.2
13.	Subsidies	2.9	2.8	2.8	3.1	3.0
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**41.3**	**44.7**	**44.9**	**45.9**	**46.5**
16.	Gross savings	4.2	3.1	2.2	1.8	2.7
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**45.6**	**47.8**	**47.1**	**47.7**	**49.2**
19.	Gross fixed capital formation	4.3	3.6	3.2	3.2	3.2
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**47.2**	**50.2**	**49.6**	**50.6**	**51.2**
22.	Tax burden	42.7	44.8	42.6	43.2	44.4
23.	**Net lending (+) or net borrowing (–)**	**– 1.7**	**– 2.4**	**– 2.4**	**– 3.0**	**– 2.0**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
15.7	15.7	15.5	14.3	14.5	14.9	14.9	15.0	14.8	14.8	14.5	14.4
12.8	11.3	11.9	12.0	13.1	13.5	13.7	13.4	13.4	15.2	15.0	15.1
16.8	17.2	17.3	17.4	17.5	17.4	17.3	17.3	17.1	17.1	17.0	16.8
:	:	:	15.2	15.3	15.3	15.2	15.2	15.0	15.1	14.9	14.7
4.6	4.4	4.5	5.7	5.2	3.8	3.5	3.4	3.4	3.9	3.8	3.7
49.9	**48.6**	**49.2**	**49.4**	**50.3**	**49.5**	**49.4**	**49.1**	**48.7**	**51.0**	**50.3**	**49.9**
19.9	20.0	19.8	20.4	20.3	19.7	19.6	19.9	19.4	19.2	18.8	18.7
12.5	12.4	12.4	12.6	12.4	11.5	11.4	11.4	11.2	10.4	10.1	9.9
:	:	:	8.1	8.0	7.8	7.8	7.9	7.6	7.5	7.2	7.0
:	:	:	12.4	12.3	11.9	11.8	12.0	11.8	11.7	11.7	11.7
21.5	21.7	21.6	19.5	19.5	18.9	18.6	18.7	18.7	18.7	18.9	18.7
4.3	4.0	4.3	4.4	4.4	4.0	3.9	3.7	3.7	3.5	3.4	3.3
3.1	2.5	2.9	2.9	2.6	2.6	2.8	2.6	2.5	2.8	2.6	2.6
:	:	:	2.5	2.6	2.5	2.7	2.8	2.6	2.4	2.4	2.4
49.1	**48.6**	**49.6**	**49.8**	**49.4**	**47.7**	**47.6**	**47.6**	**46.9**	**46.6**	**46.2**	**45.6**
0.8	0.0	– 0.4	– 0.4	0.9	1.8	1.8	1.5	1.8	4.4	4.2	4.3
:	:	:	0.2	0.2	0.3	0.1	0.3	0.2	0.2	0.2	0.2
49.9	**48.6**	**49.2**	**52.0**	**52.8**	**52.1**	**51.9**	**51.8**	**51.2**	**52.4**	**51.4**	**50.9**
3.2	3.3	2.8	3.1	2.8	2.0	1.9	1.8	1.5	1.3	1.2	1.2
:	:	:	2.0	2.2	2.1	2.5	2.4	2.1	3.4	3.3	3.0
54.1	**53.5**	**54.2**	**57.3**	**56.8**	**54.1**	**54.4**	**54.2**	**52.9**	**52.5**	**51.6**	**50.6**
45.3	44.0	44.7	44.9	45.9	46.7	46.6	46.5	45.9	47.8	47.2	46.9
– 4.2	**– 4.9**	**– 5.0**	**– 5.3**	**– 4.0**	**– 2.0**	**– 2.5**	**– 2.4**	**– 1.7**	**– 0.1**	**– 0.1**	**0.3**

Table A.1.12

Resources and expenditure of general government, Portugal

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	12.2	13.7	13.0	12.9	13.7
2.	Current taxes on income and wealth	5.6	7.8	7.9	8.8	9.8
3.	Social contributions	8.0	8.6	10.1	10.5	11.1
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	2.0	2.7	2.9	3.1	3.6
6.	**Total current resources**	**27.8**	**32.7**	**33.9**	**35.2**	**38.1**
7.	Government consumption expenditure	13.3	14.0	15.0	16.7	16.8
8.	Of which compensation of employees	10.2	10.2	11.8	12.8	13.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	9.3	10.4	11.4	12.5	13.4
12.	Interest payments	2.6	7.4	7.8	7.6	7.0
13.	Subsidies	6.0	6.8	1.4	1.3	1.2
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**31.3**	**38.7**	**35.3**	**37.7**	**37.3**
16.	Gross savings	– 3.5	– 6.0	– 1.4	– 2.5	0.8
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**27.8**	**32.7**	**33.9**	**35.2**	**38.1**
19.	Gross fixed capital formation	4.2	3.2	3.2	3.3	3.7
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**36.2**	**42.8**	**38.8**	**41.0**	**41.0**
22.	Tax burden	24.6	28.3	31.3	32.6	35.0
23.	**Net lending (+) or net borrowing (–)**	**– 8.4**	**– 10.1**	**– 4.9**	**– 5.8**	**– 2.9**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.9	13.4	13.6	14.0	14.1	13.9	14.3	14.9	14.5	14.6	14.5	14.5
9.0	8.8	9.1	9.5	10.0	10.0	9.8	10.2	10.7	10.3	10.3	10.3
11.7	11.5	11.7	11.0	11.0	11.1	11.3	11.4	11.7	12.0	12.1	12.1
:	:	:	10.1	10.3	10.4	10.6	10.6	10.9	11.1	11.2	11.1
3.1	2.6	2.8	4.1	4.3	4.0	4.0	3.8	3.6	3.6	3.7	3.7
36.8	**36.3**	**37.2**	**38.6**	**39.4**	**39.1**	**39.4**	**40.2**	**40.5**	**40.5**	**40.6**	**40.6**
17.4	17.1	17.3	18.6	18.9	19.0	18.9	19.6	20.3	20.5	20.5	20.3
14.2	13.7	13.7	13.6	13.7	13.8	13.9	14.4	14.9	15.3	15.3	15.2
:	:	:	7.6	7.3	7.7	7.6	7.8	8.8	8.8	8.8	8.8
:	:	:	11.0	11.6	11.2	11.3	11.8	11.5	11.6	11.6	11.6
15.0	14.8	15.1	11.8	11.8	11.6	11.7	11.9	12.1	12.6	12.5	12.4
6.0	6.1	6.2	6.3	5.4	4.2	3.5	3.2	3.2	3.1	3.1	3.2
1.3	1.2	1.1	1.3	1.5	1.2	1.5	1.7	1.1	1.2	1.2	1.1
:	:	:	1.7	1.9	2.0	2.1	2.2	2.3	2.2	2.2	2.2
38.8	**39.1**	**39.5**	**39.6**	**39.5**	**38.1**	**37.6**	**38.6**	**39.0**	**39.6**	**39.4**	**39.2**
– 2.0	– 2.8	– 2.3	– 1.1	– 0.1	1.0	1.8	1.7	1.6	0.9	1.1	1.3
:	:	:	1.9	2.1	2.3	1.6	1.8	1.7	2.3	2.4	2.4
36.8	**36.3**	**37.2**	**40.6**	**41.7**	**41.7**	**41.4**	**42.7**	**42.8**	**43.3**	**43.4**	**43.5**
3.9	3.5	3.7	3.7	4.2	4.3	3.9	4.1	3.7	4.1	4.2	4.3
:	:	:	1.4	1.7	1.6	2.1	1.9	1.6	1.9	1.9	1.9
42.7	**42.1**	**42.7**	**44.9**	**45.5**	**44.2**	**44.1**	**45.2**	**44.9**	**46.0**	**46.1**	**45.9**
34.1	34.4	34.8	34.5	35.1	35.1	35.4	36.4	37.0	36.9	36.9	36.9
– 5.9	**– 5.9**	**– 5.6**	**– 4.4**	**– 3.8**	**– 2.6**	**– 2.7**	**– 2.5**	**– 2.1**	**– 2.8**	**– 2.6**	**– 2.5**

Table A.1.13

Resources and expenditure of general government, Finland

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	13.1	14.1	14.9	15.0	14.7
2.	Current taxes on income and wealth	14.2	16.5	17.7	17.6	16.9
3.	Social contributions	10.9	11.4	12.9	13.6	14.6
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.8	5.1	5.9	6.8	7.6
6.	**Total current resources**	**42.0**	**47.0**	**51.4**	**53.1**	**53.7**
7.	Government consumption expenditure	17.6	19.8	20.8	23.8	24.3
8.	Of which compensation of employees	12.1	13.9	14.4	16.8	17.3
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	12.5	15.3	15.5	19.3	23.2
12.	Interest payments	1.0	1.8	1.4	1.9	2.6
13.	Subsidies	3.2	3.1	2.8	3.4	3.5
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**34.6**	**40.5**	**42.2**	**50.5**	**55.8**
16.	Gross savings	7.4	6.5	9.2	2.6	– 2.1
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**42.0**	**47.0**	**51.4**	**53.1**	**53.7**
19.	Gross fixed capital formation	3.8	3.7	3.7	3.8	3.5
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**38.6**	**44.2**	**46.1**	**54.5**	**59.5**
22.	Tax burden	38.3	42.3	45.8	46.6	46.5
23.	**Net lending (+) or net borrowing (–)**	**3.3**	**2.9**	**5.3**	**– 1.5**	**– 5.7**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
14.5	14.2	13.6	13.7	13.5	14.3	14.1	14.2	13.5	13.3	13.1	12.6
15.2	16.8	16.7	17.4	19.0	18.4	18.8	18.7	21.2	19.5	19.4	18.9
15.0	15.8	14.8	14.9	14.3	13.4	13.0	13.2	12.2	12.5	12.2	11.7
:	:	:	14.6	14.0	13.2	12.9	13.1	12.2	12.5	12.2	11.7
8.0	6.7	7.0	7.3	6.7	6.3	5.9	5.4	6.3	6.5	6.5	6.3
52.7	**53.5**	**52.1**	**53.2**	**53.5**	**52.3**	**51.8**	**51.4**	**53.1**	**51.9**	**51.0**	**49.6**
22.8	21.8	21.2	22.8	23.2	22.4	21.7	21.7	20.6	21.2	21.5	21.2
16.2	15.3	14.8	15.4	15.6	14.6	13.9	13.7	13.1	13.3	13.4	13.2
:	:	:	8.3	8.4	8.4	8.1	8.1	7.6	7.7	7.8	7.7
:	:	:	14.5	14.8	14.1	13.6	13.6	13.1	13.5	13.7	13.6
24.7	24.5	22.9	22.2	21.5	19.9	18.4	18.0	16.3	16.6	16.9	16.6
4.5	5.0	5.2	4.0	4.3	4.3	3.6	3.1	2.8	2.7	2.6	2.5
3.3	3.0	3.2	2.8	2.1	1.9	1.8	1.6	1.6	1.5	1.6	1.5
:	:	:	1.9	2.1	2.3	2.2	2.3	2.3	2.2	2.3	2.3
57.7	**56.4**	**54.3**	**53.7**	**53.1**	**50.7**	**47.6**	**46.8**	**43.7**	**44.2**	**44.9**	**44.2**
– 5.0	– 2.9	– 2.2	– 0.5	0.4	1.6	4.2	4.7	9.5	7.7	6.2	5.4
:	:	:	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3
52.7	**53.5**	**52.1**	**56.2**	**56.8**	**55.3**	**54.5**	**54.1**	**55.6**	**54.3**	**53.2**	**52.3**
2.8	2.9	2.7	2.8	2.9	3.2	2.9	2.9	2.6	2.7	2.7	2.6
:	:	:	0.6	0.9	0.3	0.3	0.3	0.3	0.5	0.5	0.4
60.6	**59.5**	**57.1**	**59.9**	**59.9**	**56.8**	**53.3**	**52.1**	**48.6**	**49.4**	**49.9**	**49.6**
44.9	47.2	45.9	46.6	47.4	46.7	46.5	46.6	47.3	45.9	45.1	43.8
– 7.9	**– 6.1**	**– 5.0**	**– 3.7**	**– 3.2**	**– 1.5**	**1.3**	**1.9**	**7.0**	**4.9**	**3.3**	**2.7**

Table A.1.14

Resources and expenditure of general government, Sweden

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	13.1	16.0	16.5	17.2	15.8
2.	Current taxes on income and wealth	20.9	20.3	22.6	19.2	19.9
3.	Social contributions	14.8	13.6	15.0	15.0	14.4
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	7.3	9.3	8.4	8.2	9.1
6.	**Total current resources**	**56.1**	**59.2**	**62.6**	**59.6**	**59.1**
7.	Government consumption expenditure	28.5	27.1	26.4	26.4	27.1
8.	Of which compensation of employees	20.2	18.3	18.1	18.3	18.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	17.6	18.2	19.2	20.6	22.9
12.	Interest payments	4.0	8.1	4.8	5.0	5.3
13.	Subsidies	4.2	4.9	4.6	4.9	5.4
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**55.4**	**59.3**	**56.3**	**58.1**	**62.4**
16.	Gross savings	0.7	– 0.1	6.3	1.4	– 3.3
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**56.1**	**59.2**	**62.6**	**59.6**	**59.1**
19.	Gross fixed capital formation	4.1	3.0	2.3	2.2	2.6
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**60.0**	**63.0**	**58.5**	**60.7**	**66.6**
22.	Tax burden	48.8	49.9	54.2	51.3	50.0
23.	**Net lending (+) or net borrowing (–)**	**– 3.9**	**– 3.7**	**4.0**	**– 1.1**	**– 7.5**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
15.1	14.3	13.8	13.7	14.3	14.8	15.3	16.8	14.5	14.6	14.3	14.1
20.1	20.3	20.8	20.2	21.6	21.7	22.4	22.0	22.2	23.4	21.2	21.2
13.9	13.8	14.2	14.2	15.3	15.0	15.1	13.7	15.8	16.3	16.1	16.0
:	:	:	13.6	14.6	14.5	14.5	13.2	15.2	15.6	15.5	15.3
9.2	8.5	8.1	8.3	8.0	7.2	7.1	6.2	6.0	5.1	4.9	4.7
58.2	**57.0**	**56.9**	**56.5**	**59.1**	**58.7**	**59.9**	**58.6**	**58.5**	**59.4**	**56.4**	**56.1**
27.1	26.1	24.8	26.4	27.1	26.5	26.7	26.7	26.2	26.7	26.9	26.7
18.5	17.6	16.7	17.3	17.8	17.4	16.8	16.4	16.4	16.7	16.5	16.4
:	:	:	7.3	7.7	7.7	7.5	7.5	7.3	7.4	7.5	7.5
:	:	:	19.0	19.5	18.9	19.2	19.3	18.9	19.2	19.4	19.2
24.4	24.1	22.5	21.3	20.3	19.6	19.3	18.8	18.3	18.1	18.4	18.4
6.0	6.6	6.8	6.9	6.8	6.5	5.7	5.0	4.2	3.4	3.1	2.9
5.7	5.1	4.9	3.8	3.3	2.7	2.2	2.1	1.6	1.5	1.5	1.4
:	:	:	2.1	1.8	1.8	2.1	1.9	2.2	2.3	2.4	2.3
65.1	**63.6**	**61.4**	**60.3**	**59.3**	**57.2**	**56.0**	**54.5**	**52.5**	**52.1**	**52.2**	**51.7**
– 6.9	– 6.6	– 4.5	– 3.9	– 0.2	1.5	3.9	4.1	6.0	7.3	4.2	4.4
:	:	:	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
58.2	**57.0**	**56.9**	**60.0**	**62.2**	**61.6**	**62.9**	**61.6**	**61.4**	**62.3**	**59.0**	**58.6**
1.0	2.9	2.8	3.4	3.0	2.7	2.7	2.7	2.5	2.6	2.6	2.6
:	:	:	0.6	0.1	0.6	– 0.8	0.2	0.0	0.1	0.1	0.1
70.1	**66.9**	**64.4**	**67.6**	**65.3**	**63.2**	**60.8**	**60.3**	**57.7**	**57.4**	**57.3**	**56.8**
49.0	48.5	49.4	48.9	51.8	52.2	53.5	53.1	53.1	54.8	52.2	52.0
– 11.9	**– 9.9**	**– 7.5**	**– 7.7**	**– 3.1**	**– 1.6**	**2.1**	**1.4**	**3.7**	**4.8**	**1.7**	**1.9**

Table A.1.15

Resources and expenditure of general government, United Kingdom

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	15.8	16.0	15.6	16.0	15.6
2.	Current taxes on income and wealth	13.4	14.5	13.8	12.8	12.1
3.	Social contributions	6.0	6.8	6.2	6.2	6.1
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	4.5	4.1	2.7	2.5	2.3
6.	**Total current resources**	**39.8**	**41.4**	**38.3**	**37.4**	**36.1**
7.	Government consumption expenditure	21.7	21.2	20.3	21.2	21.6
8.	Of which compensation of employees	12.8	12.2	11.5	11.7	11.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	10.6	12.8	10.6	11.8	13.1
12.	Interest payments	4.7	5.0	3.1	2.7	2.7
13.	Subsidies	2.5	2.0	1.1	1.0	1.1
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**40.3**	**42.0**	**35.8**	**36.9**	**39.3**
16.	Gross savings	– 0.5	– 0.5	2.4	0.5	– 3.2
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**39.8**	**41.4**	**38.3**	**37.4**	**36.1**
19.	Gross fixed capital formation	2.5	2.1	2.3	2.1	2.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**43.2**	**44.3**	**39.2**	**39.7**	**42.2**
22.	Tax burden	33.5	35.4	33.3	33.1	32.2
23.	**Net lending (+) or net borrowing (–)**	**– 3.4**	**– 2.9**	**– 0.9**	**– 2.3**	**– 6.1**

([1]) The table is based on ESA 95 definitions which do not necessarily correspond with the 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 23 = line 18 – line 21

Source: mmission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
15.3	15.4	15.7	13.1	13.2	13.5	13.5	13.9	13.9	13.6	13.5	13.4
11.4	11.8	12.6	14.9	14.7	15.0	16.2	16.1	16.7	16.8	16.9	16.7
6.1	6.2	6.2	7.5	7.4	7.4	7.5	7.5	7.4	7.7	7.6	7.6
:	:	:	6.8	6.7	6.8	6.8	6.8	6.8	7.0	7.0	7.0
2.2	2.2	2.2	2.8	2.9	2.6	2.5	2.5	2.5	2.4	2.4	2.3
35.1	**35.6**	**36.7**	**38.3**	**38.1**	**38.5**	**39.8**	**40.0**	**40.5**	**40.5**	**40.5**	**40.1**
21.5	21.2	20.9	19.6	19.3	18.4	18.0	18.5	18.8	19.2	19.6	19.9
10.7	9.1	8.4	8.3	7.9	7.5	7.2	7.2	7.3	7.5	7.6	7.7
:	:	:	8.3	8.1	7.6	7.3	7.3	7.5	7.6	7.8	7.9
:	:	:	11.3	11.2	10.8	10.7	11.2	11.3	11.6	11.9	12.0
13.8	13.6	13.4	15.4	14.8	14.4	13.7	13.4	13.4	13.8	14.0	13.7
2.8	3.2	3.4	3.6	3.6	3.6	3.5	2.9	2.8	2.4	2.3	2.2
1.1	1.1	1.1	0.8	0.9	0.7	0.6	0.6	0.5	0.6	0.5	0.5
:	:	:	1.8	1.9	1.9	2.0	2.1	2.3	2.0	2.1	2.0
40.0	**39.8**	**39.7**	**41.2**	**40.4**	**39.1**	**37.8**	**37.4**	**37.7**	**37.9**	**38.5**	**38.3**
– 4.9	– 4.2	– 3.0	– 2.9	– 2.3	– 0.6	2.0	2.6	2.9	2.6	1.9	1.8
:	:	:	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
35.1	**35.6**	**36.7**	**38.9**	**38.6**	**38.9**	**40.2**	**40.4**	**40.9**	**41.0**	**41.0**	**40.6**
1.8	1.8	1.7	2.0	1.5	1.2	1.2	1.1	1.2	1.3	1.5	1.7
:	:	:	1.2	0.9	0.7	0.6	0.6	– 2.0	0.8	1.0	1.0
42.8	**42.3**	**42.1**	**44.6**	**43.0**	**41.1**	**39.8**	**39.3**	**36.9**	**40.1**	**41.2**	**41.1**
31.3	31.9	32.9	36.5	36.1	36.6	38.0	38.1	38.7	38.6	38.6	38.3
– 7.7	**– 6.7**	**– 5.4**	**– 5.8**	**– 4.4**	**– 2.2**	**0.4**	**1.2**	**4.0**	**0.9**	**– 0.2**	**– 0.5**

Table A.1.16

Resources and expenditure of general government, euro area (1)

(% of GDP)

		Former definitions				
		1980	1985	1990	1991	1992
1.	Taxes on production and imports	12.3	12.6	12.7	12.6	12.7
2.	Current taxes on income and wealth	10.8	11.6	11.8	12.0	12.0
3.	Social contributions	15.9	16.7	16.4	16.7	17.1
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.0	3.7	3.3	3.4	3.6
6.	**Total current resources**	**41.9**	**44.6**	**44.2**	**44.7**	**45.4**
7.	Government consumption expenditure	17.4	18.0	17.2	17.6	18.0
8.	Of which compensation of employees	11.7	12.0	11.5	11.6	11.8
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	17.2	18.7	18.2	18.6	19.4
12.	Interest payments	2.6	4.5	4.9	5.0	5.5
13.	Subsidies	2.7	3.0	2.4	2.5	2.4
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**40.8**	**45.2**	**44.4**	**45.2**	**46.6**
16.	Gross savings	1.1	– 0.6	– 0.2	– 0.5	– 1.2
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**41.9**	**44.6**	**44.2**	**44.7**	**45.4**
19.	Gross fixed capital formation	3.3	3.0	3.0	3.1	3.0
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**45.3**	**49.6**	**48.6**	**49.3**	**50.2**
22.	Tax burden	39.1	41.2	41.2	41.6	42.1
23.	**Net lending (+) or net borrowing (–)**	**– 3.4**	**– 5.0**	**– 4.4**	**– 4.6**	**– 4.8**

(1) Due to problems with availability of the data, Luxembourg data are not included; from 1991 including former East Germany

(2) System is based on ESA 95 definitions which does not necessarily correspond with the former definitions:
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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [1]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
13.0	13.2	13.1	12.5	12.7	12.9	13.5	13.8	13.6	13.3	13.4	13.3
12.1	11.6	11.7	11.4	11.9	12.1	12.4	12.8	13.0	12.7	12.7	12.6
17.7	17.7	17.7	17.4	17.6	17.5	16.5	16.4	16.2	16.0	15.9	15.8
:	:	:	16.0	16.4	16.3	15.3	15.3	15.1	14.9	14.8	14.7
3.7	3.5	3.3	3.8	3.8	3.6	3.5	3.4	3.4	3.5	3.4	3.3
46.4	**46.0**	**45.7**	**45.1**	**46.0**	**46.1**	**45.8**	**46.4**	**46.2**	**45.6**	**45.4**	**45.0**
18.4	18.1	17.9	20.5	20.5	20.3	19.9	20.0	19.9	19.9	20.0	19.7
11.9	11.7	11.6	11.1	11.2	11.1	10.8	10.7	10.6	10.6	10.6	10.4
:	:	:	8.6	8.6	8.5	8.2	8.2	8.2	8.1	8.1	8.0
:	:	:	11.9	12.0	11.8	11.7	11.7	11.7	11.8	11.9	11.8
20.3	20.2	20.1	17.3	17.7	17.6	17.2	17.0	16.8	16.7	17.0	16.7
5.6	5.4	5.6	5.6	5.7	5.2	4.8	4.3	4.1	3.9	3.8	3.7
2.5	2.4	2.3	1.7	1.7	1.5	1.5	1.5	1.4	1.4	1.4	1.3
:	:	:	1.4	1.4	1.5	1.5	1.6	1.7	1.6	1.7	1.7
48.2	**47.5**	**47.2**	**46.5**	**47.0**	**46.0**	**44.9**	**44.4**	**43.8**	**43.6**	**43.7**	**43.1**
– 1.8	– 1.5	– 1.5	– 1.3	– 1.1	0.2	0.9	2.0	2.4	2.0	1.7	1.9
:	:	:	0.7	0.5	0.7	0.5	0.6	0.6	:	:	:
46.4	**46.0**	**45.7**	**46.5**	**47.2**	**47.6**	**47.1**	**47.7**	**47.4**	**46.7**	**46.6**	**46.2**
2.9	2.7	2.6	2.7	2.6	2.4	2.5	2.5	2.5	2.5	2.4	2.4
:	:	:	1.7	1.2	1.1	1.3	1.4	0.3	1.4	1.4	1.4
52.0	**51.1**	**50.7**	**51.6**	**51.5**	**50.2**	**49.4**	**49.1**	**47.2**	**48.0**	**48.1**	**47.4**
42.9	42.8	42.7	42.2	42.9	43.2	43.0	43.6	43.4	42.7	42.6	42.3
– 5.6	**– 5.1**	**– 4.9**	**– 5.1**	**– 4.3**	**– 2.7**	**– 2.3**	**– 1.3**	**0.2**	**– 1.3**	**– 1.5**	**– 1.3**

Table A.1.17

Resources and expenditure of general government, EU-15 (1)

(% of GDP)

		Former definitions				
		1980	**1985**	**1990**	**1991**	**1992**
1.	Taxes on production and imports	13.0	13.4	13.4	13.4	13.3
2.	Current taxes on income and wealth	11.9	12.8	12.8	12.7	12.6
3.	Social contributions	14.0	14.7	14.5	14.8	15.2
4.	Of which actual social contributions	:	:	:	:	:
5.	Other current resources	3.5	4.0	3.5	3.5	3.7
6.	**Total current resources**	**42.3**	**44.9**	**44.2**	**44.3**	**44.8**
7.	Government consumption expenditure	18.7	19.0	18.1	18.6	19.0
8.	Of which compensation of employees	12.3	12.4	11.8	12.0	12.1
9.	Collective consumption	:	:	:	:	:
10.	Social benefits in kind	:	:	:	:	:
11.	Social transfers other than in kind	16.1	17.6	17.1	17.7	18.6
12.	Interest payments	3.0	4.8	4.7	4.7	5.2
13.	Subsidies	2.8	2.9	2.3	2.4	2.3
14.	Other current expenditure	:	:	:	:	:
15.	**Total current expenditure**	**41.4**	**45.4**	**43.8**	**44.6**	**46.3**
16.	Gross savings	0.8	– 0.6	0.4	– 0.3	– 1.6
17.	Capital transfers received	:	:	:	:	:
18.	**Total resources**	**42.3**	**44.9**	**44.2**	**44.3**	**44.8**
19.	Gross fixed capital formation	3.2	2.9	2.9	2.9	2.9
20.	Other capital expenditure	:	:	:	:	:
21.	**Total expenditure**	**45.7**	**49.3**	**47.7**	**48.5**	**49.8**
22.	Tax burden	38.7	40.7	40.6	40.8	41.1
23.	**Net lending (+) or net borrowing (–)**	**– 3.4**	**– 4.5**	**– 3.5**	**– 4.1**	**– 5.0**

(1) Due to problems with availability of the data, Luxembourg data are not included; from 1991 including former East Germany

(2) System is based on ESA 95 definitions which does not necessarily correspond with the former definitions:
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 23 = line 18 – line 21

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions [2]								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
13.4	13.6	13.5	12.7	12.9	13.1	13.6	14.0	13.7	13.5	13.5	13.4
12.5	12.3	12.4	12.5	13.0	13.2	13.7	14.0	14.3	14.1	14.0	13.9
15.7	15.7	15.8	15.7	15.8	15.5	14.7	14.5	14.4	14.3	14.1	14.0
:	:	:	14.4	14.7	14.4	13.6	13.5	13.3	13.2	13.1	13.0
3.7	3.5	3.4	3.9	3.9	3.6	3.5	3.4	3.3	3.4	3.3	3.2
45.4	**45.1**	**45.1**	**44.8**	**45.5**	**45.5**	**45.5**	**45.9**	**45.7**	**45.2**	**45.0**	**44.6**
19.2	18.9	18.7	20.7	20.7	20.3	19.9	20.0	20.0	20.1	20.2	20.1
12.1	11.6	11.4	11.1	11.1	10.8	10.5	10.4	10.3	10.3	10.3	10.2
:	:	:	8.5	8.5	8.3	8.1	8.1	8.0	8.0	8.0	7.9
:	:	:	12.1	12.2	12.0	11.9	12.0	12.0	12.1	12.2	12.1
19.5	19.4	19.3	17.2	17.4	17.2	16.7	16.5	16.2	16.2	16.4	16.2
5.3	5.2	5.3	5.4	5.5	5.0	4.6	4.1	3.9	3.6	3.5	3.4
2.4	2.3	2.2	1.6	1.6	1.4	1.4	1.4	1.3	1.3	1.2	1.2
:	:	:	1.5	1.5	1.6	1.7	1.7	1.8	1.7	1.8	1.8
47.7	**47.1**	**46.8**	**46.4**	**46.7**	**45.4**	**44.3**	**43.7**	**43.1**	**42.9**	**43.1**	**42.6**
– 2.4	– 2.0	– 1.7	– 1.6	– 1.2	0.1	1.2	2.2	2.6	2.3	1.9	2.0
:	:	:	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.6	0.5
45.4	**45.1**	**45.1**	**46.1**	**46.8**	**46.8**	**46.6**	**47.1**	**46.8**	**46.3**	**46.1**	**45.7**
2.7	2.6	2.5	2.6	2.4	2.2	2.2	2.3	2.2	2.3	2.3	2.3
:	:	:	1.6	1.1	1.0	1.1	1.2	– 0.2	1.2	1.3	1.2
51.4	**50.5**	**50.1**	**51.3**	**51.0**	**49.3**	**48.3**	**47.8**	**45.8**	**47.0**	**47.2**	**46.6**
41.6	41.6	41.8	41.8	42.4	42.6	42.6	43.1	43.0	42.4	42.2	41.9
– 6.0	**– 5.4**	**– 5.0**	**– 5.2**	**– 4.2**	**– 2.5**	**– 1.6**	**– 0.7**	**1.0**	**– 0.7**	**– 1.1**	**– 0.9**

Table A.2.1

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Belgium	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	8.6	8.9	5.4	6.2	6.9
2. Interest payments	5.9	10.3	10.3	10.0	10.6
3. Implicit interest rate (2)	9.4	9.7	8.9	8.4	8.8
4. Nominal GDP growth rate (%)	8.8	6.4	6.0	4.6	5.3
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	8.6	8.9	5.4	6.2	6.9
6. Contribution of nominal GDP growth	– 5.5	– 6.8	– 7.0	– 5.4	– 6.3
7. Stock-flow adjustment (3)	4.9	2.6	1.8	1.3	0.8
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	2.7	– 1.4	– 5.0	– 3.8	– 3.7
9. Snowball effect (5)	0.4	3.5	3.3	4.5	4.3
10. Stock-flow adjustment (3)	4.9	2.6	1.8	1.3	0.8
11. Change in gross debt (6)	8.3	4.9	0.1	2.1	1.4
12. Level of gross debt (end of year)	78.3	121.8	127.7	129.8	131.2

Denmark	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	3.2	2.0	1.0	2.4	2.2
2. Interest payments	3.7	9.3	7.3	7.3	6.7
3. Implicit interest rate (2)	13.7	13.9	13.2	13.1	11.0
4. Nominal GDP growth rate (%)	8.0	8.7	4.7	3.9	3.5
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	3.2	2.0	1.0	2.4	2.2
6. Contribution of nominal GDP growth	– 2.2	– 5.8	– 2.6	– 2.2	– 2.1
7. Stock-flow adjustment (3)	6.0	0.9	1.4	4.4	3.9
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 0.7	– 7.6	– 6.3	– 4.9	– 4.4
9. Snowball effect (5)	1.6	3.5	4.7	5.1	4.5
10. Stock-flow adjustment (3)	6.0	0.9	1.4	4.4	3.9
11. Change in gross debt (6)	7.0	– 2.9	– 0.2	4.6	4.0
12. Level of gross debt (end of year)	36.4	69.8	57.7	62.3	66.4

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7.2	4.8	3.9	3.8	2.0	0.9	0.6	0.0	– 0.2	0.2	– 0.2
10.6	10.0	8.8	8.9	8.0	7.6	7.0	6.8	6.5	6.2	5.8
8.5	7.8	7.0	:	6.4	6.3	6.1	6.3	6.2	6.0	5.8
2.2	4.7	4.4	2.4	5.0	3.9	4.3	5.4	3.6	3.2	4.7
7.2	4.8	3.9	3.8	2.0	0.9	0.6	0.0	– 0.2	0.2	– 0.2
– 2.8	– 6.0	– 5.6	:	– 6.2	– 4.7	– 4.9	– 5.9	– 3.8	– 3.3	– 4.7
2.2	– 0.4	– 1.3	:	– 1.3	– 1.6	0.0	0.3	2.2	0.0	0.0
– 3.5	– 5.2	– 4.9	– 5.1	– 6.0	– 6.7	– 6.4	– 6.9	– 6.7	– 6.1	– 6.0
7.9	4.0	3.2	:	1.8	2.9	2.1	0.9	2.7	2.9	1.1
2.2	– 0.4	– 1.3	:	– 1.3	– 1.6	0.0	0.3	2.2	0.0	0.0
6.8	– 1.6	– 3.1	:	– 5.4	– 5.4	– 4.3	– 5.7	– 1.8	– 3.1	– 5.0
138.0	136.4	133.4	130.1	124.7	119.3	115.0	109.3	107.5	104.3	99.4

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
2.8	2.6	2.2	1.0	– 0.4	– 1.1	– 3.2	– 2.5	– 3.0	– 2.1	– 2.4
7.3	6.7	6.4	6.1	5.7	5.3	4.7	4.2	4.1	3.5	3.2
11.1	9.2	9.1	:	9.3	9.0	8.8	8.5	9.0	8.1	7.9
1.4	7.3	4.6	5.1	5.2	3.5	5.0	6.8	3.6	3.9	5.0
2.8	2.6	2.2	1.0	– 0.4	– 1.1	– 3.2	– 2.5	– 3.0	– 2.1	– 2.4
– 0.9	– 5.3	– 3.2	:	– 3.2	– 2.1	– 2.7	– 3.4	– 1.8	– 1.7	– 2.1
9.8	– 1.8	– 3.2	:	– 0.4	– 1.7	2.3	– 0.1	2.5	2.3	1.1
– 4.5	– 4.1	– 4.2	– 5.1	– 6.1	– 6.5	– 7.8	– 6.7	– 7.1	– 5.6	– 5.7
6.4	1.4	3.2	:	2.5	3.3	2.0	0.8	2.3	1.8	1.2
9.8	– 1.8	– 3.2	:	– 0.4	– 1.7	2.3	– 0.1	2.5	2.3	1.1
11.7	– 4.6	– 4.2	:	– 3.9	– 4.9	– 3.5	– 5.9	– 2.1	– 1.4	– 3.4
78.0	73.5	69.3	65.1	61.2	56.2	52.7	46.8	44.7	43.3	39.8

Table A.2.2

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Germany (1)	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (2)	1.9	2.2	2.1	3.2	2.8
2. Interest payments	2.9	2.9	2.6	2.6	3.2
3. Implicit interest rate (3)	7.2	7.1	6.8	7.1	8.5
4. Nominal GDP growth rate (%)	3.4	5.3	9.1	9.1	7.4
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (2)	1.9	2.2	2.1	3.2	2.8
6. Contribution of nominal GDP growth	– 1.4	– 2.2	– 3.5	– 3.6	– 2.8
7. Stock-flow adjustment (4)	0.5	0.4	3.1	1.2	2.7
Budgetary constraint based on the primary deficit					
8. Primary deficit (5)	– 1.0	– 0.7	– 0.6	0.6	– 0.4
9. Snowball effect (6)	:	:	:	– 0.8	0.4
10. Stock-flow adjustment (4)	0.5	0.4	3.1	1.2	2.7
11. Change in gross debt (7)	1.0	0.5	1.7	0.9	2.7
12. Level of gross debt (end of year)	42.6	43.1	43.5	40.4	43.2

Greece	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (2)	2.6	11.6	15.9	11.4	12.6
2. Interest payments	2.0	4.9	10.0	9.3	11.5
3. Implicit interest rate (3)	8.5	11.6	15.0	12.9	14.6
4. Nominal GDP growth rate (%)	20.1	22.0	20.6	23.5	15.6
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (2)	2.6	11.6	15.9	11.4	12.6
6. Contribution of nominal GDP growth	– 4.7	– 9.3	– 13.8	– 16.9	– 12.3
7. Stock-flow adjustment (4)	1.9	6.3	6.4	7.7	6.1
Budgetary constraint based on the primary deficit					
8. Primary deficit (5)	0.7	6.7	5.9	2.1	1.1
9. Snowball effect (6)	– 2.7	– 4.4	– 3.7	– 7.6	– 0.8
10. Stock-flow adjustment (4)	1.9	6.3	6.4	7.7	6.1
11. Change in gross debt (7)	– 0.2	8.7	8.6	2.2	6.4
12. Level of gross debt (end of year)	27.9	59.9	89.0	91.1	97.5

(1) From 1991 including former East Germany.
(2) Line 1 = line 5, a minus sign means a surplus.
(3) Actual interest payments as percentage of gross debt at end of t – 1.
(4) Line 7 = line 10; due to a change in definition there are no data for 1996.
(5) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(6) Due to a change in definition there are no data for 1996.
(7) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
3.5	2.6	3.4	3.4	2.7	2.2	1.6	– 1.2	2.7	2.8	2.1
3.2	3.3	3.7	3.7	3.6	3.6	3.5	3.4	3.2	3.3	3.2
7.7	7.4	7.8	:	6.2	6.1	6.0	5.6	5.4	5.6	5.5
2.5	4.9	3.8	1.8	2.1	3.1	2.3	2.6	1.9	2.3	3.6
3.5	2.6	3.4	3.4	2.7	2.2	1.6	– 1.2	2.7	2.8	2.1
– 1.1	– 2.2	– 1.8	:	– 1.2	– 1.8	– 1.4	– 1.6	– 1.1	– 1.3	– 2.1
1.6	1.9	6.1	:	– 0.3	– 0.5	0.2	1.8	– 2.2	– 0.4	– 0.6
0.2	– 0.7	– 0.4	– 0.3	– 0.9	– 1.4	– 2.0	– 4.5	– 0.5	– 0.5	– 1.1
2.2	1.1	1.9	:	2.4	1.8	2.2	1.8	2.1	1.9	1.1
1.6	1.9	6.1	:	– 0.3	– 0.5	0.2	1.8	– 2.2	– 0.4	– 0.6
4.0	2.3	7.7	:	1.2	– 0.1	0.4	– 1.0	– 0.6	1.0	– 0.7
47.2	49.5	57.1	59.8	61.0	60.9	61.3	60.3	59.8	60.8	60.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
13.6	9.9	10.5	7.8	4.7	3.1	1.7	0.8	– 0.1	– 0.3	– 0.5
12.6	13.9	12.8	10.5	8.2	7.8	7.3	7.0	6.2	5.6	5.1
14.6	14.3	13.2	:	8.2	7.8	7.4	7.3	6.5	6.0	5.6
12.6	13.5	12.1	9.9	10.7	8.8	6.7	7.6	7.4	7.1	7.5
13.6	9.9	10.5	7.8	4.7	3.1	1.7	0.8	– 0.1	– 0.3	– 0.5
– 10.9	– 13.1	– 11.6	:	– 10.7	– 8.7	– 6.6	– 7.3	– 7.1	– 6.6	– 6.8
10.0	1.0	2.0	:	2.9	2.4	3.6	5.5	4.1	5.0	4.7
1.0	– 4.0	– 2.3	– 2.8	– 3.6	– 4.7	– 5.6	– 6.2	– 6.3	– 5.8	– 5.7
1.7	0.8	1.1	:	– 2.5	– 1.0	0.7	– 0.3	– 0.9	– 1.0	– 1.7
10.0	1.0	2.0	:	2.9	2.4	3.6	5.5	4.1	5.0	4.7
12.7	– 2.3	0.8	:	– 3.1	– 3.2	– 1.2	– 1.0	– 3.1	– 1.9	– 2.7
110.2	107.9	108.7	111.3	108.2	105.0	103.8	102.8	99.7	97.8	95.1

Table A.2.3

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Spain	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	2.5	6.2	4.2	4.3	4.0
2. Interest payments	0.4	1.9	3.9	3.7	4.3
3. Implicit interest rate (2)	3.4	5.8	10.4	9.4	10.4
4. Nominal GDP growth rate (%)	14.9	11.1	11.4	9.7	7.7
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	2.5	6.2	4.2	4.3	4.0
6. Contribution of nominal GDP growth	– 1.9	– 3.7	– 4.3	– 3.8	– 3.2
7. Stock-flow adjustment (3)	1.3	2.7	1.9	0.2	1.6
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	1.8	4.3	0.3	0.6	– 0.3
9. Snowball effect (5)	– 1.5	– 1.8	– 0.4	– 0.1	1.1
10. Stock-flow adjustment (3)	1.3	2.7	1.9	0.2	1.6
11. Change in gross debt (6)	1.8	5.2	1.8	0.7	2.4
12. Level of gross debt (end of year)	17.0	42.7	44.0	44.7	47.1

France	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	0.0	2.8	1.5	2.0	3.9
2. Interest payments	1.4	2.8	2.9	2.9	3.2
3. Implicit interest rate (2)	7.7	10.5	9.0	8.6	9.4
4. Nominal GDP growth rate (%)	12.9	7.0	5.6	4.0	3.5
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	0.0	2.8	1.5	2.0	3.9
6. Contribution of nominal GDP growth	– 2.4	– 1.9	– 1.8	– 1.3	– 1.2
7. Stock-flow adjustment (3)	1.0	0.8	1.3	– 0.3	1.2
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 1.4	0.0	– 1.4	– 0.9	0.7
9. Snowball effect (5)	– 1.0	1.0	1.1	1.6	2.0
10. Stock-flow adjustment (3)	1.0	0.8	1.3	– 0.3	1.2
11. Change in gross debt (6)	– 1.5	1.8	1.1	0.4	4.0
12. Level of gross debt (end of year)	20.4	31.8	36.3	36.7	40.6

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
6.7	6.1	7.0	5.0	3.2	2.6	1.1	0.4	0.0	0.2	0.0
5.0	4.7	5.3	5.3	4.8	4.3	3.5	3.3	3.1	2.9	2.8
11.2	8.6	9.5	:	7.4	6.9	5.9	5.6	5.5	5.4	5.4
3.5	6.4	7.8	6.0	6.4	6.8	7.1	7.7	6.8	5.3	5.8
6.7	6.1	7.0	5.0	3.2	2.6	1.1	0.4	0.0	0.2	0.0
– 1.6	– 3.5	– 4.4	:	– 4.1	– 4.3	– 4.3	– 4.5	– 3.8	– 2.9	– 3.1
6.3	– 0.2	0.1	:	– 0.6	– 0.3	1.7	1.4	0.7	1.0	1.0
1.7	1.4	1.7	– 0.4	– 1.6	– 1.7	– 2.5	– 2.9	– 3.1	– 2.8	– 2.8
3.5	1.2	0.9	:	0.6	0.0	– 0.8	– 1.2	– 0.7	0.1	– 0.2
6.3	– 0.2	0.1	:	– 0.6	– 0.3	1.7	1.4	0.7	1.0	1.0
11.6	2.5	2.8	:	– 1.5	– 2.0	– 1.5	– 2.7	– 3.1	– 1.7	– 2.0
58.7	61.2	64.0	68.1	66.6	64.6	63.1	60.4	57.2	55.5	53.5

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
5.6	5.7	4.8	4.1	3.0	2.7	1.6	1.3	1.4	1.9	1.8
3.3	3.5	3.7	3.9	3.7	3.6	3.3	3.3	3.2	3.1	3.1
8.6	8.2	8.0	:	6.7	6.3	5.8	5.8	5.7	5.6	5.6
1.4	3.8	3.4	2.6	3.2	4.4	3.4	4.1	3.6	3.0	4.3
5.6	5.7	4.8	4.1	3.0	2.7	1.6	1.3	1.4	1.9	1.8
– 0.5	– 1.6	– 1.6	:	– 1.8	– 2.5	– 2.2	– 2.5	– 2.0	– 1.7	– 2.3
0.2	– 0.7	1.0	:	0.9	0.1	– 0.5	0.1	0.5	– 0.5	0.3
2.3	2.2	1.1	0.1	– 0.7	– 0.9	– 1.7	– 2.0	– 1.8	– 1.2	– 1.3
2.8	1.9	2.1	:	1.9	1.1	1.2	0.8	1.2	1.5	0.8
0.2	– 0.7	1.0	:	0.9	0.1	– 0.5	0.1	0.5	– 0.5	0.3
5.5	3.5	4.4	:	2.2	0.3	– 0.9	– 0.8	– 0.2	– 0.3	– 0.2
46.1	49.6	54.0	57.1	59.3	59.5	58.7	57.8	57.7	57.4	57.2

Table A.2.4

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Ireland	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	11.6	10.2	2.2	2.3	2.4
2. Interest payments	6.0	9.3	7.4	7.2	6.7
3. Implicit interest rate (2)	10.6	10.5	8.1	8.1	7.7
4. Nominal GDP growth rate (%)	18.3	8.5	7.3	3.8	6.3
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	11.6	10.2	2.2	2.3	2.4
6. Contribution of nominal GDP growth	– 10.3	– 7.6	– 6.7	– 3.4	– 5.4
7. Stock-flow adjustment (3)	0.3	0.2	– 1.6	0.9	0.6
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	5.6	0.9	– 5.3	– 5.0	– 4.3
9. Snowball effect (5)	– 4.4	1.7	0.8	3.9	1.3
10. Stock-flow adjustment (3)	0.3	0.2	– 1.6	0.9	0.6
11. Change in gross debt (6)	1.6	3.0	– 6.4	– 0.3	– 2.6
12. Level of gross debt (end of year)	72.3	105.3	97.5	97.3	94.7

Italy	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	8.7	12.5	11.0	10.0	9.5
2. Interest payments	5.5	8.0	9.4	10.1	11.4
3. Implicit interest rate (2)	11.3	11.9	10.9	11.3	11.9
4. Nominal GDP growth rate (%)	25.6	12.2	10.4	9.1	5.3
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	8.7	12.5	11.0	10.0	9.5
6. Contribution of nominal GDP growth	– 12.4	– 8.2	– 9.0	– 8.1	– 5.1
7. Stock-flow adjustment (3)	1.0	2.3	– 0.2	1.4	2.7
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	3.2	4.5	1.6	– 0.1	– 1.9
9. Snowball effect (5)	– 7.0	– 0.2	0.4	2.0	6.3
10. Stock-flow adjustment (3)	1.0	2.3	– 0.2	1.4	2.7
11. Change in gross debt (6)	– 2.8	6.7	1.9	3.3	7.1
12. Level of gross debt (end of year)	58.3	82.0	97.3	100.7	107.7

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
2.3	1.6	2.1	0.2	– 1.2	– 2.3	– 2.3	– 4.5	– 1.7	– 0.6	– 0.2
6.3	5.6	5.0	4.6	4.2	3.4	2.4	2.1	1.5	1.6	1.5
7.6	6.4	6.4	:	6.5	6.0	4.9	4.9	4.4	4.8	4.8
8.0	7.6	13.3	10.2	15.4	15.1	15.5	16.2	12.0	8.2	10.0
2.3	1.6	2.1	0.2	– 1.2	– 2.3	– 2.3	– 4.5	– 1.7	– 0.6	– 0.2
– 6.7	– 6.6	– 10.3	:	– 9.9	– 8.5	– 7.4	– 6.9	– 4.0	– 2.8	– 3.1
8.3	– 0.9	0.3	:	2.0	0.9	4.2	0.9	3.2	0.7	1.0
– 4.0	– 4.0	– 2.9	– 4.4	– 5.3	– 5.7	– 4.7	– 6.6	– 3.3	– 2.2	– 1.7
– 0.4	– 1.0	– 5.4	:	– 5.7	– 5.1	– 5.0	– 4.9	– 2.4	– 1.2	– 1.6
8.3	– 0.9	0.3	:	2.0	0.9	4.2	0.9	3.2	0.7	1.0
4.2	– 6.2	– 8.4	:	– 9.1	– 9.9	– 5.5	– 10.6	– 2.7	– 2.7	– 2.2
98.8	92.6	84.3	74.2	65.1	55.1	49.6	39.0	36.3	33.6	31.4

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
9.4	9.1	7.6	7.1	2.7	3.1	1.8	0.6	1.5	1.3	1.3
12.0	10.9	11.3	11.5	9.4	8.3	6.8	6.5	6.4	5.8	5.7
11.5	9.7	9.8	:	8.0	7.2	6.0	6.0	6.0	5.5	5.6
3.0	5.8	8.1	6.4	4.5	4.6	3.3	5.1	4.5	3.8	4.9
9.4	9.1	7.6	7.1	2.7	3.1	1.8	0.6	1.5	1.3	1.3
– 3.2	– 6.4	– 9.3	:	– 5.2	– 5.2	– 3.7	– 5.5	– 4.7	– 4.0	– 5.1
4.2	3.1	1.0	:	0.6	– 1.7	0.1	1.0	2.1	1.1	1.6
– 2.6	– 1.8	– 3.6	– 4.4	– 6.7	– 5.2	– 5.0	– 5.9	– 4.9	– 4.5	– 4.4
8.9	4.4	2.0	:	4.2	3.1	3.1	1.0	1.7	1.9	0.7
4.2	3.1	1.0	:	0.6	– 1.7	0.1	1.0	2.1	1.1	1.6
10.5	5.7	– 0.6	:	– 1.9	– 3.9	– 1.9	– 4.0	– 1.2	– 1.6	– 2.2
118.2	123.9	123.3	122.1	120.2	116.4	114.5	110.6	109.4	107.8	105.6

Table A.2.5

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Luxembourg	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	0.4	– 6.2	– 4.7	– 1.8	– 0.7
2. Interest payments	1.2	1.0	0.4	0.4	0.3
3. Implicit interest rate (2)	13.2	10.2	8.8	9.0	9.2
4. Nominal GDP growth rate (%)	8.8	6.0	7.5	8.6	7.2
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	0.4	– 6.2	– 4.7	– 1.8	– 0.7
6. Contribution of nominal GDP growth	– 0.8	– 0.6	– 0.4	– 0.4	– 0.3
7. Stock-flow adjustment (3)	0.1	6.3	4.2	1.6	1.9
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 0.7	– 7.2	– 5.1	– 2.2	– 1.1
9. Snowball effect (5)	0.4	0.4	0.1	0.0	0.1
10. Stock-flow adjustment (3)	0.1	6.3	4.2	1.6	1.9
11. Change in gross debt (6)	– 0.3	– 0.5	– 0.9	– 0.5	0.9
12. Level of gross debt (end of year)	9.3	9.6	4.4	3.9	4.8

The Netherlands	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	4.1	3.5	4.9	2.8	3.8
2. Interest payments	3.7	6.2	5.8	5.9	6.0
3. Implicit interest rate (2)	9.4	10.0	8.0	8.2	8.3
4. Nominal GDP growth rate (%)	6.8	4.9	6.4	5.4	4.1
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	4.1	3.5	4.9	2.8	3.8
6. Contribution of nominal GDP growth	– 2.7	– 3.0	– 4.6	– 3.9	– 3.0
7. Stock-flow adjustment (3)	1.3	4.0	– 0.6	0.9	0.1
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	0.4	– 2.6	– 0.8	– 3.1	– 2.3
9. Snowball effect (5)	1.0	3.1	1.2	2.0	3.1
10. Stock-flow adjustment (3)	1.3	4.0	– 0.6	0.9	0.1
11. Change in gross debt (6)	2.8	4.6	– 0.3	– 0.2	0.9
12. Level of gross debt (end of year)	46.3	70.5	77.4	77.2	78.1

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 1.6	– 2.7	– 1.8	– 2.1	– 2.9	– 3.2	– 3.8	– 5.8	– 5.0	– 2.0	– 2.5
0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2
8.0	6.2	5.4	:	6.1	6.5	5.4	5.0	5.2	5.1	4.9
9.3	9.2	4.1	5.5	12.1	8.6	8.7	11.5	6.1	5.2	9.1
– 1.6	– 2.7	– 1.8	– 2.1	– 2.9	– 3.2	– 3.8	– 5.8	– 5.0	– 2.0	– 2.5
– 0.4	– 0.5	– 0.2	:	– 0.7	– 0.5	– 0.5	– 0.6	– 0.3	– 0.3	– 0.4
3.0	2.7	2.2	:	3.4	3.9	4.0	6.0	5.2	1.9	2.8
– 1.9	– 3.0	– 2.1	– 2.4	– 3.2	– 3.5	– 4.1	– 6.0	– 5.3	– 2.2	– 2.7
– 0.1	– 0.2	0.1	:	– 0.3	– 0.1	– 0.2	– 0.4	– 0.1	0.0	– 0.2
3.0	2.7	2.2	:	3.4	3.9	4.0	6.0	5.2	1.9	2.8
1.0	– 0.4	0.3	:	– 0.1	0.3	– 0.3	– 0.4	– 0.1	– 0.3	– 0.1
5.8	5.4	5.6	6.2	6.0	6.3	6.0	5.7	5.5	5.2	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
3.1	3.6	3.8	1.8	1.1	0.8	– 0.4	– 2.2	– 0.3	0.0	0.4
6.0	5.7	5.7	5.6	5.2	4.9	4.5	4.0	3.4	3.0	2.7
8.0	7.6	8.0	:	7.3	7.4	7.1	6.7	6.4	5.9	5.8
2.8	5.0	5.0	4.2	5.9	6.1	5.5	7.3	6.4	4.8	5.7
3.1	3.6	3.8	1.8	1.1	0.8	– 0.4	– 2.2	– 0.3	0.0	0.4
– 2.1	– 3.7	– 3.6	:	– 4.2	– 4.0	– 3.5	– 4.3	– 3.1	– 2.4	– 2.7
0.1	– 3.1	0.6	:	– 2.2	0.1	0.3	– 0.6	0.6	– 0.4	– 0.4
– 2.9	– 2.0	– 1.9	– 3.8	– 4.1	– 4.1	– 4.9	– 6.1	– 3.6	– 3.0	– 2.3
3.9	2.0	2.1	:	1.0	0.8	1.0	– 0.4	0.3	0.6	0.0
0.1	– 3.1	0.6	:	– 2.2	0.1	0.3	– 0.6	0.6	– 0.4	– 0.4
1.1	– 3.2	0.9	:	– 5.3	– 3.2	– 3.6	– 7.1	– 3.1	– 2.9	– 2.7
79.3	76.1	77.0	75.2	69.9	66.8	63.1	56.0	52.9	50.1	47.4

Table A.2.6

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Austria	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	1.7	2.4	2.4	3.0	2.0
2. Interest payments	2.4	3.5	4.0	4.2	4.2
3. Implicit interest rate (2)	7.5	7.7	7.5	7.8	7.7
4. Nominal GDP growth rate (%)	7.5	5.5	8.2	7.2	6.0
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	1.7	2.4	2.4	3.0	2.0
6. Contribution of nominal GDP growth	– 2.4	– 2.5	– 4.4	– 3.8	– 3.3
7. Stock-flow adjustment (3)	2.2	2.0	1.2	1.1	1.1
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 0.8	– 1.1	– 1.6	– 1.2	– 2.2
9. Snowball effect (5)	0.0	1.0	– 0.4	0.3	0.9
10. Stock-flow adjustment (3)	2.2	2.0	1.2	1.1	1.1
11. Change in gross debt (6)	1.5	2.0	– 0.8	0.2	– 0.2
12. Level of gross debt (end of year)	36.4	49.4	57.5	57.7	57.5

Portugal	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	8.4	10.1	4.9	5.8	2.9
2. Interest payments	2.6	7.4	7.8	7.6	7.0
3. Implicit interest rate (2)	8.5	15.9	15.0	13.8	12.1
4. Nominal GDP growth rate (%)	26.5	25.2	17.6	14.9	12.7
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	8.4	10.1	4.9	5.8	2.9
6. Contribution of nominal GDP growth	– 8.1	– 11.8	– 9.2	– 8.2	– 7.3
7. Stock-flow adjustment (3)	– 3.9	9.7	6.3	4.2	– 2.7
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	5.8	2.7	– 2.9	– 1.8	– 4.1
9. Snowball effect (5)	– 5.5	– 4.4	– 1.4	– 0.6	– 0.4
10. Stock-flow adjustment (3)	– 3.9	9.7	6.3	4.2	– 2.7
11. Change in gross debt (6)	– 3.6	8.0	2.0	1.8	– 7.1
12. Level of gross debt (end of year)	34.9	66.6	63.1	64.9	57.8

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
4.2	4.9	5.0	4.0	2.0	2.5	2.4	1.7	0.1	0.1	– 0.3
4.3	4.0	4.3	4.4	4.0	3.9	3.7	3.7	3.5	3.4	3.3
7.7	6.8	7.0	:	6.0	6.3	5.9	5.9	5.7	5.7	5.7
3.4	5.4	4.2	3.3	2.5	4.1	3.5	4.2	2.9	2.9	3.9
4.2	4.9	5.0	4.0	2.0	2.5	2.4	1.7	0.1	0.1	– 0.3
– 1.9	– 3.2	– 2.6	:	– 1.7	– 2.5	– 2.2	– 2.6	– 1.8	– 1.8	– 2.3
2.2	1.0	1.4	:	– 4.8	– 0.8	0.7	– 0.3	– 0.2	0.1	0.0
– 0.1	0.9	0.7	– 0.4	– 2.0	– 1.4	– 1.3	– 2.0	– 3.5	– 3.3	– 3.6
2.4	0.8	1.8	:	2.3	1.4	1.5	1.1	1.7	1.7	1.0
2.2	1.0	1.4	:	– 4.8	– 0.8	0.7	– 0.3	– 0.2	0.1	0.0
4.6	2.7	3.8	:	– 4.4	– 0.8	0.9	– 1.3	– 1.8	– 1.5	– 2.6
62.1	64.7	68.6	69.2	64.7	63.9	64.9	63.6	61.7	60.2	57.6

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
5.9	5.9	5.6	3.8	2.6	2.7	2.5	2.1	2.8	2.6	2.5
6.0	6.1	6.2	5.4	4.2	3.5	3.2	3.2	3.1	3.1	3.2
11.0	10.7	10.7	:	7.3	6.4	6.3	6.2	6.3	5.9	5.9
5.2	8.3	7.8	7.0	7.9	8.6	6.8	6.5	6.6	4.8	4.7
5.9	5.9	5.6	3.8	2.6	2.7	2.5	2.1	2.8	2.6	2.5
– 2.9	– 4.7	– 4.5	:	– 4.6	– 4.7	– 3.5	– 3.3	– 3.3	– 2.5	– 2.5
0.3	– 0.3	1.1	:	– 1.8	– 2.2	0.5	0.4	2.7	0.9	0.7
– 0.1	– 0.2	– 0.6	– 1.5	– 1.7	– 0.8	– 0.8	– 1.1	– 0.4	– 0.5	– 0.7
3.2	1.4	1.7	:	– 0.4	– 1.2	– 0.3	– 0.2	– 0.1	0.6	0.7
0.3	– 0.3	1.1	:	– 1.8	– 2.2	0.5	0.4	2.7	0.9	0.7
3.3	0.9	2.2	:	– 3.8	– 4.1	– 0.6	– 0.8	2.2	1.0	0.7
61.1	62.0	64.1	62.7	58.9	54.8	54.2	53.4	55.5	56.5	57.3

Table A.2.7

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Finland	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	– 3.3	– 2.9	– 5.3	1.5	5.7
2. Interest payments	1.0	1.8	1.4	1.9	2.6
3. Implicit interest rate (2)	10.3	12.7	10.3	12.8	11.1
4. Nominal GDP growth rate (%)	15.4	8.8	5.5	– 4.5	– 2.5
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	– 3.3	– 2.9	– 5.3	1.5	5.7
6. Contribution of nominal GDP growth	– 1.5	– 1.3	– 0.8	0.7	0.6
7. Stock-flow adjustment (3)	5.0	4.8	5.7	6.2	11.7
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 4.3	– 4.7	– 6.7	– 0.4	3.1
9. Snowball effect (5)	– 0.5	0.6	0.7	2.6	3.2
10. Stock-flow adjustment (3)	5.0	4.8	5.7	6.2	11.7
11. Change in gross debt (6)	0.1	0.7	– 0.4	8.4	18.2
12. Level of gross debt (end of year)	11.6	16.4	14.5	22.9	41.1

Sweden	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	3.9	3.7	– 4.0	1.1	7.5
2. Interest payments	4.0	8.1	4.8	5.0	5.3
3. Implicit interest rate (2)	12.7	14.2	12.1	12.6	10.2
4. Nominal GDP growth rate (%)	13.6	8.9	10.0	6.1	– 0.8
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	3.9	3.7	– 4.0	1.1	7.5
6. Contribution of nominal GDP growth	– 4.2	– 5.1	– 4.0	– 2.4	0.4
7. Stock-flow adjustment (3)	5.0	0.8	6.3	10.6	5.9
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 0.1	– 4.4	– 8.9	– 3.9	2.3
9. Snowball effect (5)	– 0.3	3.0	0.8	2.6	5.7
10. Stock-flow adjustment (3)	5.0	0.8	6.3	10.6	5.9
11. Change in gross debt (6)	4.6	– 0.6	– 1.7	9.3	13.9
12. Level of gross debt (end of year)	40.0	61.9	42.0	51.3	65.1

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7.9	6.1	5.0	3.2	1.5	– 1.3	– 1.9	– 7.0	– 4.9	– 3.3	– 2.7
4.5	5.0	5.2	4.3	4.3	3.6	3.1	2.8	2.7	2.6	2.5
11.3	9.3	9.6	:	8.1	7.2	6.6	6.6	6.4	6.2	6.1
1.2	6.0	8.1	3.8	8.5	8.5	3.9	8.9	2.9	2.8	5.2
7.9	6.1	5.0	3.2	1.5	– 1.3	– 1.9	– 7.0	– 4.9	– 3.3	– 2.7
– 0.5	– 3.2	– 4.4	:	– 4.5	– 4.2	– 1.8	– 3.8	– 1.3	– 1.2	– 2.1
8.8	– 1.4	– 2.4	:	– 0.1	0.2	1.8	8.0	5.7	4.1	4.6
3.3	1.1	– 0.2	– 1.1	– 2.8	– 4.9	– 5.0	– 9.8	– 7.6	– 6.0	– 5.2
4.1	1.8	0.8	:	– 0.2	– 0.7	1.3	– 1.0	1.5	1.4	0.4
8.8	– 1.4	– 2.4	:	– 0.1	0.2	1.8	8.0	5.7	4.1	4.6
16.3	1.5	– 1.7	:	– 3.0	– 5.4	– 1.9	– 2.9	– 0.4	– 0.5	– 0.2
57.3	58.8	57.1	57.1	54.1	48.8	46.8	44.0	43.6	43.1	42.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
11.9	9.9	7.5	3.1	1.6	– 2.1	– 1.4	– 3.7	– 4.8	– 1.7	– 1.9
6.0	6.6	6.8	6.8	6.5	5.7	5.0	4.2	3.4	3.1	2.9
9.3	9.3	9.4	:	8.9	8.1	7.4	6.8	6.4	5.8	5.8
0.8	6.6	7.3	2.5	3.8	4.5	5.2	4.7	3.3	3.9	5.0
11.9	9.9	7.5	3.1	1.6	– 2.1	– 1.4	– 3.7	– 4.8	– 1.7	– 1.9
– 0.5	– 4.6	– 5.3	:	– 2.8	– 3.1	– 3.5	– 2.9	– 1.7	– 2.1	– 2.5
– 1.3	– 2.7	– 3.3	:	– 1.7	2.6	– 0.6	– 3.2	7.3	0.4	1.7
5.9	3.4	0.7	– 3.7	– 4.9	– 7.8	– 6.3	– 7.9	– 8.2	– 4.9	– 4.8
5.4	1.9	1.5	:	3.7	2.6	1.5	1.3	1.7	1.0	0.4
– 1.3	– 2.7	– 3.3	:	– 1.7	2.6	– 0.6	– 3.2	7.3	0.4	1.7
10.0	2.6	– 1.1	:	– 2.9	– 2.6	– 5.5	– 9.7	0.7	– 3.4	– 2.7
75.1	77.7	76.6	76.0	73.1	70.5	65.0	55.3	56.0	52.6	49.9

Table A.2.8

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
United Kingdom	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (1)	3.4	2.9	0.9	2.3	6.1
2. Interest payments	4.7	5.0	3.1	2.7	2.7
3. Implicit interest rate (2)	10.0	9.7	8.9	8.1	8.0
4. Nominal GDP growth rate (%)	16.9	9.5	8.4	5.2	4.2
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (1)	3.4	2.9	0.9	2.3	6.1
6. Contribution of nominal GDP growth	– 8.0	– 4.9	– 2.9	– 1.7	– 1.4
7. Stock-flow adjustment (3)	4.0	0.2	– 0.7	– 0.6	1.3
Budgetary constraint based on the primary deficit					
8. Primary deficit (4)	– 1.3	– 2.1	– 2.2	– 0.4	3.4
9. Snowball effect (5)	– 3.3	0.1	0.2	1.0	1.3
10. Stock-flow adjustment (3)	4.0	0.2	– 0.7	– 0.6	1.3
11. Change in gross debt (6)	– 0.6	– 1.9	– 2.7	– 0.1	6.0
12. Level of gross debt (end of year)	54.9	54.4	35.1	35.0	41.0

(1) Line 1 = line 5, a minus sign means a surplus.
(2) Actual interest payments as percentage of gross debt at end of t – 1.
(3) Line 7 = line 10; due to a change in definition there are no data for 1996.
(4) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(5) Due to a change in definition there are no data for 1996.
(6) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7.7	6.7	5.4	4.4	2.2	– 0.4	– 1.2	– 4.0	– 0.9	0.2	0.5
2.8	3.2	3.4	3.6	3.6	3.5	2.9	2.8	2.4	2.3	2.2
7.3	7.0	7.3	:	7.4	7.3	6.3	6.4	5.9	6.1	6.1
5.2	6.1	5.6	6.0	6.4	6.0	4.8	4.8	4.7	4.5	5.6
7.7	6.7	5.4	4.4	2.2	– 0.4	– 1.2	– 4.0	– 0.9	0.2	0.5
– 2.0	– 2.7	– 2.6	:	– 3.2	– 2.9	– 2.2	– 2.1	– 2.0	– 1.7	– 2.0
0.9	– 2.0	– 0.6	:	– 0.6	0.2	0.9	3.2	– 0.5	0.0	0.0
4.9	3.5	2.0	0.8	– 1.4	– 3.9	– 4.0	– 6.7	– 3.3	– 2.1	– 1.7
0.8	0.4	0.8	:	0.5	0.6	0.7	0.7	0.4	0.6	0.2
0.9	– 2.0	– 0.6	:	– 0.6	0.2	0.9	3.2	– 0.5	0.0	0.0
6.7	1.9	2.2	:	– 1.5	– 3.1	– 2.4	– 2.9	– 3.3	– 1.5	– 1.5
47.6	49.6	51.8	52.3	50.8	47.6	45.2	42.4	39.0	37.6	36.1

Table A.2.9

Contributions to the change in the general government gross debt ratio

(% of GDP)

	Former definitions				
Euro area (1)	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (2)	3.4	5.0	4.4	4.7	4.8
2. Interest payments	2.6	4.5	4.9	5.1	5.5
3. Implicit interest rate (3)	0.0	0.0	0.0	0.0	0.0
4. Nominal GDP growth rate (%)	10.1	6.7	9.0	7.0	5.4
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (2)	3.4	5.0	4.4	4.7	4.8
6. Contribution of nominal GDP growth	– 3.1	– 3.1	– 4.7	– 3.8	– 3.0
7. Stock-flow adjustment (4)	0.6	1.3	1.8	0.8	1.5
Budgetary constraint based on the primary deficit					
8. Primary deficit (5)	0.8	0.5	– 0.6	– 0.4	– 0.7
9. Snowball effect (6)	– 0.5	1.4	0.2	1.3	2.5
10. Stock-flow adjustment (4)	0.6	1.3	1.8	0.8	1.5
11. Change in gross debt (7)	0.9	3.2	1.4	1.7	3.4
12. Level of gross debt (end of year)	35.2	52.9	59.2	60.9	62.5

EU-15 (8)	**1980**	**1985**	**1990**	**1991**	**1992**
1. Net borrowing (2)	3.4	4.5	3.5	4.2	5.0
2. Interest payments	3.0	4.8	4.7	4.8	5.2
3. Implicit interest rate (3)	9.2	10.0	9.4	9.4	9.8
4. Nominal GDP growth rate (%)	12.3	7.3	7.7	6.9	4.2
Budgetary constraint based on the deficit					
5. Deficit (net borrowing) (2)	3.4	4.5	3.5	4.2	5.0
6. Contribution of nominal GDP growth	– 4.0	– 3.5	– 3.9	– 3.5	– 2.2
7. Stock-flow adjustment (4)	1.9	1.1	1.2	1.1	1.5
Budgetary constraint based on the primary deficit					
8. Primary deficit (5)	0.4	– 0.3	– 1.2	– 0.6	– 0.1
9. Snowball effect (6)	– 1.0	1.3	0.8	1.3	2.9
10. Stock-flow adjustment (4)	1.9	1.1	1.2	1.1	1.5
11. Change in gross debt (7)	1.3	2.1	0.8	1.7	4.3
12. Level of gross debt (end of year)	38.5	53.9	55.0	56.7	59.7

(1) EU-15 excluding DK, S and UK; from 1991 including former East Germany.
Due to problems with availability of the data, Luxembourg data are not included.
(2) Line 1 = line 5, a minus sign means a surplus.
(3) Actual interest payments as percentage of gross debt at end of t – 1.
(4) Line 7 = line 10; due to a change in definition there are no data for 1996.
(5) Net borrowing excl. interest payments, line 8 = line 1 – line 2. A minus sign means a primary surplus.
(6) Due to a change in definition there are no data for 1996.
(7) Line 11 = total of lines 5, 6 and 7 or 8, 9 and 10.
(8) Excluding Luxembourg; from 1991 including former East Germany.

Source: Commission services.

(% of GDP)

Former definitions			ESA 95 definitions							
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
5.6	5.1	4.9	4.3	2.7	2.3	1.3	– 0.2	1.3	1.5	1.3
5.6	5.4	5.6	5.7	5.2	4.8	4.3	4.1	3.9	3.8	3.7
0.0	0.0	0.0	:	7.0	6.6	6.1	5.9	5.8	5.6	5.6
1.0	4.4	4.7	4.3	2.2	4.1	4.4	4.7	3.9	3.5	4.6
5.6	5.1	4.9	4.3	2.7	2.3	1.3	– 0.2	1.3	1.5	1.3
– 0.6	– 2.8	– 3.1	:	– 1.6	– 3.0	– 3.2	– 3.3	– 2.6	– 2.3	– 3.1
0.1	0.0	1.3	:	– 1.1	– 1.0	0.8	1.1	0.3	0.3	0.5
0.0	– 0.3	– 0.7	– 1.4	– 2.5	– 2.5	– 3.0	– 4.3	– 2.6	– 2.3	– 2.4
5.0	2.6	2.5	:	3.5	1.8	1.1	0.8	1.3	1.4	0.6
0.1	0.0	1.3	:	– 1.1	– 1.0	0.8	1.1	0.3	0.3	0.5
5.2	2.3	3.1	:	– 0.1	– 1.7	– 1.0	– 2.4	– 1.1	– 0.6	– 1.4
67.7	70.0	73.1	75.6	75.5	73.9	72.8	70.5	69.4	68.8	67.4

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
6.0	5.4	5.0	4.2	2.5	1.6	0.7	– 1.0	0.7	1.1	0.9
5.3	5.2	5.3	5.5	5.0	4.6	4.1	3.9	3.6	3.5	3.4
9.0	8.4	8.3	:	7.2	6.8	6.2	6.1	5.8	5.7	5.7
0.3	4.8	4.0	5.0	5.3	4.7	5.1	6.3	3.4	3.9	4.7
6.0	5.4	5.0	4.2	2.5	1.6	0.7	– 1.0	0.7	1.1	0.9
– 0.2	– 3.0	– 2.6	:	– 3.6	– 3.2	– 3.4	– 4.0	– 2.1	– 2.3	– 2.8
– 0.3	– 0.4	0.4	:	0.1	– 0.6	1.0	2.0	0.1	0.3	0.4
0.8	0.2	– 0.3	– 1.3	– 2.5	– 3.0	– 3.4	– 4.9	– 3.0	– 2.4	– 2.4
5.1	2.2	2.8	:	1.3	1.4	0.7	– 0.2	1.5	1.1	0.6
– 0.3	– 0.4	0.4	:	0.1	– 0.6	1.0	2.0	0.1	0.3	0.4
5.6	2.1	2.9	:	– 1.0	– 2.1	– 1.6	– 3.1	– 1.4	– 0.9	– 1.5
65.4	67.4	70.3	72.2	71.2	69.0	67.5	64.4	63.0	62.1	60.6

Table A.3.1

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
Belgium	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	47.6	50.4	47.1	47.4	47.4
2. Cyclical component	1.2	– 1.1	1.3	1.1	0.9
3. Cyclically adjusted data	46.4	51.5	45.8	46.3	46.6
Total uses (% of GDP)					
4. Actual data	56.1	59.3	52.5	53.6	54.3
5. Cyclical component	– 0.3	0.2	– 0.3	– 0.3	– 0.2
6. Cyclically adjusted data	56.4	59.1	52.8	53.9	54.5
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 8.6	– 8.9	– 5.4	– 6.2	– 6.9
8. Cyclical component	1.5	– 1.3	1.6	1.4	1.1
9. Cyclically adjusted balance	– 10.0	– 7.6	– 7.0	– 7.6	– 8.0
— as % of trend GDP	– 10.3	– 7.5	– 7.2	– 7.7	– 8.1
10. GDP at 1995 market prices (annual % change)	4.4	2.0	3.0	1.8	1.6
11. Trend GDP at 1995 market prices (annual % change)	2.1	2.0	2.3	2.2	2.1
12. Gap between actual and trend GDP (% of trend GDP)	2.5	– 2.0	2.7	2.3	1.8

Denmark	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	50.8	55.3	55.1	54.7	56.0
2. Cyclical component	– 0.1	0.7	– 0.2	– 0.5	– 1.1
3. Cyclically adjusted data	50.8	54.6	55.3	55.2	57.1
Total uses (% of GDP)					
4. Actual data	53.1	56.4	56.1	57.1	58.2
5. Cyclical component	0.0	– 0.3	0.1	0.2	0.5
6. Cyclically adjusted data	53.1	56.7	56.1	56.9	57.7
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 3.2	– 2.0	– 1.0	– 2.4	– 2.2
8. Cyclical component	– 0.1	1.0	– 0.3	– 0.7	– 1.6
9. Cyclically adjusted balance	– 3.1	– 2.9	– 0.7	– 1.7	– 0.6
— as % of trend GDP	– 3.1	– 3.0	– 0.7	– 1.7	– 0.6
10. GDP at 1995 market prices (annual % change)	– 0.6	3.6	1.0	1.1	0.6
11. Trend GDP at 1995 market prices (annual % change)	1.5	1.7	1.6	1.7	1.8
12. Gap between actual and trend GDP (% of trend GDP)	– 0.2	1.3	– 0.4	– 0.9	– 2.0

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
48.3	49.2	48.8	48.5	49.1	49.4	49.8	49.7	49.5	49.2	48.8	48.6
– 0.9	– 0.6	– 0.4	– 0.4	– 0.9	– 0.2	– 0.2	0.1	0.9	0.3	– 0.3	0.0
49.2	49.8	49.2	48.8	49.9	49.6	50.1	49.6	48.5	48.9	49.0	48.5
55.5	54.0	52.7	52.8	52.9	51.4	50.7	50.3	49.5	49.0	48.9	48.3
0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.0	– 0.2	– 0.1	0.1	0.0
55.2	53.9	52.6	52.7	52.7	51.4	50.7	50.3	49.7	49.2	48.9	48.3
– 7.2	– 4.8	– 3.9	– 4.4	– 3.8	– 2.0	– 0.9	– 0.6	0.0	0.2	– 0.2	0.2
– 1.1	– 0.8	– 0.5	– 0.5	– 1.1	– 0.3	– 0.3	0.2	1.2	0.4	– 0.3	0.0
– 6.0	– 4.1	– 3.4	– 3.9	– 2.7	– 1.7	– 0.6	– 0.8	– 1.2	– 0.4	0.2	0.2
– 5.9	– 4.0	– 3.4	– 3.9	– 2.7	– 1.7	– 0.6	– 0.8	– 1.2	– 0.4	0.2	0.2
– 1.5	2.8	2.6	2.6	1.2	3.6	2.3	3.0	4.0	1.0	1.1	2.8
2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3
– 1.8	– 1.2	– 0.7	– 0.7	– 1.7	– 0.4	– 0.5	0.2	1.9	0.7	– 0.5	0.0

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
57.9	58.1	57.0	58.0	58.8	58.4	58.8	59.2	56.6	56.8	55.4	54.7
– 2.2	– 0.4	– 0.1	– 0.1	0.1	0.4	0.5	0.5	0.8	0.1	– 0.2	0.0
60.1	58.5	57.0	58.1	58.7	57.9	58.3	58.7	55.8	56.6	55.6	54.8
60.7	60.7	59.2	60.3	59.8	58.0	57.6	56.1	54.1	53.8	53.4	52.3
1.0	0.2	0.0	0.0	0.0	– 0.2	– 0.2	– 0.2	– 0.4	– 0.1	0.1	0.0
59.7	60.5	59.1	60.3	59.8	58.2	57.8	56.3	54.5	54.1	53.3	52.3
– 2.8	– 2.6	– 2.2	– 2.3	– 1.0	0.4	1.1	3.2	2.5	3.0	2.1	2.4
– 3.1	– 0.5	– 0.1	– 0.1	0.1	0.6	0.7	0.7	1.2	0.2	– 0.2	0.0
0.3	– 2.1	– 2.1	– 2.2	– 1.1	– 0.3	0.4	2.5	1.3	2.6	2.3	2.4
0.3	– 2.1	– 2.1	– 2.2	– 1.1	– 0.3	0.4	2.5	1.4	2.6	2.3	2.4
0.0	5.5	2.8	2.8	2.5	3.0	2.5	2.3	3.0	1.0	1.7	2.5
1.9	2.1	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.2
– 3.9	– 0.6	– 0.1	– 0.1	0.1	0.8	0.9	0.9	1.6	0.2	– 0.3	0.0

Table A.3.2

Cyclical adjustment of general government receipts, expenditures and budget balances

		Former definitions				
Germany [1]	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	45.1	46.0	43.3	43.5	44.9
2. Cyclical component	0.9	– 0.8	1.0	1.8	1.7
3. Cyclically adjusted data	44.2	46.8	42.3	41.8	43.2
Total uses (% of GDP)					
4. Actual data	48.0	47.2	45.3	46.8	47.6
5. Cyclical component	– 0.2	0.2	– 0.3	– 0.2	– 0.2
6. Cyclically adjusted data	48.2	47.0	45.6	46.9	47.8
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 2.9	– 1.2	– 2.1	– 3.4	– 2.8
8. Cyclical component	1.1	– 1.0	1.2	2.5	1.9
9. Cyclically adjusted balance	– 4.0	– 0.2	– 3.2	– 5.9	– 4.6
— as % of trend GDP	– 4.1	– 0.1	– 3.3	– 6.2	– 4.8
10. GDP at 1995 market prices (annual % change)	1.0	2.0	5.7	5.1	2.2
11. Trend GDP at 1995 market prices (annual % change)	1.9	2.2	2.6	2.5	2.5
12. Gap between actual and trend GDP (% of trend GDP)	2.1	– 1.9	2.4	5.0	4.1

Greece	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	26.3	30.3	32.5	33.4	34.2
2. Cyclical component	1.0	– 0.2	0.2	0.8	0.5
3. Cyclically adjusted data	25.4	30.5	32.3	32.6	33.7
Total uses (% of GDP)					
4. Actual data	29.0	42.0	48.4	44.7	46.8
5. Cyclical component	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	29.0	42.0	48.4	44.7	46.8
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 2.6	– 11.6	– 15.9	– 11.4	– 12.6
8. Cyclical component	1.0	– 0.2	0.2	0.8	0.5
9. Cyclically adjusted balance	– 3.6	– 11.4	– 16.1	– 12.1	– 13.1
— as % of trend GDP	– 3.7	– 11.4	– 16.2	– 12.4	– 13.3
10. GDP at 1995 market prices (annual % change)	0.7	2.5	0.0	3.1	0.7
11. Trend GDP at 1995 market prices (annual % change)	1.8	0.8	1.3	1.4	1.5
12. Gap between actual and trend GDP (% of trend GDP)	3.7	– 0.5	0.6	2.3	1.5

[1] From 1991 including former East Germany.

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
45.3	45.9	45.6	46.1	46.9	46.6	46.6	47.4	47.1	45.7	46.1	45.8
0.3	0.4	0.3	0.3	– 0.2	– 0.4	– 0.3	– 0.3	0.3	– 0.2	– 0.7	– 0.2
45.0	45.5	45.3	45.9	47.1	47.0	46.9	47.7	46.8	46.0	46.8	46.1
48.8	48.4	49.0	49.6	50.3	49.4	48.8	48.9	45.9	48.5	48.9	48.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
48.8	48.5	49.0	49.6	50.3	49.3	48.8	48.9	48.4	48.4	48.8	47.9
– 3.5	– 2.6	– 3.4	– 3.5	– 3.4	– 2.7	– 2.2	– 1.6	1.2	– 2.7	– 2.8	– 2.1
0.3	0.4	0.3	0.3	– 0.3	– 0.4	– 0.4	– 0.3	0.3	– 0.3	– 0.7	– 0.3
– 3.8	– 3.0	– 3.7	– 3.8	– 3.2	– 2.3	– 1.9	– 1.3	– 1.7	– 2.5	– 2.1	– 1.9
– 3.8	– 3.0	– 3.7	– 3.8	– 3.2	– 2.3	– 1.8	– 1.3	– 1.7	– 2.5	– 2.0	– 1.9
– 1.1	2.4	1.7	1.7	0.8	1.4	2.0	1.9	3.0	0.6	0.8	2.7
2.3	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.8	1.8
0.6	0.8	0.6	0.6	– 0.5	– 0.9	– 0.7	– 0.6	0.7	– 0.5	– 1.4	– 0.5

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
35.4	36.9	38.1	40.3	38.1	40.0	41.5	46.3	47.5	47.6	47.7	47.1
– 0.7	– 0.6	– 0.7	– 0.7	– 0.8	– 0.4	– 0.3	– 0.2	0.1	0.3	0.4	0.6
36.1	37.6	38.7	41.1	38.9	40.5	41.8	46.5	47.4	47.3	47.3	46.5
49.0	46.8	48.5	50.5	45.9	44.7	44.6	48.0	48.3	47.5	47.4	46.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49.0	46.8	48.5	50.5	45.9	44.7	44.6	48.0	48.3	48.0	47.4	46.6
– 13.6	– 9.9	– 10.5	– 10.2	– 7.8	– 4.7	– 3.1	– 1.7	– 0.8	0.1	0.3	0.5
– 0.7	– 0.6	– 0.7	– 0.7	– 0.8	– 0.4	– 0.3	– 0.2	0.1	0.3	0.4	0.6
– 12.9	– 9.2	– 9.8	– 9.5	– 7.0	– 4.2	– 2.8	– 1.6	– 0.9	– 0.8	– 0.1	– 0.1
– 12.7	– 9.1	– 9.6	– 9.3	– 6.9	– 4.2	– 2.8	– 1.6	– 0.9	– 0.8	– 0.1	– 0.1
– 1.6	2.1	2.1	2.1	2.4	3.6	3.4	3.6	4.1	4.1	3.7	4.2
1.7	1.9	2.2	2.2	2.5	2.8	3.0	3.2	3.4	3.5	3.6	3.7
– 1.9	– 1.8	– 1.9	– 1.9	– 2.0	– 1.1	– 0.8	– 0.4	0.2	0.8	0.9	1.4

Table A.3.3

Cyclical adjustment of general government receipts, expenditures and budget balance

	Former definitions				
Spain	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	29.6	34.2	38.4	39.2	40.9
2. Cyclical component	– 0.2	– 1.2	1.4	1.4	0.8
3. Cyclically adjusted data	29.8	35.4	37.0	37.8	40.1
Total uses (% of GDP)					
4. Actual data	31.7	40.4	42.6	43.5	44.9
5. Cyclical component	0.0	0.1	– 0.1	– 0.1	– 0.1
6. Cyclically adjusted data	31.6	40.3	42.7	43.6	44.9
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 2.5	– 6.2	– 4.2	– 4.3	– 4.0
8. Cyclical component	– 0.2	– 1.3	1.6	1.5	0.8
9. Cyclically adjusted balance	– 2.3	– 4.9	– 5.7	– 5.8	– 4.8
— as % of trend GDP	– 2.3	– 4.7	– 6.0	– 6.0	– 4.9
10. GDP at 1995 market prices (annual % change)	1.3	2.3	3.8	2.5	0.9
11. Trend GDP at 1995 market prices (annual % change)	1.8	2.4	2.9	2.8	2.8
12. Gap between actual and trend GDP (% of trend GDP)	– 0.6	– 3.6	4.2	3.9	2.1

France	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	45.3	49.1	48.2	48.2	48.0
2. Cyclical component	0.1	– 0.7	0.9	0.7	0.5
3. Cyclically adjusted data	45.2	49.8	47.2	47.5	47.5
Total uses (% of GDP)					
4. Actual data	45.4	52.0	49.7	50.2	51.8
5. Cyclical component	0.0	0.2	– 0.3	– 0.2	– 0.2
6. Cyclically adjusted data	45.4	51.8	50.0	50.3	52.0
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	0.0	– 2.8	– 1.5	– 2.0	– 3.9
8. Cyclical component	0.2	– 0.9	1.2	0.8	0.7
9. Cyclically adjusted balance	– 0.2	– 1.9	– 2.7	– 2.9	– 4.5
— as % of trend GDP	– 0.2	– 1.9	– 2.8	– 2.9	– 4.6
10. GDP at 1995 market prices (annual % change)	1.6	1.5	2.6	1.0	1.5
11. Trend GDP at 1995 market prices (annual % change)	2.4	2.2	2.1	2.0	1.9
12. Gap between actual and trend GDP (% of trend GDP)	0.4	– 2.1	3.1	2.1	1.7

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
40.9	39.8	38.0	38.4	38.8	39.0	39.1	39.7	39.5	39.6	39.6	39.6
– 0.6	– 0.7	– 0.7	– 0.7	– 0.9	– 0.5	– 0.1	0.3	0.6	0.5	0.1	0.1
41.5	40.5	38.7	39.1	39.7	39.5	39.2	39.5	38.9	39.1	39.5	39.5
47.6	45.9	45.0	45.0	43.8	42.2	41.6	40.8	39.9	39.6	39.7	39.7
0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	– 0.1	0.0	0.0	0.0
47.6	45.8	45.0	45.0	43.7	42.1	41.6	40.8	40.0	39.8	39.9	39.7
– 6.7	– 6.1	– 7.0	– 6.6	– 5.0	– 3.2	– 2.6	– 1.1	– 0.4	0.0	– 0.2	0.0
– 0.7	– 0.8	– 0.8	– 0.8	– 0.9	– 0.6	– 0.1	0.3	0.6	0.5	0.1	0.1
– 6.1	– 5.3	– 6.3	– 5.9	– 4.0	– 2.6	– 2.5	– 1.3	– 1.1	– 0.7	– 0.4	– 0.2
– 6.0	– 5.2	– 6.1	– 5.8	– 3.9	– 2.6	– 2.4	– 1.4	– 1.1	– 0.7	– 0.4	– 0.2
– 1.0	2.4	2.8	2.8	2.4	4.0	4.3	4.1	4.1	2.8	2.1	3.2
2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.1	3.2	3.1	3.1	3.1
– 1.6	– 2.0	– 2.0	– 2.0	– 2.4	– 1.5	– 0.3	0.7	1.6	1.2	0.3	0.4

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
48.4	48.3	49.0	49.7	51.4	51.9	51.2	51.8	51.5	51.2	51.0	50.5
– 0.3	– 0.3	– 0.3	– 0.3	– 0.6	– 0.6	– 0.2	0.0	0.3	0.2	– 0.1	0.1
48.8	48.6	49.3	50.0	52.0	52.6	51.4	51.8	51.3	51.1	51.1	50.4
54.1	54.0	53.8	55.2	55.5	55.0	53.9	53.4	52.9	52.6	52.9	52.3
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	– 0.1	0.0	0.0	0.0
54.0	53.9	53.7	55.1	55.3	54.8	53.8	53.4	52.9	52.8	52.9	52.3
– 5.6	– 5.7	– 4.8	– 5.5	– 4.1	– 3.0	– 2.7	– 1.6	– 1.3	– 1.4	– 1.9	– 1.8
– 0.4	– 0.3	– 0.4	– 0.4	– 0.8	– 0.8	– 0.3	0.0	0.3	0.2	– 0.1	0.1
– 5.2	– 5.3	– 4.4	– 5.1	– 3.3	– 2.2	– 2.4	– 1.6	– 1.7	– 1.7	– 1.9	– 1.9
– 5.1	– 5.3	– 4.4	– 5.1	– 3.3	– 2.2	– 2.4	– 1.6	– 1.7	– 1.7	– 1.9	– 1.9
– 0.9	2.1	1.7	1.7	1.1	1.9	3.4	2.9	3.1	2.0	1.6	2.8
1.8	1.8	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.4
– 1.0	– 0.8	– 1.0	– 1.0	– 1.8	– 1.9	– 0.7	0.0	0.8	0.5	– 0.3	0.2

Table A.3.4

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
Ireland	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	34.5	38.8	35.9	36.6	37.0
2. Cyclical component	0.7	0.0	0.8	0.0	– 0.5
3. Cyclically adjusted data	33.9	38.8	35.1	36.6	37.5
Total uses (% of GDP)					
4. Actual data	46.2	49.0	38.0	38.9	39.4
5. Cyclical component	– 0.2	0.0	– 0.2	0.0	0.2
6. Cyclically adjusted data	46.4	49.0	38.3	38.9	39.2
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 11.6	– 10.2	– 2.2	– 2.3	– 2.4
8. Cyclical component	0.9	0.0	1.0	0.0	– 0.7
9. Cyclically adjusted balance	– 12.5	– 10.2	– 3.2	– 2.3	– 1.7
— as % of trend GDP	– 12.8	– 10.2	– 3.3	– 2.3	– 1.7
10. GDP at 1995 market prices (annual % change)	3.1	3.1	7.6	1.9	3.3
11. Trend GDP at 1995 market prices (annual % change)	3.6	3.1	4.6	5.0	5.5
12. Gap between actual and trend GDP (% of trend GDP)	2.8	– 0.1	3.1	0.0	– 2.0

Italy	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	34.4	39.0	42.8	43.8	44.5
2. Cyclical component	0.8	– 0.4	0.8	0.6	0.3
3. Cyclically adjusted data	33.6	39.4	42.0	43.2	44.3
Total uses (% of GDP)					
4. Actual data	43.0	51.5	53.8	53.8	54.0
5. Cyclical component	– 0.1	0.1	– 0.1	– 0.1	0.0
6. Cyclically adjusted data	43.1	51.4	53.9	53.9	54.0
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 8.7	– 12.5	– 11.0	– 10.0	– 9.5
8. Cyclical component	0.9	– 0.5	0.9	0.7	0.3
9. Cyclically adjusted balance	– 9.5	– 12.1	– 11.9	– 10.7	– 9.8
— as % of trend GDP	– 9.8	– 11.9	– 12.2	– 10.9	– 9.8
10. GDP at 1995 market prices (annual % change)	3.5	3.0	2.0	1.4	0.8
11. Trend GDP at 1995 market prices (annual % change)	2.8	2.4	2.0	1.8	1.7
12. Gap between actual and trend GDP (% of trend GDP)	2.7	– 1.2	2.1	1.7	0.7

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
36.9	37.6	34.6	39.4	39.4	38.6	37.5	37.2	37.1	36.0	36.0	35.4
– 1.4	– 1.7	– 0.8	– 0.9	– 0.8	0.0	0.2	0.8	1.6	1.4	0.6	0.4
38.3	39.3	35.4	40.2	40.2	38.6	37.4	36.3	35.5	34.6	35.5	35.0
39.2	39.2	36.7	41.5	39.7	37.5	35.2	34.8	32.6	34.3	35.4	35.2
0.4	0.5	0.3	0.3	0.2	0.0	– 0.1	– 0.3	– 0.5	– 0.5	– 0.2	– 0.1
38.8	38.7	36.4	41.3	39.4	37.4	35.2	35.1	33.1	34.7	35.8	35.3
– 2.3	– 1.6	– 2.1	– 2.2	– 0.2	1.2	2.3	2.3	4.5	1.7	0.6	0.2
– 1.8	– 2.1	– 1.1	– 1.1	– 1.0	0.0	0.2	1.1	2.1	1.8	0.7	0.5
– 0.5	0.6	– 1.0	– 1.0	0.8	1.2	2.1	1.3	2.4	– 0.1	– 0.3	– 0.3
– 0.5	0.5	– 1.0	– 1.0	0.8	1.2	2.1	1.3	2.6	– 0.1	– 0.3	– 0.3
2.7	5.8	10.0	10.0	7.8	10.8	8.6	10.9	11.5	6.8	3.5	6.1
6.0	6.5	7.0	7.0	7.5	7.8	7.9	7.9	7.8	7.5	7.3	7.0
– 5.0	– 5.7	– 3.1	– 3.1	– 2.8	– 0.1	0.6	3.3	6.8	6.0	2.3	1.5

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
47.7	45.5	45.3	45.8	46.1	48.4	46.8	47.1	46.3	46.2	46.1	45.4
– 0.8	– 0.5	0.0	0.0	– 0.3	– 0.2	– 0.2	– 0.3	0.1	0.0	– 0.2	0.1
48.5	46.1	45.3	45.8	46.4	48.5	47.0	47.4	46.2	46.2	46.3	45.3
57.1	54.6	52.9	53.4	53.2	51.1	49.9	48.9	46.9	47.7	47.3	46.7
0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.1	54.6	52.9	53.4	53.2	51.1	49.9	48.9	48.1	47.7	47.3	46.7
– 9.4	– 9.1	– 7.6	– 7.6	– 7.1	– 2.7	– 3.1	– 1.8	– 0.6	– 1.5	– 1.3	– 1.3
– 0.9	– 0.6	0.0	0.0	– 0.3	– 0.2	– 0.2	– 0.3	0.1	0.0	– 0.2	0.1
– 8.5	– 8.5	– 7.6	– 7.6	– 6.8	– 2.5	– 2.9	– 1.5	– 1.9	– 1.5	– 1.0	– 1.4
– 8.4	– 8.4	– 7.6	– 7.5	– 6.7	– 2.5	– 2.9	– 1.5	– 1.9	– 1.5	– 1.0	– 1.4
– 0.9	2.2	2.9	2.9	1.1	2.0	1.8	1.6	2.9	1.8	1.4	2.7
1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0
– 1.8	– 1.3	– 0.1	– 0.1	– 0.7	– 0.4	– 0.4	– 0.7	0.2	0.1	– 0.5	0.1

Table A.3.5

Cyclical adjustment of general government receipts, expenditures and budget balances

			Former definitions		
Luxembourg	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	47.6	50.2	:	:	:
2. Cyclical component	0.0	– 1.6	:	:	:
3. Cyclically adjusted data	47.5	51.8	:	:	:
Total uses (% of GDP)					
4. Actual data	48.0	44.0	:	:	:
5. Cyclical component	0.0	0.7	– 0.6	– 0.5	– 0.2
6. Cyclically adjusted data	48.0	43.3	:	:	:
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 0.4	6.2	4.7	1.8	0.7
8. Cyclical component	0.0	– 2.3	:	:	:
9. Cyclically adjusted balance	– 0.5	8.5	:	:	:
— as % of trend GDP	– 0.5	8.2	:	:	:
10. GDP at 1995 market prices (annual % change)	0.8	2.9	2.0	4.6	3.7
11. Trend GDP at 1995 market prices (annual % change)	2.2	4.1	5.2	5.1	5.1
12. Gap between actual and trend GDP (% of trend GDP)	0.0	– 3.6	3.2	2.7	1.3

The Netherlands	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	50.7	52.5	48.1	50.6	50.2
2. Cyclical component	0.6	– 0.5	0.9	0.8	0.4
3. Cyclically adjusted data	50.1	53.0	47.2	49.8	49.8
Total uses (% of GDP)					
4. Actual data	54.8	56.1	53.0	53.4	54.0
5. Cyclical component	– 0.4	0.3	– 0.6	– 0.6	– 0.2
6. Cyclically adjusted data	55.2	55.7	53.6	53.9	54.2
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 4.1	– 3.5	– 4.9	– 2.8	– 3.8
8. Cyclical component	1.0	– 0.8	1.5	1.4	0.6
9. Cyclically adjusted balance	– 5.1	– 2.7	– 6.5	– 4.1	– 4.4
— as % of trend GDP	– 5.2	– 2.7	– 6.6	– 4.2	– 4.4
10. GDP at 1995 market prices (annual % change)	1.2	3.1	4.1	2.5	1.7
11. Trend GDP at 1995 market prices (annual % change)	1.7	2.1	2.8	2.8	2.8
12. Gap between actual and trend GDP (% of trend GDP)	1.5	– 1.1	2.3	2.0	0.9

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
:	:	:	47.8	47.5	46.2	45.4	45.7	46.1	45.8	45.2	44.8
:	:	:	– 1.2	– 1.8	– 0.3	– 0.1	0.2	1.1	1.0	0.1	0.2
:	:	:	48.9	49.3	46.5	45.4	45.5	45.0	44.8	45.0	44.6
:	:	:	45.1	45.4	43.4	42.2	41.9	40.3	40.8	43.2	42.3
– 0.1	0.1	0.5	0.5	0.8	0.1	0.0	– 0.1	– 0.5	– 0.4	– 0.1	– 0.1
:	:	:	44.6	44.7	43.3	42.2	42.0	40.8	41.3	43.3	42.4
1.6	2.7	1.8	2.7	2.1	2.9	3.2	3.8	5.8	5.0	2.0	2.5
:	:	:	– 1.6	– 2.6	– 0.4	– 0.1	0.3	1.5	1.5	0.2	0.3
:	:	:	4.3	4.7	3.2	3.3	3.5	4.2	3.6	1.8	2.2
:	:	:	4.2	4.5	3.2	3.2	3.5	4.4	3.7	1.8	2.2
4.1	3.8	3.2	3.2	3.6	9.0	5.8	6.0	7.5	5.1	2.9	5.2
5.0	5.1	5.1	5.1	5.2	5.3	5.3	5.3	5.3	5.2	5.1	5.0
0.4	– 0.8	– 2.6	– 2.6	– 4.0	– 0.6	– 0.2	0.5	2.6	2.5	0.3	0.5

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
50.9	48.4	46.6	47.3	47.8	47.1	46.5	47.6	47.5	45.6	44.8	44.2
– 0.5	– 0.6	– 0.5	– 0.5	– 0.5	– 0.2	0.4	0.7	0.9	0.3	– 0.1	0.0
51.4	49.0	47.2	47.8	48.3	47.3	46.1	46.9	46.6	45.3	45.0	44.3
54.0	52.1	50.5	51.4	49.6	48.2	47.2	47.1	45.4	45.4	44.8	44.6
0.3	0.4	0.4	0.4	0.4	0.1	– 0.3	– 0.5	– 0.7	– 0.2	0.1	0.0
53.7	51.7	50.1	51.1	49.3	48.1	47.5	47.6	46.7	45.6	44.8	44.6
– 3.1	– 3.6	– 3.8	– 4.2	– 1.8	– 1.1	– 0.8	0.4	2.2	0.3	0.0	– 0.4
– 0.7	– 0.9	– 0.9	– 0.9	– 0.8	– 0.3	0.6	1.2	1.6	0.5	– 0.2	– 0.1
– 2.4	– 2.7	– 2.9	– 3.3	– 1.0	– 0.8	– 1.4	– 0.7	– 0.1	– 0.3	0.2	– 0.3
– 2.3	– 2.7	– 2.9	– 3.2	– 1.0	– 0.8	– 1.4	– 0.7	– 0.1	– 0.3	0.2	– 0.3
0.9	2.6	3.0	3.0	3.0	3.8	4.4	3.7	3.5	1.1	1.5	2.7
2.8	2.9	2.9	2.9	3.0	3.0	3.0	2.9	2.8	2.7	2.6	2.5
– 1.0	– 1.3	– 1.3	– 1.3	– 1.2	– 0.4	0.9	1.7	2.4	0.8	– 0.3	– 0.1

Table A.3.6

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
Austria	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	45.6	47.8	47.1	47.7	49.2
2. Cyclical component	0.4	– 0.5	0.5	0.7	0.6
3. Cyclically adjusted data	45.2	48.3	46.7	47.0	48.6
Total uses (% of GDP)					
4. Actual data	47.2	50.2	49.6	50.6	51.2
5. Cyclical component	0.0	0.0	0.0	0.0	0.0
6. Cyclically adjusted data	47.2	50.2	49.6	50.6	51.2
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 1.7	– 2.4	– 2.4	– 3.0	– 2.0
8. Cyclical component	0.4	– 0.5	0.5	0.7	0.6
9. Cyclically adjusted balance	– 2.1	– 1.9	– 2.9	– 3.6	– 2.6
— as % of trend GDP	– 2.1	– 1.9	– 2.9	– 3.7	– 2.6
10. GDP at 1995 market prices (annual % change)	2.2	2.4	4.7	3.3	2.3
11. Trend GDP at 1995 market prices (annual % change)	2.4	2.2	2.7	2.6	2.6
12. Gap between actual and trend GDP (% of trend GDP)	1.5	– 1.6	1.8	2.4	2.2

Portugal	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	27.8	32.7	33.9	35.2	38.1
2. Cyclical component	0.7	– 1.5	1.1	1.4	0.9
3. Cyclically adjusted data	27.1	34.2	32.8	33.8	37.2
Total uses (% of GDP)					
4. Actual data	36.2	42.8	38.8	41.0	41.0
5. Cyclical component	– 0.1	0.2	– 0.1	– 0.2	– 0.1
6. Cyclically adjusted data	36.3	42.6	38.9	41.2	41.1
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 8.4	– 10.1	– 4.9	– 5.8	– 2.9
8. Cyclical component	0.8	– 1.7	1.2	1.6	1.0
9. Cyclically adjusted balance	– 9.2	– 8.4	– 6.2	– 7.4	– 3.9
— as % of trend GDP	– 9.5	– 7.9	– 6.4	– 7.8	– 4.0
10. GDP at 1995 market prices (annual % change)	4.6	2.8	4.0	4.4	1.1
11. Trend GDP at 1995 market prices (annual % change)	3.0	3.0	3.5	3.3	3.2
12. Gap between actual and trend GDP (% of trend GDP)	3.4	– 6.0	4.3	5.4	3.3

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
49.9	48.6	49.2	52.0	52.8	52.1	51.9	51.8	51.2	52.4	51.4	50.9
0.0	0.1	– 0.1	– 0.1	– 0.2	– 0.4	0.0	0.2	0.4	0.1	– 0.1	0.0
49.9	48.5	49.3	52.1	53.0	52.5	51.9	51.6	50.8	52.3	51.6	50.8
54.1	53.5	54.2	57.3	56.8	54.1	54.4	54.2	52.9	52.5	51.6	50.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54.1	53.5	54.2	57.3	56.8	54.1	54.4	54.2	53.3	52.5	51.6	50.6
– 4.2	– 4.9	– 5.0	– 5.3	– 4.0	– 2.0	– 2.5	– 2.4	– 1.7	– 0.1	– 0.1	0.3
0.0	0.1	– 0.1	– 0.1	– 0.2	– 0.4	0.0	0.2	0.4	0.1	– 0.1	0.0
– 4.2	– 5.0	– 4.9	– 5.2	– 3.8	– 1.6	– 2.5	– 2.6	– 2.5	– 0.2	0.0	0.3
– 4.2	– 5.0	– 4.9	– 5.1	– 3.8	– 1.6	– 2.5	– 2.6	– 2.5	– 0.2	0.0	0.3
0.4	2.6	1.6	1.6	2.0	1.6	3.5	2.8	3.0	1.0	1.2	2.5
2.5	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0
0.1	0.3	– 0.4	– 0.4	– 0.7	– 1.3	– 0.1	0.6	1.4	0.3	– 0.5	0.1

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
36.8	36.3	37.2	40.6	41.7	41.7	41.4	42.7	42.8	43.3	43.4	43.5
– 0.5	– 1.1	– 0.8	– 0.8	– 0.5	– 0.2	0.3	0.4	0.7	0.4	0.2	0.1
37.3	37.4	37.9	41.3	42.2	41.9	41.1	42.3	42.1	42.8	43.3	43.3
42.7	42.1	42.7	44.9	45.5	44.2	44.1	45.2	44.9	46.0	46.1	45.9
0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	– 0.1	0.0	0.0	0.0
42.6	42.0	42.7	44.9	45.5	44.2	44.1	45.2	45.3	46.1	46.1	46.0
– 5.9	– 5.9	– 5.6	– 4.4	– 3.8	– 2.6	– 2.7	– 2.5	– 2.1	– 2.8	– 2.6	– 2.5
– 0.6	– 1.3	– 0.9	– 0.8	– 0.6	– 0.2	0.3	0.5	0.7	0.5	0.2	0.2
– 5.3	– 4.6	– 4.7	– 3.5	– 3.3	– 2.3	– 3.0	– 3.0	– 3.2	– 3.2	– 2.8	– 2.6
– 5.2	– 4.4	– 4.6	– 3.4	– 3.2	– 2.3	– 3.0	– 3.0	– 3.2	– 3.3	– 2.8	– 2.7
– 2.0	1.0	4.3	4.3	3.9	3.9	4.5	3.4	3.4	1.8	1.5	2.2
3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.8	2.7	2.5	2.4	2.3
– 1.8	– 3.8	– 2.5	– 2.5	– 1.7	– 0.7	0.9	1.5	2.2	1.4	0.5	0.4

Table A.3.7

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
Finland	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	42.0	47.0	51.4	53.1	53.7
2. Cyclical component	0.2	0.1	3.3	– 0.4	– 2.8
3. Cyclically adjusted data	41.8	46.9	48.1	53.5	56.6
Total uses (% of GDP)					
4. Actual data	38.6	44.2	46.1	54.5	59.5
5. Cyclical component	– 0.1	0.0	– 1.2	0.1	1.0
6. Cyclically adjusted data	38.7	44.2	47.3	54.4	58.5
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	3.3	2.9	5.3	– 1.5	– 5.7
8. Cyclical component	0.3	0.1	4.5	– 0.5	– 3.8
9. Cyclically adjusted balance	3.0	2.7	0.8	– 0.9	– 1.9
— as % of trend GDP	3.1	2.7	0.9	– 0.9	– 1.8
10. GDP at 1995 market prices (annual % change)	5.1	3.1	0.0	– 6.3	– 3.3
11. Trend GDP at 1995 market prices (annual % change)	3.2	2.7	1.4	1.3	1.3
12. Gap between actual and trend GDP (% of trend GDP)	0.5	0.2	7.2	– 0.8	– 5.3

Sweden	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	56.1	59.2	62.6	59.6	59.1
2. Cyclical component	0.0	– 0.1	2.0	0.7	– 1.0
3. Cyclically adjusted data	56.1	59.3	60.6	58.9	60.1
Total uses (% of GDP)					
4. Actual data	60.0	63.0	58.5	60.7	66.6
5. Cyclical component	0.0	0.0	– 0.5	– 0.2	0.3
6. Cyclically adjusted data	60.0	62.9	59.1	60.8	66.4
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 3.9	– 3.7	4.0	– 1.1	– 7.5
8. Cyclical component	0.0	– 0.1	2.6	0.8	– 1.3
9. Cyclically adjusted balance	– 3.9	– 3.6	1.5	– 1.9	– 6.3
— as % of trend GDP	– 3.9	– 3.6	1.5	– 2.0	– 6.2
10. GDP at 1995 market prices (annual % change)	1.7	2.2	1.1	– 1.1	– 1.7
11. Trend GDP at 1995 market prices (annual % change)	1.7	2.0	1.4	1.3	1.3
12. Gap between actual and trend GDP (% of trend GDP)	0.0	– 0.2	3.8	1.2	– 1.8

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
52.7	53.5	52.1	56.2	56.8	55.3	54.5	54.1	55.6	54.3	53.2	52.3
– 4.1	– 3.2	– 2.4	– 2.4	– 1.8	– 0.1	0.9	1.2	2.3	0.9	0.1	0.1
56.8	56.7	54.4	58.6	58.5	55.5	53.7	52.9	53.4	53.3	53.1	52.2
60.6	59.5	57.1	59.9	59.9	56.8	53.3	52.1	48.6	49.4	49.9	49.6
1.5	1.1	0.9	0.9	0.6	0.1	– 0.3	– 0.4	– 0.8	– 0.3	0.0	0.0
59.0	58.4	56.2	59.1	59.3	56.8	53.6	52.6	49.4	49.7	49.9	49.6
– 7.9	– 6.1	– 5.0	– 3.7	– 3.2	– 1.5	1.3	1.9	7.0	4.9	3.3	2.7
– 5.6	– 4.4	– 3.2	– 3.3	– 2.4	– 0.2	1.2	1.6	3.0	1.3	0.2	0.1
– 2.2	– 1.7	– 1.8	– 0.5	– 0.8	– 1.3	0.1	0.3	4.0	3.6	3.2	2.5
– 2.1	– 1.6	– 1.7	– 0.4	– 0.7	– 1.3	0.1	0.3	4.1	3.7	3.2	2.5
– 1.2	4.0	3.8	3.8	4.0	6.3	5.3	4.1	5.6	0.7	1.6	3.3
1.5	1.9	2.3	2.3	2.7	3.0	3.2	3.4	3.4	3.4	3.3	3.3
– 7.8	– 6.0	– 4.6	– 4.6	– 3.3	– 0.3	1.8	2.4	4.6	1.9	0.2	0.2

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
58.2	57.0	56.9	60.0	62.2	61.6	62.9	61.6	61.4	62.3	59.0	58.6
– 2.7	– 1.4	– 0.4	– 0.4	– 1.0	– 1.0	– 0.4	0.7	1.2	0.5	0.0	0.1
60.9	58.4	57.3	60.4	63.2	62.6	63.3	61.0	60.2	61.8	59.0	58.5
70.1	66.9	64.4	67.6	65.3	63.2	60.8	60.3	57.7	57.4	57.3	56.8
0.8	0.4	0.1	0.1	0.3	0.3	0.1	– 0.2	– 0.3	– 0.1	0.0	0.0
69.3	66.5	64.3	67.5	65.1	62.9	60.7	60.5	58.1	57.6	57.3	56.8
– 11.9	– 9.9	– 7.5	– 7.7	– 3.1	– 1.6	2.1	1.4	3.7	4.8	1.7	1.9
– 3.5	– 1.8	– 0.6	– 0.6	– 1.2	– 1.3	– 0.5	0.9	1.6	0.6	0.0	0.1
– 8.4	– 8.1	– 7.0	– 7.1	– 1.9	– 0.3	2.6	0.5	2.1	4.2	1.8	1.7
– 8.0	– 7.9	– 6.9	– 7.1	– 1.8	– 0.3	2.5	0.5	2.2	4.2	1.8	1.7
– 1.8	4.1	3.7	3.7	1.1	2.1	3.6	4.5	3.6	1.2	1.7	2.8
1.4	1.6	1.8	1.8	2.0	2.2	2.4	2.5	2.6	2.6	2.6	2.6
– 5.0	– 2.7	– 0.8	– 0.8	– 1.8	– 1.9	– 0.7	1.3	2.3	0.9	0.0	0.2

Table A.3.8

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
United Kingdom	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	39.8	41.4	38.3	37.4	36.1
2. Cyclical component	– 0.3	– 0.5	1.0	– 0.4	– 1.1
3. Cyclically adjusted data	40.1	41.9	37.3	37.8	37.2
Total uses (% of GDP)					
4. Actual data	43.2	44.3	39.2	39.7	42.2
5. Cyclical component	0.1	0.1	– 0.2	0.1	0.2
6. Cyclically adjusted data	43.1	44.2	39.4	39.7	41.9
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 3.4	– 2.9	– 0.9	– 2.3	– 6.1
8. Cyclical component	– 0.4	– 0.6	1.1	– 0.5	– 1.3
9. Cyclically adjusted balance	– 3.0	– 2.3	– 2.0	– 1.8	– 4.8
— as % of trend GDP	– 3.0	– 2.3	– 2.1	– 1.8	– 4.6
10. GDP at 1995 market prices (annual % change)	– 2.1	3.6	0.8	– 1.4	0.2
11. Trend GDP at 1995 market prices (annual % change)	1.7	2.5	2.4	2.3	2.3
12. Gap between actual and trend GDP (% of trend GDP)	– 0.8	– 1.2	2.7	– 1.0	– 3.1

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
35.1	35.6	36.7	38.9	38.6	38.9	40.2	40.4	40.9	41.0	41.0	40.6
– 1.0	– 0.3	– 0.2	– 0.2	– 0.2	0.2	0.3	0.1	0.3	0.2	0.0	0.2
36.1	35.9	36.8	39.0	38.8	38.7	39.9	40.3	40.5	40.8	41.0	40.5
42.8	42.3	42.1	44.6	43.0	41.1	39.8	39.3	36.9	40.1	41.2	41.1
0.2	0.1	0.0	0.0	0.0	0.0	– 0.1	0.0	– 0.1	0.0	0.0	0.0
42.6	42.3	42.0	44.6	43.0	41.1	39.9	39.3	39.3	40.2	41.2	41.1
– 7.7	– 6.7	– 5.4	– 5.8	– 4.4	– 2.2	0.4	1.2	4.0	0.9	– 0.2	– 0.5
– 1.3	– 0.4	– 0.2	– 0.2	– 0.2	0.2	0.4	0.2	0.4	0.2	0.0	0.2
– 6.5	– 6.3	– 5.2	– 5.6	– 4.2	– 2.4	0.0	1.0	1.2	0.7	– 0.2	– 0.7
– 6.3	– 6.3	– 5.2	– 5.5	– 4.2	– 2.4	0.0	1.0	1.2	0.7	– 0.2	– 0.7
2.5	4.7	2.9	2.9	2.6	3.5	3.0	2.1	3.0	2.2	2.0	3.0
2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
– 2.9	– 0.8	– 0.5	– 0.5	– 0.4	0.4	0.8	0.3	0.8	0.5	– 0.1	0.4

Table A.3.9

Cyclical adjustment of general government receipts, expenditures and budget balances

	Former definitions				
Euro zone (1)	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	41.9	44.6	44.2	44.7	45.4
2. Cyclical component	0.6	– 0.7	1.0	1.1	0.8
3. Cyclically adjusted data	41.4	45.3	43.2	43.6	44.6
Total uses (% of GDP)					
4. Actual data	45.3	49.6	48.6	49.3	50.2
5. Cyclical component	– 0.1	0.2	– 0.2	– 0.2	– 0.1
6. Cyclically adjusted data	45.4	49.4	48.8	49.5	50.3
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 3.4	– 5.0	– 4.4	– 4.6	– 4.8
8. Cyclical component	0.7	– 0.8	1.3	1.2	0.9
9. Cyclically adjusted balance	– 4.1	– 4.1	– 5.6	– 5.9	– 5.7
— as % of trend GDP	– 4.2	– 4.0	– 5.8	– 6.0	– 5.8
10. GDP at 1995 market prices (annual % change)	1.9	2.2	3.7	2.6	1.5
11. Trend GDP at 1995 market prices (annual % change)	2.2	2.2	2.4	2.4	2.3
12. Gap between actual and trend GDP (% of trend GDP)	1.6	– 1.9	2.8	2.9	2.2

EU-15 (2)	**1980**	**1985**	**1990**	**1991**	**1992**
Total resources (% of GDP)					
1. Actual data	42.3	44.9	44.2	44.3	44.8
2. Cyclical component	0.4	– 0.6	1.0	0.8	0.5
3. Cyclically adjusted data	41.9	45.5	43.2	43.5	44.3
Total uses (% of GDP)					
4. Actual data	45.7	49.3	47.7	48.5	49.8
5. Cyclical component	– 0.1	0.1	– 0.2	– 0.1	0.0
6. Cyclically adjusted data	45.8	49.2	47.9	48.6	49.8
Net lending (+) or net borrowing (–) (% of GDP)					
7. Actual balance	– 3.4	– 4.5	– 3.5	– 4.1	– 5.0
8. Cyclical component	0.5	– 0.7	1.3	0.9	0.5
9. Cyclically adjusted balance	– 3.9	– 3.8	– 4.7	– 5.1	– 5.5
— as % of trend GDP	– 3.9	– 3.7	– 4.9	– 5.2	– 5.6
10. GDP at 1995 market prices (annual % change)	1.3	2.4	3.2	1.9	1.3
11. Trend GDP at 1995 market prices (annual % change)	2.1	2.2	2.3	2.3	2.2
12. Gap between actual and trend GDP (% of trend GDP)	1.2	– 1.7	2.7	2.3	1.3

(1) EU-15 excluding DK, S and UK; from 1991, including former East Germany.
Due to problems with availability of the data, Luxembourg data are not included.
(2) Excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Former definitions			ESA 95 definitions								
1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
46.4	46.0	45.7	46.5	47.2	47.6	47.1	47.7	47.4	46.7	46.6	46.2
– 0.3	– 0.2	– 0.2	– 0.2	– 0.5	– 0.4	– 0.2	0.0	0.4	0.1	– 0.2	0.0
46.7	46.2	45.9	46.7	47.7	48.0	47.3	47.7	47.0	46.6	46.9	46.2
52.0	51.1	50.7	51.6	51.5	50.2	49.4	49.1	47.2	48.0	48.1	47.4
0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	– 0.1	0.0	0.0	0.0
51.9	51.0	50.6	51.5	51.4	50.2	49.4	49.1	48.4	48.1	48.1	47.4
– 5.6	– 5.1	– 4.9	– 5.1	– 4.3	– 2.7	– 2.3	– 1.3	0.2	– 1.3	– 1.5	– 1.3
– 0.4	– 0.3	– 0.2	– 0.2	– 0.6	– 0.5	– 0.2	0.0	0.5	0.1	– 0.3	0.0
– 5.2	– 4.8	– 4.7	– 4.9	– 3.8	– 2.2	– 2.1	– 1.3	– 1.4	– 1.5	– 1.2	– 1.2
– 5.2	– 4.8	– 4.7	– 4.8	– 3.7	– 2.2	– 2.1	– 1.3	– 1.4	– 1.5	– 1.2	– 1.2
– 0.9	2.3	2.2	2.2	1.4	2.3	2.9	2.6	3.4	1.5	1.4	2.9
2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3
– 0.8	– 0.6	– 0.5	– 0.5	– 1.2	– 1.0	– 0.4	0.0	1.1	0.3	– 0.6	0.0

1993	1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
45.4	45.1	45.1	46.1	46.8	46.8	46.6	47.1	46.8	46.3	46.1	45.7
– 0.5	– 0.3	– 0.2	– 0.2	– 0.4	– 0.3	– 0.1	0.0	0.4	0.1	– 0.2	0.0
45.9	45.4	45.3	46.3	47.2	47.1	46.7	47.1	46.4	46.2	46.3	45.7
51.4	50.5	50.1	51.3	51.0	49.3	48.3	47.8	45.8	47.0	47.2	46.6
0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	– 0.1	0.0	0.0	0.0
51.3	50.4	50.0	51.2	50.9	49.2	48.3	47.9	47.1	47.1	47.2	46.6
– 6.0	– 5.4	– 5.0	– 5.2	– 4.2	– 2.5	– 1.6	– 0.7	1.0	– 0.7	– 1.1	– 0.9
– 0.7	– 0.4	– 0.2	– 0.2	– 0.5	– 0.4	– 0.1	0.1	0.5	0.2	– 0.2	0.0
– 5.4	– 5.0	– 4.8	– 5.0	– 3.7	– 2.1	– 1.6	– 0.8	– 0.8	– 0.9	– 0.9	– 1.0
– 5.3	– 5.0	– 4.8	– 4.9	– 3.7	– 2.1	– 1.6	– 0.8	– 0.8	– 0.9	– 0.9	– 1.0
– 0.4	2.8	2.4	2.4	1.6	2.5	2.9	2.6	3.3	1.6	1.5	2.9
2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3
– 1.3	– 0.7	– 0.5	– 0.5	– 1.1	– 0.8	– 0.2	0.1	1.1	0.3	– 0.5	0.0

Table A.4.1

Current tax burden; total economy

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	46.1	49.3	46.5	46.6	46.8	47.7
D (1)	42.8	42.8	40.6	40.8	41.5	42.0
EL	24.6	28.9	31.0	31.4	31.9	32.6
E	26.1	30.6	35.4	35.7	37.5	36.5
F	42.9	46.3	45.1	45.4	45.0	45.6
IRL	31.1	34.9	33.5	34.0	34.4	34.4
I	31.7	36.1	40.0	40.9	41.5	44.2
L	39.9	43.0	:	:	:	:
NL	43.9	43.4	42.8	45.0	45.0	45.9
A	42.7	44.8	42.6	43.2	44.4	45.3
P	24.6	28.3	31.3	32.6	35.0	34.1
FIN	38.3	42.3	45.8	46.6	46.5	44.9
Euro area (2)	**39.1**	**41.2**	**41.2**	**41.6**	**42.1**	**42.9**
DK	44.7	48.0	47.6	47.5	48.0	49.5
S	48.8	49.9	54.2	51.3	50.0	49.0
UK	33.5	35.4	33.3	33.1	32.2	31.3
EU-15 (3)	**38.7**	**40.7**	**40.6**	**40.8**	**41.1**	**41.6**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 1.2	0.4	0.5	0.2	0.2	0.9
D (1)	0.4	0.3	– 1.9	1.1	0.7	0.5
EL	– 0.5	– 0.1	2.8	0.4	0.6	0.6
E	1.4	0.8	0.0	0.3	1.8	– 1.0
F	1.3	0.2	– 0.1	0.3	– 0.4	0.6
IRL	2.8	– 0.9	– 0.3	0.5	0.4	0.1
I	1.7	0.0	0.8	0.8	0.7	2.7
L	0.6	1.0	:	:	:	:
NL	0.1	– 0.4	– 0.3	2.2	0.0	0.9
A	0.5	0.9	– 0.5	0.6	1.2	0.9
P	1.8	– 0.6	0.6	1.3	2.4	– 0.9
FIN	0.3	1.7	1.9	0.8	– 0.1	– 1.6
Euro area (2)	**0.7**	**0.2**	**– 0.3**	**0.7**	**0.5**	**0.8**
DK	0.9	1.3	– 2.2	– 0.1	0.5	1.6
S	– 0.3	0.0	– 0.3	– 2.8	– 1.3	– 1.0
UK	1.9	– 0.5	– 0.4	– 0.3	– 0.8	– 1.0
EU-15 (3)	**0.7**	**0.1**	**– 0.3**	**0.4**	**0.3**	**0.5**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
48.9	48.4	46.7	47.0	47.4	47.9	47.6	47.5	47.0	46.9	46.6
42.5	42.5	42.3	43.1	43.1	43.1	43.9	43.9	42.3	42.6	42.5
33.4	34.0	34.4	34.8	36.0	38.2	39.3	40.2	39.4	39.1	38.9
36.1	35.0	34.0	34.4	34.8	35.0	35.6	36.2	36.1	36.0	35.9
46.0	46.6	45.2	46.4	46.5	46.4	47.1	46.7	46.5	46.1	45.7
35.5	32.8	35.0	35.0	34.2	33.6	33.4	33.1	31.5	31.8	31.4
42.1	41.9	42.3	42.9	44.4	43.2	43.5	43.0	43.0	42.7	42.3
:	:	43.7	43.7	42.5	41.5	41.8	42.2	41.9	41.2	41.0
43.9	42.5	41.5	41.7	41.5	41.1	42.5	42.4	40.9	40.4	40.1
44.0	44.7	44.9	45.9	46.7	46.6	46.5	45.9	47.8	47.2	46.9
34.4	34.8	34.5	35.1	35.1	35.4	36.4	37.0	36.9	36.9	36.9
47.2	45.9	46.6	47.4	46.7	46.5	46.6	47.3	45.9	45.1	43.8
42.8	**42.7**	**42.2**	**42.9**	**43.2**	**43.0**	**43.6**	**43.4**	**42.7**	**42.6**	**42.3**
50.7	50.1	50.2	50.7	50.7	51.0	52.1	49.6	49.7	49.0	48.5
48.5	49.4	48.9	51.8	52.2	53.5	53.1	53.1	54.8	52.2	52.0
31.9	32.9	36.5	36.1	36.6	38.0	38.1	38.7	38.6	38.6	38.3
41.6	**41.8**	**41.8**	**42.4**	**42.6**	**42.6**	**43.1**	**43.0**	**42.4**	**42.2**	**41.9**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
1.2	– 0.5	:	0.3	0.4	0.5	– 0.3	– 0.2	– 0.5	0.0	– 0.3
0.5	0.0	:	0.9	– 0.1	0.0	0.8	0.0	– 1.6	0.4	– 0.2
0.8	0.6	:	0.4	1.2	2.1	1.1	0.9	– 0.8	– 0.2	– 0.2
– 0.4	– 1.1	:	0.3	0.4	0.2	0.7	0.6	– 0.1	– 0.1	– 0.1
0.4	0.6	:	1.2	0.1	– 0.1	0.6	– 0.4	– 0.2	– 0.4	– 0.4
1.0	– 2.6	:	0.0	– 0.8	– 0.6	– 0.2	– 0.3	– 1.6	0.3	– 0.4
– 2.1	– 0.2	:	0.6	1.5	– 1.2	0.2	– 0.5	0.0	– 0.3	– 0.4
:	:	:	0.0	– 1.2	– 1.0	0.3	0.5	– 0.3	– 0.6	– 0.3
– 2.0	– 1.4	:	0.2	– 0.2	– 0.4	1.3	– 0.1	– 1.4	– 0.5	– 0.4
– 1.2	0.7	:	1.0	0.8	– 0.1	– 0.1	– 0.5	1.8	– 0.6	– 0.3
0.3	0.4	:	0.6	0.0	0.3	1.0	0.6	0.0	0.0	– 0.1
2.3	– 1.3	:	0.8	– 0.7	– 0.2	0.1	0.8	– 1.5	– 0.8	– 1.3
– 0.1	**– 0.1**	**:**	**0.7**	**0.3**	**– 0.2**	**0.6**	**– 0.1**	**– 0.7**	**– 0.1**	**– 0.3**
1.2	– 0.6	:	0.6	– 0.1	0.3	1.1	– 2.5	0.1	– 0.8	– 0.5
– 0.5	0.9	:	3.0	0.3	1.3	– 0.4	0.1	1.7	– 2.6	– 0.3
0.6	1.1	:	– 0.4	0.5	1.4	0.1	0.6	– 0.1	0.0	– 0.3
– 0.1	**0.2**	**:**	**0.6**	**0.1**	**0.1**	**0.5**	**– 0.1**	**– 0.5**	**– 0.2**	**– 0.3**

Table A.4.2

Social contributions received; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	14.9	17.1	16.7	17.4	17.6	18.1
D (1)	16.9	17.6	16.9	17.5	17.8	18.4
EL	9.4	11.6	11.5	11.1	11.0	11.9
E	12.7	12.7	12.9	13.2	14.0	14.3
F	19.1	20.8	20.6	20.7	20.9	21.1
IRL	4.4	5.1	5.0	5.2	5.3	5.3
I	12.9	13.5	14.3	14.6	14.9	15.4
L	13.3	12.3	:	:	:	:
NL	17.5	19.8	16.4	17.3	17.8	17.8
A	14.4	14.6	15.5	15.6	16.2	16.8
P	8.0	8.6	10.1	10.5	11.1	11.7
FIN	10.9	11.4	12.9	13.6	14.6	15.0
Euro area (2)	**15.9**	**16.7**	**16.4**	**16.7**	**17.1**	**17.7**
DK	1.6	2.5	2.3	2.3	2.4	2.5
S	14.8	13.6	15.0	15.0	14.4	13.9
UK	6.0	6.8	6.2	6.2	6.1	6.1
EU-15 (3)	**14.0**	**14.7**	**14.5**	**14.8**	**15.2**	**15.7**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.0	0.5	0.2	0.6	0.3	0.5
D (1)	0.3	0.2	– 0.3	0.1	0.4	0.6
EL	0.4	0.2	0.3	– 0.4	– 0.1	1.0
E	0.1	0.0	0.3	0.3	0.9	0.3
F	0.9	0.2	0.1	0.1	0.2	0.2
IRL	0.4	– 0.1	0.1	0.2	0.1	0.0
I	0.1	0.0	0.3	0.2	0.3	0.5
L	0.4	– 0.2	:	:	:	:
NL	0.3	– 0.2	– 1.7	0.9	0.6	0.0
A	0.4	0.3	0.9	0.1	0.6	0.6
P	0.3	– 0.5	0.5	0.4	0.6	0.7
FIN	0.2	0.9	1.4	0.8	0.9	0.5
Euro area (2)	**0.4**	**0.1**	**0.0**	**0.2**	**0.4**	**0.6**
DK	0.2	0.0	0.1	0.0	0.1	0.1
S	0.4	– 0.3	0.4	– 0.1	– 0.6	– 0.5
UK	0.2	– 0.1	– 0.3	0.0	– 0.1	0.1
EU-15 (3)	**0.2**	**0.0**	**0.1**	**0.1**	**0.4**	**0.5**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
17.6	17.3	16.8	16.7	16.5	16.5	16.4	16.1	16.1	16.1	15.8
18.9	19.1	18.8	19.4	19.7	19.3	19.0	18.7	18.6	18.6	18.5
12.1	12.4	12.6	12.9	13.3	13.6	13.7	13.6	13.4	13.4	13.4
14.0	13.1	13.0	13.2	13.1	13.0	13.1	13.3	13.6	13.5	13.4
20.7	21.0	20.5	20.7	20.3	18.1	18.3	18.3	18.1	17.9	17.7
5.1	4.7	6.8	6.3	6.0	5.7	5.8	5.7	5.8	5.7	5.7
14.8	14.7	14.8	15.0	15.3	12.8	12.7	12.7	12.7	12.7	12.7
:	:	12.5	12.1	11.4	11.2	11.4	11.5	12.2	12.4	12.3
18.4	18.2	17.2	16.6	16.6	16.4	17.2	17.2	15.2	14.4	14.4
17.2	17.3	17.4	17.5	17.4	17.3	17.3	17.1	17.1	17.0	16.8
11.5	11.7	11.0	11.0	11.1	11.3	11.4	11.7	12.0	12.1	12.1
15.8	14.8	14.9	14.3	13.4	13.0	13.2	12.2	12.5	12.2	11.7
17.7	**17.7**	**17.4**	**17.6**	**17.5**	**16.5**	**16.4**	**16.2**	**16.0**	**15.9**	**15.8**
2.8	2.6	2.6	2.6	2.6	2.6	3.2	3.3	3.3	2.7	2.7
13.8	14.2	14.2	15.3	15.0	15.1	13.7	15.8	16.3	16.1	16.0
6.2	6.2	7.5	7.4	7.4	7.5	7.5	7.4	7.7	7.6	7.6
15.7	**15.8**	**15.7**	**15.8**	**15.5**	**14.7**	**14.5**	**14.4**	**14.3**	**14.1**	**14.0**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 0.5	– 0.3	:	– 0.1	– 0.2	0.0	– 0.1	– 0.3	0.0	0.0	– 0.3
0.5	0.2	:	0.6	0.2	– 0.4	– 0.3	– 0.4	– 0.1	0.0	– 0.2
0.2	0.3	:	0.3	0.4	0.3	0.1	– 0.1	– 0.2	0.0	0.0
– 0.4	– 0.9	:	0.2	– 0.1	– 0.1	0.1	0.3	0.2	– 0.1	– 0.1
– 0.3	0.2	:	0.2	– 0.4	– 2.2	0.2	0.0	– 0.2	– 0.2	– 0.2
– 0.2	– 0.4	:	– 0.5	– 0.4	– 0.3	0.1	0.0	0.0	– 0.1	0.0
– 0.6	– 0.1	:	0.3	0.3	– 2.5	– 0.1	0.0	0.0	0.0	0.0
:	:	:	– 0.4	– 0.7	– 0.2	0.1	0.1	0.8	0.2	– 0.1
0.6	– 0.2	:	– 0.6	0.0	– 0.2	0.7	0.0	– 2.0	– 0.8	0.0
0.4	0.1	:	0.0	– 0.1	– 0.1	0.0	– 0.2	0.0	– 0.1	– 0.2
– 0.3	0.2	:	0.1	0.1	0.2	0.0	0.4	0.3	0.1	0.0
0.8	– 1.1	:	– 0.6	– 0.8	– 0.4	0.1	– 1.0	0.4	– 0.4	– 0.5
0.0	**0.0**	**:**	**0.2**	**– 0.1**	**– 1.1**	**– 0.1**	**– 0.2**	**– 0.2**	**– 0.1**	**– 0.2**
0.3	– 0.2	:	0.0	0.0	0.0	0.5	0.1	0.1	– 0.6	0.0
0.0	0.3	:	1.1	– 0.2	0.0	– 1.3	2.1	0.5	– 0.1	– 0.2
0.1	0.0	:	– 0.1	0.1	0.1	– 0.1	0.0	0.2	0.0	0.0
0.0	**0.1**	**:**	**0.1**	**– 0.3**	**– 0.9**	**– 0.1**	**– 0.2**	**– 0.1**	**– 0.1**	**– 0.1**

Table A.4.3

Current taxes on income and wealth (direct taxes); general government

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	18.0	19.1	16.6	16.2	16.1	16.2
D (1)	12.8	12.6	11.2	11.3	11.6	11.2
EL	4.6	4.6	5.4	5.5	5.4	5.7
E	6.7	8.2	11.6	11.6	12.0	11.5
F	8.2	8.9	8.7	9.2	8.8	9.0
IRL	11.5	13.1	13.1	13.7	14.1	14.8
I	9.7	13.0	14.3	14.4	14.6	16.1
L	15.6	17.5	:	:	:	:
NL	15.2	12.3	14.9	16.2	15.3	16.1
A	12.5	14.0	11.6	12.2	12.7	12.8
P	5.6	7.8	7.9	8.8	9.8	9.0
FIN	14.2	16.5	17.7	17.6	16.9	15.2
Euro area (2)	**10.8**	**11.6**	**11.8**	**12.0**	**12.0**	**12.1**
DK	25.1	27.8	28.3	28.5	29.0	30.1
S	20.9	20.3	22.6	19.2	19.9	20.1
UK	13.4	14.5	13.8	12.8	12.1	11.4
EU-15 (3)	**11.9**	**12.8**	**12.8**	**12.7**	**12.6**	**12.5**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 0.8	0.0	0.2	– 0.4	– 0.1	0.1
D (1)	0.1	0.4	– 1.5	0.8	0.3	– 0.3
EL	0.6	– 0.3	0.9	0.1	– 0.1	0.3
E	0.9	0.2	– 0.1	0.0	0.4	– 0.5
F	0.6	– 0.1	0.0	0.4	– 0.3	0.2
IRL	1.3	– 0.3	0.5	0.6	0.3	0.8
I	1.1	0.4	0.1	0.0	0.2	1.5
L	– 0.5	1.0	:	:	:	:
NL	0.1	– 0.2	1.5	1.3	– 0.9	0.8
A	0.2	0.7	– 1.0	0.6	0.5	0.1
P	– 0.1	0.1	0.1	0.9	1.0	– 0.9
FIN	0.1	0.6	1.2	– 0.1	– 0.8	– 1.7
Euro area (2)	**0.4**	**0.2**	**– 0.3**	**0.4**	**0.0**	**0.1**
DK	1.0	1.1	– 1.7	0.2	0.5	1.1
S	– 0.8	– 0.3	– 1.7	– 3.4	0.6	0.2
UK	0.7	0.1	0.2	– 1.0	– 0.8	– 0.7
EU-15 (3)	**0.4**	**0.2**	**– 0.3**	**0.1**	**– 0.1**	**0.0**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
17.5	17.8	16.7	16.6	17.1	17.6	17.1	17.3	17.4	17.4	17.3
10.8	11.1	11.1	11.5	11.2	11.5	12.0	12.5	11.2	11.5	11.6
6.8	7.2	7.4	7.1	7.8	9.5	9.9	10.8	10.5	10.4	10.3
11.0	11.0	10.1	10.3	10.5	10.2	10.2	10.5	10.5	10.5	10.6
9.2	9.4	8.5	8.9	9.5	11.7	12.2	12.3	12.5	12.4	12.2
15.2	13.5	13.6	14.1	14.0	13.9	13.8	13.4	12.8	12.7	12.5
14.8	14.5	14.8	15.4	16.2	14.5	15.1	14.8	15.2	14.8	14.5
:	:	17.5	17.9	17.2	16.4	16.0	16.0	15.6	14.7	14.4
13.6	12.5	12.4	12.9	12.4	12.2	12.2	12.1	12.2	12.4	12.1
11.3	11.9	12.0	13.1	13.5	13.7	13.4	13.4	15.2	15.0	15.1
8.8	9.1	9.5	10.0	10.0	9.8	10.2	10.7	10.3	10.3	10.3
16.8	16.7	17.4	19.0	18.4	18.8	18.7	21.2	19.5	19.4	18.9
11.6	**11.7**	**11.4**	**11.9**	**12.1**	**12.4**	**12.8**	**13.0**	**12.7**	**12.7**	**12.6**
30.6	30.3	30.4	30.6	30.3	29.9	30.6	29.1	29.4	29.3	29.2
20.3	20.8	20.2	21.6	21.7	22.4	22.0	22.2	23.4	21.2	21.2
11.8	12.6	14.9	14.7	15.0	16.2	16.1	16.7	16.8	16.9	16.7
12.3	**12.4**	**12.5**	**13.0**	**13.2**	**13.7**	**14.0**	**14.3**	**14.1**	**14.0**	**13.9**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
1.3	0.3	:	0.0	0.4	0.5	– 0.5	0.2	0.1	0.0	– 0.1
– 0.4	0.3	:	0.4	– 0.3	0.3	0.5	0.5	– 1.4	0.3	0.1
1.1	0.5	:	– 0.3	0.7	1.7	0.4	0.9	– 0.3	– 0.1	– 0.1
– 0.5	0.0	:	0.1	0.2	– 0.3	0.0	0.3	0.0	0.0	0.0
0.3	0.2	:	0.5	0.6	2.2	0.6	0.0	0.2	– 0.1	– 0.2
0.3	– 1.7	:	0.5	0.0	– 0.2	– 0.1	– 0.4	– 0.5	– 0.1	– 0.3
– 1.2	– 0.3	:	0.6	0.7	– 1.6	0.6	– 0.4	0.5	– 0.4	– 0.3
:	:	:	0.4	– 0.7	– 0.8	– 0.5	0.1	– 0.4	– 0.9	– 0.2
– 2.6	– 1.1	:	0.5	– 0.5	– 0.3	0.0	– 0.1	0.1	0.2	– 0.3
– 1.5	0.6	:	1.1	0.4	0.2	– 0.3	0.0	1.9	– 0.2	0.1
– 0.2	0.3	:	0.5	0.1	– 0.3	0.4	0.6	– 0.4	0.0	0.0
1.6	– 0.1	:	1.6	– 0.6	0.4	– 0.1	2.5	– 1.6	– 0.2	– 0.4
– 0.4	**0.0**	**:**	**0.5**	**0.2**	**0.3**	**0.4**	**0.2**	**– 0.3**	**0.0**	**– 0.1**
0.5	– 0.3	:	0.2	– 0.3	– 0.4	0.7	– 1.5	0.2	– 0.1	– 0.1
0.2	0.4	:	1.4	0.1	0.8	– 0.5	0.3	1.2	– 2.2	0.1
0.4	0.8	:	– 0.2	0.3	1.2	– 0.1	0.6	0.1	0.1	– 0.1
– 0.3	**0.1**	**:**	**0.5**	**0.3**	**0.4**	**0.3**	**0.3**	**– 0.2**	**0.0**	**– 0.1**

Table A.4.4

Taxes linked to imports and production (indirect taxes); general government

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	12.2	12.0	12.1	12.0	12.0	12.3
D (1)	13.1	12.6	12.5	12.2	12.4	12.7
EL	10.5	12.5	13.9	14.6	15.3	14.7
E	6.3	9.1	10.3	10.3	10.9	10.1
F	14.9	15.6	14.9	14.5	14.3	14.3
IRL	15.3	16.7	15.6	15.2	15.2	14.4
I	9.3	9.5	11.3	11.8	11.8	12.7
L	12.4	14.8	15.0	15.1	15.5	16.1
NL	11.7	11.7	11.9	11.9	12.3	12.4
A	15.8	16.3	15.7	15.5	15.6	15.7
P	12.2	13.7	13.0	12.9	13.7	12.9
FIN	13.1	14.1	14.9	15.0	14.7	14.5
Euro area (2)	**12.3**	**12.6**	**12.7**	**12.6**	**12.7**	**13.0**
DK	18.0	17.8	17.0	16.7	16.6	16.9
S	13.1	16.0	16.5	17.2	15.8	15.1
UK	15.8	16.0	15.6	16.0	15.6	15.3
EU-15 (3)	**13.0**	**13.4**	**13.4**	**13.4**	**13.3**	**13.4**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 0.4	– 0.2	0.1	– 0.1	0.0	0.3
D (1)	0.0	– 0.3	– 0.1	0.3	0.2	0.3
EL	– 1.4	0.1	1.7	0.7	0.8	– 0.6
E	0.1	0.6	– 0.2	0.0	0.5	– 0.7
F	0.1	0.1	– 0.1	– 0.4	– 0.2	0.1
IRL	1.1	– 0.6	– 0.9	– 0.4	0.0	– 0.8
I	0.6	– 0.4	0.2	0.6	– 0.1	0.9
L	0.8	0.2	0.2	0.1	0.4	0.7
NL	– 0.4	0.0	– 0.1	0.0	0.3	0.2
A	0.0	– 0.2	– 0.3	– 0.2	0.1	0.1
P	1.9	0.2	0.0	– 0.1	0.8	– 0.7
FIN	– 0.1	0.1	– 0.3	0.1	– 0.3	– 0.2
Euro area (2)	**0.0**	**– 0.1**	**0.0**	**0.1**	**0.1**	**0.2**
DK	– 0.4	0.3	– 0.7	– 0.3	– 0.1	0.3
S	0.2	0.6	1.0	0.6	– 1.3	– 0.7
UK	0.8	– 0.3	– 0.1	0.4	– 0.3	– 0.3
EU-15 (3)	**0.2**	**– 0.1**	**0.0**	**0.1**	**– 0.1**	**0.1**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.7	12.2	12.2	12.7	12.8	12.8	13.2	13.1	12.5	12.4	12.6
13.1	12.7	11.4	11.4	11.4	11.6	12.2	12.1	11.9	12.0	11.9
14.3	14.2	13.6	14.0	14.3	14.4	15.0	15.0	14.7	14.6	14.6
10.6	10.3	10.2	10.2	10.5	11.1	11.7	11.7	11.4	11.6	11.7
14.7	14.9	15.4	16.1	16.0	16.0	15.9	15.5	15.2	15.2	15.1
15.3	14.6	13.5	13.7	13.5	13.2	13.1	13.2	12.2	12.7	12.6
12.4	12.4	12.1	11.8	12.4	15.3	15.1	15.0	14.5	14.7	14.6
16.2	16.2	12.6	12.6	12.7	12.9	13.9	14.4	13.8	13.9	14.0
12.4	12.3	10.7	11.2	11.4	11.6	12.2	12.2	12.6	12.7	12.6
15.7	15.5	14.3	14.5	14.9	14.9	15.0	14.8	14.8	14.5	14.4
13.4	13.6	14.0	14.1	13.9	14.3	14.9	14.5	14.6	14.5	14.5
14.2	13.6	13.7	13.5	14.3	14.1	14.2	13.5	13.3	13.1	12.6
13.2	**13.1**	**12.5**	**12.7**	**12.9**	**13.5**	**13.8**	**13.6**	**13.3**	**13.4**	**13.3**
17.3	17.2	16.9	17.3	17.5	18.2	18.0	17.0	16.9	16.8	16.4
14.3	13.8	13.7	14.3	14.8	15.3	16.8	14.5	14.6	14.3	14.1
15.4	15.7	13.1	13.2	13.5	13.5	13.9	13.9	13.6	13.5	13.4
13.6	**13.5**	**12.7**	**12.9**	**13.1**	**13.6**	**14.0**	**13.7**	**13.5**	**13.5**	**13.4**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.4	– 0.5	:	0.5	0.2	0.0	0.4	– 0.1	– 0.6	– 0.1	0.1
0.4	– 0.4	:	0.0	0.0	0.2	0.6	– 0.2	– 0.1	0.0	– 0.1
– 0.4	– 0.1	:	0.4	0.3	0.1	0.6	0.0	– 0.3	– 0.1	0.0
0.5	– 0.3	:	0.0	0.3	0.6	0.5	0.1	– 0.3	0.1	0.1
0.4	0.2	:	0.7	0.0	0.0	– 0.1	– 0.4	– 0.3	0.0	0.0
0.9	– 0.7	:	0.2	– 0.2	– 0.3	0.0	0.0	– 1.0	0.5	– 0.1
– 0.3	0.0	:	– 0.3	0.6	2.9	– 0.2	– 0.1	– 0.5	0.1	– 0.1
0.1	0.0	:	0.0	0.1	0.2	1.0	0.5	– 0.7	0.1	0.1
0.0	– 0.1	:	0.4	0.3	0.1	0.7	– 0.1	0.5	0.0	0.0
– 0.1	– 0.2	:	0.3	0.4	0.0	0.1	– 0.3	0.0	– 0.2	– 0.1
0.5	0.2	:	0.1	– 0.2	0.4	0.6	– 0.4	0.1	– 0.1	0.0
– 0.3	– 0.6	:	– 0.2	0.8	– 0.2	0.1	– 0.7	– 0.2	– 0.2	– 0.4
0.2	**– 0.2**	**:**	**0.2**	**0.2**	**0.6**	**0.3**	**– 0.2**	**– 0.2**	**0.0**	**– 0.1**
0.4	– 0.1	:	0.3	0.2	0.7	– 0.2	– 1.1	– 0.1	– 0.1	– 0.3
– 0.8	– 0.5	:	0.6	0.4	0.6	1.5	– 2.3	0.1	– 0.3	– 0.2
0.1	0.3	:	0.0	0.3	0.1	0.3	0.0	– 0.3	– 0.1	– 0.1
0.2	**– 0.1**	**:**	**0.2**	**0.2**	**0.5**	**0.3**	**– 0.2**	**– 0.3**	**0.0**	**– 0.1**

Table A.4.5

Other current resources; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	2.6	2.3	1.8	1.9	1.8	1.8
D (1)	2.3	3.2	2.7	2.6	3.1	3.0
EL	1.9	1.7	1.7	2.2	2.5	3.1
E	3.9	4.2	3.7	4.1	4.0	5.0
F	3.2	3.8	4.0	3.9	4.1	4.1
IRL	3.3	3.9	2.3	2.5	2.5	2.4
I	2.4	2.9	2.9	3.0	3.3	3.6
L	6.3	5.6	:	:	:	:
NL	6.4	8.8	4.9	5.2	4.8	4.6
A	2.8	2.9	4.4	4.4	4.8	4.6
P	2.0	2.7	2.9	3.1	3.6	3.1
FIN	3.8	5.1	5.9	6.8	7.6	8.0
Euro area (2)	**3.0**	**3.7**	**3.3**	**3.4**	**3.6**	**3.7**
DK	6.1	7.1	7.5	7.2	8.0	8.4
S	7.3	9.3	8.4	8.2	9.1	9.2
UK	4.5	4.1	2.7	2.5	2.3	2.2
EU-15 (3)	**3.5**	**4.0**	**3.5**	**3.5**	**3.7**	**3.7**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.5	– 0.1	0.1	0.1	– 0.2	0.0
D (1)	0.1	0.1	0.0	– 0.1	0.5	– 0.1
EL	0.3	0.0	0.1	0.5	0.3	0.6
E	0.6	0.4	0.3	0.4	– 0.1	1.0
F	0.3	0.2	0.4	– 0.1	0.2	0.0
IRL	0.1	0.2	0.0	0.3	– 0.1	– 0.1
I	– 0.1	0.5	0.1	0.2	0.2	0.4
L	0.8	0.5	:	:	:	:
NL	0.6	0.6	0.2	0.3	– 0.4	– 0.2
A	0.4	0.1	1.5	– 0.1	0.4	– 0.2
P	– 0.6	– 0.6	0.2	0.2	0.5	– 0.4
FIN	0.1	0.2	0.4	0.9	0.8	0.4
Euro area (2)	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.1**
DK	1.0	– 0.1	0.0	– 0.3	0.8	0.4
S	0.4	0.3	0.0	– 0.2	0.8	0.1
UK	0.3	0.2	– 0.2	– 0.2	– 0.1	– 0.1
EU-15 (3)	**0.3**	**0.2**	**0.1**	**0.0**	**0.2**	**0.1**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
1.5	1.5	3.1	3.2	3.0	3.0	2.8	2.9	3.0	2.6	2.7
3.0	2.7	3.5	3.4	3.2	3.1	3.0	2.8	3.1	3.0	2.9
3.8	4.2	2.9	2.9	3.4	2.9	3.0	3.0	3.4	3.0	3.0
4.2	3.6	4.1	4.2	4.0	3.7	3.7	3.3	3.5	3.4	3.4
3.7	3.8	3.7	4.0	3.9	3.7	3.6	3.9	3.7	3.9	3.7
2.1	1.8	2.8	2.9	2.7	2.5	2.2	2.1	2.5	2.4	2.3
3.6	3.7	3.1	3.2	3.2	3.2	3.3	3.1	3.2	3.2	3.1
:	:	5.7	5.5	5.3	5.2	4.9	4.7	4.7	4.7	4.5
4.1	3.7	6.0	5.8	5.5	5.0	4.7	4.8	4.9	4.6	4.3
4.4	4.5	5.7	5.2	3.8	3.5	3.4	3.4	3.9	3.8	3.7
2.6	2.8	4.1	4.3	4.0	4.0	3.8	3.6	3.6	3.7	3.7
6.7	7.0	7.3	6.7	6.3	5.9	5.4	6.3	6.5	6.5	6.3
3.5	**3.3**	**3.8**	**3.8**	**3.6**	**3.5**	**3.4**	**3.4**	**3.5**	**3.4**	**3.3**
7.5	6.8	6.8	7.1	6.7	6.6	6.0	5.8	6.0	5.4	5.3
8.5	8.1	8.3	8.0	7.2	7.1	6.2	6.0	5.1	4.9	4.7
2.2	2.2	2.8	2.9	2.6	2.5	2.5	2.5	2.4	2.4	2.3
3.5	**3.4**	**3.9**	**3.9**	**3.6**	**3.5**	**3.4**	**3.3**	**3.4**	**3.3**	**3.2**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 0.3	0.1	:	0.1	– 0.2	0.0	– 0.1	0.1	0.1	– 0.4	0.1
0.0	– 0.3	:	– 0.1	– 0.2	– 0.1	– 0.1	– 0.2	0.3	– 0.1	– 0.1
0.7	0.5	:	0.0	0.5	– 0.6	0.2	0.0	0.4	– 0.4	0.0
– 0.8	– 0.6	:	0.1	– 0.2	– 0.2	– 0.1	– 0.3	0.2	– 0.1	0.0
– 0.4	0.1	:	0.3	– 0.1	– 0.2	– 0.1	0.3	– 0.2	0.2	– 0.2
– 0.3	– 0.3	:	0.1	– 0.3	– 0.2	– 0.3	– 0.1	0.4	– 0.1	– 0.1
0.0	0.1	:	0.1	0.0	0.0	0.1	– 0.2	0.1	– 0.1	– 0.1
:	:	:	– 0.3	– 0.1	– 0.1	– 0.3	– 0.2	0.0	– 0.1	– 0.2
– 0.6	– 0.4	:	– 0.2	– 0.3	– 0.4	– 0.4	0.1	0.1	– 0.3	– 0.3
– 0.1	0.1	:	– 0.5	– 1.4	– 0.3	– 0.1	0.0	0.5	– 0.1	– 0.1
– 0.5	0.2	:	0.2	– 0.3	0.0	– 0.2	– 0.2	0.0	0.1	0.0
– 1.3	0.3	:	– 0.6	– 0.5	– 0.4	– 0.4	0.9	0.3	– 0.1	– 0.2
– 0.2	**– 0.1**	**:**	**0.0**	**– 0.2**	**– 0.1**	**– 0.1**	**– 0.1**	**0.1**	**0.0**	**– 0.1**
– 0.9	– 0.6	:	0.3	– 0.5	0.0	– 0.7	– 0.2	0.2	– 0.6	– 0.2
– 0.7	– 0.4	:	– 0.4	– 0.7	– 0.2	– 0.9	– 0.2	– 0.9	– 0.3	– 0.1
0.0	0.0	:	0.1	– 0.3	– 0.1	0.0	0.0	– 0.1	0.0	– 0.1
– 0.2	**– 0.1**	**:**	**0.0**	**– 0.2**	**– 0.1**	**– 0.1**	**– 0.1**	**0.1**	**– 0.1**	**– 0.1**

Table A.4.6

Total current resources; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	47.6	50.4	47.1	47.4	47.4	48.3
D (1)	45.1	46.0	43.3	43.5	44.9	45.3
EL	26.3	30.3	32.5	33.4	34.2	35.4
E	29.6	34.2	38.4	39.2	40.9	40.9
F	45.3	49.1	48.2	48.2	48.0	48.4
IRL	34.5	38.8	35.9	36.6	37.0	36.9
I	34.4	39.0	42.8	43.8	44.5	47.7
L	47.6	50.2	:	:	:	:
NL	50.7	52.5	48.1	50.6	50.2	50.9
A	45.6	47.8	47.1	47.7	49.2	49.9
P	27.8	32.7	33.9	35.2	38.1	36.8
FIN	42.0	47.0	51.4	53.1	53.7	52.7
Euro area (2)	**41.9**	**44.6**	**44.2**	**44.7**	**45.4**	**46.4**
DK	50.8	55.3	55.1	54.7	56.0	57.9
S	56.1	59.2	62.6	59.6	59.1	58.2
UK	39.8	41.4	38.3	37.4	36.1	35.1
EU-15 (3)	**42.3**	**44.9**	**44.2**	**44.3**	**44.8**	**45.4**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	– 0.7	0.3	0.6	0.3	0.0	0.9
D (1)	0.5	0.4	– 1.9	1.1	1.3	0.4
EL	– 0.2	0.0	2.9	0.9	0.8	1.2
E	1.7	1.2	0.3	0.7	1.7	0.1
F	1.9	0.5	0.4	0.0	– 0.2	0.5
IRL	2.9	– 0.7	– 0.3	0.8	0.4	– 0.1
I	1.6	0.4	0.7	1.0	0.7	3.2
L	1.5	1.5	:	:	:	:
NL	0.7	0.2	– 0.1	2.5	– 0.4	0.7
A	1.0	1.0	1.0	0.5	1.6	0.7
P	1.5	– 0.7	0.8	1.3	2.9	– 1.4
FIN	0.4	1.9	2.7	1.7	0.7	– 1.0
Euro area (2)	**1.0**	**0.5**	**– 0.2**	**0.7**	**0.8**	**1.0**
DK	1.7	1.4	– 2.2	– 0.4	1.2	1.9
S	0.2	0.4	– 0.3	– 3.0	– 0.5	– 0.9
UK	1.9	0.0	– 0.4	– 0.8	– 1.4	– 1.0
EU-15 (3)	**1.0**	**0.4**	**– 0.2**	**0.3**	**0.5**	**0.6**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
49.2	48.8	48.7	49.3	49.4	49.9	49.5	49.4	49.0	48.6	48.4
45.9	45.6	44.8	45.7	45.5	45.5	46.3	46.1	44.8	45.1	44.9
36.9	38.1	36.5	36.9	38.8	40.3	41.6	42.5	42.0	41.4	41.2
39.8	38.0	37.4	37.8	38.0	38.0	38.6	38.9	38.9	39.0	39.0
48.3	49.0	48.1	49.7	49.7	49.5	50.1	49.9	49.5	49.4	48.7
37.6	34.6	36.7	37.0	36.1	35.2	34.9	34.4	33.2	33.5	33.0
45.5	45.3	44.8	45.5	47.2	45.9	46.3	45.6	45.7	45.3	44.8
:	:	48.3	48.1	46.7	45.8	46.2	46.6	46.3	45.6	45.2
48.4	46.6	46.3	46.5	45.9	45.2	46.2	46.2	44.9	44.1	43.5
48.6	49.2	49.4	50.3	49.5	49.4	49.1	48.7	51.0	50.3	49.9
36.3	37.2	38.6	39.4	39.1	39.4	40.2	40.5	40.5	40.6	40.6
53.5	52.1	53.2	53.5	52.3	51.8	51.4	53.1	51.9	51.0	49.6
46.0	**45.7**	**45.1**	**46.0**	**46.1**	**45.8**	**46.4**	**46.2**	**45.6**	**45.4**	**45.0**
58.1	57.0	56.8	57.7	57.1	57.4	57.8	55.2	55.6	54.2	53.6
57.0	56.9	56.5	59.1	58.7	59.9	58.6	58.5	59.4	56.4	56.1
35.6	36.7	38.3	38.1	38.5	39.8	40.0	40.5	40.5	40.5	40.1
45.1	**45.1**	**44.8**	**45.5**	**45.5**	**45.5**	**45.9**	**45.7**	**45.2**	**45.0**	**44.6**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.9	– 0.4	:	0.6	0.1	0.5	– 0.4	– 0.1	– 0.4	– 0.4	– 0.2
0.5	– 0.3	:	0.9	– 0.2	0.0	0.8	– 0.2	– 1.3	0.3	– 0.2
1.5	1.1	:	0.5	1.8	1.5	1.3	0.9	– 0.5	– 0.6	– 0.2
– 1.2	– 1.8	:	0.5	0.2	0.0	0.6	0.3	0.1	0.0	0.1
– 0.1	0.7	:	1.7	0.0	– 0.2	0.6	– 0.2	– 0.4	– 0.1	– 0.7
0.7	– 3.0	:	0.3	– 0.8	– 0.9	– 0.3	– 0.5	– 1.2	0.2	– 0.4
– 2.2	– 0.3	:	0.7	1.7	– 1.3	0.4	– 0.7	0.1	– 0.4	– 0.5
:	:	:	– 0.2	– 1.4	– 0.9	0.4	0.5	– 0.3	– 0.7	– 0.4
– 2.5	– 1.8	:	0.2	– 0.6	– 0.8	1.0	0.0	– 1.4	– 0.8	– 0.6
– 1.3	0.6	:	0.9	– 0.7	– 0.2	– 0.3	– 0.4	2.4	– 0.7	– 0.4
– 0.5	0.9	:	0.9	– 0.3	0.3	0.8	0.3	0.0	0.1	0.0
0.8	– 1.4	:	0.3	– 1.1	– 0.6	– 0.4	1.7	– 1.2	– 0.9	– 1.5
– 0.4	**– 0.2**	**:**	**0.8**	**0.2**	**– 0.3**	**0.5**	**– 0.2**	**– 0.6**	**– 0.1**	**– 0.4**
0.2	– 1.2	:	0.9	– 0.6	0.3	0.4	– 2.6	0.4	– 1.3	– 0.6
– 1.2	– 0.1	:	2.6	– 0.4	1.2	– 1.2	– 0.1	0.8	– 2.9	– 0.3
0.6	1.0	:	– 0.2	0.4	1.3	0.2	0.6	– 0.1	0.0	– 0.4
– 0.3	**0.0**	**:**	**0.8**	**– 0.1**	**0.0**	**0.4**	**– 0.2**	**– 0.5**	**– 0.2**	**– 0.4**

Table A.4.7

Interest payments

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	5.9	10.3	10.3	10.0	10.6	10.6
D (1)	1.9	3.0	2.6	2.6	3.2	3.2
EL	2.0	4.9	10.0	9.3	11.5	12.6
E	0.4	1.9	3.9	3.7	4.3	5.0
F	1.4	2.8	2.9	2.9	3.2	3.3
IRL	6.0	9.3	7.4	7.2	6.7	6.3
I	5.5	8.0	9.4	10.1	11.4	12.0
L	1.2	1.0	0.4	0.4	0.3	0.4
NL	3.7	6.2	5.8	5.9	6.0	6.0
A	2.4	3.5	4.0	4.2	4.2	4.3
P	2.6	7.4	7.8	7.6	7.0	6.0
FIN	1.0	1.8	1.4	1.9	2.6	4.5
Euro area (2)	**2.6**	**4.5**	**4.9**	**5.0**	**5.5**	**5.6**
DK	3.7	9.3	7.3	7.3	6.7	7.3
S	4.0	8.1	4.8	5.0	5.3	6.0
UK	4.7	5.0	3.1	2.7	2.7	2.8
EU-15 (3)	**3.0**	**4.8**	**4.7**	**4.7**	**5.2**	**5.3**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.9	0.8	0.3	– 0.4	0.6	0.1
D (1)	0.2	0.0	– 0.1	0.2	0.6	0.0
EL	0.2	0.6	2.5	– 0.7	2.2	1.1
E	0.1	0.7	0.0	– 0.2	0.5	0.8
F	0.1	0.2	0.2	0.0	0.3	0.1
IRL	0.3	0.8	0.1	– 0.2	– 0.5	– 0.4
I	0.3	0.0	0.7	0.7	1.3	0.6
L	0.4	– 0.5	:	– 0.1	0.0	0.0
NL	0.4	0.2	0.0	0.2	0.1	0.0
A	0.2	0.2	0.1	0.2	0.0	0.1
P	0.2	0.8	1.8	– 0.2	– 0.6	– 0.9
FIN	0.1	0.2	0.0	0.5	0.7	1.9
Euro area (2)	**0.3**	**0.2**	**0.2**	**0.2**	**0.6**	**0.1**
DK	0.4	0.3	0.1	0.0	– 0.6	0.6
S	1.0	0.8	– 0.3	0.2	0.3	0.7
UK	0.3	0.1	– 0.6	– 0.4	0.0	0.1
EU-15 (3)	**0.3**	**0.2**	**0.1**	**0.1**	**0.5**	**0.1**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
10.0	8.8	9.3	8.9	8.0	7.6	7.0	6.8	6.5	6.2	5.8
3.3	3.7	3.7	3.7	3.6	3.6	3.5	3.4	3.2	3.3	3.2
13.9	12.8	11.2	10.5	8.2	7.8	7.3	7.0	6.2	5.6	5.1
4.7	5.3	5.2	5.3	4.8	4.3	3.5	3.3	3.1	2.9	2.8
3.5	3.7	3.8	3.9	3.7	3.6	3.3	3.3	3.2	3.1	3.1
5.6	5.0	5.4	4.6	4.2	3.4	2.4	2.1	1.5	1.6	1.5
10.9	11.3	11.5	11.5	9.4	8.3	6.8	6.5	6.4	5.8	5.7
0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2
5.7	5.7	5.9	5.6	5.2	4.9	4.5	4.0	3.4	3.0	2.7
4.0	4.3	4.4	4.4	4.0	3.9	3.7	3.7	3.5	3.4	3.3
6.1	6.2	6.3	5.4	4.2	3.5	3.2	3.2	3.1	3.1	3.2
5.0	5.2	4.0	4.3	4.3	3.6	3.1	2.8	2.7	2.6	2.5
5.4	**5.6**	**5.6**	**5.7**	**5.2**	**4.8**	**4.3**	**4.1**	**3.9**	**3.8**	**3.7**
6.7	6.4	6.4	6.1	5.7	5.3	4.7	4.2	4.1	3.5	3.2
6.6	6.8	6.9	6.8	6.5	5.7	5.0	4.2	3.4	3.1	2.9
3.2	3.4	3.6	3.6	3.6	3.5	2.9	2.8	2.4	2.3	2.2
5.2	**5.3**	**5.4**	**5.5**	**5.0**	**4.6**	**4.1**	**3.9**	**3.6**	**3.5**	**3.4**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 0.7	– 1.2	:	– 0.4	– 0.9	– 0.4	– 0.5	– 0.2	– 0.3	– 0.3	– 0.4
0.1	0.4	:	0.0	0.0	0.0	– 0.1	– 0.2	– 0.1	0.0	0.0
1.3	– 1.2	:	– 0.6	– 2.3	– 0.5	– 0.5	– 0.3	– 0.8	– 0.7	– 0.4
– 0.4	0.6	:	0.1	– 0.6	– 0.5	– 0.7	– 0.3	– 0.2	– 0.2	– 0.1
0.2	0.2	:	0.2	– 0.2	– 0.1	– 0.3	– 0.1	– 0.1	0.0	– 0.1
– 0.7	– 0.6	:	– 0.8	– 0.4	– 0.8	– 1.0	– 0.3	– 0.5	0.1	– 0.1
– 1.1	0.4	:	0.0	– 2.1	– 1.1	– 1.5	– 0.3	– 0.1	– 0.6	– 0.1
0.0	– 0.1	:	0.0	0.0	0.0	– 0.1	0.0	0.0	0.0	0.0
– 0.3	0.0	:	– 0.3	– 0.4	– 0.3	– 0.4	– 0.5	– 0.6	– 0.4	– 0.3
– 0.3	0.3	:	0.0	– 0.4	– 0.1	– 0.2	0.0	– 0.2	– 0.1	– 0.1
0.0	0.1	:	– 0.9	– 1.1	– 0.8	– 0.2	– 0.1	0.0	0.0	0.1
0.5	0.2	:	0.3	0.0	– 0.7	– 0.5	– 0.3	– 0.1	– 0.1	– 0.1
– 0.2	**0.2**	**:**	**0.1**	**– 0.6**	**– 0.4**	**– 0.5**	**– 0.2**	**– 0.2**	**– 0.2**	**– 0.1**
– 0.6	– 0.3	:	– 0.3	– 0.4	– 0.4	– 0.6	– 0.5	– 0.1	– 0.6	– 0.3
0.6	0.3	:	– 0.1	– 0.2	– 0.9	– 0.7	– 0.7	– 0.8	– 0.3	– 0.2
0.3	0.3	:	0.0	0.0	– 0.1	– 0.6	– 0.1	– 0.4	– 0.1	– 0.1
– 0.1	**0.2**	**:**	**0.1**	**– 0.5**	**– 0.3**	**– 0.5**	**– 0.2**	**– 0.2**	**– 0.2**	**– 0.1**

Table A.4.8

Final consumption expenditure of general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	17.3	16.7	13.8	14.2	14.1	14.6
D (1)	20.3	20.1	18.3	19.0	19.5	19.6
EL	13.5	16.1	15.1	14.2	13.8	14.3
E	12.9	14.2	15.0	15.6	16.4	16.9
F	17.7	19.1	17.7	17.9	18.5	19.4
IRL	18.2	16.9	14.2	15.1	15.4	15.3
I	15.0	16.6	17.4	17.4	17.5	17.5
L	14.4	13.6	12.6	12.4	12.4	12.2
NL	16.8	15.2	14.0	13.9	14.1	14.3
A	17.4	18.4	18.4	18.7	19.1	19.9
P	13.3	14.0	15.0	16.7	16.8	17.4
FIN	17.6	19.8	20.8	23.8	24.3	22.8
Euro area (2)	**17.4**	**18.0**	**17.2**	**17.6**	**18.0**	**18.4**
DK	27.0	25.6	25.6	25.7	25.8	26.8
S	28.5	27.1	26.4	26.4	27.1	27.1
UK	21.7	21.2	20.3	21.2	21.6	21.5
EU-15 (3)	**18.7**	**19.0**	**18.1**	**18.6**	**19.0**	**19.2**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.2	0.1	– 0.3	0.4	– 0.2	0.5
D (1)	0.6	0.1	– 0.5	– 0.7	0.6	0.1
EL	0.0	0.7	0.1	– 0.9	– 0.5	0.6
E	0.6	0.3	0.4	0.6	0.9	0.4
F	0.6	– 0.1	0.0	0.3	0.5	0.9
IRL	1.6	– 0.1	0.4	0.9	0.3	– 0.1
I	0.1	0.1	0.7	0.0	0.1	0.0
L	0.6	0.3	0.7	– 0.2	0.0	– 0.1
NL	– 0.2	– 0.5	– 0.3	– 0.1	0.2	0.2
A	0.0	0.3	0.6	0.3	0.4	0.8
P	0.7	0.2	0.5	1.6	0.1	0.6
FIN	0.2	0.9	1.4	3.0	0.6	– 1.6
Euro area (2)	**0.4**	**0.1**	**0.1**	**0.0**	**0.4**	**0.3**
DK	1.6	– 0.6	– 0.4	0.2	0.1	1.0
S	0.6	– 0.2	1.2	0.0	0.8	0.0
UK	1.6	– 0.8	0.5	0.9	0.5	– 0.1
EU-15 (3)	**0.6**	**– 0.1**	**0.1**	**0.2**	**0.4**	**0.2**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
14.6	14.5	21.4	21.7	21.2	21.1	21.2	21.2	21.4	21.7	21.6
19.4	19.5	19.8	20.0	19.5	19.2	19.2	19.0	19.1	19.1	18.7
13.8	15.3	15.3	14.5	15.1	15.3	15.3	15.4	15.4	15.3	15.2
16.2	16.0	18.1	18.0	17.5	17.5	17.4	17.4	17.3	17.3	17.3
19.2	19.0	23.9	24.2	24.2	23.4	23.4	23.3	23.2	23.3	23.0
15.2	14.2	16.4	15.8	15.2	14.5	14.0	13.4	14.2	15.0	15.0
17.0	15.9	17.9	18.1	18.2	17.9	18.0	18.2	18.4	18.3	18.0
11.9	12.6	18.5	18.9	17.8	16.8	17.0	16.2	17.0	17.3	16.9
13.9	13.8	24.0	23.1	22.9	22.7	23.0	22.7	23.2	23.6	23.5
20.0	19.8	20.4	20.3	19.7	19.6	19.9	19.4	19.2	18.8	18.7
17.1	17.3	18.6	18.9	19.0	18.9	19.6	20.3	20.5	20.5	20.3
21.8	21.2	22.8	23.2	22.4	21.7	21.7	20.6	21.2	21.5	21.2
18.1	**17.9**	**20.5**	**20.5**	**20.3**	**19.9**	**20.0**	**19.9**	**19.9**	**20.0**	**19.7**
25.9	25.7	25.8	25.9	25.5	26.0	25.9	25.1	25.5	25.6	25.3
26.1	24.8	26.4	27.1	26.5	26.7	26.7	26.2	26.7	26.9	26.7
21.2	20.9	19.6	19.3	18.4	18.0	18.5	18.8	19.2	19.6	19.9
18.9	**18.7**	**20.7**	**20.7**	**20.3**	**19.9**	**20.0**	**20.0**	**20.1**	**20.2**	**20.1**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.0	– 0.1	:	0.3	– 0.5	– 0.1	0.1	– 0.1	0.3	0.3	– 0.2
– 0.2	0.1	:	0.1	– 0.5	– 0.3	0.0	– 0.2	0.1	0.0	– 0.3
– 0.5	1.6	:	– 0.8	0.6	0.2	0.0	0.1	0.0	– 0.1	– 0.1
– 0.6	– 0.2	:	– 0.1	– 0.4	– 0.1	0.0	0.0	– 0.1	0.1	0.0
– 0.2	– 0.1	:	0.3	0.0	– 0.8	0.0	– 0.1	– 0.1	0.0	– 0.3
– 0.1	– 1.1	:	– 0.7	– 0.6	– 0.7	– 0.5	– 0.6	0.8	0.8	0.0
– 0.5	– 1.0	:	0.2	0.1	– 0.3	0.1	0.2	0.2	0.0	– 0.3
– 0.4	0.7	:	0.5	– 1.1	– 1.0	0.2	– 0.9	0.8	0.3	– 0.4
– 0.4	– 0.1	:	– 0.9	– 0.2	– 0.2	0.2	– 0.2	0.5	0.4	– 0.1
0.1	– 0.2	:	– 0.2	– 0.6	– 0.1	0.2	– 0.4	– 0.2	– 0.4	– 0.2
– 0.3	0.1	:	0.3	0.1	– 0.1	0.7	0.7	0.2	0.0	– 0.1
– 0.9	– 0.6	:	0.3	– 0.7	– 0.8	0.0	– 1.1	0.5	0.3	– 0.2
– 0.3	**– 0.2**	**:**	**0.0**	**– 0.3**	**– 0.4**	**0.0**	**– 0.1**	**0.1**	**0.1**	**– 0.3**
– 0.8	– 0.2	:	0.1	– 0.4	0.5	– 0.1	– 0.7	0.4	0.0	– 0.3
– 1.0	– 1.2	:	0.8	– 0.6	0.2	0.0	– 0.6	0.5	0.2	– 0.2
– 0.3	– 0.3	:	– 0.4	– 0.9	– 0.4	0.4	0.4	0.4	0.5	0.3
– 0.3	**– 0.2**	**:**	**0.0**	**– 0.4**	**– 0.3**	**0.1**	**– 0.1**	**0.1**	**0.1**	**– 0.2**

Table A.4.9

Compensation of employees; general government

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	13.4	13.0	11.1	11.5	11.5	12.0
D (1)	11.0	10.6	9.7	10.1	10.4	10.6
EL	9.4	11.4	12.5	11.5	10.9	10.9
E	9.4	10.2	10.7	11.1	11.8	11.8
F	13.4	14.4	13.0	13.1	13.4	14.0
IRL	11.8	11.5	9.9	10.5	10.6	10.8
I	11.1	11.8	12.7	12.6	12.5	12.4
L	10.1	9.7	:	:	:	:
NL	12.4	10.6	9.3	9.2	9.4	9.6
A	11.6	12.4	11.7	11.8	12.0	12.5
P	10.2	10.2	11.8	12.8	13.8	14.2
FIN	12.1	13.9	14.4	16.8	17.3	16.2
Euro area (2)	**11.7**	**12.0**	**11.5**	**11.6**	**11.8**	**11.9**
DK	18.0	17.4	17.7	17.7	17.8	18.1
S	20.2	18.3	18.1	18.3	18.8	18.5
UK	12.8	12.2	11.5	11.7	11.8	10.7
EU-15 (3)	**12.3**	**12.4**	**11.8**	**12.0**	**12.1**	**12.1**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	0.3	0.0	– 0.1	0.3	0.0	0.5
D (1)	0.2	– 0.1	– 0.3	– 0.2	0.3	0.2
EL	0.1	0.6	0.4	– 1.0	– 0.5	0.0
E	0.5	0.2	0.4	0.4	0.7	0.0
F	0.3	0.0	– 0.1	0.1	0.3	0.6
IRL	1.0	– 0.2	0.1	0.6	0.2	0.2
I	0.5	– 0.2	0.8	0.0	– 0.1	– 0.2
L	0.4	0.1	:	:	:	:
NL	– 0.2	– 0.4	– 0.3	– 0.1	0.2	0.2
A	0.0	0.1	– 0.4	0.2	0.2	0.4
P	0.6	0.0	0.4	1.0	1.0	0.4
FIN	– 0.1	0.6	0.8	2.4	0.5	– 1.1
Euro area (2)	**0.3**	**0.0**	**0.1**	**0.0**	**0.2**	**0.1**
DK	0.8	– 0.6	– 0.3	0.0	0.0	0.3
S	0.4	– 0.4	0.9	0.2	0.5	– 0.3
UK	1.0	– 0.5	0.1	0.2	0.1	– 1.1
EU-15 (3)	**0.4**	**– 0.1**	**0.1**	**0.1**	**0.2**	**– 0.1**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
12.1	12.1	11.9	11.9	11.7	11.6	11.6	11.4	11.6	11.5	11.3
10.3	10.2	9.0	8.9	8.7	8.5	8.4	8.1	8.0	7.9	7.7
10.6	11.3	11.3	10.7	11.6	11.6	11.6	11.6	11.5	11.5	11.5
11.3	11.2	11.3	11.3	10.9	10.7	10.6	10.4	10.2	10.2	10.2
14.0	14.1	13.7	13.9	13.8	13.7	13.6	13.6	13.6	13.8	13.6
10.4	9.6	10.2	9.7	9.2	8.7	8.3	8.6	9.2	9.7	9.6
11.9	11.3	11.2	11.5	11.6	10.7	10.6	10.5	10.6	10.5	10.4
:	:	9.7	9.7	9.2	8.8	8.5	8.0	8.3	8.3	7.9
9.3	9.3	10.8	10.4	10.2	10.1	10.2	10.0	10.0	10.1	10.2
12.4	12.4	12.6	12.4	11.5	11.4	11.4	11.2	10.4	10.1	9.9
13.7	13.7	13.6	13.7	13.8	13.9	14.4	14.9	15.3	15.3	15.2
15.3	14.8	15.4	15.6	14.6	13.9	13.7	13.1	13.3	13.4	13.2
11.7	**11.6**	**11.1**	**11.2**	**11.1**	**10.8**	**10.7**	**10.6**	**10.6**	**10.6**	**10.4**
17.5	17.3	17.3	17.3	17.1	17.5	17.3	16.7	16.9	16.9	16.8
17.6	16.7	17.3	17.8	17.4	16.8	16.4	16.4	16.7	16.5	16.4
9.1	8.4	8.3	7.9	7.5	7.2	7.2	7.3	7.5	7.6	7.7
11.6	**11.4**	**11.1**	**11.1**	**10.8**	**10.5**	**10.4**	**10.3**	**10.3**	**10.3**	**10.2**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.1	0.0	:	– 0.1	– 0.2	– 0.1	0.0	– 0.2	0.1	0.0	– 0.2
– 0.3	– 0.1	:	– 0.1	– 0.2	– 0.3	– 0.1	– 0.2	– 0.1	– 0.1	– 0.3
– 0.3	0.7	:	– 0.6	0.9	0.0	0.0	– 0.1	– 0.1	0.0	0.0
– 0.5	– 0.1	:	0.0	– 0.4	– 0.2	– 0.1	– 0.2	– 0.2	0.0	0.0
0.0	0.1	:	0.2	– 0.1	– 0.1	– 0.1	– 0.1	0.1	0.2	– 0.2
– 0.4	– 0.8	:	– 0.5	– 0.5	– 0.5	– 0.4	0.3	0.7	0.5	– 0.1
– 0.4	– 0.7	:	0.3	0.1	– 0.9	– 0.1	– 0.1	0.1	– 0.1	– 0.2
:	:	:	0.0	– 0.5	– 0.3	– 0.4	– 0.5	0.3	0.0	– 0.3
– 0.3	– 0.1	:	– 0.4	– 0.2	– 0.1	0.1	– 0.2	– 0.1	0.2	0.0
0.0	– 0.1	:	– 0.3	– 0.9	– 0.1	0.0	– 0.2	– 0.8	– 0.2	– 0.2
– 0.5	0.1	:	0.1	0.1	0.2	0.5	0.5	0.4	0.0	– 0.1
– 0.9	– 0.5	:	0.2	– 0.9	– 0.7	– 0.2	– 0.6	0.2	0.1	– 0.2
– 0.3	**– 0.1**	**:**	**0.1**	**– 0.1**	**– 0.3**	**– 0.1**	**– 0.1**	**0.0**	**0.0**	**– 0.2**
– 0.6	– 0.2	:	0.0	– 0.2	0.4	– 0.2	– 0.5	0.2	0.0	– 0.1
– 0.9	– 0.9	:	0.5	– 0.4	– 0.6	– 0.4	0.0	0.3	– 0.2	– 0.1
– 1.6	– 0.7	:	– 0.5	– 0.4	– 0.3	0.0	0.1	0.1	0.2	0.1
– 0.5	**– 0.2**	**:**	**0.0**	**– 0.3**	**– 0.3**	**– 0.1**	**– 0.1**	**0.0**	**0.0**	**– 0.1**

Table A.4.10

Total current uses; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	51.3	56.2	50.7	51.9	52.4	53.4
D (1)	42.7	43.4	42.0	42.3	43.4	44.8
EL	26.4	37.7	41.9	39.8	41.2	43.4
E	27.7	33.9	36.8	38.0	40.2	42.6
F	41.7	48.6	45.7	46.7	48.4	50.7
IRL	39.5	45.1	36.7	37.8	38.2	38.0
I	39.0	45.9	48.5	49.5	51.6	53.1
L	40.5	39.1	:	:	:	:
NL	49.4	51.7	49.6	50.3	51.1	51.3
A	41.3	44.7	44.9	45.9	46.5	49.1
P	31.3	38.7	35.3	37.7	37.3	38.8
FIN	34.6	40.5	42.2	50.5	55.8	57.7
Euro area (2)	**40.8**	**45.2**	**44.4**	**45.2**	**46.6**	**48.2**
DK	50.0	54.4	54.9	55.7	56.3	58.9
S	55.4	59.3	56.3	58.1	62.4	65.1
UK	40.3	42.0	35.8	36.9	39.3	40.0
EU-15 (3)	**41.4**	**45.4**	**43.8**	**44.6**	**46.3**	**47.7**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.8	0.1	– 0.1	1.1	0.6	1.0
D (1)	0.6	– 0.2	0.4	1.3	1.1	1.4
EL	0.6	3.1	2.2	– 2.2	1.4	2.2
E	1.8	1.8	0.9	1.2	2.2	2.4
F	0.9	0.5	0.3	1.0	1.7	2.3
IRL	3.2	0.6	0.4	1.2	0.4	– 0.2
I	1.0	0.1	1.3	1.0	2.1	1.5
L	1.4	– 0.6	:	:	:	:
NL	0.8	– 1.2	0.4	0.7	0.8	0.2
A	0.2	0.9	0.7	0.9	0.7	2.6
P	3.8	– 0.9	3.2	2.4	– 0.4	1.5
FIN	– 0.3	1.8	3.0	8.2	5.3	1.9
Euro area (2)	**0.9**	**0.3**	**0.7**	**1.2**	**1.5**	**1.5**
DK	3.5	– 0.9	– 0.5	0.8	0.6	2.6
S	1.8	1.3	1.2	1.9	4.2	2.7
UK	2.2	– 0.7	– 0.1	1.1	2.4	0.7
EU-15 (3)	**1.1**	**0.2**	**0.6**	**1.2**	**1.7**	**1.4**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
52.2	50.8	50.7	50.7	48.9	48.3	47.6	46.8	46.9	46.8	46.1
44.9	45.6	44.9	46.2	45.6	45.0	45.1	44.6	44.6	45.0	44.3
44.0	45.1	43.3	42.2	40.2	40.2	39.9	39.7	38.9	38.2	37.9
41.3	40.3	39.2	39.1	37.6	36.8	35.8	35.4	34.9	34.9	34.6
50.4	50.4	49.2	50.0	49.8	48.4	48.0	47.7	47.4	47.8	47.0
37.0	34.8	36.7	35.3	33.2	30.8	28.2	26.4	27.6	28.9	28.7
51.0	49.1	48.6	49.2	47.4	45.8	44.6	44.1	44.0	43.7	43.1
:	:	39.8	40.2	38.7	37.1	37.0	35.7	37.3	37.9	37.1
49.4	47.7	47.4	45.9	44.7	43.4	42.9	41.7	41.4	41.3	41.0
48.6	49.6	49.8	49.4	47.7	47.6	47.6	46.9	46.6	46.2	45.6
39.1	39.5	39.6	39.5	38.1	37.6	38.6	39.0	39.6	39.4	39.2
56.4	54.3	53.7	53.1	50.7	47.6	46.8	43.7	44.2	44.9	44.2
47.5	**47.2**	**46.5**	**47.0**	**46.0**	**44.9**	**44.4**	**43.8**	**43.6**	**43.7**	**43.1**
58.8	57.4	57.3	56.8	54.9	54.6	53.2	51.1	51.2	50.5	49.5
63.6	61.4	60.3	59.3	57.2	56.0	54.5	52.5	52.1	52.2	51.7
39.8	39.7	41.2	40.4	39.1	37.8	37.4	37.7	37.9	38.5	38.3
47.1	**46.8**	**46.4**	**46.7**	**45.4**	**44.3**	**43.7**	**43.1**	**42.9**	**43.1**	**42.6**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 1.2	– 1.4	:	0.0	– 1.8	– 0.6	– 0.7	– 0.8	0.2	– 0.2	– 0.6
0.1	0.7	:	1.3	– 0.6	– 0.6	0.1	– 0.6	0.0	0.5	– 0.8
0.7	1.1	:	– 1.1	– 1.9	0.0	– 0.3	– 0.2	– 0.8	– 0.7	– 0.3
– 1.3	– 0.9	:	– 0.1	– 1.5	– 0.7	– 1.1	– 0.4	– 0.4	– 0.1	– 0.2
– 0.3	0.1	:	0.8	– 0.3	– 1.3	– 0.5	– 0.3	– 0.3	0.4	– 0.8
– 0.9	– 2.3	:	– 1.4	– 2.1	– 2.4	– 2.7	– 1.7	1.2	1.3	– 0.2
– 2.2	– 1.9	:	0.6	– 1.9	– 1.5	– 1.2	– 0.5	– 0.1	– 0.3	– 0.5
:	:	:	0.4	– 1.5	– 1.7	0.0	– 1.3	1.6	0.6	– 0.8
– 1.9	– 1.7	:	– 1.5	– 1.2	– 1.3	– 0.5	– 1.2	– 0.4	– 0.1	– 0.3
– 0.6	1.0	:	– 0.4	– 1.7	– 0.1	0.0	– 0.7	– 0.3	– 0.4	– 0.5
0.3	0.4	:	– 0.2	– 1.4	– 0.5	1.0	0.4	0.7	– 0.2	– 0.2
– 1.3	– 2.1	:	– 0.6	– 2.3	– 3.1	– 0.9	– 3.1	0.5	0.7	– 0.7
– 0.7	**– 0.3**	**:**	**0.6**	**– 1.1**	**– 1.1**	**– 0.5**	**– 0.6**	**– 0.2**	**0.1**	**– 0.6**
0.0	– 1.4	:	– 0.5	– 1.9	– 0.4	– 1.4	– 2.0	0.1	– 0.7	– 1.0
– 1.5	– 2.3	:	– 1.1	– 2.1	– 1.2	– 1.5	– 2.0	– 0.4	0.1	– 0.5
– 0.2	– 0.1	:	– 0.7	– 1.4	– 1.3	– 0.4	0.3	0.2	0.6	– 0.2
– 0.6	**– 0.3**	**:**	**0.3**	**– 1.3**	**– 1.1**	**– 0.6**	**– 0.6**	**– 0.1**	**0.2**	**– 0.6**

Table A.4.11

Gross saving; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	– 3.7	– 5.8	– 3.6	– 4.4	– 5.0	– 5.1
D (1)	2.4	2.6	1.3	1.2	1.4	0.5
EL	– 0.1	– 7.4	– 9.4	– 6.4	– 7.0	– 7.9
E	0.6	0.3	1.7	1.2	0.7	– 1.7
F	3.7	0.5	2.4	1.4	– 0.4	– 2.2
IRL	– 4.9	– 6.2	– 0.8	– 1.2	– 1.2	– 1.0
I	– 4.6	– 6.9	– 5.7	– 5.7	– 7.1	– 5.4
L	7.1	11.1	:	:	:	:
NL	1.3	0.9	– 1.6	0.3	– 0.9	– 0.3
A	4.2	3.1	2.2	1.8	2.7	0.8
P	– 3.5	– 6.0	– 1.4	– 2.5	0.8	– 2.0
FIN	7.4	6.5	9.2	2.6	– 2.1	– 5.0
Euro area (2)	**1.1**	**– 0.6**	**– 0.2**	**– 0.5**	**– 1.2**	**– 1.8**
DK	0.7	0.9	0.2	– 1.0	– 0.4	– 1.0
S	0.7	– 0.1	6.3	1.4	– 3.3	– 6.9
UK	– 0.5	– 0.5	2.4	0.5	– 3.2	– 4.9
EU-15 (3)	**0.8**	**– 0.6**	**0.4**	**– 0.3**	**– 1.6**	**– 2.4**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	– 1.5	0.2	0.7	– 0.8	– 0.5	– 0.1
D (1)	– 0.2	0.6	– 2.3	– 0.2	0.2	– 0.9
EL	– 0.8	– 3.1	0.7	3.0	– 0.6	– 1.0
E	– 0.5	1.0	– 0.6	– 0.5	– 0.5	– 2.4
F	0.9	– 0.1	0.1	– 1.0	– 1.9	– 1.8
IRL	– 0.3	– 1.3	– 0.7	– 0.4	0.0	0.2
I	0.6	0.2	– 0.7	0.1	– 1.4	1.7
L	0.1	2.1	:	:	:	:
NL	– 0.2	1.4	– 0.6	1.8	– 1.2	0.6
A	0.8	0.1	0.3	– 0.4	0.9	– 1.9
P	– 2.4	0.2	– 2.4	– 1.1	3.3	– 2.8
FIN	0.6	0.1	– 0.3	– 6.6	– 4.7	– 2.9
Euro area (2)	**0.1**	**0.3**	**– 0.9**	**– 0.4**	**– 0.7**	**– 0.6**
DK	– 1.8	2.2	– 1.7	– 1.2	0.6	– 0.6
S	– 1.9	– 1.0	– 1.5	– 4.9	– 4.7	– 3.6
UK	– 0.3	0.6	– 0.3	– 1.9	– 3.8	– 1.7
EU-15 (3)	**– 0.1**	**0.3**	**– 0.8**	**– 0.8**	**– 1.2**	**– 0.8**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 3.0	– 2.0	– 2.0	– 1.5	0.5	1.6	1.9	2.6	2.0	1.8	2.3
1.0	0.0	– 0.1	– 0.5	– 0.1	0.5	1.2	1.5	0.2	0.1	0.6
– 7.1	– 7.1	– 6.8	– 5.2	– 1.5	0.1	1.7	2.7	3.1	3.2	3.3
– 1.5	– 2.3	– 1.8	– 1.2	0.5	1.2	2.9	3.5	4.0	4.1	4.4
– 2.1	– 1.4	– 1.1	– 0.3	– 0.1	1.1	2.1	2.2	2.1	1.6	1.7
0.6	– 0.2	– 0.1	1.7	2.9	4.4	6.7	7.9	5.6	4.5	4.3
– 5.4	– 3.9	– 3.8	– 3.7	– 0.2	0.1	1.7	1.5	1.7	1.6	1.7
:	:	8.5	7.9	8.0	8.7	9.1	10.9	9.0	7.7	8.1
– 1.0	– 1.1	– 1.1	0.6	1.3	1.8	3.3	4.5	3.5	2.8	2.5
0.0	– 0.4	– 0.4	0.9	1.8	1.8	1.5	1.8	4.4	4.2	4.3
– 2.8	– 2.3	– 1.1	– 0.1	1.0	1.8	1.7	1.6	0.9	1.1	1.3
– 2.9	– 2.2	– 0.5	0.4	1.6	4.2	4.7	9.5	7.7	6.2	5.4
– 1.5	**– 1.5**	**– 1.3**	**– 1.1**	**0.2**	**0.9**	**2.0**	**2.4**	**2.0**	**1.7**	**1.9**
– 0.7	– 0.5	– 0.5	0.9	2.2	2.8	4.6	4.1	4.4	3.7	4.1
– 6.6	– 4.5	– 3.9	– 0.2	1.5	3.9	4.1	6.0	7.3	4.2	4.4
– 4.2	– 3.0	– 2.9	– 2.3	– 0.6	2.0	2.6	2.9	2.6	1.9	1.8
– 2.0	**– 1.7**	**– 1.6**	**– 1.2**	**0.1**	**1.2**	**2.2**	**2.6**	**2.3**	**1.9**	**2.0**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
2.1	1.0	:	0.5	1.9	1.1	0.4	0.7	– 0.5	– 0.2	0.5
0.4	– 1.0	:	– 0.4	0.4	0.6	0.7	0.3	– 1.3	– 0.2	0.5
0.9	0.0	:	1.6	3.8	1.6	1.6	1.1	0.4	0.1	0.2
0.2	– 0.8	:	0.6	1.7	0.8	1.7	0.7	0.5	0.1	0.3
0.2	0.6	:	0.8	0.2	1.1	1.1	0.1	– 0.1	– 0.5	0.1
1.7	– 0.8	:	1.7	1.3	1.4	2.4	1.2	– 2.3	– 1.1	– 0.2
– 0.1	1.6	:	0.1	3.5	0.3	1.6	– 0.2	0.2	– 0.1	0.1
:	:	:	– 0.7	0.1	0.8	0.4	1.8	– 1.9	– 1.3	0.4
– 0.6	– 0.1	:	1.7	0.7	0.5	1.5	1.2	– 1.0	– 0.7	– 0.3
– 0.8	– 0.4	:	1.3	1.0	– 0.1	– 0.3	0.3	2.7	– 0.3	0.1
– 0.7	0.5	:	1.0	1.1	0.8	– 0.1	– 0.1	– 0.7	0.3	0.2
2.1	0.7	:	0.9	1.2	2.6	0.5	4.8	– 1.7	– 1.6	– 0.8
0.3	**0.1**	**:**	**0.3**	**1.2**	**0.7**	**1.1**	**0.4**	**– 0.4**	**– 0.3**	**0.2**
0.3	0.3	:	1.4	1.3	0.7	1.8	– 0.6	0.3	– 0.7	0.4
0.2	2.1	:	3.7	1.7	2.4	0.2	1.9	1.3	– 3.0	0.2
0.8	1.1	:	0.5	1.8	2.6	0.6	0.3	– 0.3	– 0.7	– 0.1
0.3	**0.3**	**:**	**0.4**	**1.3**	**1.1**	**1.0**	**0.4**	**– 0.3**	**– 0.4**	**0.2**

Table A.4.12

Gross fixed capital formation; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	4.4	2.5	1.3	1.3	1.4	1.6
D (1)	3.6	2.4	2.3	2.6	2.8	2.7
EL	2.1	3.7	2.8	3.1	3.5	3.3
E	1.8	3.6	4.9	4.8	4.0	4.1
F	3.3	3.2	3.5	3.5	3.5	3.2
IRL	5.4	3.7	2.0	2.1	2.0	2.2
I	3.2	3.7	3.3	3.2	3.0	2.6
L	6.4	4.0	4.4	4.6	5.1	5.1
NL	3.2	2.3	2.0	2.1	2.0	2.0
A	4.3	3.6	3.2	3.2	3.2	3.2
P	4.2	3.2	3.2	3.3	3.7	3.9
FIN	3.8	3.7	3.7	3.8	3.5	2.8
Euro area (2)	**3.3**	**3.0**	**3.0**	**3.1**	**3.0**	**2.9**
DK	3.3	2.1	1.6	1.5	1.9	1.8
S	4.1	3.0	2.3	2.2	2.6	1.0
UK	2.5	2.1	2.3	2.1	2.0	1.8
EU-15 (3)	**3.2**	**2.9**	**2.9**	**2.9**	**2.9**	**2.7**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.2	– 0.3	– 0.1	0.1	0.1	0.1
D (1)	0.1	– 0.1	– 0.1	0.0	0.2	– 0.1
EL	– 0.5	0.2	– 0.2	0.3	0.4	– 0.2
E	0.1	0.7	0.6	– 0.1	– 0.8	0.1
F	0.1	0.2	0.2	– 0.1	0.0	– 0.3
IRL	0.6	0.0	0.3	0.1	– 0.1	0.2
I	0.5	0.1	– 0.1	0.0	– 0.2	– 0.4
L	0.9	– 0.3	:	0.2	0.5	0.0
NL	0.3	– 0.2	0.0	0.1	0.0	– 0.1
A	– 0.2	– 0.1	– 0.1	0.1	0.0	0.0
P	0.5	– 0.3	0.0	0.1	0.4	0.3
FIN	– 0.1	0.1	0.6	0.1	– 0.3	– 0.7
Euro area (2)	**0.2**	**0.1**	**0.1**	**0.0**	**– 0.1**	**– 0.2**
DK	– 0.3	0.2	– 0.1	– 0.1	0.4	– 0.1
S	– 0.1	– 0.2	0.0	– 0.1	0.5	– 1.6
UK	– 0.2	– 0.1	0.5	– 0.2	0.0	– 0.2
EU-15 (3)	**0.1**	**0.1**	**0.1**	**– 0.1**	**0.0**	**– 0.2**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
1.6	1.4	1.8	1.6	1.6	1.6	1.8	1.8	1.6	1.4	1.4
2.6	2.3	2.3	2.1	1.9	1.9	1.9	1.9	1.8	1.7	1.6
3.1	3.3	3.2	3.2	3.4	3.6	3.7	3.7	3.8	4.0	4.0
3.9	3.7	3.7	3.1	3.1	3.3	3.4	3.3	3.4	3.5	3.6
3.1	3.2	3.3	3.2	3.0	2.9	2.9	3.0	3.0	3.0	3.0
2.3	2.4	2.3	2.4	2.5	2.7	3.1	3.6	4.1	4.3	4.3
2.3	2.2	2.1	2.2	2.2	2.4	2.4	2.4	2.2	2.0	2.0
4.2	4.5	4.6	4.7	4.2	4.5	4.6	4.3	4.6	4.8	4.6
2.0	1.9	3.0	3.1	2.9	2.9	3.1	3.2	3.3	3.3	3.4
3.3	2.8	3.1	2.8	2.0	1.9	1.8	1.5	1.3	1.2	1.2
3.5	3.7	3.7	4.2	4.3	3.9	4.1	3.7	4.1	4.2	4.3
2.9	2.7	2.8	2.9	3.2	2.9	2.9	2.6	2.7	2.7	2.6
2.7	**2.6**	**2.7**	**2.6**	**2.4**	**2.5**	**2.5**	**2.5**	**2.5**	**2.4**	**2.4**
1.8	1.8	1.8	2.0	1.9	1.7	1.7	1.7	1.7	1.8	1.8
2.9	2.8	3.4	3.0	2.7	2.7	2.7	2.5	2.6	2.6	2.6
1.8	1.7	2.0	1.5	1.2	1.2	1.1	1.2	1.3	1.5	1.7
2.6	**2.5**	**2.6**	**2.4**	**2.2**	**2.2**	**2.3**	**2.2**	**2.3**	**2.3**	**2.3**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.1	– 0.3	:	– 0.1	0.0	– 0.1	0.2	0.0	– 0.2	– 0.2	0.0
– 0.1	– 0.2	:	– 0.2	– 0.2	– 0.1	0.1	0.0	– 0.1	– 0.1	– 0.1
– 0.2	0.2	:	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1
– 0.2	– 0.3	:	– 0.6	0.0	0.3	0.0	– 0.1	0.1	0.1	0.1
– 0.1	0.1	:	– 0.1	– 0.3	– 0.1	0.0	0.1	0.0	0.0	0.0
0.2	0.0	:	0.1	0.1	0.2	0.4	0.5	0.5	0.1	0.0
– 0.3	– 0.1	:	0.1	0.0	0.2	0.1	0.0	– 0.2	– 0.2	0.0
– 0.9	0.3	:	0.1	– 0.5	0.3	0.1	– 0.4	0.3	0.2	– 0.2
0.0	– 0.1	:	0.2	– 0.2	0.0	0.1	0.1	0.1	0.0	0.1
0.0	– 0.5	:	– 0.2	– 0.9	– 0.1	– 0.1	– 0.2	– 0.3	– 0.1	– 0.1
– 0.4	0.2	:	0.4	0.2	– 0.4	0.2	– 0.4	0.4	0.2	0.1
0.1	– 0.2	:	0.1	0.3	– 0.3	0.0	– 0.3	0.1	0.0	– 0.1
– 0.1	**– 0.1**	**:**	**– 0.1**	**– 0.2**	**0.0**	**0.1**	**0.0**	**0.0**	**– 0.1**	**0.0**
– 0.1	0.0	:	0.2	– 0.1	– 0.2	0.0	0.0	0.1	0.1	0.0
1.8	– 0.1	:	– 0.4	– 0.3	0.0	0.0	– 0.2	0.1	0.0	0.0
– 0.1	0.0	:	– 0.5	– 0.3	0.1	– 0.1	0.0	0.2	0.2	0.1
– 0.1	**– 0.1**	**:**	**– 0.2**	**– 0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table A.4.13

Total uses; general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	56.1	59.3	52.5	53.6	54.3	55.5
D (1)	48.0	47.2	45.3	46.8	47.6	48.8
EL	29.0	42.0	48.4	44.7	46.8	49.0
E	31.7	40.4	42.6	43.5	44.9	47.6
F	45.4	52.0	49.7	50.2	51.8	54.1
IRL	46.2	49.0	38.0	38.9	39.4	39.2
I	43.0	51.5	53.8	53.8	54.0	57.1
L	48.0	44.0	:	:	:	:
NL	54.8	56.1	53.0	53.4	54.0	54.0
A	47.2	50.2	49.6	50.6	51.2	54.1
P	36.2	42.8	38.8	41.0	41.0	42.7
FIN	38.6	44.2	46.1	54.5	59.5	60.6
Euro area (2)	**45.3**	**49.6**	**48.6**	**49.3**	**50.2**	**52.0**
DK	53.1	56.4	56.1	57.1	58.2	60.7
S	60.0	63.0	58.5	60.7	66.6	70.1
UK	43.2	44.3	39.2	39.7	42.2	42.8
EU-15 (3)	**45.7**	**49.3**	**47.7**	**48.5**	**49.8**	**51.4**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.9	– 0.2	– 0.1	1.1	0.7	1.1
D (1)	0.8	– 0.4	0.3	2.4	0.9	1.1
EL	0.0	3.3	4.5	– 3.7	2.1	2.2
E	2.2	2.6	1.0	0.9	1.4	2.8
F	1.1	0.6	0.7	0.5	1.7	2.3
IRL	4.0	0.6	0.2	0.8	0.5	– 0.1
I	1.2	1.3	1.9	0.0	0.2	3.1
L	2.5	– 1.5	:	:	:	:
NL	1.9	– 1.6	0.2	0.4	0.6	0.1
A	0.3	0.9	0.7	1.1	0.6	2.9
P	4.3	– 0.8	3.4	2.2	– 0.1	1.7
FIN	– 0.3	1.7	3.6	8.5	4.9	1.1
Euro area (2)	**1.1**	**0.5**	**1.0**	**1.1**	**0.9**	**1.8**
DK	3.2	– 0.7	– 0.8	1.0	1.1	2.5
S	0.9	1.2	0.9	2.1	6.0	3.5
UK	2.1	– 1.1	1.5	0.6	2.4	0.7
EU-15 (3)	**1.2**	**0.2**	**1.1**	**1.0**	**1.3**	**1.6**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
54.0	52.7	52.8	52.9	51.4	50.7	50.3	49.5	49.0	48.9	48.3
48.4	49.0	49.6	50.3	49.4	48.8	48.9	45.9	48.5	48.9	48.0
46.8	48.5	50.5	45.9	44.7	44.6	48.0	48.3	47.5	47.4	46.6
45.9	45.0	45.0	43.8	42.2	41.6	40.8	39.9	39.6	39.7	39.7
54.0	53.8	55.2	55.5	55.0	53.9	53.4	52.9	52.6	52.9	52.3
39.2	36.7	41.5	39.7	37.5	35.2	34.8	32.6	34.3	35.4	35.2
54.6	52.9	53.4	53.2	51.1	49.9	48.9	46.9	47.7	47.3	46.7
:	:	45.1	45.4	43.4	42.2	41.9	40.3	40.8	43.2	42.3
52.1	50.5	51.4	49.6	48.2	47.2	47.1	45.4	45.4	44.8	44.6
53.5	54.2	57.3	56.8	54.1	54.4	54.2	52.9	52.5	51.6	50.6
42.1	42.7	44.9	45.5	44.2	43.7	45.0	44.3	46.0	46.1	45.9
59.5	57.1	59.9	59.9	56.8	53.3	52.1	48.6	49.4	49.9	49.6
51.1	**50.7**	**51.6**	**51.5**	**50.2**	**49.4**	**49.1**	**47.2**	**48.0**	**48.1**	**47.4**
60.7	59.2	60.3	59.8	58.0	57.6	56.1	54.1	53.8	53.4	52.3
66.9	64.4	67.6	65.3	63.2	60.8	60.3	57.7	57.4	57.3	56.8
42.3	42.1	44.6	43.0	41.1	39.8	39.3	36.9	40.1	41.2	41.1
50.5	**50.1**	**51.3**	**51.0**	**49.3**	**48.3**	**47.8**	**45.8**	**47.0**	**47.2**	**46.6**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 1.4	– 1.3	:	0.0	– 1.4	– 0.7	– 0.4	– 0.8	– 0.5	– 0.1	– 0.6
– 0.3	0.5	:	0.7	– 0.9	– 0.6	0.1	– 3.0	2.6	0.4	– 0.9
– 2.2	1.7	:	– 4.6	– 1.2	0.0	3.4	0.3	– 0.8	– 0.1	– 0.8
– 1.8	– 0.9	:	– 1.3	– 1.6	– 0.6	– 0.8	– 0.9	– 0.3	0.1	– 0.1
– 0.1	– 0.2	:	0.3	– 0.5	– 1.1	– 0.4	– 0.6	– 0.3	0.3	– 0.6
0.0	– 2.5	:	– 1.9	– 2.2	– 2.3	– 0.4	– 2.2	1.7	1.1	– 0.2
– 2.5	– 1.7	:	– 0.2	– 2.1	– 1.1	– 1.0	– 2.0	0.8	– 0.4	– 0.6
:	:	:	0.3	– 2.0	– 1.2	– 0.3	– 1.6	0.5	2.4	– 0.9
– 2.0	– 1.6	:	– 1.8	– 1.4	– 1.0	– 0.1	– 1.8	0.0	– 0.6	– 0.2
– 0.6	0.8	:	– 0.5	– 2.7	0.3	– 0.2	– 1.3	– 0.4	– 0.9	– 1.0
– 0.5	0.6	:	0.6	– 1.3	– 0.6	1.3	– 0.7	1.7	0.1	– 0.1
– 1.0	– 2.5	:	0.0	– 3.1	– 3.6	– 1.1	– 3.5	0.8	0.5	– 0.3
– 1.0	**– 0.4**	**:**	**– 0.1**	**– 1.3**	**– 0.9**	**– 0.3**	**– 1.9**	**0.9**	**0.1**	**– 0.7**
0.0	– 1.5	:	– 0.5	– 1.8	– 0.4	– 1.6	– 2.0	– 0.3	– 0.4	– 1.0
– 3.1	– 2.5	:	– 2.3	– 2.1	– 2.4	– 0.5	– 2.6	– 0.3	– 0.2	– 0.5
– 0.5	– 0.3	:	– 1.6	– 2.0	– 1.3	– 0.5	– 2.4	3.2	1.1	– 0.1
– 1.0	**– 0.4**	**:**	**– 0.3**	**– 1.7**	**– 1.0**	**– 0.4**	**– 2.1**	**1.2**	**0.2**	**– 0.6**

Table A.4.14

Net lending (+) or net borrowing (–); general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	– 8.6	– 8.9	– 5.4	– 6.2	– 6.9	– 7.2
D (1)	– 2.9	– 1.2	– 2.1	– 3.2	– 2.8	– 3.5
EL	– 2.6	– 11.6	– 15.9	– 11.4	– 12.6	– 13.6
E	– 2.5	– 6.2	– 4.2	– 4.3	– 4.0	– 6.7
F	0.0	– 2.8	– 1.5	– 2.0	– 3.9	– 5.6
IRL	– 11.6	– 10.2	– 2.2	– 2.3	– 2.4	– 2.3
I	– 8.7	– 12.5	– 11.0	– 10.0	– 9.5	– 9.4
L	– 0.4	6.2	4.7	1.8	0.7	1.6
NL	– 4.1	– 3.5	– 4.9	– 2.8	– 3.8	– 3.1
A	– 1.7	– 2.4	– 2.4	– 3.0	– 2.0	– 4.2
P	– 8.4	– 10.1	– 4.9	– 5.8	– 2.9	– 5.9
FIN	3.3	2.9	5.3	– 1.5	– 5.7	– 7.9
Euro area (2)	**– 3.4**	**– 5.0**	**– 4.4**	**– 4.6**	**– 4.8**	**– 5.6**
DK	– 3.2	– 2.0	– 1.0	– 2.4	– 2.2	– 2.8
S	– 3.9	– 3.7	4.0	– 1.1	– 7.5	– 11.9
UK	– 3.4	– 2.9	– 0.9	– 2.3	– 6.1	– 7.7
EU-15 (3)	**– 3.4**	**– 4.5**	**– 3.5**	**– 4.1**	**– 5.0**	**– 6.0**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	– 1.7	0.5	0.7	– 0.8	– 0.7	– 0.3
D (1)	– 0.3	0.8	– 2.2	– 1.4	0.5	– 0.7
EL	– 0.2	– 3.2	– 1.7	4.5	– 1.2	– 1.0
E	– 0.9	– 0.9	– 0.6	– 0.2	0.3	– 2.7
F	0.8	– 0.1	– 0.3	– 0.5	– 1.8	– 1.8
IRL	– 1.2	– 1.3	– 0.5	– 0.1	– 0.1	0.1
I	– 0.2	– 0.9	– 1.2	1.0	0.5	0.1
L	– 1.1	3.0	:	– 2.9	– 1.1	0.9
NL	– 1.2	1.8	– 0.4	2.2	– 1.0	0.7
A	0.7	0.1	0.3	– 0.6	1.0	– 2.2
P	– 2.8	0.1	– 2.6	– 0.9	3.0	– 3.1
FIN	0.7	0.2	– 0.9	– 6.8	– 4.3	– 2.1
Euro area (2)	**– 0.3**	**0.0**	**– 1.1**	**– 0.4**	**– 0.2**	**– 0.8**
DK	– 1.5	2.0	– 1.3	– 1.4	0.2	– 0.6
S	– 1.1	– 0.9	– 1.1	– 5.1	– 6.5	– 4.3
UK	– 0.1	1.1	– 1.9	– 1.4	– 3.8	– 1.7
EU-15 (3)	**– 0.3**	**0.2**	**– 1.3**	**– 0.7**	**– 0.9**	**– 1.0**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 4.8	– 3.9	– 4.4	– 3.8	– 2.0	– 0.9	– 0.6	0.0	0.2	– 0.2	0.2
– 2.6	– 3.4	– 3.5	– 3.4	– 2.7	– 2.2	– 1.6	1.2	– 2.7	– 2.8	– 2.1
– 9.9	– 10.5	– 10.2	– 7.8	– 4.7	– 3.1	– 1.7	– 0.8	0.1	0.3	0.5
– 6.1	– 7.0	– 6.6	– 5.0	– 3.2	– 2.6	– 1.1	– 0.4	0.0	– 0.2	0.0
– 5.7	– 4.8	– 5.5	– 4.1	– 3.0	– 2.7	– 1.6	– 1.3	– 1.4	– 1.9	– 1.8
– 1.6	– 2.1	– 2.2	– 0.2	1.2	2.3	2.3	4.5	1.7	0.6	0.2
– 9.1	– 7.6	– 7.6	– 7.1	– 2.7	– 3.1	– 1.8	– 0.6	– 1.5	– 1.3	– 1.3
2.7	1.8	2.7	2.1	2.9	3.2	3.8	5.8	5.0	2.0	2.5
– 3.6	– 3.8	– 4.2	– 1.8	– 1.1	– 0.8	0.4	2.2	0.3	0.0	– 0.4
– 4.9	– 5.0	– 5.3	– 4.0	– 2.0	– 2.5	– 2.4	– 1.7	– 0.1	– 0.1	0.3
– 5.9	– 5.6	– 4.4	– 3.8	– 2.6	– 2.3	– 2.3	– 1.5	– 2.7	– 2.6	– 2.5
– 6.1	– 5.0	– 3.7	– 3.2	– 1.5	1.3	1.9	7.0	4.9	3.3	2.7
– 5.1	**– 4.9**	**– 5.1**	**– 4.3**	**– 2.7**	**– 2.3**	**– 1.3**	**0.2**	**– 1.3**	**– 1.5**	**– 1.3**
– 2.6	– 2.2	– 2.3	– 1.0	0.4	1.1	3.2	2.5	3.0	2.1	2.4
– 9.9	– 7.5	– 7.7	– 3.1	– 1.6	2.1	1.4	3.7	4.8	1.7	1.9
– 6.7	– 5.4	– 5.8	– 4.4	– 2.2	0.4	1.2	4.0	0.9	– 0.2	– 0.5
– 5.4	**– 5.0**	**– 5.2**	**– 4.2**	**– 2.5**	**– 1.6**	**– 0.7**	**1.0**	**– 0.7**	**– 1.1**	**– 0.9**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
2.3	0.9	:	0.6	1.8	1.1	0.3	0.6	0.2	– 0.4	0.4
0.9	– 0.8	:	0.0	0.7	0.5	0.7	2.7	– 3.9	0.0	0.6
3.7	– 0.6	:	2.4	3.1	1.6	1.4	0.9	0.9	0.2	0.3
0.6	– 0.9	:	1.7	1.8	0.6	1.5	0.7	0.3	– 0.1	0.1
0.0	0.9	:	1.4	1.0	0.4	1.1	0.3	– 0.1	– 0.5	0.1
0.7	– 0.5	:	1.9	1.4	1.1	0.0	2.2	– 2.8	– 1.1	– 0.4
0.3	1.5	:	0.5	4.4	– 0.4	1.3	1.2	– 0.9	0.2	– 0.1
1.1	– 0.9	:	– 0.6	0.8	0.3	0.6	2.0	– 0.7	– 3.1	0.5
– 0.5	– 0.2	:	2.3	0.7	0.4	1.2	1.7	– 1.9	– 0.2	– 0.4
– 0.7	– 0.1	:	1.3	2.0	– 0.5	0.1	0.7	1.6	– 0.1	0.4
0.1	0.3	:	0.5	1.3	0.3	0.1	0.7	– 1.2	0.1	0.1
1.8	1.0	:	0.6	1.7	2.8	0.6	5.1	– 2.1	– 1.5	– 0.7
0.6	**0.2**	**:**	**0.8**	**1.7**	**0.4**	**0.9**	**1.5**	**– 1.5**	**– 0.2**	**0.2**
0.2	0.4	:	1.3	1.4	0.8	2.0	– 0.6	0.5	– 0.9	0.4
1.9	2.4	:	4.6	1.5	3.7	– 0.7	2.3	1.1	– 3.1	0.1
1.1	1.3	:	1.3	2.2	2.6	0.8	2.8	– 3.1	– 1.1	– 0.2
0.7	**0.4**	**:**	**1.0**	**1.7**	**0.9**	**0.9**	**1.8**	**– 1.7**	**– 0.4**	**0.1**

Table A.4.15

Net lending (+) or net borrowing (–) excluding interest; general government

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 2.7	1.4	5.0	3.8	3.7	3.5
D (1)	– 1.0	1.9	0.6	– 0.6	0.4	– 0.2
EL	– 0.7	– 6.7	– 5.9	– 2.1	– 1.1	– 1.0
E	– 1.8	– 4.3	– 0.3	– 0.6	0.3	– 1.7
F	1.4	0.0	1.4	0.9	– 0.7	– 2.3
IRL	– 5.6	– 0.9	5.3	5.0	4.3	4.0
I	– 3.2	– 4.5	– 1.6	0.1	1.9	2.6
L	0.7	7.2	5.1	2.2	1.1	1.9
NL	– 0.4	2.6	0.8	3.1	2.3	2.9
A	0.8	1.1	1.6	1.2	2.2	0.1
P	– 5.8	– 2.7	2.9	1.8	4.1	0.1
FIN	4.3	4.7	6.7	0.4	– 3.1	– 3.3
Euro area (2)	**– 0.8**	**– 0.5**	**0.6**	**0.3**	**0.7**	**0.0**
DK	0.7	7.6	6.3	4.9	4.4	4.5
S	0.1	4.4	8.9	3.9	– 2.3	– 5.9
UK	1.3	2.1	2.2	0.4	– 3.4	– 4.9
EU-15 (3)	**– 0.4**	**0.3**	**1.2**	**0.6**	**0.1**	**– 0.8**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 0.7	1.3	1.0	– 1.2	– 0.1	– 0.2
D (1)	– 0.1	0.8	– 2.3	– 1.2	1.0	– 0.7
EL	0.0	– 2.7	0.9	3.8	1.0	0.1
E	– 0.8	– 1.0	– 0.7	– 0.3	0.9	– 2.0
F	0.9	0.1	– 0.1	– 0.5	– 1.5	– 1.6
IRL	– 0.8	– 0.5	– 0.4	– 0.3	– 0.7	– 0.3
I	0.1	– 0.9	– 0.6	1.7	1.9	0.7
L	– 0.6	2.5	:	– 3.0	– 1.1	0.9
NL	– 0.8	2.0	– 0.4	2.3	– 0.9	0.6
A	0.8	0.3	0.4	– 0.4	1.1	– 2.2
P	– 2.6	0.9	– 0.8	– 1.1	2.3	– 4.0
FIN	0.8	0.3	– 0.9	– 6.3	– 3.6	– 0.2
Euro area (2)	**0.0**	**0.1**	**– 0.9**	**– 0.2**	**0.4**	**– 0.8**
DK	– 1.1	2.3	– 1.3	– 1.4	– 0.4	0.0
S	– 0.1	– 0.1	– 1.5	– 5.0	– 6.2	– 3.6
UK	0.2	1.2	– 2.5	– 1.8	– 3.8	– 1.5
EU-15 (3)	**0.1**	**0.4**	**– 1.2**	**– 0.6**	**– 0.4**	**– 0.9**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
5.2	4.9	4.9	5.1	6.0	6.7	6.4	6.9	6.7	6.1	6.0
0.7	0.4	0.2	0.3	0.9	1.4	2.0	4.5	0.5	0.5	1.1
4.0	2.3	1.0	2.8	3.6	4.7	5.6	6.2	6.3	5.8	5.7
– 1.4	– 1.7	– 1.4	0.4	1.6	1.7	2.5	2.9	3.1	2.8	2.8
– 2.2	– 1.1	– 1.8	– 0.1	0.7	0.9	1.7	2.0	1.8	1.2	1.3
4.0	2.9	3.2	4.4	5.3	5.7	4.7	6.6	3.3	2.2	1.7
1.8	3.6	3.9	4.4	6.7	5.2	5.0	5.9	4.9	4.5	4.4
3.0	2.1	3.0	2.4	3.2	3.5	4.1	6.0	5.3	2.2	2.7
2.0	1.9	1.7	3.8	4.1	4.1	4.9	6.1	3.6	3.0	2.3
– 0.9	– 0.7	– 0.9	0.4	2.0	1.4	1.3	2.0	3.5	3.3	3.6
0.2	0.6	1.9	1.5	1.7	1.2	1.0	1.6	0.4	0.5	0.7
– 1.1	0.2	0.3	1.1	2.8	4.9	5.0	9.8	7.6	6.0	5.2
0.3	**0.7**	**0.5**	**1.4**	**2.5**	**2.5**	**3.0**	**4.3**	**2.6**	**2.3**	**2.4**
4.1	4.2	4.2	5.1	6.1	6.5	7.8	6.7	7.1	5.6	5.7
– 3.4	– 0.7	– 0.8	3.7	4.9	7.8	6.3	7.9	8.2	4.9	4.8
– 3.5	– 2.0	– 2.2	– 0.8	1.4	3.9	4.0	6.7	3.3	2.1	1.7
– 0.2	**0.3**	**0.2**	**1.3**	**2.5**	**3.0**	**3.4**	**4.9**	**3.0**	**2.4**	**2.4**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
1.7	– 0.2	:	0.2	0.9	0.7	– 0.2	0.4	– 0.1	– 0.7	0.0
1.0	– 0.4	:	0.1	0.7	0.5	0.6	2.6	– 4.0	0.0	0.6
5.0	– 1.8	:	1.8	0.8	1.1	0.9	0.6	0.1	– 0.5	– 0.2
0.3	– 0.3	:	1.8	1.2	0.2	0.7	0.5	0.2	– 0.3	0.0
0.2	1.0	:	1.6	0.8	0.2	0.8	0.2	– 0.2	– 0.6	0.0
0.0	– 1.2	:	1.2	1.0	0.4	– 1.0	1.9	– 3.4	– 1.0	– 0.6
– 0.8	1.8	:	0.5	2.3	– 1.5	– 0.2	0.9	– 1.0	– 0.4	– 0.2
1.1	– 0.9	:	– 0.6	0.8	0.3	0.6	2.0	– 0.7	– 3.1	0.5
– 0.9	– 0.2	:	2.0	0.3	0.0	0.8	1.2	– 2.5	– 0.6	– 0.7
– 1.0	0.2	:	1.3	1.6	– 0.6	– 0.1	0.8	1.4	– 0.2	0.3
0.1	0.4	:	– 0.4	0.1	– 0.5	– 0.2	0.6	– 1.2	0.1	0.2
2.3	1.2	:	0.8	1.6	2.1	0.1	4.8	– 2.2	– 1.6	– 0.8
0.4	**0.3**	**:**	**0.9**	**1.1**	**0.0**	**0.4**	**1.3**	**– 1.7**	**– 0.3**	**0.1**
– 0.4	0.1	:	1.0	0.9	0.4	1.4	– 1.1	0.4	– 1.5	0.1
2.5	2.7	:	4.5	1.2	2.8	– 1.5	1.6	0.3	– 3.4	– 0.1
1.4	1.5	:	1.3	2.3	2.5	0.1	2.7	– 3.5	– 1.2	– 0.4
0.5	**0.6**	**:**	**1.0**	**1.2**	**0.5**	**0.4**	**1.6**	**– 1.9**	**– 0.6**	**0.0**

Table A.4.16

General government consolidated gross debt

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	78.3	121.8	127.7	129.8	131.2	138.0
D (1)	31.8	41.7	43.5	40.4	43.2	47.2
EL	27.9	59.9	89.0	91.1	97.5	110.2
E	17.0	42.7	44.0	44.7	47.1	58.7
F	20.4	31.8	36.3	36.7	40.6	46.1
IRL	72.3	105.3	97.5	97.3	94.7	98.8
I	58.3	82.0	97.3	100.7	107.7	118.2
L	9.3	9.6	4.4	3.9	4.8	5.8
NL	46.3	70.5	77.4	77.2	78.1	79.3
A	36.4	49.4	57.5	57.7	57.5	62.1
P	34.9	66.6	63.1	64.9	57.8	61.1
FIN	11.6	16.4	14.5	22.9	41.1	57.3
Euro area (2)	**35.2**	**52.9**	**59.2**	**59.1**	**62.5**	**67.7**
DK	36.4	69.8	57.7	62.3	66.4	78.0
S	40.0	61.9	42.0	51.3	65.1	75.1
UK	54.9	54.4	35.1	35.0	41.0	47.6
EU-15 (3)	**38.5**	**53.9**	**55.0**	**55.4**	**59.7**	**65.4**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	8.3	4.9	0.1	2.1	1.4	6.8
D (1)	2.0	0.7	1.7	0.9	2.7	4.0
EL	– 0.2	8.7	8.6	2.2	6.4	12.7
E	1.8	5.2	1.8	0.7	2.4	11.6
F	– 1.5	1.8	1.1	0.4	4.0	5.5
IRL	1.6	3.0	– 6.4	– 0.3	– 2.6	4.2
I	– 2.8	6.7	1.9	3.3	7.1	10.5
L	– 0.3	– 0.5	– 0.9	– 0.5	0.9	1.0
NL	2.8	4.6	– 0.3	– 0.2	0.9	1.1
A	1.5	2.0	– 0.8	0.2	– 0.2	4.6
P	– 3.6	8.0	2.0	1.8	– 7.1	3.3
FIN	0.1	0.7	– 0.4	8.4	18.2	16.3
Euro area (2)	**0.9**	**3.2**	**1.4**	**1.7**	**3.4**	**5.2**
DK	7.0	– 2.9	– 0.2	4.6	4.0	11.7
S	4.6	– 0.6	– 1.7	9.3	13.9	10.0
UK	– 0.6	– 1.9	– 2.7	– 0.1	6.0	6.7
EU-15 (3)	**1.3**	**2.1**	**0.8**	**1.8**	**4.3**	**5.6**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
136.4	133.4	:	130.1	124.7	119.3	115.0	109.3	107.5	104.3	99.4
49.5	57.1	:	59.8	61.0	60.9	61.3	60.3	59.8	60.8	60.1
107.9	108.7	:	111.3	108.2	105.0	103.8	102.8	99.7	97.8	95.1
61.2	64.0	:	68.1	66.6	64.6	63.1	60.4	57.2	55.5	53.5
49.6	54.0	:	57.1	59.3	59.5	58.7	57.8	57.7	57.4	57.2
92.6	84.3	:	74.2	65.1	55.1	49.6	39.0	36.3	33.6	31.4
123.9	123.3	:	122.1	120.2	116.4	114.5	110.6	109.4	107.8	105.6
5.4	5.6	:	6.2	6.0	6.3	6.0	5.7	5.5	5.2	5.1
76.1	77.0	:	75.2	69.9	66.8	63.1	56.0	52.9	50.1	47.4
64.7	68.6	:	69.2	64.7	63.9	64.9	63.6	61.7	60.2	57.6
62.0	64.1	:	62.7	58.9	54.8	54.2	53.4	55.5	56.5	57.3
58.8	57.1	:	57.1	54.1	48.8	46.8	44.0	43.6	43.1	42.9
70.0	**73.1**	**:**	**75.6**	**75.5**	**73.9**	**72.8**	**70.5**	**69.4**	**68.8**	**67.4**
73.5	69.3	:	65.1	61.2	56.2	52.7	46.8	44.7	43.3	39.8
77.7	76.6	:	76.0	73.1	70.5	65.0	55.3	56.0	52.6	49.9
49.6	51.8	:	52.3	50.8	47.6	45.2	42.4	39.0	37.6	36.1
67.4	**70.3**	**:**	**72.2**	**71.2**	**69.0**	**67.5**	**64.4**	**63.0**	**62.1**	**60.6**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 1.6	– 3.1	:	:	– 5.4	– 5.4	– 4.3	– 5.7	– 1.8	– 3.1	– 5.0
2.3	7.7	:	:	1.2	– 0.1	0.4	– 1.0	– 0.6	1.0	– 0.7
– 2.3	0.8	:	:	– 3.1	– 3.2	– 1.2	– 1.0	– 3.1	– 1.9	– 2.7
2.5	2.8	:	:	– 1.5	– 2.0	– 1.5	– 2.7	– 3.1	– 1.7	– 2.0
3.5	4.4	:	:	2.2	0.3	– 0.9	– 0.8	– 0.2	– 0.3	– 0.2
– 6.2	– 8.4	:	:	– 9.1	– 9.9	– 5.5	– 10.6	– 2.7	– 2.7	– 2.2
5.7	– 0.6	:	:	– 1.9	– 3.9	– 1.9	– 4.0	– 1.2	– 1.6	– 2.2
– 0.4	0.3	:	:	– 0.1	0.3	– 0.3	– 0.4	– 0.1	– 0.3	– 0.1
– 3.2	0.9	:	:	– 5.3	– 3.2	– 3.6	– 7.1	– 3.1	– 2.8	– 2.7
2.7	3.8	:	:	– 4.4	– 0.8	0.9	– 1.3	– 1.9	– 1.5	– 2.6
0.9	2.2	:	:	– 3.8	– 4.2	– 0.6	– 0.8	2.2	1.0	0.7
1.5	– 1.7	:	:	– 3.0	– 5.4	– 1.9	– 2.9	– 0.4	– 0.5	– 0.2
2.3	**3.1**	**:**	**:**	**– 0.1**	**– 1.7**	**– 1.1**	**– 2.4**	**– 1.1**	**– 0.6**	**– 1.3**
– 4.6	– 4.2	:	:	– 3.9	– 4.9	– 3.5	– 5.9	– 2.1	– 1.4	– 3.4
2.6	– 1.1	:	:	– 2.9	– 2.6	– 5.5	– 9.7	0.7	– 3.4	– 2.7
1.9	2.2	:	:	– 1.5	– 3.1	– 2.4	– 2.9	– 3.3	– 1.5	– 1.5
2.1	**2.9**	**:**	**:**	**– 1.0**	**– 2.1**	**– 1.6**	**– 3.1**	**– 1.4**	**– 0.9**	**– 1.5**

Table A.4.17

Cyclically-adjusted total resources of general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	46.4	51.5	45.8	46.3	46.6	49.2
D (1)	44.2	46.8	42.3	41.8	43.2	45.0
EL	25.4	30.5	32.3	32.6	33.7	36.1
E	29.8	35.4	37.0	37.8	40.1	41.5
F	45.2	49.8	47.2	47.5	47.5	48.8
IRL	33.9	38.8	35.1	36.6	37.5	38.3
I	33.6	39.4	42.0	43.2	44.3	48.5
L	47.5	51.8	:	:	:	:
NL	50.1	53.0	47.2	49.8	49.8	51.4
A	45.2	48.3	46.7	47.0	48.6	49.9
P	27.1	34.2	32.8	33.8	37.2	37.3
FIN	41.8	46.9	48.1	53.5	56.6	56.8
Euro area (2)	**41.4**	**45.3**	**43.2**	**43.6**	**44.6**	**46.7**
DK	50.8	54.6	55.3	55.2	57.1	60.1
S	56.1	59.3	60.6	58.9	60.1	60.9
UK	40.1	41.9	37.3	37.8	37.2	36.1
EU-15 (3)	**41.9**	**45.5**	**43.2**	**43.5**	**44.3**	**45.9**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	– 1.8	0.3	0.3	0.5	0.3	2.6
D (1)	0.8	0.4	– 3.1	0.0	1.4	1.9
EL	0.1	– 0.6	3.2	0.3	1.1	2.4
E	1.9	1.3	0.0	0.8	2.3	1.4
F	2.1	0.7	0.2	0.3	– 0.1	1.3
IRL	2.9	– 0.7	– 1.0	1.5	0.9	0.8
I	1.4	0.2	0.7	1.2	1.1	4.3
L	2.0	2.1	:	:	:	:
NL	0.9	– 0.2	– 0.6	2.6	0.1	1.6
A	1.0	1.0	0.5	0.3	1.6	1.2
P	1.1	– 0.7	0.7	1.0	3.4	0.1
FIN	– 0.4	1.7	3.1	5.4	3.1	0.3
Euro area (2)	**1.1**	**0.5**	**– 0.6**	**0.6**	**1.0**	**2.1**
DK	2.6	0.4	– 1.8	– 0.1	1.9	3.0
S	0.2	0.3	– 0.1	– 1.6	1.1	0.8
UK	3.2	– 0.5	0.2	0.5	– 0.6	– 1.1
EU-15 (3)	**1.3**	**0.3**	**– 0.5**	**0.5**	**0.8**	**1.6**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
49.8	49.2	48.8	49.9	49.6	50.1	49.6	48.5	48.9	49.0	48.5
45.5	45.3	45.9	47.1	47.0	46.9	47.7	46.8	46.0	46.8	46.1
37.6	38.7	41.1	38.9	40.5	41.8	46.5	47.4	47.3	47.3	46.5
40.5	38.7	39.1	39.7	39.5	39.2	39.5	38.9	39.1	39.5	39.5
48.6	49.3	50.0	52.0	52.6	51.4	51.8	51.3	51.1	51.1	50.4
39.3	35.4	40.2	40.2	38.6	37.4	36.3	35.5	34.6	35.5	35.0
46.1	45.3	45.8	46.4	48.5	47.0	47.4	46.2	46.2	46.3	45.3
:	:	48.9	49.3	46.5	45.4	45.5	45.0	44.8	45.0	44.6
49.0	47.2	47.8	48.3	47.3	46.1	46.9	46.6	45.3	45.0	44.3
48.5	49.3	52.1	53.0	52.5	51.9	51.6	50.8	52.3	51.6	50.8
37.4	37.9	41.3	42.2	41.9	41.1	42.3	42.1	42.8	43.3	43.3
56.7	54.4	58.6	58.5	55.5	53.7	52.9	53.4	53.3	53.1	52.2
46.2	**45.9**	**46.7**	**47.7**	**48.0**	**47.3**	**47.7**	**47.0**	**46.6**	**46.9**	**46.2**
58.5	57.0	58.1	58.7	57.9	58.3	58.7	55.8	56.6	55.6	54.8
58.4	57.3	60.4	63.2	62.6	63.3	61.0	60.2	61.8	59.0	58.5
35.9	36.8	39.0	38.8	38.7	39.9	40.3	40.5	40.8	41.0	40.5
45.4	**45.3**	**46.3**	**47.2**	**47.1**	**46.7**	**47.1**	**46.4**	**46.2**	**46.3**	**45.7**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
0.6	– 0.6	:	1.1	– 0.3	0.5	– 0.5	– 1.0	0.3	0.2	– 0.5
0.5	– 0.2	:	1.2	– 0.1	– 0.1	0.7	– 0.9	– 0.8	0.8	– 0.7
1.5	1.2	:	– 2.2	1.6	1.4	4.6	0.9	– 0.1	0.1	– 0.8
– 1.1	– 1.8	:	0.6	– 0.2	– 0.4	0.3	– 0.6	0.2	0.3	0.0
– 0.2	0.8	:	2.0	0.6	– 1.2	0.4	– 0.6	– 0.2	0.0	– 0.7
1.0	– 3.9	:	0.0	– 1.6	– 1.3	– 1.0	– 0.8	– 0.9	0.8	– 0.4
– 2.5	– 0.8	:	0.5	2.2	– 1.5	0.4	– 1.2	0.0	0.1	– 0.9
:	:	:	0.4	– 2.8	– 1.1	0.0	– 0.5	– 0.2	0.2	– 0.5
– 2.4	– 1.8	:	0.5	– 1.0	– 1.2	0.8	– 0.3	– 1.3	– 0.4	– 0.7
– 1.4	0.8	:	0.9	– 0.5	– 0.6	– 0.3	– 0.8	1.5	– 0.7	– 0.7
0.1	0.5	:	0.9	– 0.3	– 0.8	1.1	– 0.2	0.8	0.4	0.0
– 0.1	– 2.3	:	– 0.1	– 3.1	– 1.8	– 0.8	0.5	– 0.1	– 0.2	– 1.0
– 0.5	**– 0.3**	**:**	**1.0**	**0.3**	**– 0.7**	**0.5**	**– 0.8**	**– 0.3**	**0.3**	**– 0.7**
– 1.6	– 1.5	:	0.6	– 0.8	0.3	0.5	– 2.9	0.8	– 1.1	– 0.8
– 2.5	– 1.1	:	2.8	– 0.6	0.6	– 2.3	– 0.8	1.6	– 2.7	– 0.5
– 0.2	0.9	:	– 0.3	0.0	1.2	0.4	0.2	0.3	0.2	– 0.5
– 0.5	**– 0.1**	**:**	**0.9**	**– 0.1**	**– 0.4**	**0.4**	**– 0.7**	**– 0.2**	**0.1**	**– 0.6**

Table A.4.18

Cyclically-adjusted total uses of general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	56.4	59.1	52.8	53.9	54.5	55.2
D (1)	48.2	47.0	45.6	46.9	47.8	48.8
EL	29.0	42.0	48.4	44.7	46.8	49.0
E	31.6	40.3	42.7	43.6	44.9	47.6
F	45.4	51.8	50.0	50.3	52.0	54.0
IRL	46.4	49.0	38.3	38.9	39.2	38.8
I	43.1	51.4	53.9	53.9	54.0	57.1
L	48.0	43.3	:	:	:	:
NL	55.2	55.7	53.6	53.9	54.2	53.7
A	47.2	50.2	49.6	50.6	51.2	54.1
P	36.3	42.6	38.9	41.2	41.1	42.6
FIN	38.7	44.2	47.3	54.4	58.5	59.0
Euro area (2)	**45.4**	**49.4**	**48.8**	**49.5**	**50.3**	**51.9**
DK	53.1	56.7	56.1	56.9	57.7	59.7
S	60.0	62.9	59.1	60.8	66.4	69.3
UK	43.1	44.2	39.4	39.7	41.9	42.6
EU-15 (3)	**45.8**	**49.2**	**47.9**	**48.6**	**49.8**	**51.3**

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	1.2	– 0.2	0.0	1.1	0.7	0.7
D (1)	0.7	– 0.4	0.6	2.7	0.9	1.0
EL	0.0	3.3	4.5	– 3.7	2.1	2.2
E	2.2	2.6	1.0	0.9	1.3	2.7
F	1.0	0.5	0.8	0.4	1.6	2.0
IRL	4.0	0.6	0.4	0.6	0.3	– 0.4
I	1.2	1.3	1.9	0.0	0.2	3.0
L	2.3	– 1.7	:	:	:	:
NL	1.8	– 1.4	0.6	0.3	0.3	– 0.5
A	0.3	0.9	0.7	1.1	0.6	2.9
P	4.3	– 0.8	3.4	2.3	– 0.1	1.6
FIN	0.0	1.8	3.3	7.1	4.1	0.6
Euro area (2)	**1.0**	**0.5**	**1.1**	**1.1**	**0.9**	**1.6**
DK	2.7	– 0.2	– 1.0	0.9	0.8	2.1
S	0.9	1.3	0.8	1.8	5.5	2.9
UK	1.8	– 1.0	1.4	0.3	2.3	0.7
EU-15 (3)	**1.1**	**0.3**	**1.1**	**1.0**	**1.3**	**1.5**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
53.9	52.6	52.7	52.7	51.4	50.7	50.3	49.7	49.2	48.9	48.3
48.5	49.0	49.6	50.3	49.3	48.8	48.9	48.4	48.4	48.8	47.9
46.8	48.5	50.5	45.9	44.7	44.6	48.0	48.3	48.0	47.4	46.6
45.8	45.0	45.0	43.7	42.1	41.6	40.8	40.0	39.8	39.9	39.7
53.9	53.7	55.1	55.3	54.8	53.8	53.4	52.9	52.8	52.9	52.3
38.7	36.4	41.3	39.4	37.4	35.2	35.1	33.1	34.7	35.8	35.3
54.6	52.9	53.4	53.2	51.1	49.9	48.9	48.1	47.7	47.3	46.7
:	:	44.6	44.7	43.3	42.2	42.0	40.8	41.3	43.3	42.4
51.7	50.1	51.1	49.3	48.1	47.5	47.6	46.7	45.6	44.8	44.6
53.5	54.2	57.3	56.8	54.1	54.4	54.2	53.3	52.5	51.6	50.6
42.0	42.7	44.9	45.5	44.2	43.7	45.0	44.7	46.1	46.1	46.0
58.4	56.2	59.1	59.3	56.8	53.6	52.6	49.4	49.7	49.9	49.6
51.0	**50.6**	**51.5**	**51.4**	**50.2**	**49.4**	**49.1**	**48.3**	**48.1**	**48.1**	**47.4**
60.5	59.1	60.3	59.8	58.2	57.8	56.3	54.5	54.1	53.3	52.3
66.5	64.3	67.5	65.1	62.9	60.7	60.5	58.1	57.6	57.3	56.8
42.3	42.0	44.6	43.0	41.1	39.9	39.3	39.3	40.2	41.2	41.1
50.4	**50.0**	**51.2**	**50.9**	**49.2**	**48.3**	**47.9**	**47.1**	**47.1**	**47.2**	**46.6**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 1.4	– 1.3	:	– 0.1	– 1.3	– 0.7	– 0.4	– 0.6	– 0.5	– 0.4	– 0.5
– 0.3	0.5	:	0.7	– 1.0	– 0.5	0.1	– 0.5	0.0	0.4	– 0.9
– 2.2	1.7	:	– 4.6	– 1.2	0.0	3.4	0.3	– 0.3	– 0.6	– 0.8
– 1.8	– 0.9	:	– 1.3	– 1.6	– 0.5	– 0.8	– 0.8	– 0.2	0.1	– 0.2
– 0.1	– 0.2	:	0.2	– 0.5	– 1.0	– 0.4	– 0.5	– 0.2	0.2	– 0.6
– 0.1	– 2.3	:	– 1.8	– 2.0	– 2.2	– 0.1	– 2.0	1.6	1.0	– 0.5
– 2.5	– 1.7	:	– 0.2	– 2.1	– 1.2	– 1.0	– 0.8	– 0.4	– 0.4	– 0.6
:	:	:	0.0	– 1.4	– 1.1	– 0.2	– 1.2	0.5	2.0	– 0.9
– 2.1	– 1.6	:	– 1.8	– 1.2	– 0.7	0.1	– 0.9	– 1.1	– 0.9	– 0.2
– 0.6	0.8	:	– 0.5	– 2.7	0.3	– 0.2	– 0.9	– 0.8	– 0.9	– 1.0
– 0.6	0.7	:	0.6	– 1.3	– 0.5	1.3	– 0.3	1.3	0.0	– 0.1
– 0.6	– 2.2	:	0.2	– 2.5	– 3.2	– 1.0	– 3.1	0.3	0.2	– 0.3
– 1.0	**– 0.4**	**:**	**– 0.1**	**– 1.3**	**– 0.8**	**– 0.3**	**– 0.7**	**– 0.2**	**0.0**	**– 0.7**
0.8	– 1.4	:	– 0.5	– 1.6	– 0.4	– 1.6	– 1.8	– 0.4	– 0.8	– 1.0
– 2.8	– 2.2	:	– 2.4	– 2.2	– 2.2	– 0.2	– 2.4	– 0.5	– 0.3	– 0.5
– 0.3	– 0.2	:	– 1.6	– 1.9	– 1.3	– 0.5	0.0	0.8	1.0	– 0.1
– 0.9	**– 0.4**	**:**	**– 0.4**	**– 1.6**	**– 1.0**	**– 0.4**	**– 0.8**	**– 0.1**	**0.1**	**– 0.6**

Table A.4.19

Cyclically-adjusted net lending (+) or net borrowing (–) of general government

Percentage of GDP

	Former definitions					
	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 10.0	– 7.6	– 7.0	– 7.6	– 8.0	– 6.0
D (1)	– 4.0	– 0.2	– 3.2	– 5.2	– 4.6	– 3.8
EL	– 3.6	– 11.4	– 16.1	– 12.1	– 13.1	– 12.9
E	– 2.3	– 4.9	– 5.7	– 5.8	– 4.8	– 6.1
F	– 0.2	– 1.9	– 2.7	– 2.9	– 4.5	– 5.2
IRL	– 12.5	– 10.2	– 3.2	– 2.3	– 1.7	– 0.5
I	– 9.5	– 12.1	– 11.9	– 10.7	– 9.8	– 8.5
L	– 0.5	8.5	:	:	:	:
NL	– 5.1	– 2.7	– 6.5	– 4.1	– 4.4	– 2.4
A	– 2.1	– 1.9	– 2.9	– 3.6	– 2.6	– 4.2
P	– 9.2	– 8.4	– 6.2	– 7.4	– 3.9	– 5.3
FIN	3.0	2.7	0.8	– 0.9	– 1.9	– 2.2
Euro area (2)	**– 4.1**	**– 4.1**	**– 5.6**	**– 5.9**	**– 5.7**	**– 5.2**
DK	– 3.1	– 2.9	– 0.7	– 1.7	– 0.6	0.3
S	– 3.9	– 3.6	1.5	– 1.9	– 6.3	– 8.4
UK	– 3.0	– 2.3	– 2.0	– 1.8	– 4.8	– 6.5
EU-15 (3)	**– 3.9**	**– 3.8**	**– 4.7**	**– 5.1**	**– 5.5**	**– 5.4**

Change in percentage points of GDP

	1980	**1985**	**1990**	**1991**	**1992**	**1993**
B	– 3.0	0.5	0.3	– 0.6	– 0.4	1.9
D (1)	0.1	0.9	– 3.7	– 2.7	0.5	0.9
EL	0.1	– 3.8	– 1.3	4.0	– 1.0	0.2
E	– 0.8	– 0.9	– 0.9	– 0.1	1.0	– 1.3
F	1.1	0.2	– 0.5	– 0.1	– 1.7	– 0.7
IRL	– 1.1	– 1.3	– 1.4	0.9	0.6	1.2
I	– 0.5	– 1.1	– 1.3	1.2	0.9	1.2
L	– 0.3	3.8	:	:	:	:
NL	– 0.9	1.1	– 1.2	2.3	– 0.2	2.0
A	0.7	0.0	– 0.2	– 0.8	1.1	– 1.7
P	– 3.2	0.1	– 2.8	– 1.2	3.5	– 1.5
FIN	– 0.4	– 0.1	– 0.2	– 1.7	– 1.0	– 0.3
Euro area (2)	**– 0.1**	**0.0**	**– 1.7**	**– 0.5**	**0.1**	**0.5**
DK	– 0.1	0.6	– 0.9	– 1.0	1.1	1.0
S	– 1.0	– 1.0	– 0.9	– 3.4	– 4.4	– 2.1
UK	1.4	0.5	– 1.2	0.2	– 2.9	– 1.7
EU-15 (3)	**0.1**	**0.1**	**– 1.6**	**– 0.5**	**– 0.5**	**0.1**

(1) From 1991 including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Percentage of GDP

Former definitions		ESA 95 definitions								
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
– 4.1	– 3.4	– 3.9	– 2.7	– 1.7	– 0.6	– 0.8	– 1.2	– 0.4	0.2	0.2
– 3.0	– 3.7	– 3.8	– 3.2	– 2.3	– 1.9	– 1.3	– 1.7	– 2.5	– 2.1	– 1.9
– 9.2	– 9.8	– 9.5	– 7.0	– 4.2	– 2.8	– 1.6	– 0.9	– 0.8	– 0.1	– 0.1
– 5.3	– 6.3	– 5.9	– 4.0	– 2.6	– 2.5	– 1.3	– 1.1	– 0.7	– 0.4	– 0.2
– 5.3	– 4.4	– 5.1	– 3.3	– 2.2	– 2.4	– 1.6	– 1.7	– 1.7	– 1.9	– 1.9
0.6	– 1.0	– 1.0	0.8	1.2	2.1	1.3	2.4	– 0.1	– 0.3	– 0.3
– 8.5	– 7.6	– 7.6	– 6.8	– 2.5	– 2.9	– 1.5	– 1.9	– 1.5	– 1.0	– 1.4
:	:	4.3	4.7	3.2	3.3	3.5	4.2	3.6	1.8	2.2
– 2.7	– 2.9	– 3.3	– 1.0	– 0.8	– 1.4	– 0.7	– 0.1	– 0.3	0.2	– 0.3
– 5.0	– 4.9	– 5.2	– 3.8	– 1.6	– 2.5	– 2.6	– 2.5	– 0.2	0.0	0.3
– 4.6	– 4.7	– 3.5	– 3.3	– 2.3	– 2.6	– 2.7	– 2.6	– 3.2	– 2.8	– 2.6
– 1.7	– 1.8	– 0.5	– 0.8	– 1.3	0.1	0.3	4.0	3.6	3.2	2.5
– 4.8	**– 4.7**	**– 4.9**	**– 3.8**	**– 2.2**	**– 2.1**	**– 1.3**	**– 1.4**	**– 1.5**	**– 1.2**	**– 1.2**
– 2.1	– 2.1	– 2.2	– 1.1	– 0.3	0.4	2.5	1.3	2.6	2.3	2.4
– 8.1	– 7.0	– 7.1	– 1.9	– 0.3	2.6	0.5	2.1	4.2	1.8	1.7
– 6.3	– 5.2	– 5.6	– 4.2	– 2.4	0.0	1.0	1.2	0.7	– 0.2	– 0.7
– 5.0	**– 4.8**	**– 5.0**	**– 3.7**	**– 2.1**	**– 1.6**	**– 0.8**	**– 0.7**	**– 0.9**	**– 0.9**	**– 1.0**

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002	2003
2.0	0.6	:	1.2	1.0	1.2	– 0.2	– 0.4	0.8	0.5	0.1
0.8	– 0.7	:	0.6	0.9	0.4	0.6	– 0.4	– 0.8	0.4	0.2
3.7	– 0.5	:	2.4	2.8	1.4	1.2	0.7	0.2	0.7	0.0
0.7	– 0.9	:	1.9	1.4	0.2	1.1	0.3	0.4	0.3	0.2
– 0.1	0.9	:	1.8	1.1	– 0.2	0.8	– 0.1	0.0	– 0.2	0.0
1.0	– 1.6	:	1.8	0.4	0.9	– 0.9	1.2	– 2.5	– 0.2	0.0
0.0	0.9	:	0.8	4.3	– 0.4	1.4	– 0.4	0.4	0.5	– 0.4
:	:	:	0.4	– 1.4	0.0	0.2	0.8	– 0.7	– 1.8	0.4
– 0.4	– 0.2	:	2.3	0.2	– 0.5	0.7	0.6	– 0.2	0.5	– 0.5
– 0.8	0.1	:	1.4	2.2	– 0.9	– 0.1	0.1	2.3	0.2	0.3
0.7	– 0.1	:	0.3	1.0	– 0.3	– 0.2	0.1	– 0.6	0.4	0.2
0.5	– 0.1	:	– 0.3	– 0.6	1.4	0.2	3.7	– 0.4	– 0.4	– 0.7
0.5	**0.1**	**:**	**1.1**	**1.6**	**0.1**	**0.8**	**0.0**	**– 0.1**	**0.3**	**0.0**
– 2.4	– 0.1	:	1.1	0.9	0.7	2.0	– 1.1	1.2	– 0.3	0.2
0.3	1.2	:	5.2	1.6	2.9	– 2.1	1.6	2.1	– 2.4	0.0
0.2	1.1	:	1.3	1.8	2.4	1.0	0.2	– 0.5	– 0.8	– 0.5
0.4	**0.3**	**:**	**1.2**	**1.6**	**0.6**	**0.8**	**0.1**	**– 0.1**	**0.0**	**– 0.1**

Table A.5.1

Gross domestic product at current market prices

(Billion EUR)

	1980	1985	1990	1991	1992	1993	1994
B	87.7	109.5	156.5	164.4	175.7	184.6	197.1
D (1)	583.2	818.9	1182.2	1432.7	1561.7	1670.8	1763.7
EL	35.0	53.6	66.1	73.0	77.0	79.7	84.4
E	159.1	226.3	401.7	443.7	463.3	425.9	425.1
F	491.1	702.2	957.6	987.2	1040.5	1089.4	1139.3
IRL	15.2	27.3	37.3	38.7	41.5	42.6	46.2
I	323.2	562.1	867.8	939.6	951.2	849.0	863.4
L	3.8	5.3	8.7	9.5	10.3	11.6	12.9
NL	128.1	175.4	231.9	244.5	258.5	277.8	293.9
A	57.2	88.6	127.3	136.6	147.0	158.5	168.1
P	21.5	32.2	56.3	65.5	75.5	73.6	76.3
FIN	37.8	72.0	107.7	99.8	83.9	73.6	84.4
Euro area (2)	**1939.1**	**2868.1**	**4192.3**	**4625.8**	**4875.6**	**4925.5**	**5141.9**
DK	49.3	79.1	105.1	108.5	113.7	118.5	128.0
S	92.7	137.0	187.6	200.1	197.2	164.2	174.2
UK	385.5	602.7	780.7	836.1	828.1	823.5	878.1
EU-15 (3)	**2466.6**	**3686.8**	**5265.6**	**5770.5**	**6014.6**	**6031.8**	**6322.2**

(1) From 1991, including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Table A.5.2

Gross domestic product at constant market prices

(Annual percentage change)

	1980	1985	1990	1991	1992	1993	1994
B	4.4	2.0	3.0	1.8	1.6	– 1.5	2.8
D (1)	1.0	2.0	5.7	5.1	2.2	– 1.1	2.4
EL	0.7	2.5	0.0	3.1	0.7	– 1.6	2.1
E	1.3	2.3	3.8	2.5	0.9	– 1.0	2.4
F	1.6	1.5	2.6	1.0	1.5	– 0.9	2.1
IRL	3.1	3.1	7.6	1.9	3.3	2.7	5.8
I	3.5	3.0	2.0	1.4	0.8	– 0.9	2.2
L	0.8	2.9	2.0	4.6	3.7	4.1	3.8
NL	1.2	3.1	4.1	2.5	1.7	0.9	2.6
A	2.2	2.4	4.7	3.3	2.3	0.4	2.6
P	4.6	2.8	4.0	4.4	1.1	– 2.0	1.0
FIN	5.1	3.1	0.0	– 6.3	– 3.3	– 1.2	4.0
Euro area (2)	**1.9**	**2.2**	**3.6**	**2.5**	**1.5**	**– 0.9**	**2.3**
DK	– 0.6	3.6	1.0	1.1	0.6	0.0	5.5
S	1.7	2.2	1.1	– 1.1	– 1.7	– 1.8	4.1
UK	– 2.1	3.6	0.8	– 1.4	0.2	2.5	4.7
EU-15 (3)	**1.3**	**2.5**	**3.0**	**1.7**	**1.2**	**– 0.4**	**2.8**

(1) From 1991, including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

(Billion EUR)

1995	1996	1997	1998	1999	2000	2001	2002	2003
211.7	212.7	216.4	224.3	235.5	248.3	257.3	265.4	278.0
1880.2	1878.2	1863.5	1916.4	1974.3	2025.5	2063.0	2110.3	2187.1
89.9	98.0	107.1	109.0	118.0	122.9	130.4	139.7	150.2
446.9	480.5	495.6	525.4	565.5	608.8	650.2	684.7	724.6
1188.1	1224.6	1241.1	1297.6	1350.2	1404.8	1455.9	1499.9	1563.8
50.9	57.6	70.6	77.2	89.0	103.5	115.9	125.4	137.9
839.0	971.1	1030.0	1068.9	1108.5	1164.8	1216.6	1262.3	1324.6
13.8	14.3	15.6	16.9	18.5	20.6	21.8	23.0	25.1
317.3	324.5	332.7	351.7	373.7	401.1	426.9	447.3	473.0
179.8	182.4	181.6	188.7	196.7	204.8	210.7	216.9	225.3
82.6	88.6	94.2	100.7	108.2	115.3	122.9	128.7	134.7
98.9	100.5	108.1	115.3	120.5	131.2	135.1	138.9	146.2
5385.4	**5618.6**	**5740.9**	**5975.1**	**6240.0**	**6530.9**	**6784.7**	**7019.5**	**7345.5**
137.8	144.2	149.2	154.1	163.2	173.9	180.3	187.2	196.5
183.6	206.3	210.8	213.7	227.6	248.5	234.2	245.6	256.8
867.7	936.6	1171.5	1271.1	1368.2	1550.4	1590.8	1676.9	1755.6
6574.5	**6905.6**	**7272.4**	**7614.0**	**7999.0**	**8503.7**	**8789.9**	**9129.2**	**9554.5**

(Annual percentage change)

1995	1996	1997	1998	1999	2000	2001	2002	2003
2.6	1.2	3.6	2.3	3.0	4.0	1.0	1.1	2.8
1.7	0.8	1.4	2.0	1.9	3.0	0.6	0.8	2.7
2.1	2.4	3.6	3.4	3.6	4.1	4.1	3.7	4.2
2.8	2.4	4.0	4.3	4.1	4.1	2.8	2.1	3.2
1.7	1.1	1.9	3.4	2.9	3.1	2.0	1.6	2.8
10.0	7.8	10.8	8.6	10.9	11.5	6.8	3.5	6.1
2.9	1.1	2.0	1.8	1.6	2.9	1.8	1.4	2.7
3.2	3.6	9.0	5.8	6.0	7.5	5.1	2.9	5.2
3.0	3.0	3.8	4.4	3.7	3.5	1.1	1.5	2.7
1.6	2.0	1.6	3.5	2.8	3.0	1.0	1.2	2.5
4.3	3.9	3.9	4.5	3.4	3.4	1.8	1.5	2.2
3.8	4.0	6.3	5.3	4.1	5.6	0.7	1.6	3.3
2.3	**1.4**	**2.3**	**2.9**	**2.6**	**3.4**	**1.6**	**1.4**	**2.9**
2.8	2.5	3.0	2.5	2.3	3.0	1.0	1.7	2.5
3.7	1.1	2.1	3.6	4.5	3.6	1.2	1.7	2.8
2.9	2.6	3.5	3.0	2.1	3.0	2.2	2.0	3.0
2.4	**1.6**	**2.5**	**2.9**	**2.6**	**3.3**	**1.7**	**1.5**	**2.9**

Table A.5.3

Trend GDP at constant market prices

(Annual percentage change)

	1980	1985	1990	1991	1992	1993	1994
B	2.1	2.0	2.3	2.2	2.1	2.1	2.1
D (1)	1.9	2.2	2.6	2.5	2.5	2.3	2.1
EL	1.8	0.8	1.3	1.4	1.5	1.7	1.9
E	1.8	2.4	2.9	2.8	2.8	2.7	2.7
F	2.4	2.2	2.1	2.0	1.9	1.8	1.8
IRL	3.6	3.1	4.6	5.0	5.5	6.0	6.5
I	2.8	2.4	2.0	1.8	1.7	1.7	1.7
L	2.2	4.1	5.2	5.1	5.1	5.0	5.1
NL	1.7	2.1	2.8	2.8	2.8	2.8	2.9
A	2.4	2.2	2.7	2.6	2.6	2.5	2.4
P	3.0	3.0	3.5	3.3	3.2	3.0	3.0
FIN	3.2	2.7	1.4	1.3	1.3	1.5	1.9
Euro area (2)	**2.2**	**2.2**	**2.4**	**2.3**	**2.3**	**2.2**	**2.1**
DK	1.5	1.7	1.6	1.7	1.8	1.9	2.1
S	1.7	2.0	1.4	1.3	1.3	1.4	1.6
UK	1.7	2.5	2.4	2.3	2.3	2.4	2.4
EU-15 (3)	**2.1**	**2.2**	**2.3**	**2.2**	**2.2**	**2.2**	**2.2**

(1) From 1991, including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

Table A.5.4

Gap between actual and trend GDP at constant market prices

(% of trend GDP)

	1980	1985	1990	1991	1992	1993	1994
B	2.5	– 2.0	2.7	2.3	1.8	– 1.8	– 1.2
D (1)	2.1	– 1.9	2.4	4.3	4.1	0.6	0.8
EL	3.7	– 0.5	0.6	2.3	1.5	– 1.9	– 1.8
E	– 0.6	– 3.6	4.2	3.9	2.1	– 1.6	– 2.0
F	0.4	– 2.1	3.1	2.1	1.7	– 1.0	– 0.8
IRL	2.8	– 0.1	3.1	0.0	– 2.0	– 5.0	– 5.7
I	2.7	– 1.2	2.1	1.7	0.7	– 1.8	– 1.3
L	0.0	– 3.6	3.2	2.7	1.3	0.4	– 0.8
NL	1.5	– 1.1	2.3	2.0	0.9	– 1.0	– 1.3
A	1.5	– 1.6	1.8	2.4	2.2	0.1	0.3
P	3.4	– 6.0	4.3	5.4	3.3	– 1.8	– 3.8
FIN	0.5	0.2	7.2	– 0.8	– 5.3	– 7.8	– 6.0
Euro area (2)	**1.6**	**– 1.9**	**2.8**	**2.9**	**2.2**	**– 0.8**	**– 0.6**
DK	– 0.2	1.3	– 0.4	– 0.9	– 2.0	– 3.9	– 0.6
S	0.0	– 0.2	3.8	1.2	– 1.8	– 5.0	– 2.7
UK	– 0.8	– 1.2	2.7	– 1.0	– 3.1	– 2.9	– 0.8
EU-15 (3)	**1.2**	**– 1.7**	**2.7**	**2.3**	**1.3**	**– 1.3**	**– 0.7**

(1) From 1991, including former East Germany.
(2) Excluding Luxembourg; from 1991, including former East Germany.
(3) EU-15 excluding Luxembourg; from 1991, including former East Germany.

Source: Commission services.

(Annual percentage change)

1995	1996	1997	1998	1999	2000	2001	2002	2003
2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3
2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.8	1.8
2.2	2.5	2.8	3.0	3.2	3.4	3.5	3.6	3.7
2.8	2.9	3.0	3.1	3.1	3.2	3.1	3.1	3.1
1.9	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.4
7.0	7.5	7.8	7.9	7.9	7.8	7.5	7.3	7.0
1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0
5.1	5.2	5.3	5.3	5.3	5.3	5.2	5.1	5.0
2.9	3.0	3.0	3.0	2.9	2.8	2.7	2.6	2.5
2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0
3.0	3.0	2.9	2.9	2.8	2.7	2.5	2.4	2.3
2.3	2.7	3.0	3.2	3.4	3.4	3.4	3.3	3.3
2.1	**2.1**	**2.2**	**2.2**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**
2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.2
1.8	2.0	2.2	2.4	2.5	2.6	2.6	2.6	2.6
2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
2.2	**2.2**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**

(% of trend GDP)

1995	1996	1997	1998	1999	2000	2001	2002	2003
– 0.7	– 1.7	– 0.4	– 0.5	0.2	1.9	0.7	– 0.5	0.0
0.6	– 0.5	– 0.9	– 0.7	– 0.6	0.7	– 0.5	– 1.4	– 0.5
– 1.9	– 2.0	– 1.1	– 0.8	– 0.4	0.2	0.8	0.9	1.4
– 2.0	– 2.4	– 1.5	– 0.3	0.7	1.6	1.2	0.3	0.4
– 1.0	– 1.8	– 1.9	– 0.7	0.0	0.8	0.5	– 0.3	0.2
– 3.1	– 2.8	– 0.1	0.6	3.3	6.8	6.0	2.3	1.5
– 0.1	– 0.7	– 0.4	– 0.4	– 0.7	0.2	0.1	– 0.5	0.1
– 2.6	– 4.0	– 0.6	– 0.2	0.5	2.6	2.5	0.3	0.5
– 1.3	– 1.2	– 0.4	0.9	1.7	2.4	0.8	– 0.3	– 0.1
– 0.4	– 0.7	– 1.3	– 0.1	0.6	1.4	0.3	– 0.5	0.1
– 2.5	– 1.7	– 0.7	0.9	1.5	2.2	1.4	0.5	0.4
– 4.6	– 3.3	– 0.3	1.8	2.4	4.6	1.9	0.2	0.2
– 0.5	**– 1.2**	**– 1.0**	**– 0.4**	**0.0**	**1.1**	**0.3**	**– 0.6**	**0.0**
– 0.1	0.1	0.8	0.9	0.9	1.6	0.2	– 0.3	0.0
– 0.8	– 1.8	– 1.9	– 0.7	1.3	2.3	0.9	0.0	0.2
– 0.5	– 0.4	0.4	0.8	0.3	0.8	0.5	– 0.1	0.4
– 0.5	**– 1.1**	**– 0.8**	**– 0.2**	**0.1**	**1.1**	**0.3**	**– 0.5**	**0.0**

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