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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

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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Contents

Summary and main conclusions	1
Part I: Current developments and prospects	7
Summary	9
1. Budgetary developments in 2000–01	11
1.1. The budgetary outcome in 2000	11
1.2. Budgetary developments in 2001 and prospects for 2002	15
2. The fiscal stance and policy mix in 2000–01	19
2.1. Assessing the policy mix in EMU	19
2.2. The euro-area dimension	19
2.3. The national dimension	20
3. Medium-term budgetary outlook	25
3.1. Medium-term budgetary developments in the stability and convergence programmes	25
3.2. Budgetary composition	28
3.3. Overall assessment and risks	29
Part II: Evolving budgetary surveillance and institutions	33
Summary	35
1. Evolving budgetary surveillance and coordination under the Stability and Growth Pact	37
1.1. Changing budgetary circumstances and priorities	37
1.2. Appropriate medium-term budgetary targets in EMU	38
1.3. Adapting multilateral budgetary surveillance	42
2. National budgetary rules and institutions: how they interact with the Stability and Growth Pact	47
2.1. Introduction	47
2.2. National budgeting in the medium term: expenditure control mechanisms and numerical rules	47
2.2.1. Expenditure control and medium-term budgeting	47
2.2.2. The use of numerical rules at the national level	51
2.3. Coordination of general government positions at the national level	52
2.3.1. Stability and convergence programmes: the involvement of Parliament and the interaction with the national budget procedure	53
2.3.2. Setting the general government targets: local and regional government involvement	54

Part III: Fiscal policy and cyclical stabilisation in EMU	57
Summary	59
1. The role and effectiveness of fiscal policy in EMU	61
1.1. The recent debate on fiscal policy	61
1.2. From theory to practice: how do governments behave?	63
2. Cyclical stabilisation in EMU: role and impact of automatic stabilisers	65
2.1. The economics of automatic stabilisation	65
2.2. The smoothing impact of automatic stabilisers	66
3. Lessons for fiscal behaviour in EMU	79
Part IV: The quality and sustainability of public finances	81
Summary	83
1. The quality of public finances: improving the employment incentives of tax and benefit systems	85
1.1. Introduction	85
1.2. How tax and benefit systems affect labour supply: theory and empirical evidence	85
1.3. How tax and benefit systems affect incentives to work	87
1.4. Tax and benefit reforms: recent trends and directions	93
2. The sustainability of public finances in EMU	97
2.1. Recent demographic projections 2000–50	97
2.2. Long-term sustainability in the context of EMU	98
2.3. Developing more comparable projections of the budgetary impact of ageing	100
2.4. An emerging policy on ageing policy at EU level	107
2.4.1. Growing EU involvement in ageing related policies	107
2.4.2. A three-pronged strategy to address the budgetary consequence of ageing	108
2.4.3. Sustaining sound public finances and ensuring a fast reduction of public debt	108
2.4.4. Reforms to achieve higher employment rates	110
2.4.5. Reform of pension systems	111
Part V: Member State developments	115
1. Belgium	117
2. Denmark	121
3. Germany	125
4. Greece	129
5. Spain	133
6. France	137
7. Ireland	141
8. Italy	145
9. Luxembourg	149
10. The Netherlands	153
11. Austria	157
12. Portugal	163
13. Finland	169
14. Sweden	173
15. United Kingdom	177

Part VI: Resource section	181
1. QUEST methodology and detailed results of the simulations of automatic stabilisers (Annex to Part III)	183
1.1. Simulating automatic stabilisers with QUEST	183
1.2. Sensitivity of the budget to economic fluctuations	184
1.3. Estimates of smoothing of output fluctuations	186
1.4. Conclusions	190
2. Glossary	191
3. References	195
4. Useful Internet links	199

Statistical annex	203
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Tables

1. Budgetary developments in 2000, % of GDP	12
2. Evolution in estimates of government budgets for 2000	13
3. Allocation of UMTS licenses, procedure used and budgetary impact (% of GDP)	14
4. Forecast budgetary developments in 2001, % of GDP	16
5. Forecasts budgetary developments in 2002, % of GDP	17
6. Euro area growth assumptions in the 2000 updates	25
7. Budget targets in 2000 stability and convergence programmes	26
8. Euro area: comparison of budget targets and fiscal effort in the 1998–2000 programmes, % of GDP	27
9. Euro area: decomposition of changes in government debt ratio, % of GDP	28
10. Euro area: planned budgetary developments according to the programme updates, % of GDP	28
11. Budget balance targets, expenditures and revenue ratios over the 2001–04 period according to the SCP, % GDP	29
12. Euro area fiscal stance and fiscal impulse, 2001 onwards	31
13. Re-absorbing the stock of public debt	41
14. Decreasing public debt in ‘bad’ times	42
15. General government medium-term budgeting frameworks used in Member States	48
16. Budgetary outlook in the UK according to the 2000 updated UK CP	52
17. Involvement of Parliament in the 2000 round of programme updates	53
18. Budget balance, general government and government sub-sectors as reported in the March 2001 EDP reporting	55
19. Results of previous studies of automatic fiscal stabilisation	70
20. Sensitivity of the budget under various shocks	71
21. Short-term revenue and expenditure multipliers	72
22. Results for German output and inflation under a negative productivity	77
23. Marginal tax rates in the EU 1997–2000 (income tax plus employees contributions less cash benefit as % of gross wage)	88
24. Transfer benefits in the EU, 1993–2000	89
25. Average effective tax rates for taking up a job in 1997 (assuming principal earner at APW)	92
26. Demographic developments in the EU, 2000–50	98

27.	Pension expenditure projections 2000–50 (as % GDP, before tax)	101
28.	Primary balance required to keep balanced budgets	105
29.	Projected debt levels assuming respect of SGP targets	109
30.	Composition and balances of general government, Belgium (as % GDP)	118
31.	Key figures of the Belgian stability programme (2001–05)	119
32.	Composition and balance of general government, Denmark (as % GDP)	122
33.	Key figures of the Danish Convergence Programme (2000–05)	123
34.	Composition and balances of general government, Germany (as % of GDP)	126
35.	Key figures of the German stability programme (2001–04)	127
36.	Composition and balances of general government, Greece (as % of GDP)	130
37.	Key figures of the Greek stability programme (2000–04)	131
38.	Composition and balances of general government, Spain (as % of GDP)	134
39.	Key figures of the Spanish stability programme (2000–04)	135
40.	Composition and balances of general government, France (as % of GDP)	138
41.	Key figures of the French stability programme (2001–04)	139
42.	Composition and balances of general government, Ireland (as % of GDP)	142
43.	Key figures of the Irish stability programme (2001–03)	143
44.	Composition and balances of general government, Italy (as % of GDP)	146
45.	Key figures of Italy's stability programme (2001–04)	147
46.	Revenues and expenditure of general government, Luxembourg (as % of GDP)	150
47.	Key figures of the 2000 update to the stability programme of Luxembourg (1999–03)	151
48.	Revenues and expenditure of general government, Netherlands (as % of GDP)	154
49.	Key figures of the 2000 update to the Dutch stability programme (1999–04)	155
50.	Composition and balances of general government, Austria (as % of GDP)	158
51.	Key figures of the Austrian stability programme (2000–04)	159
52.	Composition and balances of general government, Portugal (as % of GDP)	164
53.	Key figures of the Portuguese stability programme (2001–04)	165
54.	Composition and balances of general government, Finland (as % of GDP)	170
55.	Key figures of the Finnish stability programme (2000–04)	171
56.	Composition and balance of general government, Sweden (as % of GDP)	174
57.	Key figures of the Swedish convergence programme (2001–03)	175
58.	Composition and balance of general government, United Kingdom (as % of GDP)	178
59.	Key figures of the UK convergence programme (2001–06)	179
A1	Budget sensitivities OECD and EC	184
A2	Smoothing of consumption shock under proportional tax system (%)	186
A3	Smoothing capacity under consumption shock	188
A4	Smoothing capacity under investment shock	189
A5	Smoothing capacity under exports shock	189
A6	Smoothing capacity under technology shock	190

Graphs

1.	Difference between estimated expected and realised fiscal effort in 2000, in % of GDP	13
2.	Changes in the tax burden on labour 2000–02	18
3.	The fiscal and monetary stance in the euro area 1999–2001	20
4.	Policy mix at the national level, 2000	21
5.	Fiscal stance and cyclical positions in the EMU countries, 2000	21
6.	Policy mix at the national level, 2001	22
7.	Fiscal stance and cyclical positions in the EMU countries, 2001	23
8.	Euro area: budgetary developments and output gap	26

9.	Composition of fiscal adjustment in the euro area, 1997–2004	30
10.	Factors to be considered when setting medium-term targets	39
11.	‘Close-to-balance’ requirement, budgetary positions in 2001 and medium-term budgetary targets set in the last updates of the stability and convergence programmes	40
12.	Deficit and debt in the euro area	64
13.	Pro-cyclical policy episodes in the EU, 1970–97	64
14.	Demand shock	67
15.	Supply shock	68
16.	Private consumption shock	74
17.	Private investment shock	74
18.	Export demand shock	75
19.	Productivity shock	75
20.	Net replacement rates of the unemployed at low (67% APW) wage level, 1997	90
21.	Net replacement rates of the unemployed at average (APW) wage level, 1997	91
22.	Old-age dependency ratios 2000–50 (baseline scenario)	99
23.	Projected impact of ageing populations on EU per-capita GDP	106

Summary and main conclusions

A fast-evolving debate on budgetary policy in EMU

This is the second report dedicated to public finances in EMU. In addition to reviewing Member States' budgetary performance in 2000 and assessing the short and medium-term prospects, it contains an in-depth examination of some of the most important questions in the fast-evolving debate on budgetary policy at EU level. This debate is being shaped by several factors, not least a growing understanding of the challenges and constraints facing Member States in running budgetary policies in EMU. Four issues dominate the discussions on EU budgetary policy as follows:

The Stability and Growth Pact (SGP) target of budget positions that are 'close to balance or in surplus', an important goal not yet reached in several Member States

Having achieved impressive budgetary consolidation in the run-up to EMU, Member States committed themselves in the broad economic policy guidelines (BEPG) to reach the SGP target of budget positions that are 'close to balance or in surplus', as a rule, by the end of 2001. Respect of the SGP target is vital for the smooth functioning of EMU as it would safeguard the 3% of GDP deficit ceiling and allow the automatic stabilisers to operate fully in the event of an economic slowdown. With a deterioration in budget balances projected this year and mounting downside economic risks, attaining the SGP target remains an important budgetary goal for the countries that continue to have sizeable structural deficits.

The importance of budgetary policy delivering an appropriate policy mix both at the euro-area and Member State level

EMU is a unique policy framework in having a centralised monetary policy but decentralised budgetary policies. Member States' budgetary policy must therefore ensure an appropriate policy mix at national level, while

at the same time contributing to an appropriate fiscal stance for the euro area as a whole. There is a growing awareness of the need to satisfy both of these objectives. The importance of Member States' budgetary policy in delivering the right policy mix at national level was evident several months ago when there were clear signs of overheating in several euro-area Member States. In addition, a balanced policy mix at the aggregate euro level (where fiscal policies should not overburden monetary policy) is being increasingly recognised as a necessary step to tackle successfully the current economic slowdown.

Broadening the debate on budgetary policy to include the quality and sustainability of public finances

New priorities are coming to the fore now that most Member States have reduced their budgetary imbalances. The debate on budgetary policy at EU level needs to expand from its current focus on discipline towards a parallel emphasis on the contribution of public finances to growth and employment. The challenge facing Member States is now to sustain sound public budget positions while at the same time lowering the tax burden, restructuring public expenditure to support a knowledge-based economy and preparing for the budgetary consequences of ageing populations. Sustainable public finances also contribute to the overall strategy for sustainable development endorsed by the European Council of Gothenburg in June 2001. Budgetary surveillance at EU level needs to evolve if it is to support Member States in pursuing ambitious reform agendas that do not jeopardise the commitment to fiscal discipline.

Better coordination on budgetary questions is needed

Recent events have highlighted inadequate coordination on budgetary questions in EMU, and consequently a failure on the part of Member States to react in a timely and consistent manner to common economic shocks/challenges. Examples of such coordination include how to respond to pressure to lower fuel taxes in the face of rising oil

prices, what to do with windfall revenues from the sale of third generation (UMTS) mobile phone licences, how to bring about a sustainable reduction in the tax burden, and what is the appropriate role of budgetary policies in containing overheating pressures. Faced with economic shocks/challenges of a similar nature, it is reasonable to expect that countries in a monetary union would react with policies that are consistent and which take on board the euro-area implications, although the individual policy responses obviously need to be tailored to reflect country-specific circumstances. Even in cases when the policies adopted by Member States have been broadly consistent with the EU fiscal framework, lack of coordination has led to the impression that countries are unwilling to acknowledge the euro-area implications of national policy actions, and that coordination only takes place after the event. Tackling the apparent shortcomings in the coordination of budgetary policies is a necessary and urgent task.

Outline of the report

This report addresses the above considerations that are shaping budgetary priorities in EMU. Part I reviews current developments and short-term budgetary prospects, as well as the medium-term plans set down in the latest stability and convergence programmes (submitted in late 2000 or early 2001). The analysis is based on the spring 2001 forecast of the European Commission and is supplemented with more recent information on budgetary developments in 2001.

Part II considers the role of budgetary institutions and procedures in achieving and maintaining sound public finances. It examines how the framework for budgetary surveillance at EU level is evolving in light of changing budgetary conditions and priorities and assesses the interaction of national budgetary procedures and institutions with EU budgetary surveillance requirements.

Part III examines the cyclical stabilisation role of domestic budgetary policy in EMU and the impact of automatic stabilisers: this is one of the most important budgetary questions on which a common assessment and understanding amongst euro-area countries is needed.

Part IV analyses some new budgetary priorities highlighted by the Lisbon and Stockholm European Councils, namely the working of tax and benefit systems and the budgetary implications of ageing populations.

Part V contains for each Member State a brief summary of budget developments and policy challenges. It also

contains the Council opinions on the updated stability and convergence programmes, as well as the country-specific recommendations on budgetary policy in the 2001 broad economic policy guidelines.

Budgetary developments and prospects

Part I of the report presents what is a mixed picture of recent budgetary policy developments and prospects. On the one hand, the budget deficit of the euro area has continued to shrink to 0.7% of GDP in 2000 (net of UMTS revenues), a drop of 0.5% of GDP compared with 1999, and at the same time the tax burden is being lowered in most countries. Moreover, most of the one-off budgetary receipts from the sale of UMTS licences have, as agreed, been used to reduce debt.

On the other hand, four euro-area countries (Germany, France, Italy and Portugal) are projected to have sizeable deficits in 2001. These countries have missed the opportunity of the recent favourable growth environment to meet the target of the Stability and Growth Pact, and thus they have less room for manoeuvre in the face of the current slowdown. In general, the budgetary outcome for 2000 should have been better, as some governments gave away part of the higher-than-expected 'growth dividend' via tax cuts or expenditure increases. Moreover, both the actual and cyclically-adjusted budget balances of the euro area are set to deteriorate slightly in 2001, marking the first reversal in budgetary consolidation since 1993. While this is largely due to welcome reductions in the tax burden, accompanying expenditure reforms have been postponed or toned down in some countries, including measures to modernise pension systems.

The downside risks are mounting with signs of decelerating growth in most countries. In this context, automatic budgetary stabilisers should be allowed to operate fully in those countries that have already achieved budget positions which respect the SGP target of 'close to balance or in surplus'. In contrast, the full use of automatic stabilisers may not be feasible in those Member States that have yet to reach the SGP target, as this could lead to deficits that approach the 3% of GDP deficit ceiling.

The aggregate policy mix for the euro area has been broadly balanced in 2000 and 2001. In contrast, the policy mix at national level has not always been appropriate, as fiscal behaviour in some countries has been inconsistent with domestic cyclical and monetary conditions. In

the short-term, maintaining a sound policy mix at the euro-area level is essential to limit the adverse consequences of the current deceleration in growth: an undue loosening of the fiscal stance could overburden monetary policy, leading to higher-than-necessary interest rates. A particular effort is also required in those Member States experiencing signs of overheating to ensure that the fiscal stance at national level reflects the particular cyclical and monetary conditions they face.

As regards medium-term prospects, the updated stability and convergence programmes provide for a broadly neutral fiscal stance while allowing for a steady reduction in the tax burden. They also show that all Member States aim to reach the SGP target of close to balance or in surplus, but in several cases only in 2003 or 2004. This indicates that budgetary consolidation is being back-loaded towards the final years of the programmes of some countries. It is important that the SGP goal be attained in accordance with the commitments in the BEPG, so that it does not become a goal that is continuously deferred into the future. Although some Member States have set medium-term targets that go beyond the 'close to balance or in surplus' SGP target, the programmes of most Member States appear to be unambitious in light of other budgetary objectives, and especially the need to prepare for the budgetary consequences of ageing populations.

Budgetary surveillance and institutions

A sound budgetary performance requires effective institutions, that is efficient decision-making procedures, targets and behavioural rules. Part II looks at how the budgetary institutions at both EU and national level are adapting to the new framework for conducting national fiscal policies in a monetary union.

The analysis begins by outlining a phased approach to determining what are the appropriate medium-term targets to respect the SGP goal of close to balances or in surplus. A first step was to ensure that Member States' budgetary positions would create a sufficient safety margin so that the automatic stabilisers could operate in cyclical downturns without endangering the 3% of GDP deficit ceiling. Now that such a cyclical safety-margin has been created in most Member States, it is time to complete the transition to the SGP target of budget positions which are 'close to balance or in surplus': this would build in an additional safety margin for other budgetary risks (such as unexpected shortfalls in tax revenues, expenditure over-

runs or interest rate shocks), and provide for a rapid reduction in the stock of public debt in high-debt countries towards the 60% of GDP reference value.

The report shows that a broadly balanced budget in structural terms would be required for most countries to respect the SGP goal as it would cater for budgetary risks related to cyclical downturns as well as unexpected budgetary developments. Adherence to this goal is particularly important for high-debt countries (Belgium, Greece and Italy) to ensure that debt levels fall rapidly to the 60% of GDP threshold. However, for countries which have large automatic stabilisers (Luxembourg, the Netherlands, Finland and, outside the euro area, Denmark and Sweden), a small structural surplus of some 1% of GDP appears adequate. Overall, these suggested targets are consistent with budgetary projections outlined by Member States in their updated stability and convergence programmes.

Part II also contains some practical suggestions on how to improve the EU budgetary surveillance within the existing legislative framework, some of which were put forward by the Commission in a recent communication on enhancing policy coordination in the euro area. Four suggestions warrant consideration, namely: (a) to establish a principle whereby Member States pre-inform the Commission and Council of major budgetary decisions before they are finally adopted/decided; (b) to cluster the submission of stability and convergence programmes in autumn of each year; (c) to improve the information content of the programmes; and (d) to extend their coverage to include the long-term sustainability of public finances.

The report next explores how national budgetary rules and procedures contribute towards meeting budgetary objectives at EU level. Member States' budgetary institutions are clearly being influenced by the need to be consistent with EU surveillance in a number of ways. A key factor is that the SGP establishes budgetary targets and commitments in the medium term (three to four years) compared with the traditional focus on an annual budget cycle at national level. Partly in response to the SGP, several Member States now use a multi-year budgeting framework or other mechanisms/guidelines to set and control public expenditure priorities in the medium term.

EU commitments are also shaping the relationships between the different budgetary actors at national level, i.e. central government, national parliaments and State/local authorities. Several Member States have put arrangements in place to strengthen the responsibility for

each level of government in meeting the target of the general government balance set down in the stability or convergence programmes. A welcome development is the so-called 'internal stability pacts' which have been agreed in several Member States.

Budgetary policy and cyclical stabilisation in EMU

Part III looks at budgetary policy and cyclical stabilisation in EMU, with a particular focus on the functioning of the automatic fiscal stabilisers. This type of analysis is important as it could serve as a basis for developing guidelines on the appropriate policy response expected from a Member State in EMU when faced with various types of economic shocks, i.e. providing a common analytical framework which could help avoid past coordination failures.

Given the loss of national monetary policy in EMU, budgetary policy needs to play a more significant role in smoothing the impact of country-specific shocks on real output. To this end, the norm for budgetary behaviour should be to let automatic stabilisers operate freely in both upturns and downturns, with discretionary policy being the exception rather than the rule. While this conclusion is quite uncontroversial, a number of open questions remain. Are automatic stabilisers always beneficial for the economy? How much cyclical smoothing can be expected from the working of automatic stabilisers? What kind of reforms could improve the effectiveness of automatic stabilisers?

The answers largely depend on whether the shocks hitting the economy emanate from the demand or supply side, although this distinction is not always clear-cut in practice. In the event of demand shocks, such as an acceleration of private consumption or a fall in exports, the output gap and inflation move in the same direction. Automatic fiscal stabilisers can therefore play a useful role as they cushion the impact both on output and prices. Empirical evidence shows that automatic stabilisers are particularly effective in smoothing shocks to private consumption, but less so in the event of shocks to investment or external demand.

In contrast, supply shocks (such as changes in energy prices or technological innovation) typically send output and inflation in opposite directions: for instance, a rise in the oil price results in a negative output gap and higher inflation. In this case, automatic stabilisers help smooth output, but at the cost of even higher inflation. More-

over, if the shock is permanent (i.e. it affects the level of potential activity), automatic stabilisers may be unhelpful if they delay the necessary adjustment towards the 'new' level of potential output: instead, what is needed is public financing conducive to flexibility in product and factor markets to enable output to converge to its new equilibrium level. In practice, the empirical evidence points to a relatively small impact of the automatic stabilisers in the case of supply shocks: they are thus unlikely to act as a major brake on the required adjustment or make it more difficult for the ECB to maintain price stability.

Improving the quality and sustainability of public finances

Part IV deals with medium- and long-term budgetary challenges. The Stockholm European Council of March 2001 recognised the need to broaden the debate on budgetary policy at EU level from its current focus on budgetary stability towards a parallel emphasis on the contribution of public finances to growth and employment. In particular, it called for the quality and sustainability of public finances to be improved.

As argued, outlined in the joint Commission–Council report to the Stockholm European Council in March 2001, the 'quality' of public finances can contribute to economic growth and employment in many different ways. Public spending (e.g. in physical and human capital investment, research and innovation, education, social and regional transfers) can enhance employment and output potential. However, a lack of consistent and updated data, especially on the functional distribution of public spending, has so far hampered a thorough and overall analysis of these issues which need to be addressed in future reports in liaison with the benchmarking exercises of the relevant policies (e.g. education, research and innovation). A strong engagement on the part of Member States is important to remedy such statistical deficiencies.

Taxation systems can also contribute to employment and growth by seeking a balanced burden-sharing across taxable sources, facilitating entrepreneurship and providing the right incentives for economic agents to work, save and invest. Efficient tax systems can also facilitate structural change in the event of permanent shocks, and can also encourage workers to stay longer in the labour force, thereby helping meet the challenges of ageing societies. The first chapter of Part IV focuses on the way in which reform to tax and benefit systems can foster positive incentives to offer and take up work.

Some progress has been made in easing the fiscal burden on labour and reducing marginal tax rates. In several Member States, this has been done in the context of environmental tax reforms, where reductions in the fiscal burden on labour have been financed by new or increased taxes on pollution or resource use, which lead to the inclusion of external environmental costs in market prices. Results, however, have so far been mixed and further effort is needed since overall labour taxation remains very high by historical and international standards in some Member States. A particular effort is also needed on reducing the tax burden on low-paid labour. Progress in the field of environmental taxes has been very modest to date, and this issue could be addressed in future reports.

As to benefit systems, modest progress has been made in recent years and there is still some way to go to render them more employment-friendly. Recent measures have strengthened the conditionality of unemployment and social benefit schemes by revising eligibility criteria, reinforcing checks that conditionality requirements for benefits receipt are met, and improving overall management and enforcement. However, a comprehensive approach that takes the interaction between tax and benefit systems into account has often been lacking. Also, the shift from passive towards active policies has been relatively limited. Without further reforms, it will be difficult for the EU to meet the ambitious employment targets established by the Lisbon and Stockholm European Councils.

Part IV then turns to the issue of population ageing and its impact on the long-term sustainability of public finances. Ageing will lead to substantial falls in the size of the labour force, a doubling of the old-age dependency ratio by 2050 and a consequent sharp drop in the ratio of employed persons to inactive persons. Recent projections of the Economic Policy Committee (EPC) show that spending on public pensions could increase by between 3% and 5% of GDP in most Member States in coming decades, with very large increases projected in some countries (especially Spain, Greece and Portugal, all of whom finance public pensions on a PAYG basis). If account is taken of health and care for the elderly, the overall impact of ageing on public spending could amount to an average increase of between 5% and 8% of GDP.

This raises concerns about the long-term sustainability of public finances which is of added significance in EMU: failure to prepare for the budgetary costs of ageing could make it difficult for Member States to respect the SGP and could complicate the implementation of the

single monetary policy by the ECB. Sustainable public finances, however, not only entail avoiding structural deficits and rising debt (i.e. respect of the SGP targets), but also keeping the tax burden at reasonable levels so that employment and growth are not hindered, and ensuring that essential non-age-related public expenditures (such as education and investment) are not crowded-out by pressures for increased spending on pensions and healthcare.

The joint Commission–Council report to the European Council in Stockholm outlined a three-pronged strategy to address the budgetary consequences of ageing populations, namely: (1) running down public debt at a fast pace; (2) taking measures to raise employment rates, especially amongst women and older workers; and (3) reforming pension and health systems to place them on a sound financial footing, including greater recourse to the funding of public pensions in some countries. The overall sustainability of public finances also depends on progress being made to implement structural reforms in product, services and capital markets.

The Stockholm European Council called for the long-term sustainability of public finances to be factored into the SGP and the BEPG. Although the budgetary impact of ageing populations only becomes evident in the long-run, it is determined by short- to medium-term policy decisions taken within the time frame of the stability and convergence programmes. An appropriate balance has to be drawn between cutting taxes and running down public debt, and implies that priority should be given to the latter in high-debt countries. Current policy choices (such as the medium-term budgetary target, the pace of debt reduction and the scale and type of tax reforms) outlined in the programmes therefore need to be assessed against the commitment to place public finances on a sustainable footing. To conduct regular assessments of this nature at EU level, further work is needed in developing comparable data and indicators. Projections on the impact of ageing on public finances, along the lines of the work underway in the EPC, could be usefully updated on a regular basis, say every two or three years, and incorporated in the updates of the stability and convergence programmes.

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* *

The way ahead: strengthening coordination in budgetary issues

For the decentralised (bottom-up) approach to budgetary policy to work, there must be real substance to economic policy coordination with a realistic account taken of the euro-area dimension of national policy actions. Markets and the general public are not looking for a central fiscal authority in EMU, but instead for a tangible demonstra-

tion of the capacity to achieve a consistent budgetary policy at the euro-area and national level, and a willingness on the part of euro-area countries to respect agreed rules and budgetary goals. Effective policy coordination requires that a common and transparent analytical framework exist for analysing economic policy challenges and for devising policy responses, and that adequate and timely account be taken of the implications for the euro area of national policies. Further efforts are needed to improve cooperation on budgetary policy in EMU along these lines.

Part I

Current developments and prospects

Summary

The picture of budgetary developments in the euro area in 2000 is mixed. On the one hand, the budget deficit continued to shrink, the one-off budgetary receipts from the sale UMTS licences were used to reduce debt and the tax burden started to come down in most countries. On the other hand, the underlying budgetary positions showed no improvement; in some countries the fiscal effort fell short of what was planned in the stability and convergence programmes and highly-needed expenditure reforms were largely postponed. This leaves a number of euro-area countries, and especially the largest ones, vulnerable in the face of the current slowdown.

On the basis of the Commission spring forecasts, budget balances in the euro area, both in actual and cyclically-adjusted terms, are set to deteriorate slightly in 2001. This is due to a sizeable reduction in the tax burden which is only partly being compensated by expenditure consolidation. The risks, however, are on the downside as countries experience the consequences of slower growth. Moreover, slippages from budget targets are appearing in a number of countries. In order to limit the deterioration in underlying budgetary positions, a strict implementation of this years' budget programmes is necessary.

The euro area's macroeconomic policy mix in the early years of EMU has been broadly balanced in 2000 and 2001: an overall neutral stance of the euro area's fiscal policy has gone hand in hand with a monetary policy which has pursued its goal of price stability without impeding growth. However, even if the aggregate policy mix has been balanced, the budgetary behaviour in some Member States has been inappropriate for the monetary and cyclical conditions prevailing nationally. This particularly concerns a number of euro-area members which are experiencing overheating and inflation pressures.

As to the near future, maintaining a sound policy mix at the euro-area and national level is essential to limit the adverse consequences of the global slowdown. In partic-

ular, no deterioration in the structural budget balance in 2002 should be allowed for. This is of the utmost importance, especially for countries which have not yet completed the transition to budget positions of 'close to balance or in surplus', in accordance with the Stability and Growth Pact. In order to fend off the risk of moving close to the 3% of GDP deficit limit, these countries should, consistently with the 2001 BEPG, prepare budgets for 2002 in keeping with the need to achieve positions close to balance or in surplus, as set down in their stability programmes.

In the medium term, the national budgetary policies outlined in the updated stability and convergence programmes over the period 2001–04 appear to be consistent with the close to balance requirement of the Stability and Growth Pact. Moreover, given the growth assumptions, they imply a broadly neutral fiscal stance while allowing for a steady reduction in the tax burden.

While the objectives in the programmes appear to be adequate from a purely cyclical standpoint, three questions remain. First, for a number of countries, the proposed budgetary consolidation to attain balanced budget positions tends to be back-loaded to the final years of the programmes: strict multilateral surveillance will have to be exerted to prevent further postponement of the timetable for meeting the SGP goal. Second, there are risks in a number of countries that the budgetary targets set in the programmes will not be met, as relatively optimistic growth scenarios have been used, and because the structural component of recent increases in tax revenues may have been overestimated. Third, more ambitious budgetary targets are needed in the coming years before the budgetary impact of the demographic shock is fully felt. From this broader perspective, the current medium-term fiscal plans of most euro-area members, whilst going in the right direction, appear modest and will have to be improved upon.

1. Budgetary developments in 2000–01

1.1. The budgetary outcome in 2000

2000 was the second year of EMU and of the implementation of the Stability and Growth Pact (SGP). The 2000 broad economic policy guidelines (BEPG) called upon Member States to (i) take advantage of better-than-expected growth to achieve budgetary positions in 2000 that surpass the objectives set in the updated 1999 stability and convergence programmes; (ii) to meet a budgetary position of close to balance or in surplus earlier than envisaged in the updated stability and convergence programmes, and as a rule in 2001; (iii) to pursue further fiscal consolidation beyond the minimum to comply with the requirements of the SGP⁽¹⁾.

In 2000, budget balances (net of UMTS receipts⁽²⁾) in the euro area continued to improve reaching a deficit of 0.7% of GDP, i.e. 0.5% of GDP lower than in 1999. All euro-area Member States improved their actual budgetary positions compared with 1999, especially Austria, Belgium and Spain where deficits were substantially reduced, and in Ireland and Finland where surpluses increased. The three Member States remaining outside the euro area recorded substantial surpluses.

As shown in Table 1, a lower euro-area deficit has been achieved through a reduction of the government expenditure ratio which more than offset a fall in the government revenue ratio. This positive development is in line with the BEPG, and represents a clear trend break. Expenditure ratios declined due to lower primary expenditure ratios in most countries (except in Portugal and the UK) and a fall in the interest burden on public debt. Revenue ratios

(which were on an upward path until 1999) declined in most Member States, but did increase in Denmark, Finland and Portugal. In a historical perspective, however, both revenue and expenditure ratios remain at high levels.

The fall of the euro-area actual government deficit in 2000 compared with 1999 was mainly the result of economic growth being above trend, thus generating budgetary ‘growth dividends’. To identify the role played by discretionary policy measures on budget positions, it is necessary to look at the cyclically-adjusted primary balance (CAPB) which nets out the budgetary impact of the automatic stabilisers and the change in the interest burden. The CAPB is a more appropriate indicator in this regard compared with the cyclically-adjusted balance as it is not affected by changes in interest expenditures, which are not under the direct control of the budgetary authorities⁽³⁾.

The CAPB did not improve significantly in 2000 compared with 1999, indicating that on average no discretionary fiscal consolidation efforts were made. Indeed, it deteriorated in many Member States, and especially in Germany, France and Italy (the three largest economies in the euro area which still have substantial budget deficits) indicating that they did not use favourable growth conditions to improve budgetary positions.

It is also useful to compare the budgetary outcome for 2000 with *ex ante* plans. Table 2 shows that the deficit of 0.7% of GDP for the euro area in 2000 was some 0.3 percentage points of GDP better than what had been targeted in the 1999/2000 updated stability and convergence programmes, and some 0.5 percentage points of GDP better than the Commission’s forecast of autumn 1999. Two main factors lie behind this outcome. First, economic growth in 2000 for the euro area turned out to be 3.4%, compared with a 2.8% assumption used when setting the

⁽¹⁾ The compliance of the 2000 budgetary performance with the BEPG has recently been evaluated in detail in the annual Commission report on the implementation of the BEPG (European Commission, 2001b).

⁽²⁾ To ensure comparability across Member States and recognising the one-off dimension of these receipts, the budgetary figures in this chapter are presented net of UMTS receipts. For a presentation of the issues concerning UMTS licences, see Box 1.

⁽³⁾ Other measures of the fiscal stance have been used in academic literature and policy debate. For a survey, see Alesina and Perotti (1995).

Table 1

Budgetary developments in 2000 ⁽¹⁾

(% of GDP)

	Actual budget balance 2000	Change in actual balance 99/00	Change in actual balance due to:			Change in primary balance due to:		Cyclically adjusted balance 2000	Government debt 2000
			Revenue	Primary expenditure	Interest expenditure	Cyclical comp. ⁽²⁾	Primary CAB ⁽³⁾		
B	0.0	0.7	-0.1	-0.5	-0.2	0.8	-0.3	-0.2	110.8
D	-1.0	0.4	-0.2	-0.3	-0.2	0.5	-0.3	-0.8	60.3
E	-0.4	0.7	-0.1	-0.5	-0.3	0.3	0.2	-0.8	60.7
F	-1.4	0.2	-0.5	-0.6	-0.1	0.2	-0.1	-1.4	58.0
IRL	4.5	2.4	-0.6	-2.7	-0.3	0.7	1.4	3.1	38.9
I	-1.5	0.2	-1.0	-1.0	-0.3	0.4	-0.4	-1.3	110.3
L	5.3	0.6	-0.8	-1.4	0.0	1.5	-0.9	4.3	5.3
NL	1.3	0.4	-0.2	-0.1	-0.5	0.4	-0.5	0.7	56.2
A	-1.5	0.6	-1.0	-1.6	0.0	0.2	0.4	-1.5	62.9
P	-1.7	0.4	0.5	0.2	-0.1	0.1	0.2	-2.1	54.1
FIN	6.7	4.9	1.5	-3.0	-0.3	1.0	3.6	5.1	44.0
EUR-11	-0.7	0.5	-0.4	-0.7	-0.2	0.4	-0.1	-0.7	69.9
DK	2.4	-0.6	-2.7	-1.6	-0.5	0.3	-1.4	1.8	46.3
EL	-0.9	0.9	0.5	-0.1	-0.3	0.3	0.3	-0.8	103.9
S	4.0	2.2	0.3	-1.3	-0.6	0.5	1.2	3.3	55.6
UK	1.9	0.6	0.7	0.3	-0.3	0.2	0.2	1.8	42.9
EU-15	0.0	0.6	-0.3	-0.6	-0.3	0.4	0.0	-0.1	64.6

⁽¹⁾ Excluding UMTS.⁽²⁾ Component of the primary balance affected by economic fluctuations.⁽³⁾ Primary CAB = cyclically-adjusted primary balance.

Source: Commission services.

budgetary targets in the programmes: this leads to an estimated budgetary 'growth dividend' of some 0.3 % of GDP ⁽¹⁾. Second, account has to be taken of revisions to the budgetary outcome for 1999, which means that the 'starting position' in 2000 for the euro area was 0.2 % of GDP below what was assumed when the SGP targets were set. These factors, rather than additional discretionary measures, explain in full the better-than-expected outcome for 2000.

Graph 1 illustrates whether the fiscal effort estimated for 2000 came out higher or lower than was planned. This is done by comparing the *ex ante* cyclically-adjusted primary balance of the Commission's autumn 1999 forecast with the *ex post* outcome according to the Commission's spring 2001 forecast. For the euro area, the fiscal effort appears to have been slightly weaker than expected. At Member State level, the picture is more diverse. In several

countries, budgetary consolidation was greater than planned (Finland, Austria, Greece and Sweden), whereas in others it was weaker (Luxembourg, Germany and to some extent also Belgium, France, Ireland ⁽²⁾, the Netherlands and Denmark). It is worth noting that the large euro-area Member States were among the group of countries that undershot this estimate of fiscal effort.

Government gross-debt-to-GDP ratios continued to fall in 2000 as a result of lower deficits, healthy economic growth, and the decision to allocate UMTS receipts to debt reduction. The euro-area debt ratio in 2000 fell below 70 % of GDP from over 72 % of GDP in 1999. The pace of reduction was particularly rapid in Belgium, Ireland and the Netherlands. Most countries now have a stock of debt at or below the 60 % reference value of the Treaty, although three countries (Belgium, Italy and Greece) still have debt ratios above 100 % of GDP.

⁽¹⁾ In the Commission method to calculate cyclically adjusted budget balances, the budgetary sensitivity to growth in the euro area is 0.5. This estimate is based on calculations made by the OECD. See last year's report (European Commission, 2000a).

⁽²⁾ Ireland in 1999 made a one-off capital transfer of 1.8 % of GDP to discharge future pensions obligations (see Section 2.3 and Part V). This transaction was not foreseen when the autumn 1999 forecast was made but the figure in Graph 1 has been adjusted to take it into account.

Table 2

Evolution in estimates of government budgets for 2000 (*)

	1999/2000 Stability/convergence programme (*) (1)		Outturn (2)		Difference	
	Real GDP growth (% change)	Budget balance (% of GDP)	Real GDP growth (% change)	Budget balance (% of GDP)	Real GDP growth (% change)	Budget balance (% of GDP)
B	2.5	- 1.0	4.0	0.0	1.5	1.0
D	2.5	- 1.0	3.0	- 1.0	0.5	0.0
E	3.7	- 0.8	4.1	- 0.4	0.4	0.4
F	3.0	- 1.7	3.1	- 1.4	0.1	0.3
IRL	7.4	3.3	10.7	4.6	3.3	1.3
I	2.2	- 1.5	2.9	- 1.5	0.7	0.0
L	4.9	2.5	8.5	5.5	3.6	3.0
NL	2.5	- 0.6	3.9	1.3	1.4	1.9
A	2.8	- 1.7	3.2	- 1.5	0.4	0.2
P	3.3	- 1.5	3.3	- 1.8	0.0	- 0.3
FIN	3.9	4.7	5.7	6.7	1.8	2.0
EUR-11	2.8	- 1.0	3.4	- 0.7	0.6	0.3
DK	1.6	2.1	2.9	2.5	1.3	0.4
EL	3.8	- 1.2	4.1	- 0.9	0.3	0.3
S	3.0	2.1	3.6	4.0	0.6	1.9
UK	2 1/4 (3)	0.2 (3)	3.0	1.9	3/4 (4)	1.7 (4)
EU-15	2.7	- 0.7	3.3	0.0	0.6	0.7

(*) Excluding UMTS proceeds.

(1) First round of updates of late 1999/early 2000.

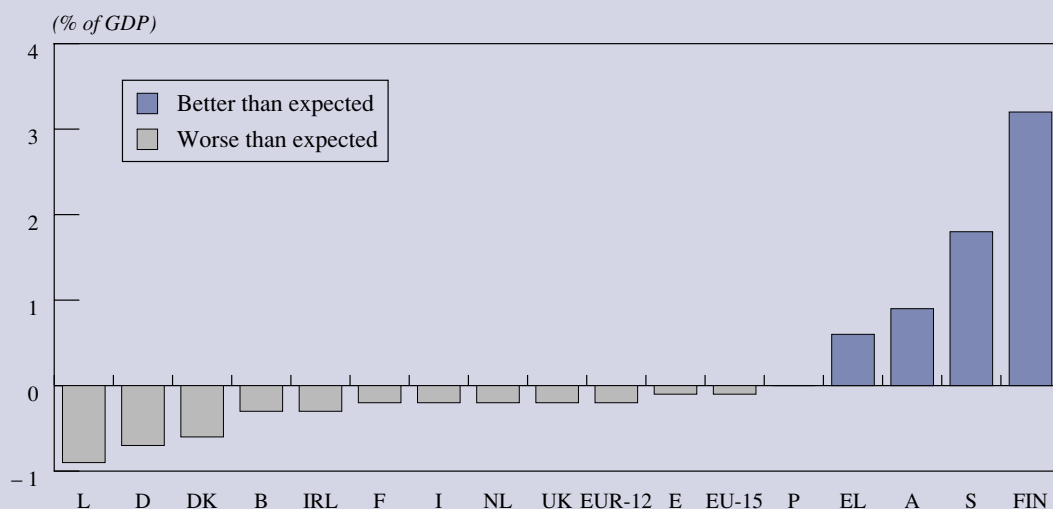
(2) Commission spring 2001 forecast.

(3) Financial year.

(4) Indicative, since comparison between financial year and calendar year figures.

Source: Commission services.

Graph 1: Difference between estimated expected and realised fiscal effort in 2000, in % of GDP



NB: The graph shows the difference between the change in the cyclically-adjusted primary balance.

Source: Commission services.

Box 1: UMTS proceeds

According to a decision of the European Parliament and of the Council of 1998 ⁽¹⁾, all Member States should allocate third-generation (or UMTS) mobile phone licences by 1 January 2002, to allow the co-ordinated and progressive introduction of UMTS services.

Member States followed different procedures for allocating UMTS licences (see Table 3). Some countries allocated licences via an auction, whereby licences are essentially awarded on the basis of the value of the bid. Other countries have opted for a pre-determined fee (of different sizes according to country) with comparative bidding (so-called beauty contest): the authorities took account of factors such as the applicant's financial resources, reliability and safety, quality and technological development of services and competitive framework. These approaches are not mutually exclusive, and in some cases elements of the beauty contest are combined with an auction. Payment arrangements also differed across countries ranging from an up-front pay-

ment to the spreading out of payments over the lifetime of the licence.

Depending on the procedure used and the timing of the allocation procedure, government proceeds have varied substantially across countries with the highest government receipts having been raised using an auction framework. However, as market conditions and expectations about future developments deteriorated in the course of 2000, the earlier auctions generated relatively higher bids than those that came later. Also, the technical design of the auctions (bidding sequencing and number of licences on offer) proved to be essential for determining the final price. All in all, the largest government receipts, as a share of GDP, were raised in the UK and Germany, with Austria and the Netherlands also raising substantial amounts: all these countries used an auction allocation procedure. Substantial receipts were expected in France for 2001, using a beauty contest with a fixed price: however, the allocation procedure has been postponed as financial market conditions have deteriorated.

⁽¹⁾ Decision No 128/1999/EC of the European Parliament and of the Council of 14 December 1998 on the coordinated introduction of a third generation mobile and wireless communication system (UMTS) in the Community (OJ L 17, 22.1.1999, p. 1).

In the context of EU budgetary surveillance, two options were considered by statisticians on how UMTS proceeds should be recorded in the ESA 95 national accounts. The

Table 3

Allocation of UMTS licences, procedure used and budgetary impact

(% of GDP)

Country	Allocation procedure used	Completion date	Impact on budget balance (ESA 95)	
			2000	2001
B	Auction	Completed March 2001	—	0.2
D	Auction	Completed August 2000	2.5	—
EL	Auction probable	Planned summer 2001	—	—
E	Beauty contest	Completed March 2000	0.1	—
F	Beauty contest	Put on hold	—	0.5
IRL	Beauty contest	Planned for June 2001	—	—
I	Auction	Made in October 2000	1.2	—
L	Beauty contest	Planned autumn 2000	—	—
NL	Auction	Completed July 2000	0.7	—
A	Auction	Q4 2000	0.4	—
P	Beauty contest	Completed end 2000	0.4	—
FIN	Beauty contest	Completed March 1999	—	—
Euro area			1.1	0.1
DK	Auction	Planned 3Q 2001	—	0.2
S	Beauty contest	Completed end 2000	—	—
UK	Auction	Completed April 2000	2.4	—
EU-15			1.3	0.1

Source: Commission services and the OECD.

payments to the governments could either be viewed as a 'rent' paid by the companies for the use of the spectrum; alternatively, the UMTS licence could be seen as a real asset sold by the government and purchased by the companies. In the former case, the payments would be spread out over the lifetime of the licence and recorded accordingly in national accounts. In the latter case, a single up-front government receipt should be recorded in the national accounts at the time of the allocation of the licence. Eurostat ⁽²⁾ ruled in favour of this latter approach and this is

⁽²⁾ See Eurostat press release No 81/2000 of 14 July 2000.

now the principle used in the ESA 95 ⁽³⁾ More precisely, the sale of real assets is recorded as negative investments on the expenditure side of the accounts. This implies that there is a temporary improvement of the actual budget balance via a one-off reduction in government expenditure.

⁽³⁾ According to the Eurostat press release, a recording of a rent is a possible alternative approach if the life-time if the licence is less than five years (not applicable here as all the licenses run for 15–20 years), or if the contract does not specify the bulk of the purchasing price leaving this to be conditional later developments over the life-time of the contract.

1.2. Budgetary developments in 2001 and prospects for 2002

According to the spring 2001 Commission forecast, the euro area and EU growth would attain 2.8% in 2001, lower than in 2000 but still at or above trend growth. The government deficit in 2001 was projected to increase slightly in the euro area and in the EU as a whole (to 0.8% and 0.3% of GDP respectively, see Table 4). This represents the first deterioration in budget positions since 1993. At Member State level, budget balances were expected to deteriorate in Germany, Ireland, Luxembourg, the Netherlands, Finland and the UK.

The cyclically-adjusted budget balance for both the euro area and the EU were also projected to deteriorate slightly in 2001. Cyclically-adjusted deficits will remain well above 'close to balance or in surplus' levels in Germany, France, Italy, and Portugal. Underlying positions in France and Italy were forecast to improve marginally, but only because of further reductions in the interest burden.

The main reason behind this deterioration is that tax reforms in many Member States (see Box 2 for further details) are not being fully financed by expenditure reductions. Total government revenue as a share of GDP in the euro area is forecast to decrease by 0.8% of GDP in 2001 to 47.2% of GDP. A fall in the revenue ratio of more than 1 percentage point of GDP is projected in Germany, Luxembourg, the Netherlands, Finland and Sweden, whereas in Spain, Austria and Portugal they will increase somewhat. In Portugal, higher tax revenues are being off-

set by an equally large increase in primary expenditure ⁽¹⁾. The non-compensated reduction in revenues in Ireland has raised stabilisation concerns in view of overheating pressures fuelled by the monetary conditions prevailing domestically (see Chapter 2).

According to the spring forecast, international economic conditions are expected to improve from the latter half of 2001 onwards as the downturn in the US economy is assumed to be short-lived. Given the anticipated rebound of growth, budgetary positions are projected (on the basis of the technical assumption of a no-policy change) to improve in actual terms in 2002 so that the euro-area deficit should be reduced to 0.4% of GDP. The EU as a whole is projected to return to a balanced budget position (see Table 5). The Commission forecast projects that cyclically-adjusted budget balance in the euro area will improve by 0.3 percentage points of GDP to a deficit of 0.6% of GDP.

There are several risks to the 2001 and 2002 projections. Firstly, the slowdown in growth in the current year is now likely to be sharper than incorporated in the Commission forecasts. Secondly, there is a risk of budgetary slippage in some countries as the result of an over-optimistic view on structural content of past improvements in revenues and expenditures.

⁽¹⁾ The composition of budgetary adjustment in Portugal is a cause for concern, highlighted in the Council opinion on the Portuguese updated stability programme (see Part V).

Table 4

Forecast budgetary developments in 2001 ⁽¹⁾

(% of GDP)

	Actual budget balance 2001	Change in actual balance 2000/01	Change in actual balance due to:			Change in primary balance due to:		Cyclically adjusted balance 2001	Government debt 2001
			Revenue	Primary expenditure	Interest expenditure	Cyclical comp. ⁽²⁾	Primary CAB ⁽³⁾		
B	0.5	0.5	-0.9	-1.0	-0.4	0.1	0.0	0.2	104.4
D	-1.7	-0.7	-1.1	-0.3	-0.1	0.1	-0.9	-1.6	58.7
EL	0.0	0.9	0.0	-0.3	-0.6	0.4	0.0	-0.3	99.9
E	0.1	0.5	0.3	-0.1	-0.1	-0.1	0.5	-0.2	58.1
F	-1.1	0.3	-0.5	-0.5	-0.1	0.1	0.0	-1.2	56.9
IRL	3.9	-0.6	-0.9	0.0	-0.3	-0.3	-0.6	2.8	33.1
I	-1.3	0.2	-0.7	-0.5	-0.3	0.1	-0.3	-1.3	105.7
L	4.0	-1.3	-2.0	-0.7	0.0	-0.2	-1.1	3.2	5.1
NL	0.8	-0.5	-2.1	-0.9	-0.7	0.0	-1.2	0.2	51.9
A	-0.7	0.8	0.5	-0.3	0.0	0.0	0.8	-0.7	61.6
P	-1.5	0.2	1.2	1.1	0.0	-0.1	0.3	-1.8	53.0
FIN	5.3	-1.4	-1.8	-0.4	-0.1	-0.2	-1.3	3.9	41.7
Euro area	-0.8	-0.1	-0.8	-0.5	-0.2	0.1	-0.4	-0.9	67.4
DK	2.9	0.5	0.0	-0.1	-0.4	-0.3	0.5	2.6	42.4
S	3.9	-0.1	-1.3	-0.4	-0.7	-0.2	-0.7	3.4	53.5
UK	1.0	-0.9	-0.4	0.9	-0.4	0.0	-1.3	0.9	38.3
EU-15	-0.3	-0.2	-0.7	-0.2	-0.3	0.0	-0.5	-0.4	61.9

⁽¹⁾ Excluding UMTS.⁽²⁾ Component of the primary balance affected by economic fluctuations.⁽³⁾ Primary CAB = cyclically-adjusted primary balance.

Source: Commission services, spring 2001 forecasts.

Thirdly, the effects of announced tax reforms are still uncertain and may well result in unexpected revenue shortfalls. Overall, there are risks of budgetary deterioration which are particularly pronounced in some countries (see Part V).

If this slowdown in growth affects the outlook for 2002 there is a question of what should be the appropriate response of budgetary policy. In line with the 'philosophy' of the SGP, those countries that have already achieved budget positions which respect the targets of 'close to balance or in surplus' should allow the automatic stabilisers to operate freely to cushion the downturn. In contrast, in those Member States that have yet to reach the SGP target, the full use of automatic stabilisers may not be feasible as it could lead to deficits that approach the 3% of GDP deficit upper-ceiling. Several countries, most notably the large euro-area economies (Germany, Italy and France) and Portugal continue to have cyclically-adjusted government deficits close to or above 1% of GDP, and therefore still have consolidation efforts to make in the coming years to build up the nec-

essary safety margins ⁽¹⁾. Moreover, these Member States seem to have particular risks of budgetary slippage in 2001.

It is therefore essential that the projected budgetary deterioration in 2001 does not lead to a further worsening in 2002. Consistently with the 2001 BEPG, Member States that still have significant deficit positions, both in actual and cyclically-adjusted terms, should prepare budgets in 2002 in keeping with the need to achieve positions close to balance or in surplus, as set down in their stability programmes. Other Member States with more favourable budgetary position are better able to withstand negative economic developments. However, in the countries where inflationary pressures are present, a looser fiscal stance should be avoided as it would aggravate economic imbalances.

⁽¹⁾ In the Commission report on the implementation of the BEPG it was noted that the budgetary plans for 2001 contain a budgetary safety margin large enough to let automatic stabilisers play in all countries with the exception of Germany and Portugal. In addition, cyclical safety margins were deemed to be on the low side in France, Italy and Austria.

Table 5

Forecast budgetary developments in 2002 ⁽¹⁾

(% of GDP)

	Actual budget balance 2002	Change in actual balance 2001/02	Change in actual balance due to:			Change in primary balance due to:		Cyclically adjusted balance 2002	Government debt 2002
			Revenue	Primary expenditure	Interest expenditure	Cyclical comp. ⁽²⁾	Primary CAB ⁽³⁾		
B	0.7	0.3	- 0.2	- 0.2	- 0.3	0.1	- 0.2	0.3	98.6
D	- 1.2	0.5	0.1	- 0.4	- 0.1	0.2	0.2	- 1.3	57.7
EL	0.6	0.6	0.2	0.2	- 0.6	0.5	- 0.5	- 0.2	98.0
E	0.2	0.1	- 0.1	0.0	- 0.1	- 0.1	0.0	0.0	55.8
F	- 0.8	0.3	- 0.4	- 0.6	- 0.1	0.1	0.2	- 1.0	55.3
IRL	3.5	- 0.4	- 1.0	- 0.4	- 0.2	- 0.4	- 0.3	2.8	26.5
I	- 1.0	0.3	- 0.5	- 0.5	- 0.4	0.2	- 0.3	- 1.2	102.6
L	3.0	- 1.0	- 1.9	- 0.8	0.0	- 0.2	- 0.8	2.4	4.9
NL	1.4	0.6	- 0.2	- 0.5	- 0.3	- 0.2	0.4	0.9	47.7
A	0.0	0.7	- 0.3	- 0.8	- 0.1	0.0	0.6	0.0	59.5
P	- 1.5	0.1	0.5	0.4	0.0	- 0.1	0.1	- 1.6	52.6
FIN	5.2	- 0.2	- 1.5	- 1.2	- 0.2	- 0.4	0.1	4.1	39.5
Euro area	- 0.4	0.4	- 0.3	- 0.5	- 0.2	0.1	0.1	- 0.6	65.2
DK	2.8	- 0.1	- 1.0	- 0.6	- 0.2	- 0.1	- 0.3	2.6	38.7
S	3.4	- 0.5	- 1.1	- 0.4	- 0.2	0.0	- 0.7	2.9	49.2
UK	0.9	- 0.1	- 0.4	0.1	- 0.3	0.1	- 0.6	0.6	35.4
EU-15	0.0	0.2	- 0.3	- 0.4	- 0.2	0.1	0.0	- 0.2	59.5

⁽¹⁾ Excluding UMTS.

⁽²⁾ Component of the primary balance affected by economic fluctuations.

⁽³⁾ Primary CAB = cyclically-adjusted primary balance.

Source: Commission services, spring 2001 forecasts.

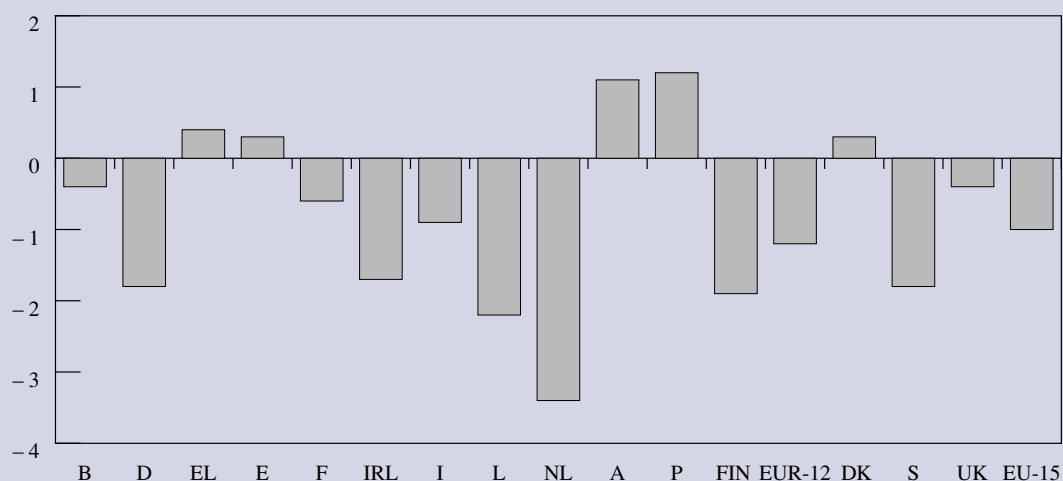
Box 2: The impact of tax reforms on tax burdens

Past trends towards higher tax revenues are now being reversed and the euro area is expected to reduce tax receipts by a cumulative 1.2 percentage points of GDP in 2000 and 2001. Member States' intention to reduce the overall tax burden and to reform tax systems was clearly indicated in their updates of stability and convergence programmes submitted at the end of 2000 (see European Commission, 2000a). While reforms vary in coverage and depth, most Member States are reducing the total tax burden, mainly by cutting direct taxation on personal and corporate income.

There is a common direction in EU tax policies towards a lowering of the tax burden on labour. Most Member States have already implemented or announced initiatives to cut personal income taxes (reduction in marginal rates, increase in both family allowances and minimum exempted income)

and to reduce both employers' and employees' social security contributions. Many consist of lowering marginal tax rates at the top and the bottom of the income scale (Germany, Ireland), or sometimes across all income brackets (Greece, Spain, France, Italy, the Netherlands, Luxembourg, Finland and Sweden). Reforms also provide for higher family allowances and higher thresholds for income tax (Spain, Italy and the UK) so that fewer wage earners pay tax. In other Member States, tax-cutting measures appear to be more targeted at reducing fiscal pressure at the low-to-middle end of the income distribution (Belgium, Greece, Ireland, Portugal, Austria and outside the euro area Denmark, UK). The combination of such reforms and the effect of the cycle on the labour tax base will bring the euro-area tax burden on labour down by around 1 percentage point of the average gross wage between 2000 and 2002 (Graph 2).

Graph 2: Changes in the tax burden on labour, 2000–02



NB: In percentage points of the average gross wage.
 Source: Commission services, spring 2001 forecasts.

Since personal income taxes are also levied on capital income, the reforms described above will impact on the tax burden on capital, albeit more limited than the impact on labour. In addition, measures implemented by many Member States also concern corporate income and are expected to improve the functioning of capital markets. In a majority of Member States (Germany, France, Italy, Ireland, the Netherlands, Portugal, Denmark and Sweden), the reduction of capital taxes is being carried out through a lowering of corporate taxation and taxes on capital gains ⁽¹⁾.

⁽¹⁾ However, it is worth mentioning that Finland has increased corporate income taxes this year.

Reforms already implemented or planned in some countries (Greece, Spain, Austria and Finland) seem to be more limited, but are also meant to improve the functioning of capital markets, especially by creating incentives for risk, venture and intangible capital.

As regards indirect taxes, measures announced to date have been rather scattered. Leaving aside Italy and the Netherlands where general increases in VAT rates have been announced, changes in indirect taxes in other Member States only affect a small share of the total taxes base (e.g. lowering VAT on certain labour-intensive sectors).

2. The fiscal stance and policy mix in 2000–01

2.1. Assessing the policy mix in EMU

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, albeit subject to constraints on the size of deficits. In EMU, national authorities set the fiscal stance at Member State level, and consequently the policy mix from a national standpoint. National budgetary policies also determine endogenously the fiscal stance for the euro area as a whole. The aggregate fiscal stance deserves special attention in the EMU context since it directly 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.

A cautious fiscal policy is needed in the early years of EMU so that the policy mix is consistent with the stability-oriented Maastricht framework and with the need to strengthen credibility in the new institutional regime⁽¹⁾. This will facilitate the task of the ECB to preserve price stability and at the same time to support growth. Moreover, the ensuing low interest rates would lead to a rapid reduction in public debt which is still high in some Member States. Such a policy stance would also contribute to stimulating business investment which has been the weakest component of activity in most countries over the past decade. In contrast, a policy mix consisting of a loose fiscal policy and higher-than-needed interest rates would

be damaging, and in EMU's infancy could undermine its credibility.

A balanced policy mix at aggregate euro-area level has to go hand in hand with a balanced policy mix at the national level: an 'appropriate' aggregate policy mix derived from 'wrong' national monetary-fiscal conditions would not prove sustainable⁽²⁾. The analysis below considers the policy mix and fiscal stance for the perspective of the euro area and Member States in turn.

2.2. The euro-area dimension

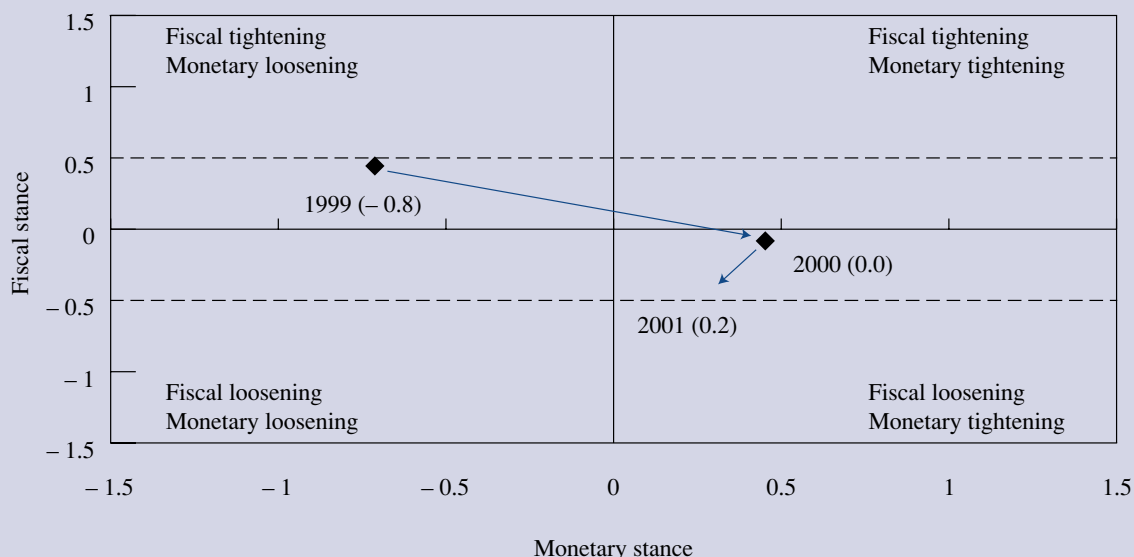
The policy mix of the euro area during the first three years of EMU is illustrated in Graph 3 which pictures the fiscal stance against the monetary stance. To capture the fiscal stance, that is the budgetary counterpart of discretionary fiscal measures, the yearly change in cyclically-adjusted primary balance (CAPB) is used. The monetary stance is proxied by the change in the short-term real interest rate. A range of $\pm 0.5\%$ of GDP indicates what can be considered a broadly neutral fiscal stance. For 2001, only an approximate indicator of the monetary stance is available⁽³⁾. The figures in parenthesis show estimates of the output gap of the euro area.

⁽²⁾ Under the SGP, automatic stabilisers are the usual means to dampen variations in economic activity (see Part III). However, at the national level, the need for active fiscal policy cannot be ruled out altogether because countries, especially small ones, may face a monetary stance which is not appropriate to their domestic needs.

⁽³⁾ For 2001, the direction of change is computed on the basis of the latest short-term interest rate (June 2001) and projected inflation rate in the Commission's spring forecast. In interpreting Graph 3, one should take into account that the change in real interest rates captures the orientation of monetary policy, but does not reflect overall monetary conditions which are also affected by the changes in the effective exchange rate. However, measures such as the so-called monetary conditions index which combine the change in both interest rates and exchange rates, are not without methodological problems.

⁽¹⁾ European Commission (2000a), Buti and Sapir (2001).

Graph 3: The fiscal and monetary stance in the euro area, 1999–2001



Source: Commission services.

Graph 3 confirms that the aggregate policy mix in the early years of the euro has been balanced: a broadly neutral fiscal stance has been coupled with growth-supporting monetary conditions (account should also be taken of the depreciation of the euro), thus helping to sustain economic activity and close the output gap. The risk of an unbalanced policy mix for the euro area due to a procyclical fiscal policy stance in 2001, signalled in last year's 'Public Finances in EMU' report (European Commission, 2000a), has to some extent diminished as a result of decelerating growth prospects. Nevertheless, fiscal discipline is required to maintain a growth-supportive policy mix. If the deterioration in the fiscal stance projected for 2001 is compounded by a further relaxation in following years, an unbalanced policy mix could emerge which would risk overburdening monetary policy.

2.3. The national dimension

Graphs 4 and 5 help assess the policy mix at the national level in 2000. Graph 4 has the fiscal stance on the vertical axis, with the horizontal axis showing the level of the real short-term interest rate in 2000 (with the arrow indicating

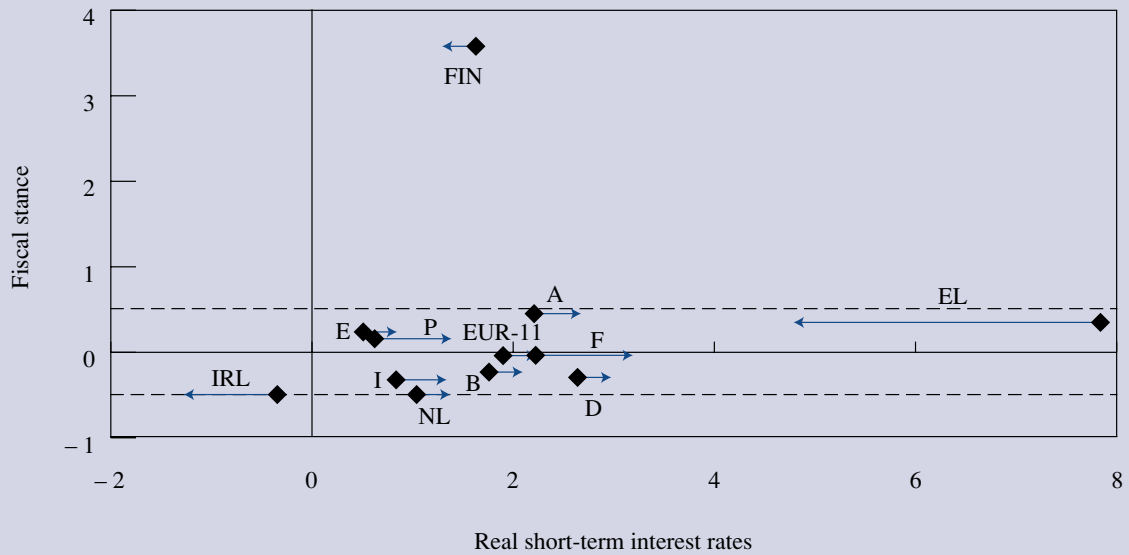
the direction of change from 1999) ⁽¹⁾. Countries at the far north-east are tightening fiscal policy and face higher-than-average real interest rates, while those at the far south-west experience a fiscal loosening and low real interest rates. Graph 5 shows the fiscal stance against the estimated output gap in 2000.

The general picture emerging from both graphs is that most countries, alongside the euro-area average, had a broadly neutral fiscal and monetary stance in 2000. Taking into account the depreciation of the euro, overall monetary conditions were growth-supportive. This took place against a background of closing or narrowing output gaps.

Not in all countries, however, the overall macroeconomic policy mix was neutral. In Greece, the monetary stance eased substantially while the fiscal stance was broadly neutral. Finland experienced a discretionary tightening

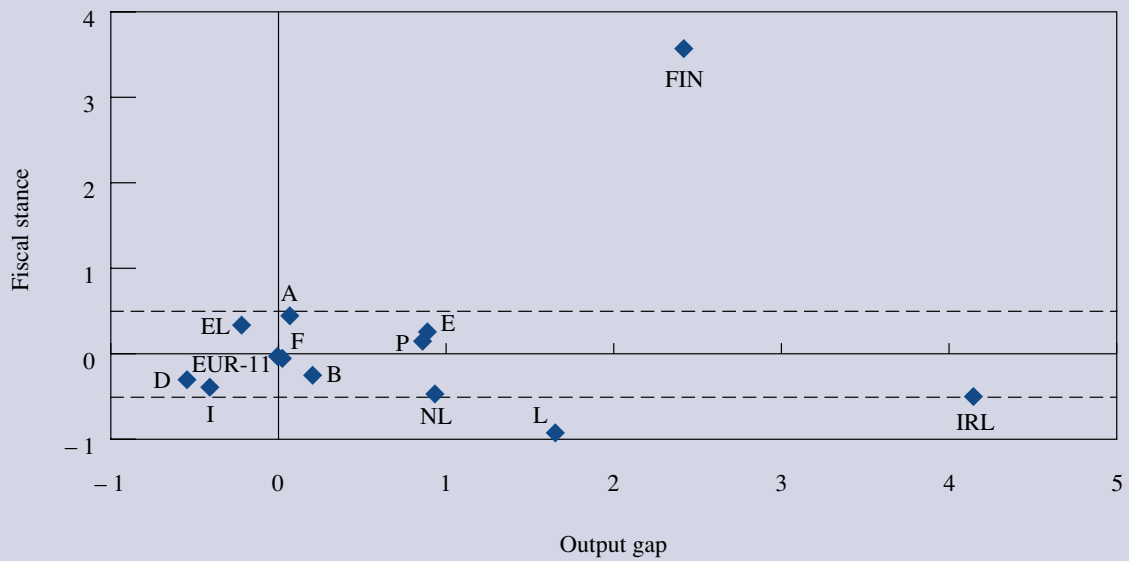
⁽¹⁾ Unlike Graph 3, which only shows the change in short-term real interest rates, Graphs 4 and 6 show also the levels of interest rates. This is because the relative position of countries in terms of interest rate levels is also important to capture the stance of monetary policy at the national level.

Graph 4: Policy mix at the national level, 2000



Source: Commission services.

Graph 5: Fiscal stance and cyclical positions in the EMU countries, 2000



Source: Commission services.

of budgetary policy, which seems appropriate given that the monetary stance tended to ease (i.e. real short-term interest rates decreased as the increase in the rate of inflation was higher than the increase in nominal short-term interest rates) and estimated output gaps were positive and large. In Ireland, the deficit figure for 1999 includes a one-off capital transfer of 1.8% of GDP for discharging future pensions liabilities of the formerly State-owned telecommunication company. Netting this out implies a cyclically-adjusted primary surplus of 5.7% of GDP in 1999 (instead of 3.9%). Taking this one-off effect into account, the fiscal stance in 2000 was expansionary.

The appropriateness of the policy mix at the national level in 2001 can be gauged on the basis of Graphs 6 and 7. The analysis is conditional on the assumptions used for the real interest rates. In Graph 6, the real short-term interest rate is the average projected for 2001 taking into account developments of nominal interest rates up to June 2001 and forecast inflation rates for 2001. The arrows show the direction of the movement from the previous year and not the precise size of the change.

A cursory examination of both graphs shows that a majority of countries are projected to have a broadly neutral fiscal stance in 2001. Four countries (Germany, Ireland, the

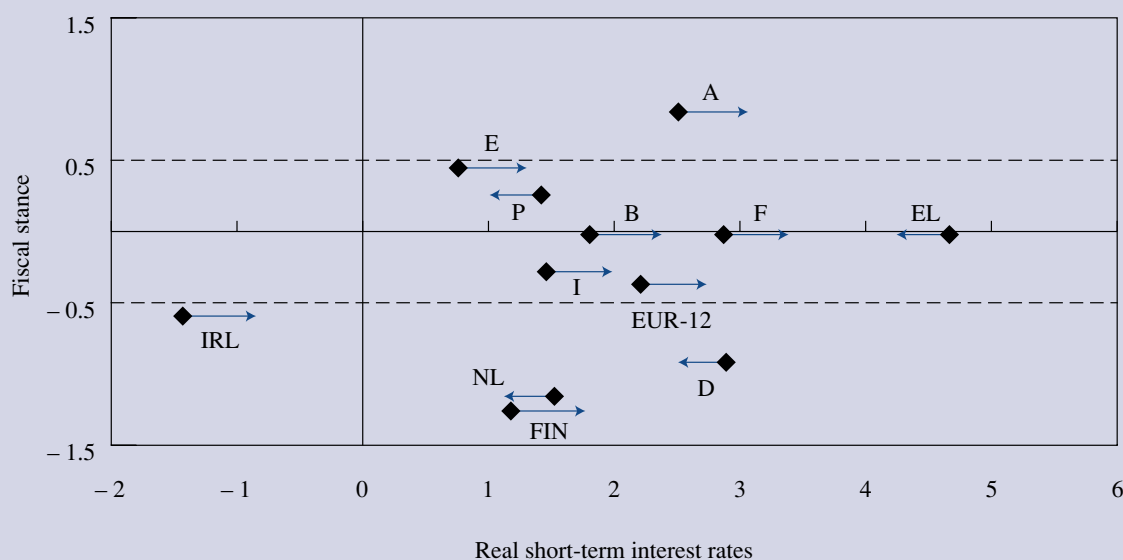
Netherlands and Finland) experience a sizeable fiscal easing while Austria registers a discretionary tightening.

As indicated above, Germany in 2001 will undertake a substantial loosening of the fiscal stance due to a tax reform. The deterioration in the underlying budgetary balance decreases Germany's room for manoeuvre to cope with adverse shocks. On account of its relative size, the discretionary easing of fiscal policy in Germany leads to the slight deterioration in the structural primary balance of the euro area in 2001.

The forecast budgetary loosening in the Netherlands, also due to a tax reform, occurs in a situation of a positive output gap, high inflation and falling real short-term interest rates. Although the budgetary situation remains in surplus, the fiscal loosening appears to be inconsistent with the need to contain inflationary pressures.

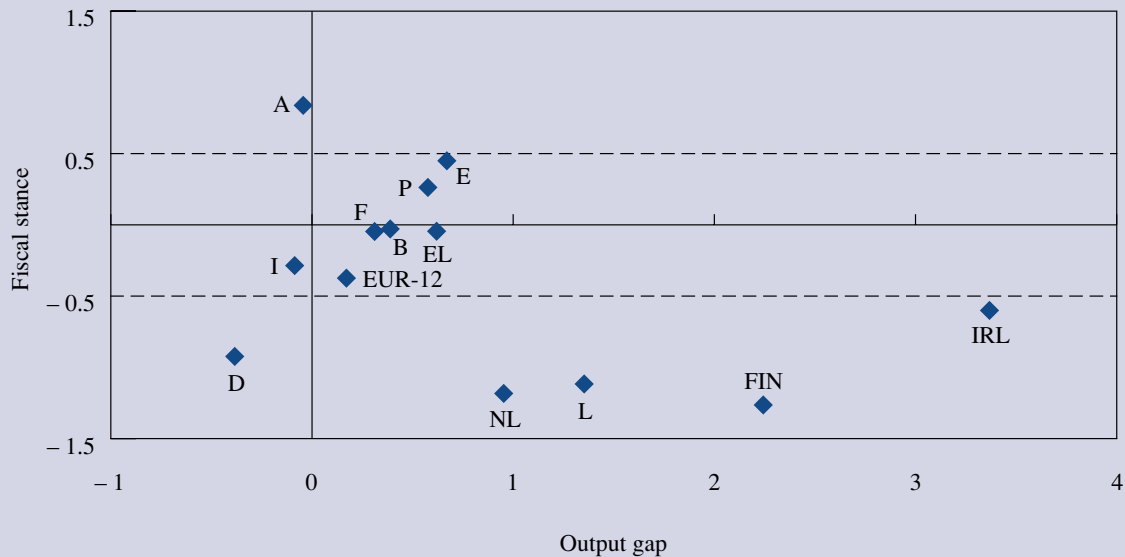
In Ireland, a sizeable fiscal expansion takes place in a context of large positive output gap and very low real interest rates (in spite of their projected increase). This adds to the fact that the fiscal stance in 2000 was expansionary at a time when the monetary stance was loosening. Hence, the planned loosening of the fiscal stance in 2001, while not calling into question the close to balance rule

Graph 6: Policy mix at the national level, 2001



Source: Commission services.

Graph 7: Fiscal stance and cyclical positions in the EMU countries, 2001



Source: Commission services.

of the SGP, is at odds with the need for economic stability ⁽¹⁾.

The assessment of the policy mix in Finland is challenging. This country has a positive output gap and a large

structural surplus. In these circumstances, a faster reduction of the high tax burden may be desirable, provided it is geared towards improving the supply side of the economy to counterbalance any expansionary demand effects of looser fiscal policy and avoid adding to inflationary pressures.

Of all EU countries, only Austria registers a clear fiscal tightening, which contributes to moving towards a balanced budget position. Consistent with the close to balance target of the SGP.

⁽¹⁾ This assessment was at the basis of a Council recommendation to Ireland in February 2001 (2001/191/EC of 12 February 2001, OJ L 69/22 of 10.3.2001).

3. Medium-term budgetary outlook

3.1. Medium-term budgetary developments in the stability and convergence programmes

The examination of the second round of updates of stability and convergence programmes which covers the period 2000 to 2004 was completed in March 2001 ⁽¹⁾. The updated programmes project a sustained economic growth in the euro area: after accelerating in 2000 to 3.4%, growth will decline gently to around 3% in 2004 (see Table 6). This is broadly in line with the Commission spring 2001 forecast, even if the assumptions for 2001 in the programmes now clearly look over-optimistic. Compared to the previous round of updated programmes, these

⁽¹⁾ The information provided by the Member States in the stability and convergence programmes is not always complete or comparable and certain assumptions therefore had to be made to estimate the aggregate figures for the euro area. The following approach has been chosen: (1) the same figure as in the year 2003 was used when the 2004 figure was not provided in the programme; (2) the Commission services' spring 2001 forecasts were used when data were not provided in the programme; (3) the country weights are based on harmonised GDP at current market prices. The cyclical component has been calculated on the basis of the Commission services' cyclical adjustment method (see European Commission (2000a)). Also, the information on interest payments is only indicative, as the programmes do not provide harmonised figures for this expenditure category.

assumptions correspond to an upward revision of average growth for the 2000–03 period, mainly due to the relatively higher growth projections for 2001 in France, Italy and the Netherlands. The euro-area trend GDP growth rate is projected to increase slightly to 2.8% at the end of the period. Furthermore, the euro-area output gap turns positive in 2001 and remains slightly positive over the rest of the projection period.

The programmes project a gradual improvement of actual budget balances over the period (see Table 7). Excluding UMTS receipts, actual budget balances in the euro area are set to move from a deficit of 0.7% of GDP in 2000 to balance in 2003 and a surplus of 0.4% of GDP in 2004. Within the euro area, Germany, France and Portugal in 2003 will show small deficits in actual terms, but by 2004, all countries project an actual budgetary position of balance or surplus. Outside the euro area, the UK target moves from a government surplus of over 1% of GDP in 2000 to a deficit of 1% of GDP in 2004.

In underlying terms, the estimated cyclically-adjusted budget balance (CAB) of the euro area is set to improve from a deficit of 0.6% of GDP in 2000 to a surplus of 0.2% of GDP in 2004 (see Graph 8).

By the end of the projection period, all countries are expected to comply with the close to balance rule of the

Table 6

Euro area growth assumptions in the 2000 updates

	2000	2001	2002	2003	2004
Real GDP growth	3.4	3.2	3.0	3.0	3.1
Trend GDP growth (*)	2.7	2.8	2.8	2.9	2.8
Output gap (*)	-0.2	0.2	0.3	0.4	0.5
<i>Pm</i> : GDP growth, Commission forecast	3.4	2.8	2.9		

(*) Commission estimates on the basis of the programme figures.

Source: Stability programmes and Commission services, spring 2001 forecasts.

Table 7

Budget targets in 2000 stability and convergence programmes

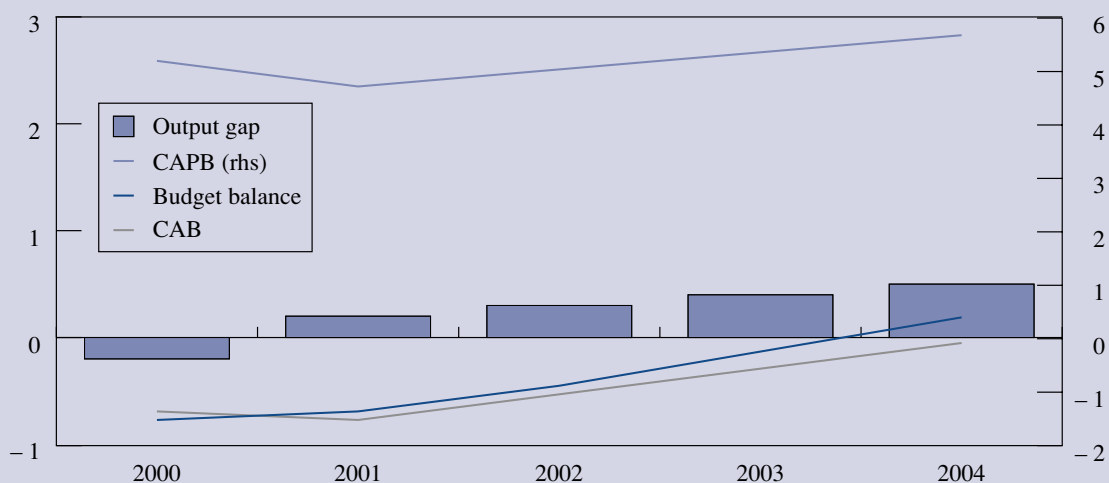
(% of GDP)

	Budget balance targets					Gross debt	
	2000	2001	2002	2003	2004	2001	2004
B	-0.1	0.2	0.3	0.5	0.6	105.8	92.9
D	-1.0	-1.5	-1.0	-0.5	0.0	58.0	54.5
EL	-0.8	0.5	1.5	2.0	2.0	98.9	84.0
E	-0.3	0.0	0.2	0.3	0.3	58.9	49.6
F	-1.4	-1.0	-0.6	-0.4	0.2	56.9	53.3
IRL	4.7	4.3	3.8	4.6	n.a	33.0	24.0 (*)
I	-1.3	-0.8	-0.5	0.0	0.0	106.6	94.9
L	3.0	2.6	2.5	2.5	n.a	5.6	5.6 (*)
NL	1.0	0.7	0.6	1.1	1.9	52.3	42.2
A	-1.8	-0.8	0.0	0.0	0.0	61.4	55.3
P	-1.9	-1.1	-0.7	-0.3	0.0	53.4	48.1
FI	4.5	4.7	4.4	4.5	4.9	39.2	32.2
EUR-12	-0.7	-0.6	-0.3	0.1	0.5	67.7	60.9
DK	2.7	2.8	2.6	2.6	2.7	44.7	36.8
S	3.4	3.5	2.0	2.0	n.a	53.2	48.2 (*)
UK	1.1	0.6	-0.1	-0.9	-1.0	37.7	35.5
EU-15	-0.2	-0.2	-0.1	0.0	0.4	61.6	55.6

NB: Figures are net of UMTS receipts.

Source: Stability and convergence programmes and Commission services.

Graph 8: Euro area: budgetary developments and output gap



Source: Stability programmes and Commission services.

SGP. However, as pointed out in the Council opinions, Germany and Portugal were found not to respect the minimum requirements of the pact in 2001. Outside the euro area, the deterioration of the UK target for 2004 has been identified by the Council as not being in accordance with the close to balance objective of the SGP. However, it was recognised that cautious growth assumptions were largely behind this relatively large deficit, and that the realised budget balance should be better than currently projected provided expenditures are kept under control.

The targets for actual budget balances in the updated programmes are clearly better than what was set down in earlier updates of stability and convergence programmes (see Section A of Table 8). It should be recognised, however, that this mainly reflects the systematic caution used when setting the targets in earlier updates: budgetary outcomes have been better than targeted because growth has turned out higher than expected and because the interest burden has fallen more than assumed.

Section B of Table 8 shows that, overall, the fiscal adjustment effort provided for in the updated programmes is similar, although slightly weaker notably in 2001, compared with the ambitions of initial programmes ⁽¹⁾. Moreover, the table shows a tendency towards the back-load-

ing of budgetary adjustment efforts over the programme period, i.e. budgetary retrenchment is strongest towards the end of the programmes' time horizon. In addition, delaying structural reforms beyond the current or next year's budget calls into question the credibility of adjustment plans, especially if difficult decisions fall outside the time horizon of the incumbent government.

The gross-debt-to-GDP ratio in the euro area is set to fall below 61 % in 2004 (see Table 9). This is better than was projected in previous updates. The main contribution to this development comes from sustained primary surpluses. Table 9 also shows that the estimated stock-flow component (somewhat counter-intuitively) contributes to increase the debt ratio ⁽²⁾ 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), or simply indicate that a certain degree of caution has been used when setting the targets for debt ⁽³⁾.

⁽¹⁾ This can be seen by comparing vertically the changes in the CAPB shown in section B of the table.

⁽²⁾ The programmes do not contain enough information to identify directly the contribution from different factors to the development of the euro-area debt ratio. Therefore, in order to identify the split between the stock-flow and the contribution from nominal growth, on the GDP deflator forecast by the Commission has been added to real growth assumptions given in the programme. In this way, the stock-flow is derived as a residual.

⁽³⁾ Privatisation and UMTS receipts help to reduce gross debt. As the UMTS receipts have been excluded from the budget balance figures here, they should be part of the stock-flow to the extent they have used to reduce gross debt. Of course, UMTS receipts will be recorded inside the ESA 95 budget balance and will therefore not show in the stock-flow.

Table 8

Euro area: comparison of budget targets and fiscal effort in the 1998–2000 programmes ⁽¹⁾, ⁽²⁾

(% of GDP)

	1999	2000	2001	2002	2003	2004
A. General government actual budget balance						
1998 SP	- 1.8	- 1.6	- 1.1	- 0.8		
1999 USP	- 1.4	- 1.1	- 1.0	- 0.6	- 0.3	
2000 USP	- 1.3	- 0.7	- 0.6	- 0.3	0.1	0.4
<i>pm.</i> COM forecast	- 1.2	- 0.7	- 0.8	- 0.4		
B. Change in general government cyclically-adjusted primary balance						
1998 SP	0.3	- 0.1	0.1	0.3		
1999 USP	0.3	- 0.1	- 0.2	0.2	0.2	
2000 USP		0.0	- 0.3	0.2	0.2	0.2
<i>pm.</i> COM forecast	0.5	- 0.1	- 0.3	0.1		

⁽¹⁾ SP stands for stability programme and USP stands for updated stability programme.

⁽²⁾ The stepwise lines indicate the period covered by each consecutive programme update.

If the latter is true, the euro-area debt ratio could well fall below the 60% of GDP reference value by the end of the projection period. All Member States (see Table 7 above) will be below the 60% of GDP threshold in 2004, except Belgium, Greece and Italy where it will fall below 100% of GDP.

3.2. Budgetary composition

The updated programmes show that both revenue and expenditure ratios are expected to decline over the projection period (Table 10). The revenue ratio is set to fall noticeably in 2001, and thereafter gradually decline. In cyclically-adjusted terms, this leads to an overall reduction of 2% of GDP in the revenue ratio over the 2000–04 period. This is more than compensated on the expenditure side by a reduction of cyclically-adjusted primary expen-

diture ratio of 2.5% over the same period. The impact of the budgetary strategies on economic activity is analysed Box 3.

Table 11 shows expenditure and revenue ratios for 2001 and 2004 for each Member State in actual terms. Both revenue and expenditure ratios are reduced in most countries. Progress is made in particular in Belgium, Germany, Greece, Italy, Finland and Denmark, even if these ratios remain high in historical terms. In fact, the revenue ratio is set to increase only in Portugal whereas the UK is the only country where the expenditure ratio is planned to go up, mainly due to a rise in investment expenditures.

To capture the budgetary adjustment strategies of the euro-area countries in a synthetic manner, Graph 9 decomposes discretionary policies into cyclically-adjusted changes in total revenue and in primary expenditure over

Table 9

Euro area: decomposition of changes in government debt ratio

(% of GDP)

	2000	2001	2002	2003	2004	Change 2001–04
Government debt ratio	70.6	67.7	65.8	63.5	60.8	
Change in debt ratio, due to:	-2.3	-2.9	-1.9	-2.3	-2.7	-9.8
— Primary balance	-3.4	-3.3	-3.5	-3.8	-4.0	-14.6
— Interest and growth contribution	0.9	0.4	0.7	0.6	0.6	2.4
— Stock-flow adjustment	0.2	0.0	0.9	0.8	0.7	2.4

Source: Stability programmes and Commission services.

Table 10

Euro area: planned budgetary developments according to the programme updates

(% of GDP)

	2000	2001	2002	2003	2004	Cumulative change	
						2001–02	2003–04
Euro area							
Total revenues	47.5	46.5	46.1	45.7	45.6		
Total expenditures	48.2	47.1	46.4	45.6	45.1		
Budget balance	-0.7	-0.6	-0.3	0.1	0.4		
Change in budget balance:	0.6	0.1	0.4	0.4	0.3	0.5	0.7
Of which:							
— change revenue	-0.3	-0.9	-0.4	-0.4	-0.1	-1.3	-0.5
— change expenditure	0.8	1.1	0.8	0.8	0.5	1.9	1.3
Contribution of:							
— cycle	0.4	0.2	0.1	0.0	0.0	0.3	0.0
— interest burden	0.2	0.2	0.1	0.2	0.1	0.3	0.3
— CAPB	0.0	-0.3	0.2	0.2	0.2	-0.1	0.4
Of which:							
— CA revenues	-0.6	-1.1	-0.5	-0.4	-0.1	-1.6	-0.5
— CA primary expenditure	0.5	0.8	0.7	0.6	0.4	1.5	1.0

Source: Stability programmes and Commission services.

Table 11

Budget balance targets, expenditures and revenue ratios over the 2001–04 period according to the SCP

(% of GDP)

	Total expenditures		Total revenues	
	2001	2004	2001	2004
B	48.9	46.8	49.1	47.4
D	46.5	44.0	45.0	44.0
EL	45.2	42.2	45.7	44.2
E	40.6	40.0	40.6	40.3
F	52.1	49.8	51.1	50.1
IRL	30.8	29.2 (*)	35.1	33.8 (*)
I	47.2	44.3	46.4	44.7
L	39.8	38.8 (*)	42.4	41.2 (*)
NL	45.2	44.4	45.9	46.3
A	50.9	49.4	50.2	49.4
P	46.8	46.0	45.7	46.0
FI	46.2	43.9	50.9	48.8
EUR-12	47.1	45.1	46.5	45.6
DK	53.5	52.0	56.4	54.7
S	53.7	52.9 (*)	57.2	54.9 (*)
UK	39.7	40.7	40.3	39.6
EU-15	46.1	44.7	45.9	45.0

(*) The figures from Ireland, Luxembourg and Sweden relate to 2003.

the 1997–2001 period. The diagonal from top-right to bottom-left indicates the direction of the budgetary adjustment: the area above it marks a deterioration in the cyclically-adjusted primary balance, while the area below indicates a structural consolidation. The diagonal from top-left to bottom right marks the composition of the adjustment: the combinations where revenue changes or expenditure changes dominate are shown in Graph 9.

Two sections in Graph 9 are of particular interest. The triangle in the upper quadrant ('tax rises cum deterioration') indicates a worsening of the structural primary balance due to large increases in expenditure ratios only partly compensated by tax rises. Most euro-area countries found themselves in this quadrant throughout past decades on account of a continuously rising tax burden combined with a deterioration in budgetary positions. The lower triangle ('tax cuts cum consolidation') indicates a reduction of structural revenues going hand-in-hand with a larger reduction of primary structural expenditure. This allows for a continued consolidation of public finances while reducing the size of the tax burden in a credible and lasting way: this combination is important in boosting the output potential of euro-area countries.

Graph 9 confirms that after years of strong tightening in the run-up to EMU, the pace of consolidation has slowed

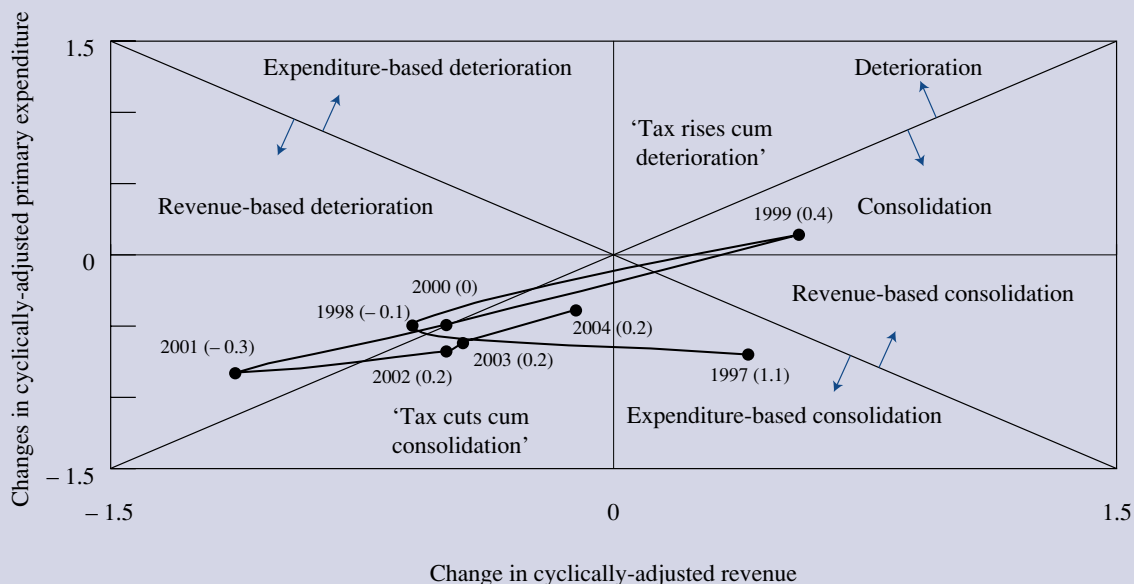
down. However, over the time horizon of the stability programmes, public finances appear to ensure a combination of tax cuts and consolidation, thereby leading to a gradual reduction in the overall size of the public sector while maintaining strong fiscal discipline. All in all, the composition of the budgetary strategies in the programmes appears to be both efficiency- and sustainability-friendly.

3.3. Overall assessment and risks

The Council found in its opinions on the programmes that with the exception of the UK ⁽¹⁾, Member States' medium-term budgetary targets satisfy 'the requirements of the Stability and Growth Pact'. Most countries were found to fulfil this requirement in 2001 with the exception of Germany and Portugal. The Council also asked two high-debt countries (Belgium, Italy), and countries that still project deficits in 2003 (Germany, France, Portugal), to use additional room for manoeuvre to improve budget balances further and/or speed up consolidation in order to

⁽¹⁾ In the UK, the deficit is projected to increase as a result of a cautious trend growth assumption and of an expansion in planned government investment.

Graph 9: Composition of fiscal adjustment in the euro area, 1997–2004 ⁽¹⁾



⁽¹⁾ In brackets, changes in CAPB excluding UMTS proceeds (in 2000 and 2001).
 Source: Commission services and stability programmes.

increase safety margins. The importance of expenditure control was emphasised in the Council opinions of virtually all Member States. Countries with potential inflationary problems were urged to keep a tight fiscal stance and/or to stand ready to use fiscal policy to reduce inflation pressures should the situation call for it (Spain, Greece, Ireland, the Netherlands, Luxembourg, Portugal and Finland).

Overall, the programmes point to a slow but continued improvement of actual budget balances over the medium term. Nonetheless, two questions remain about the degree of ambition of programmes and the realism of targets. Firstly, it is evident that the pace of fiscal consolidation has slowed down considerably and that the necessary adjustment efforts are postponed towards the end of the period. In addition, it could be argued that a greater degree of budgetary ambition is needed in a number of countries, not least to prepare for the budgetary impact of ageing populations (see Part IV). Member States should exploit the window of opportunity available in coming years to accelerate the pace of debt reduction and/or build

reserve funds years, i.e. before the budgetary impact of demographic changes fully emerge.

Second, there are some risks that may lead to the targets of the programmes not being fully attained. While the budgetary projections were often made using prudent macroeconomic assumptions in earlier programmes (and were sometimes criticised as being overly cautious), in this round of updates the opposite seems to be the case for some Member States. In addition, a large part of the improvement of budget balances in the last few years has come about through strong increases in tax revenues.

As this increase is considered to be structural, it has been included in the projections. However, this involves a risk that the structural element of this revenue growth has been overestimated which may lead in future years to lower revenue growth than expected. Also, as public debt levels are still relatively high, the impact of interest rate shocks on budget balance and other budgetary shocks has to be taken into account when setting medium-term budgetary targets (see Part II).

Box 3: The impact of fiscal policy on the economy: a tentative measure of fiscal impulse

The fiscal stance referred to in this chapter captures the discretionary effort of the government. However, it does not measure the effect of fiscal policy on the economy. The latter is measured by what can be labelled the discretionary fiscal impulse. As budgetary components have different effects on aggregate demand and supply, one needs an econometric model in which the interrelationships of various policy measures and economic behaviour are specified to measure the effect of fiscal policy on GDP. As pointed out by Buiters (1985), there is no objective, model-free measurement of the impact of fiscal policy. Therefore, the quantitative and qualitative results depend on the specification and parameterisation of the model as well as on the assumptions on the interplay between fiscal and monetary authorities.

Under normal circumstances, the fiscal stance and the fiscal impulse can be expected to go in the same direction (i.e. a loosening of the fiscal stance corresponds to an expansionary fiscal impulse). However, when small changes in the fiscal stance are associated with large restructuring of the budget, composition effects may dominate leading to a more-than-proportional impact or to a reversal of the sign.

The first-round impact of envisaged discretionary tax and expenditure changes on economic activity can be captured by a 'fiscal impulse' indicator that takes the composition of discretionary policy changes in taxation and expenditures explicitly into account. To incorporate the various channels through which changes in fiscal policy can affect economic activity, the short-term impact of fiscal policy changes has been derived from simulations using the Commission's QUEST model (see Chapter 1 in Part VI for a review on

the main features of QUEST). The approach of the simulations is similar to that used in Part III. The implied multipliers of spending and revenue changes are presented in Table 21. It must be kept in mind that the effects produced by simulations, depend *inter alia*, on the structure of the model, the type of fiscal action, the accompanying monetary and exchange rate policies and modelling of expectations. The simulations assume that the ECB is targeting inflation under a floating exchange rate regime. The supply-side effects of taxation and government expenditures are taken into account although their impact is more long-term than short-term in nature.

As a very broad characterisation, the results indicate that the impact in the first year is more important on the expenditure side (feeding more directly into demand) than on the tax side (where a large part is saved). However, in the medium term the impact from the expenditure side fades out (due to crowding out), while on the tax side the impact increases over time as supply-side effects become more important. This suggests that the composition and the timing of discretionary budgetary measures are important to consider when analysing the impact of fiscal policy on the demand conditions during a specific year.

Table 12 below reports the estimates of the euro-area fiscal impulse resulting from the fiscal stance implied by the programmes. Keeping in mind all the uncertainties related to the estimation of the short-term fiscal policy impact on economic activity and the fact that the changes in the fiscal stance and the size of the impulses are relatively small, it is interesting to note that the fiscal impulse in 2001 is moderately restrictive despite a slight loosening of the

Table 12

Euro area fiscal stance and fiscal impulse, 2001 onwards

	2001	2002	2003	2004
Fiscal stance (change CAPB)	- 0.3	+ 0.2	+ 0.2	+ 0.2
Due to: change CA revenues	- 1.1	- 0.5	- 0.4	- 0.1
change CA primary expenditure	+ 0.8	+ 0.7	+ 0.6	+ 0.4
Fiscal impulse	- 0.2	- 0.2	0	0
Due to: revenues side	+ 0.2	+ 0.3	+ 0.6	+ 0.3
expenditure side	- 0.4	- 0.5	- 0.5	- 0.3

Source: Commission services.

fiscal stance. In subsequent years, the negative effects of expenditure cuts on demand are partially compensated by the increasing positive impact of earlier tax cuts.

The difference between the two indicators (fiscal stance and fiscal impulse) reflects several factors. Firstly, the strategy of tax cuts cum expenditure reductions leads to a restrictive impulse since the expansionary short-term effect

from tax cuts is much smaller than the restrictive impact from expenditure cuts. Secondly, the short-term expansionary impact from tax cuts is relatively small during the first two years, because the positive supply-side effects gain momentum only in the medium term, whereas the economic impact stemming from expenditure changes is largest in first years and fades away rather rapidly thereafter. Hence, changes in expenditures tend to dominate in the short term.

Part II

Evolving budgetary surveillance and institutions

Summary

Multilateral surveillance of budgetary policies is a main building block of the coordination of economic policies in EMU. While the framework of multilateral budgetary surveillance is defined into Community law — the Treaty, the Stability and Growth Pact (SGP) — a large role is played by a number of less formalised conventions and agreements which buttress the formal rules both at the European and at domestic level. Such procedures, interpretations and agreements are evolving over time reflecting the experience of surveillance, the progress accomplished and the emergence of new priorities.

A much debated issue in the early years of EMU is that of the medium-term targets consistent with the ‘close to balance’ rule of the pact. While the aim is to ensure that the 3% of GDP reference value is not endangered, the initial focus was to create a sufficient cyclical safety margin to let automatic stabilisers operate in cyclical downturns without breaching the deficit ceiling. The next step is for all Member States to complete the transition and achieve the SGP target of close to balance or in surplus. To this end, a broadly balanced budget in cyclically-adjusted terms appears required for most countries: it will allow to cover for cyclical as well as other budgetary risks, and will also ensure a rapid reduction in the stock of public debt in high-debt countries towards the 60% of GDP reference value. For countries with high automatic stabilisers, a structural surplus of the order of 1% of GDP over the cycle would seem adequate. These targets are consistent with current budgetary positions or the objectives outlined in the stability and convergence programmes.

While budgetary discipline remains at the forefront of EU fiscal priorities, new objectives are coming to the fore: from a short-term perspective, maintaining a fiscal stance that is consistent with a balanced policy mix at the euro-area and national level; from a medium-term perspective, improving the quality of public finances through tax cuts and expenditure restructuring that promote growth and employment; finally, from a longer-term perspective, strengthening the sustainability of public finances by

preparing for the budgetary impact of ageing populations. These objectives should also be taken into account when setting appropriate medium-term targets.

Sustaining sound budgetary positions while addressing new priorities will be facilitated by enhancing the efficiency of budgetary surveillance, i.e. by streamlining of current procedures, achieving a greater integration between the SGP and broad economic policy guidelines, improving the content and scope of the programmes and enhancing the effectiveness of peer pressure in correcting budgetary misbehaviour.

In order to achieve these aims, changing the existing legal framework is not necessary. However, several practical steps could be taken to streamline the multilateral surveillance process on budgetary questions, especially as regards the implementation of the SGP. Four proposals in particular are being considered: first, it is necessary to reinforce the coordination of budgetary policies on the basis of a principle of ‘pre-informing’ partners on important policy measures. Second, to enhance their role as a coordination instrument, the stability and convergence programmes should all be submitted in autumn each year within a short time span. Third, it is essential to improve the content and presentation of programmes. Fourth, the scope of the surveillance under the pact should be widened to reflect the priorities set by the Stockholm European Council and to make them more consistent with the BEPG.

The effectiveness of budgetary surveillance and the credibility of the EMU stability-oriented framework depends not only on rules established at EU level, but also on their interplay with national budgetary rules. As established by the Treaty, national budgetary institutions and procedures should be consistent with the EU framework. Clearly, under the subsidiarity principle it is up to each Member State to arrange domestic institutions as it sees best fit.

Two crucial aspects of this interaction are the medium-term budgetary dimension imposed by the SGP, and the

fact that fiscal surveillance takes place at the level of the general government and not only of central government. These institutional features have required adaptations of budgetary arrangements at the national level. Several Member States now use a multi-year budgetary framework or other mechanisms/guidelines to set public expenditures priorities in the medium term. However, in many countries, the medium-term dimension is still lacking and the programmes are prepared by simply projecting the yearly budgets into the future. Furthermore, other budgetary players beyond the central government, such as national parliaments and local authorities, now get indi-

rectly involved in the implementation of the SGP. In particular, lower levels of government in several countries are being subject more explicitly to the discipline requirements of the pact, for instance via 'internal stability pacts'.

These developments show an increasing awareness of the more encompassing nature of the budget commitments in EMU. They also show that the adaptation of budgetary institutions and procedures at European and national level is an ongoing process. It must now prove effective in guaranteeing budgetary discipline while fostering the coordination of economic policies.

1. Evolving budgetary surveillance and coordination under the Stability and Growth Pact

1.1. Changing budgetary circumstances and priorities

The Stability and Growth Pact (SGP) entered into full force on 1 January 1999, with the start of EMU. It complements and strengthens the provisions of the Maastricht Treaty on budgetary discipline, and was deemed necessary to curb a bias towards running persistent deficits, to enhance the credibility of the single monetary policy and to provide fiscal policy with sufficient flexibility to cushion economic shocks in EMU.

The pact is essentially a rule-based approach to fiscal policy comprising of both preventative and dissuasive elements set down in two Council regulations and two Resolutions of the European Council ⁽¹⁾. The core commitment of the SGP is for Member States to have medium-term budget positions that are ‘close to balance or in surplus’. To this end, all countries must, on an annual basis, submit stability and convergence programmes setting 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⁾.

In addition to the medium-term target and adjustment path, the programmes must contain adequate information to enable the Commission and Council to assess whether the underlying economic assumptions are realistic, whether the measures announced in the programmes will be effective in reaching the budget targets, and, most importantly, whether the medium-term budgetary objectives provide sufficient room for manoeuvre to ensure the avoidance of an excessive deficit in the event of economic slowdown.

⁽¹⁾ For a description of the SGP, see European Commission (2000a). 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.

Without altering existing commitments or the principal purpose of the SGP, namely to define a medium-term budgetary strategy consistent with the discipline requirement of the Treaty, there is scope to develop the content and assessment of programmes in line with evolving budgetary conditions and priorities. To remain an effective and central instrument for surveillance of budgetary positions in EMU, the current framework must evolve in three directions:

- **Enhancing budgetary discipline:** the overriding budgetary imperative in EMU has been to create room for the automatic stabilisers to work in the event of a cyclical downturn without deficits breaching the 3% of GDP reference value. As outlined in Part I, most Member States have achieved this first step, and the next step is for all Member States to achieve the SGP target of budget positions which are ‘close to balance or in surplus’.
- **Strengthening the attention to quality and sustainability of public finances:** the Commission and Council in a joint report to the Stockholm European Council of March 2001, recognised that the main budgetary challenge facing Member States today is to sustain fiscal discipline while improving the quality and sustainability of public finances. Moreover, it called for the fiscal policy agenda in EMU to be broadened from its current focus on budgetary stability towards a parallel emphasis on the positive contribution which public finances can make to growth and employment (see Box 5 for a summary of the joint Commission–Council report).
- **Enhancing fiscal policy coordination:** the stability and convergence programmes not only aim at preventing excessive deficits from occurring; they are also important instruments in the overall coordination of economic and budgetary policies in EMU. This is clearly recognised in the SGP regulations which require the Council to assess whether the programmes’

projections are consistent with the broad economic policy guidelines (BEPG) and whether the contents of the programmes facilitate the closer coordination of economic policies ⁽¹⁾. Achieving a greater integration between the SGP and the BEPG, and streamlining the surveillance procedures is important to sustain fiscal discipline, to tackle the new budgetary priorities indicated above and address some of the shortcomings in economic policy coordination in EMU.

This chapter examines how the process of budgetary surveillance in EMU could evolve to reflect the above considerations within the existing regulatory framework. Section 2 looks at the appropriate medium-term target consistent with the ‘close to balance or in surplus’ rule of the pact. Section 3 examines how policy coordination on budgetary issues at EU level could be streamlined and offers some practical suggestions for strengthening the stability and convergence programmes as policy instruments for economic policy cooperation.

1.2. Appropriate medium-term budgetary targets in EMU

In the years running up to the launch of the euro, the debate in both academic and policy-making circles centred on how to ensure budgetary discipline while preserving budgetary flexibility ⁽²⁾. It emphasised the need to achieve and sustain sound budgetary positions when economic conditions are favourable so that Member States regain the effective use of fiscal policy for stabilisation purposes in periods of cyclical slowdown. Given the 3% of GDP upper ceiling on budget deficits, the necessary room for manoeuvre had to be created in order to let automatic stabilisers play freely. Further fiscal consolidation below the 3% of GDP threshold was also required to bring public debt below the 60% of GDP reference value.

While the need for further consolidation was largely recognised, the question of what constituted a budgetary target of ‘close to balance or in surplus’ according to the SGP came to the fore. Graph 10 summarises the various factors which are to be taken into account when Member States set their medium-term target. From the standpoint of the Treaty, the medium-term target should encompass sufficient room for manoeuvre to safeguard the 3% of

GDP threshold and allow for a fast reduction in the stock of public debt towards the 60% of GDP reference value. These two requirements are discussed in turn.

Safeguarding the 3% of GDP deficit threshold

In order not to exceed the 3% of GDP deficit threshold, the medium-term target should encompass a sufficient margin for cyclical fluctuations and unforeseen revenue shortfalls or excess expenditures, including the variability of the interest burden due to interest rate shocks.

Of these elements, building a sufficient room for manoeuvre to accommodate cyclical developments was generally recognised at the outset of EMU as an essential first step towards attaining close to balance positions. The so-called ‘minimal benchmarks’ computed by the Commission attempt to isolate the influence of the business cycle on the budget position ⁽³⁾. Overall, they show that most Member States should aim at a minimum to a cyclically-adjusted deficit target of 0 to 1% of GDP; given their higher cyclical stability, the three largest economies of the euro area (Germany, France, Italy) could aim at a slightly higher cyclically-adjusted deficit of 1 to 1.5% of GDP, while Sweden and Finland would have to aim for a structural surplus as their budgets are more sensitive to the cycle and their economies have shown a high degree of volatility in the past. These minimal benchmarks were used in the assessment of the initial set of stability and convergence programmes in 1999 and subsequent updates.

Given the fact that most Member States now have achieved or overshot their minimal benchmark, setting more ambitious targets in line with the letter and the spirit of the SGP appears desirable.

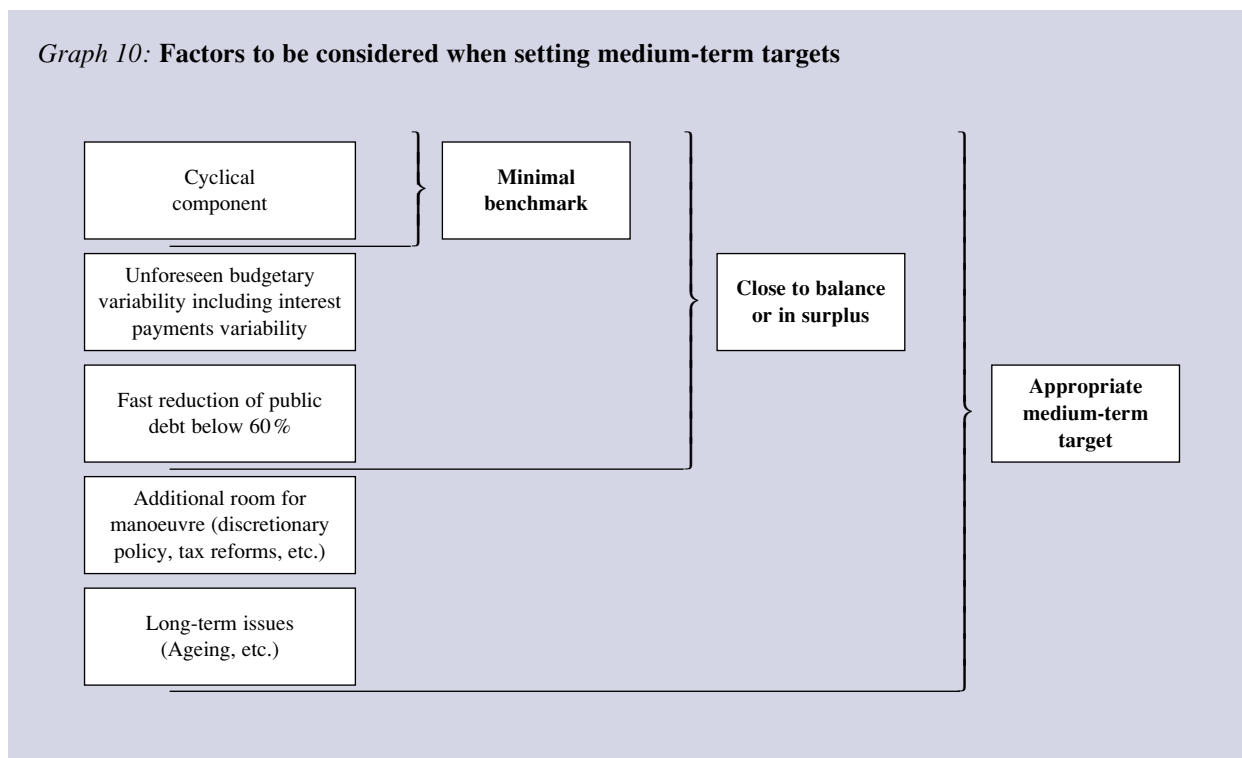
For countries with low to medium sensitivity of their budget to cyclical fluctuations (Belgium, Germany, Greece, Spain, France, Ireland, Italy, Austria, Portugal and the UK), a medium-term budgetary target of balanced budgets in cyclically-adjusted terms appears required. As Finland, the Netherlands, Luxembourg, Denmark and Sweden have a higher cyclical sensitivity of the budget balance or have experienced higher cyclical volatility, a small surplus of the order of 1% of GDP in cyclically-adjusted terms would seem adequate to safeguard the deficit

⁽¹⁾ Article 5, Council Regulation (EC) No 1466/97.

⁽²⁾ See Box 7 in European Commission (2000a).

⁽³⁾ The minimal benchmarks were calculated on the basis of budgetary elasticities prevailing in mid-1990s and past cyclical behaviour. For a detailed presentation, see European Commission (1999).

Graph 10: Factors to be considered when setting medium-term targets



threshold ⁽¹⁾. In light of measurement uncertainties, a margin of 0.5 % of GDP below target could be allowed for when assessing compliance with the ‘close to balance or in surplus’ rule.

Such targets would allow countries to let automatic stabilisers operate freely in the event of economic shocks even leading to a negative output gap of 4 percentage points of trend GDP. Moreover, they also encompass a margin for unforeseen budgetary developments (estimated to be of the order of 0.5 to 1 % of GDP, see European Commission, 2000a).

Allowing for a fast reduction in the stock of public debt

The question is raised as to whether high-debt countries (Italy, Belgium and Greece) should set more ambitious medium-term budget targets than a position of structural balance identified above, i.e. whether they should aim

for a structural surplus in order to bring about a rapid reduction of high-debt ratios towards the 60 % of GDP reference value (Article 104 of the Treaty).

There are two possible interpretations of this clause: setting a budget balance which (a) ensures a rapid reduction in the stock of debt under normal circumstances, or (b) allows for a continuous reduction in the debt even in severe economic downturns.

The analysis in Box 4 shows that a balanced-budget rule in cyclically-adjusted terms would satisfy both conditions. It would ensure a rapid reduction in public debt: under normal circumstances, the pace of reduction in the debt would be higher than that achieved by high-debt countries in the past five years and the debt would be reduced below 60 % of GDP in about 12 years. A position of structural balance would prevent the debt ratio from increasing even in severe cyclical downturns (implying a low rate of growth of nominal GDP) or episodes of prolonged below-potential economic activity (implying high negative output gaps). These results suggest that it is unnecessary to require high-debt countries to set budget targets which go beyond positions of structural balance. That being said, it is especially important that the high-debt countries rigorously adhere to this target at all times.

⁽¹⁾ While this approach is based on a full working of automatic stabilisers, in the case of the Netherlands it must be recognised that institutional arrangements put in place by the current government have increased the degree of budgetary control at the expense of the full working of the automatic stabilisers.

The ambition of the updated stability and convergence programmes

Graph 11 presents the forecast for the cyclically-adjusted budget balance (CAB) for 2001 and the projections for 2004 outlined in the latest updates of stability and convergence programmes, also in cyclically-adjusted terms. The targets of a balanced budget (including a tolerance margin of 0.5 % of GDP) and a surplus of 1 % of GDP are indicated in the graph. While a number of countries still have some way to go before reaching close to balance positions, the 2004 medium-term targets are fully in line with the SGP objectives ⁽¹⁾. Therefore, SGP requirements would not imply a tightening of Member States' current budgetary plans set out in the programmes.

As illustrated in Graph 10, budgetary ambition does not necessarily stop once the SGP target of 'close to balance or in surplus' has been reached. Accordingly, several Member States already go a step further in their updated stability and convergence programmes, and set more

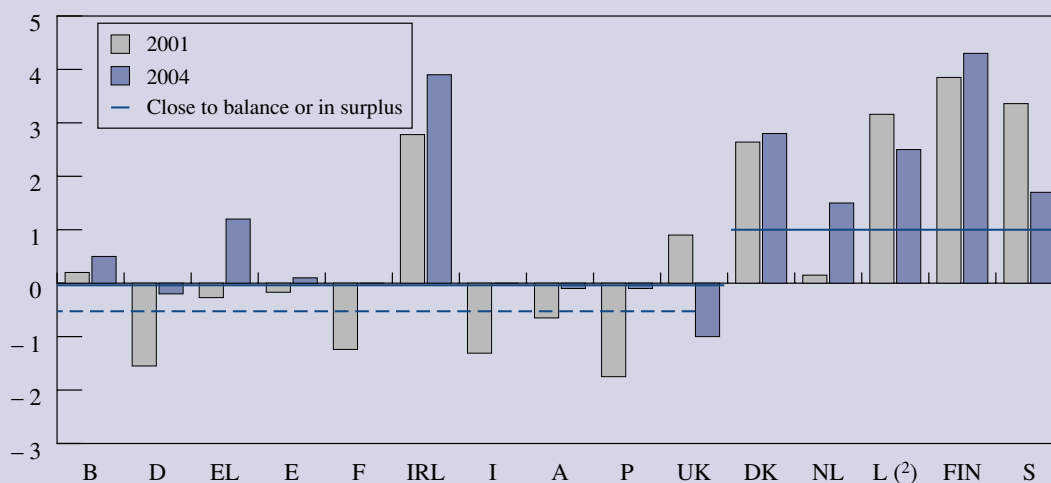
ambitious budgetary targets, for example as means to prepare for the budgetary impact of ageing populations (see Graph 11). For instance, a more aggressive strategy of debt reduction could be desirable to pre-empt at least partly the budgetary implications of the demographic shock especially in countries with PAYG pension systems (incidentally, the three high-debt countries have pension systems essentially financed on a PAYG basis) ⁽²⁾.

An additional room for manoeuvre may also prove useful for discretionary fiscal actions which, in exceptional circumstances, might be needed to supplement the automatic stabilisers (see Part III). For instance, in spite of its lower budget sensitivity, a structural surplus could be relevant for Ireland as it may be relatively more susceptible to asymmetric shocks in EMU given that the economic cycle (and consequently monetary conditions) appears to be de-synchronised from the euro-area average. While Ireland's current buoyant growth has contributed to very high surpluses, a reversal of the cyclical pattern may lead to substantial budgetary swings.

⁽¹⁾ On the specific case of the UK, see the discussion in Part I and the country section in Part V.

⁽²⁾ See Part IV, Chapter 2.

Graph 11: 'Close to balance' requirement, budgetary positions in 2001 and medium-term budgetary targets set in the last updates of the stability and convergence programmes ⁽¹⁾



⁽¹⁾ Budgetary positions for 2001 and targets for 2004 are presented in cyclically-adjusted terms.

⁽²⁾ 2003 target.

Sources: 2001: Commission forecast, spring 2001.

2004: Commission services and 2000/2001 updates of the stability and convergence programmes.

Box 4: A special rule for high-debt countries?

Article 104 of the Treaty states that public debt ratios larger than 60% of GDP should be ‘sufficiently diminishing and approaching the reference value at a satisfactory pace’. Clearly, Italy, Belgium and Greece who still have a debt ratio of around 100% of GDP will have to fulfil this goal. This Treaty requirement can be interpreted in two non-mutually exclusive fashions: (A) the medium-term target has to bring about a rapid reduction in the stock of debt; and (B) the reduction of the debt has to continue also in ‘bad’ periods.

Does a balanced budget over the cycle satisfy (A) and (B)?

The speed of reduction towards the 60% reference value, μ , can be written as follows:

$$(1) \quad \mu = \frac{\dot{b}}{60\% - b}$$

where b is the stock of debt as a share of GDP and ‘ $\dot{\cdot}$ ’ indicates the change with respect to time.

Given that, from the standpoint of safeguarding the 3% deficit ceiling, a balanced budget would be generally advisable, a specific rule for high-debt countries would be to strengthen the budget balance target, d , by a proportion (β) of the excess of the debt over the 60% ceiling:

$$(2) \quad d = \beta (b - 60\%)$$

Under $\beta = 0$, the high-debt country would keep a balanced budget, as most of the other euro-area members. Hence, it would not be required to make additional budgetary efforts compared to the other countries ⁽¹⁾. Under $\beta > 0$, the coun-

try would aim for a structural surplus. A reasonable value for β could be between 1% and 3%. Hence, if β is set at 3%, a country with a debt of 100% of GDP should set an initial target of 1.2% surplus [$3\% \times (100\% - 60\%)$]. The surplus will shrink over time as the debt is reduced and d will return to zero when $b = 60\%$. By replacing (1) and (2) in the familiar debt accumulation identity:

$$(3) \quad \dot{b} = -d - (y + \pi) b$$

where $y + \pi$ is nominal GDP growth, we obtain:

$$(4) \quad \mu = \beta + \frac{(y + \pi)b}{b - 60\%}$$

Table 13 presents the value of the budget balance, the speed of debt reduction and the number of years necessary to bring the debt below 60% of GDP for various combinations of β and b , under the assumption of annual growth of nominal GDP of 4.5% ⁽²⁾.

Two results emerge from the table. First, the speed of reduction under a balanced budget rule appears relatively high: as a point of reference, it is quite higher than the average speed of debt reduction in the period 1997–2001 in Italy and Greece (where it was 6% per year) and similar to that of Belgium (10.5%). Second, the difference in speed in moving from a balanced budget to a small surplus is limited and hardly affects the number of years to attain the 60% level. For instance, if Italy, Belgium and Greece (with their current debt ratios at around 100% of GDP), would keep a balanced budget (i.e. $\beta = 0$) over the period, they would need 12 years to reduce the debt ratio to 60% of GDP, while they would need 10 years if β would be set

⁽¹⁾ Note, however, that for a given level of the cyclically-adjusted budget balance, high-debt countries will have to maintain higher primary surpluses.

⁽²⁾ This is based on the assumptions of real GDP growth of 2.5% and an inflation rate of 2%. Clearly, countries with higher trend GDP growth will enjoy a higher speed of debt reduction.

Table 13

Re-absorbing the stock of public debt

$b \backslash \beta$	0%		1.5%		3%	
	μ	d	μ	d	μ	d
100%	10%	0	11.5%	0.6	13%	1.2
90%	12%	0	13.5%	0.5	15%	0.9
80%	16%	0	17.5%	0.3	19%	0.6

at 3%. The latter result is due to the fact that, for high-debt countries, the contribution of nominal GDP growth to the reduction of the stock of debt is largely dominant over the size of the budgetary surpluses, especially if the latter are small.

In order to check whether maintaining a balanced budget in structural terms satisfies condition (B), one can write the expression of the debt change in ‘bad’ times, under the condition that the structural balance is kept in equilibrium and automatic stabilisers are let to operate freely:

$$(5) \quad \dot{b} = -(\hat{y} + \hat{\pi})b - a\hat{G}$$

Where $(\hat{y} + \hat{\pi})$ and \hat{G} are ‘representative’ values of nominal GDP growth and output gap in ‘bad’ times and a is the sensitivity of the budget balance to the cycle. Table 14 reports the percentage points change in the debt ratio under

various combinations of $(\hat{y} + \hat{\pi})$ and \hat{G} , where a is assumed to be equal to 0.5 and b equal to 100% of GDP.

As Table 14 shows, only in the case of a very harsh recession and stagnating economic activity (in the table, a nominal GDP growth of 1% coupled with a negative output gap of 3 percentage points), the debt may temporarily increase. Although a higher sensitivity of the budget balance to the cycle (a) and lower debt levels (b) would imply a stronger impact of recessions and a less favourable contribution of nominal growth to debt reduction, these results are reassuring as they show that for the three high-debt countries of the EU a structurally-balanced budget entails a continuous decrease of the debt ratio in most cyclical circumstances.

Overall, these results show that a balanced budget for high-debt countries appears sufficient to ensure that the debt-to-GDP ratio approaches the reference value at a satisfactory pace, as required by the Treaty.

Table 14

Decreasing public debt in ‘bad’ times

G \ $y + \pi$	3%	2%	1%
- 1%	- 2.5	- 1.5	- 0.5
- 2%	- 2.0	- 1.0	- 0.0
- 3%	- 1.5	- 0.5	+ 0.5

1.3. Adapting multilateral budgetary surveillance

Coordination weaknesses are becoming more apparent

Even if the SGP and the multilateral surveillance process have contributed to keeping budgetary developments on the right track, there is a growing realisation that it needs to evolve in light of the new budgetary priorities identified by the Stockholm European Council (see Box 5). Moreover, the experiences of two and half years of EMU have highlighted inadequate coordination on budgetary questions in EMU, and consequently a failure on the part of Member States to react in a timely and consistent manner to common economic shocks/challenges. Some examples serve to illustrate these difficulties.

- The manner in which tax cuts aiming at boosting growth and employment have been announced and implemented highlighted the extent to which coordination at EU level works *ex post*, i.e. after key budgetary decisions have been taken at the national level. All the tax cuts have been announced without paying due heed to the appropriate aggregate fiscal stance for the euro area.
- Member States had diverging reactions in 2000 to public pressure for lowering taxes on fuel. They also adopted different procedures for the allocation of UMTS licences, in spite of the fact that policy decisions in one country can have knock-on consequences in neighbouring countries.
- After assessing its stability programme, the Council issued a recommendation to Ireland for failing to

respect a recommendation in the BEPG to use fiscal policy in an appropriate manner to contain inflationary pressure ⁽¹⁾. This was the first time that such a recommendation was issued, and illustrates the importance of clarifying the interaction between the SGP and the BEPG. It also served to underline the fact that the constraints on national budgetary policies in EMU go beyond avoiding excessive deficits.

It is reasonable to expect that countries participating in a monetary union and facing similar economic shocks/challenges will react with policies that may be different in view of different national conditions, but are set within a consistent framework and take on board the euro-area implications. The events described above gave the impression that the euro area lacks a framework for providing consistent answers to common economic policy challenges.

Notwithstanding the inadequate coordination amongst Member States, the existing EU rules for fiscal discipline helped ensure that these difficulties did not become outright policy mistakes. For instance, the ad hoc reductions in fuel taxes in some Member States were of negligible macroeconomic importance and did not halt the overall process of budgetary consolidation. Similarly, despite the fact there were large differences across Member States in the size of proceeds yielded from the sale of UMTS licences, from a budgetary surveillance perspective the euro area did succeed in implementing a common policy on the use of such windfall revenues, i.e. the proceeds were largely allocated to debt reduction and did not lead to additional public expenditure. Also, the willingness to issue a recommendation demonstrated that responsible fiscal behaviour is expected in good times as well as bad times, and that the euro area attaches considerable importance to the 'preventative approach' rather than waiting to deal with problems after they arise.

Overall, the picture emerging from the experience of the initial years of EMU is that the current arrangements provide important discipline on a country-by-country basis, but do not fully satisfy the needs for coordination among fiscal authorities in the euro area. Even in cases when the policies adopted by Member States have proved to be broadly consistent with the EU fiscal framework, this coordination weakness has led to the impression that countries are unwilling to acknowledge the euro-area implications of national policy actions, and that coordi-

nation only takes place after the event. Tackling the apparent shortcomings in the coordination of budgetary policies is a necessary and urgent task.

Strengthening the role of the programmes as a coordination instrument

To improve on the current situation, changing the existing legal framework is not necessary. However, several practical steps could be taken to streamline the multilateral surveillance process on budgetary questions, especially as regards the implementation of the SGP. Four proposals in particular warrant further consideration: first, it is necessary to reinforce the coordination of budgetary policies on the basis of a principle of 'pre-informing' partners on important policy measures. Second, to enhance their role as a coordination instrument, the stability and convergence programmes should all be submitted in autumn each year within a short time span. Third, it is essential to improve the content and presentation of programmes. Fourth, the scope of the surveillance under the pact should be widened to reflect the priorities set by the Stockholm European Council (see Box 5) and to make them more consistent with the BEPG.

(a) Pre-informing on important budgetary measures

The coordination of budgetary policies needs to operate on a proper *ex ante* basis. To this end, it is crucial that Member States disclose and discuss, prior to their implementation, important budgetary measures which might impact on the aggregate fiscal stance and/or on the soundness of national policies. This is even more important for the euro area and is the reason why the Commission recently suggested, in its communication on strengthening economic policy coordination within the euro area ⁽²⁾, to adopt a principle of informing beforehand other members of the euro area and the Commission — within the euro area — prior to adopting such measures. This pre-informing should provide the authorities of the Member State concerned with the reactions or the messages even before the finalisation of the measure at hand. Similarly, the main points of the stability programmes should be transmitted to the Commission before their adoption by the Member States. The euro area, which would then be notified of the Commission's observations, would thus be in a position to communicate any suggestions to the country concerned, which could take them into account in the final version of its programme. Subsequently, the sta-

⁽¹⁾ Council Recommendation 2001/191/EC of 12 February 2001, OJ L 69/22, 10.3.2001.

⁽²⁾ See European Commission (2001).

bility programmes could be submitted well ahead of the finalisation of the national budget laws in order that the euro area could, applying the same procedure, suggest possible amendments to a particular aspect of that country's budgetary policy and in order that the country concerned could take them into account in its budget law.

(b) Clustering and anticipating the submission of the programmes

Currently, the submission and assessment of the programmes is scattered over time towards the end of each year ⁽¹⁾. These arrangements imply that the programmes are examined by the Commission and the other Member States only after national budgets are approved. With the Council opinions often delivered long after the relevant debate in national Parliament, these cannot be taken into account in the budget law, undermining the usefulness of the whole peer review process.

The Ecofin Council recognised this concern already in 1999 in a report to the Helsinki European Council arguing that the 'effectiveness of the budgetary and economic surveillance procedure will be enhanced by [...] a commitment to submit the annual updates of the programmes at the same time as, or shortly after, the adoption of annual budget proposals or of medium-term budgetary strategy documents foreseen by national procedure'.

As most countries adopt their annual budget proposals well before the end of the year ⁽²⁾, it would be useful if Member States would agree to submit stability and convergence programmes at a common or clustered deadline in autumn. This allows for a proper implementation of the pre-informing principle described above. Moreover, it would be easier to make a comparable assessment of programmes and analyse their implications for the fiscal stance at the euro-area and national level. It would also make it easier to integrate the BEPG recommendations into the programmes. Finally, it would substantially enhance the visibility of the whole exercise.

(c) Improving on the existing content of the programmes

The efficiency of budgetary surveillance and coordination relies extensively on the quality of information presented in the programmes. Unfortunately, the information con-

tent of the programmes varies significantly from one Member State to another and is based on different assumptions, complicating the task of the Commission and the Council when assessing countries taken individually and when making cross-country comparisons. It is therefore essential to make sure that the assessment of budgetary developments in Member States can be based on all relevant information and on similar assumptions. Harmonising the content of the programmes, through the use of a common structure for the programmes and the presentation of information in the form of standardised tables would represent a significant improvement on the current arrangements.

(d) Extending the coverage of the programmes

The coverage of the programmes has progressively been widened to cover the new concerns of budgetary policy ⁽³⁾. It is important to ensure the integration of the SGP with the BEPG recommendations through a proper coverage in the programmes of all issues with budgetary implications. Dealing with the budgetary implications of ageing populations in the SGP requires that future updates to stability and convergence programmes should include up-to-date projections of the impact of ageing populations on pensions and, if possible, on healthcare. The quality of public finances should be also dealt with in the programmes, by taking into account the budgetary consequence of tax and spending reforms.

*
* *

In conclusion, the next challenge of fiscal surveillance includes raising the efficiency and visibility of the procedures, improving the interplay between the BEPG and SGP and, in this way, the coordination of budgetary policies, enhancing the consistency of the assessments and of the opinions, and achieving equality of treatment.

All these objectives are within reach without altering the existing legal framework. What is required is the necessary political will to move to *ex ante* surveillance and to reinforce coordination, coupled with streamlining certain practical aspects of monitoring. The next round of updates of the stability and convergence programmes in autumn 2001 should be upgraded to respond to the higher demands of policy coordination in EMU.

⁽¹⁾ To date, the submission of programmes has taken place between mid-September to January each year. See chapter II.2.
⁽²⁾ Generally between September and October.

⁽³⁾ The BEPG recommendations are now more specific and cover most macroeconomic and structural economic issues.

**Box 5: Highlights from the joint Commission–Council report
to the Stockholm European Council of March 2001**

Public budgets can contribute to fostering growth and employment through three channels — supporting a stable macroeconomic framework via sound public finances, making tax and benefit systems more employment friendly and redirecting public expenditures towards physical and human capital accumulation. This marks a new step in the fiscal policy agenda in EMU, by broadening the focus from achieving budgetary stability towards parallel emphasis on the positive contribution which public finances can make to growth and employment.

Sustaining sound public finances: after many years striving to achieve sound public finance positions, the challenge now is to sustain them while at the same time lowering the tax burden (especially on low-paid labour) and preparing for the budgetary consequences of ageing populations. This will require:

- In the short-run perspective, avoiding pro-cyclical fiscal policies. The Council affirms that Member States will avoid pro-cyclical fiscal policies, and agrees that more emphasis will be placed on structural budget balances when assessing budget positions.
- In the medium-term perspective, ensuring that tax cuts are designed to achieve a sustainable reduction in the tax burden and maximise their contribution to growth and employment. To this end, tax cuts need to be accompanied with a firm control on public expenditure. They should also target the removal of rigidities, especially in the labour market. At the same time, an appropriate balance has to be drawn between cutting taxes, running down public debt and financing public investment in key areas.
- In the long-term perspective, the Council and Commission agree that a three-pronged strategy is needed to tackle the economic and budgetary challenges of ageing populations. This should include the running down

of public debt at a faster pace, measures to raise employment rates (especially amongst women and older workers), and reform of pension systems to place them on a sound financial footing including greater recourse to the funding of public pensions. The Ecofin Council intends to regularly examine the long-term sustainability of public finances in a peer review framework, and in particular in the stability and convergence programmes.

Making tax and benefit systems more employment friendly: some progress has been made towards making tax systems more employment-friendly, by lowering the fiscal burden on labour as well as reducing marginal tax rates. However, overall labour taxation still remains high by international standards, and reforms in some countries have been piecemeal. Much less progress was made in making benefit systems more employment friendly, and changes in net replacement rates have been relatively small. Only a few Member States have developed in-work benefits to boost earnings of low-paid workers. The Council urges Member States to accelerate the reforms of tax and benefits systems with the objective of making work pay and curb unemployment traps.

Redirecting public expenditures towards physical and human capital accumulation: recent trends show that levels of public investment have stopped declining and are starting to increase in some countries, a welcome development as it has been combined with efforts to increase efficiency via the introduction of market mechanisms. In general, more resources should be devoted to education, training and R & D, but efforts to enhance capital accumulation must to a large extent come through expenditure restructuring, and not an increase in overall public expenditure. The Council urges Member States to pursue a balanced combination of spending restructuring, tax reforms, and structural measures. Only through such comprehensive strategy the EU can meet the Lisbon challenge.

2. National budgetary rules and institutions: how they interact with the Stability and Growth Pact

2.1. Introduction

Budgetary institutions can be defined as the rules and procedures through which policy-makers decide on the size and allocation of public expenditure as well as its financing through taxation and borrowing. They play an important role in ensuring an efficient allocation of public resources, and there is an increasing awareness of the relevance of budgetary institutions for budgetary performance and discipline (see Box 6 for an overview of the literature).

In stage three of EMU, Member States' budgetary policies must be consistent with the Treaty provisions on sound public finances, and the Stability and Growth Pact (SGP) establishes a comprehensive reporting and surveillance process. Although the Treaty requires Member States to ensure that national budgetary institutions and procedures are such that they can meet their Community obligations, it is the responsibility of each country to arrange its domestic budgetary procedures to this end ⁽¹⁾.

This chapter examines how national budgetary institutions in Member States interact with the SGP framework. It reviews some recent adaptations to national budgetary procedures and rules that may in part be a response to enhanced multilateral surveillance in EMU ⁽²⁾. Two aspects of this interaction warrant particular consideration.

First, the SGP establishes budgetary targets and commitments in the medium term (usually covering a three or four year time horizon), which complement the traditional focus on the annual budget cycle at the national level. Some Member States have developed a number of mechanisms to help ensure compliance with medium-term

goals. Increased emphasis is being placed on expenditure control mechanisms and medium-term budget planning: this issue is dealt with in Section 2.1 below. Moreover, a number of Member States now use numerical rules and guidelines to guide fiscal policy, see Section 2.2.

Second, as discussed in the previous chapter, the SGP requires the general government to have a medium-term budget balance of 'close to balance or in surplus'. This obligation applies to the so-called 'general government' and thus it is a concern of all levels of government, and not just the central or federal government. The role of all national budgetary players (the central government, Parliament, and local and regional governments) in preparing the stability or convergence programme warrants consideration, and is addressed in Section 3.

2.2. National budgeting in the medium term: expenditure control mechanisms and numerical rules

2.2.1. Expenditure control and medium-term budgeting

Overview of the expenditure control mechanisms at national level

A number of EU countries have introduced expenditure control mechanisms to help ensure compliance with the discipline requirement of the Treaty. Medium-term expenditure control mechanisms contribute to increase the transparency of the budgetary process by an identification of overruns at an early stage and by making the budgetary choices involved more explicit.

A fiscal strategy resting on expenditure control, while allowing for the automatic stabilisers to operate freely on the revenue side, seems largely consistent with the rationale of the EU framework which emphasises the role of budgetary discipline and the role of national automatic stabilisers in smoothing the business cycle (see Part III).

⁽¹⁾ This is made explicit in Article 3 in the Protocol on the Excessive Deficit Procedure annexed to the Treaty.

⁽²⁾ This chapter draws on ongoing work on budgetary rules and procedures carried out by DG ECFIN. For more information see also J. Fischer (2001).

Constrained medium-term expenditure paths producing a gradual decrease in the government-expenditure-to-GDP ratios could also be a useful instrument to create the conditions for lasting reductions of tax burdens while safeguarding fiscal consolidation.

Table 15 gives an overview of the different rules, objectives and guidelines, currently used in Member States to direct the evolution of public expenditure in the medium term. A number of Member States now apply extensive multi-annual budgeting frameworks including 'hard' expenditure ceilings, while others operate with less formal expenditure growth targets or guidelines.

One of the most encompassing medium-term budgeting framework is in the Netherlands. It is based on the coalition agreement of the ruling Dutch Government and cov-

ers the full period of office ⁽¹⁾. Its cornerstone is real expenditure targets. Under the current coalition agreement, real expenditure is allowed to grow by 1.5% a year on average. The real expenditure guidelines are translated into actual figures on an annual basis using the GDP deflator. The real expenditure targets are set on the basis of deliberately cautious growth scenarios. Should expenditure overruns occur, then they must in principle be compensated for in the same year. A key feature is the clear separation of the expenditure and revenue sides of the budget, since windfalls in revenues may not be used

⁽¹⁾ The current cabinet period ends in 2002. It is likely that the current framework will be slightly modified after the elections.

Table 15

General government medium-term budgeting frameworks used in Member States ⁽¹⁾, ⁽²⁾

	Multi-annual budgeting framework	Multi-annual spending targets/guidelines/objectives	Additional budget rules and targets
B	—	Annual CG + SS exp. growth of 1.5% in real terms over medium term	Primary balance objective
DK	—	Annual GG consumption growth of 1% in real terms over medium term	Average GG budget surplus of 2-3% of GDP. Reduce debt levels
D	—	Annual GG 2% exp growth in nominal terms	Golden rule for federal government
EL	—	No rule	
E	—	No rule	
F	—	GG exp. 4.5% real growth target over 3 years (2002–04). Growth target set to be below potential growth of economy	
IRL	Three year departmental 'envelopes'	—	
I	DPEF and multi-annual budget presented to Parliament	—	
L	—		
NL	CG commitment to expenditure framework over 1999–2002 office period	CG + SS to grow 9% in real terms over 1999–2002	Rules on how to deal with growth dividends on the revenue side
AT	—	No rule	
P	—	No rule	
FIN	Four-year expenditure set by CG and presented to Parliament	CG expenditures constant at 1999 real level over 2001–04 period	CG budget in surplus in structural and ESA terms
S	Three-year nominal expenditure ceilings approved by Parliament	CG exp. Growth not higher than projected nominal GDP	GG 2% surplus over the cycle
UK	Three-year spending limits for departments covers mainly discretionary expenditures	—	— Golden rule for public sector — Sustainable investment rule (40% net debt)

⁽¹⁾ GG: general government, CG: central government and SS: social security.

⁽²⁾ Member States not mentioned in the table do not yet apply a medium-term budgeting mechanism domestically.

Source: 2000/2001 updated stability and convergence programmes and Commission services.

Box 6: How budgetary institutions affect budgetary performance

Government spending is targeted towards specific groups whereas in contrast it is usually financed from a common pool of revenues. The recent literature on public choice and political economy shows that this is one of the factors leading to excessive spending (implying a 'deficit bias') as politicians try to satisfy the needs of constituencies who do not bear the full cost. The design of the budgetary process and the use and design of different budgetary rules can affect fiscal performance if they internalise this externality.

One strand of literature points to the fragmentation of budgeting institutions as a source of excessive spending (Hallerberg and von Hagen, 1999, and von Hagen and Harden, 1994). Centralisation of the decision-making in the budgetary process can help overcome this by allowing a comprehensive view of the budgetary implications of all measures to be taken into account, and forces participants to the process to recognise the real costs and benefits of each measure. In general, there are two ways of reaching a higher degree of centralisation: delegation and contracting (see von Hagen et al., 2001), and most Member States have developed one of these approaches ⁽¹⁾. Delegation essentially implies a transfer of power from the Parliament to the government, and within the government from the various spending departments to one Minister, normally the Finance Minister. The latter sets the constraints and has a strong monitoring role. Once the government has approved the budget, the Parliament can make only limited amendments to it. Under the contract approach, the targets are negotiated among the different Ministers at the beginning of the budgetary process, often on a multi-year horizon. Agreed targets become binding for all departments and are regularly reviewed to verify compliance. The Parliament has a strong position in this process as it can make important amendments on the budget proposal and monitors strictly its implementation.

In the context of enhancing fiscal discipline, one of the themes that have been debated is the relative effectiveness

⁽¹⁾ Hallerberg and von Hagen (1999) show that the choice between these two approaches is influenced by the country's voting system.

of numerical targets versus procedural rules. Numerical targets impose a constraint on budgetary policy by requiring that a specific objective is attained. Rules and procedures, instead set restrictions on the presentation, adoption and execution of budgets. Of course, targets and procedural rules can be mutually reinforcing and implemented in parallel to strengthen the credibility and the efficiency of the overall budgetary process. The actual choices made in this context depend on many factors with roots in the political and historical developments in each country.

A key consideration in this debate is what can be defined as a 'budgetary rule'. A critical feature of a budgetary rule is that it is intended for application on a permanent basis by successive governments (Kopits and Symanski, 1998). A rule should also have an *ex post* dimension, implying that an assessment is made as to compliance. Needless to say, not all policy targets that guide national budgetary policies qualify as 'rules'. Self-proclaimed 'targets' by a government would be more appropriately labelled as 'guidelines', since they are useful as commitment and transparency devices for current government's policies, but do not commit successive governments nor create any legal restraints on their policies.

The credibility of a rule is acquired over time by reputation and/or by *ex post* enforcement mechanisms and sanction systems. Only a credible rule gives *ex ante* knowledge about future budgetary policies and can influence agents' expectations. The design of a rule also involves many features. One of these is its degree of severity which depends on what part of the government sector is covered, the budgetary indicator chosen and the threshold targeted. Compliance should be easy to verify, and preferably be carried out by an independent agent. In this respect, there is a trade-off between simplicity and transparency on the one hand, and flexibility and contingency on the other hand. In principle, the ideal rule should be State-contingent: however, if rules are too contingent they may become less transparent and subject to manipulation. This makes it difficult to define what 'real' commitment involved. There could also be a trade-off between domestic rules and those imposed from the outside the country: external rules may lend more credibility while they may also suffer from a low degree of domestic social acceptance.

finance additional expenditure. As in recent years revenues have systematically been higher than assumed

(given the cautious growth scenario assumptions), 'growth dividends' relative to plan have been generated. The

framework encompasses rules on how to distribute such growth dividends between the alleviation of the tax burden and the reduction of public debt ⁽¹⁾.

In Italy, the government presents a medium-term budget-planning document (*Documento di programmazione economico-finanziaria*, DPEF) to Parliament in June each year for a vote. The DPEF contains a four-year budget framework of the main aggregates, including budget balances and expenditure and revenue ratios for the general government. The DPEF gives government targets and estimated outcomes based on trend projections, indicating the expected amount of discretionary budget measures necessary. The autumn budget then implements the DPEF for the first year of the plan. Overall, the DPEF does not directly constrain public expenditure, but rather is a framework that sets the government's medium-term objectives.

In Finland and Sweden, more explicit multi-year expenditure frameworks are used in the budget process. In Sweden, the Parliament enacts four-year nominal expenditure ceilings for central government spending including pensions but excluding interest costs. These ceilings are fixed in the spring and are the starting point for the budget that is presented during autumn. The ceilings are set so that they are in accordance with the government aim to keep the budget balance at a 2% of GDP surplus over the cycle (see Section 2.2). In Finland, the system is similar using five-year expenditure ceilings for the central government, which are presented in the spring and updated annually. However, it is the government that sets the ceilings while the Parliament is only informed. The current government sets the ceilings that aim to keep real expenditures at the 1999 level (when it took office) and provides for a central government surplus in structural terms.

The UK and Ireland use similar systems with three-year departmental expenditure envelopes. The UK system is more elaborate, having three-year departmental envelopes for discretionary expenditures (not including social security benefits and debt interest) decided in the bi-annual 'Comprehensive spending review' and subject to approval of government and Parliament. Current government

guidelines are set using a cautious 2.25% of GDP trend growth assumption. The envelopes are set in accordance with the 'golden rule' and the 'sustainable investment rule' which form part of the budgetary framework (see Section 2.2). In Ireland, the three-year departmental envelopes are set by the government and operate more as guidelines to improve medium-term planning.

Several other countries use targets for medium-term expenditure growth developments. These objectives are set by the government as a guide for fiscal policy, but do not constitute a proper multi-annual budgeting system. In France, the government uses three-year rolling growth targets for real general government expenditures. The target is to be applied on average over the three-year period and is updated and rolled over on a yearly basis. Growth targets are set below potential GDP growth estimates, thus aiming at gradually lowering the share of public expenditures to GDP. In Belgium, the government has set an annual 1.5% growth target for real primary expenditure for the federal government and social security ('Entity I'). To this end, a cautious 2.5% trend growth assumption has been used and growth dividends ⁽²⁾ are to be used to reduce debt. In Germany, the federal government has presented a 2% nominal expenditure growth objective to be applied for the whole general government sector over the medium term. In both Spain and Portugal there are currently plans to introduce more extensive medium-term budgeting frameworks.

Common features and differences across national rules

While the frameworks described above share common features, they are different in several institutional aspects. First, their status differs. Only the frameworks enacted by law, such as in Sweden or the UK, or vested with an important amount of 'political capital' can be regarded as 'rules' that provide an external constraint to guide budgetary choices. In addition, these frameworks also include enforcement mechanisms in the event of expenditure overruns. Where the government unilaterally declares a certain expenditure growth path as an objective, there is no enforcement mechanism within the system to prevent targets being reformulated or departed from.

Second, there is a trade-off between flexibility and credibility. The more practical and operational the framework is, the simpler and more focused it tends to be. But it

⁽¹⁾ In the case of a positive growth dividend on the revenue side, if the deficit is smaller than 0.75% of GDP, the allocation of additional revenues is split 50/50 between lower taxes and improving the deficit. If the deficit is higher than 0.75% of GDP, 75% goes to reduce the deficit. In the case of a negative growth dividend, if the EMU deficit is above 2.25% of GDP, 50% of revenue losses are covered by borrowing and 50% by tax increases. If the deficit is below 2.25% of GDP, 75% is covered by borrowing and 25% by higher taxes.

⁽²⁾ Growth dividends stemming from the 2.5% to 2.7% interval could be allocated for other purposes.

also risks being inflexible if economic conditions change. Such inflexibility can imply that the resulting fiscal stance becomes pro-cyclical or that the framework no longer meets the specific concern for which it was designed. Here, pressures can build to modify the parameters, or indeed for a complete redesign, of the existing framework. Both in Sweden and the Netherlands, the budgeting framework has been created at a time when budget deficits were high, largely due to rising expenditures: fiscal consolidation through expenditure control was therefore the priority. However, some pressure for change mount now that growth is higher and budget positions have moved into surplus. The possible benefits of such changes have of course to be weighed against the potential loss of gained credibility. Frameworks embodying high flexibility may end up being less binding. For example in France, the three-year average growth objective given in the 1999 update of 4% over the 2000–02 period has been increased to 4.5% for the 2001–03 period⁽¹⁾.

Third, the sectoral coverage of the expenditure frameworks varies across countries. In general, frameworks which are more directly operational tend to have a relatively narrow coverage (encompassing central government expenditures and in some cases social security) including only expenditure items that are under the direct control of the central government. However, expenditure growth ‘guidelines’ tend to apply to the general government sector as a whole in order to give guidance to other budgetary actors and indirectly work as a coordination instrument. In these cases there tends to be no ‘hard enforcement’ mechanism beyond domestic peer-pressure to respect the guidelines.

Fourth, the degree of caution used when setting the assumptions on which budgetary targets are made differ across frameworks. Many countries use deliberately cautious growth assumptions, and consequently budgetary targets are systematically exceeded on the revenue side as ‘growth dividends’ materialise. Such bias can be beneficial to the extent that the costs of not meeting budgetary targets tend to be higher than the benefits of overachieving them.

As described above, several frameworks contain some guidelines on how to deal with these better-than-projected out-turns. For example in Belgium, the government is committed to use growth dividends to reduce public debt

allowing automatic stabilisers to operate fully on the revenue side. However, in countries with lower debt levels it may be deemed more important to reduce high tax burdens than to further reduce debt levels. This could introduce a trade-off between efficiency concerns (i.e. a lower tax burden) and stabilisation concerns (i.e. offsetting the working of the automatic stabilisers in the process). As pointed out above, in the Dutch framework, growth dividends on the revenue side, contingent on the level of the deficit, are in principle to be allocated to tax reductions. In this case, these tax reductions risk being pro-cyclical as taxes are reduced when growth is high. In Sweden, growth dividends leading to budget surpluses above the structural 2% of GDP surplus target are earmarked to be returned to the household sector. However it is not specified what form this will take (whether through higher transfers or reduced taxes).

2.2.2. The use of numerical rules at the national level

Some countries complement expenditure control frameworks with numerical budgetary rules. In fact, numerical rules sometimes have a higher status, with the expenditure frameworks being viewed as means to ensure these rules are met.

Sweden applies a budgetary rule based on cyclically-adjusted budget balances. To lower the debt burden, to increase the room of manoeuvre in the case of recessions and in view of the budgetary impact of ageing populations, the government has set an objective of a 2% of GDP budget surplus on average over the business cycle, i.e. a more ambitious target than the SGP ‘close to balance or in surplus’ objective⁽²⁾. Whereas the strength of this type of rule is its flexibility in light of changing economic conditions, the monitoring of compliance is complicated as it is necessary to translate the ‘average over the business cycle’ target into an operational annual target which in turn makes it necessary to identify the position in the business cycle.

Another interesting rule is the application of a current account balance requirement, or the so-called ‘golden rule’ of deficit financing. The UK and Germany apply a golden rule in their national budgetary framework that is codified by law. In the UK, the golden rule is part of the Code for Fiscal Stability⁽³⁾ and requires the current bud-

⁽¹⁾ Indeed, in the Council opinion on the French update the Council specifically noted this increase in the expenditure norm relative to last year and found that a lower increase would be desirable.

⁽²⁾ See Part II, Chapter 1.

⁽³⁾ The Code for Fiscal Stability, approved by the House of Commons in December 1998.

get to be in balance or surplus over the economic cycle. The investment concept used is net investment (that is gross investments net of depreciation); thus, borrowing is only allowed for investment that contributes to increasing the capital stock. In Germany, the golden rule applies to the federal budget on an annual basis and is enshrined in the constitution ⁽¹⁾. The definition of investment used includes investment in human capital and therefore does not follow strictly the national accounts definition.

The pros and cons of targeting the current budget balance as opposed to the overall budget balance have been debated extensively in the literature ⁽²⁾. However, the concern in this chapter is to consider its compatibility with the EU rules which do not treat investment differently from other expenditure. While Article 104 of the Treaty on the EDP specifies that investment expenditures should be taken into account when assessing excessive deficits, an increase in borrowing to finance higher capital investment could be in conflict with SGP requirement of achieving a budget balance target of ‘close to balance or in surplus’. Although no such conflict has arisen to date, the targets set in the 2000 UK convergence programme provided an indication of the need to consider this issue ⁽³⁾.

Table 16 shows the UK current budget targets and the ESA-based overall budget balance targets as presented in the updated programme. While the national golden rule requirements are clearly overachieved, the planned budget balance deteriorates sharply as a result of increasing investment levels. These developments are difficult to reconcile with the ‘close to balance or in surplus’ requirement of the SGP (even though this would be of more concern in countries with higher debt levels or debt still

above the 60 % of GDP reference value). This was noted in the Council opinion on the UK convergence programme update (see country section in Part V) ⁽⁴⁾.

A further example of a numerical rule is that of targets for primary balances, which seem to be a useful complement to the actual balance target in high-debt countries. For instance, Belgium over several years has referred to a commitment to keep the primary budget balance over the 6 % of GDP level in the medium term so as to bring down public debt at a fast pace. An explicit reference to a figure is no longer made in their updated stability programme, mainly because primary balances are kept comfortably above it.

Several countries use different guidelines for targeting public debt levels. While most countries refer to gross debt, the UK has a rule expressed in terms of net debt. The Code for Fiscal Stability suggests a numerical value for net debt ⁽⁵⁾. In theory, the same type of conflict with the EU framework as is the case with the golden rule for deficits may arise since the gross, rather than net, debt is the relevant concept in the EU framework. However, in the current situation, this debt rule is not binding, as the net debt is below the 40 % of GDP level. Moreover, in practice this represents a tighter objective than meeting the 60 % of GDP gross debt reference value.

2.3. Coordination of general government positions at the national level

At the national level, several players other than the central government are involved in determining the general government budgetary position which is the relevant

⁽¹⁾ Article 115 in the ‘Grundgesetz’.

⁽²⁾ See for example Balassone and Franco (2001).

⁽³⁾ The consolidation effort in the run-up to EMU has to some extent been based on restricting the growth of government expenditures. Therefore, in the context of meeting the SGP budgetary targets, an application of the golden rule has generally led to no conflicts. Furthermore, the initial years of EMU, favourable growth has meant that the automatic stabilisers have contributed to improve overall actual budgetary position.

⁽⁴⁾ This type of ‘target inconsistency’ may become more relevant in relation to applicant Member States where there is an evident need for high government investment levels.

⁽⁵⁾ This is called a sustainable investment rule, by virtue of which public sector net debt as a proportion of GDP should be held over the economic cycle at a stable and prudent level and where, other things equal, a reduction in public sector net debt to below 40 % of GDP over the economic cycle is deemed desirable.

Table 16

Budgetary outlook in the UK according to the 2000 updated UK CP

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Current budget	+ 2.1	+ 1.7	+ 1.6	+ 1.3	+ 0.7	+ 0.7	0.7
ESA balance	+ 1.8	+ 1.1	+ 0.6	- 0.1	- 0.9	- 1.0	- 1.1

(% of GDP)

aggregate for EU monitoring. This section examines how the central government interacts with these other national budgetary players on issues relevant for the SGP, i.e. national Parliaments and sub-central levels of governments.

2.3.1. Stability and convergence programmes: the involvement of Parliament and the interaction with the national budget procedure

Whereas governments interact directly with the Parliament in the annual budgetary process, they operate with a large degree of autonomy when deciding the medium-term targets and commitments in their stability and convergence programmes. At present, national Parliaments are not formally involved in the process leading to the submission of the stability/convergence programmes (Table 17) ⁽¹⁾. In fact, no national Parliament formally endorses the programme before it is submitted to the EU, and in most cases are only informed at the same time or after they have been submitted to the EU.

However, a form of indirect Parliamentary endorsement of the contents and the commitments of the programmes exists to the extent that the programmes mirror documents which have already received, or are due to receive,

⁽¹⁾ Formal involvement implies a voting procedure, a debate followed by a resolution or some form of official endorsement of the programme.

Parliamentary endorsement. Therefore, the timing of submission of programmes as compared to the stage in the parliamentary process is important. In most Member States, the annual budget cycle runs during the autumn months, with Parliament adopting the final budget towards the end of the year or early the following year. The submission of updated programmes to the EU takes place at different stages in the national budgetary procedure across Member States where updated programmes have been submitted to the Commission and Council around the end of the year, ranging from early September to as late as March ⁽²⁾.

⁽²⁾ The SGP (regulation 1466/97) required that the first set of stability and convergence programmes be submitted before 1 March 1999, a deadline that was synchronised with the first reporting of data on deficits and debt for use in the excessive deficit procedure. Since then, they have submitted updated programmes around the end of the year, in some cases as early as September or as late as March. In relation to the national budget procedure, over the past three years, a number of Member States (Belgium, Spain, France, Italy, and Portugal) have consistently submitted the programmes after the adoption of the final budget by the Parliament. In a few cases (Ireland, Finland), the submission has taken place around the moment of the presentation of the draft budget to Parliament, while in others (Austria, Sweden) it has always taken place before the conclusion of the parliamentary debate on the budget. Only in the case of the UK, due to the fact that the budget is not presented until the spring, does the submission of the programme take place during the preparation of the draft budget. Beyond the regular pattern of submission dates that emerges for the majority of the Member States, it can be observed that in some countries (notably Denmark, Germany and the Netherlands) the date of submission has not been constant in time.

Table 17

Involvement of Parliament in the 2000 round of programme updates

	Time of programme submission	Stage in budget process	Parliament informed relative to submission	Possible parliamentary treatment
B	12/2000	Budget adopted by Parliament	Same time	
DK	12/2000	Budget adopted by Parliament	Same time	
D	10/2000	Parliamentary debate underway	Same time	
EL	12/2000	Parliamentary debate underway	Same time	
E	01/2001	Budget adopted by Parliament	Same time	
F	12/2000	Budget adopted by Parliament	Before	Presented by gov. and discussed in Parliament
IRL	12/2000	Budget submitted to Parliament	Same time	Parliament can discuss
I	12/2000	Budget adopted by Parliament	Same time	
L	12/2000	Budget adopted by Parliament	Same time	Relevant Parliament committee debate
NL	09/2000	Budget submitted to Parliament	Same time	Parliament can discuss and can vote on resolution
A	12/2000	Parliamentary debate underway	Same time	
P	01/2001	Budget adopted by Parliament	Same time	
FIN	09/2000	Budget submitted to Parliament	Same time	
S	11/2000	Parliamentary debate underway	Before	
UK	12/2000	Start of consultation phase leading to draft budget	Same time	

It could be argued that the submission of the programmes after the parliamentary adoption of the budget means that they better reflect the outcome of the national budgetary process. On the other hand, a late submission could also be a way to avoid a parallel discussion at EU and at national level, and could mitigate concerns on national sovereignty that debate at EU level might pre-empt national political discussion. If the programmes are instead submitted at the start of the annual budget process (i.e. ahead of the government presentation of the draft budget to the national Parliament), this could enhance the commitment of Parliaments to the main budgetary aggregates, and provide an opportunity for the concerns expressed at EU level to be taken into account in setting national budgets. Even so, there could also be a deliberate intention to submit programmes too early, especially in relation to an upcoming sensitive national policy discussion. In this case, the programmes risk quickly becoming outdated, reducing their value importantly and affecting the transparency of the whole process. Overall, as stressed in the previous chapter, given that draft budgets are usually very close to final budgets, a relatively early submission would seem to be more in line with the rationale of the SGP, allowing the EU discussions to feed back into the national discussions.

A low degree of formal involvement does not necessarily reflect the real degree of parliamentary involvement in the SGP process. As regards the short-term commitments, the degree of indirect endorsement of the programmes is in fact quite high, as generally there is a strong link between the programme targets and the annual budget for all Member States (except the UK ⁽¹⁾).

However, the endorsement by Parliament of the medium-term target, which is to be consistent with the close to balance rule of the SGP, is usually much more tenuous. The medium-term target and adjustment path set down in stability and convergence programmes are not a budget proposal or a formal decision, and thus signal ambitions rather than plans. In most Member States, the medium-term objectives are merely based on a government forecast, or a forecast made by an independent planning bureau and thus remains exclusively government's responsibility.

The situation is qualitatively different in a limited number of countries in which there is a medium-term framework

based on parliamentary decisions. In Finland and Sweden (see section 2.2), multi-annual expenditure ceilings are agreed or discussed by Parliament in the spring, and thus constrain the major aggregates ahead of the adoption of the annual budget in the autumn. The objectives presented in the programmes by the government must be consistent with the expenditure ceilings implying that the medium-term targets are endorsed by Parliament. In Italy, Parliamentary involvement goes even further as the DPEF is adopted by a vote of Parliament. The Italian stability programme is based on the budget law and the DPEF and if the programme objectives deviate from the DPEF the Parliament must be informed.

2.3.2. Setting the general government targets: local and regional government involvement

The contribution of each level of government to the general government balance

Under the SGP, the central government undertakes commitments on behalf of the general government as a whole. While the central government is responsible for observing the Treaty and the SGP requirements, regional and local authorities may play a significant role in determining aggregate budgetary developments. Therefore the arrangements (or lack thereof) which oversee the relationship between the central and decentralised government could be an issue to the extent that the SGP requirements impact on State or local government finances.

In most Member States, an important share of general government spending is carried out at local government level while the majority of taxes are raised at central government level. While depending on central government transfers, local and regional governments have a certain degree of autonomy and can have an important impact on the general government budget position if operational deficits are channelled through to central government ⁽²⁾.

Therefore, the 'financial significance' ⁽³⁾ of sub-national governments in the SGP context depends upon the part of total general government expenditure they account for, the existence of independent powers of borrowing and the possibility to claim transfers from the central gov-

⁽¹⁾ This is because the budget is not run on a calendar year basis. The UK figures are based on the mid-financial year pre-budget report.

⁽²⁾ This is a much debated issue in the United States where state governments are subject to different discipline rules.

⁽³⁾ The term 'financial significance' is used here to describe to what degree the development of local government finances needs to be controlled as they pose a risk for the general government budgetary position.

ernment to cover financial shortfalls. A higher level of financial autonomy on the revenue side (defined in terms of the level of own receipts, including shares in centrally collected taxes, relative to expenditure), could reduce the 'financial significance' of decentralised government as they would be able to find own financing in case of expenditure overruns. If, on the other hand, financial significance is high then the central government faces the problem of achieving a degree of control, be it through a mechanism of consultation and coordination or through a credible system of budgetary coordination rules.

The Member States with the highest levels of financial autonomy are federal States such as Belgium, Germany⁽¹⁾, Spain and the Nordic Member States (where local governments traditionally have a high degree of autonomy). Also, Italy is going through a process of high decentralisation. Member States that could be said to have a low degree of sub-national financial autonomy are France, the Netherlands, Ireland and, until recently taking devolution into account, the UK. In terms of the part of total expenditure which is accounted for by sub-national government, it would seem that Germany, Spain and the

Nordic countries are at the higher end of the spectrum, while Ireland, the Netherlands and Portugal are at the lower end.

Table 18 shows the general government budget balance for 2000 as reported in March 2001 with a breakdown by government sector level. The figures indicate that local governments on average run roughly balanced budgets, and in any case do not inflict major deficits in national account terms. However, this does not mean that local governments do not run operating deficits as budget balances do not tell how much of their expenditures are covered through transfers from central government. As indicated above, planned operational deficits must generally be covered by transfers to balance the budget. Higher-than-budgeted operational deficits must find additional financing, either through increased revenues (typically additional central government transfers implying higher central government expenditures) or additional borrowing (implying a local government deficit).

How central governments guide general government public finances

It is not surprising that Member States have different frameworks to guide general government finances. In countries where lower levels of government have a substantial financial autonomy, their inclusion in the elabo-

⁽¹⁾ Although in the case of Germany it may be questioned whether the degree of autonomy enjoyed by the *Länder* in setting revenue levels is really so high, given the important level of equalisation transfers.

Table 18

Budget balance, general government and government sub-sectors as reported in the March 2001 EDP reporting

(% of GDP)

2000	General government	Central government (*)	State government	Local government	Social security
B	0.0	0.7	0.1	0.1	0.5
DK	2.5	1.4		0.2	1.3
D	1.3	1.4	0.5	0.3	0.1
EL	0.9	3.3		0.1	2.4
E	0.3	0.6	0.3	0.0	0.5
F	1.3	2.2		0.3	0.6
IRL	4.5	4.2		0.0	0.4
I (**)	0.3	- 1.0		1.0	0.5
L	5.3	2.8		0.6	1.9
NL	2.0	0.3		0.2	1.5
A	1.1	1.4	0.2	0.1	0.1
P	1.4	1.4		0.0	0.0
FIN	6.7	3.3		0.1	3.3
S	4.0	1.3		0.1	2.7
UK	2.1	2.0		0.1	

(*) The EDP figures include UMTS receipts (see Part I, Box 1).

(**) Data by subsectors provided at a later stage by ESTAT.

ration of and responsibility for stability and convergence programme objectives is an important issue. In other countries, borrowing by lower levels of government is firmly restricted and to the extent that these arrangements are reliable and effective, the need for a direct involvement of local governments in the elaboration of the programmes is reduced. In general, the relative autonomy of local and regional governments is acknowledged and spending decisions and budgets are made without interference from the central government. However, the central government keeps overall control by restricting lower levels of governments power to tax or change tax rates complemented by restrictions on borrowing possibilities.

In practice, as a pre-emptive coordination device, the central government in virtually all Member States puts a boundary of some sort on lower level's finances. In a majority of Member States, local governments are only allowed to borrow to cover for investment expenditures, thus a 'golden rule' applies. In addition, it is not uncommon that borrowing has to be directly approved by the Ministry of Finance. A more binding arrangement is the adoption of a direct balanced budget constraint. Such a rule for local governments exists in Sweden since the beginning of 2000, and requires local authorities to balance their budgets in every year (if they fail to comply, the situation must be corrected within two years). The Spanish Government also plan to introduce a similar law.

In addition to the possibility to restrict borrowing, there may also be more explicit coordination frameworks. In federal States (Belgium, Germany, Spain and Austria) or Member States with strongly regionalised structure (Italy), this tends to be more important than in highly centralised countries.

In Belgium, the High Finance Council sets budgetary objectives for lower levels of government and the central government concludes agreements with communities and regions. In Germany, representatives from the federal government, the Bundesbank and *Länder* governments meet in a finance planning council (Finanzplanungsrat) to discuss overall budgetary developments and plans. In Spain, central government and individual regions meet in the Fiscal and Financial Council to discuss budgetary matters and establishing the indebtedness limits for each region. A consultation system also exists in Denmark where there are negotiated agreements between central and local government. These normally encompass overall financial ceilings and a guideline for the overall development of expenditures and revenues. However, these agreements are not legally binding.

A few countries have gone further and established so called 'internal stability pacts' which are arrangements among the different levels of government aiming to clarify division of responsibility for budget discipline. This relates more directly to the requirements on general government finances introduced in the SGP. In such internal pacts, negotiations between the different levels of government can revolve around four axes: setting the objectives, ensuring their respect, identifying the responsibility for taking corrective action and sharing responsibility in case of sanctions (¹). To this end, the internal pact can contain a set of rules which establish the part of responsibility of local and regional authorities for the general government deficit. The pacts often set up joint committees to monitor budgetary developments at sub-national level and require sub-national governments to submit annual and multi-annual plans for their debt and deficits.

Some agreements go as far as specifying the procedure to be followed in case of sanctions being applied at EU level for a breach of the excessive deficit procedure. In Germany, the *Länder* have agreed that it is a common task of all levels of government to ensure the respect of the deficit target. Agreements of this sort can take the form of a joint declaration on the willingness to consolidate the budget balance. In Austria, each government entity would have to pay a proportion of the sanction, in relation to its share of excessive deficit (this depends to a large extent on the share of population living in the territory). In Italy, the DPEF establishes budgetary targets for lower levels of government. Should Italy have an excessive deficit then regions responsible for the overrun have to contribute to the potential fine. In addition, there are positive financial incentives to meet the targets also when the general government is not in excessive deficit.

Clearly, the credibility of the internal pacts depends on the enforceability of the commitments, which in turn requires mechanisms such as a supervisory authority, conditionality of central government transfers or borrowing restrictions. Given the short experience of the SGP arrangements, the effectiveness of these domestic arrangements in ensuring that the goal of budgetary discipline is fully embodied in the political priorities of all government levels is still untested.

⁽¹⁾ Fischer and Giudice (2001).

Part III

Fiscal policy and cyclical stabilisation in EMU

Summary

It is widely recognised that given the loss of national monetary policy in EMU, budgetary policy needs to play a more significant role in smoothening the impact of country-specific shocks on real output. However, nowadays there is a growing scepticism on the use of discretionary fiscal policy for cyclical purposes: long and uncertain lags, institutional constraints and irreversibility of fiscal decisions hamper the effectiveness of fiscal policy in fine-tuning the economy.

Therefore, the norm for budgetary behaviour should be to let automatic stabilisers operate freely, with discretionary policy being the exception rather than the rule. While this conclusion is quite uncontroversial, a number of open questions remain. Are automatic stabilisers always beneficial for the economy? How much cyclical smoothing can be expected from the working of automatic stabilisers? What kind of reforms could improve the effectiveness of automatic stabilisers?

The answers to these questions largely depend on whether the shocks hitting the economy emanate from the demand or the supply side, although this distinction is not always clear-cut in practice. In the event of demand shocks, such as an acceleration of private consumption or a sudden fall in exports, output and inflation move in the same direction. Automatic fiscal stabilisers can therefore play a useful role as they cushion the impact both on output and prices. Empirical evidence shows that automatic stabilisers are particularly effective in the event of shocks to private consumption, but less so in the event of shocks to investment or external demand.

In contrast, supply shocks typically send output and inflation in opposite directions: for example, in the case of a

short-term surge in oil prices, the output gap could turn negative and at the same time there is higher inflation. If the supply side shock is only a temporary phenomenon, automatic stabilisers do smoothen output, but at the cost of higher inflation.

However, if the supply-side shock is permanent (i.e. it affects the level of potential activity), automatic stabilisers may be unhelpful if they delay the necessary adjustment towards the 'new' level of potential output: instead what is needed is flexibility in product and factor markets to enable output to converge to its new equilibrium level. In practice, the empirical evidence points to a relatively small impact of the automatic stabilisers in the case of supply-side shocks: automatic stabilisers are thus unlikely to act as a major brake on the required adjustment or make it more difficult for the central bank to maintain price stability.

This type of analysis is important as there is a need to develop guidelines on the appropriate policy response expected of a Member State in EMU when faced with various types of economic shocks, i.e. provide a common analytical framework which could help avoid past coordination failures. It also identifies an important field for economic and policy research. Some tax and welfare reforms increase efficiency and flexibility, but may negatively affect cyclical stabilisation. Given this potential trade-off, consideration could be given to designing 'smart' public finance reforms which pursue economic efficiency as their prime goal, but at the same time do not hamper (and possibly improve) the working of automatic stabilisers. Possible examples of such reforms are re-designing the time profile of unemployment benefits, a system of 'conditional' negative income tax or in-work benefits.

1. The role and effectiveness of fiscal policy in EMU

As well as contributing to a more efficient allocation of resources and a fairer income redistribution, fiscal policy also pursues the objective of stabilising economic activity. Stabilisation is seen as beneficial both from a micro-economic (to smooth consumption over time and states of nature) and a macroeconomic standpoint (to avoid excessive output and employment variability and boom-bust fluctuations) ⁽¹⁾.

EMU raises particular considerations as regards the role of national fiscal policies for stabilisation purposes given that the single monetary policy cannot be tailored to country-specific needs. The aim of this chapter is to analyse the role and effectiveness of fiscal policy in EMU with a particular emphasis on the issue of national cyclical stabilisation. This chapter reviews the recent theoretical and empirical debate on the working of fiscal policy in general, and highlights the potential and limits of this instrument as a stabilisation device in EMU. The next chapter discusses the economics of automatic stabilisers and presents new empirical evidence on their effectiveness in EU countries. The final chapter derives some principles for fiscal behaviour in EMU on the basis of the above analyses.

1.1. The recent debate on fiscal policy

A re-appraisal of the effects and transmission channels of fiscal policy

According to the standard neo-Keynesian framework, fiscal policy essentially operates through its direct impact on the current income, under the assumptions of sticky prices, slack productive capacity and myopic or liquidity-constrained households. A whole range of well-known predictions derive from this model:

- A loosening of fiscal policy stimulates both consumption and investment, and boosts demand and output.
- The stimulus to output is larger in the case of changes to public investment compared with transfers to households; it is also larger in the case of expenditure changes than tax changes.
- The exchange rate is predicted to appreciate in the event of a fiscal expansion and depreciate in the event of fiscal retrenchment; hence, fiscal multipliers are smaller in the case of flexible exchange rates than in the case of fixed exchange rates.
- The larger the government share in the economy and the higher the progressivity of tax systems, the more fiscal policy will smooth the impact of economic shocks on real output.
- National fiscal policies in a monetary union, can have 'beggar-thy-neighbour' effects. An expansionary fiscal policy in one country can have spillover effects on other countries via two channels: trade linkages (higher imports, lower exports) and financial market linkages (higher interest rates and an appreciation of the exchange rate). If the latter effect prevails, a fiscal expansion in one country would have a contractionary impact on partners countries in the monetary union ⁽²⁾.

This analytical framework entails two main policy prescriptions for monetary unions. First, national fiscal policies are considered a potential substitute for the lost national monetary policy for stabilisation purposes. Second, active coordination of national fiscal policies may be

⁽¹⁾ Empirically, however, the quantification of the benefits of stabilisation is not uncontroversial. For a survey of the literature, see Andersen (2001).

⁽²⁾ In European countries, the two effects are estimated to be low in absolute value and, since they go in opposite directions, tend to cancel out (see, for instance, Gros and Thygesen, 1998). But, arguably, if financial spillovers increase in the short run with a single currency while trade linkages take time to deepen, the overall effect may turn negative.

needed to internalise negative demand and financial spillovers.

The theoretical and empirical debate of the past ten years has led to a reappraisal of the role and effects of fiscal policy compared with the traditional approach described above. The recent literature stresses private agents' expectations other than pure demand-related transmission channels. What emerges is (1) the importance of inter-temporal effects, (2) the non-linear impact of budgetary measures, and (3) the importance of the composition of fiscal policy.

Modern macroeconomics places forward-looking, intertemporal optimising agents at the very centre of the analysis. While full Ricardian equivalence is often rejected empirically, embodying such constraints in the analysis leads to a downward revision in the size of fiscal multipliers. In particular, expectations of future spending cuts and tax increases help explain why a discretionary fiscal expansion may turn out to be rather ineffective (and vice versa). Consequently, some of the standard views listed above may not hold. For example, the conclusion that a fiscal expansion leads to an appreciation of the exchange rate is questionable if inter-temporal effects are brought into the picture.

Incorporating private agents' expectations also draws the attention to possible non-linear effects of fiscal policy. While most large-scale macroeconomic models assume that the effects of fiscal policy measures on output are proportional to their size, both theory and empirical evidence point to possible non-linear effects. As suggested by Alesina and Perotti (1995) and Giavazzi et al. (2000), some episodes of prolonged and substantial fiscal consolidation in the 1990s seem to have had a positive ('non-Keynesian') short-term impact on private consumption⁽¹⁾. A critical condition for such effects to materialise is a position of fiscal stress or crisis: in a situation of high budget deficits and growing public debt, credible retrenchment by creating expectations of a permanently lower tax burden in the future may actually stimulate private consumption; similarly, an expansionary fiscal policy in a situation of looming unsustainability may actually lead to a collapse in confidence and trigger a fall in demand. All in all, while traditional Keynesian effects can be expected in normal (non-crisis) conditions, non-

Keynesian effects may prevail if the long-run sustainability of public finances is in doubt.

The same literature points to the need to consider the composition of fiscal policy (i.e. whether it affects expenditure or receipts) when assessing the effects of budgetary measures on output. In particular, it generally recognises that fiscal consolidation has the best chance of success when it mainly rests on the expenditure side.

Overall, most recent studies (see Blanchard and Perotti (2000) and Perotti (2000) for a review of the literature) point out that traditional Keynesian macroeconomics probably overestimate the actual size of fiscal multipliers. While there is no theoretical consensus among economists about the size (and sometimes even the sign) of the short-term impact of fiscal policy on economic activity, most simulations with state-of-the-art macroeconomic models generally conclude that fiscal multipliers should in most cases be regarded as positive, albeit small.

A growing awareness of the institutional constraints on the conduct of discretionary fiscal policy

One of the clearest messages from recent literature is the growing scepticism vis-à-vis fiscal policy activism due to the institutional constraints on the design and implementation of fiscal measures. First, most studies reveal longer and more uncertain impact lags than was previously assumed. As a result, the impact of discretionary fiscal measures may only materialise long after an economy needs stimulation, i.e. they may inadvertently have a procyclical impact. Second, the irreversibility of fiscal decisions (for example creating public jobs or establishing new welfare programmes) often makes it inappropriate to take discretionary actions to tackle temporary shocks, and renders the reversal of policy choices very costly. Third, political constraints also warrant consideration. To avoid debt accumulation, discretionary fiscal policy would have to act symmetrically during recessions and booms: this implies actively increasing taxes or decreasing expenditure during upswings, which may be politically unrealistic and thus generates a bias towards running deficits.

In view of these institutional constraints, fiscal fine-tuning should be avoided and the reaction to shocks should be generally limited to the proper functioning of automatic stabilisers. Consequently, the recent literature stresses the need for rules-based fiscal policy enshrining a commitment to fiscal discipline in a stability-oriented institutional framework. Two qualifications are, however, important in this context:

⁽¹⁾ Evidence of non-Keynesian effects is also found in Italy in the fiscal retrenchment leading to the launch of EMU. See, European Commission (1999).

- Structural reforms may alter the size and efficiency of automatic stabilisers over time. For example, reducing the duration of unemployment benefits may have several offsetting effects: on the one hand, they would make a dent in the current income of people with high consumption propensity; on the other hand, they might render employment supply more responsive to economic fluctuations, thereby limiting the rise in unemployment during economic downturns. It is therefore necessary to evaluate the impact of structural reforms on the responsiveness of automatic stabilisers.
- While recourse to ‘across the board’ discretionary fiscal policy measures has fallen in disrepute, targeted fiscal measures tackling specific supply-side rigidities at source may in some cases prove useful. For instance, moderate wage setting in the public sector could help tame wage-push inflation, and the phasing out of tax reliefs for residential dwellings may prevent a real estate bubble (see, e.g. Wren-Lewis, 2000).

1.2. From theory to practice: how do governments behave?

As stressed above, active fiscal stabilisation is highly controversial, largely owing to problems of determining the timing and size of the policy change and anticipating the private sector response to policy changes. These considerations also suggest that discretionary policy should rather focus on medium- and long-term structural issues that enhance the capacity of the economy to adjust rather than pursue traditional cyclical stabilisation. However, the need for discretionary fiscal stabilisation cannot be ruled out altogether in EMU as some countries, especially small ones, may face a monetary stance which is not appropriate to their needs. The question is then whether discretionary fiscal policy is an effective way to correct this imbalance. Answering this question requires a careful, case-by-case analysis of the specific macroeconomic and structural conditions of the country concerned.

Identifying automatic stabilisers rather than discretionary measures as the most important budgetary instruments to smooth economic fluctuations in EMU is in line with the philosophy of the SGP, i.e. set an appropriate medium-term target and let automatic stabilisers play freely and symmetrically over the cycle. Such a type of budgetary behaviour would imply a substantial change compared to the past: empirical evidence indicates that countries in the last three decades have tended to behave pro-cyclically.

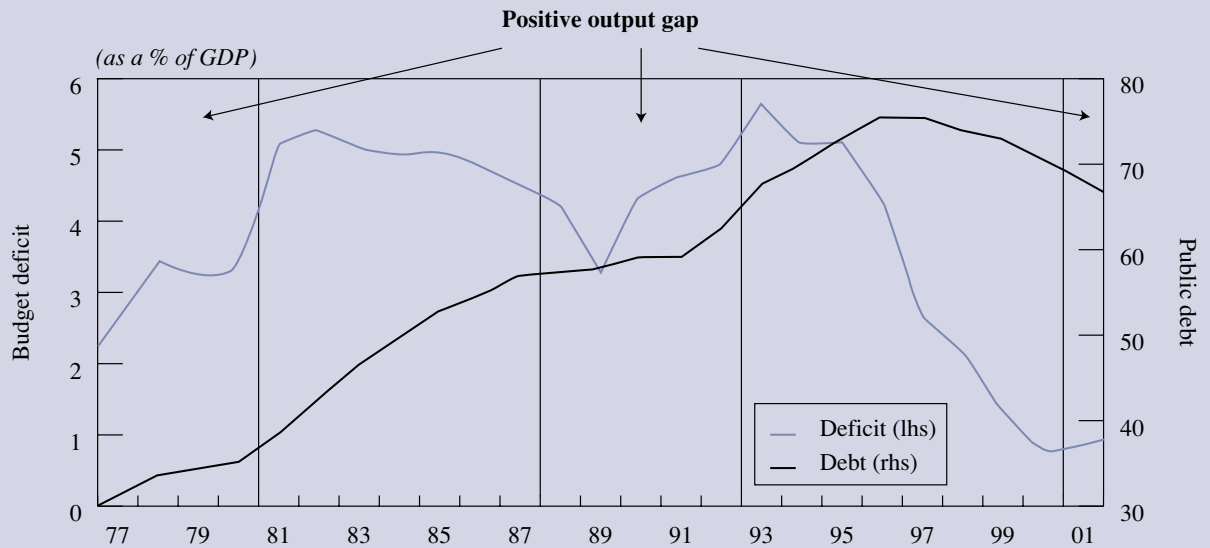
Graph 12 illustrates the stance of fiscal policies in euro-area countries since the second half of the 1970s. A cursory examination of the graph suggests that EU governments increased spending when tax revenues were buoyant and cut back when resources were tight. Deficits rose in the second half of the 1970s when there was a positive output gap, but were placed on a downward path afterwards when the economy was in a prolonged period of below-trend GDP growth. Again, a pro-cyclical loosening in the second half of the 1980s gave way in the 1990s to restrictive policies needed to return budget positions to a sustainable footing: this partly contributed to a period of subdued economic growth.

The existence of a pro-cyclical fiscal activism is confirmed by looking at Graph 13 which pictures the average output gap and the change in the cyclically-adjusted primary balance (CAPB) ⁽¹⁾. In the event of neutral discretionary policies (i.e. automatic stabilisers operate symmetrically), the dots would be distributed along the X-axis. In the case of pro-cyclical (anti-cyclical) policies, dots would be found mainly in top-left and bottom-right (bottom-left and top-right) quadrants. There were 45 of such episodes in the Member States of the EU between 1970 and 1997. The graph shows that 37 of them are concentrated on top-left and bottom-right quadrants, thus illustrating the tendency to run discretionary pro-cyclical fiscal policies.

In sum, past budgetary behaviour shows a pro-cyclical fiscal policy in both economic upturns and downturns: deficits did not fall during periods of high economic growth, implying that countries offset the working of the automatic stabilisers via discretionary tax cuts or, more frequently, expenditure increases; such fiscal relaxation in good times in turn necessitated a tightening during economic downturns. Probably even more importantly, the pro-cyclical loosening in good times took the form of establishing permanent entitlements which contributed to the trend increase in the share of government in the economy, hampered structural flexibility and made the task of regaining control of public finances very painful.

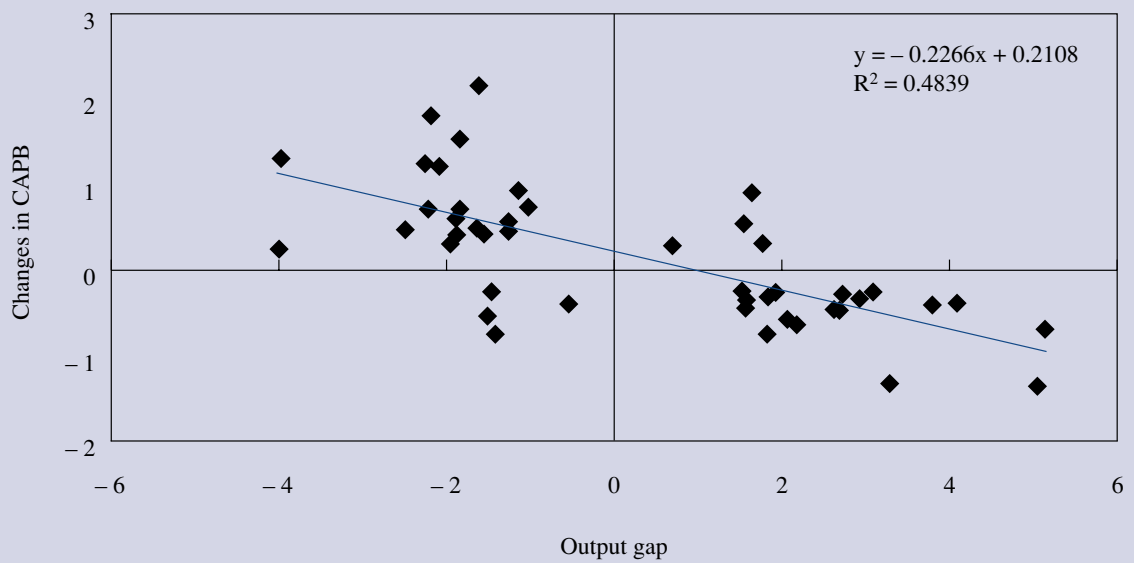
⁽¹⁾ The graph only includes episodes where over at least three years the absolute values of the annual average output gap and of the annual average change in the cyclically-adjusted primary balance was bigger than 0.25 % of trend GDP.

Graph 12: Deficit and debt in the euro area ⁽¹⁾



⁽¹⁾ Excluding Luxembourg.
Source: Commission services.

Graph 13: Pro-cyclical policy episodes in the EU, 1970–97



NB: CAPB: Cyclically-adjusted primary balance.
Source: Brunila and Martinez-Mongay (2001).

2. Cyclical stabilisation in EMU: role and impact of automatic stabilisers

2.1. The economics of automatic stabilisation

Factors affecting the size and functioning of automatic stabilisers

Once it is recognised that using discretionary fiscal policy should be the exception rather than the rule in EMU, crucial questions arise from the point of view of stabilisation. How much cyclical stabilisation is achieved via the sole working of automatic stabilisers? Do stabilisers react differently according to the typology of economic shocks hitting the economy? Are automatic stabilisers always stabilising?

In this context it is important to note that although having a stabilising impact, the size or the overall design of automatic stabilisers are not chosen with cyclical considerations in mind, but rather are the outcome of the working of tax and welfare systems, themselves the expression of social and political preferences regarding income redistribution and social insurance. In general, the size of automatic stabilisation 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⁽¹⁾. Among country-specific factors, the openness of the economy and the flexibility of the labour, product and financial markets tend to have a significant impact on the smoothing capacity provided by automatic stabilisers.

The smoothing effectiveness of automatic stabilisers may change over time. EMU as such may increase the stabilisation efficiency of fiscal policy by dampening interest and exchange rate responses to changes in fiscal policy in individual member countries. Structural reforms may lead to lower fiscal stabilisation if they entail a reduction in

progressivity of tax systems and less generous unemployment benefits. This trade-off is however not self-evident in terms of overall adjustment capacity of the economy, since tax and spending reforms should also increase flexibility in factor markets and thereby reduce the need for traditional fiscal stabilisation.

Stabilisation in the face of different types of shocks

The fact that fiscal policy works both through demand and supply channels has a bearing on its role and effectiveness in responding to different types of shocks. This holds not only in the case of automatic stabilisers, but also in the case of discretionary fiscal policy. To illustrate how the smoothing impact of automatic stabilisers varies under different circumstances, a distinction is made between demand and supply shocks and, within the latter, between temporary and permanent shocks. Of course, in reality it is often difficult to identify the type of shock hitting the economy without a considerable delay and, in most cases, shocks have a demand as well as a supply dimension. Conceptually, however, this distinction is useful⁽²⁾.

Since demand shocks are usually of a temporary nature and do not alter potential output⁽³⁾, cyclical stabilisation is desirable. In the event of a domestic shock, such as a slump in private consumption, income smoothing via automatic stabilisers would help moderate its impact on aggregate demand⁽⁴⁾. In the event of an EMU-wide demand shock, automatic stabilisers work in the same direction as the single monetary policy which aims at

⁽¹⁾ See Galí (1994), Rodrik (1998), Fatas and Mihov (1999).

⁽²⁾ A formal treatment of the effects of automatic stabilisers on output and inflation under different types of shocks is presented in Box 7.

⁽³⁾ A notable exception here is German reunification (OECD, 1999). However, such episodes can be interpreted as a combination of both permanent demand and supply shocks.

⁽⁴⁾ However, in the case of shock in foreign trade (such as a change in export demand), the role of fiscal policy is more limited and the external imbalance may be addressed, to some extent, by spontaneous reactions of real exchange rates.

price stability⁽¹⁾. Hence, the need for fiscal stabilisation at national level is reduced by the stabilisation provided by the monetary policy. However, if the demand shock is asymmetric hitting only a relatively small part of the euro area and has a negligible effect on area-wide inflation, the need for fiscal stabilisation is larger compared to a euro-area-wide shock. Whether budgetary authorities should do more than just letting the automatic stabilisers to work, depends *inter alia* on the size of the shock and on the limitations of discretionary fiscal policy stressed in the previous chapter.

In the case of temporary supply shocks such as a short-term surge in the oil price affecting the whole euro area or a large country, a conflict may arise between monetary and fiscal policy as inflation and output move in opposite directions. Interest rates may have to be raised to keep inflation in check while automatic stabilisers try to limit the output loss. Nevertheless, some degree of output smoothing via automatic stabilisers may be desirable since the adverse effect on inflation is necessarily short-lived. If the supply shock only hits a small economy in the euro area, the common monetary policy does not react and fiscal stabilisation helps smooth output, but aggravates inflationary pressures at the national level, thereby leading to a loss of competitiveness.

In the event of a permanent supply shock which changes the output potential of the economy (e.g. a lasting change in productivity due to technological innovation, long-lasting real wage gap, evolving degree of competition on the product markets, permanent shift in the terms of trade), output smoothing may not be the optimal response. Ideally, in the event of a permanent shock, the economy must adjust to a new equilibrium level, and fiscal stabilisation may slow down the inevitable structural adjustment. In contrast, public finances (that is tax and welfare systems) that are conducive to real labour market flexibility and resource re-allocation are paramount in adapting to the new structural conditions of the economy. Structural reforms would also help boost potential output in the event of a permanent negative shock.

In sum, automatic stabilisers are useful to stabilise output in the case of temporary shocks, although in the case of supply shocks output stabilisation may come at the cost of temporarily higher inflation. However, in the case of permanent (mainly supply) shocks, high automatic stabilisers

may delay the inevitable structural adjustment and, if they are symmetric, imply a stronger response by the monetary authorities.

2.2. The smoothing impact of automatic stabilisers

Estimating the impact of automatic stabilisers

Having discussed the working of automatic stabilisers in theory, this section focuses on the empirical measurement of their smoothing power. How effective are automatic stabilisers in EU countries?

In general, the measurement of the stabilising power of fiscal variables involves two channels. The first one is related to the sensitivity of government revenue and expenditure components to economic fluctuations. In an economic downturn, tax receipts will be lower as the respective tax bases are negatively affected, while on the expenditure side unemployment benefits will be higher if unemployment rises. The opposite will occur in an upturn. The second channel is related to the dampening effect of cyclically-induced changes in budgetary components. Estimating the smoothing power of automatic stabilisers is particularly challenging due to the complex interactions between fiscal variables, types of the shocks and reactions of the private sector. The standard approach to investigate the smoothing power of fiscal variables examines the operation of automatic stabilisers in terms of observed or average historical disturbances (see Box 8). The approach chosen here focuses instead on the degree of fiscal stabilisation provided under various shocks, each one representing a different type of disturbance to GDP. Specifically, the analysis distinguishes between three types of demand shocks — a shock to private consumption, private investment and export demand — and a supply shock to labour productivity.

The analysis is based on the simulations of the European Commission's macroeconomic model QUEST⁽²⁾. To account for the various channels through which fiscal expansions and contractions affect output and inflation, macroeconomic model simulations provide an appealing starting point. The results obtained are, however, model-specific and depend on the assumptions made on the accompanying monetary and exchange rate policies. As the simulations produce a range of estimates conditional

⁽¹⁾ See Buti, Roeger, in't Veld (2001).

⁽²⁾ See Chapter 1 on model simulations in Part VI.

Box 7: Do automatic stabilisers stabilise? A simple model

The effect of automatic stabilisers on output and inflation under different types of shocks is explored through a simple aggregate demand/supply model ⁽¹⁾,

$$(1) \quad Y^d = \phi_1 (d - \pi b) - \phi_2 (i - \pi^e) + \varepsilon_d$$

$$(2) \quad Y^s = Y^* + \omega(\pi - \pi^e) + \varepsilon_s$$

Equation (1) is a IS-type schedule where aggregate demand depends on the inflation-adjusted budget deficit ($d - \pi b$), where b is the stock of public debt ⁽²⁾, the real interest rate ($i - \pi^e$) and a temporary demand shock, ε_d . Equation (2) is a Lucas–Phillips supply function where aggregate supply depends on inflation expectation error and a supply shock, ε_s , which can be temporary or permanent.

⁽¹⁾ For a more extensive version of the model, see Artis and Buti (2000) and Buti, Roeger and in't Veld (2001). See also Blanchard (2000).

⁽²⁾ The results derived in the box would have not changed if, instead of capturing the effect of inflation on aggregate demand via the depreciation of the stock of public debt, one would have introduced an effect via real money balances.

The budget deficit is defined as follows:

$$(3) \quad d = d^* - a(Y - Y^*)$$

where d^* is the cyclically-adjusted deficit and $Y - Y^*$ is the output gap. Automatic stabilisers are captured by a .

By substituting (3) in (1) and re-arranging:

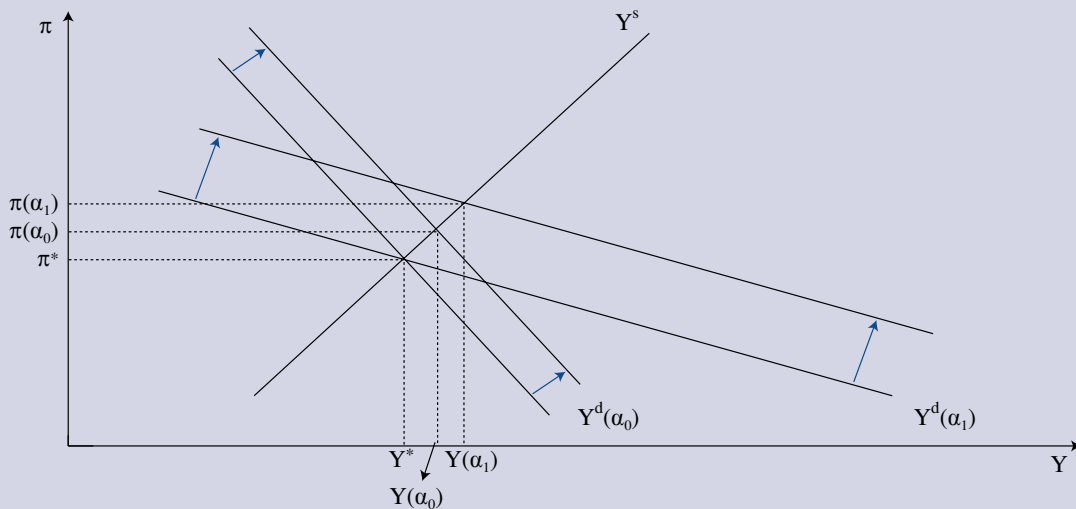
$$(4) \quad Y^d = \frac{1}{1 + \phi_1 a} [\phi_1 (d^* + aY^* - \pi b) - \phi_2 (i - \pi^e) + \varepsilon_d]$$

It is assumed that fiscal authorities set d^* at 'close to balance' and let automatic stabilisers operate freely. Monetary authorities set i so as to ensure that inflation is kept on a given target π^* in the medium run. However, since i is assumed to be fixed before the realisation of shocks, inflation may temporarily deviate from π^* .

Under these behavioural rules and rational expectations, the model can be solved for Y and π :

$$(5) \quad Y = Y^* + \frac{\omega \varepsilon_d + b \varepsilon_s}{\omega(1 + \phi_1 a) + b}$$

Graph 14: Demand shock



$$(6) \quad \pi = \pi^* + \frac{\varepsilon_d - (I + \phi_1 a) + \varepsilon_s}{\omega(I + \phi_1 a) + b}$$

Clearly, higher automatic stabilisers (i.e. a higher a), help stabilising both output and inflation in the case of a temporary demand shock.

Graph 14 illustrates the effect on output and inflation of a positive demand shock under both high and low automatic stabilisers ($a_0 > a_1$).

As shown in equation (4), a higher a implies a lower (absolute) coefficient of π — that is a higher (negative) slope — and a lower shift to the right of Y^d in the event of a positive demand shock. As the figure shows, if prior to the shock, output was at its potential level and inflation was on target, higher automatic stabilisers entail a smaller output gap and a smaller deviation of inflation from target.

In the case of a temporary supply shock (that is a shock that does not affect potential output which remains at the original level Y^* , equations (6) and (7) show that high automatic stabilisers reduce the output gap, but imply a higher deviation of π from π^* . The effect of different size of automatic stabilisers in the event of a negative supply shock is illustrated in Graph 15.

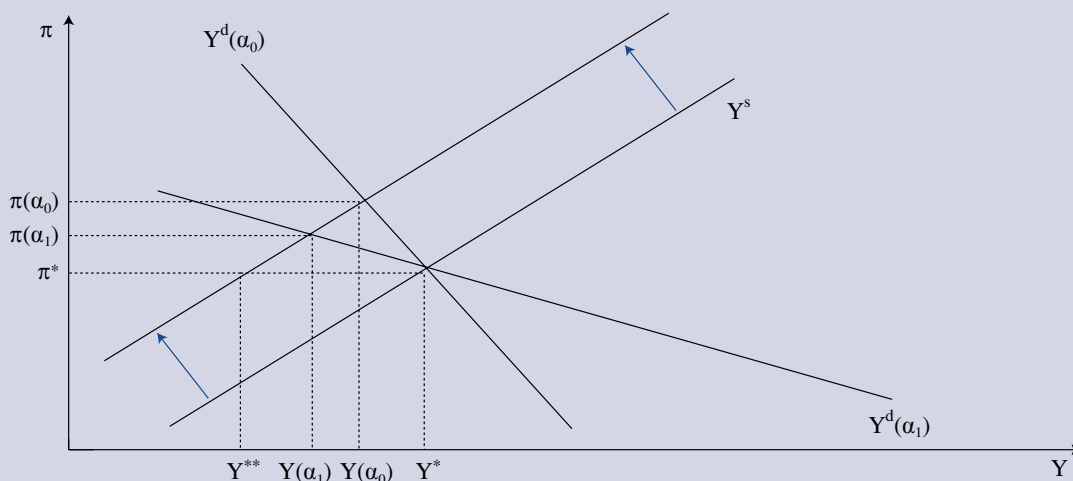
If the supply shock is permanent (that is potential output falls from Y^* to $Y^{**} = Y^* + \varepsilon_s$), the expression of the ‘new’ output gap can be derived from (5) and is the following:

$$(7) \quad Y - (Y^* + \varepsilon_s) = - \frac{\omega(I + \phi_1 a) + \varepsilon_s}{\omega(I + \phi_1 a) + b}$$

Equation (7) implies that a higher value of a increases the gap around the new potential output and, as a consequence, is both inflation- and output-destabilising. The above figure confirms that, in the case of a permanent negative supply shock, higher automatic stabilisers are destabilising for both output and inflation.

Notice that the impact of automatic stabilisers depends on the structural features of the model (i.e. the coefficients in the demand and supply equations). In a more complicated model, the size of the economy, its openness, the degree of symmetry of the shocks would also affect the stabilising power of automatic stabilisers. It depends also on the assumptions on the monetary regime. For instance, as shown in Graph 15, in the case of a persistent supply shock, if monetary authorities keep inflation on target, economic activity moves directly to its new potential level Y^{**} and the ‘correctly measured’ output gap remains zero.

Graph 15: Supply shock



on the imposed structure of the model and the underlying assumptions, the measurement of the smoothing capacity of automatic stabilisers is by no means uncontroversial. This is important to acknowledge when assessing the results. The approach involves three-steps as follows:

- The sensitivity of the budget balance to the cycle is obtained by simulating the impact of a shock of 1% of real GDP on government revenues and expenditures. Simulations are run separately for the three types of demand shocks and one supply shock, each scaled to equal 1% of real GDP. All shocks are asymmetric individual country shocks, i.e. one country at the time is affected by a negative disturbance that reduces GDP in the first year by 1% relative to baseline.
- The impact of an expansionary fiscal shock of 1% of real GDP on economic activity is derived to calculate the short-term fiscal multipliers associated with changes in government expenditures and revenues.
- The smoothing capacity of automatic stabilisers is computed by using the estimated budgetary sensitivities and fiscal multipliers. It should be noted that the results are sensitive to the type of assumptions made regarding the hypothetical benchmark scenario where automatic fiscal stabilisers are not allowed to operate. The methodology of the simulations and detailed results are presented in Chapter 1 of Part VI.

All scenarios assume that the objective of the ECB as well as the national central banks in EU countries outside the euro area is to maintain price stability. Denmark, with a narrow fluctuation band *vis-à-vis* the euro, is assumed to follow the ECB interest rate policy, while Sweden and the UK are assumed to follow inflation targeting. For instance, in the case of a negative demand shock, this implies a rule in which the central bank increases money supply as output contracts in order to closely meet a baseline inflation target.

The fact that monetary policy is allowed to function as another stabilising mechanism in the simulations and interacts with the operation of the automatic fiscal stabilisers has an important bearing for the results. As the single monetary policy reacts only to the area-wide inflation, country-specific shocks in the euro area trigger monetary policy response only to the extent they affect area-wide inflation. Consequently, the role of monetary policy in stabilising inflation and output is relatively modest in small euro-area member countries compared to the large ones and to EU countries outside the euro area (apart from Denmark).

The focus in this empirical section is on output stabilisation. The empirical analysis confirms that under demand shocks, stabilising output goes hand in hand with inflation stabilisation, while under supply shocks, there is conflict between the two objectives. As outlined in the previous section, automatic stabilisers have a destabilising effect in the case of permanent supply shocks to the extent that they slow down the adjustment to the new level of potential output. However, the short-term inflationary consequences are modest because the inflationary implications of the gap between actual and (new) potential output take time to materialise. The adverse effect on inflation is also offset by the short-term demand consequences, essentially via investment, induced by the supply shock.

Sensitivity of the budget to economic fluctuations

The modelling of tax revenues is crucial for the assessment of the operation of the automatic budget stabilisers. The QUEST model distinguishes between labour income tax (inclusive of social security contributions), corporate profit tax and consumption tax (VAT). These taxes are modelled proportionally, i.e. for each category the tax revenue has a unitary elasticity with respect to its respective tax base⁽¹⁾. For instance, for corporate profit tax, this implies that tax revenues are proportional to profits, and the cyclical sensitivity of corporate tax revenues depends on the sensitivity of profits to output fluctuations. This in turn depends on the origin of the shock.

The sensitivity of income tax revenues (including social security contributions) to output fluctuations reflects the sensitivity of employment and wages to output shocks. Indirect tax revenues depend on fluctuations in consumption. A consumption shock has a direct impact on VAT revenue, while investment and export shocks only have an indirect effect. As will become clear, the origin of the shock has very important implications for the magnitude of the cyclical sensitivity of the tax revenues.

Concerning government expenditure, it is common practice to focus on unemployment-related expenditure as an automatic stabiliser. As different types of shocks to output have different effects on unemployment, transfers related to unemployment benefits will fluctuate in proportion to the impact on unemployment. While other expenditure categories also tend to fluctuate with the cycle, often in a

⁽¹⁾ While this is the default assumption and applied in the simulations underlying the calculations reported here, this assumption can of course easily be relaxed in the model, for instance to analyse the effects of a more progressive income tax system.

Box 8: Automatic stabilisers — results of the previous studies

Various studies have attempted to quantify the dampening impact provided by the unhindered operation of the automatic fiscal stabilisers. Van den Noord (2001) calculates the impact of automatic fiscal stabilisers on the OECD measure of the output gap over the period 1991–2000. Using the OECD's interlink model, he compares the actual volatility in the output gap over the 1990s with a simulated one, in which the cyclical impact on each budget component is offset by discretionary measures. The cyclical budgetary impact is calculated on the basis of the OECD estimates of the sensitivity of budgetary components to the cycle (see Annex for more details). The estimated structural levels of tax revenues and government expenditure are calculated from actual levels by adjusting them to the ratio of (estimated) potential output to actual output and the estimated elasticities. The degree to which automatic fiscal stabilisers have smoothed economic fluctuations is then calculated for the estimated output gaps over period 1991–2000. He finds that the impact of automatic fiscal stabilisers has reduced the root mean square deviations of the output gap by a range that varies between 7% for Austria and 58% for Finland (see Table 19).

Barrell and Pina (2000) apply earlier OECD estimates of revenue and expenditure elasticities to NiGEM, the econometric model of the National Institute of Economic and Social Research. They examine the smoothing capacity of automatic fiscal stabilisers by subjecting their model to a

vector of shocks that purport to represent typical macro-economic turbulence, based on their model's residuals for the period 1993–97. The size and effectiveness of the automatic fiscal stabilisers is calculated by comparing two fiscal regimes: one where tax revenues and unemployment transfers are determined by tax and spending elasticities, and another regime where the cyclical response of those budget items is offset by discretionary measures which keep the total for each budgetary item constant at their 'structural' levels. As shown in Table 19, the authors find a much smaller degree of stabilisation provided by the automatic fiscal stabilisers, 11% for the euro area as a whole and ranging from 5% (Italy and Belgium) to 18% (Germany).

Table 19 shows that the ranking of countries in these two studies is very different, reflecting different estimates of the cyclical sensitivity of the budget to economic activity, different typology of shocks underlying the simulations and model differences.

In a comparable exercise, Cohen and Follette (2000) focus on the smoothing capacity of automatic stabilisers for the United States. Their analysis is based on the FRB/US model and differentiate between two types of shocks. They find that automatic fiscal stabilisers have a dampening effect of about 10% in the case of an aggregate demand shock while the effect is negligible for a supply shock.

Table 19

Results of previous studies of automatic fiscal stabilisation

	Interlink ⁽¹⁾	Nigem ⁽²⁾
B	22	5
D	31	18
EL	14	—
E	17	13
F	14	7
IRL	10	7
I	23	5
NL	36	6
A	7	12
P	—	10
FIN	58	7
Euro area	—	11
DK	—	—
S	26	—
UK	30	—
EU	—	—

(1) 1-RMSD (Root mean square deviation) of the output gap in the 1990s. *Source:* Van den Noord (2001).

(2) 1-RMSD of GDP growth.

Source: Barrell and Pina (2000).

pro-cyclical fashion, this is considered here as non-automatic and discretionary, although the distinction may be somewhat artificial and controversial ⁽¹⁾. For this exercise, it is assumed that these other expenditure categories do not react to cyclical swings, and they are thus kept fixed at their base levels. Although this may not be a good description of the real behaviour of fiscal authorities, it allows one to concentrate on the operation of ‘pure’ automatic stabilisers.

Table 20 reports the estimated budgetary sensitivities under various shocks to the economy. All shocks are scaled to equal 1 % of GDP ⁽²⁾. The budget sensitivity is particularly large under private consumption shocks. The deficit-to-GDP ratio rises by between 0.5 and 1.0 percentage points (in Spain and Ireland, respectively), as tax revenues, and in particular indirect taxes, are directly affected by this shock. Shocks to private investment and export demand have a smaller impact on the budget than

consumption shocks, about half the size, as no tax category is directly affected by this type of disturbance. Also technology shocks have a lower impact on the budget deficit.

The widely used OECD estimates for budget sensitivity to cyclical fluctuations (see van den Noord, 2001) produce an overall responsiveness of the budget deficit to the changes in the output gap that averages around 0.5 for the EU and vary between 0.3 for Austria and 0.8 for Denmark ⁽³⁾. While such estimates have the advantage that the elasticity of the budget to the cycle can be summarised into a single statistic, the drawback is that they hide some very crucial differences in the impact of various shocks on the budgetary position. The results are also sensitive to the period chosen.

The simulations presented here clearly show that the cyclical sensitivity of the budget depends crucially on the origin of the shock. If variations in GDP are primarily

⁽¹⁾ While an expansion raises tax revenues, it also tends to raise government expenditure. According to Méhitz (2000), this pro-cyclical discretionary policy had become systematic and in a sense quasi-automatic. Hence, the distinction between ‘pure’ automatic stabilisation and discretionary policy reactions may not be as clear-cut as often assumed.

⁽²⁾ Thus the initial shocks may differ in size to produce ex post comparable effects in terms of GDP. For instance, due to higher leakages through the external trade, the initial shock in the case of small, more open economies will be larger.

⁽³⁾ The OECD approach relies heavily on estimation of reduced form equations to derive the elasticities of various budget categories with respect to economic fluctuations. While this approach may provide some valuable insights into the size of the effects of past disturbances on the budget, such reduced form regressions suffer from several econometric shortcomings and these estimates are subject to wide margins of uncertainty. Moreover, the OECD elasticities do not make any distinction between various types of shocks (see Chapter 1 in Part VI).

Table 20

Sensitivity of the budget under various shocks

	Consumption shock	Investment shock	Export demand shock	Technology shock
B	0.9	0.4	0.5	0.5
D	0.6	0.3	0.4	0.5
EL	0.7	0.4	0.5	0.3
E	0.5	0.3	0.4	0.5
F	0.7	0.4	0.4	0.4
IRL	1.0	0.2	0.4	0.4
I	0.6	0.4	0.4	0.5
NL	0.8	0.4	0.4	0.4
A	0.8	0.4	0.5	0.4
P	0.9	0.5	0.6	0.4
FIN	0.6	0.3	0.5	0.4
Euro area: average	0.7	0.4	0.4	0.4
Standard deviation	0.13	0.05	0.07	0.06
DK	0.8	0.5	0.7	0.4
S	0.9	0.4	0.4	0.5
UK	0.7	0.3	0.3	0.4

NB: Impact on budget balance of shock scaled to 1 % of GDP.

Source: Commission services, QUEST simulations.

driven by consumption shocks then the cyclical sensitivity of the budget is much higher than when they are primarily driven by investment or export shocks. Not surprisingly, a foreign demand shock, like the Asian crisis in 1997–98, has a much smaller effect on the deficit than a shock to domestic consumption, as the latter affects directly VAT returns ⁽¹⁾.

While direct comparison of these shock-specific elasticity estimates with the average elasticities reported by the OECD is not straightforward, the overall size of the cyclical sensitivity of the budget balance is broadly similar ⁽²⁾. However, the country-specific ranking is different and varies between the shocks. Under consumption shocks, the cyclical sensitivity of the budget varies considerably more across euro-area countries than under the other shocks. To a large degree, this is a reflection of differences in effective tax rates on consumption in the model, which is low in Spain and much higher in countries like Ireland and Denmark (Martinez-Mongay, 2000). Countries with higher overall tax rates display a higher budget sensitivity but what is particularly important for the consumption shock is the share of indirect tax in total tax revenues, which is high in e.g. Portugal.

⁽¹⁾ See European Commission (2000a).

⁽²⁾ Differences in the average OECD elasticities are to a large extent driven by the different estimates of the output elasticity of primary current expenditure (high for the Netherlands and Denmark, low for most other countries, see Van den Noord (2000).

Short-term fiscal multipliers

As budgetary components have different effects on aggregate demand and supply, in order to obtain a measure of the short-term impact of budgetary changes on real GDP (i.e., the short-term fiscal multipliers), various categories of government revenue and expenditure were shocked separately. Short-term expenditure multipliers are derived from a shock in which government expenditures are increased by 1% of (baseline) GDP. On the expenditure side, a distinction is made between government purchases of goods and services, government investment, transfers to households and government employment and wages. Short-term revenue multipliers are produced by reducing labour tax, corporate profit tax and value-added tax by 1% of (baseline) GDP.

The size of the multipliers depends on various assumptions underlying the simulations, and the multipliers presented here are merely given as illustration. The fiscal shocks are permanent changes in expenditure categories and tax rates, but are offset by lump-sum changes in taxes after three years in order to stabilise the debt-to-GDP ratio in the model. The focus is here on the first year impact of the shocks. The multipliers presented in Table 21 are weighted averages of individual first year expenditure and revenue multipliers, the weights being the relative shares of each tax/expenditure category in total revenues/expenditures (see annex for further details).

Table 21

Short-term revenue and expenditure multipliers

	Revenue multiplier	Expenditure multiplier
B	0.1	0.5
D	0.2	0.4
EL	0.1	0.5
E	0.1	0.5
F	0.1	0.5
IRL	0.1	0.4
I	0.1	0.5
NL	0.1	0.4
A	0.1	0.5
P	0	0.7
FIN	0.3	0.4
DK	0.1	0.6
S	0.3	0.4
UK	0.2	0.3

NB: Weighted average impact on real output after one year of shock scaled to 1% of GDP in revenues/expenditures.

Source: Commission services, QUEST simulations.

Monetary policy is again assumed to target euro-area-wide inflation, and with independent inflation targeting in Sweden and the UK, the expansionary effects are there partially offset by a stronger response by their central banks. Monetary policy in Denmark is assumed to follow the ECB and not to respond to the fiscal expansion.

According to the simulations, a 1% of GDP increase in the government expenditure raises GDP in EU countries by between 0.3 and 0.7% in the first year (UK and Portugal, respectively). A significant part of fiscal expansion is thus crowded out (via higher real interest rates and an appreciation of the euro) or leaks abroad through higher imports.

The impact on GDP of a 1% reduction in the ratio of tax burden to GDP during the first year is considerably smaller than that of expenditures (between 0.0 to 0.1 in Portugal, to 0.3% in Sweden), because the positive supply-side effects of such tax reductions gain momentum only in the medium term. Long-run multipliers of such tax reductions are invariably positive and often substantial, but the effects arise slowly over time. The first response is generally small, as adjustment lags in employment and investment decisions mean a gradual adjustment to the new tax structure. The initial demand effects of such tax shocks, which are offset by higher lump sum taxes in the medium term, remain small.

As a very broad characterisation, the results therefore indicate that in the first year of a budgetary expansion, the impact is more important on the expenditure side (feeding more directly into demand) than on the tax side (where a large part is saved). However, in the medium term, the impact from the expenditure side fades out (due to crowding out effects) while on the tax side the impact increases over time as supply side effects become more important.

Although the net effect of expenditure or revenue changes is due to complex interactions, a number of interdependent factors influence the size of the multipliers. These factors sometimes work in opposite directions. For instance, in small, open economies, more of the stimulus leaks abroad thereby reducing the size of fiscal multipliers; however, in small euro-area countries, the output effect of fiscal policy triggers a lower, if any, reaction of monetary policy which implies higher multipliers⁽¹⁾.

⁽¹⁾ Outside the euro area, this effect does not play in the case of the UK and Sweden, while it has a powerful impact in the case of Denmark which is assumed to follow ECB policy and thereby does not react to purely country-specific developments.

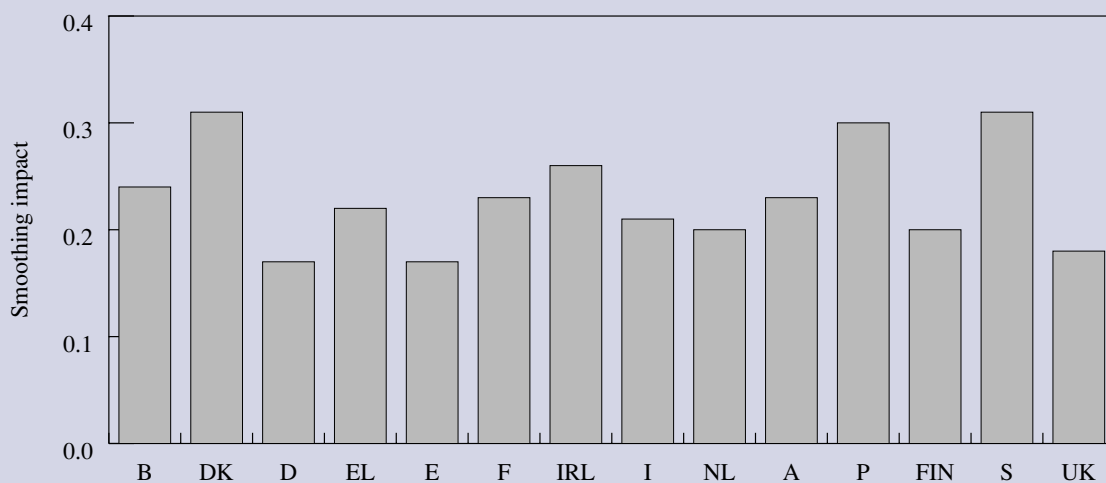
Smoothing impact of automatic stabilisers under various shocks

To obtain an estimate for the smoothing impact of automatic stabilisers, the cyclically-induced change in the budget balance is multiplied by the weighted average of the short-term revenue and expenditure multipliers. Following the differences in the estimated sensitivity of the budget to cyclical fluctuation, the average stabilisation impact of automatic stabilisers shows a significant variance under various shocks to the economy.

The simulations indicate that, in the case of a private consumption shock, automatic stabilisers smooth around 30% of GDP fluctuations in Denmark, Portugal and Sweden, while in Germany, Spain and the UK the smoothing impact of automatic stabilisers is less than 20% (Graph 16). As pointed out above, the smoothing impact of automatic stabilisers depends to a large extent on the cyclical sensitivity of the budget: the larger the cyclical sensitivity of the budget the higher the stabilisation provided by automatic stabilisers. In the case of a consumption shock, an important factor behind the differences across countries is the structure of taxes: automatic stabilisation is larger in countries with relatively high share of tax revenues coming from indirect taxes as they are directly affected by a consumption shock. However, the ‘efficiency’ of automatic stabilisers — that is the smoothing impact of a given change in the budget balance — is not the same across the countries. For instance, under a negative consumption shock, a worsening of the budget deficit by 0.6 percentage points of GDP in Finland gives the same degree of stabilisation as a worsening of the budget deficit of 0.8% of GDP in the Netherlands.

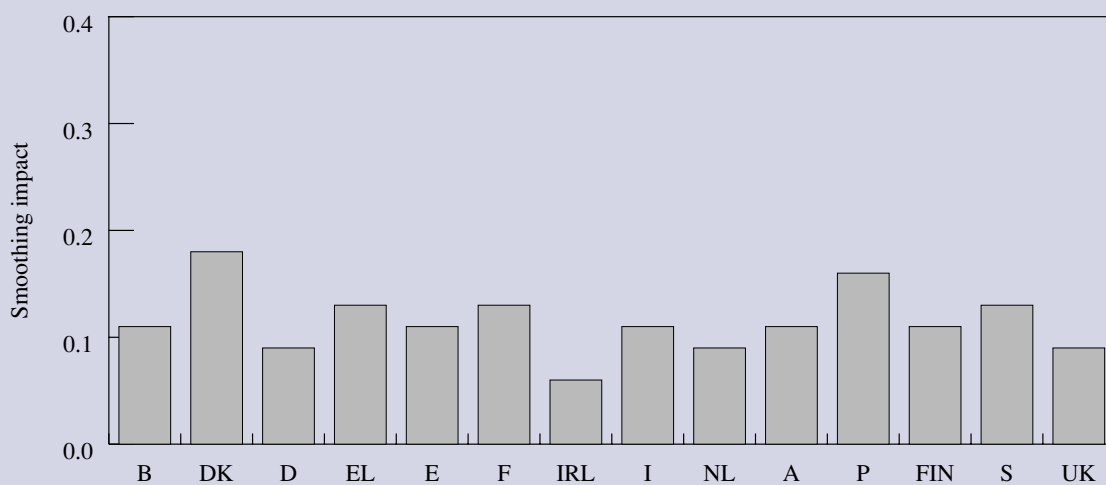
In the case of a private investment shock, the power of automatic stabilisers is considerably lower (Graph 17). Differences across countries largely reflect differences in the sensitivity of the budget to this shock but the variation is small. The same holds for an export demand shock (Graph 18). The highest stabilisation is derived in Denmark (25% or less) and Portugal (less than 20%) under both shocks, and the lowest is in Ireland, Germany, the Netherlands and the UK (10% or less). Portugal, with a lower degree of openness, and Denmark, with monetary policy that follows the ECB and thus does not respond to a fiscal expansion, have a relatively high impact multiplier for expenditure shocks in the model and this implies a higher smoothing capacity of the stabilisers. The UK has a lower effectiveness of expenditure increases as monetary policy is assumed to counteract the expansionary effect by raising interest rates. Ireland displays a lower budget sen-

Graph 16: Private consumption shock



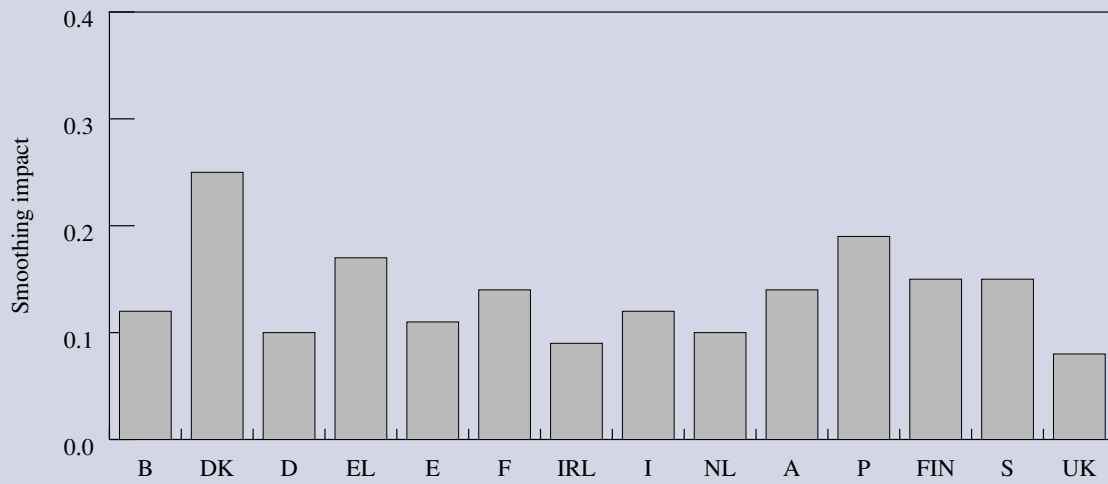
Source: Commission services, QUEST simulations.

Graph 17: Private investment shock



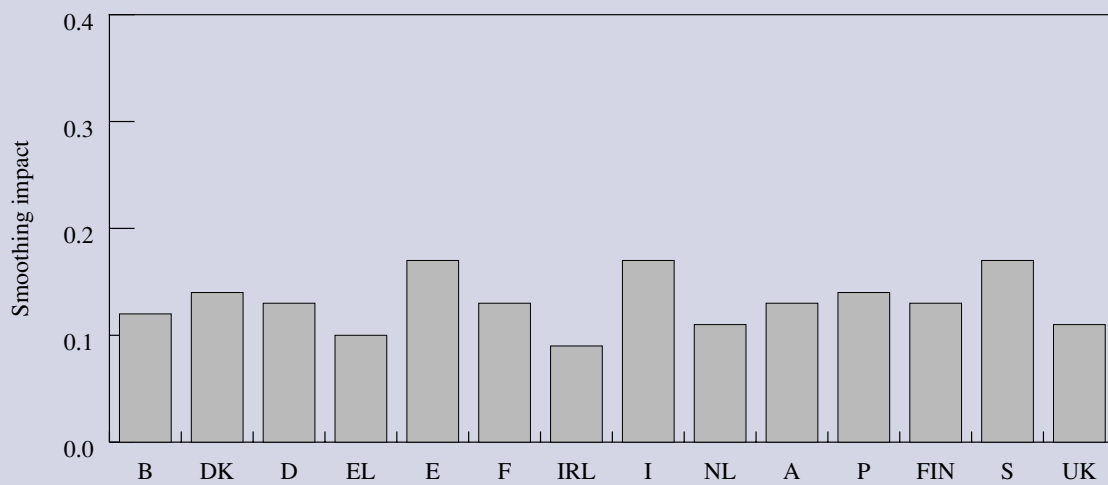
Source: Commission services, QUEST simulations.

Graph 18: Export demand shock



Source: Commission services, QUEST simulations.

Graph 19: Productivity shock



Source: Commission services, QUEST simulations.

sitivity to this particular shock, reflecting a higher reliance on indirect taxation, and achieves a lower degree of smoothing.

While automatic stabilisers have a desirable impact under demand shocks, the dampening effect provided by tax and welfare systems may be less desirable under a permanent supply shock as it delays the adjustment of output to its new potential. As pointed out in section 3.1, in case of a negative supply shock, there also arises the issue of a potential conflict between fiscal and monetary authorities as output goes down while inflation accelerates. In the case of large countries within the euro area, monetary authorities will respond by raising interest rates to offset the inflationary impact of the shock, and this will have a negative effect on GDP. Clearly, the larger the stabilisers, the stronger the reaction of the central bank. In the case of small euro-area countries, the monetary response will be very limited and, as a result, inflation will rise in the country concerned. Again, large automatic stabilisation will entail further negative consequences on competitiveness. The empirical relevance of these theoretical concerns is still under-researched as, more generally, is the role of automatic stabilisers in the event of supply shocks. In order to explore this issue, QUEST has simulated a negative permanent shock to labour productivity. As shown in Graph 19, the average degree of stabilisation provided by automatic stabilisers is modest in all EU

countries. Again, Ireland appears to have the smallest smoothing capacity for this particular shock, as it relies more on indirect taxes, which are not directly affected by this type of shock. Overall, the differences across countries are small, ranging from 9–10% in Ireland, Greece, the Netherlands and the UK to 17% in Spain, Italy and Sweden. The small output smoothing due to automatic stabilisers goes hand in hand with small impact effects on inflation (not shown here).

These results are comforting as ‘too much’ stabilisation may be harmful in the event of a long-lasting shock as they could lead to potential conflicts with monetary authorities, negative competitiveness effects and a slow-down of structural change: in other terms, the low smoothing effect shown by the simulations may actually be a good thing ⁽¹⁾. The results of the simulations presented in Box 9 support these conclusions.

⁽¹⁾ However, the focus on impact effects may mask deeper imbalances building up over the longer run. In a dynamic perspective, the ‘direct’ adverse implications of income smoothing have to be weighted against the possibly favourable effect of income support in fostering real wage flexibility and labour mobility. On the other hand, welfare systems which give rise to benefit dependency may harm structural flexibility. The interplay between replacement rates and benefit duration is crucial in delivering the appropriate balance between stabilisation and flexibility.

Box 9: The destabilising effect of automatic stabilisers on inflation under supply shocks

The role of automatic fiscal stabilisers in the event of supply shocks could lead to potential conflicts between fiscal and monetary policy, as they have a destabilising effect on inflation and, in case of a permanent supply shock, also slow down the adjustment to the new potential output. The table below shows the effects of automatic fiscal stabilisers on inflation in the case of a productivity shock for Germany.

The shock is normalised to equal 1% of GDP in the first year when automatic fiscal stabilisers are operating normally. The effect of this shock on GDP builds up gradually and by the third year GDP is 1.73% below base level. Inflation accelerates under this negative productivity shock and is 0.52% higher in the first year. In the third year, the price level has risen by 0.84% and inflation is still 0.06% higher. In this case, the monetary authorities respond by raising interest rates to counteract the inflationary pressure, and this has a further contractionary effect on output.

The scenario ‘without stabilisers’ assumes the negative impact of this shock on the deficit is for each year offset by

a reduction in government purchases, such that there is no change in the deficit. This is just one of various possible scenarios, and the assessment of the impact of automatic fiscal stabilisers varies depending on the assumed offsetting changes in the budget (as discussed in Chapter 1, Part VI). When government purchases are reduced to offset the negative impact on the deficit, the negative GDP effect is 0.11% higher in the first year. By the third year, the GDP effect is still larger, but only marginally (– 1.76 as compared to – 1.73). The acceleration in inflation is however smaller in the case of ‘no automatic stabilisers’, 0.45 compared to 0.52. After three years, prices rise by 0.84% when automatic stabilisers operate normally, as compared to 0.72% in the case without automatic stabilisers.

In sum, while the operation of automatic fiscal stabilisers could, in theory, lead to a potential conflict between fiscal and monetary policy objectives, the analysis indicates that the effects are relatively small and the scope for a damaging conflict seems limited.

Table 22

Results for German output and inflation under a negative productivity

	With stabilisers			Without stabilisers		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Def/GDP	0.45	0.74	0.81	0	0	0
GDP	– 1.00	– 1.63	– 1.73	– 1.11	– 1.7	– 1.76
Inflation	0.52	0.26	0.06	0.45	0.23	0.04
Price level	0.52	0.78	0.84	0.45	0.68	0.72

Source: Commission services, QUEST simulations.

3. Lessons for fiscal behaviour in EMU

This part of the report has explored the role and effectiveness of fiscal policy in EMU. After having reviewed the recent debate on fiscal policy, the analysis has focused on the issue of cyclical stabilisation. The broad message of the theoretical and empirical literature is that fiscal discipline and cyclical stabilisation should be the guiding principles for budgetary behaviour in EMU.

Fiscal discipline should remain a long-lasting feature of EMU's policy framework. As predictability helps to guide expectations, a rules-based budgetary discipline is a prerequisite for the credibility of the stability-oriented framework of EMU. In addition, maintaining strong fiscal discipline is all the more necessary as in a longer time perspective demographic challenges will put pressure on age-related spending and tax competition may erode tax revenue.

Fiscal stabilisation is desirable in the case of a demand shock because it allows to smooth both output and inflation. However, it should not imply that a return to discretionary fine-tuning is warranted: letting automatic stabilisers operate freely should be the norm of fiscal behaviour over the economic cycle. The empirical evidence shows that automatic stabilisers are quite effective in the case of shocks to private consumption, whilst they are less effective in the case of shocks to investment or external demand. In the latter case, within-EMU real exchange rate adjustment via inflation differentials may supplement fiscal stabilisation. An exception when discretionary policy action might warrant consideration would relate to situations when automatic stabilisers are clearly insufficient and the monetary stance runs against national stabilisation requirements. In this case, the emphasis should be on the microeconomic channels of fiscal measures, rather than on across-the-board demand stimulus.

The SGP, which provides the institutional framework for running fiscal policies in EMU, translates these two principles into policy orientations: budgetary discipline

should be preserved by making sure that the Maastricht reference value of 3% of GDP is a hard-upper ceiling, which could be exceeded only in exceptional circumstances and for a limited period of time; cyclical stabilisation would be ensured by selecting a medium-term budgetary target allowing sufficient room for manoeuvre and by letting the automatic stabilisers operate freely.

The above analysis, however, stresses also the importance of public finances in enhancing the flexibility of product and factor markets. Such flexibility, that is real wage adjustment and resource re-allocation, is required in the event of long-lasting disturbances. In the case of permanent supply shocks, strong automatic stabilisers could be counter-productive since they may slow down the adjustment to the new output potential and push inflation further away from target. This would risk creating a conflict between budgetary and monetary authorities. The empirical evidence, however, is rather reassuring as it points to relatively small effects of automatic stabilisers in the case of supply shocks. Public finances can contribute to economic adjustment in the case of permanent shocks by ensuring that tax and welfare systems are conducive to structural adjustment. In exceptional cases, targeted discretionary measures may prove useful to tackle the shock at source (e.g. by removing sectoral bottlenecks, influencing private sector wage bargaining via wage policy for public employees, etc.).

The compatibility and the smooth implementation of the abovementioned principles for fiscal behaviour in EMU is an open question. First, there may be a trade-off between cyclical stabilisation and budgetary discipline as was evident during the run up to EMU when the necessity to rebuild fiscal discipline sometimes conflicted with cyclical stabilisation. However, both non-linearity and inter-temporal dimension of fiscal policy highlighted in recent literature indicate that discipline and stabilisation are mutually supporting in the longer run. Second, there may be a short-term trade-off between budgetary discipline and structural reforms to improve flexibility: for instance, the

constraint of a structural balanced budget may prevent Member States from implementing sizeable reductions in the tax burden which would enhance labour market flexibility. However, again, the alleged trade-off is relevant only in the short term as strong fiscal discipline, by ensuring low debt and deficits, is the pre-condition to ensure a lasting decrease in the tax burden. Finally, there may be also a trade-off between cyclical stabilisation and flexible product and factor markets: if long-lasting supply-related shocks occur, too high a degree of stabilisation may be harmful if it delays necessary structural change. This may be particularly worrying in Europe where structural adjustment capacity is perceived as being sluggish.

Given this potential trade-off between cyclical stabilisation and structural reforms to improve flexibility, consideration could be given to designing structural public finance reforms which pursue economic efficiency and at the same time do not hamper (and possibly improve) the working of automatic stabilisers, i.e. correct features which may hamper an inappropriate fiscal response to certain types of shocks. Reforms of this type would include re-designing the time profile of unemployment

benefits: adequate replacement rates at the beginning of the unemployment spell would provide income support thereby helping to smoothen the shock; a decrease of replacement rates over time coupled with active labour market policies, would reduce the risk of benefit dependency, thereby enhancing flexibility. In-work benefits or a system of negative income tax conditional on strict job-search requirements may also help lessen the trade-off between cyclical stabilisation and market flexibility.

Such structural reforms, which are in line with those advocated in the BEPG and the employment guidelines, could benefit from policy coordination among the participating countries. The rationale for coordination in this context would be to foster a favourable response from the single monetary authority (countries might benefit from a supportive monetary stance to the extent that reforms reduce supply bottlenecks and lessen inflationary pressures for the euro area as a whole). Moreover, a coordinated strategy could increase the incentives of individual countries to implement tax and expenditure reforms which are politically difficult due to short-term adjustment costs.

Part IV

The quality and sustainability
of public finances

Summary

The Stockholm European Council of March 2001 recognised the need to broaden the debate on budgetary policy at EU level from its current focus on stability towards a parallel emphasis on the contribution of public finances to growth and employment. In particular, it called for the quality and sustainability of public finances to be improved.

This chapter considers a key, albeit partial, means by which public finances can enhance employment and potential output, that is ensuring that tax and benefit systems provide appropriate incentives to save, work and invest. The quality of public finances is a broader concept than reform of tax and benefit systems, and encompasses measures to shift the composition of public spending towards investment in human and physical capital, steps to enhance the efficiency of public services, and actions to improve the working of product markets (e.g. by applying strictly public procurement rules). However, lack of consistent and updated data, especially on the functional distribution of public spending, has so far hampered a thorough analysis of these issues which need to be addressed in future reports. A strong engagement on the part of Member States is important to remedy such statistical deficiencies.

Some progress has been made in easing the fiscal burden on labour and reducing marginal tax rates. In several Member States, this has been done in the context of environmental tax reforms, where reductions in the fiscal burden on labour have been financed by new or increased taxes on pollution or resource use which lead to the inclusion of external environmental costs in market prices. Results, however, have so far been mixed and further effort is needed since overall labour taxation remains very high by historical and international standards in some Member States.

As to benefit systems, some progress has been made in recent years, although there is still scope to render them more employment friendly. Recent measures have

strengthened the conditionality of unemployment and social benefit schemes by revising eligibility criteria, the checks that conditionality requirements for benefits receipt are met, as well as management and enforcement. However, a comprehensive approach taking into account the interaction between tax and benefit systems and promoting a shift from passive towards active policies, has often been lacking. Without further reforms, it will be difficult for the EU to meet the ambitious employment targets established by the Lisbon and Stockholm European Councils.

The long-run sustainability of public finances is being threatened by the budgetary impact of demographic changes. Population ageing in all Member States will lead to substantial falls in the size of the labour force, a doubling of the old-age dependency ratio by 2050 and consequently a sharp drop in the ratio of employed persons to inactive persons. Recent projections of the Economic Policy Committee (EPC) show that between 2000 and 2050, spending on public pensions could increase by between 3 and 5 percentage points of GDP in most Member States, and possibly by much higher in some countries. If account is taken of health and care for the elderly, the overall impact of ageing on public spending could be an increase of between 5 and 8 percentage points of GDP.

This raises concerns about the long-term sustainability of public finances which is of added significance in EMU: failure to prepare for the budgetary costs of ageing could make it difficult for Member States to respect the requirements of the Stability and Growth Pact (SGP) and could complicate the implementation of the single monetary policy by the ECB. Sustainable public finances not only entail avoiding structural deficits and rising debt (i.e. respect of the SGP targets), but also keeping the tax burden at reasonable levels so that employment and growth are not hindered, and ensuring that essential public expenditures (such as education and investment) are not crowded-out by pressures for increased spending on pensions and healthcare.

As stated in the joint Commission–Council report to the European Council in Stockholm, a three-pronged strategy is needed to address the budgetary consequences of ageing populations, i.e. (1) running down public debt at a fast pace, (2) taking measures to raise employment rates, especially amongst women and older workers, and (3) reforming pension and health systems to place them on a sound financial footing including greater recourse to the funding of public pensions in some countries. The overall sustainability of public finances also depends on progress being made to implement structural reforms in products, services and capital markets, in order to sustain economic growth, increase productivity and raise employment rates.

The Stockholm European Council called for the long-term sustainability of public finances to be factored into the SGP and the broad economic policy guidelines. Although the budgetary impact of ageing populations only becomes evident in the long-run, it is determined

by short to medium-term policy decisions taken within the time frame of stability and convergence programmes. Current policy choices outlined in the programmes (such as the medium-term budgetary target, the pace of debt reduction and the scale and type of tax reforms) therefore need to be assessed against the commitment to place public finances on a sustainable footing. An appropriate balance has to be drawn between cutting taxes and running down public debt, and implies that priority should be given to the latter in high-debt countries.

To conduct regular assessments of these nature at EU level, further work is needed in developing comparable data and indicators. Projections on the impact of ageing on public finances, along the lines of the work underway in the EPC, could be usefully updated on a regular basis, say every two or three years, and incorporated in the updates of the stability and convergence programmes.

1. The quality of public finances: improving the employment incentives of tax and benefit systems

1.1. Introduction

As Member States approach positions of ‘close to balance or in surplus’, the emphasis in budgetary policy is shifting from achieving sound public finances towards other objectives, notably lowering the tax burden. The Stockholm European Council of March 2001 recognised the need to broaden the focus of the fiscal policy agenda at EU level from achieving budgetary stability towards a parallel emphasis on the positive contribution which public finances can make to growth and employment. Improving the ‘quality’ of public finances implies making important policy choices to shift the composition of public spending towards investment in human and physical capital, to enhance the efficiency of public services; to reduce the distortionary impact of taxation and improve the working of product markets (by e.g. applying strictly public procurement rules).

This chapter considers a key, albeit partial, means by which public finances can enhance employment and potential output, that is ensuring that tax and benefit systems and reforms provide appropriate incentives to save, work and invest⁽¹⁾. In the context of EMU, three aspects of reform warrant specific consideration:

- The Lisbon European Council of March 2000 established a target employment rate of 70% for the EU to be achieved by 2010. Progress was made in 2000 when around 2.4 million jobs were created. However, a substantial increase in labour supply and a further fall in unemployment are needed if the Lisbon target is to be met.
- As outlined in Part IV, Chapter 2 of this report, it is imperative that public finances be sustainable over the long-run in EMU. The Stockholm European Council endorsed a three-pronged strategy to meet

the budgetary costs of ageing populations, which included measures to raise employment rates amongst women and elderly workers: this is necessary to offset the decline in the ratio of workers to retirees resulting from demographic changes.

- Member States participating in the euro area no longer have recourse to national monetary and exchange rate policies as an adjustment instrument in the event of economic shocks. The design of tax and benefit systems to a large extent determine the extent to which public finances stabilise the impact of such shocks on real output in the short-run. For shocks of a longer-term or structural nature, tax and benefit systems also influence the pace at which economies move to new equilibrium levels of output.

Section 2 of this chapter provides an overview of theoretical and empirical aspects concerning how the benefits embedded in the tax and benefit systems affect labour supply. Section 3 presents some indicators measuring incentives to work in the tax and benefit systems of Member States in the latter part of the 1990s. Section 4 discusses the direction of recent reforms in Member States.

1.2. How tax and benefit systems affect labour supply: theory and empirical evidence

Need to look at the combined impact of tax and benefits systems

There is a growing awareness that tax and benefit systems in the EU appear to lower the incentives to work and that reforms are therefore needed to ‘make work pay’. While tax and benefit systems affect both labour supply, it is their joint impact which ultimately matters for work incentives.

The impact comes through two main channels. First, tax and benefit systems can affect the decision to participate

⁽¹⁾ For an in-depth analysis, see Carone and Salomäki (2001).

in the labour market. If the benefits paid to the unemployed and their families are high relative to earnings net of taxes (the net replacement rate), there will be no incentive for such individuals to seek employment and they may even withdraw entirely from the labour market. This is referred to as an 'unemployment trap'. Second, the tax and benefit systems can affect the decision regarding work effort. A so-called 'poverty trap' can arise when greater work effort (either in terms of hours worked or quality of labour supplied) leads to no (or only a small) increase in disposable income: this can happen because higher tax rates may be applied when a person's income rises and/or due to a withdrawal of means-tested benefits (OECD, 1997).

The higher the levels of benefits and therefore of taxes to finance the welfare system, the greater the risk of disincentives to work. However, welfare systems also play an important role in correcting market failures and ensuring social cohesion, and via these channels contribute to growth and employment. The recent experience of the Nordic countries suggests that it is possible to combine generous welfare systems with high employment rates, thus lessening the trade-off between equity and efficiency goals.

The impact of taxation on labour supply

Two main factors are relevant for assessing the impact of the tax system on labour supply, namely the tax wedge and the final incidence of taxes. Taxation of labour income tends to discourage labour supply because the 'wedge' between the pre- and post-tax return to the worker alters the relative price of leisure⁽¹⁾. However, the size and direction of labour supply in response to tax changes is ambiguous as income and substitution effects work in opposite directions. For example, a cut in the tax rate means that a worker may choose to work more in light of the higher net wages (a substitution effect due to the higher opportunity cost of leisure), but she may also decide to work less as the overall salary rises (income effect). While the theoretical effect is not clear-cut, there is considerable evidence that tax changes only have a

⁽¹⁾ The tax wedge is the difference between the demand price gross of tax and the supply price net of tax, which a tax imposes on any taxed good. In the case of labour taxes, the tax wedge consists of social security contributions, payroll tax, personal income tax and consumption taxes, which produce a wedge between the real labour costs paid by the employer (production wage) and the real take-home pay of the employee (post-tax consumption wage). For a thorough survey of the impact of the tax wedge on labour supply, see Zee (1997) and Liebfriz et al. (1997) and Pissarides (1998).

small effect on the labour supply of prime age men, but they tend to discourage the labour market participation of certain other groups of individuals⁽²⁾.

The 'statutory incidence' is not relevant in determining the economic incidence of a tax: it is possible to shift taxes (e.g. from producers to consumers or from employees to employers) such that its final incidence is on a tax base that is completely different to the statutory incidence. While a complicated set of behavioural responses determines the final incidence of a tax, market participants whose demand or supply is most inelastic tend to bear a higher burden of the tax.

Benefit systems and labour supply: wage floors and unemployment

The impact of benefit systems on labour supply may be influenced by a number of social, tax and labour market institutions: these include the overall level of taxes and benefits, wage distribution and level of minimum wages, the design of benefit systems in respect of social assistance benefits for the non-employed, and other aspects of unemployment benefit generosity such as benefit duration, eligibility and job availability requirements (OECD, 1999c).

Unemployment insurance systems may increase unemployment duration, and therefore the equilibrium unemployment rate, through two main mechanisms, i.e. by lowering search intensity and by increasing workers' negotiating power at any given rate of unemployment⁽³⁾. The higher the net replacement rates, the higher the level of wages at the low end of the productivity scale (the so-called reservation wage)⁽⁴⁾. High wage floors⁽⁵⁾ (due to statutory or contractual minimum wages or high benefit levels) risk pricing low-productivity workers out of the market. This situation contributes to defining the extent of the unemployment trap.

⁽²⁾ In particular, partners in couples where one spouse is not working (usually married women) and lone-parent families are generally found to be the most responsive to incentives, both in terms of hours supplied and participation in the labour market.

⁽³⁾ Layard (1991), Blanchard and Wolfers (1999).

⁽⁴⁾ The net replacement rate is defined as a ratio of disposable income based on social benefits when out of work and disposable income earned from work, thus describing the relationship between out-of-work and in-work income.

⁽⁵⁾ The wage floor is the lowest wage level needed to produce the same disposable income as the minimum social benefits, whether based on unemployment benefits or social assistance together with possible other means-tested benefits.

In addition to legal minimum wages and unemployment benefit systems, the wage floor also crucially depends on the nature and extent of the benefits available to non-employed people, notably social assistance schemes. Such schemes often provide income security to people who are not eligible for unemployment insurance, and can thus operate as a substitute for unemployment benefit systems. The level of social assistance may be close to or even exceed the level of unemployment benefits, especially for low-paid people, and may often provide help over a long period. Hence, the level of minimum social assistance for those in non-employment defines the wage floor and affects the incentives for work in a similar way to a statutory minimum wage. Moreover, if the level of the wage floor becomes high relative to the general wage level, it tends to compress the wage distribution ⁽¹⁾.

The generosity of benefit systems and the role of eligibility criteria

Much labour market literature suggests that the duration of benefits has a significant impact on the length of unemployment. Past experiences in many countries show that the unconditional payment of benefits for long periods features among the main causes of the high unemployment. Some studies suggest that it is the combination of the replacement ratio and the time period during which the benefit is available in the event of job loss which determines how quickly the unemployed find new jobs ⁽²⁾.

There is also increasing empirical evidence that making the disbursement of unemployment benefits strictly conditional upon job search and related behaviour ('work test') can reverse, or at least partly offset, the disincentive effects linked to these schemes (OECD, 2000b). The impact of a strict and well-enforced eligibility system on the behaviour of an unemployed person can be even higher than any decrease in the generosity of the benefit systems ⁽³⁾.

⁽¹⁾ Layard et al. (1991) and Gregg (1999).

⁽²⁾ See, e.g., Buti et al (1999), Layard et al. (1991), Nickell (1997), Nickell and Layard (1997) and Scarpetta (1996).

⁽³⁾ There are several other aspects of eligibility conditions that warrant consideration. The actual implementation of the eligibility criteria can differ extensively from the formal rules, inter alia depending on the degree of discretion by the competent authorities, organisation and division of work between various authorities, as well as on cyclical conditions. They include the definition of loss of work, availability for work, suitable work (work that cannot be refused without risking a benefit sanction), valid reasons for job refusals or for quitting a job or attending interviews, or active labour market programmes (ALMPs), requirements for independent job search, and contacts with the employment services.

If the eligibility criteria are severe, and above all if their enforcement is effective, it might be possible to maintain a relatively high benefit level without generating excessive work disincentives ⁽⁴⁾. It is therefore very important to strengthen definitions and enforcement of current eligibility criteria and to pursue a more efficient administration of benefit systems. One way to achieve this is through a closer interaction with active labour market policies.

1.3. How tax and benefit systems affect incentives to work

Before assessing recent reforms to tax and benefit systems in Member States, this section takes a closer look at some of the characteristics of tax and benefit systems relevant for assessing their impact on incentives to work. They include marginal tax rates, the level of spending on transfer benefits, the net replacement rate received by the unemployed (both in the short term after one month unemployed and in the long-term after five years unemployed), and finally average effective tax rates when taking up a job.

Marginal tax rates

Marginal tax rates provide a partial or proxy indicator for incentives to work more or to improve skills. As such, they are most directly relevant to the situation of people already in work as opposed to people in transition from unemployment to work. Table 23 shows the marginal tax rates in EU Member States over the period 1997–2000 ⁽⁵⁾. Most Member States have lowered marginal tax rates on low and medium earnings: however, they remain particularly high when all types of taxpayers are considered (ranging from 40% to 50% and even higher in Belgium, France, Germany, Denmark, Finland and the Netherlands).

The poverty trap arising from the withdrawal of means-tested benefits is clearly apparent in countries where there are in-work benefits, implying a withdrawal of means-tested family allowances. For example, the marginal tax

⁽⁴⁾ The Danish Ministry of Finance constructed an indicator of strictness referring to benefit criteria in 1994–96 in 19 OECD countries (including the EU countries except Greece, Italy and Spain). According to this indicator, job availability rules were relatively strict in Luxembourg, Sweden and the Netherlands, while relatively lax in Austria and Ireland. It suggested that some countries with higher replacement rates apply stricter eligibility rules. See, Danish Ministry of Finance (1998).

⁽⁵⁾ These are not 'pure' marginal rates but 'combined' rates in that they also take into account a number of benefit programmes. For more details, see Carone and Salomäki (2001).

Table 23

Marginal tax rates in the EU 1997–2000 (income tax plus employees contributions less cash benefit)

(as % of gross wage)

	Single individual (no children, earning 67% of APW)		Single individual (2 children, earning 67% of APW)		Married couple (2 children, single earner on APW)		Married couple (2 children, 2 earners — APW + 33%)	
	Marginal tax rate in 2000	Change1997 to 2000	Marginal tax rate in 2000	Change1997 to 2000	Marginal tax rate in 2000	Change1997 to 2000	Marginal tax rate in 2000	Change1997 to 2000
B	54.1	-0.7	54.1	-0.7	51.4	-0.3	45.5	1.0
D	51.0	-0.9	48.8	-0.8	51.8	3.6	39.5	-2.4
EL	20.1	0.0	15.9	0.0	28.5	0.0	35.5	-0.3
E	26.4	-4.8	6.4	-17.7	23.2	-0.9	34.9	-1.8
F	48.6	-0.8	21.0	-0.4	21.0	-0.4	39.0	-0.5
IRL	22.0	-8.5	22.0	-68.5	28.5	-4.2	20.3	-4.6
I	32.8	-1.6	32.8	-1.6	40.1	-0.6	40.5	-6.5
L	34.1	0.0	14.7	2.1	14.7	2.1	14.2	-1.3
A	37.1	-14.4	52.1	30.5	42.0	-0.5	32.3	-2.0
P	25.0	-1.0	11.0	0.0	25.0	-1.0	27.5	-0.5
FIN	42.7	-2.3	42.7	-2.3	48.4	-2.3	38.9	-1.0
EUR-12 (*)	48.5	-2.8	33.7	-2.1	46.3	-0.8	44.5	-2.2
DK	50.7	-1.4	50.7	-1.4	45.2	-1.3	36.3	-0.5
S	38.3	-0.6	38.3	-0.6	35.2	-0.5	43.6	-2.5
UK	32.0	-1.0	69.4	36.4	69.4	36.4	20.8	-1.3
EU-15 (*)	41.9	-1.7	39.7	3.0	42.6	5.3	36.2	-1.9
US	29.6	-0.3	35.6	-15.4	29.6	-21.4	24.8	-2.4
JP	17.3	0.8	17.3	0.9	18.6	0.6	21.7	4.1

(*) Weighted average (real GDP).

Source: OECD, Taxing wages 1999–2000.

rate in Ireland in 1997 of a single person with two children at 67% of the average wage level (APW)⁽¹⁾ was 90% of the gross wage, while for the same taxpayer (single person) without children it was only 30%. Ireland rectified this problem in 2000. A similar situation is apparent for the UK as a result of the phasing-out of the working families tax credit (WFTC)⁽²⁾. The marginal tax rate for low income families (both the family with single earner at average wage level and two children and a single parent at 67% of the average wage level with two children) is as high as 69%, whereas for richer families it diminishes to 21%.

Transfer spending

Total cash transfers for social protection (in gross terms) has diminished in most Member States since 1993.

(1) The APW wage is calculated as the average gross wage earnings of adult, full-time production (manual) workers in the manufacturing sector of each country. White-collar workers are excluded.

(2) From the 2000 calculation, the marginal tax rates for the UK also include the working families' tax credit introduced on 5 October 1999 (while the former family credit programme was not included in the calculation of the MTR by the OECD).

Between 1993 and 1998, transfers to households were reduced by almost 1 percentage point of GDP in the EU as a whole. The reduction was most pronounced in Finland, the Netherlands and Sweden where it fell by 6, 5 and 4 percentage points of GDP respectively, and a reduction of 3 percentage points was also recorded in Ireland and Spain (see Table 24). From 1998 onwards, this trend has continued with a reduction of 0.5 percentage points up to 2000. Over the whole period since 1993, only Greece and Portugal showed an increase in transfer spending; although the same is true for Germany and Italy between 1993 and 1998.

In all countries which have reduced total spending, this has been achieved predominantly by reducing the share of benefits that are directed to working-age population, mainly income replacement benefits. Unemployment benefits in the EU fell by 0.7 percentage points and disability benefits by 0.2 percentage points between 1993 and 1998. The fall in benefits to the working-age population as a share of GDP can be attributed to a number of factors. It is evident that the reduction in unemployment played a

Table 24

Transfer benefits in the EU, 1993–2000

(% of GDP)

	All transfers			Transfers to working age people ⁽¹⁾		Disability		Unemployment	
	1998	Change 1993–98	Change 1998–2000 ⁽²⁾	1998	Change 1993–98	1998	Change 1993–98	1998	Change 1993–98
B	19.3	-2.3	-0.5	5.2	-0.8	1.4	-0.4	3.2	-0.5
DK	18.2	-1.8	-1.3	6.3	-2.6	2.2	0.0	3.2	-2.3
D	19.7	0.6	-0.2	4.4	-0.3	1.7	0.2	2.2	-0.5
EL	16.2	1.7	0.3	1.8	0.0	1.3	0.0	0.5	0.0
E	14.9	-2.9	-0.4	4.1	-2.5	1.6	0.0	2.5	-2.5
F	19.2	-0.4	-0.3	3.5	-0.5	0.9	-0.2	2.2	-0.4
IRL	9.1	-3.3	-1.1	3.1	-1.2	0.7	-0.1	2.2	-1.1
I	18.9	0.4	-0.3	2.0	-0.3	1.4	-0.3	0.6	0.0
L	16.8	-0.6	-1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NL	18.9	-4.9	-1.0	5.3	-3.2	2.9	-1.9	1.9	-1.0
A	19.4	-1.0	0.1	3.2	0.2	2.0	0.4	1.1	-0.2
P	13.0	0.9	0.6	3.6	0.0	2.4	-0.2	1.0	0.0
FIN	17.7	-6.2	-1.9	6.3	-3.6	3.0	-1.3	2.9	-2.2
S	19.4	-3.9	-0.9	5.8	-1.8	2.5	-0.5	2.7	-1.2
UK	16.9	-1.7	-0.4	3.5	-1.0	2.7	-0.1	0.8	-0.9
EU-15 ⁽³⁾	18.2	-0.9	-0.5	3.8	-0.9	1.8	-0.2	1.7	-0.7

⁽¹⁾ Includes unemployment + disability benefits + social assistance.

⁽²⁾ Source: Ameco, DG ECFIN, European Commission.

⁽³⁾ Weighted by real GDP share 1998.

Source: Eurostat, Social protection database, ESSPROS.

role ⁽¹⁾. However, unemployment benefits as a share of GDP diminished even in countries that registered an increase in unemployment rates over the 1993–98 period. Hence, there are grounds to say that Member States' efforts to restrict benefit spending have started to produce results, notably as regards unemployment and disability benefits.

Net replacement rates

International comparison of unemployment benefit systems is complicated because schemes differ in terms of replacement ratios, maximum duration of benefits, eligibility criteria and taxes on benefits. Moreover, differences can occur within countries and according to the family status of recipient.

Graphs 20 and 21 show the net replacement rates which describe how the disposable income changes when an

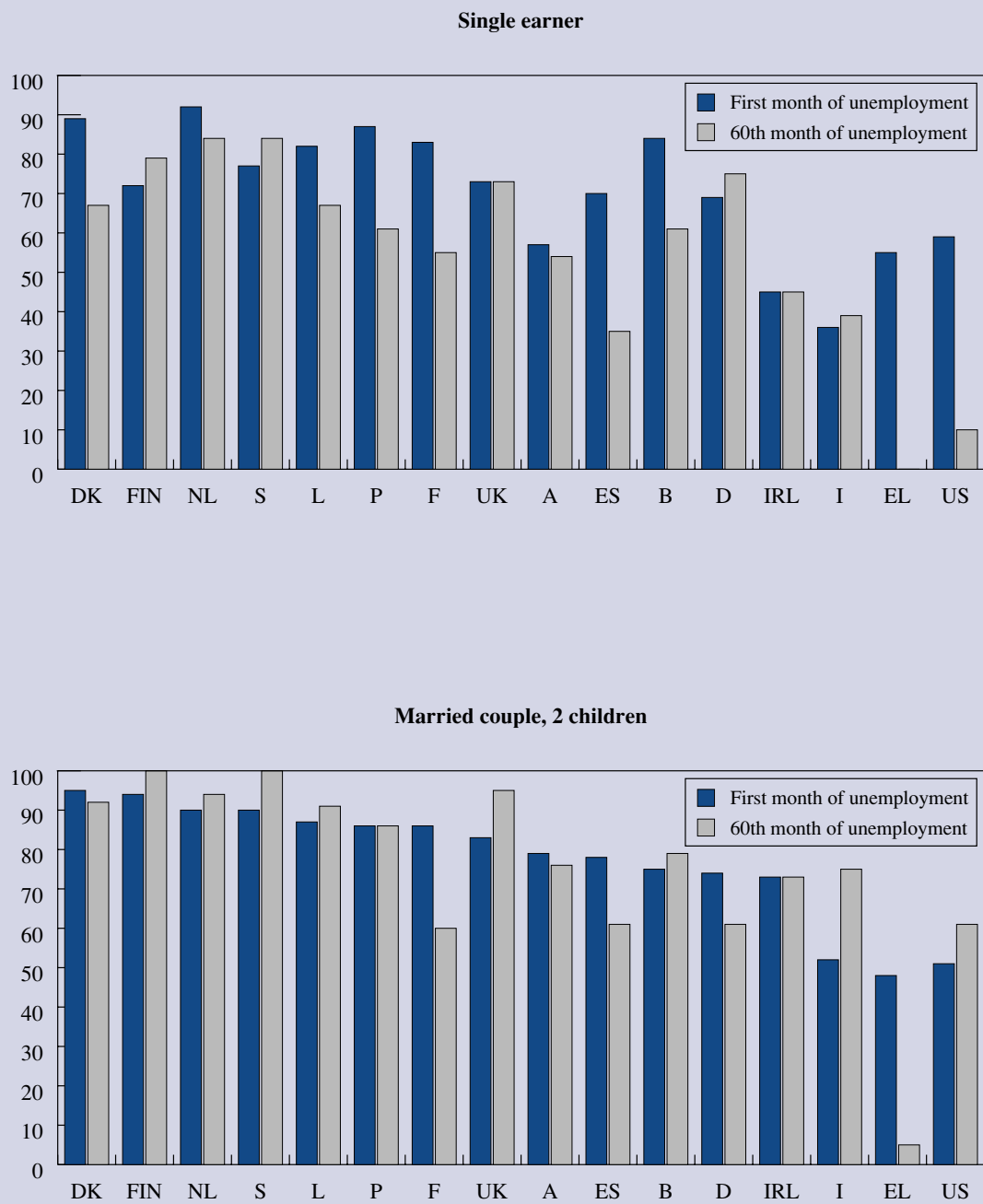
individual moves from employment to unemployment. The data refer to some family types at low and average wage levels in 1997. The net replacement rate after being unemployed one month is measured by looking at unemployment benefit without the possible topping-up of social assistance, whereas the rate of 60th month also includes the topping-up of social assistance. In some countries, the topping-up is available for the unemployed already as of the first month of unemployment ⁽²⁾. If the entitlement to insurance-based unemployment benefit has expired before the 60th month of unemployment, social assistance may constitute the main source of public support at this time. This is the case for a number of countries such as Denmark, Finland, Luxembourg, Netherlands, Spain, Sweden, United Kingdom ⁽³⁾.

⁽¹⁾ In the EU, as a whole, the unemployment rate remained almost at the same level from 1993 (10.7%) to 1997 (10.6%) but fell in 1998 to 9.9%. The unemployment rate fell in 1993–98 by several percentage points in Denmark, Spain, Ireland, the Netherlands, Finland and the UK, all of which (notably Denmark, Spain and Finland) also succeeded in reducing expenditure on unemployment benefits.

⁽²⁾ In many countries, last resort benefit schemes for the non-employed people are available for the unemployed as well. Therefore, the level of minimum social assistance also becomes an important factor affecting incentives to work.

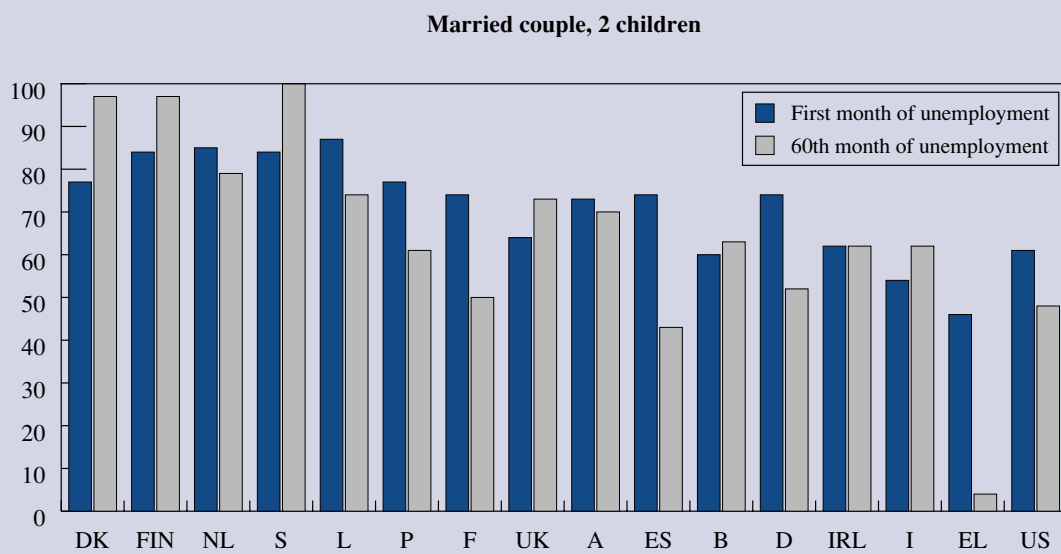
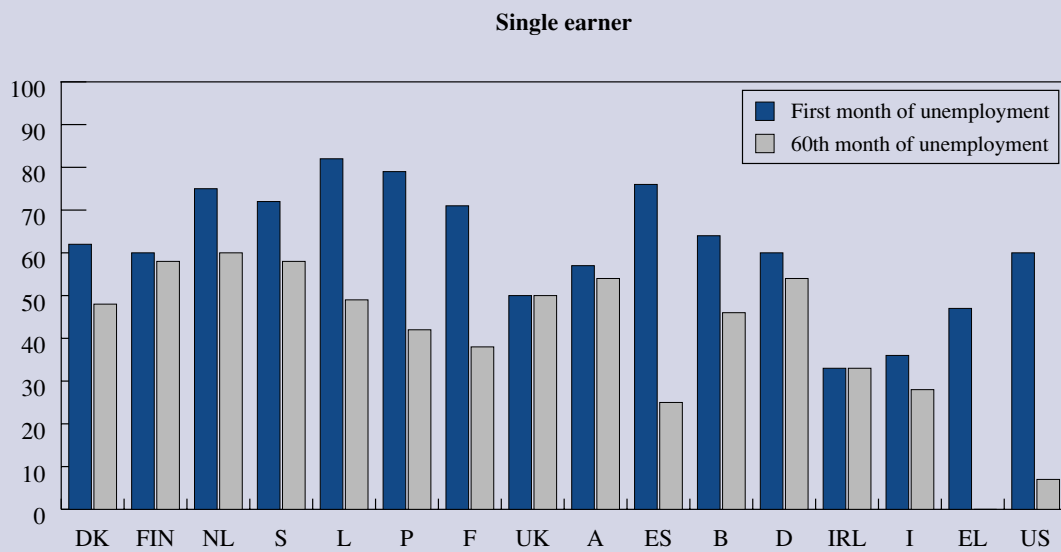
⁽³⁾ For Italy, the figures refer to the amount of the 'minimo vitale' scheme implemented (or even simply existing on paper but not funded and implemented) in a few municipalities and refer to old age people, not to working age individuals and therefore cannot be considered fully representative. For further details, see European Commission (2000b).

Graph 20: Net replacement rates of the unemployed at low (67 % APW) wage level, 1997



Source: OECD (1999c), Benefit systems and work incentives.

Graph 21: Net replacement rates of the unemployed at average (APW) wage level, 1997



Source: OECD (1999), Benefit systems and work incentives.

The net replacement rates for low-paid families with children (Graph 20) show that out-of-work income is 80% or more in eight countries. The long-term net replacement rate remains close to the level received after one month being unemployed, with some important exceptions. In some countries (Finland, the Netherlands, Sweden, Luxembourg, UK) it is even higher than in the first month of unemployment, and only in Greece and France is it markedly reduced (also for single earners in some countries). For single earners, the net replacement rates are generally somewhat lower than for families with children. Although they are over 80% in six countries in the first month of unemployment, they fall in most countries if unemployment extends beyond that period. The same features are also evident in the net replacement rates at the average wage level, the main difference being that the rates are about 10 percentage points lower (Graph 21).

Although more recent figures are not yet available, the existing knowledge of reforms of benefit schemes does not provide any grounds for concluding that large changes

have taken place in replacement rates, despite the fact that changes in tax systems in favour of wage earners may have had some effect.

Average effective tax rates when taking up a job

While net replacement rates describe how net income changes when an individual moves from employment to unemployment, it is also interesting to examine the economic incentives in cases where an individual moves from unemployment to employment, or when the spouse of an unemployed or employed person begins to work. Table 25 summarises the economic incentives in these situations by presenting the so-called average effective tax rate (AETR) ⁽¹⁾.

⁽¹⁾ The AETR indicates the share of the extra earned income not received by the family (due to taxes and withdrawal of benefits) when one of the spouses takes up a job (at the average wage level). The definition of AETR is $[1 - (\text{net in-work income} - \text{net out-of-work income}) / \text{change in gross income}]$. It does not consider other additional expenses associated with work such as child care and transportation costs, which can be large.

Table 25

Average effective tax rates for taking up a job in 1997 (assuming principal earner at APW)

Principal earner	From unemployment ⁽¹⁾ to full-time employment	From unemployment ⁽¹⁾ to part-time employment	From long-term ⁽²⁾ unemployment to part-time employment	Unemployed	Employed	Employed
Secondary earner	Non-employed	Non-employed	Non-employed	From non-employment to full-time employment	From non-employment to full-time employment	From non-employment to part-time employment
B	68	109	109	43	57	61
DK	84	84	118	55	50	48
D	80	115	115	31	51	50
EL	54	104	104	66	30	30
E	78	77	159	23	23	19
F	76	69	133	29	28	38
IRL	68	83	60	20	32	25
I	63	84	84	37	33	25
L	87	198	198	26	30	14
NL	89	90	134	45	39	37
A	76	135	135	32	30	21
P	79	174	174	14	21	13
FIN	88	117	152	48	36	23
S	88	79	154	43	37	42
UK	72	93	93	60	28	20
EU average	77	107	128	38	35	31
US	68	102	102	20	19	11
Japan	60	133	133	10	12	10

⁽¹⁾ Unemployment benefit is not topped up with social assistance.

⁽²⁾ It is assumed that the long-term unemployed person receives social assistance in the case his unemployment benefit has expired.

Source: OECD (1999), Benefit systems and work incentives.

The first three columns of Table 25 describe the amount of earnings which is ‘taxed away’ when one spouse is non-employed (and without benefits) and the principal earner moves from being unemployed and in receipt of benefits (unemployment benefit alone or unemployment benefit plus social assistance) to either full-time or part-time (a 40% work effort) employment ⁽¹⁾. On average, EU countries tax away 77% of the individual’s earnings in the case of taking up a full-time job (as a result of taxes and withdrawal of unemployment benefits), with a peak of between 80–90% in Denmark, Germany, Luxembourg, the Netherlands, Finland and Sweden.

The second and third columns of Table 25 describe the (dis)incentives to take up a part-time employment. It is apparent that this does not pay in most countries: over 100% of the increase in gross income is taxed away in half of the countries (Luxembourg, Portugal, Austria, Finland, Germany, Belgium, Greece) and 80–90% in the other countries (except France at 70%) in the case of short-term unemployment (excluding the possible topping-up impact of social assistance). Moreover, if the principal earner is long-term unemployed and the family is entitled to social assistance, there is practically no economic incentive in any country to take up a part-time job (except possibly Ireland with a 60% effective tax rate).

Columns 4, 5 and 6 of Table 25 deal with situations where the secondary earner moves from being non-employed without benefits to a full-time or a part-time job. In most countries, there do not seem to be large disincentives for the spouse to take up either part- or full-time work when the principal earner is employed. Around 50% of the income increase is taxed away in Belgium, Denmark and Germany in both cases. However, if the principal earner is unemployed (column 4), the incentive for the secondary earner to take up a job is weaker than in the case where he/she already has a job.

To sum up, the disincentives associated with moving into employment are the highest in families where neither of the spouses is working. This may suggest that a part of the problem is related to means-tested benefits granted on a family basis.

⁽¹⁾ The indicator of the first column is another way (compared to the net replacement rate) of looking at incentives in the case where the principal earner moves from unemployment benefit to full-time employment.

1.4. Tax and benefit reforms: recent trends and directions

Factors required for successful reforms

The general objective of policies aimed at increasing employment incentives or ‘making work pay’ is to promote increased access to employment and returns from economic activity. As stated above, jobs should be economically rewarding. This policy incorporates potentially important social and economic externalities in terms of social inclusion, greater self-esteem, increased welfare, and reduced social problems.

Options include general reforms of benefit schemes to increase the difference between in-work and out-of-work income, to increase the net reward from additional work effort, and to target programmes at groups of people who are at the margin of the labour market. The latter may include policies such as in-work benefits, targeted tax credits (negative income taxes), benefit transfers or wage subsidies to employers. Furthermore, reforms for tightening eligibility rules and requiring appropriate labour market behaviour from benefit recipients are also important for mobilising labour supply. The success of such policies differs across segments of the labour market and depends on a number of factors:

- the proper identification of problems and of main objectives of policies;
- general framework conditions such as the overall generosity of tax-benefit systems, the wage floor, minimum wage legislation and earnings distribution;
- the trade-offs between policies targeted at different groups since policies may be accompanied by negative side-effects such as dead-weight costs, displacement and substitution effects;
- the interaction between benefit and tax systems with the functioning and reforms of other labour market institutions.

The most important trade-off between policies targeted at different groups of people concerns the choice of whether to improve the position of those out of work or those in work, that is between the objectives of reducing the unemployment trap or the poverty trap.

Direction of tax and benefit reforms in Member States

Member States are committed in the framework of the Luxembourg process to put a series of programmes in

place to help unemployed persons to participate more fully in the labour market. Reform tax and benefit systems to make work pay and a shift from passive income support towards active measures are designed to get people back to work. However, recent reforms show the emphasis has clearly been on tax systems, while the most recent changes in benefit schemes have not been particularly significant (European Commission, 2000b).

The overall tax burden on labour in the EU has started to decline slightly since 1996. The tax reforms implemented represent a move in rendering the tax system more employment-friendly. However, the reform effort has been unequal, varying in coverage and depth across Member States. Moreover, the taxation of labour in many Member States (namely Belgium, Sweden, Germany, Finland, France, Italy, Austria, Denmark and the Netherlands) is above the EU average (41 %) and compares with less than 30 % in the United States and Japan.

Over the last five years, most Member States also succeeded in reducing the tax wedge on low-paid labour, notably thanks to reductions in employers' social security contributions on low wages. However, in general, the targeting of tax cuts at the lower end of the wage scale is not strong, and in most Member States tax reductions on labour have been more general than targeted. Nonetheless, further reductions directed at the lower end of the wage scale are expected according to recently announced tax reforms.

Regarding benefit systems, the starting positions of most Member States are characterised by relatively high net replacement rates for unemployment benefits as well as for social assistance. However, benefit spending to working-age population as a share of GDP has turned on to a downward trend, which seems to suggest a tightening or stricter control of eligibility rules, although the reform effort still seem to be insufficient.

Member States have started to reform benefit and pension schemes in order to encourage older people to stay longer in working life. The measures taken to this end include the tightening of eligibility rules and making early retirement schemes less attractive. On the other hand, reforms of unemployment benefit schemes have been rare. No country has recently carried out reductions in benefit levels and only Denmark has shortened the duration of benefits, although it still remains one of the longest in the EU. Some countries have tightened the eligibility conditions for benefits by requiring appropriate labour market behaviour (availability to and active seeking for work) and preventing the misuse of benefits.

There have been some attempts to increase employment-conditional benefits such as targeted wage subsidies, back-to-work schemes and tax credits on earned income. These reforms have been supportive of active labour market programmes. In addition, part-time work rather than unemployment has been promoted through a loosening of the conditions for receiving part-time unemployment benefits. Nonetheless, the overall shift from passive to active measures has not been strong, and only a few Member States have introduced in-work benefits. Moreover, many new measures, especially those in favour of the young and long-term unemployed, seem to provide only temporary help in terms of better incentives to work. It remains to be seen whether this is sufficient to keep these people in permanent employment or at least significantly longer than the period when the 'extra bonuses' are paid.

Some Member States have taken steps to tighten the control of eligibility criteria and to create a stricter link between rights and responsibilities, i.e. benefit entitlement is linked with requirements for appropriate labour market behaviour (active job search obligations, a stricter definition of 'suitable work', participation in active labour market programmes). As a consequence, it has become increasingly difficult for an unemployed person to turn down the offer of a job or a training programme without negative consequences for the entitlement to benefits.

For example, Denmark and Finland have introduced rules on the responsibilities of unemployed persons in their legislation especially for young unemployed persons, and have thus tightened the requirement to participate in active measures as a condition for maintaining eligibility for benefits. The Netherlands tightened the application of unemployment benefit sanctions since the mid-1980s. In 1996, legislation was introduced, according to which a voluntary quit or refusal of work or labour market participation will make the individual ineligible for benefits. Also the UK has tightened job availability conditions since mid-1980s, including a radical overhaul of benefit legislation in 1996. This legislation creates a framework for processes which define and monitor availability, job-search and compliance with employment services instructions. Furthermore in 1998 under the New Deal, participation in a labour market programme was made obligatory for all youth remaining unemployed after six months plus an additional four-month 'gateway' period.

All in all, Member States have made some progress in making the tax system more employment friendly and have started to ease the fiscal burden on labour as well as

reducing marginal tax rates. In benefit systems, the reform effort with a view to improving work incentives has been minor so far. The shift from passive to active measures has been limited and no significant shift to in-work benefits has taken place.

Further reforms should take a more comprehensive approach reviewing the interaction between tax and benefit schemes and their joint incentives to work. As regards benefit schemes, they should aim at reducing their overall generosity, in particular by re-defining the time profile

of unemployment benefits. More generally, further efforts should be devoted to strengthening eligibility criteria (job search and job availability criteria), ensuring their enforcement and the application of sanctions in case of non-compliance or misuse. Strengthening the interaction of benefit provisions with active labour market policies is also warranted. Finally, taxes on labour need to be further reduced and measures targeted at the lowest levels of the income scale need to be carefully designed so as to reduce the unemployment trap while not giving rise to poverty traps for those already in work.

2. The sustainability of public finances in EMU

Over the coming decades, the size and age-profile of the population of EU Member States will undergo substantial changes. The large cohorts of the post-war years will reach retirement age, while fertility rates are expected to remain low and life expectancy is expected to continue increasing. These demographic changes will lead to significant pressure for increased spending on public pensions and healthcare, and raises doubts as to whether public finances are sustainable in the long term. Such concerns acquired added significance in EMU given the commitment to ensure sound public finances at all times in accordance with the Stability and Growth Pact (SGP).

This chapter outlines the growing involvement of the EU in the debate on ageing populations and focuses on the steps being taken to ensure the long-term sustainability of public finances in EMU. The next section briefly summarises the latest Eurostat population projections up to 2050. Section 2 discusses the economic and budgetary consequences of ageing populations and considers how the long-term sustainability of public finances is dealt with in the existing EU framework for budgetary surveillance. Section 3 reviews recent attempts at EU level to develop more comparable projections for the impact of ageing on public finances. Section 4 outlines a comprehensive policy response to the economic and budgetary consequences of ageing populations, and considers how the long-term sustainability of public finances could be systematically incorporated into the budgetary surveillance process at EU level.

2.1. Recent demographic projections 2000–50

Updated Eurostat population projections (see Table 26) show that the average birth rates in the EU are currently only 1.5 children per woman, although they are projected to increase to almost 1.7 by 2025. Even these fertility rates are too low to ensure a natural replacement of the population or to stabilise its age structure. Life expectancy

is projected to steadily increase reflecting improved healthcare provision and breakthroughs in medical technologies. Having risen from 67 in 1960 to 75 in 2000, life expectancy at birth for men is projected to rise to an average of 80 by 2050. Life expectancy is also projected to rise for women, from 81 in 2000 to 85 by 2050. The revised population projections are based on the assumption of continued net inward migration to Member States of some 600 000 persons annually over the projection period.

As a result of these demographic developments, the EU working age population (aged between 15 and 64) will stay broadly stable at some 250 million until 2015. Thereafter, it will decline to 244 million by 2025 and 211 million by 2050, a drop of some 16%. As well as declining in size, the labour force will be greying, with workers aged between 55 and 64 accounting for a larger share of the total workforce.

At the same time, the numbers of elderly persons aged 65 and above will rise from 61 million in 2000 to 103 million by 2050. The largest increase will take place amongst the very old (aged 80+), whose numbers will almost triple from 14 million in 2000 to 38 million in 2050. The old-age dependency ratio (defined as persons aged over 65 as a percentage of working age population 15–64) will more than double from some 24% in 2000 to 49% in 2050 for the EU. In other words, the EU will move from having four to only two persons of working age for every elderly person by 2050, thus placing an increased burden on the economically active population in supporting the inactive.

These figures for the EU as a whole mask considerable variations in both the timing and size of demographic changes across Member States. Currently, there are very wide differences as regards fertility rates (ranging from below 1.3 in Spain, Greece, Italy and Austria to over 1.7 in Denmark, France, Ireland, Luxembourg, Finland and the UK). Large falls in the size of the total population between 2000 and 2050 are projected in Germany, Spain and Italy, whereas it is expected to grow in France, Ireland, Netherlands, Portugal and the UK.

Table 26

Demographic developments in the EU, 2000–50

	2000	2025	2050	Change
Assumption				
Total fertility rate	1.55	1.68	1.69	0.14
Life expectancy male (years)	75	79	80	5
Life expectancy female (years)	81	84	85	4
Net migration (thousands)	661	622	622	- 39
Population size (millions)				
Working age population (15–64)	252	244	211	- 41
Elderly population (65+)	61	86	103	42
Very old population (85+)	14	24	38	24
Total population	376	386	364	- 12
Dependency ratios				
Older workers share in labour force ⁽¹⁾	17 %	23 %	21 %	4 %
Old-age dependency ratio ⁽²⁾	24 %	35 %	49 %	25 %
Very-old as share of elderly ⁽³⁾	23 %	28 %	37 %	14 %
Number of potential workers per retiree ⁽⁴⁾	4.1	2.8	2.1	- 2.0

⁽¹⁾ Population aged 55–64 as % of population aged 15–64.

⁽²⁾ Population aged 65 + as % of population aged 15–64.

⁽³⁾ Population aged 80 + as % of population aged 65+.

⁽⁴⁾ Number of persons of working age (15–64) per elderly person (aged 65+).

Source: Eurostat — baseline scenario.

Striking differences across Member States are evident on Graph 22 displaying old-age dependency ratios. In terms of starting position, Ireland has the lowest old-age dependency ratio at 17 % compared with ratios of 25 % in Belgium, Greece, Italy and Spain. The timing of the demographic changes also differs. Steep increases in the old-age dependency ratio already start to occur after 2005 in Germany, Greece, Italy, the Netherlands and Austria. In most Member States, the old-age dependency ratio will reach a new plateau around 2040, with the highest ratios of some 60 % in 2050 forecasts for Spain and Italy (an increase of 35 percentage points over the projection period).

While caution must be exercised when using long-term population projections, they nonetheless provide reliable evidence that substantial demographic changes will occur in the coming decades. This is because the old-age dependency ratio largely depends upon the life expectancy of generations currently alive (which tend to change in a stable fashion) and on past fertility rates (which are known). Higher levels of inward migration could offset the projected decline of the total and working age populations projected, but would have to reach levels vastly above those experienced in the past to have a significant

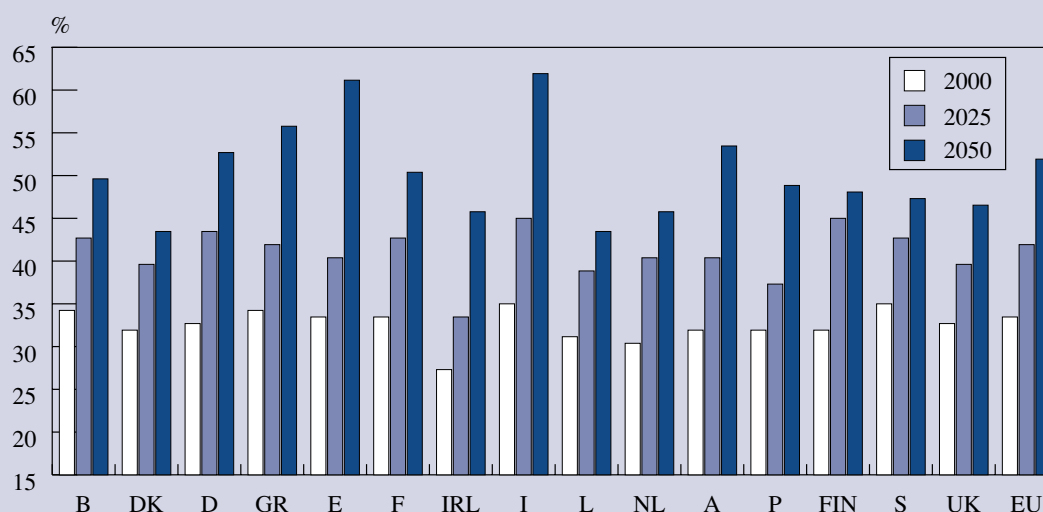
impact (United Nations, 1999). Some authors ⁽¹⁾ have expressed concerns that official national population projections underestimate the impact of the demographic changes underway on the grounds that fertility rates may not increase as projected and that the rate of increase in life expectancy could be higher than anticipated if there are significant breakthroughs in medical sciences. These concerns underline the need to regularly update population projections and the indicators of budgetary sustainability on which they are based.

2.2. Long-term sustainability in the context of EMU

The public debate on ageing populations, and especially in the context of EMU, has mostly focused on whether public finances are sustainable in the long run. Several studies have suggested that the EU could face a particularly severe impact on public finances as a result of age-

⁽¹⁾ Schieber and Hewitt (2000), England (2001).

Graph 22: Old-age dependency ratios 2000–50 (baseline scenario)



Source: Eurostat.

ing populations ⁽¹⁾. It has been argued that the budgetary surveillance process established by the Maastricht Treaty, with its short-term focus on the government balance and debt, fails to take adequate account of the future burden on public finances due to ageing populations or the capacity of Member States to meet them.

Increased age-related spending cannot be financed by running up large structural deficits and public debt. This applies to all countries in all circumstances: however, it has added significance in EMU as the running of large deficits would be contrary to the SGP. A Member State with an unsustainable public finance position may seek an accommodating monetary policy, and financial markets may perceive monetary discipline to be vulnerable with consequent pressure on euro interest and exchange rates. As pointed out by the ECB (2000), unsustainable public finance positions, or the risk thereof, would complicate the implementation of the single monetary policy and undermine confidence in the EMU process possibly resulting in interest rates being higher than they otherwise would be. There is therefore a strong rationale for EU surveillance of the long-term sustainability of public

finances in EMU so as to internalise potential negative cross-border spillover effects.

Overall, there is a broad consensus in the literature that ageing populations are likely to lead to negative budgetary and economic consequences although there is uncertainty as to the scale of these effects. The Treaty recognises that a decentralised approach to fiscal policy in EMU under national authorities, and ultimately the viability of the EMU project, hinges upon sound public finances being sustained in the long run. However, the term ‘sustainability’ is not found in the Treaty provisions: although intuitively clear (i.e. ultimately avoiding government bankruptcy), the analytical and operational definition of sustainability has proven elusive ⁽²⁾. In the absence of an agreed definition of sustainable public

⁽¹⁾ Roseveare et al. (1996), Chand and Jaeger (1996), IMF (2001).

⁽²⁾ The so-called present value budget constraint (PVBC) translates formally the principle that sooner or later the public debt has to be repaid, i.e. that today’s government debt has to be matched with the present value of cumulated primary surpluses. An important implication of the PVBC is that permanent primary deficits are not sustainable. However, this offers poor guidance to policy-makers as the solvency condition is compatible with an ever-growing debt ratio and can be met by assuming that primary surpluses will be generated by future governments. See Balassone and Franco (2000).

finances that is operationally feasible, the Maastricht Treaty took a pragmatic route. Sustainability in the Maastricht Treaty and the SGP is ensured by requiring Member States to avoid excessive deficits. Although the SGP only imposes commitments on Member States for budgetary positions in the medium term (three to five years), and does not require explicit long-term commitments, sustainability is *de facto* ensured as respect of the medium-term target will lead to the virtual disappearance of public debt in the long run.

Aside from budgetary consequences, ageing populations will also have potentially important consequences for labour market developments, private savings behaviour, productivity and economic growth. Unless offset by increases in factor productivity or resource utilisation, a decline in the size of the labour force coupled with a rapid increase in the old-age dependency ratio will lead to a lower rate of economic growth (McMorrow and Röger, 1999). The potential impact of ageing on aggregate savings is of particular importance as higher national savings could play an important role in offsetting the effects of ageing by increasing productive investment and long-run growth ⁽¹⁾. At the global level, changes in the savings/investment balance could result in changes in interest rates prevailing on the world market. The impact of ageing population on labour supply is also a key concern. If Member States meet the additional costs of public pensions by raising contribution rates (which are already very high in many Member States), this would widen the wedge between labour costs and net wages, and create disincentives to hire workers and participate in the labour market. Similarly, increasing the overall tax burden could exacerbate disincentives towards employment and investment.

⁽¹⁾ Regarding private savings, the life-cycle hypothesis (LCH) suggests that an important determinant of aggregate private savings is the age profile of the population, and savings would decrease with a rising old-age dependency ratio. However, some authors and empirical evidence from household survey data call the LCH into question, and highlight other factors determining savings such as the desire of individuals to leave bequests to future generations and the precautionary motive to protect against future uncertainties. Moreover, account should be taken of the inter-linkages between public and private savings. A decline in public saving may be fully or partially offset by an increase in public saving if private agents factor in the future tax implications of rising government indebtedness. These issues are examined in detail in Kohl and O'Brien (1998), Turner et al. (1998).

2.3. Developing more comparable projections of the budgetary impact of ageing

Recent projections for spending on public pensions 2000–50

The previous section argues that continued respect of the SGP can ensure sustainable public finances in the long-run as it results in the disappearance of public debt. However, the Council cannot simply assume that Member States will always be capable of complying with the SGP provisions in the future in the face of large increases in age-related expenditures. Additional indicators, going beyond the short-term measures of deficits and debt, are needed to ascertain the timing and scale of the impact of ageing populations on public expenditures (and revenues), and would thereby assist in devising policies that can ensure continued compliance with the SGP.

To this end, a working group on ageing populations attached to the Economic Policy Committee (EPC) was established in 1999 with a view to developing more comparable indicators of the economic and budgetary impact of ageing. As a first step, projections of the impact of ageing on public pension expenditures were developed, a considerable challenge given the complexity and diversity of pension systems across Member States. A further difficulty in making long-term budgetary projections is that a number of assumptions must be made on variables such as interest rates, productivity growth and labour market developments. Long-term budgetary projections therefore need to be interpreted with caution, but nonetheless should prove useful in identifying the risk of serious budgetary imbalances.

To help improve the comparability of projections across countries, national authorities were invited to run their own projection models (that accurately model the institutional detail of pension and social security systems) using standard Eurostat demographic (see Section 2) and economic assumptions. An interim report on the budgetary implications of ageing populations on public pensions was examined by the Ecofin Council on 7 November 2000 ⁽²⁾.

Table 27 therefore presents the results of a 'current policy scenario' based on legislation in force in early 2000,

⁽²⁾ Economic Policy Committee (2000). The work of the EPC is proceeding in parallel with an exercise underway in the OECD (Working Party 1), see OECD (2001) and Dang T.-T., Antolin and Oxley (2001).

Table 27

Pension expenditure projections 2000–50

(as % GDP, before tax) ()*

	2000	2005	2010	2020	2030	2040	2050	Change 2000 peak
B	9.3	8.7	9	10.4	12.5	13	12.6	3.7
DK (1)	10.2	11.3	12.7	14	14.7	13.9	13.2	4.5
D	10.3	9.8	9.5	10.6	13.2	14.4	14.6	4.3
EL	12.6	12.4	12.6	15.4	19.6	23.8	24.8	12.2
E	9.4	9.2	9.3	10.2	12.9	16.3	17.7	8.3
F	12.1	12.2	13.1	15	16	15.8	n.a.	3.9
IRL	4.6	4.5	5	6.7	7.6	8.3	9	4.4
I	14.2	14.1	14.3	14.9	15.9	15.7	13.9	1.7
L	7.4	7.4	7.5	8.2	9.2	9.5	9.3	2.2
NL	7.9	8.3	9.1	11.1	13.1	14.1	13.6	6.2
A	14.5	14.4	14.8	15.7	17.6	17	15.1	3.1
P	9.8	10.8	12	14.4	16	15.8	14.2	6.2
FIN	11.3	10.9	11.6	14	15.7	16	16	4.7
S	9	8.8	9.2	10.2	10.7	10.7	10	1.7
UK	5.1	4.9	4.7	4.4	4.7	4.4	3.9	- 1.2

(*) The coverage of the public pensions included in these projections made by national authorities differs somewhat from country to country and a more complete description is provided in EPC (2000). Moreover, the EPC intends to publish an updated report in autumn 2000, inter alia, which will clarify the items covered in the projection of each Member States and fill in some of the gaps.

(1) For Denmark, the change in spending between 2000 and the peak year net of the supplementary semi-funded scheme (ATP) is 3.1 % of GDP.

Source: EPC (2000).

and does not incorporate the anticipated effects of pending reforms (1). Participation rates are based on ILO (1997) projections and assume a stable rate for men over time, whereas for women they converge upwards to within 5 or 10 percentage points of the rate for men by 2050: this reflects the higher participation rates among younger female cohorts in the labour force today. Unemployment is assumed to fall by 2005 to structural level as defined by the OECD: an additional reduction of no more than one third was permitted if countries have already introduced large structural reforms. Overall, these assumptions yielded unemployment rates of between 5 % and 6 % in most Member States. Labour productivity should converge towards 1.75 % annually between 2020 and 2030.

The projections show a rise of public pension expenditure of between 3 % and 5 % of GDP in most Member States over the next few decades. Apart from the UK, where spending is projected to fall, only Italy and Sweden are projected to have increased spending on public pensions

of less than 2 % of GDP over the period 2000 to 2050. Somewhat higher upwards pressure on public pension spending is projected for Portugal and the Netherlands, with the biggest increase projected for Spain of 8 % of GDP and Greece at over 12 % of GDP.

Although the projected rise in spending on public pensions is significant, they are for most countries below the increases projected in earlier studies.

This suggests that reforms undertaken in the 1990s have gone some way towards mitigating the growth in projected spending on public pensions due to ageing populations. However, the scale of the increase projected spending of public pensions in Mediterranean countries warrants particular concern.

Main factors driving the increase in public spending on pensions

To get a better understanding of the factors driving the increases in pension spending, the OECD (2001) and Dang et al. (2001) have decomposed the projected changes into four components: (1) the old-age dependency ratio, (2) the employment ratio, (3) the benefit ratio and (4) the

(1) Various sensitivity tests and policy simulations have been conducted, which are set out in full in the EPC report and in OECD (2001).

eligibility ratio ⁽¹⁾. Not surprisingly, the increase in the old-age dependency ratio is the main driving force behind increased pension spending in nearly all Member States. It was most pronounced in Austria, France, Germany, Italy, Portugal and Spain, but significantly lower in Denmark, the Netherlands and the UK. A rise in the eligibility rate will also generate some pressure for increased spending on pensions: this is largely due to higher female labour force participation rates (i.e. more women will be entitled to higher pension entitlements as they have longer work histories).

However, pressure for increased spending on pensions is partially offset in most countries by changes in the employment rate. Also, a decline in the benefit ratio in most countries will serve to lower pension expenditure, offsetting between a quarter and a half of the impact of a higher old age dependency ratio. This decline in the benefit rate is due to recent pension reforms that have *inter alia* lengthened the contribution period for a full pension, extended the contribution period for the calculation of a pension, and shifted indexation rules for pensions from wages to prices. The most pronounced fall in benefit rates are projected for Italy and Sweden (reflecting a shift towards a notional defined contribution scheme), France (on account of a 1993 reform that lengthened contribution period and altered indexation rules) and the UK (reflecting the continued indexation of pensions to prices).

The different approaches to financing pension expenditures

As stated above, long-term expenditure projections for pensions need to be interpreted with considerable caution, and on their own do not indicate the capacity of Member States to finance additional expenditures. As well as the size of the increase in spending, account also needs to be taken of the starting level of spending on public pensions.

A further important consideration as regards the budgetary implications of ageing is how public pensions are financed. In many Member States, public pensions are

almost exclusively financed on a (PAYG) pay-as-you-go basis, i.e. current pensions are directly paid from the current contributions of the working population and employers. Changes in the ratio of workers to beneficiaries therefore directly impact their financing. A fall in the ratio of contributors to pensioners between now and 2050 will have a direct impact on the financing of PAYG pension systems, and consequently on public finance positions.

In contrast, several Member States finance a part of their public pension systems (e.g. such as the occupational pensions of civil servants) on a funded basis, i.e. pension entitlements depend upon accumulated returns of past pension contributions invested in financial assets. Ageing populations should therefore have a neutral budgetary impact ⁽²⁾. However, it should be borne in mind that funded systems may result in an 'implicit' budgetary liability on governments if, for example, an inadequate rate of return is earned to cover pension entitlements.

Account should also be taken of the taxation of pension income, which in most countries is subject to income tax albeit with various exemptions for minimum benefits or certain types of benefits. As pension income is taxable, part of future gross pension liabilities will be returned to the government through taxes: this implies that part of government liabilities is in fact a government asset and the net liability is less than that originally calculated on the basis of pension promises. Moreover, by changing the taxation of pensions, governments can affect the amount of net liabilities of future pensions. The taxation aspect is of particular relevance in countries where pension levels are high in comparison to earnings, and in countries with large funded systems where contributions and income on investments are often exempted from taxes which only become liable when pensions are paid out. These countries could expect significant increases in tax revenues from this source as more people retire.

Overall impact of ageing populations on public spending is significant

Pensions are not the only public expenditure item that will be affected by ageing populations. A significant impact is also expected on healthcare given that people consume increasing amounts of healthcare services as they age. The EPC working group on ageing is now trying to produce comparable projections for the impact of ageing

⁽¹⁾ The old-age dependency ratio is measured as the population aged 55 and over as a share of the population aged 20 to 54: this differs from the ratio described in Section 2 to reflect the fact the many older workers retire before 65. The employment ratio measures the numbers employed as a share of persons of working age (20–64). The benefit (or replacement) ratio measures the average pension benefit to the GDP per person employed. The eligibility ratio measures the share of persons aged over 55 who receive pension benefits.

⁽²⁾ See Oksanen (2001) for an analysis on the funding of pension systems.

Box 10: Demographic developments and the size of governments

As measured by total expenditures, the size of governments in the euro area account for almost half of GDP in 2000, which is significantly higher than the United States and Japan. The size of the government is smallest in Ireland (33%) and the UK (38%), but is more than 50% of GDP in other Member States (Denmark, France, Austria, Sweden). Such shares of total expenditures in GDP contrast with those recorded in the early 1960s, when the size of most governments was well below one third of GDP. At that time, Portugal and Japan were at the low end of the scale (20% of GDP), while the UK was at the top end and the United States situated somewhere in the middle. Therefore, while nominal expenditures have grown above nominal GDP almost everywhere, they have evolved unevenly across countries.

The determinants of such differences in levels and evolution of government size across countries is the subject of an abundant literature, which has considered the interplay between economic and demographic factors (Rodrick, 1998), as well as the role of comparative politics (Persson and Tabellini, 1999). Leaving aside political institutions, three are the main determinants of the across-countries differences in the size of governments over the long-run:

- According to Wagner's law, the demand of public services has an income elasticity higher than 1, so that the share of public expenditures in GDP is an increasing function of income.
- The age structure of population determines not only the composition but also the size of the public sector. In particular, ageing puts pressure on healthcare and pensions, which in most countries, are at least partially provided by the public sector either directly or through transfers. The size of governments depends on the dependency ratio.
- Exposure to international competition triggers the demand for public insurance against external shocks, which results in higher expenditures. Hence, the more open an economy is the larger is its public sector.

Martinez-Mongay (2001) has analysed the joint power of these three factors to explain across-country differences in the share of primary expenditures in GDP (EXPEND) over the long-run in EU Member States between 1960 and

1999⁽¹⁾. The effects of the economic cycle have to a large extent been offset by taking five-year averages. Income (YCAP) is GDP per capita in 1995 (purchasing power parities); the dependency (DEPEND) is measured as the share of people aged 65 or more in total population⁽²⁾, and trade openness (TOPEN) is the average share of exports and imports of goods and services in GDP. The estimated function expression de relationship between government size and three determinants above is:

$$\text{EXPEND} = -33.2 + 12.6 \text{ YCAP} + 12.0 \text{ DEPEND} + 4.2 \text{ TOPEN}$$

Regression results indicate that 60% of the across-country differences in government size in the long run are associated with differentials in income, demographic dependency and trade openness the period before. The coefficients of the regression are statistically different from zero. Back-of-the-envelope calculations give an indication of the predictive power of the function above. *Ceteris paribus*, if income and trade openness are kept constant, the increase in the dependency ratio in the EU as a whole from 16% in 2000 to 22% in 2025 and 28% in 2050 would lead to an increase of 4.5 percentage points of GDP in primary expenditures between 2000 and 2025 and to an additional increase of 2.5 percentage points between 2025 and 2050. These figures seem to be in line with the projections in Table 27.

In conclusion, there is evidence that the role of demographic factors in determining the size of government expenditures has increased over time. The process has particularly been important after the 1970s due to reforms that increased the generosity of benefit and pension systems in some countries and steps to extend the coverage of welfare systems. To lower the impact of the old-age dependency ratio on the evolution of public expenditures would require reform of pension systems that limit the pressures for increased public spending.

⁽¹⁾ The sample consists of 14 countries, since Belgium and Luxembourg are taken as a single country in the indicator of exposure to international competition.

⁽²⁾ This measure of old-age dependency is different to that used in Table 26 and Graph 22 which define the ratio as the number of persons aged 65 and above as a share of the number of persons of working age (15 to 64), i.e. not as a share of the total population.

populations on public spending on healthcare up to 2050, but results are not expected before the end of 2001.

Some long-term projections of public spending on healthcare expenditures have already been made. However, these results are much less straightforward than those obtained for pensions, as the link between ageing and health expenditure needs exploring: in particular, it tends to be concentrated in the year prior to the death of an individual irrespective of their age (Jacobzone et al., 2000). On balance, therefore, there is a consensus that healthcare expenditure will rise due to ageing, but there is still some debate as to the scale of the increase. The OECD (2001) and Dang et al. (2001) report national projections for healthcare spending including care for the elderly, although the coverage, methodologies and assumptions used in the projections differed substantially between Member States. Fourteen OECD countries reported projections with an average increase of 3.3% of GDP in public spending between 2000 and 2050. Seven EU Member States submitted projections: Belgium 3%, Denmark 2.7%, Finland 3.8%, the Netherlands 4.8%, Sweden 3.2% and the UK 1.2%.

Overall, the combined impact of ageing populations on public pension and healthcare systems suggests an increase in public spending of between 5 to 8 percentage points of GDP in most Member States, although substantially higher figures are likely in some countries ⁽¹⁾. Although this pressure will emerge over several decades, it inevitably raises concerns over the capacity of Member States to finance such increased age-related spending without breaching the SGP rule.

From expenditure projections to estimates of the long-term sustainability of public finances

While the above projections for age-related public expenditures give some indication as to the timing and scale of future budgetary pressures facing Member States, on their own they do not indicate whether public finances are sustainable in the long-term. To do so, account must be taken of the overall public finance situation of each country, i.e. what happens to tax revenues and non-age-related expenditures over time, as well as the starting position in terms of public debt and primary balance.

⁽¹⁾ Several Member States projects falls in public spending in child/family benefits and education on account of ageing populations of between 1 and 1.5% of GDP. See OECD (2001) and Dang, Antolin and Oxley (2001).

One approach to examining the sustainability is to assume 'no policy change', i.e. tax revenues and non-age-related expenditures remaining constant over time, OECD (2001). Under these assumptions, public debt either explodes or implodes over time depending upon whether the increases in age-related spending are offset by a falling interest burden. However, this unrealistically assumes no policy change on the part of government in the face of exploding/imploding government debt, and does not reflect the institutional requirements of the SGP. Moreover, debt developments are very sensitive to current primary surplus, which are high by historical standards in most Member States, especially the high-debt countries. Consequently, this approach can give the misleading impression that high-debt countries will find it relatively easy to meet the budgetary challenge of ageing (since they have scope to make most 'savings' in terms of a lower interest burden that could offset additional spending on pensions and healthcare).

In the coming months, the Commission services together with the EPC, will seek to develop indicators of sustainable public finances based on the pension projections and the forthcoming projections for healthcare spending. To be useful, such indicators need to reflect the institutional constraints on public finances in EMU, namely the obligation to respect the SGP at all times. Moreover, they should illustrate the 'real adjustment effort' required of Member States to meet the budgetary costs of ageing populations while at same time sustaining budget positions of 'close to balance or in surplus' and pursuing other budgetary objectives identified by the Lisbon and Stockholm European Councils (e.g. lowering the tax burden on labour). Even adherence to balanced budget positions over the very long-term (which could prove very difficult to sustain) may not be sufficient to prevent the need for substantial future increases in the tax burden ⁽²⁾ or cuts in non-age-related spending.

A broad concept of sustainable public finances is therefore needed which goes beyond simply avoiding structural deficits and the accumulation of public debt: sustainability also entails keeping the tax burden at reasonable levels and ensuring that non-age-related expenditures are not

⁽²⁾ Each Member State is free to determine its own tax burden. However, considerations should be given to the potential impact on competitiveness of maintaining a high tax burden over the very long run. In addition, if tax competition increases due to more mobile tax bases, governments may find it increasingly difficult to generate adequate tax revenues.

**Box 11: Assessing the ‘real adjustment effort’ required to meet the budgetary costs of ageing:
a numerical example**

Table 28 tries to capture the real ‘adjustment effort’ required by Member States by presenting examples of the primary surplus required to ensure continued respect of the SGP. It focuses on the level of the primary balance rather than the change in the primary balance. Two stylised countries are presented — country A is representative of an average EU Member State, and country B represents a high-debt Member State. Both countries have an identical tax burden of 45 % of GDP, spend 16 % of GDP on age-related expenditures in 2004 and maintain balanced budget positions throughout the projection period (in line with the close to balance rule of the SGP, see Part II, Chapter 1). The only difference between them is that country A has a

government debt burden of 60 % of GDP whereas country B has a government debt level of 100 % of GDP: this implies that country A has scope for more non-age-related spending as a share of GDP in 2005 (26 %) compared with country B (24 %) since the latter has to devote more tax revenues to servicing a higher interest burden.

As shown in the table below, high-debt countries will have to maintain high primary surpluses for several decades if the SGP is to be respected. This implies that they have less scope to cut taxes compared with low debt countries or to increase spending on non-age-related expenditure items.

Table 28

Primary balance required to keep balanced budgets (*)

	2005	2010	2020	2030	2040	2050
A (1)	3.2	2.6	1.8	1.2	0.8	0.5
B (2)	5.3	4.3	2.9	2.0	1.3	0.9

(*) Nominal interest rate is set at 5.5 %. Nominal GDP growth rate is assumed to be 4 %.

(1) average EU country, debt in 2004 at 60 % of GDP.

(2) high-debt country, debt at 100 % of GDP.

Source: Calculations of Commission services.

crowded out by increased spending on pensions and healthcare. Indicators could also be developed to identify whether current budget targets are sufficiently ambitious (in terms of debt reductions and/or the accumulation of reserve funds) to avoid future increases in the tax burden or cuts in non-age-related expenditures, measures which could be detrimental in terms of intergenerational fairness (see Oksanen, 2001).

Capturing the general equilibrium effects of ageing populations

The above analysis on the impact of ageing on the public finances is inherently partial in nature since the importance of international linkages and the role of systemic interactions and feedback mechanisms are inadequately catered for, i.e. so-called ‘general equilibrium’ effects.

Graph 23 presents the results of simulations using the Commission services’ multi-country model (Quest II) which provides an internally consistent framework for modelling the various trade and financial linkages between economies, ensures that the main dimensions of the problem can be looked at including the crucial systemic issues, such as the equilibrating role played by interest rates and exchange rates in determining the final, long-term, effects of the economic implications of this phenomenon.

Graph 23 illustrates the difference in projected output between a baseline scenario (that assumes population and labour force growth in the order of 0.25 % per annum and an annual average GDP growth rate of 2.25 %) and an ageing scenario. This ageing scenario comprises of two elements: firstly, a labour force shock, based on Eurostat’s demographic projections presented in Section 2 and

the labour force assumptions used by Members States in making the EPC projections reported on in Table 27 — secondly, a public expenditure shock based on the projections for public pensions made by the EPC as well as an estimate for a linear increase in age-related health expenditure of 2.5 % of GDP for all of the Member States over the period to 2050 ⁽¹⁾.

The overall impact of the above labour market and public finance changes is to reduce the level of GDP per

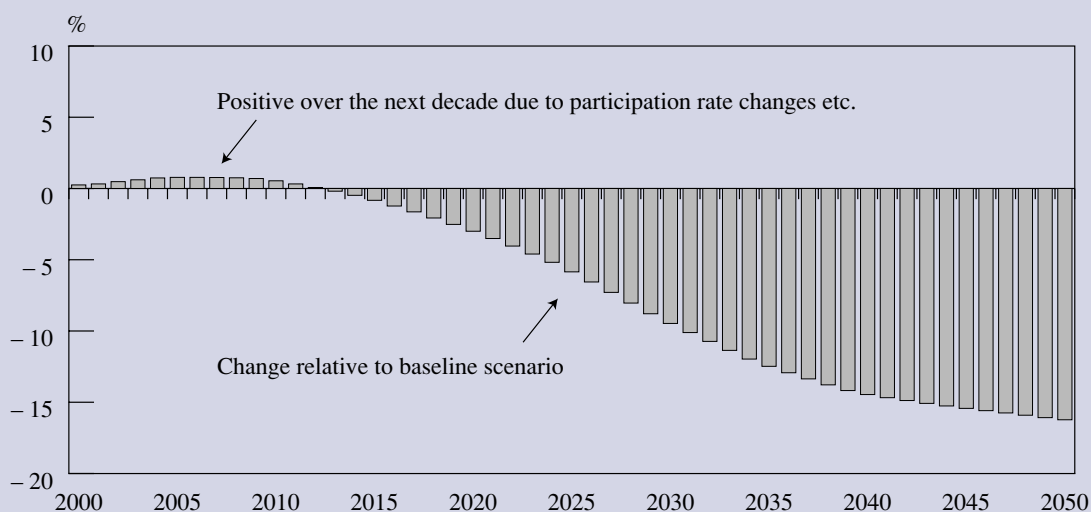
⁽¹⁾ The approach used for these simulations is the same as that used in an earlier paper by McMorrow and Röger (1999). A full description is provided in that paper, but the public finance and labour market assumptions which underpin the QUEST baseline scenario are essentially as follows. The baseline already assumes broad respect for the SGP. Changes in the population of working age are driven by the assumption that the overall population is growing in all countries over the simulation horizon at a growth rate similar to that witnessed in the most recent decades. Although there is no change in labour taxes and no assumption regarding structural reforms with regard to the respective labour markets, the structural unemployment rates still go down to 7 %, on average, mainly due to the real interest rate effects associated with respect of the SGP. In addition, unemployment benefits are assumed to be indexed to gross, as opposed to net, wages. However, while this rule was strictly applied for the 1999 simulations, in line with our NAIRU results, the country specific tax benefit rules are used for the present simulations. This implies that the large continental EU countries give benefits largely indexed to gross wages while for those countries for which no tax effect on the NAIRU could be found a 50–50 rule was applied.

capita over the period 2000–50 in the EU by over 16 % compared with the baseline, see Graph 23. That is not to say that per capita GDP will fall over the next 50 years, but rather that it will be lower than what would be expected if populations were not ageing. In terms of growth rates, ageing is expected to reduce the annual average rate of growth, relative to the baseline, by close to half a percentage point, i.e. from 2.25 % to 1.75 % p.a. While greatest effects will occur after 2020, Graph 23 illustrates that demographic developments are favourable over the coming decade, underlining the need for the EU to seize this window of opportunity to prepare for the economic and budgetary effects of ageing populations.

At Member State level, the impact on per-capita GDP largely depends on the timing and scale of demographic changes as well as the assumptions on the evolution of participation and employment rates. Countries such as Belgium, Germany, France and Finland are projected to have GDP per capita levels in 2050 that are some 20 % of GDP lower compared with the baseline (no ageing population) scenario, whereas a figure of some 10 % is recorded in countries such as Ireland, Sweden and the UK.

Overall, these results using the QUEST model confirm that although the budgetary impact of ageing populations

Graph 23: Projected impact of ageing populations on EU per-capita GDP



Source: Commission services.

are of most direct concern for the functioning of EMU, policies to mitigate the impact of ageing populations on real output are of equal importance. Visco (2001) and Barr (2000) underline the contribution which policies aimed at increasing the level of output and its growth rate as a complementary response to pension challenges. A higher level of per capita output would directly limit the negative impact of ageing on living standards and would provide additional revenue resources to help finance higher old-age-related public expenditures.

2.4. An emerging policy on ageing policy at EU level

2.4.1. Growing EU involvement in ageing related policies

There is a growing recognition that there are benefits to addressing issues related to ageing populations at EU level, with the result that the issue has featured prominently on the agendas of several recent European Councils (Stockholm of March 2001, Nice of December 2000 and Lisbon of March 2000). A comprehensive approach has been taken drawing upon the report 'Maintaining prosperity in an ageing society' (OECD, 1998), which policies through which societies can transfer resources to a rapidly growing number of retired persons without creating major economic and social strains. Such an approach recognises that budgetary sustainability in light of ageing populations must be accompanied with social sustainability.

To this end, a committee on social protection, comprising officials from social affairs Ministries, was established in 2000 with a view to upgrading cooperation on the modernisation of social protection systems (Council of the European Union, 2000). The need for ageing policies to satisfy both budgetary and social objectives was made clear in a Commission communication that identified a number of principles for pension reform which include adequacy of income provision, solidarity, transparency, predictability of benefits and fairness both within and between the generations (European Commission, 2000b). This led to a report being submitted to the European Council of Göteborg (15 and 16 June 2001) entitled 'Adequate and sustainable pensions' ⁽¹⁾.

While the EU has clear competences enshrined in the Treaty as regards budgetary surveillance to ensure sound public finances, involvement in other aspects of ageing on public policies is guided by the subsidiarity principle. This is because the main impact of ageing will be on public policies that are the responsibility of Member States, i.e. pensions and healthcare. Nonetheless, Member States can learn a great deal from the experiences of other countries and benchmark their progress against their peers. The introduction of difficult reforms can be facilitated if it is possible to present concrete examples of successful reforms in other countries. The recent Stockholm European Council of March 2001 therefore agreed that the so-called 'open method of coordination' be extended to include pensions. It also called for the Barcelona European Council of March 2002 to examine a detailed report on the quality and sustainability of pension systems, with a interim report due by December 2001.

Community level action in ageing-related policies is also required to ensure the smooth functioning of the single market. To date, measures have been taken to remove impediments resulting from pension systems to the free movement of workers and capital, and to companies operating in various countries ⁽²⁾. In October 2000, the Commission made a proposal for a directive on the activities of institutions for occupational retirement provision (COM(2000)507). The main provisions include rules concerning the establishment of minimum prudential standards and the role and responsibilities of supervisory authorities, and a qualitative approach to investment rules, according to which investment portfolio management should comply with principles (diversification, security, quality) and not uniform quantitative requirements. The proposal is also designed to allow cross-border management of occupational pension schemes — an institution in one Member State would be able to manage company pension schemes in other Member States. This initiative is an important step in the direction of creating a single market for occupational pension provision. Finally, the Commission has in April 2001 adopted a communication on the elimination of tax obstacles to the cross-border provision of occupational pensions (COM(2001)214).

⁽¹⁾ Adequate and sustainable pensions: a report by the Social Protection Committee on the future evolution of social protection: Council of the EU (2001), Document 8792/01 of 30 May 2001.

⁽²⁾ The most relevant question for social security pensions is the cross-border recognition of legal social security claims: it was dealt with in Regulation (EEC) No 1408/71 (amended 118/97) which regulates the application of social security schemes to employed persons, to self-employed persons and to members of their families moving within the Community. A directive on the supplementary pensions of workers posted in another country has been adopted in 1998, and allow these workers, as of 25 July 2001, to remain within the scheme of their home State.

2.4.2. A three-pronged strategy to address the budgetary consequence of ageing

It is beyond the scope of this chapter to consider all aspects of EU involvement in age-related policies, and instead the focus is on measures to address the budgetary consequences of ageing. The need to address the budgetary consequences of ageing populations at EU level in a more systematic and comprehensive manner, going beyond the medium-term time horizon of the stability and convergence programmes, was recognised by the Ecofin Council in December 1999. In its report to the Helsinki European Council on the coordination of economic policies, the Ecofin Council 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’.

In turn, the Lisbon European Council of March 2000 called for more emphasis to be placed on the quality and sustainability of public finances, a report on which was sent to the Stockholm European Council of March 2001 ⁽¹⁾. The Stockholm European Council 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 and in the context of stability and convergence programmes’.

The long-term sustainability of public finances in light of ageing populations is becoming an integral part of the budgetary surveillance process at EU level, and must be factored into the assessment of Member States’ public finance positions under the SGP. The joint report of the Commission and Council to the Stockholm European Council outlined a three-pronged strategy to tackle the budgetary implications of ageing populations, which includes:

- the running down public debt at a fast pace;
- measures to raise employment rates, especially amongst women and older workers;
- reform of pension and health systems to place them on a sound financial footing including greater recourse to the funding of public pensions.

These three elements are examined in turn below. This strategy and, as will be shown, involves taking measures to address the budgetary pressures at source (both from age- and non-age-related expenditures items) as well as measures to raise real output. It should be noted that the sustainability of public finances also depends on progress being made to implement structural reforms in product, services and capital markets, in order to warrant sustained economic growth, high productivity, and raise employment rates.

2.4.3. Sustaining sound public finances and ensuring a fast reduction of public debt

The contribution which respect of the SGP target can make towards meeting the additional budgetary costs of ageing populations is illustrated in Table 29. This presents illustrative calculations showing what would happen to public debt and interest payments in 2010, 2020 and 2030 if Member States stick to the medium-term targets for 2003/4 set down in their recent stability or convergence programme (see Part I, Chapter 3 for more details) ⁽²⁾. Sticking to the level of budget balances projected for 2004 would allow countries to substantially reduce their stock of debt and achieve a fall in the interest burden. This effect is particularly strong for countries that currently have large surpluses, and also for high-debt countries: these countries could achieve a fall in their interest burden of around 3 percentage points of GDP by 2020 and about 5 points by 2030. These potentially large reductions in the interest burden could go some way to offsetting the additional spending on public pensions shown on Table 27: however, in most cases, it would not suffice to offset all of the additional expenditures especially if account is taken of the additional costs on health care.

It must, however, be recognised that sustaining budget balances at the 2003/4 target levels over the very long run will be extremely difficult. Moreover, the above exercise is a partial equilibrium analysis: as discussed above, without structural reforms to avoid a further rise in the tax burden, the demographic impact could have a substantial negative effect on output (which in the above calculations is set exogenously) thereby undermining the sustainability of public finances via the GDP denominator. Finally, the 2003/4 SGP targets will be achieved by running very high

⁽¹⁾ European Commission (2000a), Council of the European Union (2001).

⁽²⁾ It should be noted that some Member States (e.g. Sweden and Finland) are already running large surpluses, and intend to continue doing so over the medium-term, precisely to prepare for the budgetary impact of ageing populations.

Table 29

Projected debt levels assuming respect of SGP targets

	Assumptions		Projected debt levels			Change in interest burden (*)		
	Deficit 2004 (*)	Debt 2000	2010	2020	2030	2010	2020	2030
B	- 0.6	111	69	40	22	- 2.1	- 3.5	- 4.5
DK	- 2.7	48	14	- 13	- 30	- 1.7	- 3.0	- 3.9
D	0.0	60	42	28	18	- 0.9	- 1.6	- 2.1
EL	- 2.0	104	52	17	- 6	- 2.6	- 4.4	- 5.5
E	- 0.3	61	36	20	10	- 1.3	- 2.0	- 2.5
F	- 0.2	58	39	24	14	- 1.0	- 1.7	- 2.2
IRL	- 4.6	39	- 10	- 43	- 64	- 2.5	- 4.1	- 5.2
I	- 0.3	112	72	44	26	- 2.0	- 3.4	- 4.3
NL	- 1.9	57	23	- 1	- 16	- 1.7	- 2.9	- 3.6
A	0.0	63	43	28	18	- 1.0	- 1.8	- 2.2
P	0.0	56	36	23	14	- 1.0	- 1.7	- 2.1
FIN	- 4.9	42	- 1	- 40	- 66	- 2.2	- 4.1	- 5.4
S	- 2.0	59	23	- 1	- 17	- 1.8	- 3.0	- 3.8
UK	1.0	40	33	29	27	- 0.4	- 0.5	- 0.6

(*) In column deficit 2004, (-) signifies surplus and (+) a deficit. Debt projections assume Member States stick to the deficit/surplus for 2004 (2003 for IRL, L and S) and assume a growth rate-interest rate differential of between 2 and 2.25 %. The change in the interest rate measures the fall in the interest rate burden compared with its level in 2000.

Source: Own calculations based on information contained in 2000 stability and convergence programmes.

primary surpluses and by having tax burdens at close to historical highs in many countries, and it may not be economically desirable to sustain these at such levels over the long run.

In accordance with the conclusions of the Stockholm European Council, the long-term sustainability of public finances must be factored into the assessment of public finance positions of Member States under the SGP. This in no way alters existing commitments or the principal purpose of stability and convergence programmes, namely to define a medium-term budgetary strategy. However, addressing the long-term sustainability of public finances in programmes underlines the fact that Member States must respect the SGP over the long-term and emphasises the need for policy actions well in advance of the major demographic changes.

Most importantly, it recognises that, although the budgetary impact of ageing populations only become evident in the long-run, it is determined by short- to medium-term policy decisions taken within the time frame of programmes. Current policy choices such as the medium-term target, the pace of debt reduction and the scale and type of tax reforms, will therefore be assessed against the commitment to place public finances on a sustainable footing. The joint Commission-Council report to

the Stockholm European Council (Council of the EU, 2001) recognised that tax cuts are not fully self-financing, and to be sustainable need to be accompanied with a firm control on public expenditure. Consequently, an appropriate balance has to be drawn between cutting taxes and running down public debt, and implies that priority should be given to the latter in high-debt countries.

The Community institutions are currently considering how to implement this agreement in practice. A first attempt was already made to include issues related to ageing population in the 2000 updates to stability and convergence programmes. This served to underline the need for further work in developing comparable data and indicators. The projections for expenditures on public pensions of the EPC are an important step in this regard, and will benefit from plans to extend this work to health care and other age-related expenditures and revenues. Given the sensitivity of results to underlying assumptions and starting budgetary positions, as well as the fact the pension reforms are underway in several Member States, consideration should be given to producing common projections on a regular basis, say every two or three years, and by countries after they introduce major reforms to their pension system. Further consideration should also be given to the merits and feasibility of developing a wider set of indicators of budgetary sustainability at EU level.

2.4.4. Reforms to achieve higher employment rates

The second element in the strategy to address the budgetary consequences of ageing population is to raise employment which could partially offset the negative impact of demographic developments on the ratio between active to inactive persons. This would directly mitigate the budgetary impact of ageing due to higher tax revenues and contributions to pension schemes as well as lower numbers of persons drawing pensions and other transfers: moreover, it would also work through the GDP denominator, since *ceteris paribus* per capita income would be higher with higher employment rates.

Progress in raising employment rates across all groups and age cohorts will help countries meet the budgetary consequences of ageing populations, and underlines the importance of meeting the target set by the Lisbon European Council to 'raise the employment rate from an average of 61 % today to as close as possible to 70 % by 2010 and to increase the number of women in employment from an average of 51 % today to more than 60 % by 2010' ⁽¹⁾.

In the context of ageing populations, however, particular attention should be paid to raising employment rates amongst older workers if the overall target of full employment by 2010 is to be attained. Participation rates of men aged over 50 have fallen considerably in the EU in recent decades, and are low (for both men and women) compared with other industrialised countries, and consequently the Stockholm European Council 'agreed to set an EU target for increasing the average EU employment rate among older women and men (55–64) to 50 % by 2010'.

There is now a very substantial gap (between six to seven years) in most EU countries between the statutory retirement age and the effective retirement age, i.e. the age at which people actually retire. Since 1960, life expectancy at retirement age has risen by some four years, from 79 to 83 years. With the age of retirement decreasing by about three years over the same period, the average duration of receipt of a pension has increased by seven years (i.e. from 13 to 20 years) and consequently has substantially increased the costs of pensions (Visco, 2001).

⁽¹⁾ The assumptions provide for both male and female participation rates gradually converge to 83 % by 2045, and for male and female unemployment rates to 4 % by 2045, the projections for working age population being taken from the high scenario provided by Eurostat, and productivity levels and productivity growth converging across European countries and to the level and growth registered in the United States by 2050.

There is strong evidence that the shedding of elderly workers has taken place in response to technological change, industrial restructuring, and reforms to employment protection legislation. The surge in the numbers of aged long-term unemployed (which were viewed as difficult to re-introduce into the labour market) has led many countries to utilise early retirement schemes to alleviate high unemployment. In this sense, early retirement was often not a voluntary choice on the part of the persons concerned, and was sometimes (e.g. to cope with large-scale labour downsizing by firms undergoing restructuring) the result from collusion between both sides of the market.

The design of tax and benefit systems ⁽²⁾ may also have introduced a bias in favour of early withdrawal from the labour market. For instance, once the eligibility conditions to retire have been met, there may be very little, if any, incentives to continue at work because the pension rights may not accrue although contributions would continue to be paid (Orszag and Stiglitz, 1999).

To reverse the fall in the effective retirement age, many Member States have established comprehensive strategies, which *inter alia* comprise reforms to unemployment benefits, employment protection legislation, working time rules and access to lifelong learning-professional rehabilitation. Eligibility to early retirement schemes must be restricted, and tax and benefit reforms must ensure 'neutrality' in the decision as to when to retire. Active measures will also be required to improve access to ensure the job opportunities are available to older workers which requires measures to promote lifelong learning and active ageing.

There is some evidence that recent policies have reversed the decline of older labour's employment rate since the 1980s. Many early retirement schemes have been scrapped and schemes to defer workers' shift to inactivity (e.g. part-time retirement) are being introduced in many countries. However, activity rates among those aged 55–64 still diverge greatly from some 69 % in Sweden to 27 % in Belgium. With the numbers of older workers aged between 55 and 64 set to increase (by around 1.3 % up to 2010) higher participation among older workers is a necessary

⁽²⁾ Pension schemes provide alternative pathways to retirement through schemes other than the old-age scheme, such as early retirement, pre-retirement and disability pension schemes. These schemes or their relaxed eligibility rules were often created in order to facilitate the exit of older workers in firms affected by industrial restructuring. See, Gruber and Wise (1997 and 1999), Blöndal and Scarpetta (1998 and 1999).

step to contribute to a return to full employment and to preserve stable public finances.

However, higher employment rates alone will not resolve the budgetary challenge of ageing populations. Sensitivity tests of the EPC have shown that even meeting the ambitious employment targets agreed in Lisbon does not completely offset the pressure on public finances (this is not surprising, as people earn additional pension entitlements the longer they participate in the labour force). Hence, reforms to raise employment rates need to be accompanied with reforms that tackle the pressures for increased age-related spending at source.

2.4.5. Reform of pension systems

The third element in the strategy to address the budgetary consequences of ageing population is further reforms of pension systems. As stressed above, such reforms should seek to limit pressures for increased public spending, promote employment and economic growth and ensure that the financial consequences of ageing are shared equitably between the generations.

Given the diversity of pension systems which are at different stages in the reform process, it is difficult to draw conclusions applicable to all Member States. Nonetheless, the EPC offered a number of recommendations on the basis of their pension projections ⁽¹⁾. The containment of the benefits, rather than increases in contribution rates should be the main instrument for improving the financial equilibrium of the pay-as-you-go pension system. Reforms should primarily aim at delaying retirement so as to ensure an adequate standard of living of the elderly. This can be achieved through a stronger link between social contributions and benefits which would result in better employment incentives.

Reforms aiming at delaying retirement are beneficial in many ways. First, the number of years spent in retirement decreases, and hence, also the pension costs (although this will be partially offset through a higher benefit owing to an increased accrual of pension rights). Second, the number of years in employment increases, which, at the same time, increases the number of contribution years. In addition, there is the advantage that it increases the living standard of the elderly, both through greater earnings during the years in employment and through increased

pensions when retired. Several simulations suggest that delaying retirement is a more efficient way to improve the financing situation of pensions than reductions in benefit levels, see OECD(2001) ⁽²⁾.

Taking into account the increased life expectancy and improved health status which people can expect to enjoy in coming decades, it should be acceptable to raise the effective retirement age. This does not necessarily require a higher statutory age, but could be achieved by promoting a flexible retirement age which leads to a more gradual transition to retirement, and by allowing persons working after the statutory retirement age to acquire increased pension entitlements. However, for such reforms to be effective, a comprehensive strategy is needed regarding benefit entitlements, lifelong learning and professional rehabilitation, flexible working time, adequate employment protection and flexible work organisation. This is the approach outlined in the 2001 *Employment Guidelines* (No 3) when calling on Member States to set up such strategies.

The joint Commission–Council report to the Stockholm European Council recognised the potential contribution of a development of funded pensions in some Member States (either on an occupational or voluntary basis) to complement PAYG schemes. Public policies have to support this development by providing a legal and fiscal framework, but without hampering the process of budgetary consolidation. Several Member States are currently considering a partial shift from a PAYG towards a funded schemes. It should be noted that funded pensions can either be run by the public or private sector, and a greater role for funding does not automatically imply a greater role for privately run pension funds.

An examination of the merits of developing funded pension schemes must go beyond an analysis of the budgetary impact. Consideration must also be given to redistribution objectives (achieving universal coverage and ‘fairness’ both within and between generations), the rate of return (adjusted for risk and net of administration

⁽¹⁾ These recommendations were based on an earlier opinion of the EPC on “The reform of European pension systems” addressed to the Council and Commission (II/220/97-EN final, 6 October 1997).

⁽²⁾ On the basis of stylised examples (and consequently they need to be interpreted with caution), the OECD finds that an increase in the effective retirement age of about one year (corresponding to a reduction in the number of beneficiaries of some 8%) would have the same impact on public finances as a fall in average benefits of some 17%. These stylised examples also point to the importance of countries seizing the window of opportunity to introduce reforms prior to the retirement of the baby-boom generation. They show that delaying reforms would need to be one quarter larger if they are delayed for 10 years, and three quarters larger if delayed by 20 years. Also see Börsch-Supan and Winter (2001), Gruber and Wise (1999).

costs), the capacity to manage various long-term risks (e.g. demographic, financial, political), and the impact on the real economy (e.g. labour market effects, impact of aggregate savings, efficient allocation of capital). Moreover, reform must reflect the fact that Member States already have mature pension systems.

Comparison of rates of returns, should not obscure a basic economic fact: the lower rate of return that a mature PAYG system can be expected to offer to future generations of pensions relative to a funded system corresponds to the gain accrued to first generation(s) of pensioners who did not make an adequate contribution relative to the entitlements they received. Hence, a greater role for funded pension systems may provide little help for public finances unless it is accompanied by a general revision of pension benefits. However, a potential advantage of a greater role for funded pension systems in some Member States is that a better diversification of the various risks associated with retirement income provision may be achieved by relying on more than one source of financing.

A greater reliance on funding may result in higher output if it creates a stronger link between contributions and entitlements and hence increases labour supply. However, Orszag and Stiglitz (1999) argue that such disincentive effects on the labour market may arise in both PAYG and funded schemes, i.e. it is the incentive structure built into the pension system rather than the financing method that matters. PAYG systems can be reformed to make them work along actuarial principles thereby reducing distortions. For example, Italy and Sweden have created notional accounting components within mandatory PAYG systems, whereby each worker has an individual lifetime account that is credited with his/her contributions and accrued interest. This part of the pension system has a defined contribution formula, i.e. the amount in a person's account is converted into an annuity at the time of retirement. Such a design may help remove disincentives which result from a perception that contributions to a PAYG scheme are taxes, whereas contribution to a funded scheme based on actuarial principles would be regarded as saving.

Although the evidence is inconclusive, higher output could result from a greater reliance on funding if it leads to an increase in aggregate saving. If the increase in mandatory saving is offset by a reduction in voluntary saving, than total saving and thereby capital accumulation and output should increase. Some authors ⁽¹⁾ suggest,

⁽¹⁾ See e.g. Börsch-Supan and Winter (2001).

albeit with inconclusive evidence, that a partial move to funding can generate beneficial side effects in terms of developing financial markets, increasing capital efficiency and total factor productivity ⁽²⁾.

Several Member States have established funds to prepare for additional age-related costs. Some countries (Denmark, the Netherlands, Finland) use funds to set aside today's savings for future pensions. France has decided to create a fund of 10% of GDP by 2020. Ireland's national reserve fund has assets equivalent to 7.5% of GDP, and the government is committed to setting aside contributions of 1% of GDP up to 2025. Belgium has set aside revenues from UMTS licences for such a fund.

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* *

Overall, EU Member States in recent years have made substantial progress towards improving the long-term sustainability of public finances. First and foremost, this has been brought about by the elimination or sharp reduction in structural budget deficits leading to public debt being placed on a steady downward path. Moreover, pension reforms adopted in the 1990s in several Member States seem to have gone some way towards mitigating the budgetary impact of ageing populations, and steps have been taken to restrict access to early retirement schemes that have contributed to a widening gap between effective and statutory retirement ages.

The agreement of the Stockholm European Council to formally incorporate long-term sustainability into the framework of the SGP is a welcome recognition that is essential for the success of EMU. Regular and systematic assessments of the sustainability of public finances requires the development of comparable data and indicators. The projections of the EPC for spending on public pensions are a step in the right direction, but further work is needed to extend this analysis to other expenditure and revenue

⁽²⁾ This is viewed as happening through the following process. First, funding changes savings behaviour and households' portfolio composition; second, active institutional investors in pension funds demand higher returns to capital, thereby influencing corporate governance; and third, improved corporate governance allocates the capital more efficiently, leading to improvements in aggregate productivity. However, even the advocates of funded schemes admit that the evidence is not yet conclusive and that there are risks of a failure in this process. More specifically, they point to the importance of financial market regulation and adequate competition between actors in the financial market.

items. Moreover, consideration should be given to supplementing these projections with additional indicators of the sustainability of public finances.

The EU can help in getting two central messages across on the need to prepare for ageing populations. First, budgetary choices today will determine Member States' capacity to meet the additional costs of ageing popula-

tions. Having achieved broadly sound public finance positions, the EU must sustain budgetary discipline over the long run. Second, citizens cannot expect to live longer and work less without there being a negative effect on public finances and their standard of living. Raising employment rates, especially amongst older workers is therefore a central element in a comprehensive strategy to meet the economic and budgetary challenges of ageing populations.

Part V

Member State developments

1. Belgium

1.1. Recent developments

Budgetary consolidation continued in 2000 when balance for the general government was achieved compared with a forecast deficit of 1% of GDP. Higher than expected revenues reflected a positive macroeconomic performance, as real GDP growth reached nearly 4% as against 2.5% previously projected. In 2000, total government revenues remained unchanged as a percentage of GDP compared with 1999, while the tax burden increased slightly. Total expenditure decreased by 0.7 percentage points of GDP, as a result of a moderate decline in current primary expenditures and interest payments. The primary surplus increased from 6.5% of GDP in 1999 to 7% in 2000.

As in recent years, budgetary consolidation in 2000 was based on achieving a high primary surplus by placing a 1.5% limit on real primary expenditure growth. In practice, real general government primary expenditure is estimated to have increased by only 1.2%, as significantly higher than expected inflation last year allowed relatively high rates of nominal increases in government spending while respecting the norm of increase expressed in real terms. The cyclically-adjusted balance remained unchanged in 2000, while the government primary surplus to GDP ratio declined slightly.

The general government debt ratio was reduced by 5.5 percentage points in 2000, to 111% of GDP. In contrast to the period before 1998 where ad hoc factors, such as privatisation and financial operations contributed a reduction in the debt ratio, the fall in the past two years was entirely endogenous, i.e. arising from the interaction between primary surpluses, GDP growth and interest rates, while stock-flow (deficit-debt) adjustments, arising mainly from exchange rate movements, had a small debt-augmenting effect.

The 2001 budget is projecting a general government surplus of 0.2% of GDP, a rather modest objective given the

results for 2000 and the need to reduce rapidly the high general government debt ratio. The reform of police forces is expected to result in an increase in primary expenditure, which together with current projections for healthcare spending in the social security sector, might result in the 1.5% limit for real spending increases being surpassed. However, the budgetary projections are based on a cautious macroeconomic projection of 2.5% real GDP growth. In the budgetary control exercise of March 2001, the initial budgetary targets for this year were confirmed.

The spring 2001 economic forecasts of the Commission are projecting the general government surplus to reach 0.6% of GDP in 2001 and 0.7% in 2002. These projections are, however, based on real GDP growth forecasts of 3% for 2001 and 3.1% for 2002. Also, for the year 2001, the Commission projections take into account receipts from the sale of UMTS licences amounting to 0.2% of GDP.

Major risks may come from the decline in VAT receipts (– 3.3% in the first four months of the year) and, on the expenditure side, from health care, which may be exceeding so far the targeted growth. However, as noted above, the prudent macroeconomic scenario (GDP growth at 2.5%) might limit the risk of not achieving the budgetary target. As a matter of fact, projections by the Federal Planning Bureau, based on 2.7% GDP growth, point to a general government surplus of 0.7% of GDP.

1.2. Medium-term prospects and policy issues

According to the 2000 update of the stability programme covering the period 2001–05, Belgium is set to continue a budgetary consolidation policy. A major policy challenge for Belgium in the years ahead is to reconcile the parallel objectives of a fast reduction in the debt ratio and the creation of budgetary margins to allocate to priority policy areas, in particular a reduction in the tax burden.

Table 30

Composition and balances of general government, Belgium (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 0.7	0.0	0.6	0.7
<i>Total receipts</i>	50.0	50.0	49.0	48.7
Of which: taxes	30.5	30.8	30.7	30.6
social contributions	16.5	16.2	16.0	15.9
<i>Total expenditure</i>	50.7	50.0	48.3	48.0
Of which: collective consumption	7.7	7.7	7.6	7.4
social transfers	29.4	29.0	28.5	28.4
interest expenditure	7.2	7.0	6.6	6.2
gross fixed capital formation	1.8	1.8	1.9	1.9
Primary balance	6.5	7.0	7.2	7.0
<i>Pm Tax burden</i>	46.4	46.5	46.0	45.9
Government debt	116.4	110.9	104.3	98.5
<i>Pm Cyclically adjusted balance</i>	- 0.1	- 0.1	0.2	0.3
<i>Pm Cyclically adjusted primary balance</i>	7.1	6.8	6.8	6.6

(*) Spring 2001 economic forecasts.

(**) Data for 2001 (except cyclically adjusted) include UMTS receipts of 0.2% of GDP.

Source: Commission services.

In the updated programme, the general government surplus is projected to rise from 0.2% of GDP in 2001 to 0.7% of GDP in 2005. The government debt-to-GDP ratio is expected to decline by 22 percentage points from 11% of GDP in 2000 to 89% in 2005. The budgetary projections are based on a cautious macroeconomic scenario, assuming real GDP growth at trend, estimated at 2.5% from 2001 to 2005. The budgetary strategy of the programme continues to be centred on maintaining high primary surpluses of over 6% of GDP per year, made possible by limiting the primary expenditure increase in real terms of Entity I (federal government and social security) to 1.5% per year; a decline in interest payments is also expected due to the decreasing government debt ratio. The projected general government balance corresponds to the movement in the cyclically-adjusted balance, as GDP growth assumptions are based on trend output growth.

An agreement between the federal government, communities and regions was concluded in December 2000 to support the objectives of the stability programme and secure the commitment of each federal entity to respect the recommendations of the High Finance Council.

While the continuation of the budgetary consolidation effort remains a priority, an increase in government spend-

ing in selected areas is projected. The updated stability programme includes a number of projects and policy initiatives to increase public investment in transportation, to implement an active employment policy and to modernise the social security system.

Moreover, a comprehensive reform of the personal income tax is expected to be implemented during 2002-06 implying an overall budgetary cost of 1.3% of GDP. The reform intends to increase work incentives by reducing the tax burden on labour income. The phased implementation of the reform, and its back-loaded character, are intended to allow for a lower tax burden while at the same time reducing government debt. Social security contributions paid by employers will be further reduced in 2001 as part of the effort to increase labour demand and employment, in particular of low paid and less qualified.

The most important medium-term challenge is to sustain budget surpluses, and to use the margins brought about by lower debt servicing costs and primary expenditure control to improve the long-term sustainability of public finances. Additional margins, which might proceed from higher than projected growth are expected to be allocated as a matter of priority to debt reduction. Simulations made by the Federal Planning Bureau indicate that such a policy is necessary in order to absorb the budgetary shock of age-

Table 31

Key figures of the Belgian stability programme, 2001–05

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	3.9	2.5	2.5	2.5	2.5	2.5
Gen. gov. budget balance (% of GDP)	0.0	0.2 (*)	0.3	0.5	0.6	0.7
Primary surplus (% of GDP)	7.0	6.8	6.6	6.4	6.3	6.2
Government debt (% of GDP)	110.7	105.8	101.4	97.2	92.9	88.7

(*) UMTS receipts excluded (0.2 % of GDP).

Source: 2000 Update of the stability programme of Belgium.

ing population. Also the government has created an ‘ageing fund’ to be funded initially by the proceeds from the sale of UMTS licences and in the medium to long term from budgetary surpluses. The creation of the ageing fund needs to be complemented with measures to raise the employment rate and to reform of the pension system so as to form a comprehensive strategy to meet the budgetary and economic implications of ageing populations.

1.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Belgium on budgetary policy:

- achieve a budgetary surplus of 0.2 % of GDP as projected for 2001 in the 2000 update of the stability programme, even in the event of slower real GDP growth than projected;
- in the framework of the budget for 2002, contain firmly the annual increase in primary expenditure within the 1.5 % limit, in real terms, in Entity I, thus allowing the achievement of the government balance objectives, in particular a primary surplus above 6 % of GDP.
- in 2002 and beyond, allocate the budgetary margins, as defined in the 2000 update of the stability programme, in a way consistent with the limit of 1.5 % growth of real expenditure; allocate all additional budgetary revenues which might result from better than expected real GDP growth to debt reduction; and

- prepare for the budgetary implications of population ageing by timely reform of the pension system, including the identification of the budgetary resources to be allocated annually to the ‘ageing fund’, in the next update of the stability programme.

Council opinion of 12 March 2001 on the updated stability programme of Belgium, 2001–05

Official Journal C 109, 10.4.2001, p. 2

On 12 March 2001, the Council examined the 2000 update of the stability programme of Belgium which covers the period 2001–05.

In the last two years, real GDP growth was stronger than expected in the 1999 updated stability programme, reaching 2.7 % in 1999 and 3.8 % in 2000. As a result the general government deficit reached 0.7 % of GDP in 1999 and turned to balance in 2000 according to the latest estimates. The government debt ratio to GDP was reduced by 5.5 percentage points to 110.6 % of GDP in 2000. The Council notes that these results comply with its opinion on the 1999 updated programme as well as with the broad economic policy guidelines.

The 2000 updated stability programme is based on a macroeconomic scenario assuming real GDP growth at trend, estimated at 2.5 % in the period from 2001 to 2005; while this cautious approach is understandable, the Council notes that, at least for 2001 and 2002, some forecasts are currently higher. The updated stability programme projects a general government surplus of 0.2 % of GDP in 2001 rising to 0.7 % of GDP in 2005 while the government

debt ratio is projected to decline by 22 percentage points of GDP to 88 % of GDP in 2005.

The Council notes that the projections for the government balance are considered in the updated programme as objectives which should be met even in the event that economic activity were to falter. The Council commends the budgetary consolidation strategy based mainly on the achievement of large primary government surpluses, reaching more than 6 % of GDP per year; this strategy, already successfully implemented in recent years, is particularly appropriate in the case of Belgium where government debt is still very high. The Council notes that the reduction of the high government debt remains a high priority. The Council notes that, according to the updated programme, in order to achieve high primary surpluses, expenditure control is expected to result from applying a limit of 1.5 % to the increase in real terms in primary expenditure in Entity I (federal government and social security). It notes also that within this framework, budgetary margins estimated at 1.3 % of GDP in 2005 are expected to become available to finance tax cuts and selected expenditure measures.

The Council acknowledges that after a prolonged period of needed budgetary restraint, a number of policy areas should be taken into consideration in Belgium, such as tax alleviation, particularly on labour, and an active employment policy; however, the Council considers that control on government expenditure must still be given the highest priority and urges the Belgian Government to respect the limit of 1.5 % set for primary expenditure in real terms already in 2001. The allocation of the budgetary margins

should be closely monitored in order to be consistent with this limit. Furthermore, given the level of government indebtedness and in view of budgetary challenges in the long term, the Council recommends that all additional revenues which might stem from better than expected real GDP growth be allocated to debt reduction.

The Council commends the structural reforms described in the updated stability programme in particular those intended to increase the employment rate as well as the policy aiming at ensuring the long-term sustainability of public finances.

The Council welcomes the new agreement concluded in December 2000 between the federal government, communities and regions in Belgium aimed at ensuring budgetary adjustment and sustainable public finances in the medium term at the different levels of government.

The Council regrets that no information was supplied in the stability programme about projected total expenditure and revenue ratios and specific categories of government expenditure such as expenditure for pension and health-care as well as government investment expenditure. The Council recommends that more detailed projections be provided in future stability programmes in order to allow a fully informed assessment.

The Council considers that the budgetary results achieved in Belgium are already in conformity in 2000 with the requirement of the Stability and Growth Pact and will remain so throughout the period covered by the 2000 updated programme.

2. Denmark

2.1. Recent developments

In 2000, the estimated outturn for the general government budget surplus is 2.4% of GDP, somewhat higher than what was expected at the time of the adoption of the budget bill, but down from the 3.1% of GDP in 1999. Total revenue as percentage of GDP fell by almost 3 percentage points, mainly as a result of lower ratios of both direct and indirect taxes to GDP. This more than offset the decline in total expenditure to GDP of slightly more than 2 percentage points. The fall in expenditure was due to lower government consumption, social transfers and interest payments. The drop in the tax burden and the expenditure ratio is welcome, and in several areas is a result of policy measures such as the lowering of company taxes.

The budgetary strategy from previous years was continued, with a declining ratio of primary expenditure to GDP. In particular, government consumption in real terms rose by only 0.6% in 2000. This was lower than expected and well in line with the government's target of restricting real growth in government consumption to 1% annually. Furthermore, the tax burden fell by more than 2 percentage points of GDP. The fall in the tax burden was caused by a decline in company taxes and VAT receipts, the latter as a result of the weak private consumption last year. In cyclically-adjusted terms, the general government net lending declined from 2.8% of GDP in 1999 to 1.8% in 2000, whereas the cyclically adjusted primary surplus declined from 7.4% of GDP to 6.0%, indicating an expansionary fiscal stance.

The consolidated gross debt continued its rapid decline and fell by almost 6 percentage points of GDP to 46.3% at the end of 2000. This fall can entirely be attributed to the budget surplus and to nominal GDP growth.

The Commission's spring 2001 economic forecasts project a general government budget surplus of 3.1% of GDP in 2001. For the current year a cautious technical assumption of proceeds from the UMTS auction, to be held in

autumn, corresponding to 0.2% of GDP is incorporated. However, there is a risk of slippage as indicated by the latest official national forecast (presented in May 2001). There, the 2001 budget surplus is set to 2.1% of GDP, mainly due to the slowdown in growth and lower than expected tax revenues.

The cyclically-adjusted primary balance would increase by 0.4 percentage points of GDP to 6.4% in 2001. As to components, government expenditure is projected to fall as a share of GDP by some 0.7 percentage points whereas the revenue to GDP ratio is expected to remain basically the same. Although a large budgetary surplus is expected to be achieved, it is noteworthy that the expansion in government consumption is likely to greatly exceed the target of restraining real rises to 1% annually. Moreover, the lowering of taxes on labour income levied by central government implemented in 2001 is partly offset by tax increases by lower levels of government.

For 2002, under announced policies, the budget balance is forecast by the Commission to be marginally lowered, to 2.8% of GDP.

2.2. Medium-term prospects and policy issues

The 2000 update of the convergence programme for Denmark envisages a continued strengthening of government finances throughout the period 2000–05. The government's medium-term strategy is to run budgetary surpluses of between 2–3% of GDP so as to reduce the debt-to-GDP ratio substantially to prepare for the impact of an ageing population. The strategy of moderately declining ratios of primary expenditure to GDP and taxes to GDP, outlined in the previous update of the programme, is largely maintained.

The macroeconomic scenario in the 2000 update is based on cautious assumptions. Real economic growth is pro-

Table 32

Composition and balance of general government, Denmark (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	3.1	2.4	3.1	2.8
<i>Total receipts</i>	58.5	55.7	55.8	54.8
Of which: taxes	47.9	45.7	45.9	45.2
social contributions	3.1	3.2	3.1	3.1
<i>Total expenditure</i>	55.4	53.3	52.6	51.9
Of which: collective consumption	8.0	7.7	7.8	7.8
social transfers	35.0	33.8	33.8	33.4
interest expenditure	4.6	4.1	3.8	3.5
gross fixed capital formation	1.7	1.8	1.8	1.8
Primary balance	7.7	6.6	6.9	6.4
<i>Pm Tax burden</i>	50.4	48.3	48.4	47.8
Government debt	52.0	46.3	42.4	38.7
<i>Pm Cyclically-adjusted balance</i>	2.8	1.8	2.6	2.6
<i>Pm Cyclically-adjusted Primary balance</i>	7.4	6.0	6.4	6.1

(*) Spring 2001 economic forecasts. The ratios of GDP may differ slightly from those published in Supplement A since the most recent GDP data has been used for the above ratios.

(**) Data for 2001 includes UMTS receipts of 0.2% of GDP.

Source: Commission services.

jected to linger around 1.7% annually between 2001–05, corresponding to the authorities' estimates of trend growth. In contrast, the Commission spring 2001 economic forecasts project real GDP to grow by 2.1% in 2001 and accelerate slightly to 2.4% in 2002.

The 2000 update of the convergence programme projects the general government balance to reach 2.8% of GDP in 2001 and to remain at or above 2.6% of GDP for the remainder of the programme period on the basis of announced policies. The gross-debt-to-GDP ratio is expected to fall by some 15 percentage points from the end of 2000 to below 34% of GDP at the end of 2005. The Commission spring 2001 economic forecasts expect the budgetary surplus to turn out slightly higher both in 2001 and 2002, due to higher underlying growth assumptions and that a technical assumption of the UMTS proceeds, of 0.2% of GDP, has been incorporated for 2001.

In fact, for the year 2000 the estimated outturn was 2.4% of GDP, some 0.3 percentage points lower than what was expected in the updated convergence programme. Even so, given the cautious growth assumptions in the update, the budgetary projections remain realistic and it cannot be excluded that the budgetary situation could turn out to be even more favourable.

In terms of major reforms, the 1998 tax reform (the 'Whitsun package') is being gradually implemented over the years 1999–2002. In particular, the last phase of the contractionary part of the package, i.e. the gradual lowering of the tax deduction of interest payments seeking to reign in private consumption, is implemented in 2001. The structural part aimed at lowering taxes on labour income is back-loaded, having an impact in 2001 but a more substantial one in 2002. However, in 2001 the lowering of income taxes levied by central government is partly offset by the rise in income taxes to lower levels of government.

In the longer term the challenge is to ensure sustainable public finances while catering adequately for the ageing population. Long-term projections on the impact on public finances made by the authorities and by the Economic Policy Committee seem to suggest that Danish general government finances have a capacity to meet the budgetary consequences of an ageing population. Partly, this can be attributed to earlier reforms which strengthened the Labour Market Supplementary Pension Scheme (which is a self-financed, obligatory pension scheme based on contributions paid on the basis of labour income) and encouraged older workers to postpone early retirement.

Table 33

Key figures of the Danish convergence programme, 2000–05 (*)

	2000	2001	2002	2003	2004	2005
Real GDP growth (annual % change)	2.4	1.8	1.7	1.7	1.6	1.7
Gen. gov. budget balance (% of GDP)	2.7	2.8	2.6	2.6	2.7	2.9
Primary surplus (% of GDP)	4.6	4.4	4.0	3.8	3.7	3.6
Government debt (% of GDP)	48.3	44.7	41.8	39.2	36.8	33.7

(*) In the authorities' May 2001 forecasts, real GDP growth was revised to 1.5% in 2001 and 1.9% in 2002. The general government budget balance was revised to 2.1% of GDP in 2001 and kept at 2.6% at GDP in 2002.

Source: Updated convergence programme for Denmark, December 2000.

2.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Denmark on budgetary policy:

- strictly limit the real increase in government consumption in 2001 to the budgeted rise of 1.9%;
- maintain high government surpluses in 2001 and the following years; and
- hold back real growth in government consumption also in the medium term so that the tax burden can decline up to 2005 in line with the government's projections in the updated convergence programme, without jeopardising the capacity of Danish public finances to cater adequately for the ageing population. In particular, more binding commitments from lower levels of government should be sought, while respecting the autonomy of local governments, in order to achieve this.

Council opinion of 12 February 2001 on the updated convergence programme of Denmark, 2000–05

Official Journal C 077, 9.3.2001, p. 4

On 12 February 2001, the Council examined Denmark's updated convergence programme, which covers the period 2000–05. The updated convergence programme foresees general government budgetary surpluses of between 2.6–2.9% of GDP over the entire period and projects the gross consolidated debt to be reduced to 34%

of GDP in 2005. In 2000, the budget surplus turned out to be higher than earlier projected and amounted to 2.7% of GDP, mainly due to stronger-than-expected growth.

The macroeconomic scenario assumed in the updated programme projects real GDP growth, following an upward revision to 2.4% in 2000, to slow down to around 1.7% annually for 2001–05. The Council notes that this growth scenario has been lowered from the previous update and that the programme's assumptions on productivity rises are moderate by international comparisons. Given the robust performance of the Danish economy in recent years, in particular the buoyant investment in equipment, and the structural reforms undertaken, a somewhat stronger growth and productivity performance could be expected. Moreover, such moderate productivity rises could imply a further loss in cost competitiveness for Danish companies if relative wage increases again turn too high.

The inflation rate started to rise in 1999 and has remained relatively high in 2000. The updated programme expects inflation to gradually decline up to 2002 as externally induced price rises should taper off and wage growth should turn slightly more moderate in the light of a weaker domestic demand growth. While the Council considers that the inflationary outlook, as assumed in the updated programme, seems plausible, the Council reiterates its recommendation to the Danish Government to take further actions in case of significant upward deviations⁽¹⁾, including budgetary ones, the more so as ERM2 membership clearly limits the monetary policy's room of manoeuvre in addressing inflationary pressures.

⁽¹⁾ Council opinion of 28 February 2000 on the updated convergence programme of Denmark for the period 1999 to 2005.

The Council notes with satisfaction that Denmark has continued to fulfil the convergence criterion on the long-term interest rate and that the exchange rate has remained stable *vis-à-vis* the euro, also after the referendum on 28 September 2000.

Regarding government finances, the Council welcomes that the Danish authorities maintain their ambition of large budgetary surpluses. As a result, Denmark continues clearly to fulfil 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.

The budgetary consolidation strategy outlined in the previous update of the programme is largely upheld, with a declining primary expenditure to GDP ratio and tax burden over the programme period. However, for the year 2001, the updated programme projects a small increase in both the primary expenditure ratio and the tax burden. The Council would have preferred for the decline in both ratios to have been implemented without disruption.

The Council calls on all levels of general government to make efforts to limit the real increase in public consumption to the target of an annual 1%. Furthermore in 2001, local and regional governments are expected to raise taxes clearly above the agreements with the central government. As these agreements between the central and

lower levels of government, aiming at restricting increases in public consumption and taxes, frequently have been exceeded in the past, the Council invites the Danish Government, in line with the recommendations in the broad economic policy guidelines, to strengthen the institutional framework, to avoid further slippage in the future.

The Council welcomes the Danish authorities' ambition to continue substantially to lower the ratio of gross-debt-to-GDP with a view to preparing for the forthcoming financial burden of an ageing population. The focus on longer-term sustainability issues in the updated programme is welcomed and the Council encourages the Danish Government to continue its efforts in preparing to cater for the ageing population.

The Council invites the Danish authorities to maintain the prominent place of structural reforms on the policy agenda. In particular, efforts to raise labour supply could prove necessary. The Council therefore encourages the authorities to consider lowering taxes on labour income also beyond 2002, for which a tax reduction is already planned. However, given that the Danish economy currently seems to be operating at a level slightly above its potential, such a tax cut would need to be compensated by offsetting budgetary measures in order not to add to the risk of overheating.

3. Germany

3.1. Recent developments

In 2000, the general government balance reached a surplus of 1.5% of GDP. Once the one-off proceeds from the UMTS licences auction of 2.5% of GDP are deducted, a deficit of 1.0% of GDP results, which compares with a deficit of 1.4% of GDP in 1999. This was achieved by a decline in the expenditure-to-GDP ratio which more than offset the slight decrease in the revenue-to-GDP-ratio brought about chiefly by the implementation of the second step of income tax reform. As a consequence, the primary surplus as a percentage of GDP continued its upward trend observed in recent years. The improvement in the government balance owed, however, much to economic growth which turned out to be higher than assumed at the time of the budget approval. In cyclically-adjusted terms, the general government balance remained broadly unchanged while the cyclically-adjusted primary surplus fell.

Budgetary developments differed according to the level of government. At the federal level, budgetary implementation was encouraging both on the revenue and on the expenditure side. While tax revenues were higher than originally budgeted, the savings programme resulted in an expenditure reduction that exceeded initial plans. Other levels of government did not perform as well, with expenditure at *Länder* and municipal level rising by more than 2% on a national accounts basis. Deficits at these levels of government, however, developed roughly in line with end-1999 projections, as revenues also rose by more than assumed at that time. Overall, nominal expenditure (excluding social security systems) increased by 1.3%, i.e. below the agreed medium-term norm of 2% per year.

The debt level, which due to the financial strains of reunification had risen significantly in the early 1990s and exceeded the 60% reference value from 1997 on, was brought down to close to 60% in 2000. This favourable development is due also to the federal government's decision to use the receipts from the UMTS auction for debt retirement (EUR 17.8 billion in 2000 and EUR 33.1 bil-

lion in 2001). This will lead to clear savings in interest payments in coming years which, according to plans, will be partly used to step up government investment in infrastructure and education.

According to budget plans, the general government deficit in 2001 is expected to rise to 1.5% of GDP. This deterioration is due to the implementation of the third step of the income tax reform and of the corporate tax reform which are estimated to cost about 1% of GDP. However, underlying these projections is the assumption of output growth of 2.75%, which on current assumptions looks overly optimistic. In its latest official forecast the German Government's revised output growth in 2001 down to 2.0%.

The federal budget for 2001 projects a decline in nominal expenditure by 0.2% compared to 2000. Induced by the reform, tax revenues are also projected to decrease slightly in nominal terms. The tax relief conceded in the current year implies a decline in the cyclically adjusted primary surplus of almost 1 percentage point. However, the tax reforms implemented in 2001 are likely to have positive supply-side effects.

However, the rapid slowdown in economic growth and waning unemployment creation also implies a risk-to-revenue and expenditure projections, with the potential for substantial slippage from budgetary targets set in the stability programme. In fact, the May 2001 forecast by the Working Group on Tax Estimates (*Arbeitskreis Steuerschätzung*), indicates a shortfall in tax revenues of some DEM 7 billion or 0.2% of GDP in 2001. This is in line with the Commission services' forecast of spring 2001, which based on an output growth projection of 2.2%, projects a general government deficit of 1.7% of GDP in 2001. Even this figure is subject to downside risks, not least due to rising uncertainties on the expenditure side (e.g. the impact of BSE and foot and mouth disease). Unexpected expenditures are also piling up at *Länder* level. Although some *Länder* have introduced a budget

Table 34

Composition and balances of general government, Germany (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 1.4	1.5	- 1.7	- 1.2
<i>Total receipts</i>	47.2	47.0	45.8	45.9
Of which: taxes	24.1	24.5	23.5	23.8
social contributions	18.9	18.7	18.3	18.0
<i>Total expenditure</i>	48.6	45.5	47.5	47.1
Of which: collective consumption	7.9	7.8	7.7	7.6
social transfers	30.0	29.7	29.5	29.2
interest expenditure	3.6	3.3	3.2	3.1
gross fixed capital formation	1.8	1.8	1.8	1.7
Primary balance	2.1	4.8	1.4	1.9
<i>Pm Tax burden</i>	43.1	43.3	41.9	41.9
Government debt	61.1	60.2	58.6	57.6
<i>Pm Cyclically-adjusted balance</i>	- 0.7	- 0.8	- 1.6	- 1.3
<i>Pm Cyclically-adjusted primary balance</i>	2.9	2.5	1.6	1.8

(*) Spring 2001 economic forecasts.

(**) Data for 2000 include UMTS receipts of 2.5 % of GDP.

Source: Commission services.

freeze, it remains to be seen how effective this measure will be. Given that the budgetary position of Germany in 2001 does not fully comply with the requirements of the Stability and Growth Pact of a medium-term budget position of close to balance or in surplus, tight expenditure restraint will be necessary to keep such slippage to a minimum.

3.2. Medium-term prospects and policy issues

In the most recent update of the stability programme of Autumn 2000, the German Government projects a balanced budget at the end of the programme's horizon, i.e. in 2004. As already announced in the preceding update, the rise in the deficit in 2001 would only be temporary and should be corrected in 2002. In the two following years, the deficit ratio would be reduced by half a percentage point of GDP each year. While the general government deficit would disappear in 2004, the federal budget would only be balanced by 2006.

The reduction in the deficit is projected to be accompanied by a decline in the tax and social charges ratio from 43.1 % of GDP in 1999 to 40.5 % in 2004. This reduction

would be brought about by the implementation of the reforms of income and corporate taxation. To make sure that the general government budget is balanced in 2004 in spite of the important tax relief amounting to an overall 2.1 % of GDP, expenditure is to increase by clearly less than the annual average rise in nominal GDP (4 % per year). At the federal level, expenditure is projected to rise by 1.9 % in 2002 and by 1.5 % in both 2003 and 2004.

In view of the high tax burden in Germany, especially on labour, the reforms of corporate and income taxation are welcome. They are expected to raise the growth potential of the economy and render it less vulnerable to external shocks in the medium term. While some progress has been made in providing incentives to take up a job, further efforts aimed at raising the tax free income threshold and — at the same time — keeping the growth in social benefits at bay are required.

While these measures should help increase the activity rate in Germany, they will not be sufficient to face the biggest long-term challenge to public finances, i.e. the fast ageing in the population. In this regard, the pension reform proposal deserves special attention. By lowering pension payments in relation to net wages from 2010 onwards and by creating private pension funds, it consti-

Table 35

Key figures of the German stability programme, 2001–04 (*)

	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	3.0	2.75	2.5	2.5	2.5
Gen. gov. budget balance (% of GDP) (*)	- 1.0	- 1.5	- 1	- 0.5	—
Primary surplus (% of GDP)	2.3	1.5	2	2.5	3
Government debt (% of GDP)	60	58	57.5	56.5	54.5

(*) UMTS receipts excluded (2.5 % of GDP).

Source: Autumn 2000 update of the stability programme of Germany.

tutes an important step in the right direction and should guarantee the pension system's sustainability in the medium term without raising pension contributions to harmful levels. The age-related problems of the system of healthcare and long-term care, however, have not been tackled yet.

Keeping public finances firmly on the envisaged consolidation path would not only facilitate the response to the challenges stemming from an ageing population, but could also create some room for the necessary investments in public infrastructure which have been somewhat neglected in the recent past.

3.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Germany on budgetary policy:

- attain a general government deficit of 1.5 % of GDP in 2001; to this end, growth of government expenditure in 2001 should respect the projections set in the framework of the November 2000 *Finanzplanungsrat*;
- when preparing the budget for 2002, maintain the planned reduction in the general government deficit to 1 % of GDP, so as to ensure that the medium-term target of a balanced budget by 2004 can be met; in the event of higher than projected tax revenues these should be used to reduce the deficit below the targeted level;
- reinforce from 2001 onwards the coordination of budgetary policy among the various levels of government

by strengthening the role of the *Finanzplanungsrat* and, eventually, in the framework of a national stability pact; and

- in order to secure the longer-term sustainability of government finances continue the implementation of the pension reform and start the elaboration of reforms of the healthcare sector and of dependency insurance, particularly of long-term care for the elderly.

Council opinion of 27 November 2000 on the updated stability programme of Germany for the period 2000–04

Official Journal C 374, 28.11.2000, p. 3

On 27 November 2000 the Council examined Germany's updated stability programme, which covers the period 2000–04. The Council welcomes the fact that this update makes distinct progress in terms of compliance with the code of conduct.

The Council notes with satisfaction that the budgetary target for the current year is maintained in spite of a slightly worse than expected outcome in 1999. However, the Council notes that this is due also to higher than projected tax revenues. The fact that the projected consolidation path depends heavily on the budgetary developments of levels of government other than the federal one shows the importance of an improved cooperation on government finances at the national level as already emphasised in the Council opinion of 28 February 2000 on the updated stability programme of Germany for the period 1999 to 2003 ⁽¹⁾.

⁽¹⁾ OJ C 98, 6.4.2000, p. 1.

The Council considers the macroeconomic scenario presented in the programme, which assumes average annual output growth of around 2.5% between 2001 and 2004, to be realistic. However, the Council recommends that, with a view to making the economy more resilient to external shocks, reforms be implemented which render the labour market more flexible. Furthermore, benefiting from the favourable development of employment, the government should adhere to its announced policy of a further clear reduction of social security contribution rates. The Council notes that the underlying growth scenario presupposes that wage moderation will prevail throughout the programme period. A moderate outcome of the wage negotiation round for the year 2002 will be crucial in this respect.

The updated programme foresees a balanced general government budget by 2004, while the gross debt ratio is expected to decrease to 54.5% of GDP by the end of the programme period. The Council considers it appropriate that the budgetary consolidation envisaged in the programme is achieved by a decrease in the expenditure ratio which is only partially offset by a decline in the revenue ratio. The Council recognises that the ongoing expenditure restraint has created some room for the planned tax reforms in the year 2001, while also recognising that in this year the decline in the revenue ratio will be higher than the decline in the expenditure ratio. However, with these reforms leading to a clear deterioration in the actual deficit in 2001 and in the structural deficit in years 2001/2002, the Council reiterates its recommendation to implement the reforms with greatest caution so as not to provoke a lasting deterioration in the structural deficit. In this context, it is important that expenditure is kept under strict control.

The Council considers that the objective for the medium-term budgetary position, set for 2002 and subsequent

years, will be in conformity with the Stability and Growth Pact.

Moreover, the Council considers that the programme is broadly in line with the recommendations of the broad economic policy guidelines. The Council recommends, however, that, should tax revenues be higher than expected, they be used to reduce the deficit below the targeted level with a view to widening the safety margin in line with the broad economic policy guidelines. Thereby, it should be ensured that no further pro-cyclical stimulus is provided to the economy which in turn might pose a threat to price stability.

Regarding government debt, the Council welcomes the fact that, owing to the improved position of government finances, the trend of a rising debt ratio has been broken. In view of the foreseeable challenges associated with the ageing of the German population, continued privatisation efforts at all levels of government would help achieve the programme's medium-term debt objectives. In this context, the Council welcomes the fact that the government will use all of the UMTS proceeds to reduce debt. While welcoming the federal government's plans to use part of the resulting interest savings to increase investment spending, the Council considers that, in light of the non-negligible risks to the budgetary projections, it would be appropriate not to spend all of the resulting interest savings.

The Council welcomes the fact that the tax reforms are inserted in a medium-term oriented comprehensive economic reform strategy. Continued reforms of the pension system and of labour and product markets could further improve the potential growth path not only of Germany, but of the euro zone as a whole.

4. Greece

4.1. Recent developments

Budgetary results for 2000 were better than initially expected, as the general government deficit fell from 1.8 % of GDP in 1999 to 0.9 % of GDP, below the initial objective set in the 2000 budget of 1.2 % of GDP. This was largely due to lower interest payments as well as higher than budgeted tax revenues coming from strong GDP growth.

Although total government current revenues were expected to fall as a result of the September 1999 tax and benefits package, in fact they increased by 0.5 percentage points of GDP. Consequently, the tax burden increased from 38.4 % of GDP in 1999 to 38.8 % in 2000. This was the main factor behind the improved government primary balance, which increased from 5.7 % of GDP in 1999 to 6.4 % in 2000. However, the cyclically-adjusted primary balance improved by only 0.3 percentage points of GDP.

Total expenditure decreased by 0.5 percentage points of GDP in 2000. Interest payments to service debt fell by 0.4 percentage points of GDP; in contrast, government consumption and civil servant wages continued to increase as a share of GDP above initial expectations.

The reduction in general government debt ratio in 2000 was only 0.7 percentage points of GDP, to 103.9%. To a large extent, this modest reduction in the public debt ratio is to be attributed to the revaluation of outstanding stock of debt denominated in foreign currencies, mainly the US dollar and the yen. Furthermore, financial operations, such as State contributions to capital increases in public entities, also prevented the debt ratio from declining further.

The 2001 budget projects a surplus for the general government of 0.5 % of GDP, despite a new package of tax cuts, particularly on personal income and enterprise taxation. The government primary surplus is expected to

increase to 7 % of GDP, as a result of a modest reduction in primary current expenditure, and more importantly due to an expectation of continued buoyancy in tax revenues stemming from favourable basic assumptions, i.e. 5 % real GDP growth in 2001 and a high underlying implicit income tax elasticity. Moreover, a significant decline in interest payments as a percentage of GDP is projected. The Commission spring forecast, with an assumption of slower real GDP growth of 4.4 % and less buoyant budgetary revenues, the general government primary surplus is projected to improve by only 0.3 percentage points of GDP to 6.7 %. Nonetheless, due to a further decline in interest payments, the general government budget reaches a position of balance. When cyclically-adjusted, the government primary surplus remains unchanged in 2001, indicating the absence of further tightening in the stance of fiscal policy.

According to the latest figures, short-term indicators confirm the Commission spring forecast for GDP growth. Preliminary results for the first four months of 2001 suggest that the budget may be on track, with an overrun in primary expenditure compensated for by a higher-than-projected increase in overall revenue.

4.2. Medium-term prospects and policy issues

The first stability programme presented by Greece after joining the euro zone on 1 January 2001 covers the period from 2000 to 2004. The stability programme projects continuing general government budgetary consolidation, in order to reduce the still high government debt ratio. The government surplus of 0.5 % of GDP expected in 2001 is projected to increase throughout the period, to 2 % of GDP in 2003 and 2004. At the same time, the government debt ratio is forecast to decline by 20 percentage points of GDP from 2000 to 2004 to reach 84 % of GDP.

The budgetary consolidation strategy relies on sustaining the primary surplus throughout the forecast period at

Table 36

Composition and balances of general government, Greece (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 1.8	- 0.9	0.0	0.6
<i>Total revenue (current)</i>	43.3	43.8	43.8	44.0
Of which: taxes	25.7	26.1	25.9	25.7
social contributions	13.7	13.8	13.9	14.0
<i>Total expenditure (**)</i>	45.2	44.7	43.8	43.4
Of which: collective consumption	8.9	8.8	8.7	8.6
social transfers	15.8	15.9	15.9	15.9
interest expenditure	7.6	7.2	6.7	6.1
gross fixed capital formation	4.3	4.4	4.4	4.6
Primary balance	5.7	6.4	6.7	6.7
<i>Pm Tax burden</i>	38.4	38.8	38.7	38.6
Government debt	104.6	103.9	99.9	98.0
<i>Pm Cyclically-adjusted balance</i>	- 1.4	- 0.8	- 0.3	- 0.2
<i>Pm Cyclically-adjusted primary balance</i>	6.1	6.4	6.4	5.9

(*) Spring 2001 economic forecasts.

(**) Current expenditure, gross fixed capital formation and net capital transfers.

Source: Commission services.

some 7% of GDP. Another factor is the constant and significant decline in debt servicing costs, decreasing by 2.3 percentage points of GDP between 2000 to 2004.

Underlying these budgetary projections, the assumptions included in the stability programme for real GDP growth, showing a constant acceleration from 4.1% in 2000 to 5.5% in 2003 and 2004 seem somewhat optimistic. In this context, the budgetary consolidation in the medium term relies mainly on continued buoyancy in tax revenues (which would only decline modestly in 2003) and falling interest payments. Decisive cuts in current primary spending are not provided for before 2002. Such a consolidation process might prove to have little stabilisation impact on the economy. Persisting inflationary pressures in a context of strong economic activity would call for a more stability-oriented budgetary stance.

To improve the efficiency and equity of the fiscal system, the government is envisaging a tax reform to be implemented from the 2003 budget onwards. To this end, a committee was set up in early 2001 which will prepare proposals for a comprehensive reform by March 2002. Moreover, in order to establish an adequate control on primary expenditure increases, it is envisaged to create a

mechanism of norms to be respected. The annual budget will be prepared within a multiannual framework; on a pilot basis, the reform will be implemented in the framework of preparations for the budget for 2002.

According to the stability programme, achieving sustainable non-inflationary growth in the medium term also relies on structural reforms. In particular, the reduction of the size of the public sector is expected to continue, and the privatisation of a number of State-controlled companies is planned over the period covered. In most cases, privatisations will be partial with the State keeping a majority stake. Active labour market policy aiming at improving its functioning and at promoting job creation, is being implemented, in particular a 2% reduction in employer social security contributions for low paid employees.

Reform of the social security system is viewed as essential in order to contribute to the long-term sustainability of public finances in Greece given the budgetary implications of ageing population and the weaknesses of the current system, namely the overall low level of contributions compared to the relatively high level of pension entitlements. At the initiative of the government, a dialogue

Table 37

Key figures of the Greek stability programme, 2000–04

	1999	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	3.4	4.1	5.0	5.2	5.5	5.5
Gen. gov. budget balance (% of GDP)	- 1.8	- 0.8	0.5	1.5	2.0	2.0
Primary surplus (% of GDP)	5.8	6.5	7.0	7.3	7.3	6.8
Government debt (% of GDP)	104.6	103.9	98.9	96.0	90.5	84.0

Source: 2000 update of the stability programme of Greece.

with the social partners will start in the course of 2001 aimed at ensuring the long-term viability of the social security system. The government intends to present its proposals resulting from the social dialogue, most likely before the end of the year.

4.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Greece on budgetary policy:

- ensure that the budgetary target of a surplus of 0.5 % of GDP set for 2001 is met and be ready to tighten the budgetary implementation in 2001 should inflationary pressures persist;
- maintain in the budget for 2002 a budgetary stance clearly oriented towards price stability; to this end, respect the government primary surplus objective of 7 % of GDP mainly through fast retrenchment in government current primary expenditure applying clear and binding norms;
- pursue the reform of the public sector in order to reduce its size in the medium term with a view to improving the competitiveness of the economy and to alleviating the burden on public finances; and
- accelerate the implementation of the reform of the social security sector in order to ensure the viability of the system; in particular, initiate in 2001 the reform of the pension system needed to address the challenges resulting from the ageing population.

Council opinion of 12 February 2001 on the stability programme of Greece, 2000–04

Official Journal C 077, 9.3.2001, p. 1

On 12 February 2001, the Council examined the first stability programme of Greece which covers the period 2000–04. The stability programme was submitted by the Greek Government within six months of the Council decision of 19 June 2000 on the adoption by Greece of the single currency on 1 January 2001 ⁽¹⁾.

The stability programme is projecting robust real GDP growth rates, accelerating from 4.1 % in 2000 to 5.5 % in 2004, supported by high investment rates, strong exports and sustained private consumption. The Council considers the real GDP growth forecasts included in the stability programme as ambitious, at the upper range of possibilities. The programme also presents an alternative scenario projecting lower, though still robust, real GDP growth based in particular on a higher assumption for imported oil prices.

On the basis of the baseline macroeconomic scenario, the programme is projecting a general government surplus of 0.5 % of GDP in 2001 which will rise to 2 % of GDP in 2004. The programme is based on the fiscal consolidation strategy followed until now by the Greek convergence programmes, consisting in maintaining high primary surpluses supported, however, by a significant reduction in interest payments as a percentage of GDP, resulting from lower interest rates and a declining government debt ratio. The general government debt ratio is expected to decline by 20 percentage points of GDP, to 84.0 % of GDP in 2004.

⁽¹⁾ OJ L 167, 7.7.2000, p. 19.

The Council considers that the projected budgetary position provides adequate safety margin against breaching the 3% of GDP deficit threshold in normal circumstances and is in conformity with the requirements of the Stability and Growth Pact. The Council commends the fiscal consolidation strategy of the programme, centred on high primary surpluses, which is essential in reducing rapidly the still very high government debt ratio and prepares for future challenges, notably the budgetary burden from ageing population. The Council considers, however, that such a strategy should be primarily based on an adequate control of primary expenditure increase through clear and binding norms with the aim of reducing the current expenditure ratio.

The Council warns that under conditions of high GDP growth, according to the projections, combined with easing monetary conditions, renewed inflationary pressures may persist; the Council considers that risks of overheating of the economy need to be contained through determined support from domestic policies, mainly a tight fiscal stance, in particular through restraint on current expenditure, and by ensuring wage moderation.

The Council notes that the programme includes a number of market liberalisation measures, the setting-up of an appropriate regulatory framework and structural reforms in the labour, product and capital markets while a reform of the social security system is announced for 2001. The Council considers, however, that the ambitious growth and employment objectives of the stability programme, and future challenges, require a more determined attitude in the reform effort; the Council encourages the Greek Government to accelerate the implementation of necessary reforms, in particular in the labour market and the social security system, in order to enhance the potential of the economy, strengthen its competitiveness and improve the conditions for sustainable growth and employment creation.

The Council considers that the stability programme is consistent with the broad economic policy guidelines.

The Council invites the Greek authorities to pay particular attention to the need for reform of the pension system, and invites them to address the budgetary consequences of ageing in the next update of the stability programme.

5. Spain

5.1. Recent developments

Following the pattern of recent years, fiscal consolidation continued in 2000. General government fiscal targets were overachieved: the deficit posted an outturn of 0.3 % of GDP (compared to an original target of 0.8 % set in the 1999 stability programme update) while the debt-to-GDP ratio fell to 60.6 % (compared with 62.8 % in the 1999 update).

Despite stronger-than-expected GDP growth in 2000 (4.1 % compared to an initial official forecast of 3.7 %), which fuelled job creation and corporate profits and thus higher direct taxes, shortfalls of other revenues, especially of other transfers and property income led to a slight decline in the ratio of total receipts to GDP. As a result, a reduction in the deficit was achieved through expenditure restraint, particularly as regards primary expenditure, which fell by 0.6 percentage points of GDP. Nevertheless, a reduction in interest payments (0.3 percentage points of GDP lower than in 1999), partially reflecting a falling debt burden, also contributed to fiscal consolidation. Regarding primary current expenditure, civil service pay was increased below the rate of CPI inflation, helping to reduce public consumption as a percentage of GDP, and subsidies were also cut. Gross fixed capital formation remained unchanged as a percentage of GDP but other capital expenditure fell, partly due to proceeds from UMTS licence sales. As a result, the overall deficit decreased by 0.9 percentage points, to 0.3 % of GDP, while the primary surplus increased further to 3 % of GDP from 2.4 % in 1999. The cyclically-adjusted primary surplus to GDP ratio was somewhat higher than in 1999 (2.5 % compared to 2.2 %).

The debt-to-GDP ratio was reduced by 2.7 percentage points in 2000, to just above the 60 % threshold, maintaining the declining path followed since 1997. In the absence of significant privatisation receipts to counter-balance other financial operations, stock-flow adjustments tended to increase the ratio, as in 1999. The reduction in the debt-to-GDP ratio thus stemmed from the primary surplus and nominal GDP growth.

The core objectives of the budget law for 2001 are to reach a balanced budget for the general government, an increase in capital expenditure (especially infrastructures and R & D) and an upgrading of social coverage while maintaining an active labour market policy. The target of budget balance nevertheless seems unambitious taking into account the better-than-expected general government deficit in 2000 and the still strong economic activity forecast for 2001. In addition, some budget measures should help to improve public finances, such as increasing fees on UMTS licensees, freezing personal income tax brackets and raising civil servants' salaries below expected average inflation.

As a consequence, based on this budget but with a lower GDP growth, the Commission services spring 2001 forecast is of a small surplus of 0.1 % of GDP and a further decline in the government debt-to-GDP ratio to 58.1 % in 2001, explained by the same factors at work in 2000. The cyclically-adjusted primary surplus is expected to increase by a further 0.5 percentage points of GDP, implying a tightening in the budgetary stance.

Major risks arise from the sharper than expected slowdown in GDP growth. This could have resulted in a deceleration in private consumption, and consequently the lower than expected growth rate of indirect taxes during the first four months of the year (3.6 % compared to 6.9 %). However, lower indirect taxes have been compensated for by direct taxes growing above budgetary projections for the whole year (8.3 % compared to 5.3 %). On the spending side, the increase in current transfers is particularly worrying, which have increased by 6.0 %, compared to a budgeted 3.4 %.

5.2. Medium-term prospects and policy issues

The January 2001 updated stability programme, covering the period 2000-04, reaffirms the two-handed strategy

Table 38

Composition and balances of general government, Spain (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 1.2	- 0.3	0.1	0.2
<i>Total receipts</i>	39.6	39.5	39.8	39.8
Of which: taxes	21.9	22.2	22.2	22.3
social contributions	13.1	13.4	13.4	13.4
<i>Total expenditure</i>	40.8	39.9	39.7	39.6
Of which: collective consumption	7.5	7.4	7.3	7.3
social transfers	22.2	22.0	21.8	21.7
interest expenditure	3.6	3.3	3.2	3.1
gross fixed capital formation	3.3	3.3	3.4	3.5
Primary balance	2.4	3.0	3.3	3.2
<i>Pm Tax burden</i>	35.2	35.7	35.8	35.8
Government debt	63.4	60.6	58.1	55.8
<i>Pm Cyclically-adjusted balance</i>	- 1.4	- 0.9	- 0.1	0.1
<i>Pm Cyclically-adjusted primary balance</i>	2.2	2.5	3.0	3.2

(*) Spring 2001 economic forecasts.

(**) Data for 2000 include UMTS receipts of 0.1 % of GDP.

Source: Commission services.

adopted in previous programmes, i.e. budgetary consolidation and structural reforms. The strategy continues relying on primary current expenditure restraint, allowing for a reinforcement of public investment and a reduction in the tax burden after 2002. Real convergence and reduction of unemployment continue to be the primary objectives.

The update is based on a baseline scenario which forecasts GDP growth of 3.6 % in 2001 and 3.2 % on average during the rest of the period. Within this framework, the general government should be in balance in 2001 and record a surplus of 0.3 % of GDP by 2004. In the same period, the primary surplus to GDP ratio is set to increase from 3.3 % to 3.5 %. Growing primary surpluses leading to an accelerated decline in the debt ratio along with moderate interest rates should result in falling interest payments. In turn, the current expenditure ratio should fall by 0.9 percentage points between 2001 and 2004, while capital expenditure would rise by 0.2 percentage points. As a result, the programme envisages a steady reduction of the total expenditure-to-GDP ratio by 0.6 percentage points to 40 % in 2004, while the total revenue-to-GDP ratio is expected to decrease by 0.3 percentage points to 40.3 %. The gross debt ratio is forecast to fall below 60 % of GDP in 2001, and below 50 % by the end of the period.

The spring 2001 Commission forecast projects a small general government surplus of 0.1 % of GDP in 2001 to

rise to 0.2 % in 2002. The latter coincides the 0.2 % of GDP surplus envisaged in the updated stability programme for 2002. However, these projections are based on an average real GDP growth of 3.2 % for this two-year period, compared with 3.4 % considered in the updated stability programme. This suggests room for manoeuvre to reach official targets even in the case of a stronger-than-expected deceleration of economic activity.

Regarding budgetary measures aiming at specific policy objectives, a labour market reform has recently entered into force, implying an extension of rebates on employers' social security contributions for employees recruited on new permanent contracts, with an expected full-year cost at around 0.1 % of GDP. Rebates are extended in time or increased in the case of recruitment of the long-term unemployed and women recruited to occupations where they are under-represented. Other measures to improve social protection, recently agreed between the central government and one of the trade unions, will probably be implemented in 2002. Some increase in the lowest levels of pensions is provided for, although the final cost of these measures has not yet been detailed.

According to the January 2001 updated stability programme, the tax reform announced for 2002 will be supply-side oriented, aiming at promoting saving, investment and labour supply. This reform should have an

Table 39

Key figures of the Spanish stability programme, 2000–04

	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	4.0	3.6	3.2	3.2	3.2
Gen. gov. budget balance (% of GDP)	- 0.3 (*)	0.0	0.2	0.3	0.3
Primary surplus (% of GDP)	3.0	3.3	3.4	3.5	3.5
Government debt (% of GDP)	61.1	58.9	56.6	52.8	49.6

(*) UMTS receipts included (0.1 % of GDP).

Source: 2000 Update of the stability programme of Spain.

estimated overall budgetary cost of 0.3 % of GDP over the years 2003 (the first year of implementation) and 2004. In this respect, the Commission assessment of the updated programme stressed that this reform should be subject to the achievement of fiscal targets and take into account developments as regards price stability.

Although the current public pension scheme is expected to remain in surplus in the short and medium term, its financial viability in the long term is a matter of concern. This is due to Spain's particularly adverse demographic profile and the adverse budgetary consequences of ageing. The 2001 updated stability programme gives little information on this issue, beyond announcing a commitment to allocate most of the expected social security surpluses to the reserve fund created in 2000. In the recent agreement to improve social protection, only few steps have been taken to assure the long-term sustainability of the welfare state: self-employed farmers and fishermen will be integrated into the general self-employed regime, which is less generous; people aged above 65 will be allowed to work while receiving a retirement pension. On the contrary, some important measures have been delayed: up to 2004, the amount of the reserve fund has been limited to EUR 6 million (less than 1 % of GDP); early retirement has been slightly facilitated rather than discouraged; changes in contribution requirements will not be considered until 2003; and for employees, no agreement has been reached to align special regimes with the general regime.

As a result, additional steps are needed for ensuring the future viability of the public pension system. This calls for a comprehensive and thorough overhaul of current pension schemes, including greater recourse to funded pensions. As shown below, a recommendation for comprehensive legislation in this area is also included in the 2001 BEPG.

5.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Spain on budgetary policy:

- achieve a budgetary position of balance for 2001 as set in the updated stability programme, especially through primary current expenditure restraint; moreover, there should be a readiness to tighten fiscal policy further to counterbalance additional inflationary pressures;
- prepare the 2002 budget aiming at the target of the 2001 updated stability programme; should inflationary pressures persist, any better than expected results in 2001 should be carried forward and fiscal policy tightened further; additionally, ensure that the fiscal reform envisaged for 2002 is supply-side-oriented and does not jeopardise the stability programme budgetary objectives; and
- increase the public pension fund reserve created in the 2000 budget law to at least 1 % of GDP by 2004, as envisaged in the latest updated stability programme; additionally, legislate already in 2001 for a comprehensive overhaul of the public pension system to ensure its future viability.

Council opinion of 12 March 2001 on the updated stability programme of Spain, 2000–04

Official Journal C 109, 10.4.2001, p. 3

On 12 March 2001, the Council examined Spain's updated stability programme which covers the 2000–04

period. The Council notes that the programme reaffirms the strategy adopted in the two previous programmes: promoting healthy economic growth through fiscal consolidation and structural reforms. Notwithstanding, the update has the same lack of information found in the two previous programmes, which makes more difficult the assessment of both the macroeconomic scenario and the estimate of the underlying budgetary position. This lack of information should be corrected in future updates.

The programme's objectives are to turn the estimated 2000 general government deficit of 0.3% of GDP into a balance in 2001 and a surplus of 0.3% in 2004, while the debt ratio falls to 49.6% of GDP at the end of the forecast period.

The Council welcomes the overall record of implementation of the previous update. GDP has grown more briskly than expected along with strong job creation, while general government balance and debt targets have been over-achieved. Nevertheless, recent price developments have been worse than expected, reflecting increasing core inflation stemming from strong domestic demand as well as external factors. The Council therefore considers essential that wage growth should be compatible with price stability. The Council recommends that wage indexation be phased out. It also recommends that if inflationary pressures should persist, the Spanish authorities should tighten fiscal policy further.

The macroeconomic scenario considered in the updated programme assumes output growth will decelerate from its present high rate (4.0% in 2000) to 3.6% in 2001 and to slightly below trend over the period 2002–04 (3.2% on average). Although for 2001 recent developments may point to a weaker outturn, the Council notes that this medium-term macroeconomic scenario appears broadly realistic overall.

The update continues with the successful budgetary strategy based on the restraint of primary current expenditure, which will allow for a reinforcement of government investment and for a reduction in the tax burden through a fiscal reform in 2002. Fiscal policy can be considered mildly restrictive over the period. As the envisaged strengthening of the government balance is based on expenditure restraint, the Council reiterates its encouragement for the approval of appropriate instruments, such as the proposed law of budgetary stability, to reinforce control of public spending at various levels of government. In turn, the Spanish authorities should be prepared

to consider measures to offset the budgetary impact of the recent court ruling on civil servant wages in the event that this ruling is upheld on appeal.

The underlying budgetary position from 2001 should provide a sufficient safety margin to prevent the deficit from breaching the 3% of GDP threshold during a normal cyclical downturn. The safety margin will increase further after 2001. The Council therefore considers that the updated stability programme is in conformity with the provisions of the Stability and Growth Pact. The Council considers the envisaged widening of the safety margin is justified in order to cope with the budgetary consequences of ageing. In this respect, the Council welcomes the commitment made by the Spanish authorities to allocate the expected social security surpluses to further increase the social security reserve fund created in 2000. The Council notes that as recommended in the 2000 broad economic policy guidelines this fund was reinforced in 2000. Nonetheless, the update does not provide additional steps to tackle the long-term sustainability of public finances in view of the ageing population. The Council recommends the Spanish authorities to adopt new measures in order to ensure the viability of the public pension system, and would welcome greater attention to the issue of long-term sustainability in future updates.

The Council considers that the budgetary adjustment should be facilitated by its being shared by all levels of government, and in particular notes with satisfaction that the territorial governments are targeted to be in balance from 2001 on. Given the increasing role of territorial governments in various categories of expenditure (notably investment), this requires the continued effective functioning of the existing coordination between general government sub-sectors, which should be reinforced through the appropriate instruments under domestic discussion, such as the proposed law of budgetary stability. The Council also welcomes the commitment to apply any better-than-expected budgetary results of central government to public debt redemption.

The Council considers that the programme is consistent with the broad economic policy guidelines. The Council notes with approval the importance given in the update to structural policies. Structural reforms play an important role in increasing the potential output of the Spanish economy while easing inflationary pressures. The Council, therefore, encourages the Spanish Government to implement the envisaged structural reforms, which must be closely monitored and speeded up and reinforced if necessary.

6. France

6.1. Recent developments

The fiscal consolidation process continued in 2000, with the government deficit being reduced to 1.4% of GDP down from 1.6% of GDP in 1999. This improvement was due to the continued control of expenditures and the relative buoyancy of tax receipts, despite the implementation of the first step of a multiannual tax cuts plan. Following several years of rapid deficit retrenchment (averaging 1% of GDP per year since 1996), the pace of budgetary adjustment decelerated in 2000, with the return to a more neutral fiscal stance.

With the notable exception of the health care sector, total real expenditures were kept under control, increasing by 1% in 2000. Together with an upward revision of the 2000 GDP level by INSEE in April 2001, this led to a decrease in the expenditure-to-GDP ratio that was larger than expected (52.8% as against 53% expected in the 2000 update of the stability programme). It has, however, to be stressed that this outcome was achieved in a context of higher-than-projected inflation (1.7% instead of the 0.9% initially planned), and that nominal expenditures increased faster than initially planned.

Despite tax cuts amounting to 1% of GDP, the growth of tax receipts remained dynamic in 2000. The reasons behind this buoyancy are strong GDP growth and an unexpectedly high elasticity of taxes to income and consumption. The tax cuts concerned indirect taxes (VAT, vehicle registration tax), direct taxes (income tax, local tax on accommodation) and social contributions. The tax burden was reduced from its historical peak of 45.6% in 1999 to 45.2% in 2000.

The general government debt ratio was reduced for the second consecutive year to 58% of GDP, a better outcome than the 58.4% planned in the last update of the stability programme.

The budget for 2001 projected a reduction in the general government deficit ratio to 1% of GDP (0.5% including

revenues from UMTS licences). In the new forecast presented in March 2001, the French authorities confirmed this target despite a downward revision of macroeconomic projections (the forecast range for GDP growth was revised from 3–3.6% in the budget for 2001 to 2.7–3.1%). The budget for 2001 projects an increase in real expenditures of 1.8%, a significantly higher rate than in 2000, mainly due to a revision in social spending. At the same time, the tax burden is expected to continue declining by 0.7% of GDP in 2001 as a consequence of the ongoing tax reform which includes further reductions in employers' social contributions.

The spring 2001 Commission economic forecasts projected a general government deficit of 1.1% of GDP in 2001 (0.6% including UMTS revenues) and 0.8% in 2002. Overall, the Commission forecasts indicate that government budgetary consolidation will continue in 2001, albeit at a slightly slower pace than previously expected. However, with the unexpected worsening of growth prospects this year, the balance of risks now clearly lie on the downside. According to Commission services' calculations, the cyclically-adjusted primary balance is expected to remain roughly stable this year for the second consecutive year, indicating a neutral fiscal stance in 2001.

6.2. Medium-term prospects and policy issues

The French authorities have for several years pursued a budgetary strategy of fiscal consolidation based on binding norms for real government expenditure. In the 2000 update of the stability programme, this strategy was restated, but adjusted in favour of a faster reduction in the tax burden, which remains higher than the EU average. The tax cuts decided upon last year aim at increasing incentives to work so as to achieve the main objective of French economic policy, i.e. full employment in the medium term. In parallel, a small increase in the multi-annual expenditure norm was agreed, in particular to pro-

Table 40

Composition and balances of general government, France (*)

(% of GDP)

	1999	2000	2001 (*)	2002 (*)
Government balance (**)	- 1.6	- 1.4	- 0.6	- 0.8
<i>Total receipts</i>	51.9	51.4	51.4	51.0
Of which: taxes	28.7	28.4	27.5	27.4
social contributions	18.4	18.3	18.6	18.5
<i>Total expenditure</i>	53.5	52.8	52.0	51.8
Of which: collective consumption	9.4	9.3	9.2	9.1
social transfers	32.3	32.0	31.9	31.5
interest expenditure	3.3	3.3	3.2	3.1
gross fixed capital formation	2.9	3.0	3.0	3.0
Primary balance	1.7	1.9	2.6	2.3
<i>Pm Tax burden</i>	45.6	45.2	45.2	44.9
Government debt	58.7	58.0	56.9	55.3
<i>Pm Cyclically adjusted balance</i>	- 1.3	- 1.3	- 1.2	- 1.0
<i>Pm Cyclically adjusted primary balance</i>	2.0	2.0	1.9	2.1

(*) Spring 2001 economic forecasts.

(**) Data for 2001 include UMTS receipts of 0.5 % of GDP.

NB: the figures for 1999 and 2000 were released by INSEE on 27 April 2001, after the forecast exercise was completed. Figures used in the forecast exercise were a deficit of 1.3 % of GDP in 2000, a tax burden of 45.5 % of GDP and an expenditure ratio of 53.2 % of GDP.

Source: Commission services.

vide scope for new active policies on the labour market. Against this background, the major challenge for the years ahead will be to ensure the success of these policies without compromising the achievement of a balanced budget position by 2004.

Compared with the previous updates of the stability programme, the deficit reduction planned in the 2000 update is more gradual. The general government deficit is projected to fall from 1 % of GDP in 2001 (excluding UMTS revenues) to a deficit of 0.5 % or a surplus of 0.2 % of GDP in 2004, depending on the macroeconomic scenario (GDP growth averages 2.5 % over the period 2002–04 in a cautious scenario and 3 % in a favourable one). Budgetary projections provide for an improvement in the cyclically-adjusted budget balance, as actual GDP is projected to be close to potential over the period covered by the programme. The government debt-to-GDP ratio should continue declining from 58 % in 2000 to 52.3 % or 53.8 % in 2004, depending on the macroeconomic scenario.

Along with the implementation of the next steps of the tax reform, the decline in the tax burden which started in 2000 is projected to continue until 2004. The French Gov-

ernment is pursuing a lower tax burden with three aims in mind: first, stimulating labour supply by strengthening incentives to work, via cuts in household income tax and the implementation of a tax credit for workers at the low end of the wage scale; second, favouring investment by a cut in corporate tax; and finally, compensating partly the automatic rise in unit labour costs induced by the working time reduction by exemptions from employers social contributions. These tax cuts will amount to around 1.7 % of GDP over the period 2001–04.

The projected cumulated increase in expenditures was revised upwards for the second consecutive update of the stability programme: real spending would increase by 4.5 % between 2002 and 2004 while the norm for 2001–03 had been fixed at 4 %. The revision is mainly due to additional spending in the social sector. Part of it would finance a reform of unemployment benefits to improve job-seekers assistance, and the remainder would finance an upward revision in health expenditures which have systematically exceeded targets in recent years. The creation of a new mechanism allowing for a tighter control in health expenditures remains an important challenge for the years ahead.

Table 41

Key figures of the French stability programme, 2001–04

	2000	2001 (*)	2002 (*)	2003 (*)	2004 (*)
Real GDP growth (annual % change)	3.2	3.3	2.5/3	2.5/3	2.5/3
Gen. gov. budget balance (% of GDP)	- 1.4	0.1 (**)	n.a./- 0.6	n.a./0.4	- 0.5/0.3 (**)
Primary surplus (% of GDP)	1.9	2.2	n.a./2.6	n.a./2.7	2.4/3.2
Government debt (% of GDP)	58.4	56.9	55.7/55.2	54.9/54.0	53.8/52.3

(*) The projections for 2001 are done under a real GDP growth scenario of 3/3.6%. The projections for 2002–04 are done under the two alternative growth scenarios presented in the table.

(**) These figures include UMTS receipts amounting to 1.0% of GDP in the projections of the 2000 update of the stability programme. The actual amount of the UMTS revenues was only 0.5% of GDP.

Source: 2000 Update of the stability programme of France.

In a context of positive macroeconomic prospects and where demographic developments remain favourable in the short-term, the elimination of the government deficit in the medium term remains of high importance in order to prepare government finances to future challenges. Indeed, uncertainties remain concerning the management of the budgetary burden arising from ageing population. In 1999, the government created a public fund to be financed by the revenues from the sale of UMTS licences and from surpluses of the social security sector. This fund, created to smooth the impact of ageing population on public finances, is a positive development but needs to be urgently complemented with a comprehensive reform of the pension system, which has been debated for several years now.

6.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to France on budgetary policy:

- achieve in 2001 a general government deficit of 1% of GDP (excluding UMTS receipts) as targeted in the 2000 updated stability programme; to this aim, ensure that the increase in real government expenditure will not exceed the projected 1.8% in 2001;
- in the framework of the budget for 2002, contain government expenditures in real terms within the 1.6 limit set by the government in order to secure the achievement of the 0.6% government deficit target set in the

2000 updated stability programme so as to ensure a surplus by 2004; and

- allocate in 2002 and beyond, as a matter of priority any additional available margin to strengthen the budgetary position in order to prepare for long-term challenges, notably the burden for public finances which will result from ageing of population; with a view to securing the long-term sustainability of government finances, to make further progress in reforming the pension system.

Council opinion of 12 February 2001 on the updated stability programme of France, 2002–04

Official Journal C 077, 9.3.2001, p. 5

On 12 February 2001, the Council examined the updated stability programme of France which covers the period 2001–04.

Economic growth has been robust over the past two years, broadly in line with the projections of the 1999 updated stability programme. In 2000, the French economy registered a third consecutive year of strong GDP growth with relatively low inflation. The unemployment rate continued to decline and reached 9.2% in November, down from 10.9% one year earlier. Despite this sharp fall in unemployment, wage and price developments remained very moderate. Headline inflation increased from 0.5% in 1999 to 1.7% in 2000 mainly due to higher oil prices.

The Council notes that, building on a more favourable outcome than expected in 1999 and an expenditure

growth slower than initially projected, the general government deficit for 2000, estimated at 1.4% of GDP, will be lower than initially expected; the government debt ratio in 2000, estimated at 58.4% of GDP, was also lower than targeted by one percentage point. The broad economic policy guidelines which aim at using better than expected revenues to achieve faster reduction in the government deficit. Therefore, the Council finds that a better budgetary outcome could have been achieved in 2000, taking into account the favourable economic and public finances developments.

The budgetary projections of the updated programme are based, as in the past, on two macroeconomic scenarios, a cautious scenario, in which potential growth stays at its current level of 2.5% a year, while in the favourable scenario, potential output is estimated to gradually increase to 3% due to stronger investment and employment growth. From 2001, real GDP growth is projected to follow one of the two non-inflationary scenarios. The favourable one is presented as the economic policy target and the most likely projection. In both cases, inflation is projected to stay at a low level over the entire period.

The Council considers that the two macroeconomic scenarios of the programme provide a plausible range of values for GDP growth between 2002–04 and that the macroeconomic performance of France in recent years indicates a probable rise in the capacity of the French economy to sustain higher non-inflationary growth than in the past, resulting from a rise in capital accumulation and a fall in structural unemployment; the Council considers, in view of the above, the macroeconomic projections of the favourable scenario as attainable.

The updated programme is projecting a general government surplus of 0.2% of GDP in 2004 under the favourable scenario and a deficit of 0.5% under the cautious one. The government debt ratio is expected to decrease from 58.4% in 2000 to 54.5% or 53% according to the alternative macroeconomic scenarios. These developments reflect mainly structural progress; however, the Council regrets that a deficit remains in 2004 under the

cautious scenario. Even if the projected budgetary position provides an adequate safety margin against breaching the 3% of GDP deficit threshold in normal circumstances — in conformity with the requirements of the Stability and Growth Pact — the Council considers that the French Government should seek a situation of budgetary balance in 2004 also under the cautious scenario and to advance the timing of budgetary surplus ahead of 2004 under the favourable one. This would be in line also with its recommendation on the 1999 updated stability programme.

The Council welcomes that an important tax reform is being implemented without compromising the global fiscal trend. This reform is in line with the recommendations of the broad economic policy guidelines concerning the measures aimed at improving the functioning of the labour market. The Council commends the budgetary strategy based on control of real expenditure growth; however, the Council considers that a budgetary policy based on expenditure ceilings requires an effective system to rein in spending as soon as any slippage is detected especially in the field of health care expenditure; consequently the Council invites the French Government to introduce the appropriate mechanism enabling the respect of the expenditure norms. The Council notes that the increase in expenditure included in the finance law for 2001, 1.8% in real terms, accounts for a significant part of the norm for the cumulated increase for the period 2001 to 2003 fixed at 4% in real terms in the 1999 updated programme. Moreover, the Council notes that the norm for the cumulated increase in expenditures has been revised upwards, real spending being allowed to increase by 4.5% in real terms from 2002 to 2004. In the view of the Council, a lower increase in expenditure would be desirable to allow a faster reduction in the government deficit.

The Council considers, further, that available budgetary margins should be used, as a matter of priority, in strengthening the budgetary position and preparing for future challenges, notably the budgetary burden from the ageing of population. In this respect, further progress with pension reform would be welcome.

7. Ireland

7.1. Recent developments

Previous expectations concerning growth, tax revenues and the budget surplus in 2000 were far exceeded. While the budget for 2000 projected a general government surplus of 3.3 % of GDP in 2000, the actual surplus is now estimated at 4.5 % of GDP. This in turn reflects much higher than expected growth, estimated at 10.7 % compared to a previous projection of 7.4 %. As a result, tax revenue grew by 14.9 % rather than 9.6 % as budgeted. Disregarding special factors, the surplus increased by 0.6 percentage points on 1999 ⁽¹⁾ and the general government expenditure ratio to GDP declined by almost 1 percentage point to 33.6 %, while the revenue ratio fell by 0.3 percentage points to 38.1 %. Both ratios continue to be the lowest in the EU.

Net current expenditure of central government rose by 4.5 % in 2000. Over the period since 1997, for which the government had targeted a ceiling of a 4 % average nominal increase, expenditure grew by 4.3 % on average ⁽²⁾ implying that this self-imposed norm was more or less adhered to.

In cyclically-adjusted terms and again disregarding special factors, the surplus remained virtually unchanged in 2000 and the primary surplus deteriorated by about 0.5 % of GDP. While calculations of the output gap are subject to a particularly large margin of error in Ireland, this suggests a discretionary easing of fiscal policy in 2000.

The substantial surplus and high nominal growth brought about a further large reduction in the debt ratio of 11 percentage points to 39.1 %. At the same time, a significant

part of the central government surplus equivalent to 2.3 % of GDP — including privatisation receipts — was allocated to the new National Pensions Reserve Fund (see below).

For 2001, the Irish authorities project a minor deterioration of the general government surplus to 4.3 % of GDP, with the debt ratio declining further to 33.3 %, based on a GDP growth assumption of 8.8 %. The budget for 2001 implements generalised and targeted direct and indirect tax cuts and significant increases in current and capital spending. In its recommendation of 12 February 2001, the Council deemed these budget plans inconsistent with the broad economic policy guidelines for 2000 on account of their expansionary and pro-cyclical nature.

The GDP growth assumption for the 2001 budget now seems on the high side. Recent developments, including the US slowdown, the weak performance of the ICT sector, the limited outbreak of foot-and-mouth disease and extensive restrictions to avoid a more serious incidence, imply a considerable risk to the fiscal outcome in 2001. No revisions to the initial budgetary targets have been announced so far.

The Commission services' spring 2001 forecasts envisage a general government surplus of 3.9 % of GDP in 2001 and 3.6 % in 2002, based on growth of 7.5 % and 7.1 % respectively. The cyclically-adjusted primary surplus is expected to decrease by 0.6 percentage points of GDP, suggesting an expansionary budgetary stance.

7.2. Medium-term prospects and policy issues

The primary objective of the December 2000 update of the stability programme is 'the continuation of sustainable economic growth, supported by moderate inflation and competitive wage developments'. The budgetary targets are to maintain a surplus of 4.2 % of GDP on average

⁽¹⁾ The reported figures include a one-off capital transfer of 1.8 % of GDP for discharging future pensions of the formerly State-owned telecoms company, implying an adjusted surplus of 3.9 % of GDP in 1999.

⁽²⁾ Excluding the 2000 contribution to the Local Government Fund set up in 1999.

Table 42

Composition and balances of general government, Ireland

(% of GDP)

	1999	2000 (**)	2001 (**)	2002 (**)
Government balance (**)	2.1 (*)	4.5	3.9	3.6
<i>Total receipts</i>	38.4	38.1	37.2	36.1
Of which: taxes	26.9	26.4	25.8	25.2
social contributions	5.8	5.8	5.5	5.3
<i>Total expenditure</i>	36.3 (*)	33.6	33.2	32.6
Of which: collective consumption	5.0	4.8	4.8	4.6
social transfers	18.8	17.9	17.9	17.4
interest payments	2.4	2.1	1.8	1.6
gross fixed capital formation	3.1	3.8	4.0	4.6
Primary balance	4.5 (*)	6.6	5.7	5.1
<i>Pm Tax burden</i>	32.6	32.3	31.5	30.7
Government debt	50.1	39.1	33.3	26.7
<i>Pm Cyclically-adjusted balance</i>	1.4 (*)	3.1	2.8	2.8
<i>Pm Cyclically-adjusted primary balance</i>	3.9 (*)	5.2	4.6	4.4

(*) Surplus and expenditure ratios include a one-off capital transfer of 1.8 % of GDP for discharging future pensions of the formerly State-owned telecoms company.

(**) Spring 2001 economic forecasts.

Source: Commission services.

over the period covered (2001–03) and to achieve a further reduction of the debt ratio to below one quarter of GDP in 2003. The accompanying taxation and expenditure projections embody further reform of the tax/benefit system, taking account of the government's commitments to remove those who earn the minimum wage from the tax net and to substantially increase child benefit payments.

The macroeconomic scenario assumes gradually moderating growth towards more sustainable rates: GDP growth is expected to slow from 8.8 % in 2001 to 5.7 % in 2003, broadly in line with the Commission services' spring 2001 forecast.

The key fiscal policy issue in Ireland is determining the appropriate stance in a rapidly-expanding economy with overheating and inflationary pressures, while at the same time maximising output potential and facilitating the transition to a more sustainable growth path. There has been an important supply-enhancing component in the most recent budgets. Infrastructural bottlenecks are being tackled and labour force participation should benefit from further direct tax relief and ongoing reform of the tax/benefit system. However, supply-side measures may be less

effective than anticipated, given capacity constraints in the construction sector and the tightness of the labour market, and may be outweighed by budgetary boosts to demand.

A second key issue is the relation between fiscal policy and social partnership, embodied by successive national agreements since 1987, and the future of expenditure control. While the national agreement approach may no longer be able to foster wage moderation given the tightness of the Irish labour market, the public finance commitments in terms of tax cuts, public sector wage increases and social spending, are considerable. These may limit fiscal flexibility and the feasibility of defining and adhering to expenditure norms. As the government's own norm on current spending growth and plans to introduce multi-annual budgeting were recently abandoned, the future of expenditure control in Ireland now seems uncertain.

The long-term sustainability of the public finances is enhanced by the recent forward-looking decision to set aside a sum equal to 1 % of GNP each year until 2055 for the National Pensions Reserve Fund. This fund was set up in 2000 to move away from a complete reliance on

Table 43

Key figures of the Irish stability programme, 2001–03

	2000	2001	2002	2003
Real GDP growth (annual % change)	10.7	8.8	6.3	5.7
General government budget balance (% of GDP)	4.7	4.3	3.8	4.6
Primary surplus (% of GDP)	6.7	6.1	5.4	6.0
Government debt (% of GDP)	39	33	28	24

Source: December 2000 update of the stability programme of Ireland.

PAYG financing for public pensions and towards the part-funding of future pension liabilities. So far, the fund has also benefited from privatisation receipts and at end-2000, it totalled over 6% of GDP. While the fund falls within the general government sector and contributions to it therefore do not reduce the general government surplus, it increases awareness of the budgetary consequences of ageing populations. Ireland has a more favourable demographic profile than most EU Member States, with large increases in the old-age dependency ratio occurring some 10 to 15 years after most other Member States.

7.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Ireland on budgetary policy:

- use countervailing budgetary measures during the current fiscal year to better align the budget plans for 2001 with the 2000 BEPG;
- prepare a budget for 2002 that contributes to an orderly easing of the pace of demand;
- improve expenditure control, applying from 2002 clear norms on spending aggregates; and
- continue to accord high priority to the national development plan especially to infrastructure, human capital investment and R & D, but subject to the fulfilment of the stability objectives of fiscal policy.

Council opinion of 12 February 2001 on the 2000 update of Ireland's stability programme, 2001–03

Official Journal C 077, 9.3.2001, p. 7

On 12 February 2001 the Council examined the 2000 update of Ireland's stability programme, which covers the period 2001–03.

The Council notes that the Irish economy continues to grow rapidly in 2000, with real GDP growth of 10.7% expected in the 2000 update. Employment growth in 2000 is estimated at 4.5%, with the unemployment rate declining further to 4.1% on average. Inflationary pressures have intensified. Average HICP inflation rose to 5.3% in 2000. While this upsurge in price inflation is partly due to external and temporary factors, which are expected to fall gradually out of the consumer price index, domestically generated inflation has increased too, house price inflation remains very high and wages are rising rapidly.

As a result of strong economic growth, the projections in the 1999 update of the stability programme for the improvement in the budgetary situation were exceeded by a large margin. The Council welcomes the fact that the general government balance for 2000 remains in substantial surplus, estimated to be around 4.7% of GDP, and that another sharp reduction in the general government debt ratio was achieved.

Projections for the period 2001 to 2003 show an average surplus ratio of 4.2%, with the debt ratio declining further to less than one quarter of GDP by 2003. The Council welcomes the fact that, as in the original programme and its 1999 update, Ireland fully and comfortably fulfils the Stability and Growth Pact obligations throughout the

period covered. The projected general government surplus is clearly sufficient in each year to provide a safety margin against breaching the 3% of GDP reference value in the event of normal cyclical fluctuations.

The macroeconomic scenario underlying these projections assumes a gentle decline in real GDP growth and in inflation over the period. The positive output gap, after an estimated 4.5% of trend GDP in 2000, is expected to peak in 2001 at 5.4% and to decline gradually thereafter. In this context, the Council considers that the stimulatory nature of the budget for 2001 poses a considerable risk to the benign outlook in terms of growth and inflation portrayed in the 2000 update. The Council considers that this budget, the main measures of which are indirect and direct tax cuts and substantial increases in current and capital expenditure, is pro-cyclical. The Council finds that it will give a boost to demand of at least 0.5% of GDP and that its possible supply effects are likely to be small in the short term, thereby aggravating overheating and inflationary pressures and widening the positive output gap.

In particular, the strategy of inducing labour force increases through an alleviation of the direct tax burden, which was recommended in the 2000 broad economic policy guidelines (BEPG) with respect to the labour market, may have become less effective than in the past because it took place in the context of an expansionary budgetary policy, and the tightness of the labour market could well hamper further attempts at encouraging wage moderation with direct tax cuts. Further, while indirect tax cuts have a once-and-for-all effect on the price level, they

probably have no lasting effects on the rate of inflation but clearly further stimulate demand.

Given that the monetary policy is now set for the euro area as a whole and no longer available as an instrument at national level, other policies, including budgetary policies, must be used more actively. Against this background, the Council finds that the planned contribution of fiscal policy to the macroeconomic policy mix in Ireland is inappropriate. The Council recalls that it has repeatedly urged the Irish authorities, most recently in its 2000 broad guidelines of the economic policies, to ensure economic stability by means of fiscal policy. The Council regrets that this advice was not reflected in the budget for 2001, despite developments in the course of 2000 indicating an increasing extent of overheating. The Council considers that Irish fiscal policy in 2001 is not consistent with the broad guidelines of the economic policies as regards budgetary policy. The Council has therefore decided, together with this opinion, to make a recommendation under Article 99(4) of the Treaty establishing the European Community with a view to ending this inconsistency.

The Council welcomes the fact that the 2000 update addresses the issue of structural reform. In particular, the Council notes with satisfaction the progress made in the area of long-term sustainability of the public finances with the creation of a National Pensions Reserve Fund, which at end-2000 already amounts to about 6.3% of GDP. The Council also welcomes continued efforts to enhance the quality of public finances through reform of the tax/benefit system and an increased focus on capital expenditure in response to Ireland's infrastructural needs.

8. Italy

8.1. Recent developments

The general government deficit (net of UMTS receipts) was 1.5 % of GDP in 2000, down from 1.8 % in 1999. Including receipts from UMTS licences, the deficit ratio was 0.3 % of GDP. The improvement in the actual budgetary position resulted essentially from lower interest payments, and the outcome matched the original budgetary projection. However, it was obtained with a significantly higher annual rate of GDP growth than originally projected (2.9 % against 2.2 %).

The crucial fiscal policy measure, affecting the budget in 2000 were tax cuts introduced in September 2000 affecting whole year payments. The tax cuts were planned to be matched with higher-than-previously-expected tax receipts, and thus the intention was to stabilise the tax burden. However, according to final national accounts data, the tax burden (national definition) fell to 42.4 % of GDP from 43.0 % in 1999, supporting the conclusion that projected higher trend revenues from a more effective tax collection and the 'surfacing' of the tax base (from the black to the official economy) may not have fully materialised. On the expenditure side the better-than-expected outcome primarily reflects lower social transfers. More specifically, pension expenditures increased significantly less than planned, partly thanks to tighter eligibility conditions resulting from the implementation of previous reforms. On the other hand, the increase in government final consumption expenditure turned out higher than planned, mainly due to higher outlays for health care.

When cyclically-adjusted, the general government deficit in 2000 did not improve. In particular, the cyclically-adjusted primary surplus (excluding the proceeds of UMTS auctions) declined to 5.1 % of GDP from 5.5 % in 1999, indicating a mildly expansionary fiscal stance. Thus, the observed improvement in the budgetary position does not signal an adjustment in the underlying position and appears to be the result of the favourable economic cycle.

The general government debt ratio continued to decline in 2000, reaching 110.2 % of GDP, 4.3 percentage points lower than in 1999. The result was mainly obtained thanks to sustained nominal GDP growth in 2000 and the proceeds of the UMTS auctions.

The 2001 budget projects a general government deficit of 0.8 % of GDP. Underlying the aggregate budgetary projection is a series of measures operating both on the expenditure and revenue side of the budget. The budget introduces further significant tax and social security contribution cuts which, like the tax cuts implemented in 2000, are expected to be backed by higher trend tax receipts supplemented by expenditure-curbing measures.

Based on the results of the latest budgetary control exercise (April), the projection for the general government deficit in 2001 was revised to 1.0 % of GDP. This essentially reflects a downward revision of the forecast for GDP growth in 2001 from 2.9 % to 2.5 %.

More detailed information for the first quarter of the year points to waning tax revenues and there are indications that expenditure, especially for health care, displays considerably more dynamism than expected. Taking into account the risks that exist on the expenditure side and the uncertainties surrounding tax receipts, there is a concrete possibility of a very significant slippage from the revised general government deficit projection of 1.0 % of GDP in 2001.

The spring 2001 economic forecast of the Commission projects the general government deficit to be 1.3 % in 2001 and 1.0 % in 2002. While there are no major differences in the macroeconomic scenario or on the expenditure side, the Commission's forecast assumes a less optimistic increase in tax revenues and lower proceeds from the sale of State-owned real estate: this would result in a primary surplus of less than 5 % of GDP. This forecast, however, assumes that expenditure is tightly controlled during the year. The cyclically-adjusted primary surplus is projected to fall

Table 44

Composition and balances of general government, Italy (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 1.8	- 0.3	- 1.3	- 1.0
<i>Total receipts</i>	47.1	46.1	45.5	44.9
Of which: taxes	30.3	29.7	29.2	28.8
social contributions	12.8	12.7	12.6	12.5
<i>Total expenditure (**)</i>	48.9	46.5	46.8	45.9
Of which: final consumption expend.	18.1	18.0	17.7	17.5
social transfers other than in kind	17.2	16.7	16.5	16.2
interest expenditure	7.2	7.0	6.6	6.2
gross fixed capital formation	2.5	2.4	2.3	2.3
Primary balance (**)	5.0	6.1	4.8	4.7
<i>Pm Tax burden</i>	43.3	42.7	42.1	41.6
Government debt	114.5	110.2	105.7	102.6
<i>Pm Cyclically-adjusted balance</i>	- 1.2	- 1.3	- 1.3	- 1.2
<i>Pm Cyclically-adjusted primary balance</i>	5.5	5.1	4.9	4.6

(*) Spring 2001 economic forecasts.

(**) Data for 2000 include UMTS receipts of 1.2% of GDP.

Source: Commission services.

again slightly. This does not seem warranted by a situation in which public debt remains above 100% of GDP and inflation continues to exceed the euro-area average.

8.2. Medium-term prospects and policy issues

According to the December 2000 update of the stability programme covering the period 2000–04, Italy is set to continue its budgetary consolidation policy based on keeping the primary surplus at a high level and on reducing current expenditure as a percentage of GDP, in parallel with some easing of the still high tax burden and an expansion of public investment.

As a result of this strategy, the general government's budgetary position is projected to improve steadily until 2004. Conditional on the somewhat optimistic macroeconomic scenario presented in the updated stability programme in which GDP growth is significantly above trend, the deficit is expected to turn into a balance in 2003 and become a surplus thereafter.

The crucial element of the whole fiscal framework is high primary surpluses. With further large savings in interest payments unlikely to come through lower interest rates,

the consolidation process hinges largely on the ability to reduce current non-interest expenditure. In this respect, recent experience points to a tendency to overshoot forecasts of health care expenditure where responsibilities are spread across different levels of government. In this context, the 2001 budget includes a provision strengthening the Domestic Stability Pact, an institutional arrangement between different levels of government introduced in 1999 aimed at keeping the budgetary position of the local administrations under control. However, the effectiveness of the new arrangement remains to be tested, especially regarding the control of health care expenditure.

To reconcile the overall aim of continuing the budgetary consolidation efforts with the objective of reducing the tax burden, the timing and content of tax and social security contribution cuts is of crucial importance. The latest tax cuts introduced in the 2001 budget are designed to secure the programme's growth objectives through positive demand and supply-side effects. However, some uncertainty remains as to whether the expected higher trend of *ex ante* tax receipts, which was to create room for tax and contributions cuts, are fully structural and hence compatible with the planned consolidation path.

The December 2000 update of the stability programme stressed the intention to increase infrastructure invest-

Table 45

Key figures of Italy's stability programme, 2001–04

	2001	2002	2003	2004
Real GDP growth (annual % change)	2.9	3.1	3.1	3.1
Gen. gov. budget balance (% of GDP)	- 0.8	- 0.5	0.0	0.3
Primary surplus (% of GDP)	5.3	5.5	5.6	5.5
Government debt (% of GDP)	106.6	103.5	99.6	94.9

ment as a percentage of GDP from 2001. The overall programme of new investment is quantified at over EUR 41 billion to be implemented over several years. A considerable part of that amount is expected to be raised by the private sector through project financing, and hence would not impact immediately on the budget. So far, the experience with this new approach is limited to a few, minor projects, and hence no full assessment about its effectiveness is possible.

As regards the overall sustainability of public finance with a view to the ageing population, Italy has implemented two reforms since 1995, leading to a stabilisation of the high ratio of pension expenditure to GDP. However, the budgetary strategy does not yet contain a comprehensive approach on how to address the challenges arising from demographic developments, especially concerning the set of interrelated issues such as pensions, labour participation, the fiscal burden on labour and health care. This is of particular importance given the unfavourable demographic trends and the still high level of debt-to-GDP ratio.

8.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Italy on budgetary policy:

- achieve a general government deficit of 0.8 % of GDP in 2001 as targeted in the 2000 updated stability programme; ensure when preparing the budget for 2002 the respect of the steady path of deficit reduction in order to achieve the medium-term objective of a balanced budget in 2003, by securing primary surpluses at the high levels projected in the programme;

- match any loss of revenue stemming from additional reductions of taxes and social security contributions with offsetting expenditure cuts; ensure in the formulation of the budget for 2002 a more comprehensive rationalisation of public spending, with a view to improving the supply-side conditions of the economy;
- strengthen the domestic stability pact, translating in a more rigorous way its provisions for the decentralised administrations, in order to ensure already in 2001 more effective control of current primary expenditure, in particular on health care; and
- take every opportunity to improve budgetary targets and accelerate the reduction of the high government debt ratio, also in order to prepare for long-term budgetary challenges from population ageing; also with a view to securing the long-term sustainability of government finances, proceed as scheduled to the reassessment of the parameters of the pension system in 2001 including further steps to promote the expansion of supplementary privately-funded pension schemes.

Council opinion of 12 February 2001 on the updated stability programme of Italy, 2002–04

Official Journal C 077, 9.3.2001 p. 3

On 12 February 2001 the Council examined Italy's updated stability programme, which covers the period 2000–04. The Council welcomes the revision of the objectives for the general government budget balance in 2000 and beyond, as recommended in the broad economic policy guidelines (BEPG). The Council notes favourably that the reduction of the debt ratio to below 100 % of GDP in 2003 is confirmed in spite of the higher

target in 2000 compared to the first update of the stability programme. However, considering the still high debt ratio and the future challenges to the long-term sustainability of public finances from an ageing population, the Council considers that Italy's revised fiscal targets could have been more ambitious.

The Council notes Italy's intention to continue the budgetary strategy outlined in the initial programme, which aims at keeping the primary surplus at a high level and reducing current expenditure as a percentage of GDP, in parallel with some easing of the tax burden. Higher than expected tax receipts are assumed to have provided backing for the tax and social security contribution cuts outlined in the programme. The primary surplus is expected to increase as a percentage of GDP, averaging 5.5% of GDP over the period. The underlying budgetary position over the programme period provides a safety margin against breaching the 3% of GDP deficit threshold in normal cyclical fluctuations, implying that Italy would continue to satisfy the requirements of the Stability and Growth Pact up to 2004.

The Council observes that there are risks that the budgetary framework outlined in the updated stability programme may not materialise as planned. The macroeconomic projections, which assume a significant acceleration in GDP growth from an annual rate of 1.4% in 1999 to over 3% in 2002–04, may be optimistic also in the light of recent developments in the external environment; on the other hand, the assumptions on interest rates are rather conservative in the light of recent developments in financial markets.

The available data do not allow at present a conclusive appraisal of the implementation of the budget in 2000. However, if the general government deficit were higher than the new objective of 1.3% of GDP, Italy would not have fully complied with last year's Council opinion and with the recommendations of the June 2000 BEPG. As for 2001 and beyond, there are concerns that the increase in planned revenues, which has provided backing for the tax and social security contribution cuts, may not turn out to be fully structural and that the expenditure-reduc-

ing measures introduced with the financial law for 2001 could not be fully effective.

In the light of the considerations made above, the Council urges Italy firmly to commit itself to respect the programme's objectives. Primary surpluses should remain at the high levels projected in the programme. Any deviation from the planned deficit and primary surplus outcomes should be promptly addressed and corrective measures taken. This should be ensured through a tight control of current primary expenditure. The Council encourages Italy to accompany the reduction in the ratio of current primary expenditure to GDP with a more effective and more comprehensive rationalisation of public spending, aimed at improving the supply-side conditions of the economy.

Moreover, even though Italy fulfils the requirements of the Stability and Growth Pact, it should take every opportunity to improve future budgetary targets and speed up the consolidation process, in order to accelerate the reduction of the government debt ratio. The Council recommends that future decisions to reduce the tax and social security contributions burden should be matched by offsetting expenditure cuts.

In line with both its opinion ⁽¹⁾ on the original stability programme and its opinion on the first updated programme ⁽²⁾, the Council notes that Italy has not taken further steps to address the medium-term structural challenges to public finances from pension and other age-related budgetary expenditures. The reassessment of the parameters of the pension system scheduled to take place later this year should not be postponed. The Council urges Italy to address this issue with determination. Although the financial law for 2001 includes a few isolated measures on pensions, the Council advocates a more comprehensive approach. The reassessment of the pension system should take place within the framework of a broader overhaul of the Italian welfare system.

⁽¹⁾ OJ C 68, 11.3.1999, p. 1.

⁽²⁾ OJ C 98, 6.4.2000, p. 2.

9. Luxembourg

9.1. Recent developments

Strong growth in the Luxembourg economy in recent years (real GDP increased by 7.5% in 1999 and by 8.5% in 2000) resulted in extremely buoyant government revenues: indirect taxes have been growing by more than 10% a year since 1997 and they increased by 18.8% in 2000. Revenues from direct taxes rose by 8.1% in 2000 and social security contributions by 10.4%, reflecting a fast increase in employment as well as accelerating wages. However, nominal GDP growth was so pronounced that, despite these high rates of increase, only indirect taxes rose in percentage of GDP, while direct taxes declined as well as social contributions. In total, general government receipts decreased as a share of GDP from 47.3% to 46.5%.

Expenditure also increased by non-negligible, albeit less impressive, margins. As a whole, total government expenditure increased by 9.2%, but its share in GDP declined from 42.6% to 41.2%.

As a result of rapidly increasing revenues, the general government surplus rose from 4.7% of GDP in 1999 to 5.3% in 2000, while in cyclically-adjusted terms it declined from 5.2% to 4.3%. The primary surplus declined too in cyclically adjusted terms, indicating an expansionary fiscal stance. Public debt, which was already the lowest in the EU, decreased slightly from 6.0% of GDP in 1999 to 5.3%.

A major tax reform was decided in 2000: it foresees a two step reduction in income tax, in 2001 and 2002, while company tax should be reduced in 2002. *Ex ante* cuts in income tax should amount to about 1.2% of GDP in 2001 and 0.9% in 2002. As a result of these tax cuts, but also because of decelerating GDP growth, the general government surplus is expected to decrease significantly over the coming years, declining from 5.3% of GDP in 2000 to about 4% in 2001 and 3% in 2002 according to the Commission services forecasts. In cyclically-adjusted terms,

the decline in the surplus would be slightly smaller, as real GDP growth is forecast to decelerate in 2001 and 2002 to between 5 and 6%. The 2000 update of the stability programme of Luxembourg, projected a government surplus of 2.6% of GDP in 2001 and 2.5% in 2002.

The appropriateness of such an expansionary fiscal impulse for a fast-growing economy that is already at full employment and is recording a relatively rapid increase in consumer prices can be questioned. However, potential overheating effects are in practice considerably limited by the extreme openness of the economy. Moreover, the tax burden had significantly increased in 1999, from 42.3% of GDP in 1998 to 46.1%, and hardly decreased, by only 0.2 percentage points of GDP, in 2000; cuts in income tax planned for 2001 and 2002 would only bring it back in 2002 to its 1998 level (see Table 46). Furthermore, the large, recurrent and increasing surpluses and the negligible public debt clearly created the scope for a tax alleviation without jeopardising the very sound public finance position of the Grand-Duchy.

9.2. Medium-term prospects and policy issues

Budgetary policy in Luxembourg is based on three major principles enshrined in the coalition agreement concluded in 1999, namely that the general government balance should continue to be in net lending position, that the State budgetary balance should remain in balance and that the State current expenditure should increase less than the overall budget. These requirements have been easily met until now and should continue being fulfilled in the near future as a result of the expected strong growth of the economy.

The 2000 update to the stability programme points out that special attention will be devoted to support some specific policy objectives, especially the development in the information society and research activities, peace and

Table 46

Revenues and expenditure of general government, Luxembourg (*)

(% of GDP)

	1999	2000	2001	2002
Government balance	+ 4.7	+ 5.3	+ 4.0	+ 3.0
<i>Total receipts</i>	47.3	46.5	44.5	42.6
Of which: taxes	31.0	31.0	29.5	28.2
social contributions	11.9	11.6	11.4	11.2
<i>Total expenditure</i>	42.6	41.2	40.5	39.7
Of which: collective consumption	17.3	16.6	16.3	16.1
social transfers (in kind & others)	25.0	23.7	23.1	22.6
interest payments	0.3	0.3	0.3	0.3
gross fixed capital formation	4.3	4.4	4.6	4.6
Primary balance	+ 5.0	+ 5.6	+ 4.3	+ 3.2
<i>Pm Tax burden</i>	46.1	45.9	44.1	42.5
Government debt	6.0	5.3	5.1	4.9
<i>Pm Cyclically-adjusted balance</i>	+ 5.2	+ 4.3	+ 3.2	+ 2.4
<i>Pm Cyclically-adjusted primary balance</i>	+ 5.5	+ 4.6	+ 3.4	+ 2.6

(*) Spring 2001 economic forecasts.

Source: Commission services.

security, internal security, food safety as well as expenditure for development aid and humanitarian action. Special attention is devoted to investment in infrastructure: gross fixed capital formation by the State should increase by more than 20% in 2001 after 14% in 2000.

Public finances in Luxembourg are in good health, even if public expenditure has been growing fast throughout the 1990s. Part of this increase may be explained by impressive public investment plans, but current expenditure also rose strongly and is expected to continue to rise fast. Due to high real GDP growth, strong increases in expenditure should not prevent large budgetary surpluses being achieved in coming years. However, such a rapid increase in spending, which seems easily sustainable under current macroeconomic circumstances might turn into a matter of concern, should economic growth unexpectedly weaken.

The recurrent surpluses recorded by Luxembourg have mostly occurred in social security, where they have been used to build up the reserves: as a result, 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, according to the 2000 update to the stability programme, they should increase to about 24.3% in 2003. The Luxembourg authorities have commissioned an in-depth study

on the effects of ageing population on the pensions system ⁽¹⁾.

The study distinguishes two macroeconomic and demographic scenarios for the coming decades. In the first one, real GDP growth remains roughly as strong in the future as it was in the recent past, amounting to 4% a year on average. In the second one, it gradually slows down to less than 2% a year in the period 2030–40, as it is hampered by some exogenous reason (e.g. shortages in the labour supply deriving from a halt in the rise in the number of frontier workers).

The first scenario shows the increase in the reserves of the pension regime is sufficient to finance pension expenditure in coming decades. However, from 2025, surpluses in the regime only come from revenues of accumulated assets, as expenditure begins to exceed contributions. The level of the reserves starts then to decrease but remains positive. In this scenario, the current level of pensions is thus sustainable with the current level of contributions. Pensions might even be slightly raised and/or contributions

⁽¹⁾ Bureau international du Travail, 'Evaluation actuarielle et financière du régime général d'assurance pension du Grand-duché de Luxembourg', Genève, 2001.

Table 47

Key figures of the 2000 update to the stability programme of Luxembourg, 1999–2003

(% of GDP unless otherwise stated)

	1999	2000	2001	2002	2003
Real GDP growth (annual % change)	7.5	8.3	5.2	5.3	5.8
General government balance	+ 4.4	+ 3.0	+ 2.6	+ 2.5	+ 2.5

Source: 2000 update to the stability programme of Luxembourg.

slightly decreased (by about 4% with respect to their current levels). In the second scenario, on the contrary, pensions expenditure exceeds contributions from 2012. The reserves are then gradually absorbed and fall to zero around 2028. The moment when the regime becomes a net borrower might be postponed up to 2050 only if the contributions were immediately raised by about one third and no increase in the pensions level is possible. The study recommends several reforms, like raising the minimum age of retirement, limiting pre-retirement options and reducing the use of invalidity schemes by people aged over 50.

9.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Luxembourg on budgetary policy:

- tighten budgetary conditions when executing the budget in 2001 and when preparing the budget for 2002 in order to counter inflationary pressures should they persist; and
- monitor closely the increase in government expenditures in order to safeguard the balance of public finances should real GDP growth falter as well as their sustainability in the long term taking account of the ageing population.

Council opinion of 12 March 2001 on the updated stability programme of **Luxembourg**, 1999–2003

Official Journal C 109, 10.4.2001, p. 1

On 12 March 2001 the Council examined the 2000 update of the stability programme of Luxembourg which covers

the period 2000–03. The Council notes that continuing commitment to sound economic policies, in particular budgetary policies, has entailed a remarkable economic performance in Luxembourg: real GDP growth reached 7.5% in 1999 and an estimated 8.3% in 2000.

The Council notes with satisfaction that the budgetary objectives set in the 1999 update have been exceeded, as the general government surplus reached 4.4% of GDP in 1999 and likely more than 3% of GDP in 2000. The Council considers that the updated stability programme is consistent with the broad economic policy guidelines.

The Council notes that the updated programme takes into account the effects of the ambitious reduction in income tax planned for 2001 and 2002; as a result of these tax cuts, the general government surplus is projected to come down to about 2.5% of GDP in the years 2001–03. While the very healthy public finance situation in Luxembourg clearly allows a significant reduction in the tax burden, the Council, considering the fiscal impulse given by the tax reform to a fast-growing economy where wage increases are already accelerating, encourages the government to be ready to tighten the stance of fiscal policy if inflationary risks become more evident.

The Council notes that government expenditures are still increasing at a rapid pace although their ratio to GDP is projected to decline by two percentage points during the period to 2003; therefore, the Council recommends to the Luxembourg Government to monitor closely and be ready to limit expenditure increases which might become a source of vulnerability for the public finances should real GDP growth falter.

However, the Council commends the policies aimed at strengthening economic efficiency, particularly increased public investment. It notes the measures aimed at strengthening the reserve funds in the social security sector, particularly for pension provision. More information on the

implications of the cost of the ageing population should be provided in the next update. The Council also notes the recent ILO study on pensions commissioned by the government. The Council notes that, although the government debt is particularly low in Luxembourg, more information concerning developments in this area should also be provided.

The Council considers that the underlying financial position of the general government corresponding to the projected surpluses over the period of the programme to 2003 provides an adequate safety margin against breaching the 3% of GDP deficit threshold, thus fully complying with the Stability and Growth Pact requirements.

10. The Netherlands

10.1. Recent developments

The general government surplus rose from 1.0% of GDP in 1999 to 1.3% in 2000 (netting out revenues of 0.7% of GDP from the auction of UMTS licences). This improvement was due to strong real GDP growth of 3.9% in 2000.

With only a limited alleviation of the tax burden being implemented, government revenues kept rising rapidly, by 7%. All categories of revenues remained roughly constant as a share of GDP and total government revenues amounting to 47.4% of GDP as against 47.5% in 1999.

This contrasts with developments on the expenditure side. Interest payments as a share of GDP decreased from 4.4% in 1999 to 4.0% in 2000, mainly due to the rapid decrease in the debt ratio in recent years. However, public consumption increased by more than 6%, only slightly below nominal GDP growth, while public investment rose by nearly 14%. As a whole, current expenditure declined as a share of GDP from 42.7% to 42%; however, it should be noted that more than half of this decrease resulted from the accounting treatment of UMTS revenues. When cyclically-adjusted, the general government balance in 2000 remained unchanged at 0.7% of GDP, while the government primary surplus to GDP ratio declined slightly. Due to this surplus and to strong nominal and real GDP growth, the public debt fell by more than 7 percentage points of GDP, from 63.2% in 1999 to 56.1% in 2000.

On 1 January 2001, a major fiscal reform decided in the 1998 coalition agreement was implemented, the main features of which are an increase in environmental levies and in the standard VAT rate (from 17.5% to 19%), a substantial decrease in households income taxation and a reform of the taxation of wealth income. The rise in indirect taxes should generate about 0.7% of GDP of additional revenues while the decrease in income taxation should cost *ex ante* about 1.5% of GDP. The total *ex ante* cost of the reform for public finance should thus represent

about 0.75% of GDP in 2001. On the expenditure side, lower than projected interest payments and social security expenditure as well as a faster than expected rise in the GDP deflator ⁽¹⁾, are creating room for an increase in expenditure in other domains. Therefore, the government decided upon additional expenditure for 2001 amounting to EUR 3 billion (0.7% of GDP essentially in health care, education and public order).

Mainly as a result of these tax cuts, but also because of slower (though still rather buoyant) output growth, the general government surplus should decrease, according to the spring Commission forecasts, from 2% of GDP in 2000 to about 0.8% of GDP in 2001 (0.7% according to the 2001 budget, presented to Parliament in September 2000 and 0.5% of GDP in the latest official forecast presented in May 2001).

In cyclically-adjusted terms, the surplus would decline from 0.7% of GDP in 2000 (excluding the UMTS receipts) to 0.2% in 2001, thus leading to an expansionary stance of fiscal policy. This development should not prevent the debt-to-GDP ratio from continuing to decrease rapidly.

One of the objectives of the tax reform is to reduce the tax burden on labour, especially for the lower paid, in order to increase the difference between social benefits and the net income from labour and to enhance the incentive for the unemployed and inactive to work. As registered unemployment is at its lowest level since the mid-1970s and employment growth has been strong in recent years, increasing the supply of labour has become a major challenge for the Dutch economy. However, a large pool of potentially active people exists, especially among the recipients of disability benefits, the number of which is now five times higher than registered unemployment.

⁽¹⁾ Under the current coalition agreement, expenditure by the State, the social security and the health care sector is allowed to grow by 1.5% a year in real terms. These real ceilings are translated in nominal terms by indexing them with the GDP deflator.

Table 48

Revenues and expenditure of general government, Netherlands (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	+ 1.0	+ 2.0	+ 0.8	+ 1.4
<i>Total receipts</i>	47.5	47.4	45.3	45.0
Of which: taxes	24.4	24.2	24.1	24.1
social contributions	17.1	17.1	15.3	15.1
<i>Total expenditure</i>	46.5	45.4	44.5	43.6
Of which: collective consumption	10.8	10.7	10.6	10.5
social transfers (in kind & others)	24.5	23.9	23.2	23.0
interest payments	4.4	4.0	3.3	3.0
gross fixed capital formation	3.0	3.2	3.2	3.2
Primary balance	+ 5.4	+ 6.0	+ 4.1	+ 4.4
<i>Pm Tax burden</i>	41.7	41.6	39.6	39.4
Government debt	63.2	56.3	52.1	47.8
<i>Pm Cyclically-adjusted balance</i>	+ 0.7	+ 0.7	+ 0.2	+ 0.9
<i>Pm Cyclically-adjusted primary balance</i>	+ 5.1	+ 4.7	+ 3.5	+ 3.9

(*) Spring 2001 economic forecasts.

(**) Data for 2001 include UMTS receipts of 0.7 % of GDP.

Source: Commission services.

10.2. Medium-term prospects and policy issues

The major economic policy challenge is the rising inflationary tensions in the economy. Wages and prices have accelerated in recent years and are now clearly increasing faster than in neighbouring countries. From this point of view, though commendable in its principle, the tax reform is not ideally timed: in particular, the rise in the VAT rate had a substantial impact on consumer prices, which have been rising at an annual rate above 4.5 % in the first quarter of this year. However, it is possible that the considerable boost to households' disposable income resulting from the tax cuts will encourage a renewal of wage moderation but this is not warranted.

There is a specific issue relating to the preparation of the 2002 budgets. The budgetary framework used in the Netherlands sets down rules on how to allocate higher than planned revenues which have materialised over the 1998–2002 cabinet period. To this end there is a potential room for additional tax cuts of 0.8 % of GDP in next

year's budget ⁽¹⁾. In this context, the BEPG makes it clear (see Section 10.3) that the 2002 budget should help limit inflationary pressure and improve on the 2001 budgetary position.

Since a general election will take place in 2002, the 2000 update of the Dutch stability programme does not contain much information about the medium-term budgetary strategy, which will be determined by the government that will enter office after the election. For the period 2002–04, the update presents different technical projections depending on GDP growth (2 % or 3.25 % per year on average) and on the use of budgetary margins. For each of these two scenarios, the additional budgetary room

⁽¹⁾ The Dutch budgetary framework specifies that 50 % of higher than planned revenues can be allocated to tax cuts while 50 % is allocated to reducing debt. The latest estimate on higher than planned revenues over the cabinet period are EUR 9.4 billion, leaving EUR 4.7 billion available for tax cuts. About EUR 1.4 billion of net tax cuts have been implemented leaving a room of EUR 3.4 billion for next year's budget (last budget of the current coalition).

Table 49

Key figures of the 2000 update to the Dutch stability programme, 1999–2004

(% of GDP unless otherwise stated)

	1999	2000	2001	2002	2003	2004
Real GDP growth (annual % change)						
— cautious scenario (2002–04)	3.9	4.5	4	2	2	2
— favourable scenario (2002–04)				3.75	3.75	3.75
General government balance						
— cautious scenario (2002–04)	+ 1.0	+ 1.7	+ 0.7			
priority to debt reduction				+ 0.3	+ 0.3	+ 0.6
further tax cuts				+ 0.3	+ 0.3	+ 0.3
— favourable scenario (2002–04)	+ 1.0	+ 1.7	+ 0.7			
priority to debt reduction		(*)		+ 0.6	+ 1.1	+ 1.9
further tax cuts				+ 0.6	+ 0.6	+ 0.6
General government gross debt						
— cautious scenario (2002–04)	62.9	56.6	52.3	50.3	48.7	46.7
— favourable scenario (2002–04)				49.5	46.5	42.2

(*) UMTS receipts excluded (0.7 % of GDP).

NB: The 2000 update to the Dutch stability programme, submitted to the Commission on 19 September 2000, is based on the autumn 2000 forecasts of the Centraal Planbureau.

Source: 2000 update to the stability programme of the Netherlands.

for manoeuvre is used for further tax cuts (the surplus being assumed to remain constant) or for increasing the surplus and accelerating the reduction in the debt. In all cases, the government debt ratio falls below 50 % in 2002 or 2003 (see Table 2).

The updated stability programme puts the emphasis on structural improvement in the economy by the re-orientation of government spending towards long-term objectives: reduced spending on interest payments and unemployment benefits should create, in 2001 and mostly in 2002, the budgetary margin for additional expenditure in other domains, especially in education, health care, police and justice as well as for specific employment policies (as foreseen in the coalition agreement and in subsequent decisions by the government).

In a longer perspective, budgetary policy will have to face the financial consequences of the ageing population, although the situation of the Netherlands compares favourably with most other Member States, the Dutch pension system being widely funded. According to a recent study by the Centraal Planbureau⁽¹⁾, on the basis of unchanged policies, the general government would remain

in surplus until 2016 and government debt would reach a minimum of about 28 % of GDP around 2020. Then, public deficits and debt would begin to increase together with pensions and health care expenditure, and the situation would become clearly unsustainable in the second half of the century. However, assuming a limited increase in the tax burden at the beginning of the period (e.g. a rise in indirect taxes by 0.7 percentage point of GDP in 2001), the reduction in the government debt (which would be nearly totally redeemed around 2030) and in interest payments allowed by larger surpluses would be sufficient to counterbalance the increasing cost of ageing and to keep the government finance on a sustainable path.

10.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to the Netherlands on budgetary policy:

- maintain strict control of government expenditure despite lower expected economic growth, in order to limit the reduction in the government surplus in 2001 (projected at 0.7 % of GDP in the 2000 update of the stability programme) and to contain inflationary pressures;

⁽¹⁾ C. van Ewijk and Alii (2000).

- prepare a budget for 2002 the stance of which is firmly oriented at limiting inflationary pressures, thus improving the budgetary outcome as against 2001; to this end, the budgetary margins as defined in the 2000 update of the stability programme should be allocated taking into consideration cyclical conditions as a matter of priority and ensure a clear improvement in the budgetary position; and
- with a view to securing long-term sustainability of public finances taking into account the ageing population, use available budgetary margins for accelerated debt reduction as a matter of priority from 2002.

Council opinion of 27 November 2000 on the updated stability programme of the Netherlands for the period 1999–2004

Official Journal C 376, 29.12.2000, p. 1

On 27 November 2000, the Council examined the Netherlands' updated stability programme, which covers the period 1999–2004. The Council welcomes the presentation of the update of the stability programme shortly after the presentation of the budget, as was recommended in the Council opinion of 31 January 2000 on the updated stability programme of the Netherlands, 1999 to 2002 ⁽¹⁾, so that it reflects the most recent economic data and forecasts.

Macroeconomic developments proved significantly better in the Netherlands than was expected in the 1999 updated stability programme. As a result, the general government balance in both 1999 and 2000 improved significantly to a surplus of 1 % of GDP in both years as against a deficit of 0.6 % of GDP projected in the 1999 update. The general government debt ratio to GDP is expected to fall to 56.6 % in 2000, below the 60 % reference value. Real GDP growth will continue to be dynamic in 2001, but, as a result of the fiscal reform to be implemented in that year, the government surplus is estimated to be reduced to 0.7 % of GDP; however, the government debt ratio should be further reduced to 52.3 % of GDP. The Council notes that the period 2002 to 2004 incorporates two years, 2003 and 2004, which are beyond the term of the present government and that the estimates for the period 2002 to 2004 are technical projections, within two macroeconomic

scenarios, under the assumption of unchanged policies from 2002 onwards.

The Council considers that, taking into account current strong economic prospects for the Dutch economy in the next two years, the favourable scenario provides an appropriate basis for the assessment of the budgetary position in the medium term. The Council considers that the programme fulfils the requirements of the Stability and Growth Pact.

The Council welcomes the fiscal reform which will be implemented in 2001 and which aims at reducing the tax burden and at fostering labour supply by reducing the replacement rate. However, the structural deficit deteriorates in 2001. The Council notes that inflationary pressures are emerging in the present phase of strong economic growth; it considers that such pressures might strengthen next year and in 2002, under the impact of reductions in personal income taxes and of possible further tax alleviation in 2002. In view of these risks, the Council encourages the Dutch Government to ensure that the stance of fiscal policy will be firmly oriented to limiting inflationary pressures; to this end, it urges the government to allocate budgetary margins taking due consideration of cyclical conditions, in particular in 2002, and to maintain strict control of government expenditure. The Council recommends that these considerations should also prevail, taking account of macroeconomic developments, when the Dutch Government shapes the budgetary policies in 2003 and 2004. Given the buoyant increase in disposable income in 2001, the Council considers that a moderate outcome of the current wage negotiations will be crucial in this respect.

The Council commends the emphasis given in the updated stability programme to structural improvement in the economy by the reorientation of government spending towards longer-term objectives in priority areas, such as education, health care and investments in infrastructures; it notes with satisfaction that such a shift in spending is implemented without prejudice to the respect of the ceilings in real terms imposed on expenditure. The Council welcomes the consideration given in the updated stability programme to long-term sustainability of public finances in view of the impact of the ageing population. It considers that this analysis would justify using much of the margin likely to become available from 2002 for accelerated debt reduction. The Council considers that the 2000 update of the stability programme is consistent with the broad economic policy guidelines.

⁽¹⁾ OJ C 60, 2.3.2000, p. 1.

11. Austria

11.1. Recent developments

The general government deficit in 2000 fell by 1 percentage point to 1.1% of GDP, which compares with a deficit target of 1.4%. However, fiscal gains stemming from strong output growth contributed significantly to this improvement. In fact, real GDP growth in 2000 reached 3.2% as against a projected 2.8% in the March 2000 stability programme. Moreover, one-off revenues lowered the deficit by an estimated 0.7% of GDP (proceeds from the auctioning of UMTS licences amounted to 0.4% of GDP, with sales of real estate accounting for the remainder).

When cyclically adjusted and excluding the one-off revenues, the general government deficit fell by 0.1 percentage points, while the government primary surplus rose by 0.2 percentage points suggesting a mildly restrictive fiscal stance. Such an improvement in government finances appears quite moderate in light of the fact that Austria has not yet reached a medium-term budgetary position of close to balance or in surplus as required by the Stability and Growth Pact. However, it should be remembered that the budget year 2000 was difficult for two reasons. First, returning to the path of fiscal consolidation was challenging in light of a general tax reform, the cost of which is estimated at some EUR 2.3 billion or 1.2% of GDP, 0.9 percentage points of which fell due in 2000. The reform was adopted by the previous government without provisions to meet its budgetary cost. Second, due to delays in forming a new government after general elections in October 1999, the 'effective' budgetary year 2000 was much shorter than usual (*ex ante*, the budget plan for 2000 applied to only seven months), thus limiting the government's room of manoeuvre.

As a result of the tax reform total government revenue as a percentage of GDP declined by 0.9 percentage points to 50.5%, thereby lowering the tax burden by the same order of magnitude. Current government expenditure net of interest payments fell by 0.7 percentage points to 42.8%

of GDP. This was mainly the result of a decline in government consumption of 0.4 percentage points of GDP (split in roughly equal parts between compensations for employees and purchases for goods and services), with other current revenue accounting for the remainder. Furthermore, there was a sharp drop in capital expenditure of around 1% of GDP, chiefly because the one-off revenues mentioned above (as under ESA 95 rules, they are recorded as negative capital expenditure in the government accounts). The overall result was an increase in the general government primary surplus from 1.1% in 1999 to 1.8% of GDP in 2000.

The general government debt ratio in 2000 fell by almost 2 percentage points to 62.8% of GDP. This outcome is better than what was expected in the latest update of the stability programme. This is due mainly to additional stock-flow-adjustments (in particular, the depreciation of the yen).

In view of the very moderate decline in the government deficit between 1997 and 2000, the government stepped up its consolidation efforts in the budgets for the years 2001 and 2002. In Autumn 2000, the government agreed a two-year budget for 2001 and 2002: however, for constitutional reasons budgets need to be passed on an annual basis. Hence, the draft budget for 2002 was sent to Parliament in March 2001 and passed already in April.

The 2001 budget projects the general government deficit will decline to 0.75% of GDP. Netting out one-off revenues in 2000, this corresponds to an improvement in the deficit of around 1 percentage point. However, this improvement occurs at the expense of a sharp rise in the tax burden, which is projected to increase by almost 1 percentage point to 44.5% of GDP in 2001. Tax increases, which are estimated to raise revenues by 0.9% of GDP, are predominantly of a base-broadening type and leave tax rates unchanged.

On the expenditure side, two areas of reform aimed at containing spending are noteworthy: first, a public pen-

Table 50

Composition and balances of general government, Austria (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 2.1	- 1.1	- 0.7	0.0
<i>Total receipts</i>	51.6	50.6	51.1	50.8
Of which: taxes	28.5	27.8	28.8	29.1
social contributions	17.3	17.0	16.8	16.6
<i>Total expenditure</i>	53.7	51.8	51.7	50.8
Of which: collective consumption	7.7	7.5	7.3	7.1
social transfers	30.6	30.5	30.0	30.0
interest expenditure	3.5	3.6	3.5	3.4
gross fixed capital formation	1.8	1.7	1.6	1.6
Primary balance	1.5	2.4	2.9	3.4
<i>Pm Tax burden</i>	44.5	43.6	44.5	44.5
Government debt	64.7	62.8	61.5	59.4
<i>Pm Cyclically-adjusted balance</i>	- 1.9	- 1.5	- 0.7	0.0
<i>Pm Cyclically-adjusted Primary balance</i>	1.6	2.1	2.9	3.5

(*) Spring 2001 economic forecasts.

(**) Data for 2000 include UMTS receipts of 0.4 % of GDP.

Source: Commission services.

sion reform which seeks to raise the average retirement age, and second, a reform of public administration, the result of which should be, *inter alia*, a significant reduction in government employment. A large part of the planned overall expenditure savings stem from these two areas. However, the savings are partly counteracted by additional spending. In 2001, overall spending at federal level is projected to increase mainly due to compensation payments related to World War II and higher subsidies to the national railways company. When cyclically adjusted, both the general government balance to GDP ratio and the primary balance are expected to increase, indicating a restrictive fiscal stance.

In 2002, the general government position is planned to be in balance and the debt-to-GDP ratio should drop to 59.2 % of GDP. At the federal level, budgetary consolidation is chiefly brought about by expenditure savings (due mainly to the continued effects of the reform of the pension system and of the administrative reform). However, there are also some spending increases planned in 2002. Most notably, a significant increase in childcare allowances is expected to cost government finances by 0.2 % of GDP.

In sum, over the period 2001–02, the planned consolidation measures amount to a cumulative EUR 3.6 billion or

1.6 % of GDP, more than half of which stems from the revenue side. As regards 2001, the expected increase in revenue should be attainable even under less favourable economic conditions than currently projected. Some risk factors however stem from the expenditure side, in particular at the regional government level, where savings plans are still largely undefined, and from uncertainties regarding the administrative reform. The safety margin, however, provided by revenue side measures seems sufficiently large.

As a consequence, there is no a priori reason to assume that the general government deficit target of 0.75 % of GDP for 2001 could not be attained. Hence, unless real growth would deteriorate considerably, the danger of budgetary slippage would be rather limited. Some of the risks to anticipated savings also apply to 2002 (in particular regarding public administration) where more than 40 % of total savings is scheduled to materialise, the safety margin seems again sufficiently large to prevent jeopardising the general government budgetary target, provided that regional governments succeed in implementing the yet undefined but necessary expenditure cuts to attain the required surplus. In any case, tight expenditure restraint will be necessary to avoid any slippage from the expenditure targets.

Table 51

Key figures of the Austrian stability programme, 2000–04

	1999	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	2.8	3.5	2.8	2.7	2.3	2.5
Gen. gov. budget balance (% of GDP)	- 2.1	- 1.4 (*)	- 0.75	0.0	0.0	0.0
Primary surplus (% of GDP)	1.4	2.1	2.7	3.4	3.3	3.2
Government debt (% of GDP)	64.6	63.1	61.4	59.1	57.2	55.3

(*) UMTS receipts included (0.4 % of GDP).

Source: Austrian stability programme, December 2000 update.

11.2. Medium-term prospects and policy issues

The December 2000 update of the stability programme, covering the period 2001–04, represents a major policy shift and a profound revision of the medium-term budgetary adjustment path. Beyond the year 2002, the updated stability programme provides for general government finances to remain in balance. The debt ratio, after falling below the 60 % reference value in 2002, should decline further to 55.3 % of GDP by 2004.

The budgetary strategy of the programme relies heavily on tax measures in the initial years. Consequently, total revenues over the period 2001–04 are projected to rise on average by 3.4 % annually. The tax burden, after increasing sharply in 2001–02, is projected to decline moderately in the last two years of the programme. On the expenditure side, primary current expenditure is expected to fall from 44.9 % of GDP in 2000 to 43 % in 2004. This requires that the expenditure measures deliver the expected savings and that spending pressures in other areas, notably in the healthcare sector, can be contained.

As regards the tax burden, according to the stability programme the government plans to significantly decrease non-wage labour costs in 2003. Furthermore, the current political discussion centres on a potential tax reform in 2003, an election year, providing major tax relief. However, the budgetary margins for such a reform appear very limited if the balanced budget target should be respected. Indeed, reconciling the parallel objectives of reducing the high tax burden while upholding fiscal consolidation will prove to be one of the major economic policy challenges in the years ahead.

Providing for the long-term budgetary impact of population ageing will be another major policy challenge. Spending pressure in the public pension system is bound to increase in spite of the recent reform. Significant further reform efforts will, therefore, be necessary in the longer term if social security contribution rates are to be prevented from rising to prohibitive levels.

11.3. 2001 BEGP recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Austria on budgetary policy:

- ensure tight budgetary execution at all levels of government in both 2001 and 2002 in order to meet the targets of the December 2000 update of the stability programme of respectively, 0.75 and 0 % of GDP; realise expenditure savings as planned in the stability programme, in particular in the area of administrative reform and the social security sector;
- in the following years reduce the high tax burden, in particular on labour, without however jeopardising the budgetary consolidation objectives; this will call for additional and permanent expenditure savings; and
- in view of long-term challenges — notably resulting from population ageing — continue reforms in the pension system: in particular review already in 2001 benefit levels and reconsider access to invalidity pensions in order to increase the average retirement age; in the health care sector: take measures to counter the rising spending pressures.

Council opinion of 12 February 2001 on the updated stability programme of Austria, 2000–04

Official Journal C 077, 9.3.2001, p. 6

On 12 February 2001 the Council examined the updated stability programme for Austria which covers the period 2000–04.

The updated programme envisages a decline in the general government budget deficit from 1.4 % of GDP in 2000 to a balanced position in 2002 and the following years. The government gross debt is expected to decrease from 61.1 % of GDP to below the 60 % reference value in 2002 and further to 55.3 % in 2004. The Council notes with satisfaction that, in compliance with its recommendation on the previous update of the programme ⁽¹⁾, the current programme envisages a much faster reduction of the government deficit. Moreover, the Council acknowledges that the budgetary goals are to be achieved without resorting to the one-off measures included in the previous update.

The Council notes that, in spite of higher-than-projected growth, the estimated deficit for 2000 in the current update is not lower than projected in the previous programme once originally unbudgeted universal mobile telecommunications system (UMTS) proceeds are excluded. The Council recommended in its opinion on the previous update and in the recommendations of the June 2000 broad economic policy guidelines (BEPG) that, in the event of higher growth, a better deficit outcome should be achieved. The available data do not at present allow a conclusive appraisal of the implementation of the budget in 2000. If, however, the outcome for the general government deficit were not lower than the objective of 1.7 % of GDP, Austria would not have fully complied with last year's Council opinion and the BEPG recommendations.

The deficit projections of the programme are based on a macroeconomic scenario expecting output growth to decline from its cyclical peak of 3.5 % in 2000 to 2.3 % in 2003 and resume to 2.5 % in 2004, amounting to an annual average growth of 2.6 % over the forecast period.

The Council considers that the expected growth is feasible in view of the presently good supply and demand conditions for the Austrian economy.

The underlying budgetary position implicit in the deficit goals is in line with the requirements of the Stability and Growth Pact from 2001 onwards, i.e. they provide Austrian Government finances with a large enough safety margin to withstand a normal cyclical downturn without breaching the 3 % of GDP reference value for the deficit. The Council notes with satisfaction that, in accordance with its recommendations, the Stability and Growth Pact is now respected earlier, which is appropriate in view of the currently favourable economic conditions.

However, the Council notes that in the initial years of the programme the deficit reduction relies heavily on revenue side measures. As a consequence, the already high tax burden in Austria rises further in 2001, thereby more than offsetting the effects of the income tax reform 2000. The Council, therefore, invites the Austrian Government to consider measures which permit a significant decline in the tax burden, especially on labour, while preserving the budgetary adjustment path.

The Council considers that, to achieve a balanced budget by 2002, a strict budgetary implementation at all levels of government is crucial. This seems essential in view of uncertainties regarding the savings estimates of the public administration and pension reforms. At the level of the *Bundesländer* the expenditure cuts necessary to achieve the surpluses required by the national stability pact largely remain to be defined.

The Council acknowledges that, by 2003, more than half of the total envisaged consolidation will originate from expenditure savings. This requires that achievements in budgetary consolidation be locked in and budgetary discipline be maintained in the years 2003 and beyond. Any additional spending or further revenue reductions, including those envisaged in the programme, should be made strictly contingent on compensatory expenditure cuts. In light of the medium- and longer-term challenges to public finances, due not least to population ageing, and the need to render government finances more conducive to investment and growth, the Council considers that fiscal adjustment needs to be continued with determination.

The Council acknowledges ongoing structural reforms of the Austrian economy in line with the broad economic policy guidelines. The recent reform of early retirement is particularly welcome. However, the Council encourages the Austrian Government to continue its reform efforts in order to better achieve and safeguard sustainable government finances in the medium and longer term, namely

⁽¹⁾ OJ C 162, 10.6.2000, p. 1.

in the pension system and the health care sector. The Council invites the authorities to provide more information on this issue in the next update of the programme. The Council also encourages the Austrian Government to

continue determinedly with the reforms of product and capital markets, with a view to enhancing competition, fostering the provision of risk capital and improving entrepreneurial dynamism and corporate governance.

12. Portugal

12.1. Recent developments

The general government deficit for the year 2000 declined to an estimated 1.4% of GDP from 2.1% in the previous year, slightly below the target of 1.5%. However, the deficit outcome includes initially not budgeted proceeds from the sale of UMTS licences amounting to 0.35% of GDP. Net of these windfall receipts, the deficit exceeded the target by around a quarter of a percentage point.

This shortfall is due chiefly to lower than expected revenues, with the revenue-to-GDP ratio estimated to have risen by 1.5 percentage points, i.e. half a percentage point below initial projections. While the income from most tax categories, and in particular from personal income tax and VAT, remained in line with expectations, taxes on energy came in significantly below projections as the government decided to pass on only part of the increase in oil prices to end users. On the expenditure side, current primary expenditure increases were well above projections, but this was largely compensated by lower capital expenditure which declined by about 0.6% of GDP compared to initial plans of a rise of 0.3%. The shortfall in capital expenditure reflects to a large extent transitional problems with the new Community support framework which was approved in April 2000. The general government debt ratio was reduced by almost 1.0 percentage point in 2000 to 54.1% of GDP.

As in previous years, compliance with budgetary targets relied heavily on revenue increases from income and turnover taxes, reflecting the impact of various measures broadening tax bases and increasing the efficiency of tax collection. Tax rates, on the other hand, were not raised and even slightly reduced for some tax categories (in particular for low-income earners). These developments broadly offset the rapid rise in current primary expenditure. When adjusting for the influence of the cycle and for the proceeds from the allocation of UMTS licences, both the general government balance and the primary balance

improved only marginally by 0.1% of GDP. Under the specific circumstances of the Portuguese economy in the year 2000, this stance of budgetary policy must be regarded as insufficiently tight. This is so because Portugal has not yet reached a medium-term budgetary position of close to balance or in surplus as required by the Stability and Growth Pact. In addition, over recent years the Portuguese economy has registered high and rising current account deficits as a result of domestic demand strongly outstripping supply (triggered by very expansionary monetary conditions as a consequence of Portugal joining the euro area). A tighter budgetary stance could have significantly contributed to counteracting such rising imbalances in the economy.

In 2001, the updated stability programme projects the general government deficit to decline to 1.1% of GDP. Excluding the UMTS proceeds in 2000, this corresponds to a decline of about 0.6% of GDP. Achieving this target calls for a reinforcement of control procedures, in particular as far as current expenditure is concerned. In the absence of such reinforced control mechanisms, there is a risk of continuing expenditure overruns, particularly in the area of health care and the government wage bill. Moreover, economic growth in 2001 might turn out to be significantly weaker than the projected 3.3% on which the 2001 budget is based. In the Commission spring forecast, GDP growth in 2001 is projected to be 2.6%. Such a slowdown would make the planned budgetary tightening challenging.

Fears about lower-than-expected growth might be materialising. Faltering domestic demand is weakening VAT revenue, which, together with the policy of stabilising administered fuel prices, results in significant tax shortfalls. In parallel, primary expenditure, in particular in the health care sector, is increasing above projections. Nonetheless, the government is sticking to the initial deficit target. In order to offset the impact of the slowdown in economic activity on the budget, the government announced a supplementary budget in June which is expected to contain significant expenditure cuts.

Table 52

Composition and balances of general government, Portugal (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	- 2.1	- 1.4	- 1.5	- 1.5
<i>Total receipts</i>	42.7	43.4	44.7	45.2
Of which: taxes	25.3	25.6	26.6	26.9
social contributions	10.8	11.1	11.2	11.2
<i>Total expenditure</i>	44.8	44.8	46.2	46.6
Of which: collective consumption	8.0	8.4	8.4	8.5
social transfers	11.6	12.2	12.2	12.3
interest expenditure	3.2	3.2	3.1	3.1
gross fixed capital formation	4.1	3.8	4.3	4.3
Primary balance	1.1	1.8	1.6	1.6
<i>Pm Tax burden</i>	36.8	37.5	38.5	39.0
Government debt	55.0	54.1	53.0	52.6
<i>Pm Cyclically-adjusted balance</i>	- 2.2	- 2.0	- 1.7	- 1.6
<i>Pm Cyclically-adjusted primary balance</i>	1.0	1.1	1.4	1.5

(*) Spring 2001 economic forecasts.

(**) Data for 2000 include UMTS receipts of 0.35 % of GDP.

Source: Commission services.

12.2. Medium-term prospects and policy issues

According to the stability programme update covering the period 2001–04, Portugal will pursue a policy of budgetary consolidation, reaching a balanced general government budget position in 2004. The updated programme envisages a cumulative increase in revenue of three-quarters of a percentage point of GDP, while expenditure is expected to fall by the same amount. The adjustment effort is front-loaded as two thirds of the revenue increases and almost all the expenditure cuts are due in 2001. Such a front-loading is appropriate in view of the imbalances in the economy and the need to achieve as rapidly as possible a budgetary position in compliance with the Stability and Growth Pact. However, a major policy challenge for Portugal will be, already in 2001, to rein in current primary expenditure with a view to securing the planned reduction of the expenditure to GDP ratio. As far as revenues are concerned, the increase in the revenue to GDP ratio is expected to be achieved by continuing the policy of broadening tax bases and increasing the efficiency of tax collection. This strategy has been quite successful over the past couple of years but diminishing returns are to be expected in the years to come. Moreover, the overall tax burden in Portugal has increased rapidly in recent

years, approaching the EU average at a time when most other Member States are intent on lowering the tax pressure.

The budgetary projections are based on an average annual growth rate of 3.25 % over the programme period. These projections are in line with Portugal's need for further catching-up within the European Union. However, the risks to these projections are somewhat on the downside. In particular, it cannot be excluded that Portugal will face a period of somewhat more subdued growth in view of the requirement to correct the large imbalances. Strong export-led growth could facilitate such an adjustment process, but this would require a sustained improvement in the external competitiveness which has weakened significantly in recent years.

The stability programme update projects a strengthening of capital expenditure in the period covered by the programme after the reduction in public investment registered in 2000. Government capital expenditure is planned to average about 6.25 % of GDP over the period, with a slight decline from 6.6 % of GDP in 2001 to 6.2 % in 2004. This profile is likely to reflect the programmed reduction in EU capital transfers according to the third Community support framework, especially after 2003.

Table 53

Key figures of the Portuguese stability programme, 2001–04

	2001	2002	2003	2004
Real GDP growth (annual % change)	3.3	3.2	3.2	3.2
Gen. gov. budget balance (% of GDP)	- 1.1	- 0.7	- 0.3	0.0
Primary surplus (% of GDP)	2.1	2.5	2.7	2.9
Government debt (% of GDP)	53.4	51.5	49.8	48.1

Source: 2001 Update of the stability programme of Portugal.

Given the catching-up needs of Portugal, in order to sustain the required high levels of investment without breaching overall budgetary targets, the reduction in Community funds will tighten the overall budgetary constraint, reinforcing the need for a better control of current primary expenditure in the framework of the envisaged public finance consolidation programme.

In December 2000, the Parliament approved a major tax reform act, which is to be implemented in two phases. The first phase took effect in January 2001, involves changes in the personal income tax, corporate income tax and the tax incentives statute. The second phase, which is due to be completed by January 2002, involves energy and vehicles taxes and the taxation of immovable property. The major aims of the first phase of the reform are: (i) to reduce taxes on dependent workers, particular for lower income brackets; (ii) to widen tax bases and improve the efficiency of tax collection; and, (iii) to bring into the tax system a large number of companies with a view to levelling competition conditions and allowing for the future planned reduction in statutory tax rates. While these reforms go in the right direction as they contribute to an enhanced efficiency of the tax system, the frequent change in the tax code in recent years in itself may have contributed to a lack of transparency and clarity thus calling for a period of stabilisation once the reform measures are in place.

Portugal urgently needs to develop a strategy to address the budgetary consequences of population ageing⁽¹⁾. Debt reduction can offset some of the expected increase in

spending on pensions and health care, but on its own this will not suffice. Measures are required to reform the pension system including greater recourse to funded pensions. In order to eventually strengthen the financial position of the social security system, a new framework law for social security was adopted in July 2000 and the secondary legislation defining the details of the reform is currently being drafted. While the social protection system will continue to be based on a contribution-based system financed by employers and employees, a public social security fund (FEFSS) was revitalised. It will be funded out of the annual social security surplus. Total fund assets amounted to about EUR 3 billion at the end of 2000 (about 2.75 % of GDP).

12.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Portugal on budgetary policy:

- meet the 1.1 % of GDP deficit target for 2001, which calls for a strict adherence to the current primary expenditure plans; if needed, do not use the current expenditure amounts frozen in the budget for 2001 to avoid cutting back government investment plans;
- prepare a budget for 2002 which aims at a faster decline in the deficit ratio than planned in the 2001 updated stability programme and meet the medium-term target of a balanced budget by 2004 at the latest; such an acceleration of budgetary consolidation should be based on expenditure restraint rather than on tax increases; and
- underpin the process of budgetary consolidation by introducing already in 2001 additional measures in

⁽¹⁾ Long-term projections for public pension expenditures by the EPC working group on ageing show that spending on public pensions, which in Portugal accounted for 10 % of GDP in 2000, will, under a 'no-policy change' scenario, rise to 16 % of GDP by 2030. This large increase could prove especially acute as public pensions in Portugal are largely financed on a pay-as-you-go basis.

the area of health care to improve expenditure control and efficiency and by implementing expeditiously the enabling legislation required by the recently adopted social security law to strengthen the financial position of the social security sector in the light of the budgetary challenges of an ageing population.

Council opinion of 12 March 2001 on the updated stability programme of Portugal, 2001–04

Official Journal C 109, 10.4.2001, p. 4

On 12 March 2001 the Council examined the updated stability programme of Portugal which covers the period 2001–04. The Council notes that the present update maintains the budgetary targets of the previous programme update, i.e. the general government balance is projected to improve from an estimated deficit of 1.4% of GDP in 2000 to a balanced position in 2004, while the general government consolidated gross debt should be brought to below 50% of GDP by the end of the programme period. The present update assumes annual average output growth of 3.25% over the period 2001–04, which is slightly below the growth projections of the previous programme update.

Regarding the budgetary implementation in 2000, the Council notes that overruns in current primary expenditure and lower than estimated revenues from mineral oil taxes (0.5% of GDP) were only partially offset by lower than projected capital expenditure and higher than budgeted tax revenues in some areas (income taxes, VAT). The deficit target of 1.5% of GDP was achieved only because of the proceeds from the sale of Universal Mobile Telecommunications System (UMTS) licences, which were not initially budgeted and amounted to 0.4% of GDP. The overruns in current primary expenditure in 2000 were not in line with the 2000 broad economic policy guidelines in so far as these recommended strict adherence to the budgetary target through tight expenditure restraint. The Council notes with concern that such overruns have been a feature of the budgetary implementation in earlier years. The Council further notes that the underlying budgetary position, net of UMTS proceeds, has hardly changed from 1999 to 2000. This appears inappropriate in the current conditions of excess demand in the Portuguese economy and in view of the need to achieve a budgetary position in line with the Stability and Growth Pact, both of which call for a tighter budgetary stance, as advocated by the broad economic policy guidelines.

The Council notes that the growth scenario underlying the current update is more realistic than the previous one. The Council considers that the current conditions of excess demand, which have translated into a large and widening external imbalance, pose a downward risk to sustained economic growth. To achieve a more balanced and sustainable growth pattern it is, therefore, essential that the projected recomposition of growth away from domestic demand towards exports materialises. The Council urges the Portuguese authorities in this context to monitor closely price and wage developments in the economy with a view to strengthening competitiveness. It seems crucial, in particular, that the current acceleration in consumer price inflation does not feed into a wage price spiral. The Council recommends that the Portuguese authorities should be ready to tighten fiscal policy further should inflationary pressures persist.

As regards government finances, the Council notes that, abstracting from UMTS proceeds, the projected improvement in the government balance in 2001 amounts to 0.7% of GDP. This implies an appropriate tightening of the budgetary stance in 2001 and requires control of current expenditure, in particular through the reinforcement of budgetary procedures. In the absence of such reinforced control mechanisms, there is a risk of continuing expenditure overruns, particularly in the area of health care and the government wage bill. The Council welcomes the efforts which are being made in this respect and encourages the Portuguese Government to implement forthcoming measures swiftly and with determination in the framework of the envisaged public finance consolidation programme. Moreover the Council considers that control of total expenditure should not rely on cutbacks in public investment given the catching-up needs of Portugal and the broad economic policy guidelines for 2000, which call for redirecting government spending to give greater relative importance to investment in physical and human capital, innovation and information technologies.

The Council notes that, according to the programme update, the overall consolidation effort is spread more or less evenly over the period 2001–04. Moreover, the reduction in the deficit ratio results from similar cumulative changes of 0.75 of a percentage point of GDP on both the revenue and the expenditure side of the budget. The Council notes the intention of the Portuguese authorities to further increase tax revenues in the coming years, as a consequence of broadening the tax base and a more efficient tax administration brought about by ongoing reform of the tax system. However, this budgetary consolidation

strategy should be consistent with a reduction in the tax burden as advocated in the broad economic policy guidelines and already noted by the Council in its opinion on the previous update ⁽¹⁾. In fact, the tax burden in Portugal has risen rapidly in recent years and may have reached a level that could impede more dynamic growth. Moreover, while acknowledging that the increase in the revenue ratio is brought about despite ongoing cuts in tax rates, the Council considers that continued reliance on higher efficiency in the collection of taxes is not without risks as tax efficiency measures might deliver diminishing returns.

The Council considers that the budgetary position underlying the medium-term deficit targets of the Portuguese stability programme update is in line with the requirements of the Stability and Growth Pact only after 2002. The Council therefore reiterates its recommendation in the opinion on the previous update to aim for a faster decline in the deficit ratio with a view to increasing the necessary safety margin that allows Portugal to let the automatic stabilisers work in the event of a cyclical downturn. The Portuguese authorities should, therefore, do their best to

achieve better results than planned. The Council expects that, in the next update of the programme, the Portuguese Government will introduce concrete measures to attain such a more ambitious pace of budgetary consolidation.

The Council welcomes the planned budgetary and structural reform measures outlined in the programme which are broadly in line with the broad economic policy guidelines. Among the most urgent reforms are the implementation of the new basic law for the budget. Additional measures in the area of health care to improve expenditure control and efficiency are also needed to underpin the process of budgetary consolidation. Moreover, with a view to ensuring the sustainability of government finances in the longer term, the Council encourages the Portuguese authorities to implement expeditiously the enabling legislation required by the recently adopted social security framework law. A rapid and determined implementation of these reforms, some of which were already announced in previous updates of the programme, is necessary to strengthen the overall credibility of the economic policy strategy. Also Portugal needs to develop a comprehensive strategy to address the budgetary challenges of the ageing population. Therefore, the Council invites the Portuguese authorities to address this issue more extensively in the next update of its stability programme.

⁽¹⁾ OJ C 111, 18.4.2000, p. 3.

13. Finland

13.1. Recent developments

Owing to robust output growth of 5.7%, and helped by exceptional tax revenues, the general government surplus in 2000 rose to 6.7% of GDP. Central government finances, in particular, benefited from the rapid pace of economic growth and enterprises' favourable earnings performance. In spite of sizeable tax cuts, total revenue from income and wealth taxes increased by over a third from the previous year. Overall, general government revenue increased by about 1.5 percentage points to 55% of GDP. At the same time, expenditure growth was moderate. The government had announced in its stability programme that it would maintain, in the framework of its annual spending guidelines, real expenditure at the level of 1999. Following the spending guidelines for 2000, public expenditure as percentage of GDP fell by 3.4 percentage points to 48.4%. When cyclically adjusted, both the general government balance and the primary-balance-to-GDP ratio increased significantly in 2000, implying a strong tightening in the budgetary stance.

Due to the exceptionally strong primary surplus of 9.4% of GDP and high income from privatisation proceeds, totalling EUR 2 billion or 1.5% of GDP, the general government debt ratio fell to 44% in 2000, down from 46.9% in the previous year. However, the updated stability programme had predicted the debt ratio to fall to 42.4% in 2000. The discrepancy is mostly explained by financial operations of employment 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.

In 2001, the Finnish Government continues its consolidation strategy consisting basically of expenditure restraint coupled with income tax cuts, targeted mostly at low income earners. In spite of the strong domestic demand raising revenue from indirect taxes, as exceptional tax

revenue ceases and with sizeable cuts in income taxes and in social security contributions being implemented — amounting to EUR 1.5 billion, over 1% of GDP — the revenue ratio will resume its earlier downward trend. The Commission services forecast the revenue ratio to fall by 1.8 percentage points to 53.3% of GDP. On the expenditure side, spending on unemployment benefits is expected to decline due to the projected fall in joblessness while interest payments will be diminished following a fall in actual debt. As a result, the expenditure ratio is projected to decline slightly to 48% of GDP. Risks to the projected developments stem from weaker than expected economic growth and expenditure slippage-related to mounting spending pressures.

The 2001 budget projects a general government surplus of 4.7% of GDP. This is slightly below the Commission services' forecast of 5.3%. The implied change in the cyclically-adjusted primary balance (which is expected to fall from 7.8% of GDP to 6.6%) indicates a loosening of the budgetary stance. Keeping in mind the exceptional factors contributing to the budgetary outcome in 2000 and in view of the expected weakening of economic activity and the expected lessening of price pressures, such a budgetary stance appears justified. Taking into account the projected proceeds from privatisation, the updated stability programme forecasts the general government debt ratio to fall to 39.2%.

Higher spending limits for 2002 together with the tax arrangement reached during the income policy settlements at the end of 2000 (including a plan of income tax cuts of 0.5% GDP in 2002), would suggest a loosening of the aim to maintain a restrictive fiscal policy stance. The agreed spending limit for 2002 in real terms is about 1% higher than the budget for 2001. This ceiling exceeds the aim envisaged in the updated stability programme of keeping expenditure in coming years at the level of budget for 2001 in real terms (excluding the cost of active debt management).

Table 54

Composition and balances of general government, Finland (*)

(% of GDP)

	1999	2000	2001	2002
Government balance	1.8	6.7	5.3	5.2
<i>Total receipts</i>	53.6	55.1	53.3	51.8
Of which: taxes	32.6	34.3	33.2	32.7
social contributions	13.0	12.1	11.8	11.8
<i>Total expenditure</i>	51.8	48.4	48.0	46.6
Of which: collective consumption	8.1	7.6	7.6	7.5
social transfers	31.4	29.4	29.1	28.7
interest expenditure	3.1	2.8	2.7	2.5
gross fixed capital formation	2.8	2.6	2.7	2.7
Primary balance	4.9	9.4	8.0	7.7
<i>Pm Tax burden</i>	46.3	47.3	45.9	45.3
Government debt	46.9	44.0	41.7	39.5
<i>Pm Cyclically-adjusted balance</i>	1.2	5.1	3.9	4.1
<i>Pm Cyclically-adjusted primary balance</i>	4.3	7.8	6.6	6.6

(*) Spring 2001 economic forecasts.

Source: Commission services.

13.2. Medium-term prospects and policy issues

According to the 2000 update of the stability programme covering the period 2000–04, Finland is set to continue its budgetary consolidation policy with the government balance projected to post surpluses of more than 4% of GDP throughout the period. The stability programme projects the revenue ratio of general government to fall by 3.2 percentage points to 46.3% of GDP in 2004 while the expenditure ratio should fall by 3.5 percentage points to 41.2% of GDP. At the same time the government debt-to-GDP ratio is expected to decline from 42.4% of GDP in 2000 to 32.2% of GDP in 2004. The budgetary projections are based on a scenario of slowing output growth from over 5% in 2000 to 2.5% in 2004.

As the growth of government revenue weakens in step with the projected slowdown of the economy, the rate of reduction in government debt will slow. Under favourable circumstances, however, it could be possible to create a virtuous circle in government finances over the next few years, whereby progressively smaller interest payments on outstanding debt would enable an accelerated pace of debt reduction. This, however, requires that the growth of government primary expenditure remains moderate and any

privatisation proceeds are used — as announced by the government — to a substantial degree for debt reduction.

An increasing challenge for Finnish fiscal policy in the context of sound budgetary policy is to resist mounting spending pressures, while at the same time allowing for continued alleviation in the overall tax burden. This can be best achieved by adhering to expenditure restraint in accordance with annual spending guidelines. If continued, the government's approach of cutting earned income taxes will relieve the tax burden on labour which should raise incentives to take up work while at the same time preserving the competitive international position of the Finnish economy in the medium term.

The foreseen changes in the population structure in the course of the coming decades, resulting in the number of employed declining and the number of old-age dependants increasing, will be a major challenge for the sustainability of general government finances in Finland. Significant additional resources will have to be made available for pensions benefits as well as for health care and long-term care for the elderly. Well over 150 000 persons, more than 6% of total employment, employed in the public sector alone will be retiring by the end of decade. The need to raise the retirement age from the current low average of 58 years is crucial in this regard.

Table 55

Key figures of the Finnish stability programme, 2001–04

	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	5.2	4.2	3.2	2.7	2.7
Gen. gov. budget balance (% of GDP)	4.5	4.7	4.4	4.5	4.9
Primary surplus (% of GDP)	7.8	7.6	7.1	7.0	7.1
Government debt (% of GDP)	42.4	39.2	37.1	34.9	32.2

Source: Stability programme for Finland, September 2000 update.

The globalisation increases the risk of the tax competition and hence erosion of tax base. Tax competition threatens to transfer production inputs from the country of high taxation to the country of low taxation. Finland, with a tax burden of 47.3 % of GDP in 2000, is particularly exposed to this risk. The first signs of the outcome of unfavourable tax competition have already been seen in the form of companies outsourcing various functions to other countries. While the total level of tax burden is forecast to decline by 2 percentage points to 45.3 % of GDP in 2002, the overall level remains high. At the same time, taxes on corporate income and on capital as well as on real estates are low compared to international averages. The high indirect taxes in Finland are subject to the risk of downside revision due to the implementation of EU-wide internal markets directives.

13.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Finland on budgetary policy:

- adhere to the expenditure targets set in the budget for 2001;
- maintain high government surpluses in 2001 and the following years; and
- ensure the long-term sustainability of public finances in view of the future effects of population ageing on pensions and health care costs, to which Finland is particularly exposed; this requires the continuation of the policy of debt reduction but needs to be complemented by measures, to be adopted during the programme period, raising the low effective retirement age.

Council opinion of 27 November 2000 on the updated stability programme of Finland for the period 2000–04

Official Journal C 374, 28.12.2000, p. 4

On 27 November 2000 the Council examined Finland's updated stability programme, which covers the period 2000–04. The Council notes with satisfaction that the Finnish general government surplus, registered since 1998, increased in 1999, and is projected to exceed 4 % of GDP throughout the period 2000–04, while the general government debt-to-GDP ratio is projected to continue to decline. Moreover, the Council considers that the updated programme is consistent with the broad economic policy guidelines.

The Council welcomes the overall record of implementation of the 1999 updated programme, although it noted that the improvement in the budget surplus actually achieved in 1999 and the reduction in government debt both fell some way short of the projections then made, with all three sub-sectors of general government contributing to the shortfall in the overall surplus and with lower revenue than expected. In addition, inflationary pressures have emerged. The rise in domestically generated inflation appears linked to a corresponding rise in inflation in the service sector.

The macroeconomic scenario presented in the latest updated stability programme includes strong economic growth in 2000 due to continued robust internal and external demand. Thereafter, GDP is assumed to decelerate from 2001 for the remainder of the projection period. The central characteristic of a medium-term slowing down in the economy appears plausible, taking into account the rapid recent growth of the Finnish economy and the strains on capacity already evident in certain areas. The risk remains that the economy may overheat and that excessive demand may add to inflationary pres-

asures. The Council considers that moderate wage developments will be crucial in this respect.

As already referred to in the 2000 broad economic policy guidelines, the Council also considers that a tight fiscal stance in Finland is necessary to contain risks of overheating. Subject to this, the Council commends the fiscal strategy of the updated stability programme. This consolidates previous programmes and aims to maintain surpluses around 4.5% of GDP through a reduction in government expenditure in relation to GDP but at the same time reduces the tax burden.

The underlying budgetary position corresponding to the 4.5% expected surplus for 2000 will allow Finland to continue to fulfil the requirements of the Stability and Growth Pact. The Council considers that continued fiscal restraint embodied in the updated programme is justified

in view of the future effects of population ageing on pensions and health care costs, to which Finland is particularly exposed.

The Council welcomes the commitment in the updated programme to continued structural reforms. Reforms are particularly important in promoting the government's central objective of raising employment and at the same time safeguarding price stability. Fiscal reform, reducing the still heavy overall taxation and social contribution burden on labour, can reinforce this potential. Concerns remain that the structure of the pension system contains disincentives for older workers to remain in the labour market and that pension system funding may need to be strengthened in the face of rapid ageing. The reductions in government expenditure and revenue relative to GDP anticipated in the programme and continued structural reforms should both help to increase employment.

14. Sweden

14.1. Recent developments

The government finances have been in surplus since 1998, and in 2000 the surplus rose markedly, by 2.2 percentage points to 4% of GDP, well above Sweden's projection of 3.4% of GDP. This surplus was achieved largely due to a fall in the expenditure-to-GDP ratio, but also due to higher-than-expected tax revenue. Total expenditure decreased by 1.9 percentage points of GDP, as a result of fall both in interest payments and current primary expenditure as a share of GDP. Total revenue increased by 0.3 percentage points of GDP, with buoyant tax revenues despite the tax cuts implemented in 2000, and resulted in an increase of the tax burden. The general government primary surplus increased from 6.7% of GDP in 1999 to 8.3% of GDP in 2000.

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 medium-term budget planning tool. Expenditure covered by the ceiling in 2000 came out below projections (by SEK 5 billion). The cyclically-adjusted balance rose to 3.3% of GDP from 1.6% of GDP in 1999 and the cyclically-adjusted primary balance rose to 7.6% of GDP from 6.4% of GDP in 1999, indicating a strong tightening in the fiscal stance.

The general government debt ratio was reduced by 9.6 percentage points in 2000, to 55.6% of GDP. This rather sizeable reduction of debt was achieved by the large surplus mentioned above, and also due to a substantial buy-back of bonds in mid-2000 with the proceeds of the flotation of shares in Telia.

In 2001, the surplus in government finances is expected to fall only slightly, to 3.9% of GDP, despite a lower GDP growth forecast of 2.7%. This will be brought about by an expected further fall in the expenditure-to-GDP ratio of 1.4 percentage points, (resulting from expenditure

control by means of the previously set ceiling on central government expenditure) and from lower interest payments. In the 2001 spring fiscal policy bill, some measures and re-allocations were introduced compared with the 2001 budget. The net effect of these is expected to result in marginally lower spending. Moreover, the carrying forward of the higher-than expected tax revenues in 2000 contributes to limit the decline in the revenue-to-GDP ratio, following from the strategy of lowering the proportion of people paying income tax to central government and the compensation for the increase in pension contributions. The cyclically-adjusted surplus is expected to rise slightly, by 0.1 percentage points, whereas the cyclically adjusted primary surplus is expected to fall by 0.7 percentage points. This illustrates a loosening in the fiscal stance in 2001, resulting from the tax cuts this year. As inflation is forecast to remain below the Riksbank's target of 2%, this should not present a problem⁽¹⁾.

In the budget for 2001, a surplus of 3.5% of GDP was projected and in the 2001 spring fiscal policy bill, this was revised upwards slightly, to 3.6% of GDP. This is somewhat below the Commission's forecast, and is mainly due to a slightly less optimistic view on tax revenue and private consumption.

14.2. Medium-term prospects and policy issues

The overriding goal of fiscal policy as set down in its 2000 updated convergence programme is to maintain sound public finances. To achieve this, Sweden's medium-term budgetary strategy is two-fold and consists of: (i) nominal ceilings on central government expenditure set annually three years ahead, and (ii) a 2% of GDP surplus target for general government on average over the busi-

⁽¹⁾ The recent sharp rise in inflation is expected to be temporary and inflation should return to around 2% towards the end of the year.

Table 56

Composition and balance of general government, Sweden (*)

(% of GDP)

	1999	2000	2001	2002
Government balance	1.8	4.0	3.9	3.4
<i>Total receipts</i>	62.1	62.4	61.1	60.0
Of which: taxes	39.1	37.2	36.4	35.7
social contributions	13.7	16.4	16.4	16.2
<i>Total expenditure</i>	60.3	58.4	57.2	56.6
Of which: collective consumption	:	:	:	:
social transfers	18.9	18.4	18.3	18.1
interest expenditure	4.8	4.3	3.5	3.3
gross fixed capital formation	2.8	2.5	2.6	2.6
Primary balance	6.7	8.3	7.4	6.7
<i>Pm Tax burden</i>	53.0	53.6	52.8	52.0
Government debt	65.2	55.6	53.5	49.2
<i>Pm Cyclically-adjusted balance</i>	1.6	3.3	3.4	2.9
<i>Pm Cyclically-adjusted primary balance</i>	6.4	7.6	6.9	6.2

(*) Spring 2001 economic forecasts.

Source: Commission services.

ness cycle. A major policy challenge for Sweden in the years ahead is to extend the budgetary strategy of adhering to the 2% of GDP surplus target, on which long-term sustainability of public finances is heavily reliant, and at the same time maintain strict expenditure control, in the face of upward pressure on the public finances from demographic changes.

In the 2000 update, the general government surplus was projected to be higher than 3% of GDP in each year between 2001–03. This was confirmed and extended to 2004 in the 2001 spring fiscal policy bill, although some revisions were made. The budgetary strategy consists of a declining trend in both the revenue — and expenditure-to-GDP ratios. These budgetary projections are based on real GDP growth of 2.7% in 2001 and 2.6% in 2002 and assumed growth of a little above 2% for the outer years. The government debt-to-GDP ratio fell below 60% of GDP in 2000 and is expected to fall further, to below 50% of GDP by 2004.

From January 2000, a balanced budget requirement for local governments was introduced. Calculations in the 2001 spring bill suggest higher surpluses in this sector in 2001 and 2002 compared with the 2000 update, whereas in 2003 and 2004 the sector is projected to be broadly in balance.

In the 2001 spring bill, the ceilings on central government expenditure between 2001–03 are proposed to be maintained and the introduction of an expenditure ceiling for 2004 confirms a declining trend in relation to GDP over this period. However, within these ceilings several measures, including previously decided ones, for priority areas are included. Increasing employment and combating unemployment remain key issues but also other areas are considered, such as education, social services and the environment. Moreover, various benefit levels are being increased, including unemployment benefits. This latter appears to be somewhat at odds with the government's goal of an 80% employment ratio by 2004, as it, generally, would not add to the financial incentives to work.

On unchanged policies, the 2001 spring bill projects surpluses that over-achieve the government's 2% of GDP surplus target. As described above, taxes were lowered in 2001 and the goal of reducing taxes further along the same lines is expected to be achieved in coming years. This goal is in line with the Commission's BEPG to reform tax and benefit systems to make work pay and it would, in principle, seem to be room for this, given that the 2% target is achieved. New tax measures can be expected in the September budget bill for 2002, conditional on an assessment of the macroeconomic situation and a balance in government finances consistent with the

Table 57

Key figures of the Swedish convergence programme, 2001–03 (*)

	2000	2001	2002	2003	2004
Real GDP growth (annual % change)	3.9	3.5	2.1	2.1	:
Gen. Gov. budget balance (% of GDP)	3.4	3.5	2.0	2.0	:
Primary surplus (% of GDP)	7.6	7.0	5.3	5.0	:
Government debt (% of GDP)	58.9	53.2	50.2	48.2	:

(*) In the 2001 Spring Bill, real GDP growth was revised to 2.7% in 2001 and 2.6% in 2002. The general government budget balance was revised to 3.6% of GDP in 2001 and 3.1% of GDP in 2002.

Source: Updated Swedish convergence programme, November 2000.

2% of GDP surplus target. The targets set for public finances appear to be achievable and at the same time allow for further tax cuts, and are in line with the requirements of the Stability and Growth Pact.

The main challenge for budgetary policy in the medium term and beyond is to sustain sound public finances. While the outlook to 2004 is positive, in the longer term, demographic projections suggest slower growth of the labour supply (which creates a drag on economic growth and revenue) and increased age-related spending. In this context, projections in the 2000 update suggest that large surpluses of 2% of GDP on average until 2015, thereby reducing debt and interest payments, are required to keep public finances sustainable in the long-term. To this end, maintaining a relatively high tax ratio, given the implications of increased global competition and possible tax base erosion, may prove difficult. This in turn suggests that further efforts to contain expenditure might be necessary in the longer term.

14.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to Sweden on budgetary policy:

- maintain high government surpluses in 2001 and the following years;
- continue with the strategy of lowering taxes for low- and medium-wage earners in 2002 while still attaining the medium-term surplus target of 2% of GDP, taking

into account the position in the business-cycle, and at the same time ensure adherence to the central government expenditure ceiling; and

- pursue the strategy of reducing public debt in the medium term, as described in the 2000 updated convergence programme, by maintaining the government surplus target of 2% of GDP over the cycle while implementing the strategy of further tax cuts and tight expenditure control; this should place Sweden in a better position to cope with the burden on public finances stemming from the ageing of the population.

Council opinion of 19 January 2001 on the updated convergence programme of Sweden, 2000 to 2003

Official Journal C 073, 6.3.2001, p. 1

On 19 January 2001 the Council examined Sweden's updated convergence programme, which covers the period 2000 to 2003. The Council notes with satisfaction that the updated programme envisages continued government surpluses throughout the period to 2003 as the Swedish authorities maintain their medium-term objective of a budget surplus of 2% of gross domestic product (GDP) on average over the business cycle. The strategy of lowering the expenditure ratio, aided by tight expenditure ceilings and a balanced budget requirement for local governments, is accompanied by a lowering of the tax ratio. The Council considers this budgetary strategy appropriate. The Council further notes with satisfaction that the debt ratio is expected to fall below the reference value of 60% of GDP in 2000, and to continue to fall substantially over the remainder of the programme period.

The macroeconomic scenario presented in the programme, with GDP growth of 3.9% and 3.5% for the years 2000 and 2001, appears realistic but for the years 2002 and 2003 no forecasts are presented and the update assumes a cautious 2.1% GDP growth, considered to be the trend growth rate.

The budgetary surpluses targeted in the updated programme provide a large enough safety margin for the general government balance not to breach the 3% of GDP deficit reference value in normal circumstances. The Council considers that Sweden continues to comply with the requirements of the Stability and Growth Pact. Furthermore, the Council welcomes the attention given in the programme to the long-term sustainability of public finances. The Council notes that Sweden's strategy on this hinges on maintaining a surplus of 2% of GDP over a period of 15 years. By lowering debt and interest payments this will make room to cover much of the costs of ageing to be faced in later years. The Council also encourages Sweden to pursue other routes to restrict expenditure, since the programme recognises that Sweden may have difficulties in maintaining a tax ratio that is markedly higher than in most other countries.

The Council notes that Sweden at present comfortably fulfils the convergence criterion on price stability and that the continued achievement of the domestic inflation target is likely to be consistent with the European Central Bank objective for price stability. Trends in Swedish long-term interest rates in recent years clearly reflect the favourable development of economic fundamentals, which is expected to continue in the future. Following from this, the spread of Swedish long-term interest rates against euro rates has narrowed during 2000, and Sweden continues to fulfil the interest rate convergence criterion. Regarding the exchange rate, although the krona has displayed less volatility in recent years, 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 this end, the Council, as stated in its opinion on the updated 1999 convergence programme ⁽¹⁾, expects Sweden to decide to join the ERM2 in due course.

In an environment of strong economic growth, continued wage moderation remains an important factor of stability and a moderate outcome of the wage negotiation round for 2001 and 2002 will be crucial in this respect. The indications are that new wage agreements should result in only slightly higher wage increases, but the risks are on the upside. In this context, the Council encourages Sweden to direct fiscal policy so that it supports monetary policy in the achievement of the inflation target, in line with the broad economic policy guidelines. While inflationary pressures have remained low in 2000 and are expected to be contained during 2001, there is a risk that the economy might overheat and threaten price stability if wage moderation were to weaken. In such a case, an expansionary fiscal stance in 2001 and 2002 would be inappropriate in the face of an economy where output is above or close to potential.

In order to obtain higher and sustainable economic growth, the strategy of previous programmes is continued and structural measures are being undertaken with a view to enhance the supply side of the economy. Among these measures, the lowering of the very 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 continue these initiatives with determination and especially continue to reduce the high tax burden.

⁽¹⁾ Council opinion of 31 January 2000 on the updated convergence programme of Sweden, 1999 to 2002 (OJ C 60, 2.3.2000, p. 5).

15. United Kingdom

15.1. Recent developments

The government finances in 2000 again achieved a substantial surplus. The latest estimated outturn for the general government balance was a surplus of 4.3% of GDP following a surplus of 1.3% in 1999. Excluding UMTS cash receipts, the surplus in 2000 was 1.9% of GDP. The cyclically-adjusted outturn was a similar 1.8% of GDP. The reason for a higher surplus in 2000, other than UMTS receipts, was the strength of government receipts — itself partly attributable to above-trend economic growth of 3%. The tax burden is estimated to have increased from 38.1% of GDP in 1999 to 38.9% in 2000. In particular, taxes on income were particularly buoyant in 2000. Current and capital expenditure, both as a share of GDP, changed little between 1999 and 2000 though an exception among the components of expenditure was a fall in debt interest payments from 3% of GDP in 1999 to 2.7% in 2000.

The sound state of the government finances are associated with consolidation in recent years and, most recently, with the achievement of the government's well-known fiscal rules which 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. These rules are enshrined in the Code for Fiscal Stability. The government's forward projections and plans, for public finance purposes, are based on an assumed, cautious, GDP trend growth of 2.25% a year compared to an already cautious trend growth assumption of 2.5% a year. It is not therefore surprising that the government's objectives, on a year by year basis, have been over-achieved and, indeed, substantial underlying surpluses have been recorded. The cyclically-adjusted primary surplus, as a percentage of GDP, increased slightly in 2000.

The general government debt, fell to 42.9% of GDP at the end of 2000 from 45.7% at the end of 1999. Much of this

fall can be attributable to the large surplus, boosted by UMTS receipts.

The public finances are expected to remain strong in 2001 though the general government surplus is expected to fall to 1% of GDP in 2001. This is mainly due to expansionary measures announced both in the pre-budget report of November of last year and this year's March budget. These measures, combined, are expected to cost 0.8% of GDP in a full year. The cyclically-adjusted surplus is expected to fall from 1.8% of GDP in 2000 (excluding UMTS receipts) to 0.9% in 2001. This expansionary stance is not expected to present problems in the UK where inflation is very low and indeed, rises in general government consumption should help maintain respectable GDP growth of 2.7% in 2001. The risks to growth would appear to be on the downside resulting from the possibility of a sharper slowdown than expected in the global economy due to a US slowdown, and, specific to the UK, a larger effect than anticipated from the effects of the foot-and-mouth disease. Such risks, if confirmed, would be expected to reduce the surplus to below that projected.

15.2. Medium-term prospects and policy issues

The public finances look sound in the short term and the Commission services are projecting a surplus of 0.9% of GDP in 2002. However, the latest convergence programme update showed the public finances moving into deficit in the medium term, on the basis of 'announced policies' that is around 1% of GDP. This persists for the financial years 2003–04 to 2005–06 (the last year of the programme). Since the economy is projected to be operating around potential over this period it would suggest a structural deficit of the same order of magnitude — around 1% of GDP.

While such a deficit is consistent with the UK's own fiscal rules described above, it cannot be said to be consis-

Table 58

Composition and balance of general government, United Kingdom (*)

(% of GDP)

	1999	2000	2001	2002
Government balance (**)	1.3	4.3	1.0	0.9
<i>Total receipts</i>	41.4	42.1	41.6	41.3
Of which: taxes	30.3	31.0	30.6	30.4
social contributions	7.5	7.6	7.5	7.4
<i>Total expenditure</i>	40.1	37.7	40.6	40.4
Of which: collective consumption	7.6	7.7	7.8	7.9
social transfers	24.4	24.4	24.5	24.4
interest expenditure	3.0	2.7	2.3	2.0
gross fixed capital formation	1.1	1.2	1.4	1.7
Primary balance	4.2	7.0	3.3	2.9
<i>Pm Tax burden</i>	38.1	38.9	38.3	37.9
Government debt	45.7	42.9	38.3	35.4
<i>Pm Cyclically-adjusted balance</i>	1.3	1.8	0.9	0.6
<i>Pm Cyclically-adjusted primary balance</i>	4.3	4.5	3.2	2.6

(*) Spring 2001 economic forecasts.

(**) Data for 2000 includes UMTS receipts of 2.4 % of GDP.

Source: Commission services.

tent with the close to balance rule of the Stability and Growth Pact. While the authorities must be aware of any move into deficit that takes the public finances away from the terms of the Stability and Growth Pact, the cautious approach of the UK authorities to public finance projections is a reason for believing that the medium-term outcome may not be as far away from the terms of the pact as the projections suggest.

As noted above, the UK authorities have two rules to which the public finances must adhere. These rules are considered essential to deliver macroeconomic stability. Within the achievement of those rules, the government has promoted many individual policies on both expenditure and taxation that have been designed to address economic and social reform. They have been carried out under four broad headings: (i) meeting the productivity challenge, (ii) increasing employment opportunity for all, (iii) fairness for families and communities, and (iv) protecting the environment.

In addition, there has been reform of the process for setting public expenditure. Discretionary public expenditure allocations, accounting for over half of public expenditure (called departmental expenditure limits) are set for three-

year periods and provide greater certainty in planning and increase budget flexibility in the medium term. In particular, a separation of current and capital budgets removes a bias against investment. In this context, one major aspect of the public finance outlook is the rise in resources devoted to public investment which are intended to redress a long standing problem of 'under-investment in public services' — this falls under the heading above called 'meeting the productivity challenge'. Net public investment is planned to double from a (projected) 0.7 % of GDP in 2000–01 to 1.8 % in 2005–06. Such a rise more than accounts for the projected movement of the finances into deficit of 1 % of GDP, described above. A major challenge for the government will be to ensure that this investment objective (desirable in its own right) is realised but, at the same time, to meet the terms of the Stability and Growth Pact.

In the longer term, the public finances look sustainable. The authorities expect debt to fall to 35 % of GDP by 2005–06 so reducing interest payments further. The convergence programme update contains long-term projections of the public finances based on demographic projections of population and announced policy. The projections suggest that the government's fiscal rules will continue to

Table 59

Key figures of the UK convergence programme, 2001–06 (*)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Real GDP growth (annual % change)	3	2.25	2.25	2.25	2.25	2.25
Gen. gov. budget balance (% of GDP)	1.1	0.6	- 0.1	- 0.9	- 1.0	- 1.1
Primary surplus (% of GDP)	3.3	2.6	1.8	0.8	0.7	0.5
Government debt (% of GDP)	40.1	37.7	36.1	35.6	35.5	35.4

(*) In the 2001 budget, the general government budget balance was revised to 1.7 % of GDP in 2000/01, 0.5 % in 2001/02, - 0.9 % in 2004/05 and - 1.0 % in 2005/06.

Source: Delivering economic stability — December 2000.

be achieved on current policies. One of the important reasons for the long-term sustainability of the public finances is that most social security benefits are indexed to prices (rather than wages). So they remain constant in terms of purchasing power but fall as a share of GDP over time.

However, the uncertainties of the future are noted, both in terms of demographic projections and future demands on public expenditure. The authorities have noted, in broad terms, policies that might be developed to minimise the risk to public finances in the future — for example, increasing retirement age for women and assisting people to provide for retirement themselves.

15.3. 2001 BEPG recommendations on budgetary policy

In the context of the 2001 broad economic policy guidelines, the Ecofin Council has made the following recommendations to the United Kingdom on budgetary policy:

- ensure that a general government surplus of at least 0.5 % of GDP is achieved in 2001–02 as projected in the 2001 budget;
- for the general government balance, ensure, in preparing the budget, that an out-turn in 2002–03 is achieved that, as planned, is close to balance; and
- allow public investment, net of depreciation, to double, as planned, as a share of GDP, between 2000–01 and 2003–04 while, at the same time, ensuring that the terms of the Stability and Growth Pact continue to be respected.

Council opinion of 12 February 2001 on the updated convergence programme for the United Kingdom, 1999/2000 to 2005/2006

Official Journal C 077, 9.3.2001, p. 2

On 12 February 2001 the Council examined the updated convergence programme of the United Kingdom which covers the period 1999–2000 to 2005–06. The programme envisages a government surplus of 1.1 % of GDP in 2000–01, a smaller surplus in 2001–02, balance in 2000–03 and deficits around 1 % of GDP in the three following years to 2005–06. The Council considers it appropriate that the programme stresses the securing of macro-economic stability supported by sound monetary and fiscal policies and continued structural reform.

The programme is built upon a macro-economic framework showing a return of GDP growth from 3 % in 2000 to close to trend — put at 2.5 % — thereafter, which the Council considers to be realistic if cautious. Moreover, 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 criterion 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. It notes that while there are signs of reduced exchange rate volatility, it cannot be concluded that this policy framework has delivered a stable exchange rate. Therefore, 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 2000/2001, 2001/2002 and 2002/2003 close to balance in underlying terms thus fulfilling the requirements of the Stability and Growth Pact. However, the Council notes that a persistent deficit of 1 % of GDP emerges in the latter years of the plan; larger than the deficits of around 0.5 % of GDP in the two final years of the previous update. This would not be in line with the prescription of 'close to balance or surplus' contained in the Stability and Growth Pact. The Council acknowledges that this emerges in the projections as a result of the use of a very cautious trend growth assumption of 2.25 % per annum and as a consequence of increased government investment as a share of GDP within the expenditure totals. Should trend growth be higher, as expected, compliance with the BEPG will require more ambitious budgetary outcomes. While the specific recommendation to the UK in the

BEPG advised the UK to pursue a policy of substantially raising the ratio of government fixed investment to GDP, it also recommended to do so within the context of firm control of government expenditure, thereby keeping the underlying position of government finances broadly unchanged. Therefore, the Council encourages the government to 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, to take remedial action.

The Council notes that the government gross debt ratio in the United Kingdom remains below 60 % of GDP and is expected to fall to 40 % in 2000/2001. The Council welcomes the envisaged further reduction of the gross debt ratio to 35 % of GDP by 2004/2005.

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 levels to those of competitors and secure further improvements in the labour market.

The Council notes that the programme provides both long-term projections of public finances and a description of policies that could be addressed to minimise the impact of ageing, and welcomes the sustainable position which is projected.

Part VI

Resource section

1. QUEST methodology and detailed results of the simulations of automatic stabilisers (Annex to Part III)

1.1. Simulating automatic stabilisers with QUEST

This annex describes the methodology of the analysis of the automatic fiscal stabilisers in some more detail. The results are based on simulations of the European Commission's quarterly economic model QUEST ⁽¹⁾. The model can be characterised as a modern version of the neoclassical Keynesian synthesis model. Behavioural equations of households and firms are derived from explicit dynamic optimisation problems subject to budget constraints and adjustment costs. Prices adjust sluggishly and the nominal wage response is delayed because of overlapping wage contracts, and the model has Keynesian features in the short run. However, with intertemporal budget constraints imposed in the model, the efficacy of fiscal policy is more limited than in the textbook Keynesian model.

Consumption and saving in the model is based on an optimising model of life-cycle behaviour, and the main variables determining consumption are life-cycle income (or human wealth, the total of current income and the expected discounted future net income stream) and financial wealth. In addition, it is assumed that a fraction of households are liquidity constrained and their consumption is determined by current disposable income. A fiscal expansion that raises real interest rates makes saving more attractive and induces consumers to reduce consumption. Moreover, permanent income is negatively affected as consumers face higher tax liabilities in the future. Those consumers that are liquidity constrained and do not follow the life cycle hypothesis increase their consumption as disposable income rises slightly, but overall, the negative effect dominates in the model and consumption falls. The optimal investment rule is derived from profit maximisation by firms, and depends on current and discounted

future expected profitability and the relative price of investment goods. This forms a second channel through which a fiscal expansion can crowd out private expenditure. In the long run, the economy moves back, through the adjustment of prices and wages, to equilibrium output, which is defined by the supply side. Taxes can affect this steady state level of output and have important distortionary effects in the model.

An assessment of the impact of automatic fiscal stabilisers requires the definition of an alternative regime without such stabilisers. As the objective is to measure the degree to which budget items are able to smooth disturbances to output, the alternative benchmark can be defined as one where such budget items are not operating, or one where the impact of the disturbances on the budget is neutralised by offsetting changes in other policy parameters. The precise definition of the alternative benchmark is of crucial importance.

A model-based analysis of the smoothing capacity of automatic fiscal stabilisers is always dependent on the assumptions underlying the simulations. The distinction between automatic fiscal stabilisers and discretionary fiscal policy actions is not always clear cut, which makes the analysis sensitive to the assumptions concerning fiscal policy responses. There are also other stabilising mechanisms operating in the economy, which can partly offset or reinforce the working of automatic fiscal stabilisers, and estimates differ depending on the assumed monetary policy responses.

In this analysis, the operation of automatic fiscal stabilisers is broken down into two channels. The first relates to the sensitivity of the budget to disturbances to GDP, the second to the smoothing of GDP that such budgetary changes can generate. Due to the complex interactions between fiscal, monetary and private agents, these channels are not fully independent, and simultaneity means that the measurement of automatic fiscal stabilisation is always indirect and conditional on the specific assumptions.

⁽¹⁾ The model is described in detail in Roeger and in 't Veld (1997).

1.2. Sensitivity of the budget to economic fluctuations

The European Commission's method of calculating cyclically-adjusted budget balances is based on the estimated budget elasticities by the OECD. These are used to adjust the actual government revenues and expenditures for an estimated cyclical component. The OECD distinguishes four different categories of taxes — corporate tax, personal income tax, social security contributions and indirect tax — and calculates the sensitivity of each of these categories to output. In addition, the output elasticity of unemployment-related expenditure is estimated and the cyclical component of total current primary expenditure, adjusted for the share of unemployment-related expenditure in the total, is computed. Van den Noord (2000) reports an overall responsiveness of the deficit-to-GDP ratio with respect to the output gap that averages around 0.5 for the EU and varies between 0.3 for Austria and 0.85 for Denmark (see Table A.1).

The European Commission's estimates of the budget sensitivity are based on those of the OECD, but apply an overall revenue elasticity, which is a weighted average of the four revenue elasticities (personal income taxes, social security contributions, corporate taxes and indirect taxes). The cyclical component of the budget is then calculated as the product of the calculated output gap — the difference between actual output and an estimated output trend

(HP filtered) — with the estimated sensitivity of the budget to the output gap.

While these elasticity estimates are widely used by others, they are not uncontroversial. Mélitz (2000) argues that the high estimated sensitivity may not provide a good characterisation of fiscal policy. His estimates suggest a much lower responsiveness of fiscal policy to the cycle, ranging from 31 to 37%. He concludes that while an expansion may raise tax revenues, it also tends to raise government expenditure and this pro-cyclical discretionary policy has become systematic and in a sense quasi-automatic. Wijkander and Roeger (2001) also include the response of expenditure categories like government transfers to households, government purchases and public sector salaries in their analysis of the stabilisation efficiency of fiscal policies in Germany and France. The distinction between 'pure' automatic stabilisation and discretionary policy reactions appears not to be as clear-cut as often assumed.

In the analysis of Part III, the European Commission's QUEST model is used to examine the operation of automatic budget stabilisers. The sensitivity of the budget to economic fluctuations is analysed under various demand shocks and a supply shock.

Some of the major differences with the abovementioned OECD estimates are worth emphasising. The sensitivity of the budget to output fluctuations depends on the sensitivity of tax bases (or expenditure bases) to GDP fluctu-

Table A.1

Budget sensitivities OECD and EC

	OECD						EC		
	Corporate tax	Personal tax	Social security	Indirect tax	Current exp.	Total balance	Total tax	Total exp.	Total balance
B	0.9	1.3	1.0	0.9	-0.4	0.7	0.5	0.2	0.7
DK	1.6	0.7	0.7	1.6	-0.7	0.9	0.5	0.3	0.9
D	0.8	1.3	1.0	1.0	-0.1	0.5	0.4	0.0	0.5
EL	0.9	2.2	1.1	0.8	0.0	0.4	0.3	0.0	0.4
E	1.1	1.1	0.8	1.2	-0.1	0.4	0.3	0.0	0.4
F	1.8	0.6	0.5	0.7	-0.3	0.5	0.3	0.1	0.4
IRL	1.2	1.0	0.8	0.5	-0.4	0.3	0.3	0.1	0.4
I	1.4	0.8	0.6	1.3	-0.1	0.5	0.4	0.0	0.4
NL	1.1	1.4	0.8	0.7	-1.0	0.8	0.4	0.4	0.8
A	1.9	0.7	0.5	0.5	0.0	0.3	0.3	0.0	0.3
P	1.4	0.8	0.7	0.6	-0.2	0.4	0.3	0.1	0.3
FIN	0.7	1.3	1.1	0.9	-0.4	0.6	0.5	0.2	0.7
S	0.9	1.2	1.0	0.9	-0.5	0.8	0.5	0.3	0.8
UK	0.6	1.4	1.2	1.1	-0.2	0.5	0.4	0.1	0.5

Source: Van den Noord (2000) and Commission services.

tuations and the relative size of each revenue or expenditure category in the total budget. In the OECD method, these elasticities with respect to the output gap are based on regressions of the tax base (e.g. private consumption) on the output gap to derive the sensitivity of tax revenues (indirect tax returns) with respect to the output gap. In the analysis here a distinction is made between three different autonomous shocks that affect consumption, investment and exports directly, and a technology shock. The first shock affects a tax base directly and yields the largest budget sensitivities. For the other shocks, the impact on the tax bases is only indirect and the overall sensitivity is considerably smaller.

For this exercise, the model distinguishes between labour income tax (inclusive of social security contributions), corporate profit tax and consumption tax (VAT). These taxes are modelled proportionally, i.e. for each category the tax revenue has a unitary elasticity with respect to its respective tax base. For corporate profit tax, this implies revenues are proportional to profits, and the sensitivity of profit tax revenues depends on the sensitivity of profits to the type of shock given. Van den Noord (2000) calculates the sensitivity of profits to the output gap as one minus the sensitivity of the wage bill, and bases the latter on estimates of the output elasticity of employment and the employment elasticity of wages. In the analysis here, the sensitivity of profits to output fluctuations will depend on the origin of the shock but will also generally be large.

For labour income tax, the assumption of a proportional tax system deviates from that by van den Noord (2000), who estimates a real wage elasticity of income tax per worker which is larger than one⁽¹⁾. It has to be borne in mind though that we do not make the distinction between income tax and social security contributions. The reported OECD estimate for the elasticity of social security contributions to real wages lies for most countries below one, and a weighted average of the two tax categories would be closer to unity. In the model, the sensitivity of income tax revenues (including social security contributions) to output fluctuations reflects the sensitivity of employment and wages to output shocks. Again, in the OECD approach estimates of these are based on regressions on the output gap.

⁽¹⁾ While proportionality is the default assumption and applied in the simulations reported here, this assumption can of course easily be relaxed in the model, for instance to analyse the effects of a more progressive income tax system.

Indirect tax revenues depend on fluctuations in consumption. The different demand shocks considered have each a different impact on consumer spending. A consumption shock directly affects VAT receipts, while the investment and export shock only have an indirect effect. The consumption shock will therefore display the largest changes in budget deficits. In this respect the analysis here differs crucially from the OECD approach, in which the sensitivity of indirect taxes is based on a reduced form regression of consumption on output. The short-run output elasticity of private consumption is estimated over the period 1985–98, with inclusion of a time trend and correcting for simultaneity, and assuming proportional taxes this estimated elasticity is then used as a measure of the tax sensitivity with respect to output fluctuations.

Concerning expenditure, it is common practice to focus exclusively on unemployment-related expenditure as an automatic stabiliser. While other expenditure categories fluctuate equally with the cycle, in a pro- or counter-cyclical fashion, this is normally considered non-automatic and discretionary, although the distinction is somewhat artificial and controversial (Melitz, 2000, Wijkander and Roeger, 2001). In the model, the default assumption is that various expenditure components grow in line with GDP: government purchases of goods and service, government transfers to households (excluding unemployment benefits) and government investment are specified as growing in line with GDP, and government wages as indexed to private sector wages. In this exercise, however, it is assumed that these expenditure categories are not behaving in a pro-cyclical manner, but kept fixed at their base levels. Although this may not be a good description of the real world, it allows us to concentrate on the operation of what others describe as the ‘pure’ automatic fiscal stabilisers. As far as unemployment-related expenditure is concerned, in this analysis the different demand shocks have different effects on unemployment, and total unemployment benefit payments will fluctuate in proportion to the effect the shock has on the number of unemployed. In the OECD approach, the output elasticity of unemployment-related expenditure is based on estimates of the short-run employment elasticities of the labour force and the trend unemployment rate. Their calculations show a particularly high sensitivity for Denmark and the Netherlands, which makes these two countries outliers in the overall estimated sensitivity of the budget (see Table A.1).

As is clear from the above, the OECD approach relies heavily on estimation of reduced form equations to derive

estimates of elasticities of the sensitivities of budget categories with respect to economic fluctuations. While this approach may provide some valuable insights into the size of the effects of past disturbances on the budget, and has the advantage that the effectiveness of automatic fiscal stabilisers can be summarised into a single statistic, such reduced form regressions suffer from several econometric shortcomings and estimates are subject to wide margins of uncertainty. The approach here attempts to analyse the operation of automatic budget stabilisers in a model framework by distinguishing between different disturbances to output.

1.3. Estimates of smoothing of output fluctuations

Stabilisation under proportional versus lump-sum taxes

In most studies, the effectiveness of the automatic stabilisers is calculated on the basis of a comparison with an alternative fiscal regime where, by keeping tax revenues for each category constant at their 'structural' levels, there is an implicit adjustment in tax rates. This implies that the comparison is not just measuring the degree of stabilisation, but incorporates effects of such tax changes on economic activity. In fact, this is the main difficulty for any quantitative assessment of automatic fiscal stabilisation: for comparison, an alternative regime has to be defined in which the budgetary impact of economic fluctuations is offset by a change in other components of the budget. By choosing to neutralise the budget impact of an up- or downturn by an offsetting change in that particular tax category, one implicitly analyses the impact of that particular tax on economic activity.

In the QUEST model, with a proportional tax system, the effect of the economic disturbance on the respective tax bases could be offset by a change in the tax rates of such

a magnitude that the total tax revenue remains constant. This gives the combined effect of the cyclical impact on the budget and the effect of changes in tax rates in the model. An alternative approach would be to set all taxes in the model to zero and introduce lump sum taxes such that all tax revenues are equal to the baseline values ⁽¹⁾.

The comparison of these two scenarios gives a more direct indication of the stabilisation that is provided by the proportional tax system, and is closely comparable to the studies reviewed above.

Table A.2 reports the damping provided by the proportional tax system, as compared to a lump-sum tax system, under a consumption shock. For each country a shock is given to the consumption equation residual which reduces GDP by 1% of its baseline value. In this simulation, the tax system operates as explained above, and tax revenues are negatively affected by the shock to consumption. Then the same shock is given to the model, but with all taxes set to zero and replaced by lump-sum taxes. Technically this is done by recalibrating all equations and adding lump-sum taxes to the model as add factors, and running the same shock simulation again. In this second simulation, tax receipts are not affected by the downturn but equal baseline values. Of course, the two scenarios are never completely comparable, as one can never fully control for other factors that may change between these alternative scenarios. There are other stabilising mechanisms operating in the model, and there may be differences in, for instance, the monetary policy response to the shock

⁽¹⁾ This is the approach adopted by Cohen and Follette (2000), who use the Federal Reserve Board's FRB/US quarterly econometric model to analyse the damping provided by the tax system of aggregate demand and supply shocks for the United States. Comparing the proportional tax system in their model with an alternative scenario where these taxes are replaced by lump-sum taxes, they find, under the assumption of monetary policy following a Taylor rule, a damping of around 8%.

Table A.2

Smoothing of consumption shock under proportional tax system

	(%)													
B	DK	D	EL	E	F	IRL	I	NL	A	P	FIN	S	UK	
1.8	3.9	4.3	8.1	4.2	2.4	1.8	6.7	2.5	1.6	9.9	2.7	1.7	3.5	

NB: Percentage smoothing in case of consumption shock calculated as:

$$(1 - \text{private sector GDP effect under proportional taxes} / \text{private sector GDP under lump sum taxes}) * 100\%.$$

under the two alternative tax regimes and different exchange rate responses ⁽¹⁾.

The results in this table indicate the damping due to the proportional tax system is modest at around 5% on average and varies across countries from 1.6 to 9.9%. The smaller more open economies tend to have somewhat smaller damping than others, but there is no clear correlation between the ranking and the size or openness of the economies ⁽²⁾. In general, countries that rely more on indirect taxation, as a share in total taxes, show the largest damping. The smoothing due to the proportional tax system is only part of the total automatic stabilisation provided by the budget, and the smoothing effect of unemployment-related transfers, which are ignored here, should strengthen the overall stabilisation effect. However, the case considered here is one where tax receipts are directly affected by the shock and the smoothing impact of taxes is likely to be smaller under alternative shocks.

Automatic stabilisation

While the comparison with a lump-sum tax can provide valuable insights into the effects of the tax system on the volatility of output, it may equally be of interest to consider more wide-ranging offsetting fiscal policy changes. In practice, there is no reason to assume that governments offset the budgetary impact of a particular disturbance by offsetting changes in tax rates for each individual category. In fact, it may intuitively be more appealing to consider the alternative possibility, that governments offset the budgetary impact of a shock, which may mainly fall on tax revenues, by offsetting changes in spending. This corresponds more closely to the empirical evidence of procyclical fiscal behaviour (Buti, Franco and Ongena, 1998; Brunila and Martinez-Mongay, 2001). It is commonly found that the short-term impact of changes in government expenditure is larger than changes in taxes, at least in the first year, so one would expect to find a larger stabilising effect when the alternative regime is defined as one where the lower tax receipts are offset by lower government expenditure. Hence, the estimate of the smoothing effect of automatic stabilisers depends crucially on the assumed alternative. For this reason, in the calculations

below, two alternatives are considered. The first comparison is one where tax revenues are adjusted, in proportion to their ratios in the baseline, such that the total deficit-to-GDP ratio remains constant. This gives an indication of the effectiveness of the overall tax system to smooth output fluctuations and is closely comparable to the estimates reported above. In the second scenario, government expenditure is raised, again proportional to the ratios in the baseline, and this comparison leads to considerably higher estimates of the effects of fiscal stabilisers.

We distinguish between three demand shocks — shocks to consumption, investment and exports — and a supply shock (productivity). Each shock is an asymmetric individual country shock scaled to equal 1% of real GDP, i.e. one country at the time is affected by a negative disturbance that reduces GDP in the first year by 1% relative to baseline.

Any assessment of the size of cyclical sensitivity of the budget and its effect on economic activity is conditioned on the assumed reaction of other economic variables. All scenarios underlying this analysis assume an inflation targeting regime by the ECB and, for countries outside the euro zone, their individual central banks (the exception is Denmark, which although not participating in EMU, is assumed to follow the ECB interest rate policy). In case of a negative demand shock, this implies a rule in which the central bank increases the money supply as output contracts in order to closely meet a baseline inflation target. Hence, monetary policy functions as another stabilising mechanism that smoothens output fluctuations and interacts with the operation of the automatic fiscal stabilisers.

Demand and supply shocks

Table A.3 reports the results for autonomous shocks to consumption, given as shocks to the equation residuals. The shock is scaled to equal a 1% change in the level of real GDP. The second column reports the sensitivity of the budget to this disturbance. For a consumption shock this is particularly large. The deficit-to-GDP ratio rises by between 0.5 and 0.9%, as tax revenues, in particular indirect taxes, are directly affected by this shock. Differences across countries are mainly explained by the relative importance of indirect taxes in the budget and the degree to which other tax bases respond to this particular disturbance. Countries that rely more on indirect taxation display a higher sensitivity to this shock (Ireland, Sweden), and this also helps to explain why for instance Portugal displays a higher budget sensitivity than a country like Spain. In general though, the responsiveness of other tax

⁽¹⁾ The two alternative regimes also lead to slightly different changes in potential output and in prices. In fact, under a lump-sum tax regime productive factors could be more sensitive to shocks and this affects the inflation implications this shock has in the model.

⁽²⁾ The assumption of independent monetary policy in Sweden and the UK means that the results for these two countries are not directly comparable with the rest.

Table A.3

Smoothing capacity under consumption shock

	Budget sensitivity (¹)	Average revenue multiplier (²)	Average expenditure multiplier (³)	Smoothing GDP (revenue) (⁴)	Smoothing GDP (expenditure) (⁵)	Average smoothing GDP (⁶)
B	0.88	0.06	0.49	0.05	0.43	0.24
DK	0.82	0.13	0.64	0.11	0.52	0.31
D	0.61	0.17	0.39	0.10	0.24	0.17
EL	0.71	0.09	0.53	0.06	0.38	0.22
E	0.53	0.11	0.54	0.06	0.28	0.17
F	0.71	0.12	0.54	0.08	0.38	0.23
IRL	0.97	0.11	0.43	0.11	0.42	0.26
I	0.64	0.13	0.51	0.08	0.33	0.21
NL	0.79	0.09	0.41	0.07	0.32	0.20
A	0.76	0.12	0.48	0.09	0.37	0.23
P	0.85	0.03	0.67	0.03	0.57	0.30
FIN	0.59	0.25	0.43	0.15	0.25	0.20
S	0.94	0.29	0.38	0.27	0.36	0.31
UK	0.72	0.2	0.31	0.14	0.22	0.18

(¹) Overall sensitivity of the budget to this particular shock (Def./GDP ratio).

(²) Weighted average of the first year GDP effects of reductions in labour income tax, corporate tax and VAT of 1% of GDP under specific assumptions (see text). Based on weights for 2000.

(³) Weighted average of the first year GDP effects of increases in government purchases, government investment, transfers to households, government employment and wages of 1% of GDP under specific assumptions (see text). Based on weights for 2000.

(⁴) Implied smoothing of GDP that is achieved by the operation of the 'automatic budgetary stabilisers' if it is assumed that the alternative regime is one where revenues are raised across the board.

(⁵) Implied smoothing of GDP that is achieved by the operation of the 'automatic budgetary stabilisers' if it is assumed that the alternative regime is one where expenditure is cut across the board.

(⁶) Implied smoothing of GDP that is achieved by the operation of the 'automatic budgetary stabilisers' if it is assumed that the alternative regime is one where revenues and expenditure are equally adjusted.

bases to this shock differs across countries and this can have an additional effect on the overall budget sensitivity.

Two measures of automatic fiscal stabilisation are reported in the table. First the smoothing of output is calculated under the assumption that the effect of the shock on the budget is offset by changes on the revenue side of the budget. For this purpose, the next column reports the weighted average of the short-run tax multipliers of the model, weighted by the relative shares of each tax category in total revenues (¹). These are based on model simulations of individual tax shocks, each of 1% of GDP, under identical model assumptions and inflation targeting monetary policy. These are relatively small in the short

run, ranging from 0.1 to 0.3, reflecting the anticipation of higher taxes in the future. The stabilisation effect of the budget stabilisers using these tax multipliers is around 0.1, which implies that the smoothing of GDP that is achieved by the operation of the 'automatic budgetary stabilisers' is generally less than 10%. Expenditure multipliers are considerably higher in the model. The weighted average for expenditure shocks, i.e. increases in government purchases, government wage bill, transfers to household and government investment, is around 0.5 on average. An across the board expenditure adjustment to offset the budget effect of economic fluctuations therefore leads to a larger estimate of the smoothing effect of fiscal stabilisers, on average around 0.4.

Table A.4 gives the results for shocks to the investment equation residuals. These disturbances have a smaller impact on the budget than consumption shocks, about half the size, as the impact on tax revenues is much smaller under this type of shock. The variation across

(¹) The effectiveness of fiscal policy changes depends on many different factors and these multipliers are merely presented here as illustration. Differences in duration, assumptions concerning labour market responses and various other assumptions are of crucial importance.

countries is also considerably smaller. The degree of automatic stabilisation when tax revenues are adjusted is small, around 5%, but almost 20% when expenditure is adjusted.

Estimates of the power of stabilisers under an exports equation residual shock are reported in Table A.5. These

also have a smaller impact on the budget than consumption shocks, as, like in the case of an investment shock, no tax category is directly affected by this type of disturbance. The degree of automatic stabilisation when tax revenues are adjusted is similar to under an investment shock, around 5%, and about three times larger when expenditure is adjusted.

Table A.4

Smoothing capacity under investment shock

	Budget sensitivity (¹)	Average revenue multiplier (²)	Average expenditure multiplier (³)	Smoothing GDP (revenue) (⁴)	Smoothing GDP (expenditure) (⁵)	Average smoothing GDP (⁶)
B	0.40	0.06	0.49	0.02	0.20	0.11
DK	0.46	0.13	0.64	0.06	0.29	0.18
D	0.33	0.17	0.39	0.06	0.13	0.09
EL	0.43	0.09	0.53	0.04	0.23	0.13
E	0.33	0.11	0.54	0.04	0.18	0.11
F	0.38	0.12	0.54	0.05	0.21	0.13
IRL	0.24	0.11	0.43	0.03	0.10	0.06
I	0.35	0.13	0.51	0.05	0.18	0.11
NL	0.36	0.09	0.41	0.03	0.15	0.09
A	0.38	0.12	0.48	0.05	0.18	0.11
P	0.45	0.03	0.67	0.01	0.30	0.16
FIN	0.33	0.25	0.43	0.08	0.14	0.11
S	0.39	0.29	0.38	0.11	0.15	0.13
UK	0.34	0.2	0.31	0.07	0.10	0.09

NB: See Table A.3.

Table A.5

Smoothing capacity under exports shock

	Budget sensitivity (¹)	Average revenue multiplier (²)	Average expenditure multiplier (³)	Smoothing GDP (revenue) (⁴)	Smoothing GDP (expenditure) (⁵)	Average smoothing GDP (⁶)
B	0.45	0.06	0.49	0.03	0.22	0.12
DK	0.65	0.13	0.64	0.09	0.42	0.25
D	0.36	0.17	0.39	0.06	0.14	0.10
EL	0.54	0.09	0.53	0.05	0.29	0.17
E	0.35	0.11	0.54	0.04	0.19	0.11
F	0.42	0.12	0.54	0.05	0.23	0.14
IRL	0.35	0.11	0.43	0.04	0.15	0.09
I	0.39	0.13	0.51	0.05	0.20	0.12
NL	0.38	0.09	0.41	0.03	0.16	0.10
A	0.48	0.12	0.48	0.06	0.23	0.14
P	0.55	0.03	0.67	0.02	0.37	0.19
FIN	0.45	0.25	0.43	0.11	0.19	0.15
S	0.44	0.29	0.38	0.13	0.17	0.15
UK	0.31	0.2	0.31	0.06	0.10	0.08

NB: See Table A.3.

While automatic fiscal stabilisation is a desirable stabilising mechanism under demand shocks, smoothing the impact of the disturbance on GDP, under permanent supply shocks, the damping provided by a proportional tax system may be less desirable, as it delays the adjustment of output to its new potential. In case of a negative supply shock, there also arises the issue of a potential conflict between fiscal and monetary authorities, as the effect on output and prices go in opposite directions. Monetary authorities will respond by raising interest rates to offset the inflationary impact of the shock, and this will have a negative effect on GDP. As an example of a supply shock, Table A.6 shows the results for shocks to labour productivity. The impact of this shock is now also affected by the response of the ECB to higher inflation, which depends on the weight of that country in the euro zone's average. The effect on the budget averages around 0.4 percentage points, and the implied smoothing of GDP is around 8% in case of revenue adjustment and 20% under expenditure adjustment.

1.4. Conclusions

The estimates presented here of the size and importance of automatic fiscal stabilisers are all based on hypothetical scenarios in which the effect of a particular shock on

the budget is compared to its effect under a lump-sum tax system or offset by a general, across-the-board, adjustment in expenditure or revenue categories. There is no single estimate of the degree to which fiscal 'stabilisers' smooth output volatility and it would be misleading to interpret one particular scenario as providing such a general estimate. What the scenarios clearly show is that the cyclical sensitivity of the budget depends crucially on the type of disturbance. If variations in GDP are primarily driven by consumption shocks, then the cyclical sensitivity of the budget is much higher than when they are driven by investment or export shocks. A foreign demand shock, like the Asia crisis in 1997–98, has a much smaller effect on the deficit than a shock to domestic consumption, as the latter affects directly VAT receipts. To what extent output is smoothed by the operation of automatic fiscal stabilisers depends to a large extent on how one measures this. The damping provided by the tax system is, according to these model calculations, relatively small. If it is assumed that the alternative regime is one where expenditure is cut to keep the budgetary position constant then the measured stabilisation effect is however considerably larger. This conclusion holds for the short-run impact effect, but in the medium term this result is partly reversed, as the estimates of tax multipliers are much larger in the medium to long term. This analysis has focused on the short-term stabilisation aspects, and more important structural implications have been ignored.

Table A.6

Smoothing capacity under technology shock

	Budget sensitivity (¹)	Average revenue multiplier (²)	Average expenditure multiplier (³)	Smoothing GDP (revenue) (⁴)	Smoothing GDP (expenditure) (⁵)	Average smoothing GDP (⁶)
B	0.45	0.06	0.49	0.03	0.22	0.12
DK	0.37	0.13	0.64	0.05	0.24	0.14
D	0.45	0.17	0.39	0.08	0.18	0.13
EL	0.33	0.09	0.53	0.03	0.18	0.10
E	0.51	0.11	0.54	0.06	0.28	0.17
F	0.39	0.12	0.54	0.05	0.21	0.13
IRL	0.35	0.11	0.43	0.04	0.15	0.09
I	0.54	0.13	0.51	0.07	0.28	0.17
NL	0.42	0.09	0.41	0.04	0.17	0.11
A	0.43	0.12	0.48	0.05	0.21	0.13
P	0.40	0.03	0.67	0.01	0.27	0.14
FIN	0.39	0.25	0.43	0.10	0.17	0.13
S	0.50	0.29	0.38	0.14	0.19	0.17
UK	0.43	0.2	0.31	0.09	0.13	0.11

NB: See Table A.3.

2. Glossary

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.

Broad economic policy guidelines (BEPG): Annual guidelines for the economic and budgetary policies of the Member States. They are prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (Ecofin).

Budget balance: The balance between total public expenditure and revenue in a specific year, with a positive balance indicating a surplus and a negative balance indicating a deficit. For the monitoring of Member State budgetary positions, the EU uses general government aggregates. See also 'Structural budget balance', 'Primary budget balance', and 'Primary structural budget 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.

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.

Consumption taxes: See 'Indirect taxation'.

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'.

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 component of fiscal policy: See 'Fiscal stance'.

Economic and Financial Committee: 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.

Effective tax rate: The ratio of broad categories of tax revenue (labour income, capital income, consumption) to their respective tax bases.

Employment rate: Ratio of employment over working age population (15–64).

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).

Funded pension system: Pension system in which pension expenditures are financed by accumulated contributions and the returns on investments. They can be run either by public or private entities.

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’.

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’). Some central banks have shifted to inflation targeting in recent years.

Interest burden: General government interest payments on public debt as a share of GDP.

Lump-sum taxes: Taxes which are set independently of earnings. As such, they are usually seen as non-distortionary because they do not influence economic agents’ decisions (e.g. on labour supply, etc.).

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’.

Marginal tax rate: The variation of taxes relative to the variation of revenues. They affect incentives to work more or to improve skills (see also ‘Unemployment trap’ and ‘Poverty trap’).

Maturity structure of public debt: The profile of total debt in terms of when it is due to be paid back. Interest rate changes affect the budget balance directly to the extent that the general government sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the budget balance to changes in the prevailing interest rate. See also ‘Public debt’.

‘Minimal benchmarks’: Medium-term reference values for the budget balances providing a cyclical safety margin for the automatic stabilisers to operate freely during economic slowdowns without leading to excessive deficits. The minimal benchmarks have been estimated individually for the various Member States by the European Commission (1999). They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

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.

Non-wage labour costs: See ‘Social security contributions’.

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. 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.

Participation rate: Ratio of labour force over working age population (15–64).

Pay-as-you-go pension system: Pension system in which current pension expenditures are financed by the contributions of current employees.

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.

Poverty trap: The presence of tax and benefit system affects the decision regarding work efforts and improving skills. Poverty trap typically occurs when greater work effort leads to no or small increase in disposable income (due to higher marginal tax rate and/or the suppression of means-tested benefits).

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’.

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.

Replacement rate (net or gross): The ratio of benefits paid to unemployed people and their families relative to their previous (net or gross) labour earnings.

Reservation wage: The minimum net wage below which an individual is expected to refuse a job offer.

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.

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.

‘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 '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'.

Tax base: The income of that sector or activity within an economy on which a certain tax is imposed. If a tax base is expanding while the tax rate is kept constant, tax revenue from that source will automatically increase.

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. See also cyclical component.

Tax wedge: Difference between the wage paid by the employer and that received by the worker induced by labour taxes. It is calculated as income taxes plus employers' and employees' social security contributions as a proportion of compensation per employee.

UMTS: Third generation of technical support for mobile phone communications. Sale of UMTS licences is expected to give rise to one-off receipts.

Unemployment trap: The presence of tax and benefit system affects the decision regarding searching for job. Unemployment trap typically occurs when quitting unemployment leads to no or small increase in disposable income (due to higher marginal tax rate and/or the suppression of means-tested benefits).

Wage floors: The lowest wage level needed to produce the same disposable income as the minimum social benefits, whether based on unemployment benefits or social assistance.

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4. 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

Economic and Finance Ministries

Belgium	http://treasury.fgov.be/interthes	Trésorerie — Ministère des Finances Belge Thesaurie — Belgisch Ministerie van Financien
Denmark	http://www.fm.dk	Ministry of Finance
Germany	http://www.bundesfinanzministerium.de	Bundesministerium der Finanzen
Spain	http://www.meh.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	http://www.bog.frb.fed.us http://www.federalreserve.gov	Board of Governors of the Federal Reserve System Federal Reserve Bank of New York

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	Statistics Bureau/Statistics Centre

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

Contents

Table A.1:	Resources and expenditure of general government, by country	206
Table A.2:	Contributions to the change in the general government gross debt ratio, by country	240
Table A.3:	Cyclical adjustment of general government receipts, expenditures and budget balances, by country	258
Tables A.4:	Government finance in the Member States; 1980–2001, by country	276
	1. Current tax burden	276
	2. Social contributions received	278
	3. Current taxes on income and wealth (direct taxes)	280
	4. Taxes linked to imports and production (indirect taxes)	282
	5. Other current resources	284
	6. Total current resources	286
	7. Interest payments	288
	8. Final consumption expenditure	290
	9. Compensation of employees	292
	10. Total current uses	294
	11. Gross saving	296
	12. Gross fixed capital formation	298
	13. Total uses	300
	14. Net lending (+) or net borrowing (–)	302
	15. Net lending (+) or net borrowing (–) excluding interest	304
	16. General government consolidated gross debt	306
	17. Cyclically-adjusted total resources	308
	18. Cyclically-adjusted total uses	310
	19. Cyclically-adjusted net lending (+) or net borrowing (–)	312
Tables A.5:	Gross domestic product, trend GDP and output gap	314
	1. Gross domestic product at current market prices in 1 000 million EUR	314
	2. Gross domestic product at constant market prices (annual percentage change)	314
	3. Trend GDP at constant market prices (annual percentage change)	316
	4. Gap between actual and trend GDP at constant market prices (% of trend GDP)	316

Table A.1.1.

Resources and expenditure of general government

(% of GDP)

Belgium	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	12.2	12.0	12.2	12.1	12.0	12.4
2. Current taxes on income and wealth	18.0	19.2	16.7	16.3	16.2	16.3
3. Social contributions	14.9	17.1	16.8	17.4	17.7	18.2
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	2.6	2.3	1.8	1.9	1.8	1.8
6. Total current resources	47.7	50.6	47.4	47.7	47.7	48.6
7. Government consumption expenditure	17.3	16.7	13.9	14.3	14.1	14.6
8. Of which compensation of employees	13.4	13.0	11.2	11.5	11.5	12.0
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	23.6	24.9	23.1	24.0	24.3	24.7
12. Interest payments	5.9	10.3	10.4	10.0	10.6	10.7
13. Subsidies	3.6	3.7	2.8	2.9	2.6	2.6
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	51.4	56.3	51.1	52.1	52.7	53.7
16. Gross savings	- 3.7	- 5.8	- 3.6	- 4.4	- 5.0	- 5.1
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	47.7	50.6	47.4	47.7	47.7	48.6
19. Gross fixed capital formation	4.4	2.5	1.3	1.3	1.4	1.6
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	56.2	59.5	52.8	53.9	54.6	55.8
22. Tax burden	46.2	49.4	46.8	46.8	47.0	47.9
23. Net lending (+) or net borrowing (-)	- 8.6	- 8.9	- 5.4	- 6.2	- 6.9	- 7.2

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
12.7	12.2	12.2	12.7	12.9	12.9	13.3	13.2	13.4	13.4
17.5	17.9	16.7	16.7	17.1	17.6	17.2	17.4	17.3	17.2
17.7	17.4	16.8	16.8	16.7	16.5	16.5	16.2	16.0	15.9
:	:	14.8	14.7	14.6	14.5	14.5	14.2	14.0	13.9
1.5	1.5	3.1	3.2	3.0	2.9	2.8	3.0	2.8	2.8
49.4	49.0	48.9	49.4	49.7	50.0	49.9	49.8	49.5	49.3
14.6	14.5	21.5	21.8	21.3	21.2	21.4	21.1	20.8	20.5
12.1	12.1	12.0	11.9	11.8	11.7	11.6	11.4	11.2	11.1
:	:	7.8	7.7	7.6	7.6	7.7	7.6	7.6	7.4
:	:	13.7	14.1	13.7	13.6	13.7	13.5	13.2	13.1
24.3	24.3	16.6	16.6	16.3	16.0	15.7	15.5	15.3	15.3
10.0	8.8	9.3	8.9	8.0	7.7	7.2	6.9	6.6	6.2
2.4	2.4	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5
:	:	2.0	2.1	2.2	2.2	2.2	2.1	2.2	2.2
52.4	51.0	50.9	50.9	49.2	48.5	48.0	47.2	46.4	45.8
-3.0	-2.0	-2.0	-1.5	0.5	1.5	1.9	2.7	3.1	3.5
:	:	0.4	0.4	0.6	0.5	0.6	0.5	0.5	0.5
49.4	49.0	48.6	49.3	49.7	50.0	50.0	49.9	49.0	48.7
1.6	1.4	1.8	1.6	1.6	1.5	1.8	1.8	1.9	1.9
:	:	1.0	1.1	1.5	1.3	1.4	1.3	1.0	1.3
54.2	52.9	53.0	53.0	51.6	50.9	50.7	49.9	48.3	48.0
49.1	48.6	46.9	47.2	47.8	48.1	48.0	47.9	47.6	47.4
-4.8	-3.9	-4.3	-3.8	-1.9	-0.9	-0.7	0.0	0.6	0.7

Table A.1.2.

Resources and expenditure of general government

(% of GDP)

Denmark	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	18.0	17.8	17.0	16.7	16.6	16.9
2. Current taxes on income and wealth	25.1	27.8	28.3	28.5	29.0	30.1
3. Social contributions	1.6	2.5	2.3	2.3	2.4	2.5
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	6.0	7.1	7.5	7.2	8.0	8.4
6. Total current resources	50.8	55.2	55.1	54.7	56.0	57.9
7. Government consumption expenditure	27.0	25.6	25.6	25.7	25.8	26.8
8. Of which compensation of employees	18.0	17.4	17.7	17.7	17.8	18.1
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	20.3
12. Interest payments	3.7	9.3	7.3	7.3	6.6	7.3
13. Subsidies	3.0	2.8	3.3	3.2	3.8	3.9
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	50.0	54.4	54.9	55.7	56.3	58.9
16. Gross savings	0.7	0.8	0.2	- 1.0	- 0.4	- 1.0
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	50.8	55.2	55.1	54.7	56.0	57.9
19. Gross fixed capital formation	3.3	2.1	1.6	1.5	1.9	1.8
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	53.1	56.4	56.1	57.1	58.2	60.7
22. Tax burden	44.7	48.0	47.6	47.5	48.0	49.5
23. Net lending (+) or net borrowing (-)	- 3.2	- 2.0	- 1.0	- 2.4	- 2.2	- 2.8

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
17.3	17.2	16.9	17.3	17.5	18.0	17.8	17.0	16.5	16.1
30.6	30.3	30.4	30.6	30.3	29.6	30.1	28.7	29.4	29.1
2.8	2.6	2.6	2.6	2.6	2.6	3.1	3.2	3.1	3.1
:	:	1.6	1.6	1.6	1.6	2.1	2.2	2.1	2.1
7.5	6.8	6.8	7.1	6.7	6.6	6.0	5.5	5.6	5.3
58.1	56.9	56.8	57.7	57.1	56.7	57.0	54.4	54.6	53.6
25.9	25.7	25.8	25.9	25.5	25.7	25.5	24.7	24.8	24.6
17.5	17.3	17.3	17.3	17.1	17.3	17.1	16.6	16.7	16.6
:	:	8.5	8.5	8.3	8.1	8.0	7.7	7.8	7.8
:	:	17.3	17.4	17.1	17.6	17.5	17.0	17.0	16.9
21.7	20.8	20.4	19.8	18.8	18.1	17.5	16.8	16.8	16.5
6.7	6.4	6.4	6.1	5.7	5.3	4.6	4.1	3.8	3.5
3.7	3.6	2.5	2.6	2.4	2.3	2.3	2.2	2.1	2.0
:	:	2.2	2.4	2.4	2.5	2.5	2.5	2.6	2.5
58.8	57.4	57.3	56.8	54.9	53.9	52.4	50.3	50.0	49.2
-0.7	-0.5	-0.5	0.9	2.2	2.9	4.6	4.1	4.6	4.5
:	:	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
58.1	56.9	58.0	58.8	58.4	58.0	58.5	55.7	55.8	54.8
1.8	1.8	1.8	1.9	1.9	1.7	1.7	1.8	1.8	1.8
:	:	0.5	0.4	0.4	0.5	0.4	0.4	0.1	0.3
60.7	59.2	60.3	59.8	58.0	56.9	55.4	53.3	52.6	51.9
50.7	50.1	50.2	50.7	50.7	50.4	51.2	49.1	49.2	48.5
-2.6	-2.2	-2.3	-1.0	0.4	1.1	3.1	2.4	3.1	2.8

Table A.1.3.

Resources and expenditure of general government

(% of GDP)

Germany ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	13.1	12.6	12.5	12.2	12.4	12.7
2. Current taxes on income and wealth	12.8	12.6	11.2	11.3	11.6	11.2
3. Social contributions	16.9	17.6	16.9	17.5	17.8	18.4
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	2.3	3.2	2.7	2.6	3.1	3.0
6. Total current resources	45.1	46.0	43.3	43.5	44.9	45.3
7. Government consumption expenditure	20.2	20.1	18.3	18.9	19.5	19.6
8. Of which compensation of employees	11.0	10.6	9.7	10.1	10.4	10.6
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	17.2	16.8	15.8	16.6	17.3	18.4
12. Interest payments	1.9	3.0	2.6	2.6	3.2	3.2
13. Subsidies	2.3	2.3	2.2	2.4	2.1	2.1
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	42.7	43.4	42.0	42.3	43.4	44.8
16. Gross savings	2.4	2.6	1.3	1.2	1.4	0.5
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	45.1	46.0	43.3	43.5	44.9	45.3
19. Gross fixed capital formation	3.6	2.4	2.3	2.6	2.8	2.7
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	48.0	47.2	45.3	46.8	47.6	48.8
22. Tax burden	42.8	42.8	40.5	40.8	41.5	42.0
23. Net lending (+) or net borrowing (-)	- 2.9	- 1.2	- 2.1	- 3.2	- 2.8	- 3.5

⁽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 18 = line 6 + line 17.

Line 21 = line 15 + line 19 + line 20.

Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽²⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
13.1	12.7	11.4	11.4	11.4	11.6	12.2	12.0	12.1	12.1
10.8	11.1	11.1	11.5	11.2	11.5	12.0	12.5	11.4	11.7
18.9	19.1	18.8	19.4	19.6	19.2	18.9	18.7	18.3	18.0
:	:	17.7	18.3	18.5	18.1	17.9	17.6	17.3	17.0
3.0	2.7	3.5	3.4	3.2	3.2	3.1	2.9	2.8	2.8
45.9	45.6	44.8	45.7	45.4	45.5	46.1	46.0	44.6	44.6
19.4	19.5	19.8	19.9	19.5	19.1	19.0	18.9	18.7	18.6
10.3	10.2	9.0	8.9	8.7	8.4	8.3	8.1	7.9	7.7
:	:	8.4	8.4	8.1	8.0	7.9	7.8	7.7	7.6
:	:	11.4	11.6	11.3	11.1	11.1	11.0	11.0	10.9
18.6	19.0	18.1	19.3	19.3	18.9	18.9	18.7	18.5	18.3
3.3	3.7	3.7	3.7	3.6	3.6	3.5	3.3	3.2	3.1
2.1	2.1	2.1	2.0	1.8	1.8	1.7	1.7	1.6	1.6
:	:	1.2	1.3	1.4	1.4	1.6	1.7	1.7	1.7
44.9	45.6	44.9	46.2	45.5	44.8	44.8	44.3	43.8	43.3
1.0	0.0	-0.1	-0.5	-0.1	0.6	1.3	1.8	0.8	1.3
:	:	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4
45.9	45.6	46.1	46.8	46.5	46.6	47.2	47.0	45.9	46.0
2.5	2.3	2.3	2.1	1.9	1.8	1.8	1.8	1.8	1.7
:	:	1.6	1.2	1.2	1.3	1.3	-1.1	1.2	1.2
48.4	49.0	49.6	50.3	49.2	48.6	48.6	45.6	47.6	47.2
42.5	42.5	42.2	43.1	43.0	42.9	43.7	43.8	42.3	42.3
-2.6	-3.4	-3.5	-3.4	-2.7	-2.1	-1.4	1.5	-1.7	-1.2

Table A.1.4.

Resources and expenditure of general government

(% of GDP)

Greece	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	10.4	12.5	13.9	14.6	15.3	14.7
2. Current taxes on income and wealth	4.5	4.6	5.4	5.5	5.4	5.7
3. Social contributions	9.3	11.6	11.5	11.1	11.0	11.9
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	1.9	1.7	1.7	2.2	2.5	3.1
6. Total current resources	26.2	30.3	32.5	33.4	34.2	35.4
7. Government consumption expenditure	13.4	16.1	15.1	14.2	13.7	14.3
8. Of which compensation of employees	9.3	11.4	12.5	11.5	10.9	10.9
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	9.3	14.1	15.0	14.9	14.8	15.1
12. Interest payments	2.0	4.9	10.0	9.3	11.5	12.6
13. Subsidies	2.2	5.2	4.0	3.5	3.6	3.9
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	26.2	37.7	41.9	39.8	41.2	43.4
16. Gross savings	- 0.1	- 7.4	- 9.4	- 6.4	- 7.0	- 7.9
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	26.2	30.3	32.5	33.4	34.2	35.4
19. Gross fixed capital formation	2.1	3.6	2.8	3.1	3.5	3.3
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	28.8	41.9	48.4	44.7	46.8	49.0
22. Tax burden	24.4	28.8	31.0	31.4	31.9	32.6
23. Net lending (+) or net borrowing (-)	- 2.6	- 11.6	- 15.9	- 11.4	- 12.6	- 13.6

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
14.3	14.2	13.5	14.0	14.3	14.4	15.2	15.3	15.2	15.1
6.8	7.2	7.4	7.1	7.8	9.5	10.5	10.8	10.7	10.6
12.1	12.4	12.6	12.9	13.3	13.5	13.7	13.8	13.9	14.0
:	:	10.5	10.8	11.2	11.4	11.7	11.8	11.8	11.9
3.8	4.2	2.9	2.9	3.4	2.7	2.7	2.7	2.7	2.7
36.9	38.0	36.4	36.9	38.8	40.1	42.0	42.6	42.5	42.4
13.8	15.3	15.3	14.5	15.2	15.3	15.0	15.2	14.9	14.7
10.6	11.3	11.3	10.7	11.6	11.7	11.5	11.6	11.5	11.4
:	:	9.4	8.5	8.9	9.1	8.9	8.8	8.7	8.6
:	:	5.9	6.0	6.3	6.2	6.1	6.3	6.2	6.1
15.2	15.5	15.1	15.4	15.6	15.6	15.8	15.9	15.9	15.9
13.9	12.7	11.1	10.5	8.2	7.8	7.6	7.2	6.7	6.1
3.6	3.3	0.4	0.5	0.2	0.1	0.2	0.2	0.2	0.2
:	:	1.3	1.2	1.1	1.2	1.6	1.2	1.3	1.3
44.0	45.1	43.3	42.2	40.3	40.1	40.1	39.7	38.9	38.1
-7.1	-7.1	-6.8	-5.2	-1.5	0.0	1.9	2.9	3.6	4.3
:	:	0.0	0.0	0.0	0.0	0.0	:	:	:
36.9	38.0	37.7	38.1	40.0	41.4	43.3	43.8	43.8	44.0
3.1	3.3	3.2	3.2	3.4	3.6	4.1	4.3	4.4	4.6
:	:	0.2	-0.6	-0.2	-0.5	-0.3	-0.5	-0.9	-0.8
46.8	48.5	47.8	45.9	44.7	44.6	45.2	44.7	43.8	43.4
33.4	34.0	34.4	34.8	36.0	38.2	40.1	40.6	40.5	40.4
-9.9	-10.5	-10.2	-7.8	-4.7	-3.1	-1.8	-0.9	0.0	0.6

Table A.1.5.

Resources and expenditure of general government

(% of GDP)

Spain	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	6.3	9.1	10.3	10.3	10.8	10.1
2. Current taxes on income and wealth	6.7	8.2	11.6	11.6	12.0	11.5
3. Social contributions	12.7	12.7	12.9	13.2	14.0	14.3
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.9	4.2	3.7	4.1	4.0	5.0
6. Total current resources	29.6	34.2	38.4	39.2	40.9	40.9
7. Government consumption expenditure	12.9	14.2	15.0	15.6	16.4	16.8
8. Of which compensation of employees	9.4	10.2	10.7	11.1	11.8	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	16.2
12. Interest payments	0.4	1.9	3.9	3.7	4.3	5.0
13. Subsidies	1.8	2.4	2.4	2.5	2.5	3.1
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	27.7	33.9	36.7	38.0	40.2	42.6
16. Gross savings	0.5	0.3	1.7	1.2	0.7	- 1.7
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	29.6	34.2	38.4	39.2	40.9	40.9
19. Gross fixed capital formation	1.8	3.6	4.9	4.7	4.0	4.1
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	31.6	40.4	42.6	43.5	44.9	47.6
22. Tax burden	26.1	30.6	35.4	35.7	37.5	36.5
23. Net lending (+) or net borrowing (-)	- 2.5	- 6.2	- 4.2	- 4.3	- 4.0	- 6.7

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
10.6	10.3	10.2	10.2	10.5	11.1	11.7	11.6	11.6	11.6
11.0	11.0	10.1	10.3	10.5	10.2	10.3	10.5	10.6	10.6
14.0	13.1	13.0	13.2	13.1	13.1	13.1	13.4	13.4	13.4
:	:	12.0	12.2	12.2	12.2	12.3	12.5	12.5	12.5
4.2	3.6	4.1	4.2	4.0	3.7	3.6	3.1	3.2	3.2
39.8	38.0	37.4	37.8	38.1	38.2	38.6	38.6	38.8	38.8
16.2	16.0	18.1	17.9	17.6	17.5	17.3	17.1	16.9	16.8
11.3	11.2	11.3	11.3	10.9	10.7	10.5	10.4	10.2	10.0
:	:	8.0	7.8	7.7	7.6	7.5	7.4	7.3	7.3
:	:	10.1	10.1	9.9	9.9	9.8	9.7	9.6	9.5
15.8	15.1	13.9	13.8	13.3	12.8	12.4	12.4	12.3	12.2
4.7	5.3	5.2	5.3	4.8	4.3	3.6	3.3	3.2	3.1
2.9	3.0	1.1	1.0	0.9	1.1	1.2	1.1	1.1	1.1
:	:	0.9	1.0	1.1	1.2	1.3	1.3	1.3	1.4
41.3	40.3	39.2	39.0	37.6	37.0	35.9	35.2	34.8	34.6
-1.5	-2.3	-1.8	1.2	0.4	1.2	2.8	3.4	4.0	4.3
:	:	1.4	1.4	1.3	1.3	1.4	1.2	1.3	1.2
39.8	38.0	38.4	38.8	39.1	39.1	39.6	39.5	39.8	39.8
3.9	3.7	3.7	3.1	3.1	3.3	3.3	3.3	3.4	3.5
:	:	2.5	2.0	1.9	1.8	2.0	1.7	1.8	1.8
45.9	45.0	45.0	43.7	42.2	41.7	40.8	39.9	39.7	39.6
36.1	35.0	34.0	34.4	34.8	35.1	35.7	36.2	36.2	36.3
-6.1	-7.0	-6.6	-4.9	-3.2	-2.6	-1.2	-0.3	0.1	0.2

Table A.1.6.

Resources and expenditure of general government

(% of GDP)

France	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	14.9	15.6	14.9	14.5	14.3	14.3
2. Current taxes on income and wealth	8.1	8.9	8.7	9.2	8.8	9.0
3. Social contributions	19.1	20.8	20.6	20.7	20.9	21.1
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.2	3.8	4.0	3.9	4.1	4.1
6. Total current resources	45.3	49.1	48.2	48.2	48.0	48.4
7. Government consumption expenditure	17.7	19.1	17.7	17.9	18.5	19.4
8. Of which compensation of employees	13.4	14.4	13.0	13.1	13.4	14.0
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	23.1
12. Interest payments	1.4	2.8	2.9	2.9	3.2	3.3
13. Subsidies	2.5	3.0	2.1	2.2	2.2	2.4
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	41.7	48.6	45.7	46.7	48.4	50.7
16. Gross savings	3.7	0.5	2.4	1.4	- 0.4	- 2.2
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	45.3	49.1	48.2	48.2	48.0	48.4
19. Gross fixed capital formation	3.3	3.2	3.5	3.5	3.5	3.1
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	45.4	52.0	49.7	50.1	51.8	54.1
22. Tax burden	42.9	46.3	45.1	45.4	45.0	45.6
23. Net lending (+) or net borrowing (-)	0.0	- 2.8	- 1.5	- 2.0	- 3.9	- 5.6

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
14.7	14.9	15.4	16.1	16.0	16.0	16.1	15.7	15.4	15.4
9.2	9.4	8.5	8.9	9.5	11.7	12.2	12.3	12.1	12.0
20.7	21.0	20.5	20.7	20.3	18.2	18.4	18.5	18.5	18.4
:	:	18.7	18.9	18.4	16.4	16.6	16.7	16.7	16.6
3.7	3.8	3.7	4.0	3.9	3.7	3.6	3.7	3.7	3.8
48.3	49.0	48.1	49.7	49.7	49.6	50.4	50.2	49.8	49.6
19.2	19.0	23.9	24.2	24.2	23.5	23.7	23.5	23.3	23.1
14.0	14.1	13.7	13.9	13.8	13.7	13.7	13.5	13.2	12.9
:	:	9.8	9.9	10.0	9.5	9.5	9.4	9.2	9.1
:	:	14.1	14.2	14.2	14.1	14.1	14.1	14.1	14.0
22.9	23.0	18.5	18.7	18.8	18.4	18.3	18.1	17.8	17.5
3.5	3.7	3.8	3.9	3.7	3.6	3.4	3.3	3.2	3.1
2.3	2.3	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.3
:	:	1.6	1.7	1.6	1.7	1.7	1.7	1.6	1.6
50.4	50.4	49.2	50.0	49.8	48.6	48.3	47.9	47.3	46.7
-2.1	-1.4	-1.1	-0.3	0.0	1.1	2.1	2.3	2.5	2.9
:	:	0.4	0.3	0.8	1.2	1.4	1.5	1.5	1.5
48.3	49.0	49.7	51.4	51.9	51.3	52.1	51.9	51.4	51.0
3.1	3.2	3.3	3.2	3.0	2.9	2.9	3.0	3.0	3.0
:	:	1.5	0.9	0.8	2.1	2.2	2.1	1.5	2.1
54.0	53.8	55.2	55.5	55.0	54.0	53.7	53.2	51.9	51.8
45.9	46.6	45.2	46.4	46.5	46.5	47.3	47.0	46.6	46.3
-5.6	-4.8	-5.5	-4.1	-3.0	-2.7	-1.6	-1.3	-0.6	-0.8

Table A.1.7.

Resources and expenditure of general government

(% of GDP)

Ireland	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	15.3	16.7	15.5	15.2	15.2	14.4
2. Current taxes on income and wealth	11.5	13.1	13.1	13.7	14.1	14.8
3. Social contributions	4.4	5.1	5.0	5.2	5.3	5.3
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.3	3.8	2.2	2.5	2.5	2.4
6. Total current resources	34.5	38.8	35.9	36.6	37.0	36.9
7. Government consumption expenditure	18.1	16.9	14.2	15.1	15.4	15.3
8. Of which compensation of employees	11.8	11.5	9.8	10.5	10.6	10.8
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	11.6	15.1	13.4	14.1	14.6	14.5
12. Interest payments	6.0	9.3	7.4	7.2	6.7	6.3
13. Subsidies	7.2	7.4	5.6	5.5	4.7	4.9
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	39.5	45.1	36.7	37.8	38.2	38.0
16. Gross savings	- 4.9	- 6.2	- 0.8	- 1.2	- 1.2	- 1.0
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	34.5	38.8	35.9	36.6	37.0	36.9
19. Gross fixed capital formation	5.4	3.7	2.0	2.1	2.0	2.2
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	46.1	49.0	38.0	38.9	39.4	39.2
22. Tax burden	31.1	34.9	33.5	34.0	34.4	34.4
23. Net lending (+) or net borrowing (-)	- 11.6	- 10.2	- 2.2	- 2.3	- 2.4	- 2.3

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
15.3	14.6	13.5	13.7	13.5	13.2	13.4	13.4	13.4	13.3
15.2	13.5	13.6	14.1	14.0	13.9	13.5	13.0	12.4	11.8
5.1	4.7	6.8	6.3	6.0	5.8	5.8	5.8	5.5	5.3
:	:	5.0	4.6	4.4	4.3	4.5	4.5	4.3	4.1
2.1	1.8	2.8	2.9	2.7	2.5	2.8	2.7	2.5	2.4
37.6	34.7	36.7	37.0	36.2	35.4	35.5	34.9	33.7	32.8
15.2	14.2	16.4	15.8	15.2	14.5	14.0	13.3	13.4	12.9
10.4	9.6	10.2	9.7	9.2	8.8	8.2	7.8	7.9	7.4
:	:	6.1	5.8	5.5	5.2	5.0	4.8	4.8	4.6
:	:	10.4	10.0	9.6	9.3	8.9	8.5	8.5	8.2
14.4	13.7	11.8	11.6	10.9	10.3	9.9	9.2	9.3	9.0
5.6	5.0	5.4	4.6	4.2	3.4	2.4	2.1	1.8	1.6
4.4	4.1	1.0	1.0	1.0	0.8	1.0	1.0	0.9	0.8
:	:	2.1	2.4	2.2	2.2	2.1	1.9	1.8	1.7
37.0	34.8	36.8	35.3	33.6	31.2	29.5	27.6	27.1	26.1
0.6	-0.2	-0.1	1.7	2.6	4.1	6.0	7.3	6.6	6.8
:	:	1.8	1.7	1.7	1.6	2.2	2.2	2.3	2.3
37.6	34.7	39.4	39.5	38.6	37.7	38.4	37.8	36.9	35.9
2.3	2.4	2.3	2.4	2.5	2.7	3.1	3.8	4.0	4.5
:	:	1.6	1.2	1.1	1.0	3.0	1.2	1.0	1.0
39.2	36.8	41.6	39.7	37.8	35.7	36.3	33.3	33.0	32.4
35.4	32.9	35.1	35.0	34.2	33.7	33.2	32.4	31.5	30.6
-1.6	-2.1	-2.2	-0.2	0.7	2.1	2.1	4.5	3.9	3.5

Table A.1.8.

Resources and expenditure of general government

(% of GDP)

Italy	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	9.3	9.5	11.3	11.8	11.8	12.7
2. Current taxes on income and wealth	9.7	13.0	14.3	14.4	14.6	16.0
3. Social contributions	12.9	13.5	14.3	14.6	14.9	15.4
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	2.4	2.9	2.9	3.0	3.3	3.6
6. Total current resources	34.4	38.9	42.8	43.8	44.5	47.7
7. Government consumption expenditure	15.0	16.6	17.4	17.4	17.5	17.5
8. Of which compensation of employees	11.1	11.8	12.6	12.6	12.5	12.4
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	19.7
12. Interest payments	5.5	8.0	9.4	10.1	11.4	12.0
13. Subsidies	3.5	3.4	2.5	2.6	2.3	2.7
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	39.0	45.9	48.5	49.5	51.6	53.1
16. Gross savings	- 4.6	- 6.9	- 5.7	- 5.7	- 7.1	- 5.4
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	34.4	38.9	42.8	43.8	44.5	47.7
19. Gross fixed capital formation	3.2	3.7	3.3	3.2	3.0	2.6
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	43.0	51.5	53.8	53.8	54.0	57.1
22. Tax burden	31.7	36.1	40.0	40.9	41.5	44.2
23. Net lending (+) or net borrowing (-)	- 8.7	- 12.5	- 11.0	- 10.0	- 9.5	- 9.4

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
12.3	12.4	12.1	11.8	12.4	15.3	15.2	15.1	15.1	15.0
14.8	14.5	14.8	15.4	16.1	14.4	15.1	14.6	14.1	13.8
14.8	14.6	14.8	15.0	15.3	12.8	12.8	12.7	12.6	12.5
:	:	13.0	14.6	14.9	12.5	12.4	12.4	12.3	12.2
3.6	3.7	3.1	3.2	3.2	3.2	3.3	3.0	3.0	2.9
45.5	45.3	44.8	45.5	47.2	45.8	46.3	45.5	44.8	44.2
17.0	15.9	17.9	18.1	18.2	17.9	18.1	18.0	17.7	17.5
11.9	11.3	11.2	11.5	11.6	10.7	10.7	10.5	10.4	10.1
:	:	7.3	7.3	7.2	7.2	7.2	7.2	7.0	6.9
:	:	10.6	10.8	11.0	10.8	10.8	10.8	10.7	10.6
19.7	19.1	16.7	16.9	17.3	17.0	17.2	16.7	16.5	16.2
10.9	11.3	11.5	11.5	9.4	8.0	6.7	6.5	6.2	5.8
2.4	1.9	1.5	1.5	1.2	1.3	1.2	1.2	1.1	1.1
:	:	1.1	1.3	1.3	1.3	1.4	1.4	1.5	1.5
51.0	49.1	48.6	49.2	47.4	45.6	44.7	43.8	43.0	42.1
-5.4	-3.8	-3.8	-3.7	-0.2	0.2	1.6	1.8	1.8	2.1
:	:	0.9	0.4	1.0	0.7	0.5	0.4	:	:
45.5	45.3	45.8	46.1	48.4	46.8	47.1	46.1	45.5	44.9
2.3	2.2	2.1	2.2	2.2	2.4	2.5	2.4	2.3	2.3
:	:	2.5	1.6	1.3	1.4	1.4	0.1	1.3	1.3
54.6	52.9	53.4	53.2	51.1	49.6	48.9	46.5	46.8	45.9
42.1	41.9	42.3	42.9	44.4	43.2	43.5	43.0	42.3	41.8
-9.1	-7.6	-7.6	-7.1	-2.7	-2.8	-1.8	-0.3	-1.3	-1.0

Table A.1.9.

Resources and expenditure of general government

(% of GDP)

Luxembourg	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	12.3	14.7	15.1	15.3	15.5	16.1
2. Current taxes on income and wealth	15.5	17.3	:	:	:	:
3. Social contributions	13.2	12.2	:	:	:	:
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	6.2	5.6	:	:	:	:
6. Total current resources	47.2	49.9	:	:	:	:
7. Government consumption expenditure	14.3	13.5	12.7	12.6	12.4	12.3
8. Of which compensation of employees	10.0	9.6	:	:	:	:
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	21.4	20.5	:	:	:	:
12. Interest payments	1.1	1.0	0.4	0.4	0.3	0.3
13. Subsidies	2.9	3.0	3.0	3.1	2.9	2.8
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	40.2	38.9	:	:	:	:
16. Gross savings	7.0	11.0	:	:	:	:
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	47.2	49.9	:	:	:	:
19. Gross fixed capital formation	6.4	3.9	4.5	4.7	5.1	5.1
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	47.7	43.7	:	:	:	:
22. Tax burden	39.7	42.7	:	:	:	:
23. Net lending (+) or net borrowing (-)	- 0.4	6.2	4.7	1.8	0.7	1.6

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 – line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
16.1	16.0	12.5	12.6	12.9	13.4	14.2	14.9	14.8	14.7
:	:	18.4	18.3	17.5	16.5	16.9	16.1	14.7	13.5
:	:	12.4	12.3	11.8	11.6	11.9	11.6	11.4	11.2
:	:	11.2	11.1	10.7	10.6	10.9	10.7	10.5	10.3
:	:	5.5	5.4	5.3	5.3	4.8	4.3	3.9	3.6
:	:	48.9	48.6	47.4	46.8	47.7	46.9	44.8	43.0
11.8	12.5	18.2	18.8	17.9	17.2	17.3	16.6	16.3	16.1
:	:	9.6	9.6	9.3	9.1	8.7	8.1	:	:
:	:	8.5	8.5	8.3	7.7	7.4	7.2	7.1	7.0
:	:	9.7	10.3	9.6	9.5	9.9	9.4	9.2	9.1
:	:	16.5	16.4	15.7	15.3	15.1	14.3	13.9	13.5
0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
2.8	2.0	1.8	2.0	1.8	1.9	1.6	1.6	1.4	1.3
:	:	3.1	2.6	2.9	3.3	3.5	3.1	2.9	2.8
:	:	39.8	40.2	38.6	38.1	37.8	35.8	34.8	33.9
:	:	9.0	8.4	8.8	8.8	9.9	11.1	10.0	9.1
:	:	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1
:	:	48.3	47.9	47.0	46.4	47.3	46.5	44.5	42.6
4.2	4.4	4.5	4.7	4.2	4.6	4.3	4.4	4.6	4.6
:	:	1.5	1.3	1.2	1.1	1.2	1.6	1.6	1.6
:	:	45.1	45.4	43.4	43.2	42.6	41.2	40.5	39.7
:	:	44.7	44.5	43.5	42.3	46.1	45.9	44.1	42.5
2.6	1.8	3.3	2.5	3.6	3.2	4.7	5.3	4.0	3.0

Table A.1.10.

Resources and expenditure of general government

(% of GDP)

The Netherlands	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	11.6	11.7	11.8	11.9	12.2	12.4
2. Current taxes on income and wealth	15.1	12.2	14.9	16.2	15.3	16.1
3. Social contributions	17.4	19.6	16.3	17.3	17.8	17.8
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	6.3	8.7	4.9	5.2	4.8	4.6
6. Total current resources	50.4	52.2	47.9	50.6	50.1	50.8
7. Government consumption expenditure	16.7	15.1	14.0	13.9	14.1	14.2
8. Of which compensation of employees	12.3	10.6	9.3	9.2	9.4	9.6
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	25.3	26.3	26.1	26.3	26.7	26.9
12. Interest payments	3.7	6.1	5.7	5.9	6.0	6.0
13. Subsidies	2.9	3.4	2.9	3.1	3.1	2.9
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	49.1	51.4	49.5	50.3	51.0	51.2
16. Gross savings	1.3	0.9	- 1.5	0.3	- 0.9	- 0.3
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	50.4	52.2	47.9	50.6	50.1	50.8
19. Gross fixed capital formation	3.2	2.2	1.9	2.1	2.0	2.0
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	54.4	55.7	52.8	53.4	53.8	53.9
22. Tax burden	43.6	43.1	42.7	45.0	44.8	45.8
23. Net lending (+) or net borrowing (-)	- 4.1	- 3.5	- 4.9	- 2.8	- 3.8	- 3.1

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
12.3	12.3	10.7	11.2	11.4	11.6	12.2	12.1	12.7	12.6
13.4	12.5	12.4	12.9	12.4	12.1	12.2	12.1	11.4	11.5
18.2	18.2	17.2	16.6	16.6	16.5	17.1	17.1	15.3	15.1
:	:	16.0	15.5	15.5	15.4	16.0	16.0	14.2	14.1
4.0	3.7	6.0	5.8	5.5	5.0	4.7	4.7	4.6	4.6
48.0	46.6	46.3	46.5	45.9	45.2	46.2	46.0	43.9	43.7
13.8	13.8	24.0	23.1	22.9	22.8	22.8	22.6	22.3	22.1
9.2	9.2	10.8	10.4	10.2	10.2	10.2	10.0	9.7	9.7
:	:	11.6	11.3	11.0	10.8	10.8	10.7	10.6	10.5
:	:	12.5	11.9	11.9	11.9	12.0	11.9	11.7	11.6
25.8	25.1	15.3	14.8	13.9	13.0	12.5	12.0	11.5	11.3
5.6	5.7	5.9	5.6	5.2	4.8	4.4	4.0	3.3	3.0
2.5	1.8	1.1	1.2	1.5	1.5	1.6	1.5	1.4	1.4
:	:	1.1	1.2	1.2	1.4	1.4	1.9	2.0	2.0
49.0	47.7	47.4	45.9	44.7	43.4	42.7	42.0	40.5	39.8
-1.0	-1.1	-1.1	0.6	1.3	1.8	3.5	4.1	3.4	4.0
:	:	0.3	0.6	0.4	0.4	0.5	0.4	0.4	0.4
48.0	46.6	47.3	47.8	47.1	46.4	47.5	47.2	45.1	44.9
2.0	1.9	3.0	3.1	2.9	3.0	3.0	3.2	3.2	3.2
:	:	0.4	-0.1	-0.2	-0.1	0.0	-0.7	-0.2	-0.2
51.6	50.4	51.4	49.6	48.2	47.1	46.5	45.2	44.3	43.5
43.5	42.5	41.5	41.7	41.5	41.2	42.4	42.3	40.3	40.1
-3.6	-3.8	-4.2	-1.8	-1.1	-0.7	1.0	2.0	0.8	1.4

Table A.1.11.

Resources and expenditure of general government

(% of GDP)

Austria	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	15.8	16.3	15.7	15.5	15.6	15.7
2. Current taxes on income and wealth	12.5	14.0	11.6	12.2	12.7	12.8
3. Social contributions	14.4	14.7	15.5	15.6	16.2	16.8
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	2.8	2.9	4.4	4.4	4.8	4.6
6. Total current resources	45.6	47.9	47.1	47.7	49.2	49.9
7. Government consumption expenditure	17.4	18.4	18.4	18.7	19.1	19.9
8. Of which compensation of employees	11.6	12.4	11.7	11.8	12.0	12.5
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	21.5
12. Interest payments	2.4	3.5	4.0	4.2	4.2	4.3
13. Subsidies	2.9	2.8	2.8	3.1	3.0	3.1
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	41.3	44.7	44.9	45.9	46.5	49.1
16. Gross savings	4.2	3.1	2.2	1.8	2.7	0.8
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	45.6	47.9	47.1	47.7	49.2	49.9
19. Gross fixed capital formation	4.3	3.6	3.2	3.2	3.2	3.2
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	47.2	50.3	49.6	50.6	51.2	54.1
22. Tax burden	42.7	44.9	42.6	43.2	44.4	45.3
23. Net lending (+) or net borrowing (-)	- 1.7	- 2.4	- 2.4	- 3.0	- 1.9	- 4.2

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 – line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
15.7	15.5	14.2	14.5	15.0	15.0	15.1	14.6	14.7	14.7
11.3	11.9	12.0	13.1	13.5	13.7	13.4	13.2	14.1	14.4
17.2	17.3	17.4	17.5	17.3	17.2	17.3	17.0	16.8	16.6
:	:	15.2	15.3	15.3	15.2	15.2	14.9	14.8	14.6
4.4	4.5	5.8	5.2	3.8	3.5	3.1	3.1	2.1	2.2
48.6	49.2	49.5	50.3	49.6	49.5	48.9	48.0	47.8	47.8
20.0	19.8	20.4	20.3	19.7	19.6	19.6	19.3	19.0	18.7
12.4	12.4	12.6	12.4	11.5	11.3	11.4	11.2	11.2	10.8
:	:	8.1	8.0	7.8	7.8	7.7	7.5	7.3	7.1
:	:	12.4	12.3	11.9	11.9	11.9	11.8	11.7	11.7
21.7	21.6	19.5	19.5	18.9	18.6	18.7	18.7	18.3	18.3
4.0	4.3	4.4	4.2	3.9	3.8	3.5	3.6	3.5	3.4
2.5	2.9	2.9	2.6	2.6	2.8	2.6	2.5	2.7	2.6
:	:	2.5	2.6	2.5	2.7	2.6	2.3	1.8	1.8
48.6	49.6	49.7	49.3	47.5	47.4	47.0	46.3	45.4	44.8
0.0	-0.4	-0.3	1.0	2.1	2.0	1.8	1.7	2.4	2.9
:	:	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1
48.6	49.2	52.1	52.8	52.2	52.0	51.6	50.6	51.1	50.8
3.3	2.8	3.1	2.8	2.0	1.9	1.8	1.7	1.6	1.6
:	:	2.0	2.2	2.1	2.5	2.2	1.2	1.5	1.5
53.5	54.2	57.2	56.6	53.9	54.3	53.7	51.8	51.7	50.8
44.0	44.7	44.9	45.9	46.9	46.7	46.5	45.6	46.4	46.4
-4.9	-5.0	-5.2	-3.8	-1.7	-2.2	-2.1	-1.1	-0.7	0.0

Table A.1.12.

Resources and expenditure of general government

(% of GDP)

Portugal	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	12.4	13.8	13.1	13.0	13.8	13.0
2. Current taxes on income and wealth	5.7	7.9	8.0	8.9	9.9	9.0
3. Social contributions	8.1	8.7	10.2	10.6	11.2	11.8
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	2.0	2.7	2.9	3.1	3.6	3.1
6. Total current resources	28.2	33.1	34.2	35.5	38.4	36.9
7. Government consumption expenditure	13.5	14.2	15.2	16.8	16.9	17.5
8. Of which compensation of employees	10.3	10.4	11.9	13.0	13.9	14.2
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	9.5	10.5	11.5	12.6	13.5	15.1
12. Interest payments	2.6	7.5	7.9	7.7	7.0	6.1
13. Subsidies	6.1	6.9	1.5	1.3	1.2	1.3
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	31.7	39.2	35.6	38.1	37.6	39.0
16. Gross savings	- 3.5	- 6.1	- 1.4	- 2.5	0.8	- 2.1
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	28.2	33.1	34.2	35.5	38.4	36.9
19. Gross fixed capital formation	4.2	3.3	3.2	3.3	3.7	3.9
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	36.7	43.4	39.1	41.4	41.3	42.9
22. Tax burden	25.2	28.9	31.9	33.1	35.6	34.5
23. Net lending (+) or net borrowing (-)	- 8.5	- 10.3	- 5.0	- 5.9	- 2.9	- 6.0

- (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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
13.4	13.6	14.3	14.4	14.2	14.6	15.0	14.8	14.7	14.6
8.8	9.1	9.3	9.9	10.1	9.9	10.3	10.8	11.9	12.3
11.5	11.7	11.0	11.0	11.1	11.4	11.5	11.9	12.0	12.0
:	:	10.1	10.3	10.4	10.7	10.8	11.1	11.2	11.2
2.6	2.8	3.9	4.1	3.8	3.8	3.5	4.3	4.2	4.2
36.3	37.1	38.4	39.3	39.1	39.6	40.3	41.8	42.7	43.2
17.2	17.2	18.7	19.0	19.1	19.1	19.7	20.6	20.6	20.8
13.7	13.7	13.7	13.7	13.8	14.0	14.4	14.9	14.9	14.8
:	:	8.0	7.6	7.8	7.8	8.0	8.4	8.4	8.5
:	:	10.7	11.4	11.3	11.3	11.6	12.2	12.2	12.3
14.8	15.1	11.8	11.8	11.7	11.7	11.8	12.3	12.4	12.5
6.1	6.2	6.2	5.4	4.2	3.5	3.2	3.2	3.1	3.1
1.2	1.1	1.4	1.5	1.2	1.5	1.0	0.9	0.9	0.8
:	:	1.6	1.9	2.0	2.1	2.3	2.5	2.5	2.5
39.1	39.4	39.7	39.6	38.2	37.8	38.1	39.5	39.4	39.7
-2.8	-2.3	-1.3	-0.2	0.9	1.8	2.2	2.3	3.3	3.4
:	:	1.9	2.1	2.3	1.6	2.2	1.6	1.6	1.6
36.3	37.1	40.4	41.6	41.7	41.8	42.7	43.4	44.7	45.2
3.5	3.6	3.7	4.2	4.4	4.0	4.1	3.8	4.3	4.3
:	:	1.4	1.7	1.6	1.8	2.4	1.4	2.2	2.2
42.2	42.7	44.9	45.6	44.4	44.1	44.8	44.8	46.2	46.6
34.7	35.0	34.5	35.3	35.4	35.8	36.8	37.5	38.5	39.0
-5.9	-5.6	-4.6	-4.0	-2.7	-2.3	-2.1	-1.4	-1.5	-1.5

Table A.1.13.

Resources and expenditure of general government

(% of GDP)

Finland	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	13.1	14.1	14.9	15.0	14.7	14.5
2. Current taxes on income and wealth	14.2	16.5	17.7	17.6	16.9	15.2
3. Social contributions	10.9	11.4	12.9	13.6	14.6	15.0
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.8	5.1	5.9	6.8	7.6	8.0
6. Total current resources	42.0	47.0	51.4	53.1	53.7	52.7
7. Government consumption expenditure	17.6	19.8	20.8	23.8	24.3	22.8
8. Of which compensation of employees	12.0	13.9	14.4	16.8	17.3	16.2
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	24.7
12. Interest payments	1.0	1.8	1.4	1.9	2.6	4.5
13. Subsidies	3.2	3.1	2.8	3.4	3.5	3.3
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	34.6	40.5	42.2	50.5	55.8	57.7
16. Gross savings	7.4	6.5	9.1	2.6	- 2.1	- 5.0
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	42.0	47.0	51.4	53.1	53.7	52.7
19. Gross fixed capital formation	3.8	3.6	3.7	3.8	3.5	2.8
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	38.6	44.2	46.1	54.5	59.5	60.6
22. Tax burden	38.3	42.3	45.8	46.6	46.5	44.9
23. Net lending (+) or net borrowing (-)	3.3	2.8	5.3	- 1.5	- 5.7	- 7.9

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
14.2	13.6	13.7	13.5	14.3	14.1	14.0	13.3	13.0	12.7
16.8	16.7	17.4	18.9	18.4	18.8	18.6	21.0	20.2	20.0
15.8	14.8	14.9	14.3	13.4	13.0	13.0	12.1	11.8	11.8
:	:	14.6	14.0	13.2	12.9	12.9	12.1	11.8	11.7
6.7	7.0	7.3	6.7	6.3	5.9	5.4	6.2	5.8	5.6
53.5	52.0	53.2	53.5	52.3	51.8	51.0	52.7	50.9	50.0
21.8	21.2	22.8	23.2	22.4	21.7	21.5	20.6	20.4	20.2
15.2	14.8	15.4	15.6	14.6	13.9	13.6	13.0	12.8	12.6
:	:	8.3	8.4	8.4	8.1	8.1	7.6	7.6	7.5
:	:	14.5	14.8	14.1	13.6	13.5	12.9	12.8	12.7
24.5	22.9	22.2	21.5	19.9	18.4	17.9	16.5	16.3	16.0
5.0	5.2	4.0	4.3	4.3	3.6	3.1	2.8	2.7	2.5
3.0	3.2	2.8	2.1	1.9	1.7	1.6	1.5	1.4	1.4
:	:	1.9	2.1	2.3	2.2	2.3	2.2	2.2	2.2
56.4	54.3	53.7	53.0	50.7	47.6	46.4	43.6	43.0	42.4
-2.9	-2.2	-0.5	0.4	1.6	4.2	4.6	9.1	7.8	7.7
:	:	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3
53.5	52.0	56.2	56.8	55.3	54.5	53.6	55.1	53.3	51.8
2.9	2.7	2.8	2.9	3.2	2.9	2.8	2.6	2.7	2.7
:	:	0.6	0.9	0.3	0.3	0.3	0.1	0.1	0.1
59.5	57.1	59.9	59.9	56.8	53.2	51.8	48.4	48.0	46.6
47.2	45.9	46.6	47.4	46.7	46.5	46.1	47.0	45.6	45.0
-6.0	-5.0	-3.7	-3.2	-1.5	1.3	1.8	6.7	5.3	5.2

Table A.1.14.

Resources and expenditure of general government

(% of GDP)

Sweden	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	13.0	15.9	16.6	17.1	15.7	15.1
2. Current taxes on income and wealth	20.7	20.2	22.6	19.2	19.8	20.1
3. Social contributions	14.7	13.5	15.0	14.9	14.3	13.9
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	7.2	9.3	8.4	8.2	9.0	9.2
6. Total current resources	55.6	59.0	62.7	59.5	58.8	58.2
7. Government consumption expenditure	28.3	26.9	26.4	26.3	27.0	27.1
8. Of which compensation of employees	20.0	18.2	18.1	18.3	18.7	18.5
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	17.4	18.1	19.2	20.6	22.7	24.4
12. Interest payments	3.9	8.1	4.8	5.0	5.2	6.0
13. Subsidies	4.2	4.9	4.6	4.9	5.3	5.7
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	54.9	59.0	56.3	58.1	62.0	65.1
16. Gross savings	0.7	- 0.1	6.3	1.4	- 3.3	- 6.9
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	55.6	59.0	62.7	59.5	58.8	58.2
19. Gross fixed capital formation	4.1	3.0	2.3	2.2	2.6	1.0
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	59.5	62.7	58.6	60.6	66.3	70.1
22. Tax burden	48.4	49.6	54.2	51.3	49.8	49.0
23. Net lending (+) or net borrowing (-)	- 3.9	- 3.7	4.0	- 1.1	- 7.5	- 11.9

(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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
14.3	13.8	13.7	14.3	14.8	15.3	16.9	14.7	14.5	14.1
20.3	20.8	20.2	21.6	21.7	22.4	22.2	22.5	21.9	21.6
13.8	14.2	14.2	15.2	15.0	15.0	13.7	16.4	16.4	16.2
:	:	13.6	14.6	14.5	14.5	13.2	15.6	15.7	15.5
8.5	8.1	8.3	8.0	7.2	7.1	6.2	6.0	5.4	5.2
57.0	56.9	56.5	59.1	58.7	59.9	59.1	59.5	58.2	57.2
26.1	24.8	26.3	27.1	26.5	26.7	26.9	26.3	26.4	26.3
17.6	16.7	17.3	17.8	17.4	16.8	16.5	16.7	16.7	16.6
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
24.1	22.5	21.3	20.3	19.6	19.3	18.9	18.4	18.3	18.1
6.6	6.8	6.9	6.8	6.4	5.8	4.8	4.3	3.5	3.3
5.1	4.9	3.8	3.3	2.7	2.2	2.0	1.9	1.8	1.7
:	:	2.1	1.8	1.8	2.1	1.9	2.1	1.9	1.9
63.6	61.4	60.3	59.3	57.1	56.2	54.5	53.1	51.9	51.3
-6.6	-4.5	-3.9	-0.2	1.6	3.7	4.6	6.5	6.3	5.9
:	:	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
57.0	56.9	60.0	62.2	61.6	62.9	62.1	62.4	61.1	60.0
2.9	2.8	3.4	3.0	2.7	2.7	2.8	2.5	2.6	2.6
:	:	0.6	0.0	0.6	-0.7	0.1	0.1	0.1	0.1
66.9	64.4	67.6	65.3	63.1	61.0	60.3	58.4	57.2	56.6
48.5	49.4	48.8	51.8	52.2	53.5	53.5	54.2	53.4	52.6
-9.9	-7.5	-7.7	-3.1	-1.5	1.9	1.8	4.0	3.9	3.4

Table A.1.15.

Resources and expenditure of general government

(% of GDP)

United Kingdom	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	15.8	15.9	15.6	16.0	15.7	15.4
2. Current taxes on income and wealth	13.4	14.5	13.8	12.9	12.1	11.5
3. Social contributions	6.0	6.8	6.2	6.2	6.1	6.1
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	4.5	4.1	2.7	2.5	2.3	2.2
6. Total current resources	39.8	41.4	38.3	37.5	36.2	35.2
7. Government consumption expenditure	21.7	21.2	20.3	21.2	21.7	21.6
8. Of which compensation of employees	12.8	12.2	11.5	11.7	11.8	10.7
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	10.6	12.8	10.6	11.9	13.2	13.8
12. Interest payments	4.7	5.0	3.1	2.7	2.7	2.8
13. Subsidies	2.5	2.0	1.1	1.0	1.1	1.1
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	40.3	41.9	35.9	37.0	39.5	40.2
16. Gross savings	- 0.5	- 0.5	2.4	0.5	- 3.3	- 5.0
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	39.8	41.4	38.3	37.5	36.2	35.2
19. Gross fixed capital formation	2.5	2.1	2.3	2.1	2.0	1.8
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	43.2	44.2	39.2	39.8	42.3	43.0
22. Tax burden	33.5	35.2	33.4	33.2	32.1	31.4
23. Net lending (+) or net borrowing (-)	- 3.4	- 2.9	- 0.9	- 2.3	- 6.1	- 7.8

- (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 18 = line 6 + line 17.
 Line 21 = line 15 + line 19 + line 20.
 Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽¹⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
15.5	15.8	13.2	13.3	13.6	13.5	14.0	14.1	13.9	13.7
11.9	12.7	15.0	14.8	15.0	16.5	16.3	16.9	16.7	16.7
6.2	6.2	7.6	7.5	7.5	7.6	7.5	7.6	7.5	7.4
:	:	6.8	6.8	6.9	6.9	6.9	7.0	6.9	6.8
2.2	2.2	2.9	3.0	2.7	2.6	2.6	2.4	2.5	2.5
35.8	36.9	38.6	38.6	38.9	40.2	40.5	41.1	40.6	40.2
21.3	21.0	19.8	19.4	18.4	18.2	18.5	18.7	19.1	19.3
9.1	8.5	8.8	8.3	7.8	7.4	7.5	7.5	7.7	7.8
:	:	8.2	8.1	7.4	7.4	7.6	7.7	7.8	7.9
:	:	11.5	11.3	11.0	10.8	10.9	11.1	11.3	11.4
13.7	13.5	15.4	14.9	14.4	13.7	13.5	13.3	13.2	13.0
3.2	3.4	3.7	3.7	3.7	3.6	3.0	2.7	2.3	2.0
1.1	1.1	0.7	0.8	0.6	0.5	0.6	0.6	0.6	0.5
:	:	1.9	2.0	2.0	2.2	2.2	2.5	2.8	2.6
40.0	40.0	41.5	40.8	39.2	38.2	37.8	37.8	37.9	37.4
-4.2	-3.1	-2.9	-2.2	-0.3	2.0	2.7	3.3	2.7	2.8
:	:	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
35.8	36.9	40.1	39.8	40.0	41.2	41.4	42.1	41.6	41.3
1.8	1.7	2.0	1.5	1.2	1.2	1.1	1.2	1.4	1.7
:	:	1.2	0.9	0.7	0.6	0.6	-1.9	0.5	0.5
42.5	42.4	45.8	44.2	42.0	40.7	40.1	37.7	40.6	40.4
32.0	33.1	36.8	36.5	36.9	38.3	38.5	39.3	38.7	38.4
-6.7	-5.4	-5.8	-4.4	-2.0	0.4	1.3	4.3	1.0	0.9

Table A.1.16.

Resources and expenditure of general government

(% of GDP)

Euro area ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	12.3	12.6	12.7	12.6	12.7	12.9
2. Current taxes on income and wealth	10.9	11.7	11.9	12.1	12.1	12.2
3. Social contributions	16.0	16.8	16.5	16.8	17.2	17.8
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.0	3.7	3.3	3.4	3.6	3.7
6. Total current resources	42.2	44.9	44.4	44.9	45.6	46.6
7. Government consumption expenditure	17.5	18.1	17.2	17.7	18.1	18.4
8. Of which compensation of employees	11.8	12.0	11.4	11.6	11.8	12.0
9. Collective consumption	:	:	:	:	:	:
10. Social benefits in kind	:	:	:	:	:	:
11. Social transfers other than in kind	17.3	18.8	18.2	18.7	19.4	20.3
12. Interest payments	2.6	4.5	4.8	4.9	5.4	5.5
13. Subsidies	2.7	3.0	2.4	2.5	2.3	2.5
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	41.0	45.4	44.4	45.3	46.7	48.3
16. Gross savings	1.1	- 0.5	- 0.1	- 0.4	- 1.1	- 1.7
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	42.2	44.9	44.4	44.9	45.6	46.6
19. Gross fixed capital formation	3.3	3.0	3.0	3.1	3.0	2.9
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	45.6	49.7	48.6	49.4	50.3	52.1
22. Tax burden	39.4	41.5	41.4	41.8	42.3	43.1
23. Net lending (+) or net borrowing (-)	- 3.4	- 4.8	- 4.2	- 4.5	- 4.7	- 5.5

⁽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 18 = line 6 + line 17.

Line 21 = line 15 + line 19 + line 20.

Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽²⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
13.2	13.0	12.5	12.6	12.8	13.5	13.8	13.6	13.6	13.5
11.7	11.7	11.5	12.0	12.2	12.4	12.8	13.0	12.5	12.5
17.8	17.8	17.5	17.7	17.6	16.5	16.5	16.3	16.0	15.8
:	:	16.1	16.5	16.4	15.4	15.3	15.2	14.9	14.8
3.5	3.3	3.8	3.8	3.6	3.5	3.4	3.3	3.3	3.2
46.1	45.9	45.3	46.1	46.3	46.0	46.5	46.2	45.4	45.1
18.1	17.9	20.6	20.7	20.4	20.0	20.1	19.9	19.7	19.5
11.7	11.6	11.1	11.2	11.0	10.8	10.7	10.5	10.3	10.1
:	:	8.6	8.6	8.4	8.2	8.2	8.1	8.0	7.9
:	:	12.0	12.1	11.9	11.8	11.8	11.7	11.7	11.6
20.3	20.2	17.3	17.7	17.6	17.2	17.1	16.7	16.5	16.3
5.3	5.5	5.5	5.6	5.1	4.7	4.2	4.0	3.8	3.7
2.3	2.2	1.7	1.7	1.5	1.5	1.5	1.4	1.4	1.4
:	:	1.4	1.4	1.5	1.5	1.6	1.7	1.7	1.7
47.5	47.2	46.5	47.1	46.1	45.0	44.5	43.8	43.1	42.5
-1.4	-1.4	-1.2	-0.8	0.2	1.0	2.0	2.5	2.3	2.7
:	:	0.6	0.5	0.7	0.8	0.8	0.8	:	:
46.1	45.9	46.6	47.4	47.7	47.2	47.8	47.4	46.6	46.4
2.7	2.6	2.7	2.6	2.4	2.4	2.5	2.5	2.5	2.5
:	:	1.7	1.2	1.1	1.5	1.6	0.4	1.2	1.4
51.1	50.7	51.6	51.6	50.3	49.4	49.0	47.0	47.3	46.8
42.9	42.9	42.3	43.1	43.4	43.1	43.7	43.5	42.7	42.5
-5.0	-4.8	-5.0	-4.2	-2.6	-2.1	-1.2	0.4	-0.7	-0.5

Table A.1.17.

Resources and expenditure of general government

(% of GDP)

EU-15 ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Taxes on production and imports	13.0	13.4	13.4	13.4	13.3	13.4
2. Current taxes on income and wealth	11.8	12.7	12.8	12.7	12.6	12.6
3. Social contributions	14.0	14.7	14.5	14.8	15.2	15.7
4. Of which actual social contributions	:	:	:	:	:	:
5. Other current resources	3.5	4.0	3.5	3.5	3.7	3.7
6. Total current resources	42.3	44.8	44.2	44.4	44.8	45.4
7. Government consumption expenditure	18.7	19.0	18.2	18.6	19.0	19.2
8. Of which compensation of employees	12.3	12.4	11.8	12.0	12.2	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	19.5
12. Interest payments	3.0	4.8	4.7	4.7	5.2	5.3
13. Subsidies	2.8	2.9	2.3	2.4	2.3	2.4
14. Other current expenditure	:	:	:	:	:	:
15. Total current expenditure	41.4	45.4	43.8	44.7	46.4	47.8
16. Gross savings	0.8	- 0.6	0.4	- 0.3	- 1.6	- 2.4
17. Capital transfers received	:	:	:	:	:	:
18. Total resources	42.3	44.8	44.2	44.4	44.8	45.4
19. Gross fixed capital formation	3.2	2.9	2.9	2.9	2.9	2.7
20. Other capital expenditure	:	:	:	:	:	:
21. Total expenditure	45.6	49.3	47.7	48.5	49.8	51.5
22. Tax burden	38.7	40.7	40.6	40.9	41.1	41.7
23. Net lending (+) or net borrowing (-)	- 3.4	- 4.5	- 3.5	- 4.1	- 5.0	- 6.0

⁽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 18 = line 6 + line 17.

Line 21 = line 15 + line 19 + line 20.

Line 23 = line 18 - line 21.

Source: Commission services.

(% of GDP)

Former definitions		ESA 95 definitions ⁽²⁾							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
13.6	13.5	12.7	12.9	13.1	13.6	14.0	13.8	13.7	13.7
12.3	12.4	12.5	13.0	13.2	13.7	14.0	14.3	13.8	13.8
15.7	15.8	15.7	15.9	15.6	14.7	14.6	14.5	14.3	14.1
:	:	14.5	14.7	14.5	13.6	13.5	13.4	13.2	13.1
3.5	3.4	3.9	3.9	3.6	3.5	3.4	3.3	3.2	3.2
45.1	45.1	44.8	45.6	45.6	45.5	46.0	45.8	45.0	44.7
18.9	18.7	20.7	20.7	20.3	20.0	20.0	19.9	19.8	19.7
11.6	11.4	11.1	11.1	10.9	10.5	10.4	10.3	10.2	10.0
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
19.4	19.3	17.2	17.4	17.2	16.7	16.5	16.2	16.0	15.7
5.2	5.4	5.4	5.5	5.0	4.6	4.1	3.9	3.6	3.4
2.3	2.2	1.6	1.6	1.4	1.4	1.4	1.3	1.3	1.2
:	:	1.5	1.6	1.6	1.7	1.8	1.9	1.9	1.9
47.1	46.9	46.4	46.8	45.4	44.3	43.7	43.0	42.5	41.9
-2.0	-1.7	-1.6	-1.0	0.2	1.3	2.2	2.8	2.5	2.8
:	:	0.6	0.5	0.6	0.6	0.7	-	:	:
45.1	45.1	46.3	46.9	47.0	46.8	47.2	47.0	46.3	46.0
2.6	2.5	2.6	2.4	2.2	2.2	2.3	2.3	2.3	2.4
:	:	1.6	1.1	1.0	1.2	1.3	-0.1	1.0	1.1
50.5	50.1	51.4	51.1	49.4	48.4	47.9	45.8	46.5	46.0
41.6	41.8	41.8	42.5	42.6	42.7	43.2	43.1	42.4	42.1
-5.4	-5.0	-5.2	-4.2	-2.4	-1.5	-0.6	1.2	-0.2	0.0

Table A.2.1.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Belgium	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	8.6	8.9	5.4	6.2	6.9	7.2
2. Interest payments	5.9	10.3	10.4	10.0	10.6	10.7
3. Implicit interest rate ⁽²⁾	9.4	9.7	8.8	8.4	8.8	8.5
4. Nominal GDP growth rate (%)	8.8	6.6	5.8	4.8	5.3	2.2
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	8.6	8.9	5.4	6.2	6.9	7.2
6. Contribution of nominal GDP growth	- 5.5	- 7.0	- 6.9	- 5.7	- 6.3	- 2.7
7. Stock-flow adjustment ⁽³⁾	4.9	2.6	1.8	1.3	0.8	2.2
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	2.7	- 1.4	- 5.0	- 3.8	- 3.7	- 3.5
9. Snow-ball effect ⁽⁵⁾	0.4	3.3	3.5	4.3	4.3	8.0
10. Stock-flow adjustment ⁽³⁾	4.9	2.6	1.8	1.3	0.8	2.2
11. Change in gross debt ⁽⁶⁾	8.3	4.7	0.3	1.9	1.4	6.9
12. Level of gross debt (end of year)	78.5	122.2	128.6	130.4	131.8	138.8

Denmark

1. Net borrowing ⁽¹⁾	3.2	2.0	1.0	2.4	2.2	2.8
2. Interest payments	3.7	9.3	7.3	7.3	6.6	7.3
3. Implicit interest rate ⁽²⁾	13.7	13.9	13.2	13.1	11.0	11.1
4. Nominal GDP growth rate (%)	8.0	8.6	4.7	3.9	3.5	1.4
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	3.2	2.0	1.0	2.4	2.2	2.8
6. Contribution of nominal GDP growth	- 2.2	- 5.8	- 2.6	- 2.2	- 2.1	- 0.9
7. Stock-flow adjustment ⁽³⁾	6.0	0.9	1.4	4.4	3.9	9.8
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 0.7	- 7.6	- 6.3	- 4.9	- 4.4	- 4.5
9. Snow-ball effect ⁽⁵⁾	1.6	3.5	4.7	5.1	4.5	6.4
10. Stock-flow adjustment ⁽³⁾	6.0	0.9	1.4	4.4	3.9	9.8
11. Change in gross debt ⁽⁶⁾	7.0	- 2.9	- 0.1	4.6	4.0	11.7
12. Level of gross debt (end of year)	36.4	69.8	57.7	62.3	66.3	78.0

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
4.8	3.9	3.8	1.9	0.9	0.7	0.0	-0.6	-0.7
10.0	8.8	8.9	8.0	7.7	7.2	6.9	6.6	6.2
7.8	7.0	:	6.5	6.4	6.2	6.3	6.3	6.3
4.9	4.4	2.4	4.8	4.1	3.8	5.4	5.4	5.1
4.8	3.9	3.8	1.9	0.9	0.7	0.0	-0.6	-0.7
-6.3	-5.6	:	-6.0	-4.9	-4.3	-5.8	-5.7	-5.1
-0.4	-1.3	:	-1.2	-1.5	0.3	0.3	-0.1	0.0
-5.2	-4.9	-5.1	-6.1	-6.7	-6.5	-7.0	-7.2	-7.0
3.7	3.3	:	2.1	2.8	2.8	1.2	0.8	1.2
-0.4	-1.3	:	-1.2	-1.5	0.3	0.3	-0.1	0.0
-1.9	-3.0	:	-5.3	-5.5	-3.4	-5.6	-6.5	-5.8
136.9	133.8	130.5	125.3	119.8	116.4	110.8	104.3	98.5
2.6	2.2	1.0	-0.4	-1.1	-3.1	-2.4	-3.1	-2.8
6.7	6.4	6.1	5.7	5.3	4.6	4.1	3.8	3.5
9.2	9.1	:	9.3	9.0	8.8	8.5	8.5	8.7
7.3	4.6	5.1	5.2	4.7	5.2	6.7	4.5	5.0
2.6	2.2	1.0	-0.4	-1.1	-3.1	-2.4	-3.1	-2.8
-5.3	-3.2	:	-3.0	-2.7	-2.4	-2.8	-2.0	-2.1
-1.8	-3.2	:	-0.3	-1.7	2.3	0.0	1.3	1.2
-4.1	-4.2	-5.1	-6.1	-6.4	-7.7	-6.6	-6.9	-6.4
1.4	3.2	:	2.7	2.5	2.2	1.4	1.7	1.5
-1.8	-3.2	:	-0.3	-1.7	2.3	0.0	1.3	1.2
-4.6	-4.2	:	-3.9	-5.6	-3.6	-5.8	-3.9	-3.7
73.5	69.3	65.1	61.2	55.6	52.0	46.3	42.4	38.7

Table A.2.2.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Germany ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽²⁾	1.9	2.2	2.1	3.2	2.8	3.5
2. Interest payments	2.9	2.9	2.6	2.6	3.2	3.2
3. Implicit interest rate ⁽³⁾	7.2	7.0	6.8	7.1	8.5	7.7
4. Nominal GDP growth rate (%)	3.4	5.3	9.1	9.1	7.4	2.5
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽²⁾	1.9	2.2	2.1	3.2	2.8	3.5
6. Contribution of nominal GDP growth	- 1.4	- 2.1	- 3.5	- 3.6	- 2.8	- 1.1
7. Stock-flow adjustment ⁽⁴⁾	0.5	0.4	3.1	1.2	2.7	1.6
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁵⁾	- 1.0	- 0.7	- 0.6	0.6	- 0.4	0.2
9. Snow-ball effect ⁽⁶⁾	:	:	:	- 0.8	0.4	2.2
10. Stock-flow adjustment ⁽⁴⁾	0.5	0.4	3.1	1.2	2.7	1.6
11. Change in gross debt ⁽⁷⁾	1.0	0.4	1.7	0.9	2.7	4.0
12. Level of gross debt (end of year)	42.6	43.1	43.5	40.4	43.1	47.2

Greece

1. Net borrowing ⁽²⁾	2.6	11.6	15.9	11.4	12.6	13.6
2. Interest payments	2.0	4.9	10.0	9.3	11.5	12.6
3. Implicit interest rate ⁽³⁾	8.5	11.6	15.0	12.9	14.6	14.6
4. Nominal GDP growth rate (%)	19.8	22.0	20.6	23.5	15.6	12.6
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽²⁾	2.6	11.6	15.9	11.4	12.6	13.6
6. Contribution of nominal GDP growth	- 4.6	- 9.2	- 13.8	- 16.9	- 12.3	- 10.9
7. Stock-flow adjustment ⁽⁴⁾	1.8	6.3	6.4	7.7	6.1	10.0
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁵⁾	0.6	6.7	5.9	2.1	1.1	1.0
9. Snow-ball effect ⁽⁶⁾	- 2.6	- 4.3	- 3.7	- 7.6	- 0.8	1.7
10. Stock-flow adjustment ⁽⁴⁾	1.8	6.3	6.4	7.7	6.1	10.0
11. Change in gross debt ⁽⁷⁾	- 0.2	8.7	8.6	2.2	6.4	12.7
12. Level of gross debt (end of year)	27.7	59.8	89.0	91.1	97.5	110.2

⁽¹⁾ From 1991 including former East Germany.⁽²⁾ Line 1 = line 5. A minus sign means a surplus.⁽³⁾ Actual interest payment as percentage of gross debt at end of $t - 1$.⁽⁴⁾ Line 7 = line 10. Due to a change in definition there is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
2.6	3.4	3.4	2.7	2.1	1.4	-1.5	1.7	1.2
3.3	3.7	3.7	3.6	3.6	3.5	3.3	3.2	3.1
7.4	7.8	:	6.2	6.1	6.0	5.6	5.4	5.5
4.9	3.8	1.8	2.2	3.2	2.5	2.6	3.1	3.5
2.6	3.4	3.4	2.7	2.1	1.4	-1.5	1.7	1.2
-2.2	-1.8	:	-1.3	-1.9	-1.5	-1.6	-1.8	-2.0
1.9	6.1	:	-0.3	-0.3	0.4	2.2	-1.5	-0.3
-0.7	-0.3	-0.3	-0.9	-1.5	-2.1	-4.8	-1.4	-1.9
1.1	1.9	:	2.3	1.7	2.1	1.7	1.3	1.1
1.9	6.1	:	-0.3	-0.3	0.4	2.2	-1.5	-0.3
2.3	7.7	:	1.1	-0.2	0.3	-0.7	-1.6	-1.0
49.4	57.1	59.8	60.9	60.7	61.1	60.3	58.7	57.7
9.9	10.5	7.8	4.7	3.1	1.8	0.9	0.0	-0.6
13.9	12.7	10.5	8.2	7.8	7.6	7.2	6.7	6.1
14.3	13.2	:	8.2	7.8	7.6	7.4	6.9	6.6
13.5	12.1	9.9	10.6	8.4	6.3	7.2	7.5	7.6
9.9	10.5	7.8	4.7	3.1	1.8	0.9	0.0	-0.6
-13.1	-11.6	:	-10.7	-8.4	-6.3	-7.0	-7.2	-7.1
1.0	1.9	:	2.9	2.4	3.6	5.5	3.2	5.8
-4.0	-2.3	-2.8	-3.6	-4.7	-5.7	-6.4	-6.7	-6.7
0.8	1.1	:	-2.4	-0.5	1.3	0.2	-0.6	-1.0
1.0	1.9	:	2.9	2.4	3.6	5.5	3.2	5.8
-2.3	0.8	:	-3.0	-2.8	-0.9	-0.7	-4.1	-1.8
107.9	108.7	111.3	108.3	105.5	104.6	103.9	99.9	98.0

Table A.2.3.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Spain	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	2.5	6.2	4.2	4.3	4.0	6.7
2. Interest payments	0.4	1.9	3.9	3.7	4.3	5.0
3. Implicit interest rate ⁽²⁾	3.4	5.8	10.4	9.4	10.4	11.2
4. Nominal GDP growth rate (%)	14.9	11.1	11.4	9.7	7.7	3.5
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	2.5	6.2	4.2	4.3	4.0	6.7
6. Contribution of nominal GDP growth	- 1.9	- 3.7	- 4.3	- 3.8	- 3.2	- 1.6
7. Stock-flow adjustment ⁽³⁾	1.2	2.7	1.9	0.2	1.6	6.3
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	1.8	4.2	0.3	0.6	- 0.3	1.7
9. Snow-ball effect ⁽⁵⁾	- 1.5	- 1.8	- 0.4	- 0.1	1.1	3.5
10. Stock-flow adjustment ⁽³⁾	1.2	2.7	1.9	0.2	1.6	6.3
11. Change in gross debt ⁽⁶⁾	1.8	5.2	1.8	0.7	2.4	11.6
12. Level of gross debt (end of year)	17.0	42.7	44.0	44.7	47.1	58.7
France						
1. Net borrowing ⁽¹⁾	0.0	2.8	1.5	2.0	3.9	5.6
2. Interest payments	1.4	2.8	2.9	2.9	3.2	3.3
3. Implicit interest rate ⁽²⁾	7.7	10.5	9.0	8.6	9.4	8.6
4. Nominal GDP growth rate (%)	12.9	7.0	5.6	4.0	3.5	1.4
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	0.0	2.8	1.5	2.0	3.9	5.6
6. Contribution of nominal GDP growth	- 2.4	- 1.9	- 1.8	- 1.3	- 1.2	- 0.5
7. Stock-flow adjustment ⁽³⁾	1.0	0.8	1.3	- 0.3	1.2	0.2
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 1.4	0.0	- 1.4	- 0.9	0.7	2.3
9. Snow-ball effect ⁽⁵⁾	- 1.0	1.0	1.1	1.6	2.0	2.8
10. Stock-flow adjustment ⁽³⁾	1.0	0.8	1.3	- 0.3	1.2	0.2
11. Change in gross debt ⁽⁶⁾	- 1.5	1.8	1.1	0.4	4.0	5.5
12. Level of gross debt (end of year)	20.4	31.8	36.3	36.7	40.6	46.1

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
6.1	7.0	4.9	3.2	2.6	1.2	0.3	-0.1	-0.2
4.7	5.3	5.3	4.8	4.3	3.6	3.3	3.2	3.1
8.6	9.5	:	7.4	6.9	5.9	5.6	5.6	5.6
6.4	7.8	6.0	6.2	6.7	7.0	7.7	6.7	5.8
6.1	7.0	4.9	3.2	2.6	1.2	0.3	-0.1	-0.2
-3.5	-4.4	:	-4.0	-4.2	-4.2	-4.5	-3.8	-3.2
-0.2	0.1	:	-0.6	-0.4	1.7	1.5	1.4	1.1
1.4	1.7	-0.4	-1.6	-1.7	-2.4	-3.0	-3.3	-3.2
1.2	0.9	:	0.8	0.1	-0.7	-1.2	-0.7	-0.1
-0.2	0.1	:	-0.6	-0.4	1.7	1.5	1.4	1.1
2.5	2.8	:	-1.4	-2.0	-1.3	-2.7	-2.5	-2.3
61.2	64.0	68.1	66.7	64.7	63.4	60.6	58.1	55.8
5.6	4.8	4.1	3.0	2.7	1.6	1.3	0.6	0.8
3.5	3.7	3.9	3.7	3.6	3.4	3.3	3.2	3.1
8.2	8.0	:	6.7	6.3	5.8	5.8	5.7	5.7
3.8	3.4	2.6	3.2	4.0	3.3	3.7	4.3	4.5
5.6	4.8	4.1	3.0	2.7	1.6	1.3	0.6	0.8
-1.6	-1.6	:	-1.8	-2.3	-2.0	-2.0	-2.4	-2.4
-0.7	1.0	:	0.9	0.1	-0.6	0.0	0.7	0.1
2.2	1.1	0.1	-0.7	-0.9	-1.8	-2.0	-2.6	-2.3
1.9	2.1	:	1.9	1.3	1.4	1.3	0.8	0.7
-0.7	1.0	:	0.9	0.1	-0.6	0.0	0.7	0.1
3.5	4.4	:	2.2	0.5	-0.9	-0.8	-1.2	-1.6
49.6	54.0	57.1	59.3	59.7	58.8	58.0	56.9	55.3

Table A.2.4.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Ireland	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	11.6	10.2	2.2	2.3	2.4	2.3
2. Interest payments	6.0	9.3	7.4	7.2	6.7	6.3
3. Implicit interest rate ⁽²⁾	10.6	10.5	8.1	8.1	7.7	7.6
4. Nominal GDP growth rate (%)	18.3	8.5	7.3	3.8	6.2	8.0
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	11.6	10.2	2.2	2.3	2.4	2.3
6. Contribution of nominal GDP growth	- 10.3	- 7.6	- 6.7	- 3.4	- 5.4	- 6.6
7. Stock-flow adjustment ⁽³⁾	0.3	0.2	- 1.6	0.9	0.6	8.3
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	5.6	0.9	- 5.3	- 5.0	- 4.3	- 4.0
9. Snow-ball effect ⁽⁵⁾	- 4.4	1.7	0.8	3.9	1.3	- 0.4
10. Stock-flow adjustment ⁽³⁾	0.3	0.2	- 1.6	0.9	0.6	8.3
11. Change in gross debt ⁽⁶⁾	1.6	3.0	- 6.4	- 0.3	- 2.6	4.2
12. Level of gross debt (end of year)	72.3	105.3	97.5	97.3	94.7	98.8
Italy						
1. Net borrowing ⁽¹⁾	8.7	12.5	11.0	10.0	9.5	9.4
2. Interest payments	5.5	8.0	9.4	10.1	11.4	12.0
3. Implicit interest rate ⁽²⁾	11.3	11.9	10.9	11.3	11.9	11.5
4. Nominal GDP growth rate (%)	25.6	12.2	10.4	9.1	5.3	3.0
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	8.7	12.5	11.0	10.0	9.5	9.4
6. Contribution of nominal GDP growth	- 12.4	- 8.2	- 9.0	- 8.1	- 5.1	- 3.1
7. Stock-flow adjustment ⁽³⁾	1.0	2.3	- 0.2	1.4	2.7	4.2
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	3.2	4.5	1.6	- 0.1	- 1.9	- 2.6
9. Snow-ball effect ⁽⁵⁾	- 7.0	- 0.2	0.4	2.0	6.3	8.9
10. Stock-flow adjustment ⁽³⁾	1.0	2.3	- 0.2	1.4	2.7	4.2
11. Change in gross debt ⁽⁶⁾	- 2.8	6.7	1.9	3.3	7.1	10.5
12. Level of gross debt (end of year)	58.3	82.0	97.3	100.6	107.7	118.2

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
1.6	2.1	0.2	-0.7	-2.1	-2.1	-4.5	-3.9	-3.5
5.6	5.0	4.6	4.2	3.4	2.4	2.1	1.8	1.6
6.4	6.4	:	6.6	6.1	5.1	4.9	5.3	5.4
7.5	13.1	10.2	15.6	14.8	14.0	17.5	13.7	12.7
1.6	2.1	0.2	-0.7	-2.1	-2.1	-4.5	-3.9	-3.5
-6.6	-10.1	:	-10.0	-8.4	-6.7	-7.2	-4.7	-3.8
-0.9	0.3	:	1.5	0.3	3.9	0.8	2.8	0.7
-4.0	-2.9	-4.4	-4.9	-5.5	-4.5	-6.6	-5.7	-5.1
-1.0	-5.2	:	-5.8	-5.0	-4.3	-5.1	-2.9	-2.2
-0.9	0.3	:	1.5	0.3	3.9	0.8	2.8	0.7
-6.2	-8.2	:	-9.2	-10.1	-4.9	-11.2	-5.7	-6.6
92.6	84.4	74.3	65.1	55.0	50.1	38.9	33.1	26.5
9.1	7.6	7.1	2.7	2.8	1.8	0.3	1.3	1.0
10.9	11.3	11.5	9.4	8.0	6.7	6.5	6.2	5.8
9.7	9.8	:	8.0	7.0	6.0	6.0	5.9	5.8
5.8	8.1	6.4	4.5	4.5	3.3	5.2	5.4	5.2
9.1	7.6	7.1	2.7	2.8	1.8	0.3	1.3	1.0
-6.4	-9.3	:	-5.2	-5.2	-3.7	-5.7	-5.6	-5.3
3.1	1.0	:	0.4	-1.5	0.1	1.1	-0.3	1.2
-1.8	-3.6	-4.4	-6.7	-5.2	-5.0	-6.1	-4.8	-4.7
4.4	2.0	:	4.1	2.8	3.1	0.8	0.5	0.5
3.1	1.0	:	0.4	-1.5	0.1	1.1	-0.3	1.2
5.7	-0.6	:	-2.1	-3.8	-1.8	-4.2	-4.6	-3.1
123.9	123.3	122.1	120.1	116.2	114.5	110.2	105.7	102.6

Table A.2.5.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Luxembourg	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	0.4	- 6.2	- 4.7	- 1.8	- 0.7	- 1.6
2. Interest payments	1.1	1.0	0.4	0.4	0.3	0.3
3. Implicit interest rate ⁽²⁾	13.2	10.2	8.8	9.0	9.2	8.0
4. Nominal GDP growth rate (%)	8.8	6.0	5.7	7.7	8.9	9.5
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	0.4	- 6.2	- 4.7	- 1.8	- 0.7	- 1.6
6. Contribution of nominal GDP growth	- 0.8	- 0.6	- 0.3	- 0.3	- 0.3	- 0.4
7. Stock-flow adjustment ⁽³⁾	0.1	6.3	4.2	1.6	1.9	3.0
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 0.7	- 7.1	- 5.2	- 2.2	- 1.1	- 1.9
9. Snow-ball effect ⁽⁵⁾	0.4	0.4	0.2	0.1	0.0	- 0.1
10. Stock-flow adjustment ⁽³⁾	0.1	6.3	4.2	1.6	1.9	3.0
11. Change in gross debt ⁽⁶⁾	- 0.3	- 0.5	- 0.8	- 0.5	0.8	1.0
12. Level of gross debt (end of year)	9.2	9.5	4.5	4.0	4.8	5.8

The Netherlands

1. Net borrowing ⁽¹⁾	4.1	3.5	4.9	2.8	3.8	3.1
2. Interest payments	3.7	6.1	5.7	5.9	6.0	6.0
3. Implicit interest rate ⁽²⁾	9.4	10.0	8.0	8.2	8.3	8.0
4. Nominal GDP growth rate (%)	6.8	4.9	6.5	5.0	4.3	2.7
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	4.1	3.5	4.9	2.8	3.8	3.1
6. Contribution of nominal GDP growth	- 2.7	- 3.0	- 4.6	- 3.6	- 3.1	- 2.0
7. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	:
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	0.3	- 2.6	- 0.8	- 3.1	- 2.3	- 2.9
9. Snow-ball effect ⁽⁵⁾	:	:	:	:	:	:
10. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	:
11. Change in gross debt ⁽⁶⁾	2.7	4.5	- 0.3	0.1	0.7	1.1
12. Level of gross debt (end of year)	45.1	68.7	75.6	75.7	76.4	77.6

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
-2.6	-1.8	-2.5	-3.6	-3.2	-4.7	-5.3	-4.0	-3.0
0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
6.2	5.4	:	6.1	6.5	5.3	5.6	5.8	5.8
9.8	4.5	4.7	10.8	6.6	9.9	13.0	9.5	9.0
-2.6	-1.8	-2.5	-3.6	-3.2	-4.7	-5.3	-4.0	-3.0
-0.5	-0.2	:	-0.6	-0.4	-0.6	-0.7	-0.5	-0.4
2.7	2.2	:	4.1	4.0	4.8	5.4	4.3	3.2
-3.0	-2.0	-2.9	-4.0	-3.6	-5.0	-5.6	-4.3	-3.2
-0.2	0.0	:	-0.3	0.0	-0.3	-0.4	-0.2	-0.2
2.7	2.2	:	4.1	4.0	4.8	5.4	4.3	3.2
-0.4	0.2	:	-0.1	0.4	-0.5	-0.6	-0.2	-0.2
5.3	5.6	6.2	6.0	6.4	6.0	5.3	5.1	4.9
3.6	3.8	1.8	1.1	0.7	-1.0	-2.0	-0.8	-1.4
5.6	5.7	5.6	5.2	4.8	4.4	4.0	3.3	3.0
7.6	8.0	:	7.3	7.3	7.0	6.7	6.4	6.0
5.6	4.1	4.2	5.9	6.1	5.6	7.4	8.1	6.1
3.6	3.8	1.8	1.1	0.7	-1.0	-2.0	-0.8	-1.4
-4.1	-2.9	:	-4.2	-4.0	-3.5	-4.2	-4.2	-3.0
:	0.3	:	-2.1	0.2	0.9	-0.7	0.8	0.1
-2.0	-1.9	-3.8	-4.1	-4.2	-5.4	-6.0	-4.1	-4.4
:	2.9	:	1.0	0.8	0.9	-0.2	-0.9	0.0
:	0.3	:	-2.1	0.2	0.9	-0.7	0.8	0.1
-3.6	1.5	:	-5.2	-3.2	-3.6	-7.1	-4.2	-4.3
74.0	75.5	75.2	70.0	66.8	63.2	56.1	51.9	47.7

Table A.2.6.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Austria	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	1.7	2.4	2.4	3.0	1.9	4.2
2. Interest payments	2.4	3.5	4.0	4.2	4.2	4.3
3. Implicit interest rate ⁽²⁾	7.5	7.7	7.5	7.8	7.7	7.7
4. Nominal GDP growth rate (%)	7.4	5.4	8.2	7.2	6.0	3.4
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	1.7	2.4	2.4	3.0	1.9	4.2
6. Contribution of nominal GDP growth	-2.4	-2.4	-4.4	-3.8	-3.3	-1.9
7. Stock-flow adjustment ⁽³⁾	2.2	2.0	1.2	1.1	1.1	2.2
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	-0.8	-1.0	-1.6	-1.2	-2.2	-0.1
9. Snow-ball effect ⁽⁵⁾	0.0	1.0	-0.4	0.3	0.9	2.4
10. Stock-flow adjustment ⁽³⁾	2.2	2.0	1.2	1.1	1.1	2.2
11. Change in gross debt ⁽⁶⁾	1.5	2.0	-0.8	0.2	-0.2	4.6
12. Level of gross debt (end of year)	36.4	49.5	57.5	57.7	57.5	62.0
Portugal						
1. Net borrowing ⁽¹⁾	8.6	10.3	5.0	5.9	2.9	6.0
2. Interest payments	2.7	7.6	7.9	7.7	7.1	6.1
3. Implicit interest rate ⁽²⁾	:	:	15.0	13.8	12.1	11.0
4. Nominal GDP growth rate (%)	26.5	25.2	17.7	14.8	12.8	5.5
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	8.6	10.3	5.0	5.9	2.9	6.0
6. Contribution of nominal GDP growth	-7.4	-10.8	-9.4	-8.3	-7.5	-3.1
7. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	:
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	5.9	2.7	-2.9	-1.8	-4.2	-0.1
9. Snow-ball effect ⁽⁵⁾	:	:	:	:	:	:
10. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	:
11. Change in gross debt ⁽⁶⁾	-3.3	7.3	2.0	1.9	-7.3	3.2
12. Level of gross debt (end of year)	31.9	60.8	64.2	66.1	58.8	62.0

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
4.9	5.0	3.8	1.7	2.2	2.1	1.1	0.7	0.0
4.0	4.3	4.2	3.9	3.8	3.5	3.6	3.5	3.4
6.8	7.0	:	5.7	6.1	5.7	5.8	5.8	5.7
5.4	4.2	3.3	2.6	4.0	3.7	4.5	3.8	3.6
4.9	5.0	3.8	1.7	2.2	2.1	1.1	0.7	0.0
-3.2	-2.6	:	-1.7	-2.5	-2.3	-2.9	-2.3	-2.2
0.9	1.4	:	-4.4	-0.5	1.0	-0.2	0.4	0.0
0.9	0.7	-0.4	-2.2	-1.5	-1.5	-2.4	-2.9	-3.4
0.8	1.8	:	2.1	1.3	1.2	0.7	1.2	1.3
0.9	1.4	:	-4.4	-0.5	1.0	-0.2	0.4	0.0
2.7	3.8	:	-4.5	-0.8	0.8	-1.8	-1.3	-2.2
64.7	68.5	69.2	64.7	63.9	64.7	62.9	61.6	59.5
5.9	5.6	4.0	2.7	2.3	2.1	1.4	1.5	1.5
6.1	6.2	5.4	4.2	3.5	3.2	3.2	3.1	3.1
10.7	10.7	:	7.3	6.3	6.2	6.1	6.1	6.1
8.7	8.1	6.9	7.6	7.9	6.7	6.0	6.9	5.3
5.9	5.6	4.0	2.7	2.3	2.1	1.4	1.5	1.5
-4.9	-4.7	:	-4.5	-4.3	-3.5	-3.3	-3.5	-2.7
:	2.5	:	-1.9	-1.8	1.1	0.8	0.9	0.8
-0.2	-0.6	-1.4	-1.6	-1.2	-1.1	-1.8	-1.6	-1.6
:	1.6	:	-0.2	-0.8	-0.3	-0.2	-0.4	0.4
:	2.5	:	-1.9	-1.8	1.1	0.8	0.9	0.8
0.7	2.0	:	-3.7	-3.8	-0.3	-0.9	-1.0	-0.4
62.7	64.7	62.8	59.1	55.3	55.0	54.1	53.0	52.6

Table A.2.7.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Finland	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	- 3.3	- 2.8	- 5.3	1.5	5.7	7.9
2. Interest payments	1.0	1.8	1.4	1.9	2.6	4.5
3. Implicit interest rate ⁽²⁾	10.3	12.7	10.3	12.8	11.1	11.3
4. Nominal GDP growth rate (%)	15.4	8.8	5.5	- 4.5	- 2.5	1.2
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	- 3.3	- 2.8	- 5.3	1.5	5.7	7.9
6. Contribution of nominal GDP growth	- 1.5	- 1.3	- 0.8	0.7	0.6	- 0.5
7. Stock-flow adjustment ⁽³⁾	5.0	4.8	5.7	6.2	11.7	8.8
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 4.3	- 4.7	- 6.7	- 0.4	3.1	3.3
9. Snow-ball effect ⁽⁵⁾	- 0.5	0.6	0.7	2.6	3.2	4.1
10. Stock-flow adjustment ⁽³⁾	5.0	4.8	5.7	6.2	11.7	8.8
11. Change in gross debt ⁽⁶⁾	0.1	0.7	- 0.4	8.4	18.2	16.3
12. Level of gross debt (end of year)	11.6	16.4	14.5	22.9	41.0	57.3

Sweden

1. Net borrowing ⁽¹⁾	3.9	3.7	- 4.0	1.1	7.5	11.9
2. Interest payments	3.9	8.1	4.8	5.0	5.2	6.0
3. Implicit interest rate ⁽²⁾	:	14.2	12.1	12.6	10.2	9.3
4. Nominal GDP growth rate (%)	13.6	8.7	10.3	6.4	- 0.4	0.3
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	3.9	3.7	- 4.0	1.1	7.5	11.9
6. Contribution of nominal GDP growth	- 4.5	- 5.0	- 4.1	- 2.5	0.2	- 0.2
7. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	- 1.4
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 0.1	- 4.4	- 8.9	- 3.9	2.3	5.9
9. Snow-ball effect ⁽⁵⁾	:	:	:	:	:	5.9
10. Stock-flow adjustment ⁽³⁾	:	:	:	:	:	- 1.4
11. Change in gross debt ⁽⁶⁾	1.8	- 0.4	- 1.8	9.1	13.6	10.3
12. Level of gross debt (end of year)	39.6	61.6	42.1	51.2	64.8	75.1

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
6.0	5.0	3.2	1.5	- 1.3	- 1.8	- 6.7	- 5.3	- 5.2
5.0	5.2	4.3	4.3	3.6	3.1	2.8	2.7	2.5
9.3	9.6	:	8.1	7.2	6.6	6.4	6.5	6.4
6.0	8.1	3.8	8.5	8.5	4.7	8.7	5.5	4.9
6.0	5.0	3.2	1.5	- 1.3	- 1.8	- 6.7	- 5.3	- 5.2
- 3.2	- 4.4	:	- 4.5	- 4.2	- 2.2	- 3.8	- 2.3	- 1.9
- 1.4	- 2.4	:	- 0.1	0.2	2.1	7.6	5.3	4.8
1.0	- 0.1	- 1.1	- 2.7	- 4.9	- 4.9	- 9.4	- 8.0	- 7.7
1.8	0.8	:	- 0.2	- 0.7	0.9	- 1.0	0.4	0.6
- 1.4	- 2.4	:	- 0.1	0.2	2.1	7.6	5.3	4.8
1.4	- 1.7	:	- 3.0	- 5.4	- 1.9	- 2.9	- 2.3	- 2.3
58.8	57.1	57.1	54.1	48.8	46.9	44.0	41.7	39.5
9.9	7.5	3.1	1.5	- 1.9	- 1.8	- 4.0	- 3.9	- 3.4
6.6	6.8	6.8	6.4	5.8	4.8	4.3	3.5	3.3
9.3	9.4	:	8.8	8.3	7.0	6.8	6.6	6.5
6.6	7.3	2.5	3.8	4.5	4.7	4.4	4.7	5.2
9.9	7.5	3.1	1.5	- 1.9	- 1.8	- 4.0	- 3.9	- 3.4
- 4.6	- 5.3	:	- 2.8	- 3.1	- 3.2	- 2.8	- 2.5	- 2.6
- 3.6	- 3.7	:	- 1.7	3.8	- 1.5	- 2.8	4.2	1.7
3.4	0.7	- 3.7	- 4.9	- 7.8	- 6.7	- 8.3	- 7.4	- 6.7
2.0	1.8	:	3.6	2.7	1.6	1.5	1.0	0.7
- 3.6	- 3.7	:	- 1.7	3.8	- 1.5	- 2.8	4.2	1.7
2.6	- 1.1	:	- 3.0	- 1.2	- 6.6	- 9.6	- 2.2	- 4.3
77.7	76.6	76.0	73.0	71.8	65.2	55.6	53.5	49.2

Table A.2.8.

Contributions to the change in the general government gross debt ratio

(% of GDP)

United Kingdom	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽¹⁾	3.4	2.9	0.9	2.3	6.1	7.8
2. Interest payments	4.7	5.0	3.1	2.7	2.7	2.8
3. Implicit interest rate ⁽²⁾	10.0	9.7	8.9	8.1	8.0	7.3
4. Nominal GDP growth rate (%)	16.8	9.6	8.4	5.1	4.0	5.1
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽¹⁾	3.4	2.9	0.9	2.3	6.1	7.8
6. Contribution of nominal GDP growth	- 7.9	- 4.9	- 2.9	- 1.7	- 1.4	- 2.0
7. Stock-flow adjustment ⁽³⁾	4.0	0.1	- 0.7	- 0.6	1.3	0.9
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁴⁾	- 1.3	- 2.1	- 2.2	- 0.4	3.4	4.9
9. Snow-ball effect ⁽⁵⁾	- 3.2	0.1	0.2	1.0	1.3	0.8
10. Stock-flow adjustment ⁽³⁾	4.0	0.1	- 0.7	- 0.6	1.3	0.9
11. Change in gross debt ⁽⁶⁾	- 0.5	- 1.9	- 2.7	0.0	6.0	6.7
12. Level of gross debt (end of year)	55.0	54.3	35.2	35.1	41.2	47.8

⁽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 is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
6.7	5.4	4.4	2.0	-0.4	-1.3	-4.3	-1.0	-0.9
3.2	3.4	3.7	3.7	3.6	3.0	2.7	2.3	2.0
7.0	7.3	:	7.5	7.4	6.4	6.2	5.5	5.4
6.0	5.4	5.9	6.5	5.7	4.6	4.9	4.9	5.5
6.7	5.4	4.4	2.0	-0.4	-1.3	-4.3	-1.0	-0.9
-2.7	-2.5	:	-3.2	-2.8	-2.1	-2.1	-2.0	-2.0
-2.1	-0.6	:	-0.4	0.2	1.0	3.6	-1.5	0.0
3.6	2.0	0.7	-1.7	-4.0	-4.2	-7.0	-3.3	-2.9
0.5	0.9	:	0.5	0.8	0.8	0.6	0.3	0.0
-2.1	-0.6	:	-0.4	0.2	1.0	3.6	-1.5	0.0
2.0	2.3	:	-1.6	-3.0	-2.4	-2.8	-4.6	-2.9
49.8	52.1	52.7	51.1	48.1	45.7	42.9	38.3	35.4

Table A.2.9.

Contributions to the change in the general government gross debt ratio

(% of GDP)

Euro area ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
1. Net borrowing ⁽²⁾	3.4	4.8	4.2	4.6	4.7	5.5
2. Interest payments	2.6	4.5	4.8	5.0	5.4	5.5
3. Implicit interest rate ⁽³⁾	0.0	0.0	0.0	0.0	0.0	0.0
4. Nominal GDP growth rate (%)	10.3	6.8	9.1	6.9	5.4	1.0
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽²⁾	3.4	4.8	4.2	4.6	4.7	5.5
6. Contribution of nominal GDP growth	-3.2	-3.1	-4.7	-3.7	-3.0	-0.6
7. Stock-flow adjustment ⁽⁴⁾	0.6	1.3	1.8	0.8	1.6	0.0
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁵⁾	0.8	0.4	-0.7	-0.4	-0.8	0.0
9. Snow-ball effect ⁽⁶⁾	-0.5	1.3	0.1	1.3	2.5	4.9
10. Stock-flow adjustment ⁽⁴⁾	0.6	1.3	1.8	0.8	1.6	0.0
11. Change in gross debt ⁽⁷⁾	0.9	3.1	1.3	1.7	3.3	5.0
12. Level of gross debt (end of year)	35.3	52.8	58.7	60.4	62.0	67.0

EU-15 ⁽⁸⁾

1. Net borrowing ⁽²⁾	3.6	3.0	3.5	4.1	5.0	6.0
2. Interest payments	4.7	4.5	4.7	4.7	5.2	5.3
3. Implicit interest rate ⁽³⁾	:	:	:	:	9.8	9.0
4. Nominal GDP growth rate (%)	5.3	8.8	7.8	6.9	4.2	0.2
Budgetary constraint based on the deficit						
5. Deficit (net borrowing) ⁽²⁾	3.6	3.0	3.5	4.1	5.0	6.0
6. Contribution of nominal GDP growth	-2.7	-4.4	-3.9	-3.5	-2.2	-0.1
7. Stock-flow adjustment ⁽⁴⁾	:	:	:	:	:	:
Budgetary constraint based on the primary deficit						
8. Primary deficit ⁽⁵⁾	-1.1	-1.4	-1.2	-0.6	-0.1	0.8
9. Snow-ball effect ⁽⁶⁾	:	:	:	:	:	:
10. Stock-flow adjustment ⁽⁴⁾	:	:	:	:	:	:
11. Change in gross debt ⁽⁷⁾	1.2	-0.9	1.0	1.8	4.2	5.6
12. Level of gross debt (end of year)	55.2	54.3	54.5	54.9	59.1	64.7

(1) EU-15 excluding DK, EL, S, 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 payment as percentage of gross debt at end of $t - 1$.

(4) Line 7 = line 10. Due to a change in definition there is 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 is 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						
1994	1995	1996	1997	1998	1999	2000	2001	2002
5.0	4.8	4.2	2.6	2.1	1.2	-0.4	0.7	0.5
5.3	5.5	5.6	5.1	4.7	4.2	4.0	3.8	3.7
0.0	0.0	:	6.9	6.5	6.0	5.9	5.8	5.7
4.4	4.7	4.2	2.1	4.1	4.4	4.6	4.8	4.7
5.0	4.8	4.2	2.6	2.1	1.2	-0.4	0.7	0.5
-2.8	-3.0	:	-1.5	-2.9	-3.1	-3.2	-3.2	-3.0
0.1	1.3	:	-1.2	-0.8	0.8	1.2	0.0	0.4
-0.3	-0.6	-1.4	-2.5	-2.6	-3.0	-4.4	-3.1	-3.2
2.5	2.4	:	3.6	1.8	1.2	0.9	0.6	0.6
0.1	1.3	:	-1.2	-0.8	0.8	1.2	0.0	0.4
2.3	3.2	:	-0.1	-1.6	-1.0	-2.3	-2.6	-2.2
69.3	72.5	75.0	74.9	73.3	72.3	69.9	67.4	65.2
5.4	5.0	4.2	2.4	1.5	0.6	-1.2	0.2	0.0
5.2	5.4	5.5	5.0	4.6	4.1	3.9	3.6	3.4
8.4	8.3	:	7.2	6.8	6.2	6.1	5.8	5.8
4.8	3.9	5.0	5.3	4.6	5.0	6.3	3.9	4.8
5.4	5.0	4.2	2.4	1.5	0.6	-1.2	0.2	0.0
-3.0	-2.5	:	-3.7	-3.1	-3.3	-4.0	-2.4	-2.8
:	0.2	:	0.1	-0.5	1.1	2.2	-0.5	0.4
0.2	-0.3	-1.3	-2.5	-3.1	-3.5	-5.1	-3.4	-3.4
:	2.9	:	1.3	1.5	0.8	-0.1	1.2	0.6
:	0.2	:	0.1	-0.5	1.1	2.2	-0.5	0.4
2.1	2.9	:	-1.1	-2.1	-1.6	-3.0	-2.8	-2.4
66.7	69.6	72.3	71.2	69.2	67.6	64.6	61.8	59.5

Table A.3.1.

Cyclical adjustment of general government receipts, expenditures and budget balances

Belgium	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	47.7	50.6	47.4	47.7	47.7	48.6
2. Cyclical component	1.2	- 1.0	1.3	1.2	0.9	- 0.9
3. Cyclically-adjusted data	46.4	51.6	46.2	46.5	46.8	49.4
Total uses (% of GDP)						
4. Actual data	56.2	59.5	52.8	53.9	54.6	55.8
5. Cyclical component	- 0.3	0.2	- 0.3	- 0.3	- 0.2	0.2
6. Cyclically-adjusted data	56.5	59.3	53.2	54.2	54.8	55.5
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 8.6	- 8.9	- 5.4	- 6.2	- 6.9	- 7.2
8. Cyclical component	1.5	- 1.2	1.6	1.5	1.2	- 1.1
9. Cyclically-adjusted balance	- 10.1	- 7.7	- 7.0	- 7.7	- 8.1	- 6.1
— as % of trend GDP	- 10.4	- 7.6	- 7.2	- 7.8	- 8.2	- 6.0
10. GDP at 1995 market prices (annual % change)	4.4	1.9	2.8	1.9	1.6	- 1.5
11. Trend GDP at 1995 market prices (annual % change)	2.1	2.0	2.2	2.1	2.1	2.1
12. Gap between actual and trend GDP (% of trend GDP)	2.6	- 1.9	2.6	2.4	1.9	- 1.7
Denmark						
Total resources (% of GDP)						
1. Actual data	50.8	55.2	55.1	54.7	56.0	57.9
2. Cyclical component	- 0.1	0.7	- 0.2	- 0.4	- 1.0	- 2.1
3. Cyclically-adjusted data	50.8	54.6	55.3	55.2	57.0	60.0
Total uses (% of GDP)						
4. Actual data	53.1	56.4	56.1	57.1	58.2	60.7
5. Cyclical component	0.0	- 0.3	0.1	0.2	0.5	0.9
6. Cyclically-adjusted data	53.1	56.7	56.1	56.9	57.7	59.7
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 3.2	- 2.0	- 1.0	- 2.4	- 2.2	- 2.8
8. Cyclical component	- 0.1	1.0	- 0.2	- 0.6	- 1.5	- 3.1
9. Cyclically-adjusted balance	- 3.1	- 2.9	- 0.8	- 1.8	- 0.7	0.3
— as % of trend GDP	- 3.0	- 3.0	- 0.8	- 1.8	- 0.7	0.3
10. GDP at 1995 market prices (annual % change)	- 0.6	3.6	1.0	1.1	0.6	0.0
11. Trend GDP at 1995 market prices (annual % change)	1.5	1.7	1.6	1.6	1.8	1.9
12. Gap between actual and trend GDP (% of trend GDP)	- 0.2	1.3	- 0.3	- 0.8	- 2.0	- 3.8

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
49.4	49.0	48.6	49.3	49.7	50.0	50.0	49.9	49.0	48.8
- 0.5	- 0.3	- 0.3	- 0.9	- 0.4	- 0.5	- 0.5	0.1	0.2	0.3
49.8	49.3	48.9	50.1	50.1	50.4	50.5	49.8	48.8	48.4
54.2	52.9	53.0	53.0	51.6	50.9	50.7	49.9	48.3	48.0
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	- 0.1	- 0.1
54.1	52.8	52.9	52.8	51.5	50.8	50.6	49.9	48.6	48.1
- 4.8	- 3.9	- 4.3	- 3.8	- 1.9	- 0.9	- 0.7	0.0	0.6	0.7
- 0.6	- 0.4	- 0.4	- 1.1	- 0.5	- 0.6	- 0.6	0.2	0.3	0.4
- 4.2	- 3.5	- 3.9	- 2.7	- 1.4	- 0.3	- 0.1	- 0.2	0.2	0.3
- 4.2	- 3.5	- 3.9	- 2.6	- 1.4	- 0.3	- 0.1	- 0.2	0.2	0.3
3.0	2.6	2.6	1.2	3.4	2.4	2.7	4.0	3.0	3.1
2.1	2.2	2.2	2.3	2.5	2.6	2.7	2.8	2.9	2.9
- 0.9	- 0.6	- 0.6	- 1.7	- 0.8	- 1.0	- 0.9	0.3	0.4	0.7
58.1	56.9	58.0	58.8	58.4	58.0	58.5	55.7	55.8	54.8
- 0.3	- 0.1	- 0.1	0.0	0.3	0.4	0.2	0.4	0.2	0.2
58.5	57.0	58.1	58.8	58.1	57.6	58.2	55.3	55.5	54.6
60.7	59.2	60.3	59.8	58.0	56.9	55.4	53.3	52.6	51.9
0.2	0.0	0.0	0.0	- 0.1	- 0.2	- 0.1	- 0.2	- 0.1	- 0.1
60.5	59.1	60.3	59.8	58.1	57.1	55.5	53.5	52.9	52.0
- 2.6	- 2.2	- 2.3	- 1.0	0.4	1.1	3.1	2.4	3.1	2.8
- 0.5	- 0.1	- 0.1	0.0	0.4	0.6	0.3	0.6	0.3	0.2
- 2.1	- 2.1	- 2.2	- 1.0	- 0.1	0.5	2.8	1.8	2.6	2.6
- 2.1	- 2.1	- 2.2	- 1.0	- 0.1	0.5	2.8	1.8	2.7	2.6
5.5	2.8	2.8	2.5	3.0	2.8	2.1	2.9	2.1	2.4
2.1	2.2	2.2	2.4	2.4	2.5	2.5	2.5	2.5	2.5
- 0.6	- 0.1	- 0.1	0.0	0.5	0.8	0.4	0.8	0.4	0.3

Table A.3.2.

Cyclical adjustment of general government receipts, expenditures and budget balances

Germany ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	45.1	46.0	43.3	43.5	44.9	45.3
2. Cyclical component	0.9	- 0.8	1.0	1.8	1.7	0.3
3. Cyclically-adjusted data	44.2	46.8	42.3	41.7	43.1	45.0
Total uses (% of GDP)						
4. Actual data	48.0	47.2	45.3	46.8	47.6	48.8
5. Cyclical component	- 0.2	0.2	- 0.3	- 0.2	- 0.2	0.0
6. Cyclically-adjusted data	48.2	47.0	45.6	46.9	47.8	48.8
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 2.9	- 1.2	- 2.1	- 3.4	- 2.8	- 3.5
8. Cyclical component	1.1	- 1.0	1.2	2.5	1.9	0.3
9. Cyclically-adjusted balance	- 4.0	- 0.2	- 3.3	- 5.9	- 4.7	- 3.8
— as % of trend GDP	- 4.1	- 0.2	- 3.4	- 6.2	- 4.9	- 3.8
10. GDP at 1995 market prices (annual % change)	1.0	2.0	5.7	5.0	2.2	- 1.1
11. Trend GDP at 1995 market prices (annual % change)	1.9	2.1	2.6	2.4	2.5	2.3
12. Gap between actual and trend GDP (% of trend GDP)	2.1	- 1.8	2.5	5.1	4.2	0.7

Greece

Total resources (% of GDP)						
1. Actual data	26.2	30.3	32.5	33.4	34.2	35.4
2. Cyclical component	0.9	- 0.2	0.2	0.8	0.5	- 0.6
3. Cyclically-adjusted data	25.2	30.5	32.3	32.6	33.7	36.0
Total uses (% of GDP)						
4. Actual data	28.8	41.9	48.4	44.7	46.8	49.0
5. Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically-adjusted data	28.8	41.9	48.4	44.7	46.8	49.0
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 2.6	- 11.6	- 15.9	- 11.4	- 12.6	- 13.6
8. Cyclical component	0.9	- 0.2	0.2	0.8	0.5	- 0.6
9. Cyclically-adjusted balance	- 3.6	- 11.4	- 16.1	- 12.1	- 13.1	- 13.0
— as % of trend GDP	- 3.7	- 11.4	- 16.2	- 12.4	- 13.3	- 12.7
10. GDP at 1995 market prices (annual % change)	0.7	2.5	0.0	3.1	0.7	- 1.6
11. Trend GDP at 1995 market prices (annual % change)	1.8	0.8	1.2	1.4	1.5	1.7
12. Gap between actual and trend GDP (% of trend GDP)	3.7	- 0.5	0.6	2.3	1.5	- 1.8

(1) From 1991 including former East Germany.

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
45.9	45.6	46.1	46.8	46.5	46.6	47.2	47.0	45.9	46.0
0.4	0.2	0.2	- 0.3	- 0.5	- 0.5	- 0.7	- 0.3	- 0.2	0.0
45.5	45.3	45.9	47.1	47.1	47.0	47.9	47.3	46.0	45.9
48.4	49.0	49.6	50.3	49.2	48.6	48.6	45.6	47.6	47.2
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
48.5	49.0	49.6	50.2	49.2	48.6	48.6	48.0	47.6	47.2
- 2.6	- 3.4	- 3.5	- 3.4	- 2.7	- 2.1	- 1.4	1.5	- 1.7	- 1.2
0.4	0.3	0.3	- 0.3	- 0.6	- 0.5	- 0.7	- 0.3	- 0.2	0.0
- 3.0	- 3.6	- 3.7	- 3.1	- 2.1	- 1.5	- 0.7	- 0.8	- 1.6	- 1.3
- 3.0	- 3.7	- 3.7	- 3.1	- 2.1	- 1.5	- 0.7	- 0.8	- 1.5	- 1.3
2.3	1.7	1.7	0.8	1.4	2.1	1.6	3.0	2.2	2.6
2.2	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1
0.9	0.6	0.6	- 0.6	- 1.2	- 1.1	- 1.5	- 0.5	- 0.4	0.1
36.9	38.0	37.7	38.1	40.0	41.4	43.3	43.8	43.8	44.0
- 0.6	- 0.7	- 0.7	- 0.7	- 0.4	- 0.4	- 0.4	- 0.1	0.3	0.8
37.5	38.7	38.3	38.8	40.4	41.8	43.7	43.9	43.6	43.2
46.8	48.5	47.8	45.9	44.7	44.6	45.2	44.7	43.8	43.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46.8	48.5	47.8	45.9	44.7	44.6	45.2	44.7	43.8	43.4
- 9.9	- 10.5	- 10.2	- 7.8	- 4.7	- 3.1	- 1.8	- 0.9	0.0	0.6
- 0.6	- 0.7	- 0.7	- 0.7	- 0.4	- 0.4	- 0.4	- 0.1	0.3	0.8
- 9.3	- 9.8	- 9.5	- 7.1	- 4.2	- 2.7	- 1.4	- 0.8	- 0.3	- 0.2
- 9.1	- 9.6	- 9.3	- 6.9	- 4.2	- 2.7	- 1.4	- 0.8	- 0.3	- 0.2
2.0	2.1	2.1	2.4	3.5	3.1	3.4	4.1	4.4	4.8
1.9	2.2	2.2	2.4	2.7	3.0	3.2	3.4	3.6	3.7
- 1.7	- 1.7	- 1.7	- 1.8	- 1.1	- 1.0	- 0.9	- 0.2	0.6	1.8

Table A.3.3.

Cyclical adjustment of general government receipts, expenditures and budget balances

Spain	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	29.6	34.2	38.4	39.2	40.9	40.9
2. Cyclical component	- 0.2	- 1.2	1.5	1.4	0.8	- 0.6
3. Cyclically-adjusted data	29.8	35.4	37.0	37.8	40.1	41.5
Total uses (% of GDP)						
4. Actual data	31.6	40.4	42.6	43.5	44.9	47.6
5. Cyclical component	0.0	0.1	- 0.1	- 0.1	- 0.1	0.0
6. Cyclically-adjusted data	31.6	40.3	42.7	43.6	44.9	47.6
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 2.5	- 6.2	- 4.2	- 4.3	- 4.0	- 6.7
8. Cyclical component	- 0.2	- 1.3	1.6	1.5	0.9	- 0.6
9. Cyclically-adjusted balance	- 2.3	- 4.9	- 5.8	- 5.8	- 4.9	- 6.1
— as % of trend GDP	- 2.3	- 4.7	- 6.0	- 6.1	- 5.0	- 6.0
10. GDP at 1995 market prices (annual % change)	1.3	2.3	3.8	2.5	0.9	- 1.0
11. Trend GDP at 1995 market prices (annual % change)	1.8	2.4	2.9	2.8	2.7	2.7
12. Gap between actual and trend GDP (% of trend GDP)	- 0.6	- 3.6	4.3	4.0	2.2	- 1.5
France						
Total resources (% of GDP)						
1. Actual data	45.3	49.1	48.2	48.2	48.0	48.4
2. Cyclical component	0.1	- 0.7	1.0	0.7	0.6	- 0.3
3. Cyclically-adjusted data	45.2	49.8	47.2	47.5	47.4	48.7
Total uses (% of GDP)						
4. Actual data	45.4	52.0	49.7	50.1	51.8	54.1
5. Cyclical component	0.0	0.2	- 0.3	- 0.2	- 0.2	0.1
6. Cyclically-adjusted data	45.4	51.8	50.0	50.3	52.0	54.0
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	0.0	- 2.8	- 1.5	- 2.0	- 3.9	- 5.6
8. Cyclical component	0.2	- 0.9	1.2	0.9	0.7	- 0.4
9. Cyclically-adjusted balance	- 0.2	- 1.9	- 2.8	- 2.9	- 4.6	- 5.2
— as % of trend GDP	- 0.2	- 1.9	- 2.9	- 3.0	- 4.6	- 5.2
10. GDP at 1995 market prices (annual % change)	1.6	1.5	2.6	1.0	1.5	- 0.9
11. Trend GDP at 1995 market prices (annual % change)	2.4	2.2	2.1	2.0	1.9	1.8
12. Gap between actual and trend GDP (% of trend GDP)	0.4	- 2.1	3.2	2.2	1.8	- 0.9

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
39.8	38.0	38.4	38.8	39.1	39.1	39.6	39.5	39.8	39.8
- 0.7	- 0.7	- 0.7	- 0.8	- 0.6	- 0.2	0.1	0.3	0.2	0.2
40.4	38.7	39.1	39.6	39.6	39.3	39.5	39.2	39.6	39.6
45.9	45.0	45.0	43.7	42.2	41.7	40.8	39.9	39.7	39.6
0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
45.8	45.0	45.0	43.7	42.2	41.7	40.8	40.0	39.8	39.6
- 6.1	- 7.0	- 6.6	- 4.9	- 3.2	- 2.6	- 1.2	- 0.3	0.1	0.2
- 0.7	- 0.7	- 0.7	- 0.9	- 0.6	- 0.2	0.1	0.3	0.3	0.2
- 5.4	- 6.3	- 5.9	- 4.0	- 2.6	- 2.4	- 1.2	- 0.8	- 0.2	0.0
- 5.3	- 6.2	- 5.8	- 3.9	- 2.5	- 2.4	- 1.2	- 0.8	- 0.2	0.0
2.4	2.8	2.8	2.4	3.9	4.3	4.0	4.1	3.2	3.3
2.7	2.8	2.8	2.9	3.1	3.2	3.3	3.4	3.4	3.4
- 1.8	- 1.9	- 1.9	- 2.4	- 1.6	- 0.5	0.2	0.9	0.7	0.5
48.3	49.0	49.7	51.4	51.9	51.3	52.1	51.9	51.4	51.0
- 0.2	- 0.3	- 0.3	- 0.6	- 0.7	- 0.4	- 0.2	0.0	0.1	0.2
48.5	49.3	50.0	52.0	52.6	51.7	52.4	51.9	51.3	50.9
54.0	53.8	55.2	55.5	55.0	54.0	53.7	53.2	51.9	51.8
0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0
53.9	53.7	55.1	55.3	54.8	53.9	53.7	53.2	52.5	51.8
- 5.6	- 4.8	- 5.5	- 4.1	- 3.0	- 2.7	- 1.6	- 1.3	- 0.6	- 0.8
- 0.3	- 0.4	- 0.4	- 0.7	- 0.8	- 0.5	- 0.3	0.0	0.1	0.2
- 5.4	- 4.4	- 5.1	- 3.3	- 2.2	- 2.2	- 1.3	- 1.3	- 1.2	- 1.0
- 5.3	- 4.4	- 5.1	- 3.3	- 2.2	- 2.2	- 1.3	- 1.3	- 1.2	- 1.0
2.1	1.7	1.7	1.1	1.9	3.1	2.9	3.2	2.9	2.8
1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.6
- 0.7	- 0.9	- 0.9	- 1.8	- 2.0	- 1.2	- 0.6	0.0	0.3	0.5

Table A.3.4.

Cyclical adjustment of general government receipts, expenditures and budget balances

Ireland	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	34.5	38.8	35.9	36.6	37.0	36.9
2. Cyclical component	0.6	0.0	0.8	0.1	-0.4	-1.3
3. Cyclically-adjusted data	33.9	38.8	35.0	36.5	37.4	38.2
Total uses (% of GDP)						
4. Actual data	46.1	49.0	38.0	38.9	39.4	39.2
5. Cyclical component	-0.3	0.0	-0.3	0.0	0.2	0.5
6. Cyclically-adjusted data	46.4	49.0	38.4	38.9	39.2	38.7
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	-11.6	-10.2	-2.2	-2.3	-2.4	-2.3
8. Cyclical component	0.9	0.0	1.2	0.1	-0.6	-1.7
9. Cyclically-adjusted balance	-12.5	-10.2	-3.3	-2.4	-1.8	-0.6
— as % of trend GDP	-12.8	-10.2	-3.4	-2.4	-1.8	-0.5
10. GDP at 1995 market prices (annual % change)	3.1	3.1	7.6	1.9	3.3	2.7
11. Trend GDP at 1995 market prices (annual % change)	3.6	3.1	4.5	4.9	5.4	5.9
12. Gap between actual and trend GDP (% of trend GDP)	2.8	-0.1	3.3	0.4	-1.6	-4.5
Italy						
Total resources (% of GDP)						
1. Actual data	34.4	38.9	42.8	43.8	44.5	47.7
2. Cyclical component	0.8	-0.4	0.8	0.7	0.3	-0.8
3. Cyclically-adjusted data	33.6	39.4	42.0	43.1	44.2	48.5
Total uses (% of GDP)						
4. Actual data	43.0	51.5	53.8	53.8	54.0	57.1
5. Cyclical component	-0.1	0.0	-0.1	-0.1	0.0	0.1
6. Cyclically-adjusted data	43.1	51.4	53.9	53.9	54.0	57.1
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	-8.7	-12.5	-11.0	-10.0	-9.5	-9.4
8. Cyclical component	0.9	-0.5	0.9	0.7	0.3	-0.8
9. Cyclically-adjusted balance	-9.5	-12.1	-11.9	-10.7	-9.8	-8.6
— as % of trend GDP	-9.8	-11.9	-12.2	-10.9	-9.9	-8.4
10. GDP at 1995 market prices (annual % change)	3.5	3.0	2.0	1.4	0.8	-0.9
11. Trend GDP at 1995 market prices (annual % change)	2.8	2.4	2.0	1.8	1.7	1.7
12. Gap between actual and trend GDP (% of trend GDP)	2.7	-1.2	2.2	1.7	0.8	-1.8

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
37.6	34.7	39.4	39.5	38.6	37.7	38.4	37.8	36.9	35.9
- 1.5	- 0.7	- 0.7	- 0.7	0.0	0.1	0.5	1.0	0.8	0.5
39.1	35.4	40.2	40.2	38.5	37.6	37.9	36.8	36.1	35.4
39.2	36.8	41.6	39.7	37.8	35.7	36.3	33.3	33.0	32.4
0.5	0.3	0.3	0.3	0.0	- 0.1	- 0.2	- 0.4	- 0.3	- 0.2
38.7	36.5	41.3	39.4	37.8	35.7	36.5	33.7	33.3	32.6
- 1.6	- 2.1	- 2.2	- 0.2	0.7	2.1	2.1	4.5	3.9	3.5
- 2.0	- 1.0	- 1.0	- 0.9	0.1	0.2	0.7	1.4	1.1	0.8
0.4	- 1.1	- 1.1	0.8	0.7	1.9	1.4	3.1	2.8	2.8
0.4	- 1.1	- 1.1	0.8	0.7	1.9	1.4	3.2	2.9	2.8
5.8	9.7	9.7	7.7	10.7	8.6	9.8	10.7	7.5	7.1
6.4	7.0	7.0	7.5	7.9	8.1	8.3	8.3	8.3	8.2
- 5.1	- 2.7	- 2.7	- 2.5	0.1	0.5	2.0	4.2	3.4	2.3
45.5	45.3	45.8	46.1	48.4	46.8	47.1	46.1	45.5	44.9
- 0.5	0.0	0.0	- 0.3	- 0.3	- 0.3	- 0.5	- 0.2	0.0	0.2
46.0	45.3	45.9	46.4	48.6	47.1	47.6	46.3	45.5	44.8
54.6	52.9	53.4	53.2	51.1	49.6	48.9	46.5	46.8	45.9
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54.6	52.9	53.4	53.2	51.0	49.6	48.8	47.6	46.8	46.0
- 9.1	- 7.6	- 7.6	- 7.1	- 2.7	- 2.8	- 1.8	- 0.3	- 1.3	- 1.0
- 0.6	- 0.1	- 0.1	- 0.4	- 0.3	- 0.3	- 0.5	- 0.2	0.0	0.2
- 8.5	- 7.6	- 7.5	- 6.7	- 2.4	- 2.5	- 1.2	- 1.3	- 1.3	- 1.2
- 8.4	- 7.6	- 7.5	- 6.7	- 2.4	- 2.5	- 1.2	- 1.3	- 1.3	- 1.2
2.2	2.9	2.9	1.1	2.0	1.8	1.6	2.9	2.5	2.7
1.7	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.3
- 1.3	- 0.1	- 0.1	- 0.8	- 0.6	- 0.8	- 1.2	- 0.4	- 0.1	0.4

Table A.3.5.

Cyclical adjustment of general government receipts, expenditures and budget balances

Luxembourg	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	47.2	49.9	:	:	:	:
2. Cyclical component	0.1	- 1.6	:	:	:	:
3. Cyclically-adjusted data	47.2	51.5	:	:	:	:
Total uses (% of GDP)						
4. Actual data	47.7	43.7	:	:	:	:
5. Cyclical component	0.0	0.7	- 0.3	- 0.3	- 0.1	- 0.6
6. Cyclically-adjusted data	47.7	43.0	:	:	:	:
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 0.4	6.2	4.7	1.8	0.7	1.6
8. Cyclical component	0.1	- 2.3	:	:	:	:
9. Cyclically-adjusted balance	- 0.6	8.4	:	:	:	:
— as % of trend GDP	- 0.6	8.1	:	:	:	:
10. GDP at 1995 market prices (annual % change)	0.8	2.9	2.2	6.1	4.5	8.7
11. Trend GDP at 1995 market prices (annual % change)	2.2	4.3	5.8	5.8	5.8	5.8
12. Gap between actual and trend GDP (% of trend GDP)	0.2	- 3.6	1.5	1.8	0.5	3.3
The Netherlands						
Total resources (% of GDP)						
1. Actual data	50.4	52.2	47.9	50.6	50.1	50.8
2. Cyclical component	0.6	- 0.4	0.9	0.8	0.5	- 0.4
3. Cyclically-adjusted data	49.8	52.6	47.0	49.9	49.6	51.2
Total uses (% of GDP)						
4. Actual data	54.4	55.7	52.8	53.4	53.8	53.9
5. Cyclical component	- 0.4	0.3	- 0.7	- 0.5	- 0.3	0.3
6. Cyclically-adjusted data	54.9	55.4	53.5	53.9	54.2	53.6
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 4.1	- 3.5	- 4.9	- 2.8	- 3.8	- 3.1
8. Cyclical component	1.0	- 0.7	1.6	1.3	0.8	- 0.7
9. Cyclically-adjusted balance	- 5.1	- 2.8	- 6.5	- 4.1	- 4.5	- 2.4
— as % of trend GDP	- 5.2	- 2.8	- 6.6	- 4.2	- 4.6	- 2.4
10. GDP at 1995 market prices (annual % change)	1.2	3.1	4.1	2.3	2.0	0.8
11. Trend GDP at 1995 market prices (annual % change)	1.7	2.0	2.7	2.7	2.8	2.8
12. Gap between actual and trend GDP (% of trend GDP)	1.5	- 0.9	2.3	1.9	1.1	- 0.9

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
:	:	48.3	47.9	47.0	46.4	47.3	46.5	44.5	42.6
:	:	0.0	- 1.3	- 0.6	- 1.0	- 0.4	0.7	0.6	0.4
:	:	48.4	49.2	47.6	47.4	47.7	45.8	43.9	42.2
:	:	45.1	45.4	43.4	43.2	42.6	41.2	40.5	39.7
- 0.3	0.0	0.0	0.5	0.3	0.4	0.1	- 0.3	- 0.2	- 0.2
:	:	45.1	44.9	43.1	42.8	42.5	41.5	40.7	39.9
2.6	1.8	3.3	2.5	3.6	3.2	4.7	5.3	4.0	3.0
:	:	0.0	- 1.8	- 0.9	- 1.4	- 0.5	1.0	0.8	0.6
:	:	3.3	4.3	4.5	4.5	5.2	4.3	3.2	2.4
:	:	3.3	4.2	4.5	4.4	5.1	4.3	3.2	2.4
4.2	3.8	3.8	2.9	7.3	5.0	7.5	8.5	5.6	5.5
5.7	5.7	5.7	5.7	5.8	5.9	5.9	6.0	6.0	5.9
1.8	- 0.1	- 0.1	- 2.7	- 1.4	- 2.2	- 0.8	1.7	1.4	1.0
48.0	46.6	47.3	47.8	47.1	46.4	47.5	47.2	45.1	44.9
- 0.3	- 0.5	- 0.5	- 0.6	- 0.3	0.0	0.2	0.4	0.4	0.3
48.3	47.2	47.8	48.4	47.4	46.5	47.3	46.9	44.8	44.6
51.6	50.4	51.4	49.6	48.2	47.1	46.5	45.2	44.3	43.5
0.2	0.4	0.4	0.4	0.3	0.0	- 0.1	- 0.3	- 0.3	- 0.2
51.4	50.0	51.0	49.2	48.0	47.1	46.6	46.2	44.6	43.7
- 3.6	- 3.8	- 4.2	- 1.8	- 1.1	- 0.7	1.0	2.0	0.8	1.4
- 0.4	- 0.9	- 0.9	- 1.0	- 0.6	- 0.1	0.3	0.6	0.6	0.5
- 3.2	- 2.9	- 3.2	- 0.8	- 0.5	- 0.6	0.7	0.7	0.2	0.9
- 3.2	- 2.8	- 3.2	- 0.8	- 0.5	- 0.6	0.7	0.7	0.2	0.9
3.2	2.3	2.3	3.0	3.8	4.1	3.9	3.9	3.4	3.1
2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.4	3.4	3.4
- 0.6	- 1.3	- 1.3	- 1.4	- 0.8	- 0.1	0.4	0.9	1.0	0.7

Table A.3.6.

Cyclical adjustment of general government receipts, expenditures and budget balances

Austria	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	45.6	47.9	47.1	47.7	49.2	49.9
2. Cyclical component	0.4	- 0.5	0.5	0.7	0.7	0.1
3. Cyclically-adjusted data	45.1	48.4	46.6	47.0	48.6	49.8
Total uses (% of GDP)						
4. Actual data	47.2	50.3	49.6	50.6	51.2	54.1
5. Cyclical component	0.0	0.0	0.0	0.0	0.0	0.0
6. Cyclically-adjusted data	47.2	50.3	49.6	50.6	51.2	54.1
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 1.7	- 2.4	- 2.4	- 3.0	- 1.9	- 4.2
8. Cyclical component	0.4	- 0.5	0.5	0.7	0.7	0.1
9. Cyclically-adjusted balance	- 2.1	- 1.9	- 2.9	- 3.7	- 2.6	- 4.3
— as % of trend GDP	- 2.1	- 1.9	- 3.0	- 3.8	- 2.7	- 4.3
10. GDP at 1995 market prices (annual % change)	2.3	2.2	4.7	3.3	2.3	0.4
11. Trend GDP at 1995 market prices (annual % change)	2.3	2.2	2.6	2.6	2.5	2.4
12. Gap between actual and trend GDP (% of trend GDP)	1.7	- 1.8	1.9	2.6	2.4	0.4
Portugal						
Total resources (% of GDP)						
1. Actual data	28.2	33.1	34.2	35.5	38.4	36.9
2. Cyclical component	0.7	- 1.5	1.1	0.9	0.8	- 0.4
3. Cyclically-adjusted data	27.5	34.6	33.0	34.6	37.6	37.3
Total uses (% of GDP)						
4. Actual data	36.7	43.4	39.1	41.4	41.3	42.9
5. Cyclical component	- 0.1	0.2	- 0.1	- 0.1	- 0.1	0.0
6. Cyclically-adjusted data	36.8	43.2	39.2	41.5	41.4	42.9
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 8.5	- 10.3	- 5.0	- 5.9	- 2.9	- 6.0
8. Cyclical component	0.8	- 1.7	1.2	1.0	0.9	- 0.4
9. Cyclically-adjusted balance	- 9.3	- 8.6	- 6.2	- 6.9	- 3.8	- 5.5
— as % of trend GDP	- 9.6	- 8.1	- 6.5	- 7.1	- 3.9	- 5.5
10. GDP at 1995 market prices (annual % change)	4.6	2.8	4.4	2.3	2.5	- 1.1
11. Trend GDP at 1995 market prices (annual % change)	3.0	2.9	3.4	3.2	3.1	3.0
12. Gap between actual and trend GDP (% of trend GDP)	3.4	- 5.8	4.3	3.4	2.8	- 1.3

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
48.6	49.2	52.1	52.8	52.2	52.0	51.6	50.6	51.1	50.8
0.2	0.0	0.0	-0.2	-0.5	-0.2	-0.2	0.0	0.0	0.0
48.4	49.3	52.1	52.9	52.7	52.3	51.8	50.6	51.1	50.8
53.5	54.2	57.2	56.6	53.9	54.3	53.7	51.8	51.7	50.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53.5	54.2	57.2	56.6	53.9	54.3	53.7	52.1	51.7	50.8
-4.9	-5.0	-5.2	-3.8	-1.7	-2.2	-2.1	-1.1	-0.7	0.0
0.2	0.0	0.0	-0.2	-0.5	-0.2	-0.2	0.0	0.0	0.0
-5.0	-5.0	-5.1	-3.7	-1.2	-2.0	-1.9	-1.5	-0.7	0.0
-5.1	-4.9	-5.1	-3.7	-1.2	-2.0	-1.9	-1.5	-0.7	0.0
2.6	1.6	1.6	2.0	1.3	3.3	2.8	3.2	2.5	2.6
2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7
0.6	-0.2	-0.2	-0.5	-1.6	-0.8	-0.5	0.1	0.0	-0.2
36.3	37.1	40.4	41.6	41.7	41.8	42.7	43.4	44.7	45.2
-0.6	-0.6	-0.6	-0.4	-0.1	0.1	0.1	0.3	0.2	0.1
36.9	37.7	41.0	42.0	41.8	41.6	42.6	43.2	44.5	45.0
42.2	42.7	44.9	45.6	44.4	44.1	44.8	44.8	46.2	46.6
0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.1	42.6	44.9	45.5	44.4	44.1	44.9	45.2	46.2	46.6
-5.9	-5.6	-4.6	-4.0	-2.7	-2.3	-2.1	-1.4	-1.5	-1.5
-0.7	-0.7	-0.7	-0.4	-0.2	0.1	0.1	0.3	0.2	0.1
-5.2	-4.9	-3.9	-3.6	-2.5	-2.4	-2.2	-2.0	-1.7	-1.6
-5.1	-4.8	-3.8	-3.5	-2.5	-2.5	-2.3	-2.1	-1.7	-1.6
2.2	2.9	2.9	3.7	3.8	3.8	3.0	3.3	2.6	2.6
2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8
-2.0	-2.0	-2.0	-1.3	-0.5	0.4	0.4	0.9	0.6	0.3

Table A.3.7.

Cyclical adjustment of general government receipts, expenditures and budget balances

Finland	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	42.0	47.0	51.4	53.1	53.7	52.7
2. Cyclical component	0.2	0.1	3.4	- 0.3	- 2.7	- 4.0
3. Cyclically-adjusted data	41.8	46.9	48.0	53.3	56.4	56.7
Total uses (% of GDP)						
4. Actual data	38.6	44.2	46.1	54.5	59.5	60.6
5. Cyclical component	- 0.1	- 0.1	- 1.2	0.1	1.0	1.5
6. Cyclically-adjusted data	38.7	44.2	47.3	54.4	58.5	59.1
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	3.3	2.8	5.3	- 1.5	- 5.7	- 7.9
8. Cyclical component	0.3	0.2	4.7	- 0.4	- 3.6	- 5.5
9. Cyclically-adjusted balance	3.0	2.7	0.6	- 1.1	- 2.1	- 2.4
— as % of trend GDP	3.0	2.7	0.7	- 1.1	- 2.0	- 2.2
10. GDP at 1995 market prices (annual % change)	5.1	3.1	0.0	- 6.3	- 3.3	- 1.1
11. Trend GDP at 1995 market prices (annual % change)	3.2	2.7	1.4	1.2	1.3	1.6
12. Gap between actual and trend GDP (% of trend GDP)	0.5	0.3	7.4	- 0.5	- 5.1	- 7.6
Sweden						
Total resources (% of GDP)						
1. Actual data	55.6	59.0	62.7	59.5	58.8	58.2
2. Cyclical component	0.0	0.0	2.0	0.7	- 0.7	- 2.6
3. Cyclically-adjusted data	55.6	59.0	60.7	58.8	59.5	60.8
Total uses (% of GDP)						
4. Actual data	59.5	62.7	58.6	60.6	66.3	70.1
5. Cyclical component	0.0	0.0	- 0.6	- 0.2	0.2	0.8
6. Cyclically-adjusted data	59.5	62.6	59.2	60.8	66.1	69.2
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 3.9	- 3.7	4.0	- 1.1	- 7.5	- 11.9
8. Cyclical component	0.0	0.0	2.6	0.9	- 1.0	- 3.4
9. Cyclically-adjusted balance	- 3.9	- 3.7	1.5	- 2.0	- 6.5	- 8.4
— as % of trend GDP	- 3.9	- 3.7	1.5	- 2.0	- 6.5	- 8.0
10. GDP at 1995 market prices (annual % change)	1.7	1.9	1.4	- 1.1	- 1.4	- 2.2
11. Trend GDP at 1995 market prices (annual % change)	1.7	1.8	1.3	1.2	1.3	1.4
12. Gap between actual and trend GDP (% of trend GDP)	0.1	0.0	3.7	1.3	- 1.4	- 4.9

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
53.5	52.0	56.2	56.8	55.3	54.5	53.6	55.1	53.3	51.8
- 3.2	- 2.4	- 2.4	- 1.9	- 0.4	0.4	0.4	1.2	1.1	0.8
56.6	54.4	58.6	58.7	55.8	54.2	53.1	53.9	52.2	51.0
59.5	57.1	59.9	59.9	56.8	53.2	51.8	48.4	48.0	46.6
1.1	0.9	0.9	0.7	0.2	- 0.1	- 0.2	- 0.4	- 0.4	- 0.3
58.4	56.2	59.1	59.3	56.7	53.4	51.9	48.9	48.4	46.9
- 6.0	- 5.0	- 3.7	- 3.2	- 1.5	1.3	1.8	6.7	5.3	5.2
- 4.3	- 3.2	- 3.3	- 2.6	- 0.6	0.5	0.6	1.6	1.5	1.1
- 1.8	- 1.8	- 0.4	- 0.6	- 0.9	0.8	1.2	5.1	3.9	4.1
- 1.7	- 1.7	- 0.4	- 0.6	- 0.9	0.8	1.2	5.2	3.9	4.1
4.0	3.8	3.8	4.0	6.3	5.3	4.2	5.7	4.0	3.6
2.0	2.5	2.5	2.9	3.4	3.7	4.0	4.1	4.2	4.3
- 5.8	- 4.6	- 4.6	- 3.6	- 0.8	0.7	0.9	2.4	2.2	1.6
57.0	56.9	60.0	62.2	61.6	62.9	62.1	62.4	61.1	60.0
- 1.3	- 0.4	- 0.4	- 0.9	- 1.1	- 0.5	0.2	0.6	0.4	0.4
58.3	57.3	60.4	63.2	62.7	63.4	61.9	61.9	60.7	59.6
66.9	64.4	67.6	65.3	63.1	61.0	60.3	58.4	57.2	56.6
0.4	0.1	0.1	0.3	0.3	0.2	- 0.1	- 0.2	- 0.1	- 0.1
66.5	64.3	67.5	65.1	62.8	60.8	60.3	58.6	57.3	56.7
- 9.9	- 7.5	- 7.7	- 3.1	- 1.5	1.9	1.8	4.0	3.9	3.4
- 1.7	- 0.5	- 0.5	- 1.2	- 1.4	- 0.7	0.3	0.7	0.5	0.5
- 8.2	- 7.0	- 7.2	- 1.9	- 0.1	2.6	1.6	3.3	3.4	2.9
- 8.0	- 6.9	- 7.1	- 1.8	- 0.1	2.6	1.6	3.4	3.4	2.9
4.1	3.7	3.7	1.1	2.1	3.6	4.1	3.6	2.7	3.0
1.6	1.8	1.8	2.1	2.3	2.6	2.7	2.9	3.0	3.1
- 2.5	- 0.8	- 0.8	- 1.7	- 2.0	- 1.0	0.4	1.0	0.8	0.7

Table A.3.8.

Cyclical adjustment of general government receipts, expenditures and budget balances

United Kingdom	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	39.8	41.4	38.3	37.5	36.2	35.2
2. Cyclical component	- 0.3	- 0.5	1.0	- 0.3	- 1.1	- 1.0
3. Cyclically-adjusted data	40.1	41.9	37.3	37.9	37.3	36.3
Total uses (% of GDP)						
4. Actual data	43.2	44.2	39.2	39.8	42.3	43.0
5. Cyclical component	0.1	0.1	- 0.2	0.1	0.2	0.2
6. Cyclically-adjusted data	43.1	44.2	39.4	39.8	42.1	42.8
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 3.4	- 2.9	- 0.9	- 2.3	- 6.1	- 7.8
8. Cyclical component	- 0.4	- 0.6	1.2	- 0.4	- 1.3	- 1.2
9. Cyclically-adjusted balance	- 3.0	- 2.3	- 2.1	- 1.9	- 4.8	- 6.5
— as % of trend GDP	- 3.0	- 2.3	- 2.2	- 1.9	- 4.7	- 6.4
10. GDP at 1995 market prices (annual % change)	- 2.2	3.8	0.7	- 1.5	0.1	2.3
11. Trend GDP at 1995 market prices (annual % change)	1.7	2.5	2.3	2.2	2.2	2.3
12. Gap between actual and trend GDP (% of trend GDP)	- 0.9	- 1.2	2.8	- 0.9	- 2.9	- 2.9

Source: Commission services.

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
35.8	36.9	40.1	39.8	40.0	41.2	41.4	42.1	41.6	41.3
- 0.3	- 0.2	- 0.2	- 0.2	0.1	0.1	0.0	0.1	0.1	0.2
36.2	37.1	40.3	40.1	39.9	41.1	41.4	41.9	41.5	41.0
42.5	42.4	45.8	44.2	42.0	40.7	40.1	37.7	40.6	40.4
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5	42.3	45.8	44.1	42.1	40.8	40.1	40.2	40.6	40.4
- 6.7	- 5.4	- 5.8	- 4.4	- 2.0	0.4	1.3	4.3	1.0	0.9
- 0.4	- 0.3	- 0.3	- 0.3	0.2	0.2	0.0	0.1	0.1	0.3
- 6.3	- 5.2	- 5.5	- 4.1	- 2.2	0.3	1.3	1.8	0.9	0.6
- 6.3	- 5.1	- 5.5	- 4.1	- 2.2	0.3	1.3	1.8	0.9	0.6
4.4	2.8	2.8	2.6	3.5	2.6	2.3	3.0	2.7	3.0
2.3	2.4	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7
- 0.9	- 0.6	- 0.6	- 0.6	0.3	0.3	0.0	0.3	0.3	0.6

Table A.3.9.

Cyclical adjustment of general government receipts, expenditures and budget balances

Euro area ⁽¹⁾	Former definitions					
	1980	1985	1990	1991	1992	1993
Total resources (% of GDP)						
1. Actual data	42.2	44.9	44.4	44.9	45.6	46.6
2. Cyclical component	0.6	- 0.7	1.0	1.1	0.9	- 0.3
3. Cyclically-adjusted data	41.7	45.5	43.3	43.8	44.7	46.8
Total uses (% of GDP)						
4. Actual data	45.6	49.7	48.6	49.4	50.3	52.1
5. Cyclical component	- 0.1	0.2	- 0.3	- 0.2	- 0.1	0.1
6. Cyclically-adjusted data	45.7	49.5	48.8	49.5	50.4	52.0
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 3.4	- 4.8	- 4.2	- 4.5	- 4.7	- 5.5
8. Cyclical component	0.7	- 0.8	1.3	1.3	1.0	- 0.4
9. Cyclically-adjusted balance	- 4.1	- 4.0	- 5.5	- 5.8	- 5.6	- 5.2
— as % of trend GDP	- 4.2	- 3.9	- 5.6	- 6.0	- 5.8	- 5.1
10. GDP at 1995 market prices (annual % change)	1.9	2.2	3.8	2.6	1.6	- 0.8
11. Trend GDP at 1995 market prices (annual % change)	2.2	2.2	2.4	2.3	2.3	2.2
12. Gap between actual and trend GDP (% of trend GDP)	1.5	- 1.9	2.9	3.0	2.3	- 0.7

EU-15 ⁽²⁾

Total resources (% of GDP)						
1. Actual data	42.3	44.8	44.2	44.4	44.8	45.4
2. Cyclical component	0.4	- 0.6	1.0	0.8	0.5	- 0.5
3. Cyclically-adjusted data	41.9	45.4	43.2	43.5	44.3	45.9
Total uses (% of GDP)						
4. Actual data	45.6	49.3	47.7	48.5	49.8	51.5
5. Cyclical component	- 0.1	0.1	- 0.2	- 0.1	0.0	0.1
6. Cyclically-adjusted data	45.7	49.2	47.9	48.6	49.9	51.3
Net lending (+) or net borrowing (-) (% of GDP)						
7. Actual balance	- 3.4	- 4.5	- 3.5	- 4.1	- 5.0	- 6.0
8. Cyclical component	0.5	- 0.7	1.3	1.0	0.5	- 0.6
9. Cyclically-adjusted balance	- 3.9	- 3.8	- 4.8	- 5.1	- 5.6	- 5.4
— as % of trend GDP	- 3.9	- 3.7	- 4.9	- 5.2	- 5.6	- 5.4
10. GDP at 1995 market prices (annual % change)	1.3	2.4	3.1	1.9	1.3	- 0.5
11. Trend GDP at 1995 market prices (annual % change)	2.1	2.2	2.3	2.3	2.2	2.2
12. Gap between actual and trend GDP (% of trend GDP)	1.2	- 1.6	2.8	2.3	1.4	- 1.2

(1) EU-15 excluding DK, EL, S, 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							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
46.1	45.9	46.6	47.4	47.7	47.2	47.8	47.4	46.6	46.4
- 0.2	- 0.2	- 0.1	- 0.5	- 0.5	- 0.3	- 0.3	0.0	0.1	0.1
46.3	46.0	46.8	47.9	48.2	47.6	48.1	47.4	46.6	46.2
51.1	50.7	51.6	51.6	50.3	49.4	49.0	47.0	47.3	46.8
0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
51.0	50.6	51.5	51.5	50.2	49.3	49.0	48.1	47.5	46.9
- 5.0	- 4.8	- 5.0	- 4.2	- 2.6	- 2.1	- 1.2	0.4	- 0.7	- 0.5
- 0.2	- 0.2	- 0.2	- 0.6	- 0.6	- 0.4	- 0.4	0.0	0.1	0.2
- 4.8	- 4.6	- 4.8	- 3.7	- 2.0	- 1.8	- 0.9	- 0.7	- 0.9	- 0.7
- 4.8	- 4.6	- 4.7	- 3.6	- 2.0	- 1.7	- 0.9	- 0.7	- 0.9	- 0.7
2.4	2.2	2.2	1.4	2.3	2.8	2.5	3.4	2.7	2.9
2.2	2.2	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.6
- 0.5	- 0.5	- 0.5	- 1.2	- 1.2	- 0.8	- 0.8	0.0	0.2	0.4
45.1	45.1	46.3	46.9	47.0	46.8	47.2	47.0	46.3	46.0
- 0.2	- 0.2	- 0.2	- 0.5	- 0.4	- 0.2	- 0.3	0.0	0.1	0.2
45.3	45.3	46.4	47.4	47.4	47.1	47.5	46.9	46.2	45.8
50.5	50.1	51.4	51.1	49.4	48.4	47.9	45.8	46.5	46.0
0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
50.4	50.1	51.4	51.0	49.4	48.3	47.9	47.1	46.6	46.1
- 5.4	- 5.0	- 5.2	- 4.2	- 2.4	- 1.5	- 0.6	1.2	- 0.2	0.0
- 0.3	- 0.2	- 0.2	- 0.6	- 0.5	- 0.3	- 0.3	0.1	0.1	0.2
- 5.1	- 4.8	- 4.9	- 3.7	- 2.0	- 1.3	- 0.4	- 0.1	- 0.4	- 0.3
- 5.1	- 4.8	- 4.9	- 3.6	- 2.0	- 1.3	- 0.4	- 0.1	- 0.4	- 0.3
2.8	2.3	2.3	1.6	2.5	2.8	2.5	3.3	2.7	2.9
2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.7
- 0.6	- 0.5	- 0.5	- 1.1	- 1.0	- 0.7	- 0.6	0.1	0.2	0.4

Table A.4.1.

Current tax burden, total economy

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	46.2	49.4	46.8	46.9	47.0	47.9
D ⁽¹⁾	42.8	42.8	40.6	40.8	41.5	42.0
EL	24.4	28.8	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	39.7	42.7	:	:	:	:
NL	43.6	43.1	42.7	45.0	44.9	45.8
A	42.7	44.9	42.6	43.2	44.4	45.3
P	25.2	28.9	31.9	33.1	35.6	34.5
FIN	38.3	42.3	45.8	46.6	46.5	44.9
Euro area ⁽²⁾	39.4	41.5	41.4	41.8	42.3	43.1
DK	44.7	48.0	47.6	47.5	48.0	49.5
S	48.4	49.7	54.2	51.3	49.8	49.0
UK	33.5	35.3	33.4	33.2	32.2	31.4
EU-15 ⁽³⁾	38.7	40.7	40.7	40.9	41.1	41.7

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	- 1.2	0.3	0.6	0.1	0.1	0.9
D ⁽¹⁾	0.4	0.3	- 1.9	1.1	0.7	0.5
EL	- 0.4	- 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	0.6	2.7
L	0.6	1.0	:	:	:	:
NL	0.1	- 0.4	- 0.3	2.3	- 0.2	0.9
A	0.6	1.0	- 0.5	0.6	1.2	0.9
P	1.8	- 0.6	0.6	1.3	2.4	- 1.1
FIN	0.3	1.7	1.9	0.8	- 0.1	- 1.6
Euro area ⁽²⁾	0.7	0.2	- 0.4	0.7	0.5	0.8
DK	0.9	1.3	- 2.2	- 0.1	0.5	1.6
S	- 0.3	0.1	- 0.4	- 3.0	- 1.5	- 0.7
UK	1.5	- 0.3	- 0.3	- 0.2	- 1.1	- 0.7
EU-15 ⁽³⁾	0.7	0.2	- 0.3	0.4	0.2	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
49.1	48.6	46.9	47.2	47.8	48.1	48.0	48.0	47.6	47.4
42.5	42.5	42.2	43.1	43.0	42.9	43.7	43.8	42.3	42.3
33.4	34.0	34.4	34.8	36.1	38.2	40.1	40.6	40.5	40.5
36.1	35.0	34.0	34.4	34.8	35.1	35.7	36.2	36.3	36.3
46.0	46.6	45.2	46.4	46.5	46.5	47.3	47.0	46.6	46.3
35.5	32.9	35.1	35.0	34.2	33.7	33.2	32.4	31.5	30.6
42.1	41.9	42.3	42.9	44.4	43.2	43.5	43.0	42.3	41.8
:	:	44.7	44.5	43.5	42.3	46.1	45.9	44.1	42.5
43.6	42.5	41.5	41.7	41.5	41.2	42.4	42.3	40.3	40.1
44.0	44.7	44.9	45.9	46.9	46.7	46.5	45.6	46.4	46.4
34.7	35.0	34.5	35.3	35.4	35.8	36.8	37.5	38.5	39.0
47.2	45.9	46.6	47.4	46.7	46.5	46.1	47.0	45.6	45.0
42.9	42.9	42.3	43.1	43.4	43.1	43.7	43.5	42.7	42.5
50.7	50.1	50.2	50.7	50.7	50.4	51.2	49.1	49.2	48.5
48.5	49.4	48.9	51.8	52.2	53.5	53.5	54.2	53.4	52.6
32.0	33.1	36.8	36.5	36.9	38.3	38.5	39.3	38.7	38.4
41.6	41.8	41.8	42.5	42.6	42.7	43.2	43.1	42.4	42.1

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
1.1	-0.5	:	0.3	0.5	0.3	-0.1	-0.0	-0.4	-0.2
0.5	0.0	:	0.9	-0.1	-0.1	0.7	0.1	-1.4	0.0
0.8	0.6	:	0.4	1.3	2.1	1.9	0.5	-0.0	-0.1
-0.4	-1.1	:	0.3	0.5	0.3	0.6	0.5	0.1	0.0
0.4	0.6	:	1.2	0.1	0.0	0.8	-0.3	-0.4	-0.3
1.0	-2.6	:	-0.0	-0.8	-0.5	-0.5	-0.8	-0.9	-0.9
-2.1	-0.2	:	0.6	1.5	-1.3	0.4	-0.5	-0.6	-0.5
:	:	:	-0.2	-0.9	-1.2	3.8	-0.2	-1.8	-1.6
-2.3	-1.0	:	0.2	-0.2	-0.3	1.3	-0.1	-2.0	-0.2
-1.2	0.7	:	1.0	1.0	-0.1	-0.2	-0.9	0.8	0.0
0.2	0.3	:	0.7	0.1	0.4	1.0	0.7	1.0	0.5
2.3	-1.3	:	0.8	-0.7	-0.2	-0.4	0.9	-1.4	-0.6
-0.2	-0.1	:	0.7	0.3	-0.3	0.5	-0.1	-0.8	-0.2
1.2	-0.6	:	0.6	-0.1	-0.3	0.8	-2.1	0.1	-0.7
-0.5	0.9	:	3.0	0.3	1.3	-0.0	0.7	-0.8	-0.8
0.6	1.1	:	-0.3	0.4	1.4	0.2	0.8	-0.6	-0.3
-0.1	0.2	:	0.6	0.1	0.1	0.5	-0.0	-0.8	-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	16.8	17.4	17.7	18.2
D ⁽¹⁾	16.9	17.6	16.9	17.5	17.8	18.4
EL	9.3	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	13.2	12.2	:	:	:	:
NL	17.4	19.7	16.3	17.3	17.8	17.8
A	14.4	14.7	15.5	15.6	16.2	16.8
P	8.1	8.7	10.2	10.6	11.2	11.8
FIN	10.9	11.4	12.9	13.6	14.6	15.0
Euro area ⁽²⁾	16.0	16.8	16.5	16.8	17.2	17.8
DK	1.6	2.5	2.3	2.3	2.4	2.5
S	14.7	13.5	15.1	14.9	14.3	13.9
UK	6.1	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	0.0	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	- 1.8	0.9	0.5	- 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	0.6
FIN	0.2	0.9	1.4	0.8	0.9	0.5
Euro area ⁽²⁾	0.3	0.1	- 0.0	0.2	0.4	0.5
DK	0.2	- 0.0	0.1	0.0	0.1	0.1
S	0.4	- 0.3	0.4	- 0.1	- 0.7	- 0.4
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
17.7	17.4	16.8	16.8	16.7	16.6	16.5	16.2	16.0	15.9
18.9	19.1	18.8	19.4	19.6	19.2	18.9	18.7	18.3	18.0
12.1	12.4	12.6	12.9	13.3	13.5	13.7	13.8	13.9	14.0
14.0	13.1	13.0	13.2	13.1	13.1	13.1	13.4	13.4	13.4
20.7	21.0	20.5	20.7	20.3	18.2	18.4	18.6	18.6	18.5
5.1	4.7	6.8	6.3	6.0	5.8	5.8	5.8	5.5	5.3
14.8	14.7	14.8	15.0	15.3	12.8	12.8	12.7	12.6	12.5
:	:	12.4	12.3	11.8	11.6	11.9	11.6	11.4	11.2
18.2	18.2	17.2	16.6	16.6	16.5	17.1	17.1	15.3	15.1
17.2	17.3	17.4	17.5	17.3	17.2	17.3	17.0	16.8	16.6
11.5	11.7	11.0	11.0	11.1	11.4	11.5	11.9	12.0	12.0
15.8	14.8	14.9	14.3	13.4	13.0	13.0	12.1	11.8	11.8
17.8	17.8	17.5	17.7	17.6	16.5	16.5	16.4	16.0	15.9
2.8	2.6	2.6	2.6	2.6	2.6	3.1	3.2	3.1	3.1
13.8	14.2	14.2	15.3	15.0	15.1	13.8	16.4	16.4	16.2
6.2	6.2	7.6	7.5	7.5	7.6	7.6	7.6	7.5	7.4
15.7	15.8	15.7	15.9	15.6	14.7	14.6	14.5	14.3	14.1

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-0.5	-0.3	:	-0.1	-0.1	-0.1	-0.0	-0.3	-0.2	-0.1
0.5	0.2	:	0.6	0.2	-0.4	-0.3	-0.3	-0.4	-0.3
0.2	0.3	:	0.3	0.4	0.2	0.2	0.1	0.1	0.1
-0.4	-0.9	:	0.2	-0.0	-0.1	0.0	0.3	0.0	-0.0
-0.3	0.2	:	0.2	-0.4	-2.1	0.2	0.1	0.0	-0.1
-0.2	-0.4	:	-0.4	-0.4	-0.2	0.1	-0.1	-0.3	-0.2
-0.6	-0.1	:	0.3	0.3	-2.5	-0.0	-0.1	-0.1	-0.2
:	:	:	-0.2	-0.5	-0.1	0.2	-0.3	-0.2	-0.2
0.4	-0.0	:	-0.6	0.0	-0.1	0.7	-0.0	-1.8	-0.2
0.4	0.1	:	0.0	-0.1	-0.1	0.0	-0.3	-0.2	-0.2
-0.3	0.2	:	0.1	0.1	0.3	0.1	0.4	0.1	0.0
0.8	-1.1	:	-0.6	-0.8	-0.4	-0.0	-0.9	-0.3	-0.1
0.0	0.0	:	0.2	-0.1	-1.1	-0.1	-0.1	-0.3	-0.2
0.3	-0.2	:	0.0	-0.0	-0.0	0.5	0.1	-0.1	-0.1
-0.0	0.3	:	1.1	-0.2	0.0	-1.3	2.6	0.0	-0.2
0.1	0.0	:	-0.1	0.1	0.1	-0.1	0.0	-0.1	-0.1
-0.0	0.1	:	0.1	-0.3	-0.9	-0.1	-0.1	-0.2	-0.2

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	19.2	16.7	16.3	16.2	16.3
D ⁽¹⁾	12.8	12.6	11.2	11.3	11.6	11.2
EL	4.5	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	15.5	17.3	:	:	:	:
NL	15.1	12.2	14.9	16.2	15.3	16.1
A	12.5	14.0	11.6	12.2	12.7	12.8
P	5.7	7.9	8.0	8.9	9.9	9.0
FIN	14.2	16.5	17.7	17.6	16.9	15.2
Euro area ⁽²⁾	10.9	11.7	11.9	12.1	12.1	12.2
DK	25.1	27.8	28.3	28.5	29.0	30.1
S	20.7	20.2	22.6	19.2	19.8	20.1
UK	13.5	14.5	13.8	12.9	12.1	11.5
EU-15 ⁽³⁾	11.8	12.7	12.8	12.7	12.6	12.6

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	-0.8	0.0	0.3	-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	0.2	-0.2	1.5	1.4	-1.0	0.8
A	0.2	0.8	-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	0.5	0.4
UK	0.7	0.1	0.2	-1.0	-0.7	-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
17.5	17.9	16.7	16.7	17.1	17.6	17.2	17.5	17.4	17.3
10.8	11.1	11.1	11.5	11.2	11.5	12.0	12.5	11.4	11.7
6.8	7.2	7.4	7.1	7.8	9.5	10.5	10.8	10.7	10.6
11.0	11.0	10.1	10.3	10.5	10.2	10.3	10.5	10.6	10.6
9.2	9.4	8.5	8.9	9.5	11.7	12.2	12.3	12.1	12.0
15.2	13.5	13.6	14.1	14.0	13.9	13.5	13.0	12.4	11.9
14.8	14.5	14.8	15.4	16.2	14.5	15.1	14.6	14.1	13.8
:	:	18.4	18.3	17.5	16.5	16.9	16.1	14.7	13.5
13.4	12.5	12.4	12.9	12.4	12.2	12.2	12.1	11.4	11.5
11.3	11.9	12.0	13.1	13.5	13.7	13.4	13.2	14.1	14.4
8.8	9.1	9.3	9.9	10.1	9.9	10.3	10.8	11.9	12.3
16.8	16.7	17.4	19.0	18.4	18.8	18.6	21.0	20.3	20.0
11.7	11.7	11.5	12.0	12.2	12.4	12.8	13.0	12.5	12.5
30.6	30.3	30.4	30.6	30.3	29.6	30.1	28.7	29.4	29.1
20.3	20.8	20.2	21.6	21.7	22.4	22.2	22.5	21.9	21.6
11.9	12.7	15.0	14.8	15.1	16.5	16.4	17.0	16.7	16.7
12.3	12.4	12.5	13.0	13.2	13.7	14.0	14.3	13.8	13.8

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
1.3	0.3	:	-0.1	0.4	0.5	-0.4	0.3	-0.1	-0.1
-0.4	0.3	:	0.4	-0.3	0.3	0.5	0.5	-1.1	0.3
1.1	0.5	:	-0.3	0.7	1.7	1.0	0.3	-0.1	-0.1
-0.5	0.0	:	0.1	0.2	-0.3	0.0	0.3	0.1	0.0
0.3	0.2	:	0.5	0.6	2.2	0.6	0.0	-0.2	-0.1
0.3	-1.7	:	0.5	-0.0	-0.2	-0.4	-0.5	-0.6	-0.5
-1.2	-0.3	:	0.6	0.7	-1.7	0.6	-0.4	-0.5	-0.3
:	:	:	-0.1	-0.8	-1.0	0.3	-0.7	-1.5	-1.2
-2.6	-1.0	:	0.5	-0.5	-0.3	0.0	-0.1	-0.7	0.1
-1.5	0.6	:	1.1	0.4	0.2	-0.3	-0.2	0.9	0.2
-0.2	0.3	:	0.6	0.2	-0.2	0.4	0.5	1.1	0.4
1.6	-0.1	:	1.6	-0.6	0.4	-0.3	2.5	-0.8	-0.3
-0.5	0.0	:	0.5	0.2	0.2	0.4	0.2	-0.5	0.0
0.5	-0.3	:	0.2	-0.3	-0.8	0.5	-1.4	0.7	-0.3
0.2	0.4	:	1.4	0.1	0.8	-0.2	0.3	-0.6	-0.3
0.4	0.8	:	-0.2	0.2	1.4	-0.1	0.6	-0.3	0.0
-0.3	0.2	:	0.5	0.3	0.5	0.3	0.3	-0.5	0.0

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	12.2	12.1	12.1	12.4
D ⁽¹⁾	13.1	12.6	12.5	12.2	12.4	12.7
EL	10.4	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	12.3	14.7	15.1	15.3	15.5	16.1
NL	11.6	11.7	11.9	11.9	12.2	12.4
A	15.8	16.3	15.7	15.5	15.6	15.7
P	12.4	13.8	13.1	13.0	13.8	13.0
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	12.9
DK	18.0	17.8	17.0	16.7	16.6	16.9
S	13.0	15.9	16.6	17.1	15.7	15.1
UK	15.8	16.0	15.6	16.0	15.7	15.4
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	-0.0	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	0.4	0.2	0.1	0.6
NL	-0.4	-0.0	-0.1	0.1	0.3	0.2
A	0.0	-0.1	-0.3	-0.2	0.1	0.1
P	1.9	0.2	-0.0	-0.1	0.8	-0.8
FIN	-0.1	0.1	-0.3	0.1	-0.3	-0.2
Euro area ⁽²⁾	0.1	-0.1	-0.0	0.1	0.1	0.3
DK	-0.4	0.3	-0.7	-0.3	-0.1	0.3
S	0.2	0.7	0.9	0.6	-1.4	-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
12.7	12.2	12.2	12.7	12.9	12.9	13.3	13.3	13.4	13.4
13.1	12.7	11.4	11.4	11.4	11.6	12.2	12.0	12.1	12.1
14.3	14.2	13.6	14.0	14.3	14.4	15.2	15.3	15.2	15.1
10.6	10.3	10.2	10.2	10.5	11.1	11.7	11.6	11.6	11.6
14.7	14.9	15.4	16.1	16.0	16.0	16.1	15.7	15.4	15.4
15.3	14.6	13.5	13.7	13.5	13.2	13.4	13.4	13.4	13.3
12.4	12.4	12.1	11.8	12.4	15.3	15.2	15.1	15.1	15.0
16.1	16.0	12.5	12.7	12.9	13.4	14.2	14.9	14.8	14.7
12.3	12.3	10.7	11.2	11.4	11.6	12.2	12.2	12.7	12.6
15.7	15.5	14.3	14.5	15.0	15.0	15.1	14.6	14.7	14.7
13.4	13.6	14.3	14.4	14.2	14.6	15.0	14.8	14.7	14.6
14.2	13.6	13.7	13.5	14.3	14.1	14.0	13.3	13.0	12.7
13.2	13.0	12.5	12.7	12.8	13.5	13.8	13.6	13.6	13.5
17.3	17.2	16.9	17.3	17.5	18.0	17.8	17.0	16.5	16.2
14.3	13.8	13.7	14.3	14.8	15.3	16.9	14.7	14.5	14.1
15.5	15.8	13.2	13.3	13.6	13.5	14.0	14.1	13.9	13.7
13.6	13.5	12.7	12.9	13.1	13.7	14.0	13.8	13.7	13.7

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
0.3	-0.5	:	0.5	0.2	0.0	0.4	-0.1	0.1	0.0
0.4	-0.4	:	0.0	0.0	0.2	0.6	-0.1	0.0	0.0
-0.4	-0.1	:	0.4	0.3	0.2	0.8	0.1	-0.1	-0.1
0.5	-0.3	:	0.0	0.3	0.6	0.5	-0.0	-0.0	0.0
0.4	0.2	:	0.7	-0.0	0.0	0.0	-0.4	-0.2	-0.1
0.9	-0.6	:	0.2	-0.2	-0.3	0.2	0.0	-0.0	-0.1
-0.3	0.0	:	-0.3	0.6	2.9	-0.2	-0.1	-0.1	-0.0
-0.0	-0.1	:	0.2	0.2	0.5	0.8	0.7	-0.1	-0.1
-0.1	-0.0	:	0.4	0.3	0.1	0.6	-0.0	0.5	-0.1
-0.1	-0.2	:	0.3	0.5	0.0	0.1	-0.4	0.1	-0.0
0.4	0.2	:	0.1	-0.2	0.4	0.4	-0.2	-0.1	-0.0
-0.3	-0.6	:	-0.2	0.8	-0.2	-0.0	-0.7	-0.3	-0.3
0.2	-0.2	:	0.2	0.2	0.7	0.3	-0.2	-0.0	-0.0
0.4	-0.1	:	0.3	0.2	0.5	-0.2	-0.8	-0.5	-0.3
-0.8	-0.5	:	0.6	0.4	0.6	1.6	-2.2	-0.2	-0.3
0.1	0.3	:	0.1	0.3	-0.1	0.5	0.1	-0.2	-0.2
0.2	-0.1	:	0.2	0.2	0.5	0.3	-0.2	-0.1	-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	6.2	5.6	:	:	:	:
NL	6.3	8.7	4.9	5.2	4.8	4.6
A	2.8	2.9	4.4	4.4	4.8	4.6
P	2.1	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	3.4	3.4	3.6	3.7
DK	6.1	7.1	7.5	7.2	8.0	8.4
S	7.2	9.3	8.4	8.2	9.0	9.2
UK	4.5	4.1	2.7	2.5	2.3	2.3
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	- 0.0	- 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	0.1	0.3	- 0.4	- 0.2
A	0.4	0.1	1.5	- 0.0	0.4	- 0.2
P	- 0.6	- 0.6	0.3	0.2	0.5	- 0.5
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	0.4	- 0.0	- 0.2	0.8	0.2
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	0.0

⁽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
1.5	1.5	3.1	3.2	3.0	2.9	2.8	3.0	2.8	2.8
3.0	2.7	3.5	3.4	3.2	3.2	3.1	2.9	2.8	2.8
3.8	4.2	2.9	2.9	3.4	2.7	2.7	2.7	2.7	2.7
4.2	3.6	4.1	4.2	4.0	3.8	3.6	3.1	3.2	3.2
3.7	3.8	3.7	4.0	3.9	3.7	3.7	3.7	3.7	3.8
2.1	1.8	2.8	2.9	2.7	2.5	2.8	2.7	2.5	2.4
3.6	3.7	3.1	3.2	3.2	3.2	3.3	3.0	3.0	2.9
:	:	5.5	5.4	5.3	5.3	4.8	4.3	3.9	3.6
4.0	3.7	6.0	5.8	5.5	5.0	4.7	4.7	4.6	4.6
4.4	4.5	5.8	5.2	3.8	3.5	3.1	3.1	2.1	2.2
2.6	2.8	3.9	4.1	3.8	3.8	3.5	4.3	4.2	4.2
6.7	7.0	7.3	6.7	6.3	5.9	5.4	6.2	5.8	5.6
3.5	3.3	3.8	3.8	3.6	3.5	3.4	3.3	3.3	3.2
7.5	6.8	6.8	7.1	6.7	6.6	6.0	5.5	5.6	5.3
8.5	8.1	8.3	8.0	7.2	7.1	6.2	6.0	5.4	5.2
2.2	2.2	2.9	3.0	2.7	2.6	2.6	2.4	2.6	2.5
3.5	3.4	3.9	3.9	3.7	3.5	3.4	3.3	3.2	3.2

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-0.3	0.1	:	0.1	-0.3	-0.0	-0.1	0.1	-0.2	-0.0
0.0	-0.3	:	-0.1	-0.2	0.0	-0.1	-0.2	-0.1	-0.0
0.7	0.5	:	0.0	0.5	-0.7	-0.0	0.0	-0.0	-0.0
-0.8	-0.6	:	0.1	-0.2	-0.2	-0.2	-0.5	0.1	0.0
-0.4	0.1	:	0.3	-0.1	-0.2	-0.1	0.0	0.0	0.0
-0.3	-0.3	:	0.1	-0.2	-0.2	0.3	-0.1	-0.2	-0.1
-0.0	0.1	:	0.1	0.0	-0.0	0.1	-0.2	-0.0	-0.1
:	:	:	-0.1	-0.1	-0.0	-0.4	-0.5	-0.4	-0.3
-0.6	-0.4	:	-0.2	-0.3	-0.4	-0.3	-0.0	-0.1	-0.0
-0.1	0.0	:	-0.6	-1.4	-0.3	-0.4	-0.0	-1.0	0.0
-0.5	0.2	:	0.2	-0.3	0.0	-0.3	0.8	-0.0	-0.0
-1.3	0.3	:	-0.6	-0.5	-0.4	-0.5	0.8	-0.4	-0.2
-0.2	-0.1	:	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	-0.0
-0.9	-0.6	:	0.3	-0.5	-0.1	-0.6	-0.5	0.1	-0.3
-0.7	-0.4	:	-0.4	-0.7	-0.2	-0.9	-0.2	-0.5	-0.3
-0.0	-0.0	:	0.1	-0.3	-0.1	0.0	-0.2	0.1	-0.1
-0.2	-0.1	:	0.0	-0.2	-0.1	-0.1	-0.1	-0.0	-0.0

Table A.4.6.

Total current resources, general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	47.7	50.6	47.4	47.7	47.7	48.6
D ⁽¹⁾	45.1	46.0	43.3	43.5	44.9	45.3
EL	26.2	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	47.2	49.9	:	:	:	:
NL	50.4	52.2	47.9	50.6	50.1	50.8
A	45.6	47.9	47.1	47.7	49.2	49.9
P	28.2	33.1	34.2	35.5	38.4	36.9
FIN	42.0	47.0	51.4	53.1	53.7	52.7
Euro area ⁽²⁾	42.2	44.9	44.4	44.9	45.6	46.6
DK	50.8	55.3	55.1	54.7	56.0	57.9
S	55.6	59.0	62.7	59.5	58.8	58.2
UK	39.8	41.4	38.3	37.5	36.2	35.2
EU-15 ⁽³⁾	42.3	44.8	44.2	44.4	44.8	45.4

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	-0.7	0.2	0.7	0.2	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	0.0
F	1.9	0.5	0.4	0.0	-0.2	0.4
IRL	2.9	-0.7	-0.3	0.8	0.4	-0.0
I	1.6	0.4	0.7	1.0	0.7	3.2
L	1.5	1.5	:	:	:	:
NL	0.7	0.2	-0.2	2.7	-0.5	0.8
A	1.0	1.1	1.0	0.5	1.6	0.7
P	1.5	-0.7	0.8	1.4	2.9	-1.5
FIN	0.4	1.9	2.7	1.7	0.7	-1.0
Euro area ⁽²⁾	1.0	0.5	-0.2	0.7	0.7	1.0
DK	1.7	1.4	-2.2	-0.4	1.2	1.9
S	0.2	0.5	-0.4	-3.2	-0.7	-0.6
UK	2.0	-0.1	-0.4	-0.8	-1.3	-1.0
EU-15 ⁽³⁾	1.0	0.4	-0.2	0.3	0.4	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
49.4	49.0	48.9	49.4	49.7	50.0	49.9	49.9	49.5	49.3
45.9	45.6	44.8	45.7	45.4	45.5	46.1	46.1	44.6	44.6
36.9	38.1	36.4	36.9	38.8	40.1	42.0	42.6	42.5	42.4
39.8	38.0	37.4	37.8	38.1	38.2	38.6	38.6	38.8	38.8
48.3	49.0	48.1	49.7	49.7	49.6	50.4	50.2	49.8	49.6
37.6	34.7	36.7	37.0	36.2	35.4	35.5	34.9	33.8	32.8
45.5	45.3	44.8	45.5	47.2	45.8	46.3	45.5	44.8	44.2
:	:	48.9	48.6	47.4	46.8	47.7	46.9	44.9	43.0
48.0	46.6	46.3	46.5	45.9	45.2	46.2	46.0	44.0	43.7
48.6	49.2	49.5	50.3	49.7	49.5	48.9	48.0	47.8	47.8
36.3	37.1	38.4	39.3	39.1	39.6	40.3	41.8	42.7	43.2
53.5	52.1	53.2	53.5	52.3	51.8	51.0	52.7	50.9	50.0
46.1	45.9	45.3	46.1	46.3	46.0	46.5	46.2	45.4	45.1
58.1	57.0	56.8	57.7	57.1	56.7	57.0	54.4	54.6	53.6
57.0	56.9	56.5	59.1	58.7	59.9	59.1	59.5	58.2	57.2
35.8	36.9	38.6	38.6	38.9	40.2	40.5	41.1	40.6	40.2
45.1	45.1	44.9	45.6	45.6	45.6	46.0	45.8	45.0	44.7

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
0.8	-0.4	:	0.5	0.3	0.3	-0.1	0.0	-0.4	-0.2
0.5	-0.3	:	0.9	-0.2	0.0	0.7	-0.1	-1.5	-0.0
1.5	1.1	:	0.5	1.9	1.4	1.9	0.5	-0.1	-0.1
-1.2	-1.8	:	0.5	0.3	0.1	0.5	-0.0	0.2	0.0
-0.1	0.7	:	1.7	-0.0	-0.1	0.8	-0.2	-0.4	-0.2
0.7	-3.0	:	0.3	-0.8	-0.8	0.2	-0.7	-1.1	-0.9
-2.2	-0.3	:	0.6	1.7	-1.3	0.5	-0.8	-0.7	-0.6
:	:	:	-0.3	-1.1	-0.6	0.9	-0.8	-2.1	-1.9
-2.8	-1.4	:	0.2	-0.6	-0.7	1.0	-0.2	-2.1	-0.2
-1.3	0.6	:	0.8	-0.6	-0.2	-0.6	-0.9	-0.2	0.0
-0.6	0.8	:	0.9	-0.2	0.5	0.6	1.5	1.0	0.5
0.8	-1.4	:	0.3	-1.1	-0.6	-0.8	1.7	-1.8	-0.8
-0.5	-0.2	:	0.9	0.1	-0.3	0.5	-0.3	-0.9	-0.2
0.2	-1.2	:	0.9	-0.5	-0.4	0.3	-2.6	0.2	-0.9
-1.2	-0.1	:	2.6	-0.4	1.2	-0.8	0.5	-1.3	-1.1
0.6	1.1	:	-0.0	0.3	1.3	0.3	0.6	-0.5	-0.3
-0.3	0.0	:	0.8	-0.0	-0.0	0.4	-0.2	-0.8	-0.3

Table A.4.7.

Interest payments

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	5.9	10.4	10.4	10.0	10.6	10.7
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	6.1	5.7	5.9	6.0	6.0
A	2.4	3.5	4.0	4.2	4.2	4.3
P	2.6	7.6	7.9	7.7	7.0	6.1
FIN	1.0	1.8	1.4	1.9	2.6	4.5
Euro area ⁽²⁾	2.6	4.5	4.8	4.9	5.4	5.5
DK	3.7	9.3	7.3	7.3	6.7	7.3
S	3.9	8.1	4.8	5.0	5.2	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	0.0	-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	0.5	0.1
DK	0.4	0.3	0.1	-0.0	-0.6	0.6
S	1.0	0.8	-0.4	0.1	0.3	0.8
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
10.0	8.8	9.3	8.9	8.0	7.7	7.2	7.0	6.6	6.3
3.3	3.7	3.7	3.7	3.6	3.6	3.5	3.3	3.2	3.1
13.9	12.8	11.1	10.5	8.3	7.8	7.6	7.3	6.7	6.1
4.7	5.3	5.2	5.3	4.8	4.3	3.6	3.3	3.2	3.1
3.5	3.7	3.8	3.9	3.7	3.6	3.4	3.3	3.2	3.1
5.6	5.0	5.4	4.6	4.2	3.4	2.5	2.1	1.8	1.6
10.9	11.3	11.5	11.5	9.4	8.0	6.8	6.5	6.2	5.8
0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3
5.6	5.7	5.9	5.6	5.2	4.9	4.4	4.0	3.3	3.0
4.0	4.3	4.4	4.2	3.9	3.8	3.5	3.6	3.5	3.4
6.1	6.2	6.3	5.4	4.2	3.5	3.2	3.2	3.1	3.1
5.0	5.2	4.0	4.3	4.3	3.6	3.1	2.8	2.7	2.5
5.3	5.5	5.5	5.6	5.1	4.7	4.3	4.0	3.8	3.7
6.7	6.4	6.4	6.1	5.7	5.3	4.6	4.1	3.8	3.5
6.6	6.8	6.9	6.8	6.4	5.8	4.8	4.3	3.5	3.3
3.2	3.4	3.7	3.7	3.7	3.6	3.0	2.7	2.3	2.0
5.2	5.4	5.4	5.5	5.0	4.6	4.1	3.9	3.6	3.4

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-0.7	-1.2	:	-0.4	-0.9	-0.4	-0.5	-0.2	-0.4	-0.3
0.1	0.4	:	0.0	-0.0	-0.0	-0.1	-0.2	-0.1	-0.1
1.3	-1.2	:	-0.6	-2.3	-0.4	-0.3	-0.3	-0.6	-0.6
-0.4	0.6	:	0.1	-0.6	-0.5	-0.7	-0.3	-0.1	-0.1
0.2	0.2	:	0.2	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1
-0.7	-0.6	:	-0.8	-0.3	-0.8	-1.0	-0.4	-0.3	-0.2
-1.1	0.4	:	-0.0	-2.1	-1.3	-1.3	-0.3	-0.3	-0.4
-0.0	-0.0	:	0.0	-0.0	0.0	-0.1	-0.0	-0.0	-0.0
-0.4	0.1	:	-0.3	-0.4	-0.3	-0.4	-0.5	-0.7	-0.3
-0.3	0.3	:	-0.1	-0.4	-0.1	-0.2	0.0	-0.0	-0.1
0.0	0.1	:	-0.9	-1.1	-0.8	-0.3	-0.1	-0.0	-0.0
0.5	0.2	:	0.3	-0.0	-0.7	-0.5	-0.3	-0.1	-0.2
-0.2	0.2	:	0.1	-0.5	-0.4	-0.5	-0.2	-0.2	-0.2
-0.6	-0.3	:	-0.3	-0.4	-0.5	-0.6	-0.5	-0.4	-0.2
0.6	0.3	:	-0.1	-0.3	-0.6	-1.0	-0.6	-0.8	-0.2
0.3	0.3	:	0.0	0.0	-0.1	-0.6	-0.3	-0.4	-0.3
-0.1	0.2	:	0.1	-0.5	-0.4	-0.5	-0.3	-0.3	-0.2

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	13.9	14.3	14.1	14.7
D ⁽¹⁾	20.3	20.1	18.3	19.0	19.5	19.6
EL	13.4	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	14.3	13.5	12.7	12.6	12.4	12.3
NL	16.7	15.1	14.0	13.9	14.1	14.2
A	17.4	18.4	18.4	18.7	19.1	19.9
P	13.5	14.2	15.2	16.8	16.9	17.5
FIN	17.6	19.8	20.8	23.8	24.3	22.8
Euro area ⁽²⁾	17.5	18.1	17.2	17.7	18.1	18.4
DK	27.0	25.6	25.6	25.7	25.8	26.8
S	28.3	26.9	26.4	26.3	27.0	27.1
UK	21.7	21.2	20.3	21.2	21.7	21.6
EU-15 ⁽³⁾	18.7	19.0	18.2	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	0.0	-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	0.0	0.0
L	0.6	0.3	0.9	-0.1	-0.2	-0.2
NL	-0.2	-0.4	-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	1.7	0.1	0.6
FIN	0.2	0.9	1.4	3.0	0.6	-1.6
Euro area ⁽²⁾	0.4	0.0	0.1	0.0	0.4	0.3
DK	1.6	-0.6	-0.4	0.2	0.1	1.0
S	0.6	-0.1	1.2	-0.1	0.7	0.1
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
14.6	14.5	21.5	21.8	21.3	21.2	21.4	21.1	20.8	20.5
19.4	19.5	19.8	19.9	19.5	19.1	19.0	18.9	18.7	18.6
13.8	15.3	15.3	14.5	15.2	15.4	15.0	15.2	14.9	14.7
16.2	16.0	18.1	18.0	17.6	17.5	17.3	17.1	16.9	16.8
19.2	19.0	23.9	24.2	24.2	23.5	23.7	23.5	23.3	23.1
15.2	14.2	16.4	15.8	15.2	14.5	14.0	13.3	13.4	12.9
17.0	15.9	17.9	18.1	18.2	17.9	18.1	18.0	17.7	17.5
11.8	12.5	18.2	18.8	17.9	17.2	17.3	16.6	16.3	16.1
13.8	13.8	24.0	23.1	22.9	22.8	22.8	22.6	22.3	22.1
20.0	19.8	20.4	20.3	19.7	19.6	19.6	19.3	19.0	18.7
17.2	17.2	18.7	19.0	19.1	19.1	19.7	20.6	20.6	20.8
21.8	21.2	22.8	23.2	22.4	21.7	21.5	20.6	20.4	20.2
18.1	17.9	20.6	20.7	20.4	20.0	20.1	19.9	19.7	19.5
25.9	25.7	25.8	25.9	25.5	25.7	25.5	24.7	24.8	24.6
26.1	24.8	26.4	27.1	26.5	26.7	26.9	26.3	26.4	26.3
21.3	21.0	19.8	19.4	18.4	18.2	18.5	18.7	19.1	19.3
18.9	18.7	20.7	20.7	20.3	20.0	20.0	19.9	19.8	19.7

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-0.0	-0.1	:	0.3	-0.5	-0.1	0.2	-0.3	-0.3	-0.3
-0.2	0.1	:	0.1	-0.5	-0.4	-0.1	-0.2	-0.2	-0.1
-0.5	1.6	:	-0.8	0.6	0.2	-0.3	0.1	-0.3	-0.2
-0.6	-0.2	:	-0.1	-0.4	-0.1	-0.2	-0.3	-0.1	-0.1
-0.2	-0.1	:	0.3	0.0	-0.7	0.1	-0.2	-0.2	-0.2
-0.1	-1.0	:	-0.7	-0.6	-0.7	-0.6	-0.6	0.0	-0.5
-0.5	-1.0	:	0.2	0.1	-0.2	0.2	-0.1	-0.2	-0.3
-0.4	0.6	:	0.6	-0.9	-0.7	0.1	-0.8	-0.2	-0.3
-0.5	0.0	:	-0.9	-0.2	-0.1	0.0	-0.2	-0.3	-0.2
0.1	-0.2	:	-0.2	-0.6	-0.0	-0.0	-0.3	-0.3	-0.3
-0.3	0.1	:	0.3	0.1	0.0	0.6	0.9	0.0	0.2
-0.9	-0.6	:	0.3	-0.7	-0.8	-0.2	-1.0	-0.2	-0.2
-0.3	-0.2	:	0.0	-0.3	-0.3	0.0	-0.2	-0.2	-0.2
-0.8	-0.2	:	0.1	-0.4	0.2	-0.2	-0.8	0.1	-0.2
-1.0	-1.2	:	0.8	-0.6	0.2	0.2	-0.6	0.1	-0.1
-0.3	-0.3	:	-0.4	-1.0	-0.3	0.3	0.2	0.4	0.2
-0.3	-0.2	:	0.0	-0.4	-0.3	0.1	-0.2	-0.1	-0.1

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	11.2	11.5	11.6	12.0
D ⁽¹⁾	11.0	10.6	9.7	10.1	10.4	10.6
EL	9.3	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	10.0	9.6	:	:	:	:
NL	12.3	10.6	9.3	9.2	9.4	9.6
A	11.6	12.4	11.7	11.8	12.0	12.5
P	10.3	10.4	11.9	13.0	13.9	14.2
FIN	12.1	13.9	14.4	16.8	17.3	16.2
Euro area ⁽²⁾	11.8	12.0	11.5	11.6	11.8	12.0
DK	18.0	17.4	17.7	17.7	17.8	18.1
S	20.0	18.2	18.1	18.3	18.7	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	12.2	12.1

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.3	0.0	- 0.0	0.3	0.0	0.5
D ⁽¹⁾	0.2	- 0.0	- 0.3	- 0.2	0.3	0.2
EL	0.2	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	0.1
I	0.5	- 0.2	0.8	- 0.0	- 0.1	- 0.2
L	0.4	0.0	:	:	:	:
NL	- 0.2	- 0.4	- 0.3	- 0.1	0.2	0.2
A	- 0.0	0.2	- 0.4	0.2	0.2	0.4
P	0.6	0.0	0.4	1.0	1.0	0.3
FIN	- 0.1	0.6	0.8	2.4	0.5	- 1.1
Euro area ⁽²⁾	0.3	- 0.0	0.1	0.1	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	0.4	- 0.2
UK	1.0	- 0.5	0.0	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
12.1	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.2	11.2
10.3	10.2	9.0	8.9	8.7	8.5	8.3	8.1	7.9	7.7
10.6	11.3	11.3	10.7	11.6	11.7	11.5	11.6	11.5	11.4
11.3	11.2	11.3	11.3	10.9	10.7	10.5	10.4	10.2	10.0
14.0	14.1	13.7	13.9	13.8	13.7	13.7	13.5	13.2	12.9
10.4	9.6	10.2	9.7	9.2	8.8	8.2	7.8	7.9	7.4
11.9	11.3	11.2	11.5	11.6	10.7	10.7	10.5	10.4	10.1
:	:	9.6	9.6	9.3	9.1	8.7	8.1	7.9	7.9
9.2	9.3	10.8	10.4	10.2	10.2	10.2	10.0	9.7	9.7
12.4	12.4	12.6	12.4	11.5	11.3	11.4	11.2	11.2	10.8
13.7	13.7	13.7	13.7	13.8	14.0	14.4	14.9	14.9	14.9
15.3	14.8	15.4	15.6	14.6	13.9	13.6	13.0	12.8	12.6
11.7	11.6	11.1	11.2	11.1	10.8	10.7	10.5	10.3	10.1
17.5	17.3	17.3	17.3	17.1	17.3	17.1	16.6	16.7	16.6
17.6	16.7	17.3	17.8	17.4	16.8	16.5	16.7	16.7	16.6
9.1	8.5	8.8	8.3	7.8	7.4	7.5	7.5	7.7	7.8
11.6	11.4	11.1	11.1	10.9	10.5	10.5	10.3	10.2	10.0

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
0.1	0.0	:	-0.1	-0.1	-0.1	-0.0	-0.2	-0.2	-0.1
-0.3	-0.1	:	-0.1	-0.2	-0.3	-0.1	-0.2	-0.2	-0.2
-0.3	0.7	:	-0.6	0.9	0.1	-0.2	0.1	-0.2	-0.1
-0.5	-0.1	:	-0.0	-0.4	-0.2	-0.2	-0.2	-0.2	-0.1
-0.0	0.1	:	0.2	-0.1	-0.1	0.0	-0.3	-0.3	-0.3
-0.4	-0.8	:	-0.5	-0.5	-0.5	-0.5	-0.5	0.2	-0.6
-0.4	-0.7	:	0.3	0.1	-0.9	-0.0	-0.2	-0.1	-0.3
:	:	:	0.1	-0.4	-0.2	-0.4	-0.6	-0.1	-0.1
-0.3	0.0	:	-0.4	-0.2	-0.1	-0.0	-0.2	-0.2	-0.1
-0.0	-0.1	:	-0.3	-0.9	-0.1	0.1	-0.2	-0.1	-0.3
-0.6	0.0	:	-0.0	0.1	0.2	0.4	0.5	-0.0	-0.0
-0.9	-0.5	:	0.2	-0.9	-0.7	-0.3	-0.6	-0.2	-0.2
-0.3	-0.1	:	0.1	-0.1	-0.3	-0.1	-0.2	-0.2	-0.2
-0.6	-0.2	:	0.0	-0.2	0.1	-0.2	-0.5	0.1	-0.1
-0.9	-0.9	:	0.5	-0.4	-0.6	-0.3	0.2	0.0	-0.1
-1.6	-0.7	:	-0.5	-0.4	-0.4	0.0	0.1	0.1	0.1
-0.5	-0.2	:	-0.0	-0.3	-0.3	-0.1	-0.2	-0.1	-0.2

Table A.4.10.

Total current uses, general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	51.4	56.3	51.1	52.1	52.7	53.7
D ⁽¹⁾	42.7	43.4	42.0	42.3	43.4	44.8
EL	26.3	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	40.2	38.9	:	:	:	:
NL	49.1	51.4	49.5	50.3	51.0	51.2
A	41.3	44.7	44.9	45.9	46.5	49.1
P	31.7	39.2	35.6	38.1	37.6	39.0
FIN	34.6	40.5	42.2	50.5	55.8	57.7
Euro area ⁽²⁾	41.0	45.4	44.4	45.3	46.7	48.3
DK	50.0	54.4	54.9	55.7	56.3	58.9
S	54.9	59.0	56.4	58.1	62.1	65.1
UK	40.3	41.9	35.9	37.0	39.5	40.2
EU-15 ⁽³⁾	41.4	45.4	43.8	44.7	46.4	47.8

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.8	- 0.0	0.0	1.1	0.5	1.0
D ⁽¹⁾	0.6	- 0.2	0.4	1.3	1.1	1.3
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	0.8	0.7	0.2
A	0.2	1.0	0.7	0.9	0.7	2.6
P	3.9	- 1.0	3.2	2.5	- 0.4	1.4
FIN	- 0.3	1.8	3.0	8.2	5.3	1.9
Euro area ⁽²⁾	0.9	0.2	0.7	1.2	1.4	1.5
DK	3.5	- 0.9	- 0.5	0.8	0.6	2.6
S	1.7	1.4	1.1	1.7	4.0	3.0
UK	2.3	- 0.7	- 0.1	1.1	2.5	0.7
EU-15 ⁽³⁾	1.1	0.1	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
52.4	51.0	50.9	50.9	49.2	48.5	48.0	47.2	46.4	45.8
44.9	45.6	44.9	46.2	45.5	44.8	44.8	44.3	43.8	43.3
44.0	45.1	43.3	42.2	40.3	40.1	40.1	39.7	38.9	38.1
41.3	40.3	39.2	39.1	37.6	37.0	35.9	35.2	34.8	34.6
50.4	50.4	49.2	50.0	49.8	48.6	48.3	47.9	47.3	46.7
37.0	34.8	36.8	35.3	33.6	31.2	29.5	27.6	27.2	26.1
51.0	49.1	48.6	49.2	47.4	45.6	44.7	43.8	43.0	42.1
:	:	39.8	40.2	38.6	38.1	37.8	35.8	34.8	34.0
49.0	47.7	47.4	45.9	44.7	43.4	42.7	42.0	40.6	39.8
48.6	49.6	49.8	49.3	47.5	47.4	47.0	46.3	45.4	44.8
39.1	39.4	39.7	39.6	38.2	37.8	38.1	39.5	39.4	39.7
56.4	54.3	53.7	53.1	50.7	47.6	46.4	43.6	43.0	42.4
47.6	47.2	46.5	47.1	46.1	45.0	44.5	43.8	43.1	42.5
58.8	57.4	57.3	56.8	54.9	53.9	52.4	50.3	50.0	49.2
63.6	61.4	60.3	59.3	57.1	56.2	54.5	53.1	51.9	51.3
40.0	40.0	41.5	40.8	39.2	38.2	37.8	37.8	37.9	37.4
47.1	46.9	46.4	46.8	45.4	44.3	43.7	43.0	42.5	41.9

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
- 1.3	- 1.4	:	0.1	- 1.8	- 0.6	- 0.6	- 0.7	- 0.8	- 0.6
0.1	0.7	:	1.3	- 0.7	- 0.7	0.0	- 0.5	- 0.5	- 0.5
0.7	1.1	:	- 1.1	- 1.9	- 0.2	0.0	- 0.4	- 0.8	- 0.8
- 1.3	- 0.9	:	- 0.1	- 1.4	- 0.7	- 1.1	- 0.7	- 0.4	- 0.2
- 0.3	0.1	:	0.8	- 0.3	- 1.2	- 0.3	- 0.4	- 0.6	- 0.6
- 0.9	- 2.2	:	- 1.5	- 1.8	- 2.3	- 1.8	- 1.9	- 0.4	- 1.1
- 2.2	- 1.9	:	0.6	- 1.9	- 1.8	- 0.9	- 0.9	- 0.7	- 0.9
:	:	:	0.4	- 1.6	- 0.6	- 0.3	- 2.0	- 1.0	- 0.9
- 2.2	- 1.3	:	- 1.5	- 1.2	- 1.3	- 0.7	- 0.7	- 1.4	- 0.8
- 0.6	1.0	:	- 0.5	- 1.7	- 0.1	- 0.4	- 0.7	- 0.9	- 0.5
0.1	0.3	:	- 0.1	- 1.3	- 0.4	0.2	1.4	- 0.1	0.3
- 1.3	- 2.1	:	- 0.6	- 2.3	- 3.1	- 1.2	- 2.9	- 0.5	- 0.7
- 0.7	- 0.3	:	0.6	- 1.0	- 1.1	- 0.5	- 0.7	- 0.7	- 0.6
- 0.0	- 1.4	:	- 0.5	- 1.9	- 1.0	- 1.5	- 2.1	- 0.3	- 0.8
- 1.5	- 2.3	:	- 1.1	- 2.2	- 0.9	- 1.6	- 1.5	- 1.2	- 0.6
- 0.2	- 0.0	:	- 0.7	- 1.6	- 1.1	- 0.4	0.0	0.1	- 0.5
- 0.6	- 0.3	:	0.3	- 1.4	- 1.1	- 0.5	- 0.7	- 0.5	- 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	-4.5	-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	11.0	:	:	:	:
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	-3.6	-6.1	-1.4	-2.5	0.8	-2.1
FIN	7.4	6.5	9.2	2.6	-2.1	-5.0
Euro area ⁽²⁾	1.1	-0.5	-0.1	-0.4	-1.1	-1.7
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	-3.3	-5.0
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	-2.9
FIN	0.6	0.1	-0.3	-6.6	-4.7	-2.9
Euro area ⁽²⁾	0.1	0.4	-0.9	-0.5	-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
-3.0	-2.0	-2.0	-1.5	0.5	1.5	1.9	2.7	3.1	3.5
1.0	0.0	-0.1	-0.5	-0.1	0.6	1.3	1.8	0.8	1.3
-7.1	-7.1	-6.8	-5.2	-1.5	0.0	1.9	2.9	3.6	4.3
-1.5	-2.3	-1.8	1.2	0.5	1.2	2.8	3.4	4.0	4.3
-2.1	-1.4	-1.1	-0.3	-0.1	1.1	2.1	2.3	2.5	2.9
0.6	-0.2	-0.1	1.7	2.6	4.1	6.0	7.3	6.6	6.8
-5.4	-3.9	-3.8	-3.7	-0.2	0.3	1.6	1.8	1.8	2.1
:	:	9.0	8.4	8.8	8.8	9.9	11.1	10.0	9.1
-1.0	-1.1	-1.1	0.6	1.3	1.8	3.5	4.1	3.4	4.0
0.0	-0.4	-0.3	1.0	2.1	2.1	1.8	1.7	2.4	3.0
-2.8	-2.3	-1.3	-0.2	0.9	1.8	2.2	2.3	3.3	3.4
-2.9	-2.2	-0.5	0.4	1.6	4.2	4.6	9.1	7.8	7.7
-1.4	-1.4	-1.2	-0.8	0.2	1.0	2.0	2.5	2.3	2.7
-0.7	-0.5	-0.5	0.9	2.2	2.9	4.6	4.1	4.6	4.5
-6.6	-4.5	-3.9	-0.2	1.6	3.7	4.6	6.5	6.3	5.9
-4.2	-3.1	-2.9	-2.2	-0.3	2.0	2.7	3.3	2.7	2.8
-2.0	-1.7	-1.6	-1.0	0.2	1.3	2.2	2.8	2.5	2.8

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
2.1	1.0	:	0.5	2.0	1.0	0.4	0.7	0.4	0.4
0.4	-1.0	:	-0.4	0.4	0.7	0.7	0.5	-1.0	0.5
0.9	0.0	:	1.6	3.8	1.5	1.9	1.0	0.7	0.8
0.2	-0.8	:	3.1	-0.8	0.8	1.6	0.7	0.6	0.2
0.2	0.6	:	0.8	0.2	1.1	1.0	0.2	0.2	0.4
1.7	-0.8	:	1.8	0.9	1.5	1.9	1.3	-0.7	0.2
-0.1	1.6	:	0.1	3.5	0.4	1.4	0.2	0.1	0.3
:	:	:	-0.7	0.4	-0.0	1.2	1.1	-1.1	-0.9
-0.6	-0.1	:	1.7	0.7	0.5	1.7	0.5	-0.7	0.6
-0.8	-0.4	:	1.3	1.1	-0.1	-0.2	-0.2	0.7	0.6
-0.7	0.5	:	1.1	1.1	0.9	0.4	0.1	1.0	0.1
2.1	0.7	:	0.9	1.2	2.6	0.4	4.6	-1.3	-0.2
0.3	0.1	:	0.5	1.0	0.8	1.0	0.5	-0.2	0.4
0.3	0.3	:	1.4	1.3	0.7	1.8	-0.5	0.5	-0.1
0.2	2.1	:	3.7	1.8	2.1	0.9	1.9	-0.1	-0.5
0.8	1.1	:	0.6	1.9	2.3	0.7	0.5	-0.6	0.2
0.3	0.3	:	0.6	1.1	1.1	1.0	0.5	-0.2	0.3

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	1.4	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	3.9	4.5	4.7	5.1	5.1
NL	3.2	2.2	2.0	2.1	2.0	2.0
A	4.3	3.6	3.2	3.2	3.2	3.2
P	4.2	3.3	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	3.1	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	-0.4	-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	-0.0	-0.0	-0.2	-0.4
L	0.9	-0.3	:	0.2	0.4	-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	0.2
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	-0.2	0.4	-1.6
UK	-0.2	-0.1	0.5	-0.2	-0.0	-0.2
EU-15 ⁽³⁾	0.1	0.0	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
1.6	1.4	1.8	1.6	1.6	1.5	1.8	1.8	1.9	1.9
2.6	2.3	2.3	2.1	1.9	1.8	1.9	1.8	1.8	1.8
3.1	3.3	3.2	3.2	3.4	3.6	4.1	4.3	4.5	4.6
3.9	3.7	3.7	3.1	3.1	3.3	3.3	3.3	3.4	3.5
3.1	3.2	3.3	3.2	3.0	2.9	2.9	3.0	3.0	3.0
2.3	2.4	2.3	2.4	2.5	2.7	3.1	3.8	4.0	4.5
2.3	2.2	2.1	2.2	2.2	2.4	2.5	2.4	2.3	2.3
4.2	4.4	4.5	4.7	4.2	4.6	4.3	4.4	4.6	4.6
2.0	1.9	3.0	3.1	2.9	3.0	3.0	3.2	3.2	3.2
3.3	2.8	3.1	2.8	2.0	1.9	1.8	1.7	1.6	1.6
3.5	3.6	3.7	4.2	4.4	4.0	4.1	3.8	4.3	4.3
2.9	2.7	2.8	2.9	3.2	2.9	2.9	2.6	2.7	2.7
2.7	2.6	2.7	2.6	2.4	2.4	2.5	2.5	2.5	2.5
1.8	1.8	1.8	1.9	1.9	1.7	1.7	1.8	1.8	1.8
2.9	2.8	3.4	3.0	2.7	2.7	2.8	2.5	2.6	2.6
1.8	1.7	2.0	1.5	1.2	1.2	1.1	1.2	1.4	1.7
2.6	2.5	2.6	2.4	2.2	2.2	2.3	2.3	2.3	2.4

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
0.1	-0.3	:	-0.2	-0.0	-0.0	0.3	0.0	0.0	0.0
-0.1	-0.2	:	-0.2	-0.2	-0.1	0.0	-0.0	-0.0	-0.0
-0.2	0.2	:	0.0	0.2	0.2	0.4	0.2	0.2	0.1
-0.2	-0.3	:	-0.6	-0.0	0.3	-0.1	-0.0	0.1	0.1
-0.1	0.1	:	-0.0	-0.3	-0.1	0.0	0.1	0.0	0.0
0.2	0.0	:	0.1	0.1	0.3	0.4	0.7	0.2	0.5
-0.3	-0.1	:	0.1	0.0	0.2	0.1	-0.1	-0.1	0.0
-0.9	0.3	:	0.1	-0.5	0.4	-0.4	0.1	0.2	0.0
-0.0	-0.1	:	0.2	-0.2	0.1	0.0	0.2	-0.0	0.0
0.0	-0.5	:	-0.2	-0.9	-0.1	-0.0	-0.1	-0.1	-0.1
-0.4	0.1	:	0.4	0.2	-0.4	0.1	-0.3	0.4	0.1
0.1	-0.2	:	0.1	0.3	-0.3	-0.0	-0.2	0.1	0.0
-0.1	-0.1	:	-0.1	-0.2	0.0	0.1	0.0	-0.0	0.0
-0.1	0.0	:	0.1	-0.0	-0.2	-0.0	0.1	0.1	-0.0
1.8	-0.1	:	-0.4	-0.3	0.0	0.0	-0.2	0.0	0.0
-0.1	-0.0	:	-0.5	-0.3	0.0	-0.1	0.1	0.2	0.3
-0.1	-0.1	:	-0.2	-0.2	0.0	0.0	0.0	0.0	0.1

Table A.4.13.

Total uses, general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	56.2	59.5	52.8	53.9	54.6	55.8
D ⁽¹⁾	48.0	47.2	45.3	46.8	47.6	48.8
EL	28.8	41.9	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	47.7	43.7	:	:	:	:
NL	54.4	55.7	52.8	53.4	53.8	53.9
A	47.2	50.3	49.6	50.6	51.2	54.1
P	36.7	43.4	39.1	41.4	41.3	42.9
FIN	38.6	44.2	46.1	54.5	59.5	60.6
Euro area ⁽²⁾	45.6	49.7	48.6	49.4	50.3	52.1
DK	53.1	56.4	56.1	57.1	58.2	60.7
S	59.5	62.7	58.6	60.6	66.3	70.1
UK	43.2	44.2	39.3	39.8	42.3	43.0
EU-15 ⁽³⁾	45.6	49.3	47.7	48.5	49.8	51.5

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	0.9	- 0.3	- 0.0	1.0	0.7	1.2
D ⁽¹⁾	0.8	- 0.4	0.3	2.4	0.9	1.1
EL	0.1	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	0.4	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	0.5	0.5	0.1
A	0.4	1.0	0.7	1.1	0.6	2.9
P	4.3	- 0.8	3.4	2.3	- 0.1	1.6
FIN	- 0.3	1.7	3.6	8.5	4.9	1.1
Euro area ⁽²⁾	1.1	0.4	0.9	1.2	0.9	1.8
DK	3.2	- 0.7	- 0.8	1.0	1.1	2.5
S	0.9	1.3	0.7	2.0	5.7	3.8
UK	2.1	- 1.2	1.5	0.6	2.5	0.7
EU-15 ⁽³⁾	1.2	0.2	1.0	1.1	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
54.2	52.9	53.0	53.0	51.6	50.9	50.7	49.9	48.3	48.0
48.4	49.0	49.6	50.3	49.3	48.6	48.6	45.6	47.6	47.2
46.8	48.5	47.8	45.9	44.7	44.6	45.2	44.7	43.8	43.4
45.9	45.0	45.0	43.8	42.2	41.7	40.8	39.9	39.7	39.6
54.0	53.8	55.2	55.5	55.0	54.0	53.8	53.2	52.0	51.8
39.2	36.8	41.6	39.7	37.8	35.7	36.3	33.3	33.0	32.4
54.6	52.9	53.4	53.2	51.1	49.6	48.9	46.5	46.8	46.0
:	:	45.1	45.4	43.4	43.2	42.6	41.2	40.5	39.7
51.6	50.5	51.4	49.6	48.2	47.1	46.5	45.3	44.3	43.5
53.5	54.2	57.2	56.6	53.9	54.3	53.7	51.8	51.7	50.8
42.2	42.7	44.9	45.6	44.4	44.1	44.8	44.8	46.2	46.6
59.5	57.1	59.9	59.9	56.8	53.3	51.8	48.4	48.0	46.6
51.1	50.7	51.6	51.6	50.3	49.4	49.0	47.0	47.3	46.8
60.7	59.2	60.3	59.8	58.0	56.9	55.4	53.3	52.6	51.9
66.9	64.4	67.6	65.3	63.1	61.0	60.3	58.4	57.2	56.6
42.5	42.4	45.9	44.2	42.0	40.7	40.1	37.7	40.6	40.4
50.5	50.1	51.4	51.1	49.4	48.4	47.9	45.8	46.5	46.0

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-1.6	-1.3	:	0.0	-1.4	-0.7	-0.2	-0.8	-1.6	-0.3
-0.3	0.5	:	0.7	-1.0	-0.6	0.0	-3.1	2.1	-0.4
-2.2	1.7	:	-1.9	-1.2	-0.1	0.6	-0.4	-0.9	-0.4
-1.8	-0.9	:	-1.3	-1.5	-0.5	-1.0	-0.9	-0.1	-0.1
-0.1	-0.2	:	0.3	-0.5	-1.0	-0.2	-0.6	-1.2	-0.2
-0.0	-2.4	:	-1.9	-1.9	-2.2	0.7	-3.0	-0.3	-0.7
-2.5	-1.7	:	-0.2	-2.1	-1.5	-0.7	-2.4	0.3	-0.8
:	:	:	0.3	-2.1	-0.1	-0.6	-1.5	-0.7	-0.8
-2.3	-1.2	:	-1.8	-1.4	-1.1	-0.6	-1.3	-0.9	-0.9
-0.6	0.8	:	-0.6	-2.7	0.4	-0.6	-1.9	-0.0	-1.0
-0.7	0.5	:	0.6	-1.2	-0.3	0.8	0.0	1.4	0.4
-1.0	-2.5	:	-0.0	-3.1	-3.6	-1.5	-3.4	-0.5	-1.3
-1.0	-0.4	:	0.0	-1.3	-0.9	-0.4	-2.0	0.3	-0.5
-0.0	-1.5	:	-0.5	-1.8	-1.1	-1.5	-2.1	-0.7	-0.7
-3.1	-2.5	:	-2.3	-2.2	-2.2	-0.7	-1.9	-1.2	-0.6
-0.5	-0.2	:	-1.7	-2.2	-1.3	-0.6	-2.4	2.8	-0.2
-1.0	-0.4	:	-0.3	-1.7	-1.1	-0.5	-2.1	0.7	-0.4

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	4.8	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	– 8.5	– 10.3	– 5.0	– 5.9	– 2.9	– 6.0
FIN	3.3	2.9	5.3	– 1.5	– 5.7	– 7.9
Euro area ⁽²⁾	– 3.4	– 4.8	– 4.2	– 4.5	– 4.7	– 5.5
DK	– 3.2	– 2.0	– 1.0	– 2.4	– 2.2	– 2.8
S	– 3.9	– 3.7	4.1	– 1.1	– 7.5	– 11.9
UK	– 3.4	– 2.9	– 0.9	– 2.3	– 6.1	– 7.8
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	– 3.3	– 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	2.1	– 1.0	0.7
A	0.7	0.1	0.3	– 0.6	1.0	– 2.2
P	– 2.9	0.1	– 2.7	– 0.9	3.0	– 3.1
FIN	0.7	0.2	– 0.9	– 6.8	– 4.3	– 2.1
Euro area ⁽²⁾	– 0.3	0.1	– 1.1	– 0.5	– 0.1	– 0.8
DK	– 1.5	2.0	– 1.3	– 1.4	0.2	– 0.6
S	– 1.1	– 0.9	– 1.2	– 5.1	– 6.4	– 4.4
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
-4.8	-3.9	-4.3	-3.8	-1.9	-0.9	-0.7	0.0	0.6	0.7
-2.6	-3.4	-3.5	-3.4	-2.7	-2.1	-1.4	1.5	-1.7	-1.2
-9.9	-10.5	-10.2	-7.8	-4.7	-3.1	-1.8	-0.9	0.0	0.6
-6.1	-7.0	-6.6	-5.0	-3.2	-2.6	-1.2	-0.3	0.1	0.2
-5.7	-4.8	-5.5	-4.1	-3.0	-2.7	-1.6	-1.3	-0.6	-0.8
-1.6	-2.1	-2.2	-0.2	0.7	2.1	2.1	4.5	3.9	3.5
-9.1	-7.6	-7.6	-7.1	-2.7	-2.8	-1.8	-0.3	-1.4	-1.0
2.6	1.8	3.3	2.6	3.6	3.2	4.7	5.3	4.0	3.0
-3.6	-3.8	-4.2	-1.8	-1.1	-0.7	1.0	2.0	0.8	1.4
-4.9	-5.0	-5.2	-3.8	-1.7	-2.2	-2.1	-1.2	-0.7	-0.0
-5.9	-5.6	-4.6	-4.0	-2.7	-2.3	-2.1	-1.4	-1.5	-1.5
-6.1	-5.0	-3.7	-3.2	-1.5	1.3	1.8	6.7	5.3	5.2
-5.0	-4.8	-5.0	-4.3	-2.6	-2.1	-1.2	0.4	-0.7	-0.5
-2.6	-2.2	-2.3	-1.0	0.4	1.1	3.1	2.4	3.1	2.8
-9.9	-7.5	-7.7	-3.1	-1.5	1.9	1.9	4.0	3.9	3.4
-6.7	-5.4	-5.8	-4.4	-2.0	0.5	1.3	4.3	1.0	0.9
-5.4	-5.0	-5.2	-4.2	-2.4	-1.6	-0.7	1.2	-0.2	-0.0

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
2.4	0.9	:	0.6	1.8	1.0	0.3	0.7	0.6	0.1
0.9	-0.8	:	0.0	0.7	0.7	0.6	2.9	-3.2	0.5
3.7	-0.6	:	2.4	3.1	1.5	1.3	0.9	0.9	0.6
0.6	-0.9	:	1.7	1.8	0.6	1.4	0.8	0.4	0.1
-0.0	0.9	:	1.4	1.1	0.4	1.1	0.3	0.8	-0.2
0.7	-0.5	:	2.0	0.9	1.3	0.0	2.4	-0.6	-0.4
0.3	1.5	:	0.5	4.4	-0.1	1.1	1.4	-1.0	0.3
1.1	-0.9	:	-0.7	1.1	-0.5	1.5	0.6	-1.3	-1.0
-0.5	-0.2	:	2.3	0.7	0.4	1.6	1.0	-1.2	0.6
-0.7	-0.1	:	1.3	2.1	-0.5	0.2	0.9	0.5	0.7
0.1	0.3	:	0.6	1.3	0.4	0.2	0.7	-0.1	0.1
1.8	1.0	:	0.6	1.7	2.8	0.5	4.9	-1.4	-0.2
0.5	0.2	:	0.7	1.7	0.5	0.9	1.6	-1.1	0.2
0.2	0.4	:	1.3	1.4	0.8	2.0	-0.6	0.7	-0.3
1.9	2.4	:	4.6	1.6	3.4	-0.1	2.2	-0.2	-0.5
1.1	1.3	:	1.4	2.3	2.5	0.8	3.0	-3.3	-0.1
0.7	0.4	:	1.0	1.8	0.9	0.9	1.9	-1.4	0.2

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	-0.6	-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	7.1	5.2	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	-5.9	-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	-0.4	0.7	0.4	0.8	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	-0.8	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	-1.2	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	2.4	-4.0
FIN	0.8	0.3	-0.9	-6.3	-3.6	-0.2
Euro area ⁽²⁾	0.0	0.2	-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
5.2	4.9	5.0	5.1	6.1	6.7	6.5	7.0	7.2	7.0
0.7	0.4	0.2	0.3	0.9	1.5	2.1	4.8	1.4	1.9
4.0	2.3	1.0	2.8	3.6	4.7	5.7	6.4	6.7	6.7
-1.4	-1.7	-1.4	0.4	1.6	1.7	2.4	3.0	3.3	3.2
-2.2	-1.1	-1.8	-0.1	0.7	0.9	1.8	2.0	2.6	2.3
4.0	2.9	3.2	4.4	5.0	5.5	4.6	6.6	5.7	5.1
1.8	3.6	3.9	4.4	6.7	5.2	5.0	6.1	4.8	4.8
3.0	2.0	3.6	2.9	4.0	3.6	5.0	5.6	4.3	3.2
2.0	1.9	1.7	3.8	4.1	4.2	5.4	6.0	4.1	4.4
-0.9	-0.7	-0.8	0.4	2.2	1.5	1.5	2.4	2.9	3.4
0.2	0.6	1.7	1.4	1.6	1.2	1.1	1.8	1.6	1.6
-1.1	0.2	0.3	1.1	2.8	4.9	4.9	9.5	8.0	7.7
0.3	0.6	0.5	1.4	2.5	2.6	3.0	4.4	3.1	3.2
4.1	4.2	4.2	5.1	6.1	6.4	7.7	6.6	6.9	6.4
-3.4	-0.7	-0.8	3.7	4.9	7.8	6.7	8.3	7.4	6.7
-3.6	-2.0	-2.1	-0.7	1.7	4.0	4.2	7.0	3.3	2.9
-0.2	0.3	0.2	1.3	2.5	3.1	3.5	5.1	3.4	3.4

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
1.7	-0.2	:	0.2	1.0	0.6	-0.2	0.4	0.3	-0.2
1.0	-0.4	:	0.1	0.7	0.6	0.6	2.7	-3.3	0.4
5.0	-1.8	:	1.8	0.8	1.1	1.0	0.6	0.3	-0.0
0.3	-0.3	:	1.8	1.2	0.2	0.7	0.6	0.3	-0.0
0.2	1.0	:	1.6	0.8	0.3	0.8	0.2	0.6	-0.3
0.0	-1.2	:	1.2	0.6	0.6	-1.0	2.1	-0.9	-0.6
-0.8	1.8	:	0.5	2.3	-1.5	-0.2	1.2	-1.3	-0.1
1.0	-0.9	:	-0.7	1.1	-0.4	1.5	0.6	-1.3	-1.1
-0.9	-0.1	:	2.0	0.3	0.1	1.2	0.6	-1.9	0.3
-1.0	0.2	:	1.2	1.8	-0.7	-0.1	1.0	0.5	0.5
0.1	0.4	:	-0.3	0.2	-0.4	-0.0	0.7	-0.2	0.0
2.3	1.2	:	0.8	1.6	2.1	-0.0	4.6	-1.4	-0.3
0.3	0.4	:	0.9	1.1	0.0	0.5	1.4	-1.3	0.1
-0.4	0.1	:	1.0	0.9	0.3	1.3	-1.1	0.3	-0.5
2.5	2.7	:	4.5	1.2	2.8	-1.1	1.6	-0.9	-0.7
1.4	1.5	:	1.4	2.3	2.3	0.2	2.8	-3.7	-0.4
0.5	0.6	:	1.1	1.3	0.5	0.4	1.6	-1.6	-0.0

Table A.4.16.

General government consolidated gross debt

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	78.5	122.2	128.6	130.4	131.8	138.8
D ⁽¹⁾	31.8	41.7	43.5	40.4	43.1	47.2
EL	27.7	59.9	89.0	91.2	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	9.2	9.5	4.5	4.0	4.8	5.8
NL	46.0	70.0	77.2	77.2	78.0	79.1
A	36.4	49.5	57.5	57.7	57.5	62.1
P	35.4	67.5	63.6	65.5	58.3	61.4
FIN	11.6	16.4	14.5	22.9	41.1	57.3
Euro area ⁽²⁾	35.3	52.8	58.7	58.6	62.0	67.0
DK	36.4	69.8	57.7	62.3	66.4	78.0
S	39.6	61.6	42.1	51.2	64.8	75.1
UK	55.0	54.3	35.2	35.1	41.2	47.9
EU-15 ⁽³⁾	38.5	53.8	55.0	55.5	59.8	65.4

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	8.3	4.7	0.3	1.9	1.4	6.9
D ⁽¹⁾	2.0	0.7	1.7	0.9	2.7	4.0
EL	- 0.2	8.7	8.6	2.2	6.3	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	- 0.8	- 0.5	0.8	1.0
NL	2.7	4.6	- 0.3	0.1	0.7	1.2
A	1.5	2.0	- 0.8	0.2	- 0.2	4.6
P	- 3.7	8.1	2.0	1.9	- 7.2	3.2
FIN	0.1	0.7	- 0.4	8.4	18.2	16.3
Euro area ⁽²⁾	0.9	3.1	1.3	1.7	3.3	5.0
DK	7.0	- 2.9	- 0.1	4.6	4.0	11.7
S	4.6	- 0.5	- 1.9	9.1	13.6	10.3
UK	- 0.5	- 1.9	- 2.7	- 0.1	6.0	6.7
EU-15 ⁽³⁾	1.3	2.1	0.8	1.8	4.3	5.7

⁽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.

Percentage of GDP

Former definitions		ESA 95 definitions							
1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
136.9	133.8	:	130.5	125.3	119.8	116.4	110.8	104.4	98.6
49.5	57.1	:	59.8	60.9	60.7	61.1	60.3	58.7	57.7
107.9	108.7	:	111.3	108.3	105.5	104.6	103.9	99.9	98.0
61.2	64.0	:	68.1	66.7	64.7	63.4	60.7	58.1	55.8
49.6	54.0	:	57.1	59.3	59.7	58.8	58.0	56.9	55.3
92.6	84.5	:	74.3	65.1	55.0	50.1	38.9	33.1	26.5
123.9	123.3	:	122.1	120.1	116.2	114.5	110.3	105.7	102.6
5.4	5.6	:	6.2	6.0	6.4	6.0	5.3	5.1	4.9
75.5	77.0	:	75.2	70.0	66.8	63.2	56.2	51.9	47.7
64.7	68.6	:	69.2	64.7	63.9	64.7	62.9	61.6	59.5
62.1	64.1	:	62.8	59.1	55.3	55.0	54.1	53.0	52.6
58.8	57.1	:	57.1	54.1	48.8	46.9	44.0	41.7	39.5
69.3	72.5	:	75.0	74.9	73.3	72.3	69.9	67.4	65.2
73.5	69.3	:	65.1	61.2	55.6	52.0	46.3	42.4	38.7
77.7	76.6	:	76.0	73.0	71.8	65.2	55.6	53.5	49.2
49.8	52.1	:	52.7	51.1	48.1	45.7	42.9	38.3	35.4
67.5	70.4	:	72.3	71.2	69.2	67.6	64.6	61.9	59.5

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-1.9	-3.1	:	:	-5.3	-5.5	-3.4	-5.6	-6.5	-5.8
2.3	7.7	:	:	1.1	-0.2	0.3	-0.7	-1.6	-1.0
-2.3	0.8	:	:	-3.1	-2.8	-0.9	-0.7	-4.1	-1.8
2.5	2.8	:	:	-1.4	-2.0	-1.4	-2.7	-2.5	-2.3
3.5	4.4	:	:	2.2	0.5	-0.9	-0.8	-1.2	-1.6
-6.2	-8.2	:	:	-9.2	-10.1	-4.9	-11.2	-5.8	-6.6
5.7	-0.6	:	:	-2.1	-3.8	-1.8	-4.2	-4.6	-3.1
-0.4	0.2	:	:	-0.1	0.4	-0.5	-0.6	-0.2	-0.2
-3.6	1.5	:	:	-5.2	-3.2	-3.6	-7.1	-4.2	-4.3
2.7	3.8	:	:	-4.5	-0.8	0.8	-1.8	-1.3	-2.2
0.6	2.0	:	:	-3.7	-3.8	-0.3	-0.9	-1.0	-0.4
1.5	-1.7	:	:	-3.0	-5.4	-1.9	-2.9	-2.3	-2.3
2.3	3.2	:	:	-0.1	-1.6	-1.0	-2.3	-2.6	-2.2
-4.6	-4.2	:	:	-3.9	-5.6	-3.6	-5.8	-3.9	-3.7
2.6	-1.1	:	:	-3.0	-1.2	-6.6	-9.6	-2.2	-4.3
2.0	2.3	:	:	-1.6	-3.0	-2.4	-2.8	-4.6	-2.9
2.1	2.9	:	:	-1.1	-2.1	-1.6	-3.0	-2.7	-2.4

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	51.6	46.2	46.5	46.8	49.4
D ⁽¹⁾	44.2	46.8	42.3	41.7	43.1	45.0
EL	25.2	30.5	32.3	32.6	33.7	36.0
E	29.8	35.4	37.0	37.8	40.1	41.5
F	45.2	49.8	47.2	47.5	47.4	48.7
IRL	33.9	38.8	35.0	36.5	37.4	38.2
I	33.6	39.4	42.0	43.2	44.2	48.5
L	47.2	51.5	:	:	:	:
NL	49.8	52.6	47.0	49.9	49.6	51.2
A	45.1	48.4	46.7	47.0	48.6	49.8
P	27.5	34.7	33.0	34.6	37.6	37.3
FIN	41.8	46.9	48.0	53.3	56.4	56.7
Euro area ⁽²⁾	41.7	45.5	43.4	43.8	44.7	46.8
DK	50.8	54.6	55.3	55.2	57.0	60.0
S	55.6	59.0	60.7	58.8	59.5	60.8
UK	40.1	41.9	37.3	37.9	37.3	36.3
EU-15 ⁽³⁾	41.9	45.4	43.2	43.5	44.3	45.9

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	- 1.8	0.2	0.4	0.3	0.3	2.7
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	- 1.1	1.5	0.9	0.8
I	1.4	0.2	0.6	1.2	1.1	4.3
L	2.0	2.1	:	:	:	:
NL	0.9	- 0.3	- 0.7	2.8	- 0.2	1.6
A	1.0	1.1	0.5	0.3	1.6	1.2
P	1.2	- 0.7	0.5	1.6	3.0	- 0.3
FIN	- 0.4	1.7	3.1	5.4	3.1	0.3
Euro area ⁽²⁾	1.1	0.5	- 0.7	0.6	1.0	2.1
DK	2.6	0.4	- 1.8	- 0.1	1.9	3.0
S	0.2	0.4	- 0.4	- 1.9	0.7	1.3
UK	3.3	- 0.6	0.2	0.5	- 0.6	- 1.1
EU-15 ⁽³⁾	1.4	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
49.9	49.3	48.9	50.1	50.1	50.5	50.5	49.8	48.8	48.4
45.5	45.3	45.9	47.1	47.1	47.0	47.9	47.3	46.0	45.9
37.6	38.7	38.3	38.8	40.5	41.9	43.7	43.9	43.6	43.2
40.4	38.7	39.1	39.7	39.6	39.3	39.5	39.2	39.6	39.6
48.6	49.3	50.0	52.0	52.6	51.7	52.4	51.9	51.3	50.9
39.1	35.4	40.2	40.2	38.5	37.6	37.9	36.8	36.1	35.4
46.0	45.3	45.9	46.4	48.6	47.1	47.6	46.3	45.5	44.8
:	:	48.4	49.2	47.6	47.4	47.7	45.8	43.9	42.2
48.3	47.2	47.8	48.4	47.4	46.5	47.3	46.9	44.8	44.6
48.4	49.3	52.1	52.9	52.7	52.3	51.8	50.6	51.1	50.8
36.9	37.7	41.0	42.0	41.8	41.6	42.6	43.2	44.5	45.1
56.6	54.4	58.6	58.7	55.8	54.2	53.1	53.9	52.2	51.0
46.3	46.0	46.8	47.9	48.2	47.6	48.1	47.4	46.6	46.2
58.5	57.0	58.1	58.8	58.1	57.6	58.3	55.3	55.6	54.6
58.3	57.3	60.4	63.2	62.7	63.4	61.9	61.9	60.7	59.6
36.2	37.1	40.3	40.1	39.9	41.1	41.4	41.9	41.5	41.0
45.3	45.3	46.4	47.4	47.4	47.1	47.5	47.0	46.2	45.8

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
0.4	-0.6	:	1.2	0.0	0.3	0.1	-0.7	-1.0	-0.3
0.5	-0.1	:	1.3	-0.1	-0.0	0.8	-0.6	-1.2	-0.1
1.5	1.2	:	0.5	1.7	1.4	1.9	0.2	-0.4	-0.3
-1.0	-1.8	:	0.6	-0.0	-0.3	0.2	-0.3	0.4	0.0
-0.2	0.8	:	2.0	0.6	-0.9	0.7	-0.5	-0.6	-0.4
0.9	-3.7	:	0.0	-1.7	-0.9	0.3	-1.1	-0.7	-0.8
-2.5	-0.7	:	0.6	2.2	-1.6	0.5	-1.3	-0.8	-0.7
:	:	:	0.8	-1.6	-0.3	0.3	-1.9	-1.9	-1.7
-3.0	-1.1	:	0.6	-0.9	-1.0	0.8	-0.5	-2.1	-0.1
-1.4	0.8	:	0.8	-0.3	-0.4	-0.5	-1.2	0.5	-0.3
-0.4	0.8	:	1.0	-0.1	-0.2	1.0	0.6	1.3	0.6
-0.1	-2.2	:	0.0	-2.9	-1.6	-1.0	0.8	-1.7	-1.2
-0.6	-0.3	:	1.1	0.3	-0.6	0.5	-0.7	-0.8	-0.4
-1.6	-1.5	:	0.7	-0.7	-0.5	0.6	-3.0	0.3	-0.9
-2.5	-1.0	:	2.8	-0.5	0.8	-1.5	-0.1	-1.2	-1.1
-0.1	1.0	:	-0.3	-0.2	1.2	0.3	0.5	-0.4	-0.5
-0.5	-0.0	:	0.9	0.0	-0.3	0.4	-0.6	-0.7	-0.4

Table A.4.18.

Cyclically-adjusted total uses of general government

Percentage of GDP

	Former definitions					
	1980	1985	1990	1991	1992	1993
B	56.6	59.3	53.2	54.2	54.8	55.5
D ⁽¹⁾	48.2	47.0	45.6	46.9	47.8	48.8
EL	28.8	41.9	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	38.4	38.9	39.2	38.8
I	43.1	51.4	53.9	53.9	54.0	57.1
L	47.7	43.0	:	:	:	:
NL	54.9	55.4	53.5	53.9	54.2	53.7
A	47.2	50.3	49.6	50.6	51.2	54.1
P	36.8	43.2	39.2	41.5	41.4	42.9
FIN	38.7	44.3	47.3	54.4	58.5	59.1
Euro area ⁽²⁾	45.7	49.5	48.8	49.6	50.4	52.0
DK	53.1	56.7	56.1	56.9	57.7	59.8
S	59.5	62.7	59.2	60.8	66.1	69.3
UK	43.1	44.2	39.4	39.8	42.1	42.8
EU-15 ⁽³⁾	45.7	49.2	47.9	48.6	49.9	51.3

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	1.2	- 0.3	0.0	1.0	0.7	0.7
D ⁽¹⁾	0.7	- 0.4	0.6	2.7	0.9	1.0
EL	0.1	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	0.7	0.4	1.6	2.0
IRL	4.0	0.6	0.4	0.5	0.3	- 0.5
I	1.2	1.3	1.9	- 0.0	0.1	3.0
L	2.3	- 1.7	:	:	:	:
NL	1.7	- 1.3	0.6	0.4	0.2	- 0.5
A	0.4	1.0	0.7	1.1	0.6	2.9
P	4.4	- 0.8	3.5	2.3	- 0.1	1.5
FIN	- 0.0	1.8	3.3	7.1	4.1	0.6
Euro area ⁽²⁾	1.0	0.4	1.0	1.2	0.8	1.6
DK	2.7	- 0.2	- 1.0	0.9	0.8	2.0
S	0.9	1.4	0.7	1.6	5.3	3.2
UK	1.8	- 1.1	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
54.1	52.8	52.9	52.8	51.5	50.8	50.6	50.0	48.6	48.1
48.5	49.0	49.6	50.2	49.2	48.6	48.6	48.0	47.6	47.2
46.8	48.5	47.8	45.9	44.7	44.6	45.2	44.7	43.8	43.4
45.8	45.0	45.0	43.7	42.2	41.7	40.8	40.0	39.8	39.6
53.9	53.7	55.1	55.3	54.8	53.9	53.7	53.2	52.5	51.8
38.7	36.5	41.3	39.4	37.8	35.7	36.5	33.7	33.4	32.6
54.6	52.9	53.4	53.2	51.0	49.6	48.8	47.6	46.8	46.0
:	:	45.1	44.9	43.1	42.8	42.5	41.5	40.8	39.9
51.4	50.0	51.0	49.2	48.0	47.1	46.6	46.2	44.6	43.7
53.5	54.2	57.2	56.6	53.9	54.3	53.7	52.1	51.7	50.8
42.2	42.6	44.9	45.5	44.4	44.1	44.9	45.2	46.2	46.7
58.4	56.2	59.1	59.3	56.7	53.4	51.9	48.9	48.4	46.9
51.1	50.6	51.5	51.5	50.2	49.3	49.0	48.1	47.5	46.9
60.5	59.1	60.3	59.8	58.1	57.1	55.5	53.5	52.9	52.0
66.5	64.3	67.5	65.1	62.8	60.8	60.3	58.6	57.3	56.7
42.5	42.3	45.8	44.2	42.1	40.8	40.1	40.2	40.6	40.4
50.4	50.1	51.4	51.0	49.4	48.3	47.9	47.1	46.6	46.1

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
-1.5	-1.3	:	-0.1	-1.3	-0.8	-0.2	-0.6	-1.4	-0.5
-0.3	0.5	:	0.6	-1.0	-0.6	-0.0	-0.5	-0.4	-0.4
-2.2	1.7	:	-1.9	-1.2	-0.1	0.6	-0.4	-0.9	-0.4
-1.8	-0.9	:	-1.3	-1.5	-0.5	-0.9	-0.8	-0.2	-0.1
-0.1	-0.2	:	0.2	-0.5	-0.9	-0.2	-0.5	-0.6	-0.7
-0.1	-2.2	:	-1.9	-1.6	-2.1	0.8	-2.8	-0.4	-0.8
-2.5	-1.7	:	-0.2	-2.1	-1.5	-0.7	-1.2	-0.8	-0.8
:	:	:	-0.2	-1.8	-0.3	-0.3	-1.0	-0.7	-0.9
-2.2	-1.4	:	-1.8	-1.2	-0.9	-0.5	-0.4	-1.6	-0.9
-0.6	0.8	:	-0.6	-2.7	0.4	-0.6	-1.6	-0.4	-1.0
-0.7	0.5	:	0.7	-1.2	-0.3	0.8	0.4	1.0	0.4
-0.7	-2.2	:	0.2	-2.6	-3.3	-1.4	-3.1	-0.5	-1.4
-0.9	-0.4	:	-0.0	-1.3	-0.9	-0.4	-0.8	-0.7	-0.6
0.8	-1.4	:	-0.5	-1.7	-1.0	-1.6	-2.0	-0.6	-0.9
-2.7	-2.2	:	-2.5	-2.3	-2.0	-0.4	-1.8	-1.2	-0.6
-0.3	-0.2	:	-1.7	-2.1	-1.3	-0.7	0.1	0.4	-0.2
-0.9	-0.3	:	-0.3	-1.7	-1.1	-0.5	-0.8	-0.5	-0.5

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	-10.1	-7.7	-7.0	-7.7	-8.1	-6.1
D ⁽¹⁾	-4.0	-0.2	-3.3	-5.2	-4.7	-3.8
EL	-3.6	-11.4	-16.1	-12.1	-13.1	-13.0
E	-2.3	-4.9	-5.8	-5.8	-4.9	-6.1
F	-0.2	-1.9	-2.8	-2.9	-4.6	-5.2
IRL	-12.5	-10.2	-3.3	-2.4	-1.8	-0.6
I	-9.5	-12.1	-11.9	-10.7	-9.8	-8.6
L	-0.6	8.5	:	:	:	:
NL	-5.1	-2.8	-6.5	-4.1	-4.6	-2.4
A	-2.1	-1.9	-2.9	-3.7	-2.6	-4.3
P	-9.3	-8.6	-6.2	-6.9	-3.8	-5.5
FIN	3.0	2.7	0.6	-1.1	-2.1	-2.4
Euro area ⁽²⁾	-4.1	-4.0	-5.5	-5.8	-5.7	-5.2
DK	-3.1	-2.9	-0.8	-1.8	-0.7	0.3
S	-3.9	-3.7	1.5	-2.0	-6.5	-8.4
UK	-3.0	-2.3	-2.1	-1.9	-4.8	-6.5
EU-15 ⁽³⁾	-3.9	-3.8	-4.8	-5.1	-5.6	-5.4

Change in percentage points of GDP

	1980	1985	1990	1991	1992	1993
B	-3.1	0.6	0.3	-0.7	-0.4	2.0
D ⁽¹⁾	0.1	0.9	-3.7	-2.6	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	-1.5	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	-1.3	2.4	-0.5	2.1
A	0.7	0.1	-0.2	-0.8	1.1	-1.7
P	-3.2	0.1	-2.9	-0.7	3.1	-1.8
FIN	-0.4	-0.1	-0.2	-1.8	-1.0	-0.3
Euro area ⁽²⁾	-0.1	0.0	-1.7	-0.6	0.1	0.5
DK	-0.1	0.6	-0.9	-1.0	1.1	1.0
S	-1.1	-1.0	-1.2	-3.4	-4.6	-1.9
UK	1.5	0.5	-1.2	0.2	-2.9	-1.7
EU-15 ⁽³⁾	0.1	0.0	-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
-4.2	-3.5	-3.9	-2.7	-1.4	-0.3	-0.1	-0.2	0.2	0.3
-3.0	-3.6	-3.7	-3.1	-2.1	-1.5	-0.7	-0.8	-1.6	-1.3
-9.3	-9.8	-9.5	-7.1	-4.3	-2.7	-1.4	-0.8	-0.3	-0.2
-5.4	-6.3	-5.9	-4.0	-2.6	-2.4	-1.3	-0.8	-0.2	-0.0
-5.4	-4.4	-5.1	-3.3	-2.2	-2.2	-1.3	-1.3	-1.2	-1.0
0.5	-1.1	-1.1	0.8	0.7	1.9	1.4	3.1	2.8	2.8
-8.5	-7.6	-7.5	-6.7	-2.4	-2.5	-1.2	-1.3	-1.3	-1.2
:	:	3.3	4.3	4.5	4.6	5.2	4.3	3.2	2.4
-3.2	-2.9	-3.2	-0.8	-0.5	-0.6	0.7	0.7	0.2	0.9
-5.0	-5.0	-5.1	-3.7	-1.2	-2.0	-1.9	-1.5	-0.7	0.0
-5.2	-4.9	-3.9	-3.6	-2.5	-2.5	-2.2	-2.0	-1.7	-1.6
-1.8	-1.8	-0.4	-0.6	-0.9	0.8	1.2	5.1	3.9	4.1
-4.8	-4.6	-4.8	-3.7	-2.0	-1.8	-0.9	-0.7	-0.9	-0.7
-2.1	-2.1	-2.2	-1.0	-0.1	0.5	2.8	1.8	2.6	2.6
-8.2	-7.0	-7.2	-1.9	-0.1	2.6	1.6	3.3	3.4	2.9
-6.3	-5.2	-5.5	-4.1	-2.2	0.3	1.3	1.8	0.9	0.6
-5.1	-4.8	-4.9	-3.7	-2.0	-1.3	-0.4	-0.1	-0.4	-0.3

Change in percentage points of GDP

1994	1995	1995	1996	1997	1998	1999	2000	2001	2002
1.9	0.7	:	1.3	1.3	1.1	0.3	-0.1	0.4	0.1
0.8	-0.7	:	0.6	1.0	0.6	0.9	-0.1	-0.8	0.3
3.7	-0.6	:	2.4	2.8	1.5	1.3	0.6	0.5	0.1
0.7	-0.9	:	1.9	1.5	0.2	1.1	0.5	0.6	0.1
-0.1	0.9	:	1.8	1.1	0.0	0.9	0.0	0.1	0.3
1.0	-1.6	:	1.9	-0.1	1.2	-0.5	1.7	-0.3	0.0
0.1	0.9	:	0.8	4.3	-0.1	1.3	-0.1	0.0	0.1
:	:	:	1.0	0.2	0.0	0.6	-0.9	-1.1	-0.8
-0.8	0.3	:	2.4	0.3	-0.1	1.3	-0.0	-0.5	0.8
-0.8	0.1	:	1.5	2.5	-0.8	0.1	0.4	0.9	0.7
0.3	0.3	:	0.3	1.0	0.1	0.2	0.2	0.3	0.1
0.6	0.0	:	-0.2	-0.3	1.7	0.4	3.9	-1.2	0.2
0.4	0.1	:	1.1	1.6	0.3	0.9	0.1	-0.2	0.3
-2.4	-0.0	:	1.1	1.0	0.6	2.2	-0.9	0.8	-0.0
0.2	1.2	:	5.3	1.8	2.7	-1.0	1.7	0.0	-0.5
0.2	1.1	:	1.4	1.9	2.5	1.0	0.5	-0.9	-0.3
0.3	0.3	:	1.3	1.7	0.7	0.9	0.2	-0.3	0.2

Table A.5.1.

Gross domestic product at current market prices

(1 000 million EUR)

	1980	1985	1990	1991	1992	1993
B	87.6	109.2	155.4	163.6	174.9	183.6
D ⁽¹⁾	583.2	818.9	1 182.2	1 432.6	1 561.7	1 670.8
EL	35.2	53.7	66.1	73.0	77.0	79.7
E	159.1	226.3	401.7	443.7	463.3	425.9
F	491.1	702.2	957.6	987.2	1 040.5	1 089.4
IRL	15.2	27.3	37.2	38.6	41.4	42.6
I	323.2	562.1	867.8	939.6	951.2	849.0
L	3.8	5.3	8.6	9.3	10.3	11.6
NL	128.9	176.5	232.6	244.5	259.1	278.3
A	57.2	88.5	127.3	136.6	147.0	158.5
P	21.2	31.8	55.8	64.9	74.9	73.3
FIN	37.8	72.0	107.7	99.8	83.9	73.6
Euro area ⁽²⁾	1 904.4	2 814.7	4 125.5	4 551.3	4 797.8	4 845.0
DK	49.3	79.1	105.0	108.4	113.7	118.5
S	93.5	137.6	187.3	200.4	198.2	164.2
UK	385.2	603.3	779.2	833.8	824.5	819.7
EU-15 ⁽³⁾	2 467.6	3 688.4	5 263.1	5 766.9	6 011.1	6 027.2

Table A.5.2.

Gross domestic product at constant market prices

(Annual percentage change)

	1980	1985	1990	1991	1992	1993
B	4.4	1.9	2.8	1.9	1.6	- 1.5
D ⁽¹⁾	1.0	2.0	5.7	5.0	2.2	- 1.1
EL	0.7	2.5	0.0	3.1	0.7	- 1.6
E	1.3	2.3	3.8	2.5	0.9	- 1.0
F	1.6	1.5	2.6	1.0	1.5	- 0.9
IRL	3.1	3.1	7.6	1.9	3.3	2.7
I	3.5	3.0	2.0	1.4	0.8	- 0.9
L	0.8	2.9	2.2	6.1	4.5	8.7
NL	1.2	3.1	4.1	2.3	2.0	0.8
A	2.3	2.2	4.7	3.3	2.3	0.4
P	4.6	2.8	4.4	2.3	2.5	- 1.1
FIN	5.1	3.1	0.0	- 6.3	- 3.3	- 1.1
Euro area ⁽²⁾	1.9	2.2	3.6	2.4	1.5	- 0.8
DK	- 0.6	3.6	1.0	1.1	0.6	- 0.0
S	1.7	1.9	1.4	- 1.1	- 1.4	- 2.2
UK	- 2.2	3.8	0.7	- 1.5	0.1	2.3
EU-15 ⁽³⁾	1.3	2.5	3.0	1.7	1.2	- 0.4

⁽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.

(1 000 million EUR)

1994	1995	1996	1997	1998	1999	2000	2001	2002
196.5	211.0	211.9	215.3	223.6	233.6	246.0	259.4	272.6
1 763.8	1 880.2	1 878.2	1 866.5	1 921.9	1 982.4	2 032.9	2 096.8	2 170.1
84.4	89.9	98.0	107.0	108.5	117.1	121.5	129.0	138.9
425.1	446.9	480.5	494.7	523.6	563.1	606.3	647.1	684.8
1 139.3	1 188.1	1 224.6	1 241.1	1 297.6	1 350.2	1 404.8	1 465.1	1 531.0
46.1	50.8	57.5	70.6	77.1	87.7	103.1	117.2	132.1
863.4	839.0	971.1	1 030.0	1 068.8	1 107.8	1 165.7	1 228.5	1 292.9
13.0	14.0	14.3	15.4	16.4	18.1	20.5	22.5	24.5
296.3	317.3	324.5	332.7	351.6	373.9	401.6	434.0	460.4
168.1	179.8	182.4	181.8	188.7	197.1	205.9	213.9	221.6
76.2	82.7	88.5	93.9	99.6	107.0	114.0	121.9	128.4
84.4	98.9	100.5	108.1	115.3	121.4	132.0	139.3	146.1
5 059.2	5 294.7	5 519.7	5 634.6	5 867.7	6 124.1	6 412.3	6 723.2	7 040.1
128.0	137.8	144.2	149.2	155.9	165.4	176.1	183.7	192.9
174.2	183.6	206.3	210.8	213.7	226.5	246.6	240.2	251.5
873.3	861.5	929.0	1 163.4	1 259.0	1 352.6	1 533.2	1 569.2	1 656.3
6 319.1	6 567.5	6 897.2	7 265.0	7 604.8	7 985.7	8 489.6	8 845.3	9 279.8

(Annual percentage change)

1994	1995	1996	1997	1998	1999	2000	2001	2002
3.0	2.6	1.2	3.4	2.4	2.7	4.0	3.0	3.1
2.3	1.7	0.8	1.4	2.1	1.6	3.0	2.2	2.6
2.0	2.1	2.4	3.5	3.1	3.4	4.1	4.4	4.8
2.4	2.8	2.4	3.9	4.3	4.0	4.1	3.2	3.3
2.1	1.7	1.1	1.9	3.4	2.9	3.1	2.9	2.8
5.8	9.7	7.7	10.7	8.6	9.8	10.7	7.5	7.1
2.2	2.9	1.1	2.0	1.8	1.6	2.9	2.5	2.7
4.2	3.8	2.9	7.3	5.0	7.6	8.5	5.6	5.5
3.2	2.3	3.0	3.8	4.1	3.9	3.9	3.4	3.1
2.6	1.6	2.0	1.3	3.3	2.8	3.2	2.5	2.6
2.2	2.9	3.7	3.8	3.8	3.3	3.3	2.6	2.6
4.0	3.8	4.0	6.3	5.3	4.2	5.7	4.0	3.6
2.4	2.2	1.4	2.3	2.9	2.5	3.4	2.8	2.9
5.5	2.8	2.5	3.0	2.8	2.1	2.9	2.1	2.4
4.1	3.7	1.1	2.1	3.6	4.1	3.6	2.7	3.0
4.4	2.8	2.6	3.5	2.6	2.3	3.0	2.7	3.0
2.8	2.3	1.6	2.5	2.8	2.5	3.3	2.8	2.9

Table A.5.3.

Trend GDP at constant market prices

(annual percentage change)

	1980	1985	1990	1991	1992	1993
B	2.1	2.0	2.2	2.1	2.1	2.1
D ⁽¹⁾	1.9	2.1	2.6	2.4	2.5	2.3
EL	1.8	0.8	1.2	1.4	1.5	1.7
E	1.8	2.4	2.9	2.8	2.7	2.7
F	2.4	2.2	2.1	2.0	1.9	1.8
IRL	3.6	3.1	4.5	4.9	5.4	5.9
I	2.8	2.4	2.0	1.8	1.7	1.7
L	2.2	4.3	5.8	5.8	5.8	5.8
NL	1.7	2.0	2.7	2.7	2.8	2.8
A	2.3	2.2	2.6	2.6	2.5	2.5
P	3.0	2.9	3.4	3.3	3.1	3.0
FIN	3.2	2.7	1.4	1.2	1.3	1.6
Euro area ⁽²⁾	2.2	2.2	2.4	2.3	2.3	2.2
DK	1.5	1.7	1.6	1.6	1.8	1.9
S	1.7	1.8	1.3	1.2	1.3	1.4
UK	1.7	2.5	2.3	2.2	2.2	2.3
EU-15 ⁽³⁾	2.1	2.2	2.3	2.2	2.2	2.2

Table A.5.4.

Gap between actual and trend GDP at constant market prices

(% of trend GDP)

	1980	1985	1990	1991	1992	1993
B	2.6	-1.9	2.6	2.4	1.9	-1.7
D ⁽¹⁾	2.1	-1.8	2.5	4.4	4.2	0.7
EL	3.7	-0.5	0.6	2.3	1.5	-1.8
E	-0.6	-3.6	4.3	4.0	2.2	-1.5
F	0.4	-2.1	3.2	2.2	1.8	-1.0
IRL	2.8	-0.1	3.3	0.4	-1.6	-4.5
I	2.7	-1.2	2.2	1.7	0.8	-1.8
L	0.2	-3.6	1.5	1.8	0.5	3.3
NL	1.5	-0.9	2.3	1.9	1.1	-0.9
A	1.7	-1.8	1.9	2.6	2.4	0.4
P	3.4	-5.8	4.3	3.4	2.8	-1.3
FIN	0.5	0.3	7.4	-0.5	-5.1	-7.6
Euro area ⁽²⁾	1.5	-1.9	2.9	3.0	2.3	-0.7
DK	-0.2	1.3	-0.3	-0.8	-2.0	-3.8
S	0.1	-0.0	3.7	1.3	-1.4	-4.9
UK	-0.9	-1.2	2.8	-0.9	-2.9	-2.9
EU-15 ⁽³⁾	1.2	-1.6	2.8	2.3	1.4	-1.2

⁽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.

(annual percentage change)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.1	2.2	2.3	2.5	2.6	2.7	2.8	2.9	2.9
2.2	2.1	2.0	1.9	1.9	2.0	2.0	2.0	2.1
1.9	2.2	2.5	2.7	3.0	3.2	3.4	3.6	3.7
2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.4	3.4
1.9	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.7
6.4	7.0	7.5	7.9	8.1	8.3	8.3	8.3	8.2
1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.3
5.7	5.7	5.7	5.8	5.9	5.9	6.0	6.0	5.9
2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.4	3.4
2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7
3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.8
2.0	2.5	2.9	3.4	3.7	4.0	4.1	4.2	4.3
2.2	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.6
2.1	2.2	2.4	2.4	2.5	2.5	2.5	2.5	2.5
1.6	1.8	2.1	2.3	2.6	2.7	2.9	3.0	3.1
2.4	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7
2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.7

(% of trend GDP)

1994	1995	1996	1997	1998	1999	2000	2001	2002
-0.9	-0.6	-1.7	-0.8	-1.0	-0.9	0.3	0.4	0.7
0.9	0.6	-0.6	-1.2	-1.1	-1.5	-0.5	-0.4	0.1
-1.7	-1.7	-1.8	-1.1	-1.0	-0.9	-0.2	0.6	1.8
-1.9	-1.9	-2.4	-1.6	-0.5	0.2	0.9	0.7	0.5
-0.8	-1.0	-1.9	-2.1	-1.0	-0.5	0.1	0.3	0.5
-5.1	-2.7	-2.5	0.1	0.5	2.0	4.2	3.4	2.3
-1.3	-0.1	-0.8	-0.6	-0.8	-1.2	-0.4	-0.1	0.4
1.8	-0.1	-2.8	-1.4	-2.2	-0.7	1.7	1.4	1.0
-0.6	-1.3	-1.4	-0.8	-0.1	0.4	0.9	1.0	0.7
0.6	-0.2	-0.5	-1.6	-0.8	-0.5	0.1	-0.0	-0.2
-2.0	-2.1	-1.4	-0.6	0.2	0.6	1.0	0.7	0.4
-5.8	-4.6	-3.6	-0.8	0.7	0.9	2.4	2.2	1.6
-0.5	-0.5	-1.3	-1.3	-0.8	-0.8	0.0	0.2	0.4
-0.6	-0.1	0.0	0.5	0.8	0.4	0.8	0.4	0.3
-2.5	-0.8	-1.7	-2.0	-1.0	0.4	1.0	0.8	0.7
-0.9	-0.6	-0.6	0.3	0.3	-0.0	0.3	0.3	0.6
-0.6	-0.5	-1.2	-1.0	-0.6	-0.6	0.1	0.2	0.4

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