Part IV

The quality of public finances:

What role within the EU framework for economic policy coordination?
Summary

Besides recognising that achieving and maintaining sound budgetary positions is essential for its success, the Lisbon strategy has highlighted the importance of improving the quality of public finances. This part of the report endeavours to clarify the role of the quality of public finances within the EU framework of economic policy coordination and investigates possibilities for improving the quality of public finances in practice.

The analysis proposes a broad definition of the quality of public finances. According to this definition quality concerns the allocation of resources and the most effective and efficient use of those resources in relation to identified strategic priorities. Regarding the priorities, the EU Lisbon strategy includes sustainable growth, full employment, social cohesion and competitiveness. A full discussion of all these aims would go beyond the scope of this report. Therefore, the first part of the chapter focuses on the link between fiscal policy and long-term growth, while recognising the partial nature of such an analysis. It begins with a review of the recent literature on the link between the composition of public expenditure and revenue and long-term growth. The findings of existing studies confirm the importance of taking into account both the costs (i.e. higher taxation) and benefits (i.e. reaching policy objectives) of public spending to undertake a meaningful analysis of such a link. The major difficulties that have been encountered in existing empirical studies concern the question of which expenditures should be considered as ‘productive’ (i.e. growth-enhancing) and which are instead to be classified as ‘unproductive’. Although there is a degree of agreement that a few categories of public expenditure can quite safely be included among ‘productive’ public expenditures because they are directly aimed at productivity improvements (e.g. R & D, education and infrastructure investment) there is no consensus among researchers concerning the impact of most expenditure items on long-term growth. This lack of consensus is reflected by the fact that available classifications of ‘productive’ expenditure in the EU range between 5 and 44 % of total public expenditure, depending on which expenditure categories are seen as ‘productive’. Macroeconomic data on the composition of public expenditure in fact cannot account for the relevant heterogeneity of expenditure items within a given category concerning their impact on productivity growth. In view of these difficulties, the report also investigates the microeconomic approach to identifying productive expenditure, which is to analyse individual projects on the basis of cost-benefit analysis. On this aspect, the analysis concludes that cost-benefit analysis is theoretically sound, widely used in practice and that the scope for learning from international practices is large given that several countries have undertaken projects to refine the methodology for applying cost-benefit analysis at national level.

A macroeconomic approach has also been adopted to investigate patterns and determinants of the reconstitution of public expenditure across EU countries. It focuses on two questions: (i) how did the composition of public expenditure change over time and (ii) what may have been the driving factors of changes in the composition of public expenditure? The outcome for the Member States for which data were available shows that, over the period of 1991–2002, social protection and healthcare expenditure increased their share in total expenditure. This suggests that the main drivers of expenditure composition over the medium/long-term are the underlying upward pressures such as those related to ageing and that the discussion on reallocating funds in line with priorities cannot abstract from such ongoing tendencies.

A microeconomic and institutional perspective is adopted to investigate the second part of the definition of quality, i.e. the effective and efficient use of resources towards identified priorities. It shows that several Member States have introduced reforms to the budgetary process that aim at achieving society’s priorities in the most efficient and effective way by linking public expenditure to policy outcomes (performance-budget-
ing). In this respect, the empirical literature arrives at a balanced judgement as to what can be achieved through such reforms, especially given difficulties in identifying appropriate outcome targets, while still concluding that sizeable efficiency gains may be possible through such reforms.

The next sections of the part then continue the institutional analysis by showing how strategies for better controlling public expenditure, reallocating funds to their most ‘productive’ uses and lasting fiscal consolidation on the expenditure side can contribute to a higher growth potential. Firstly, effective expenditure control is a precondition for performance-budgeting. Secondly, effective medium-term expenditure frameworks can also facilitate the political decision-making process of reallocation funds between broad expenditure categories. Thirdly, the analysis shows that countries with stronger institutional frameworks for expenditure control generally showed expenditure-based fiscal consolidation, while many other countries relied on raising revenues in times of fiscal consolidation. The implementation of such strategies of expenditure-based fiscal consolidation depends not only on the introduction of the appropriate budgetary institutions, however, but also requires the political will to do so. In this respect, the data show that many of the countries that had established a track record of expenditure control — while at the same time strengthening budgetary institutions that aim at using existing funds better — have almost immediately used the increased room for manoeuvre and slackened the reins in recent years.

Finally, this part of the report stresses that issues related to the composition of the budget are a national competency. In addition, the EU has an important role to play in encouraging public finances that are supportive of the objectives of the Union, in particular those of the Lisbon strategy. Overall, the analysis implies that the allocation of resources and the monitoring of action undertaken to pursue identified priorities should have a greater role in the analysis and conduct of fiscal policy. To this end the broad economic policy guidelines (BEPGs) should contribute more effectively, as well as other EU processes, such as the European employment strategy and the open method of coordination of social protection, to improve the quality of public finances.

Progress should also include, firstly, the exchange of information on how strategic priorities have been fixed with respect to national budgets and what the experiences with implementing them have been. Secondly, further improvements in data availability are needed — in particular regarding the functional classification of government expenditure — since this is a necessary condition for an appropriate analysis of the contribution of public finances to agreed priorities. Thirdly, a proper design and implementation of medium-term expenditure frameworks and progress in cost-benefit analysis and performance-budgeting would help to improve both the control and allocation of existing funds.
1. Introduction

The Lisbon strategy has highlighted the strategic importance of improving both the sustainability of public finances and their quality. However, while the EU fiscal framework lays down the principles and procedures for achieving fiscal sustainability, the principles for improving the quality of public finances have not yet been integrated in a systematic way within the framework of EU policy coordination or within the EU fiscal framework. A consensus seems to have developed that it is important to redirect public expenditure towards ‘productive’ items and to ensure that tax structures strengthen the growth potential (1), but there is no sufficient understanding yet on the best way of making such an approach operational. The central theme in this part is to discuss the concept of quality in the EU framework of economic policy coordination, with the purpose of facilitating a policy discussion on how the quality of public finances could be improved in practice. Naturally, the question of what could be done at the level of the Member States and what could be done at the level of the EU is an important issue and it will therefore be addressed in Section 2, taking subsidiarity as the guiding principle.

Section 2 starts with conceptual issues. It proposes a broad definition of the concept of quality and shows how quality fits with the existing objectives of the EU framework for economic policy coordination. Sections 3 and 4 then view the topic of quality from different perspectives in order to identify possible policy instruments. As a starting point of the analysis, Section 3 takes a macroeconomic perspective that concentrates on the potential contribution of budgetary aggregates and items (i.e. the composition of the budget) to long-term growth. It then compares the composition of public expenditure across countries and over time and presents an empirical analysis of the factors that may have influenced changes in individual expenditure categories. It ends with a short review of the possible interaction between the size of the public sector and the long-term growth rate. Next, Section 4 takes a microeconomic perspective that focuses on the tools and institutions that can be helpful for enhancing the quality of public finances in practice. It concentrates on cost-benefit analysis as the principal tool for identifying ‘productive’ investment (which includes all social costs and benefits from government intervention and thereby also addresses issues related to ensuring a sustainable economic development), and on institutional arrangements for linking public expenditure to policy outcomes in order to improve the efficiency and effectiveness of public expenditure. Furthermore, this section also shows how the relevant policy objective from a microeconomic perspective (an efficient allocation of resources) and a central policy objective in the macroeconomic approach (i.e. long-term growth) are related. Section 5 then draws the whole analysis together by focusing on the consistency of fiscal sustainability and quality. It shows how strategies for better controlling public expenditure, fiscal consolidation on the expenditure side and reallocating funds to their best uses can contribute to long-term growth. Finally, it should be noted that the approach throughout the whole of this part is to briefly discuss theory and to concentrate more on empirical comparisons across EU countries (2) where data were available.

---


2. The new Member States have always been included in the analysis where data were available.


2. The concept of quality

2.1. The three dimensions of budgeting

The overall objectives of the broad economic policy guidelines (BEPGs) as the overarching instrument for economic policy-making in the EU are defined in the Treaty, Article 98: ‘Member States shall conduct their economic policies with a view to contributing to the achievement of the objectives of the Community, as defined in Article 2, and in the context of the broad economic guidelines referred to in Article 99(2). The Member States and the Community shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources …’. Article 2 then provides a list of objectives that includes ‘to promote economic and social progress and a high level of employment and to achieve balanced and sustainable development …’.

Within this general framework, the coordination of fiscal policies at the level of the EU is geared towards ensuring sound public finances. This includes aggregate fiscal discipline as well as the principle of automatic stabilisation over the economic cycle. However, these are not the only functions of national budgets. Apart from these macroeconomic functions, national budgets also perform the function of the allocation of public resources. More specifically, it is generally accepted that it is possible to examine budgetary policies ‘in three dimensions’ (Atkinson and van den Noord, 2001), to ‘identify budgetary outcomes at three levels’ (World Bank, 1998) or to distinguish ‘three objectives of budgeting’ (Schick, 2002). These three dimensions, levels or objectives of budgeting are:

- aggregate fiscal discipline;

- allocation of resources in accordance with strategic priorities;

- efficient and effective use of resources in the implementation of strategic priorities.

An alternative way of rewriting the three dimensions of budgeting — which aligns them better with the present focus of the EU fiscal framework on macroeconomic aspects — has been proposed by Diamond (2003):

- to ensure fiscal control and fiscal discipline;

- to provide a degree of stabilisation of the economy;

- to promote allocative and technical efficiency in service delivery through procedures that provide incentives for greater productivity.

The first requirement aims at making sure that the total amount of money a government spends will be closely aligned to what is affordable in the medium and long term. This remains particularly important in the euro zone given the need for consistency between national fiscal policies and the single monetary policy as well as in the European Union as a whole given the need to cater for the costs of ageing. The second requirement, to provide for a degree of stabilisation of the economy, also remains particularly important given that the single monetary policy can only be geared towards the euro zone as a whole so that national fiscal policies need to be able to react flexibly to asymmetric economic developments. Therefore, with respect to fiscal policy, analysis at the level of the EU has concentrated on the role and effectiveness of the automatic stabilisers (e.g. European Commission, 2002a) while stressing the importance of allowing the automatic stabilisers to operate symmetrically over the cycle. In sum, at the level of the EU, in light of the creation of the single currency the most urgent task has been to achieve enhanced coordination of the macroeconomic function of national budgets. It has also been pointed out in the literature (e.g. Diamond, 2003) that once budget systems are able to fulfil the requirements of aggregate discipline and a degree of (automatic) stabilisation, it will be possible to devote more attention to allocative and technical efficiency. Such a development is much in line with the way attention in the EU fiscal
framework widened along mutually reinforcing dimensions of sustainability, automatic stabilisation and quality. In fact, by taking the three dimensions of budgeting of fiscal sustainability, automatic stabilisation and quality as a starting point, it becomes possible to propose a definition of the concept of quality, where the quality of public finances concerns the allocation of resources and the efficient and effective use of those resources in relation to identified strategic priorities (1). The advantage of using this definition would be that it focuses on the link between public expenditure and policy objectives, while it does not specify the policy objectives ex ante. Put differently, it is the role of the political process to prioritise the objectives, and the role of budgeting to achieve these objectives in the best way. In this respect, the Lisbon process has specified priorities such as sustainable growth, full employment, social cohesion and competitiveness.

A relevant question is whether there are trade-offs between the three dimensions of budgeting or whether they are mutually consistent. In this respect, previous work of the European Commission (e.g. European Commission, 2002a) has highlighted the consistency of fiscal sustainability and automatic stabilisation: a budgetary position of ‘close to balance or in surplus’ creates room for manoeuvre for the automatic stabilisers to operate symmetrically over the economic cycle. In addition, this part will illustrate the consistency of sustainability and quality. Firstly, lowering the debt level — especially in high-debt countries — decreases the flow of interest payments and creates room for increasing ‘productive’ expenditure (Section 3.4). Secondly, a fixed budget constraint fosters the use and development of budgetary techniques and institutions that aim at increasing the effectiveness and the efficiency of the use of public resources (Sections 4.2 and 4.3). Finally, quality can also be seen as consistent with sustainability given that a higher potential growth rate will facilitate maintaining a sustainable fiscal position. Thus, this part argues that the three dimensions of sustainability, automatic stabilisation and quality are mutually reinforcing if they are applied properly.

2.2. Quality: What role within the EU framework for economic policy coordination?

This section discusses how the broad economic policy guidelines (BEPGs) could contribute to improve the quality of public finances. Over the last few years, the role of the BEPGs has evolved towards the central policy document at the level of the EU for identifying guidelines on how to attain strategic priorities, while at the same time attention has also shifted towards monitoring the implementation of the recommendations through implementation reports. In addition, it seems appropriate to address the topic of quality in the BEPGs given the objective of the BEPGs as specified in the EU Treaty of ‘an efficient allocation of resources’. Furthermore, it is also consistent with the fact that the allocation of resources through the budget, including the composition of public expenditure and revenues, is at the heart of the national political decision-making process. The BEPGs fully respect national competencies in this respect, as is reflected in the relevant Treaty provisions (‘Member States shall conduct their economic policies in the context of the BEPGs’). At the same time, this Treaty provision spells out the obligation for Member States to conduct their economic policies within the context of the priorities as set out in the BEPGs, so that policy discussions at the level of the EU could be useful with respect to the exchange of information; for learning from international experiences; for identifying best practices and for peer pressure to improve policy outcomes in line with strategic priorities. In addition, a contribution to the quality of public finances can be given by the Union’s initiative for growth, through which the European Council has established a roadmap for increased investment in physical and human capital to complement structural reforms. Furthermore, other policy processes such as the European employment strategy and the open method of coordination on social protection can also contribute to relevant aspects of the quality of public finances. However, in what follows, only the role of the BEPGs will be discussed.

In order to clarify the role of the quality of public finances in the BEPGs further, the remainder of this part will examine to what extent a macroeconomic perspective on quality may help in identifying guidelines with respect to the growth-enhancing role of public finances. Thereafter, a microeconomic perspective on quality would serve to investigate possibilities for a more effective and efficient use of resources for reaching strategic priorities, whether defined at national or at EU level.
3. A macroeconomic perspective on quality

3.1. Introduction

A full discussion on quality of public finances would consider all possible policy objectives (sustainable growth, social cohesion, etc.) and investigate what fiscal policy can do to achieve them in the most effective and efficient way and whether or not there would be trade-offs between different policy objectives. However, such an extended analysis would go beyond the scope of this part. Instead, as a starting point for further analysis of the contribution of fiscal policy to the objectives of the Lisbon strategy, it concentrates on the link between fiscal policy and long-term growth only. Hence, any findings following from this partial analysis should be seen as preliminary.

The focus on the link between fiscal policy and long-term growth does not imply that fiscal policy is the only variable that may influence growth. Levine and Renelt (1992) have identified more than 50 variables that are significantly correlated to growth in at least some studies. When conducting a systematic sensitivity analysis of a number of these partial growth correlations, they find that most of the correlations are fragile, as it is nearly always possible to find alternative explanatory variables that cause the partial correlation as identified previously to disappear. This finding also applies to a wide array of fiscal variables, including capital formation, education and defence. In response, Sala-i-Martin (1997) uses a different concept of ‘robustness’ and finds that 22 out of 59 variables are strongly related to growth. However, still no measure of government spending (including investment) appears to affect growth in a significant way. Focusing more directly on fiscal policy, Easterly and Rebelo (1993) make a similar point: the link between most fiscal variables and growth turns out to be statistically fragile since it depends heavily on what other control variables are included in the regression (1). Hence, it should be admitted from the start that the uncertainty surrounding the partial correlations between fiscal policy variables and growth remains large and that our understanding of which variables cause economic growth is very limited. This is particularly the case in the fiscal area where the causality often might run from growth to fiscal variables. In sum, from a policy point of view, a broad perspective is needed to identify policies that could raise low structural growth rates within the EU. Such an approach is taken in the Sapir report (2003), which identifies a six-point agenda for improving the growth potential of the EU economy (2). The perspective of this section is narrower and concentrates on the link between fiscal policy and long-term growth only.

3.2. Fiscal policy and long-term growth

Virtually all studies on the link between fiscal policy and long-term growth start from Solow’s neoclassical growth model that implies that in the long run steady-state growth rate is constant and driven by exogenous factors of population growth and technological change. Fiscal policy can only affect the level of output in the steady state and the adjustment path through its impact on savings. For example, lower taxes on capital can lead to increased savings and to a higher growth rate until a new steady state has been reached.

The transitional dynamics cannot be ignored, however, given that it may take a long time for the economy to adjust to a new steady state (3). One of the criticisms of the neoclassical growth model points out that it is difficult to find reasons in these models why the government

(1) Nevertheless, the share of public investment in transport and communication and the government’s budget surplus are consistently correlated with growth in their cross-section of countries. Furthermore, government revenue/GDP rises with per capita income (Wagner’s law) in both the cross-section and the historical data sets.

(2) The six-point agenda calls on the EU and its members: (1) to make the single market more dynamic; (2) to boost investment in knowledge; (3) to improve the macroeconomic policy framework for EMU; (4) to redesign policies for convergence and restructuring; (5) to achieve more effectiveness in decision-taking and regulation; and (6) to refocus the EU budget.

(3) See Barro and Sala-i-Martin (1995): ‘Convergence speeds that are consistent with the empirical evidence imply that the time required for substantial convergence is typically in the order of several generations’.
Part IV
The quality of public finances

The quality of public finances therefore allow the possibility of government intervention for correcting market failures when there are externalities. This leads to the conclusion that investment in human and physical capital may affect the steady-state growth rate. This point can be illustrated on the basis of the following production function (see Gerson, 1998, for an extensive description):  

\[ Y_t = f(A_t, K_t, B_t, L_t) \]

Where \( t \) is time, \( Y \) is output, \( K \) and \( L \) are capital and labour and \( A_t \) and \( B_t \) represent the quality of the stock of labour and capital. This equation states that total output at any moment in time depends on the volume and productivity of capital and labour.

In the neoclassical model, the production function inhibits decreasing returns to both capital and labour and \( A_t \) and \( B_t \) are exogenous. Consequently, the economy will tend to a constant capital/labour ratio, where the return from additional investment equals its cost. When, by contrast, endogenously determined increases in \( A_t \) and \( B_t \) ensure that the marginal product of physical capital does not tend to zero when the amount of capital per worker increases, policies that affect the incentives to invest in either physical or human capital can have permanent effects on the long-run growth rate.

The basic message for fiscal policy is summarised in Table IV.1 where ‘productive’ expenditure is defined as expenditure with a positive effect on the marginal productivity of capital and/or labour (\( A_t \) and \( B_t \) in equation (1)), while distortionary taxes are taxes that distort the decision to invest in capital or labour and — hence — might have negative growth effects.

The empirical literature on ‘productive’ government expenditure has been summarised in European Commission (2002a). In sum, there seems to be a tendency towards the conclusion that public infrastructure investment (\(^2\)), education and R & D investment are positively correlated to long-term growth, even if the magnitude of the impact is questionable and the effects may not be linear. However, it should be borne in mind that the positive effects of fiscal policy on long-term growth ultimately depend on the extent to which it is able to address externalities and not on the specific category of expenditure (\(^3\)). For example, spending on social security will also be ‘productive’ if it delivers insurance that the market is not able to deliver due to market failures and informational problems.

On the whole, the empirical evidence in support of endogenous growth through fiscal policy remains mixed. Jones (1995) presents evidence against the endogenous growth hypothesis on the basis of time-series data for the United States that indicate a lack of persistent change in growth rates. By contrast, several recent empirical studies have also attempted to estimate the combined impact

---

Table IV.1
Fiscal policy aggregates and long-term economic growth

<table>
<thead>
<tr>
<th>Budgetary aggregates</th>
<th>Classification</th>
<th>Theory: Effect on growth</th>
<th>Possible examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>Productive</td>
<td>Positive effect on marginal productivity of capital and labour</td>
<td>Investment in transport and communication, education, R &amp; D, healthcare</td>
</tr>
<tr>
<td></td>
<td>Unproductive</td>
<td>Effect on marginal productivity zero or negative</td>
<td>Expenditure on economic services, recreation</td>
</tr>
<tr>
<td>Taxation</td>
<td>Distortionary</td>
<td>Distorting supply or demand of capital and labour</td>
<td>Taxation on income and profit</td>
</tr>
<tr>
<td></td>
<td>Non-distortionary</td>
<td>No distortion of supply or demand of capital and labour</td>
<td>Proportional tax on consumption</td>
</tr>
</tbody>
</table>


---

\(^1\) The literature on endogenous-growth models starts with Romer (1986).

\(^2\) In this respect, the European initiative for growth targets public and private investment in networks and knowledge. See also the communication from the Commission on a European initiative for growth (2003b).

\(^3\) Section 4.2 on cost-benefit analysis will develop this point further.
of ‘productive’ expenditure and distortional taxation
(as well as several ‘control’ variables in some cases) on
growth (Kocherlakota and Yi, 1997; Kneller et al., 1999
and 2001; Romero de Avila and Strauch, 2003). The
basic argument is that both sides of the budget (revenues
and expenditures) should be taken into account in esti-
mating the effects of fiscal policy on long-run growth.
Indeed, these studies typically find that results are not
statistically significant when only the revenue or
expenditure side is included in the growth regression
given that positive effects of ‘productive’ spending and
negative effects of distortionary taxation could be offset-
ting. Results become statistically significant, however,
and coefficients have the theoretically predicted sign
when both the expenditure and revenue side are included
in the regression. These results support the notion that
the composition of expenditure and revenues matter for
long-term growth and that policies to improve the com-
position of both expenditure and revenue could have
positive effects on long-term growth. As noted, from a
policy perspective one should also know the degree of
uncertainty surrounding different estimates. This, of
course, applies to the robustness of the coefficients to
alternative specifications and to the confidence intervals
around the estimated coefficients (1), but also to a key
question: which part of total expenditure could be con-
sidered to be ‘productive’ and which part of total taxa-
tion could be considered to be distortionary?

3.3. From theory to practice: Comparing
composite indicators

From a policy perspective, it is highly relevant to know
which expenditure categories might be ‘productive’ or
‘unproductive’ and which classes of taxes may be more
distortionary than others. Therefore, Table IV.2 com-
pares different measures of ‘productive’ public expendi-
ture and distortionary taxation as used in the empirical
literature. Obviously, choices for a particular measure
are often driven by considerations of data availability.
For example, it is widely recognised that public invest-
ment (‘gross fixed capital formation’) is not a particular
good measure of ‘productive’ expenditure (see, e.g.
European Commission, 2003, Part III, where one of the
arguments is that a narrow focus on physical capital
ignores the importance of human capital). However, the
advantage of using this measure is that long time-series
are available which facilitates the use of advanced
econometric techniques. Alternatively, R & D and
investment in transport and communication would be
obvious candidates of any measure of ‘productive’
expenditure, but for these categories data availability
remains a serious problem. The main message from
Table IV.2 is that differences in macroeconomic esti-
mates of ‘productive’ expenditure as a share of total
expenditure can be enormous. At one side of the spec-
trum is the study by Kneller, Bleaney and Gemmell
(1999, 2001). In their main analysis, ‘productive’
expenditure consists of general public services, defence,
education, health, housing, transport and communica-
tion. On the basis of data for 2001 this would imply that
44 % of total expenditure would be ‘productive’ for both
the euro zone and EU-15. At the other end of the extreme
is the study by Romero de Avila and Strauch (2003) that
uses public investment as a proxy for ‘productive’ public
expenditure. This reduces the amount of ‘productive’
public expenditure to only 5 % of total expenditure for
both the euro zone and EU-15. A middle position is
taken by the recent work of Thöne (2003) that identifies
‘productive’ expenditure in Germany and calculates that
in 2002, the federal budget on ‘Public expenditure for
growth and sustainable development’ (PEGS) amounted
to 21 % of federal expenditure. But also in this case,
results are highly sensitive to change in the classification
since this study draws attention to the fact that the exclu-
sion of the category of ‘children’s allowance’ (as part of
the category of ‘family policy’ in Table IV.2) reduces the
PEGS from 21 to 10 % of total federal expenditure in
2002. Similar arguments also apply to the revenue side
of the budget, where results for distortionary taxes can
change from about 30 to 60 % of total revenues depend-
ing on the question of whether or not social security con-
tributions are classified as distortionary.

These large differences in empirical estimates point out
a fundamental problem that empirical macroeconomic
studies face: data that correspond to the theoretical clas-
sification into ‘productive’ and ‘unproductive’ expendi-
ture or distortionary and non-distortionary taxation are
not available at the macroeconomic level. Instead, data
available in national accounts have to be used, either on
the basis of the economic or on the basis of the functional
classification, while assuming that all expenditure in a
particular category is either ‘productive’ or ‘unproduc-
tive’. For example, there are good reasons to believe that
better and more effective and efficient education will improve human capital and therefore will contribute to raising the growth potential. But this does not mean that all expenditure labelled as education is always good for growth (for example, a school with no teachers would not contribute much to improving the growth potential). Similarly, on the revenue side, the question of whether or not to label social security contributions as distortionary would depend on the specifics of its design such as the question of whether there are close links between benefits and entitlements. Thus, the macroeconomic approach may be useful to identify budgetary categories that are on average more ‘productive’ or distortionary than others, but in the end all government intervention has to be investigated individually with respect to its design and the question of whether or not its benefits outweighs its costs. Such an approach will be followed as part of the microeconomic perspective in Section 4.2 on cost-benefit analysis.

During the last few years, attempts have also been made to arrive at composite indicators, in order to relate the

### Table IV.2
Comparing classifications of ‘productive’ expenditure items and distortionary taxation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure items classified as ‘productive’</td>
<td>— subsidies to R &amp; D</td>
<td>— general public services</td>
<td>— general public services</td>
<td>— public investment</td>
<td>— schools and nursery schools</td>
</tr>
<tr>
<td></td>
<td>— education</td>
<td>— defence</td>
<td>— defence</td>
<td>— colleges, universities and other education</td>
<td>— transport and communication</td>
</tr>
<tr>
<td></td>
<td>— transport and communication</td>
<td>— housing</td>
<td>— housing</td>
<td>— science and R &amp; D outside universities</td>
<td>— education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— transport and communication</td>
<td>— health</td>
<td>— family policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>— active labour market policies</td>
<td>— education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>— public health service</td>
<td>— transport and communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>— environmental and nature protection</td>
<td>— general services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>— promotion of renewable energies</td>
<td>— public health service</td>
</tr>
<tr>
<td><strong>Total ( % of total expenditure)</strong></td>
<td>Typically less than 20 % in OECD countries in 1985</td>
<td>44 % for both the euro zone and EU-15 in 2001 (*)</td>
<td>20 % for both the euro zone and EU-15 in 2001 (*)</td>
<td>5 % for both the euro zone and EU-15 in 2001</td>
<td>21 % of German federal expenditure in 2002</td>
</tr>
<tr>
<td>Taxation items classified as distortionary</td>
<td>Not addressed</td>
<td>— taxation on income and profit</td>
<td>— social security contributions</td>
<td>— direct taxation on property and income</td>
<td>Not addressed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>— taxation on payroll and manpower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>— taxation on property</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total ( % of total revenues)</strong></td>
<td>64 % for the euro zone and 63 % for EU-15 in 2001 (*)</td>
<td>— taxation on income</td>
<td>— social security contributions</td>
<td>— direct taxation on property and income</td>
<td>— taxation on property</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>— taxation on property</td>
</tr>
</tbody>
</table>

(*) The total for ‘productive’ expenditure as calculated is an approximation given that transport and communication expenditure are left out of the calculation since no data were available for these subcategories of economic affairs.

(#) Approximation on the basis of ESA 95 categories of D4 (property income), D5 (current taxes on income and wealth) and D61 (social contributions). The figure for total distortionary taxation as calculated on the basis of Romero de Avila and Strauch (2003) include D4 and D5.

NB: The totals for Kneller, Bleaney and Gemmell (1999, 2001) and Romero de Avila and Strauch (2003) are based on own calculations on the basis of the Ameco and NewCronos databases.
composition of expenditure of a particular country to the achievement of strategic goals of government intervention. The use of such composite indicators could be especially relevant from the perspective of the EU if it allows meaningful comparison across countries. Therefore, it may be useful to summarise the methodology and the outcomes of different indicators. It should be noted from the start, however, that the indicators discussed below (i.e. European Commission, 2002a, and Afonso et al., 2003) aim at measuring different concepts so that the outcomes should not be compared.

Table IV.3 summarises the methodology as used for the two indicators. The indicator in European Commission (2002a) aims at measuring the contribution of public expenditure in different countries to long-term growth. On the basis of a literature review of the link between expenditure items and long-term growth, it derives an assumed impact of different expenditure categories (inputs) on long-term growth (outcome). The impact does not need to be linear as it can be negative (as with interest payments); positive provided that expenditure is kept within certain limits (e.g. social expenditure, indicated by +/– in Table IV.3) or positive for a larger range of values (for example R & D). Finally, the indicator is calculated as an index in which all expenditure items receive the same weight. A noticeable aspect is that the ranking as produced by this indicator is positively correlated with the size of the public sector (a correlation coefficient of 0.49). This results from the methodology employed since expenditure items with an assumed positive correlation to growth outweigh the items with an assumed negative correlation to growth.

The indicator as used in Afonso et al. (2003) aims at measuring the efficiency of the public sector in reaching objectives of government intervention. These include performance indicators with respect to the traditional ‘Musgravian’ functions of government (i.e. allocative efficiency, stabilisation and the distribution of income) and public performance indicators in the field of public administration (e.g. reducing corruption), education (e.g. secondary school enrolment), health (e.g. life expectancy) and public infrastructure. The final efficiency indicator is calculated as the ratio of performance indicators (outcomes) by a measure of public expenditure related to that indicator (input), based on the assumption that this amount of money is used to achieve that outcome. Finally, in calculating public sector efficiency for each country, all performance indicators receive the same weight. The ranking as produced by this indicator is negatively correlated to the size of the public sector (correlation coefficient of –0.69), as a result of the methodology in which performance indicators are divided by a measure of ‘relevant’ expenditure for each indicator, so that higher expenditure lowers efficiency.

To summarise, it seems clear that the different indicators serve different purposes, use a different methodology and thus also produce different rankings. The main advantage of the use of such indicators would be that they allow an aggregate comparison across countries and thus can give generalised policy messages. The main weakness of aggregate indicators is that strong assumptions have to be made in order to calculate such a synthetic indicator. In this respect, both studies as referred to in this section indicate that calculations are for illustrative purposes only, given that devising and calculating any indicator involves a number of arbitrary choices. In addition, the microeconomic approach as it will be discussed in Section 4 will stress the importance of individual project appraisal in order to guide decision-making in practice.

3.4. The composition of public expenditure

The conclusions of the previous sections on the impact of fiscal policy on long-term growth refer to the relevance of shifting expenditure towards ‘productive’ items and making taxation less distortionary. At the same time, the previous sections also highlighted that the available data at the macroeconomic level do not necessarily correspond entirely to the theoretical classification of ‘productive’ or distortionary. Therefore, the analysis of the composition of the budget in this section does not investigate whether the ‘productive’ part of expenditure has increased or decreased. Instead, it focuses on more preliminary questions: what are the differences in the composition change over time and what may have been driving factors of changes in the composition?

In this respect, previous studies (e.g. European Commission, 2002a, and Atkinson and van den Noord, 2001) have analysed changes in the composition on the basis of the national accounts classification according to transactions. However, the functional classification of government expenditure can also be useful for making inter-country comparisons of the extent to which governments are involved in economic and social functions and thus be particularly suitable to analyse issues related to quality. These data are available for all EU-15 countries for
three years only while no data are available for the new Member States (see Box IV.1). Therefore, improving the availability of data remains a key priority. In the meantime, this section already anticipates a full analysis on the basis of the functional classification by analysing developments over time on the basis of a subset of countries for which longer time-series were available.

3.4.1. Comparing the composition of public expenditure across countries

The main conclusions from the analysis of the trends in public expenditure in European Commission (2002a) are that a large part of the growth in public expenditure until the first half of the 1990s can be attributed to the rise in expenditure on social protection and that differences in expenditure on social protection also explain to a large extent the differences in size of the public sector between Member States, reflecting — at least partly — differences in preferences.

The data on the functional classification of public expenditure in EU countries in Table 4 show that social protection is by far the largest category of government spending (see also Revelin, 2003). This category mainly covers benefits for subcategories such as sickness and disability, old age, family and children, unemployment and other forms of social benefits (1). Differences between countries range from 7% of GDP in Ireland to 24% of GDP in Sweden and Denmark. The second largest category is that of general public services that includes expenses related to executive and legislative organs, financial and fiscal affairs, external affairs, foreign economic aid, general services, research and development, interest payments and other expenses related to debt. However, it excludes expenditure on items specifically related to one of the other functions such as R & D

---

Table IV.3
Comparing the methodology of composite indicators

<table>
<thead>
<tr>
<th>Expenditure items (inputs)</th>
<th>Outcomes</th>
<th>Calculation methodology</th>
<th>Ranking of EU countries resulting from indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of public expenditure, EC (2002)</td>
<td>Education (+)</td>
<td>Assumed effects of inputs on long-term economic growth on the basis of literature review</td>
<td>Index whereby all expenditure items receive same weight</td>
</tr>
<tr>
<td></td>
<td>R &amp; D (+)</td>
<td>(as indicated by + or – for every expenditure item)</td>
<td>FR</td>
</tr>
<tr>
<td></td>
<td>Gross fixed capital formation (+)</td>
<td></td>
<td>DE</td>
</tr>
<tr>
<td></td>
<td>Healthcare (+)</td>
<td></td>
<td>FI</td>
</tr>
<tr>
<td></td>
<td>Active labour market policies (+)</td>
<td></td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>Compensation of employees (+/-)</td>
<td></td>
<td>AT</td>
</tr>
<tr>
<td></td>
<td>Collective consumption (+/-)</td>
<td></td>
<td>NL</td>
</tr>
<tr>
<td></td>
<td>Old age and survivor (+/-)</td>
<td></td>
<td>ES</td>
</tr>
<tr>
<td></td>
<td>Unemployment benefits (+/-)</td>
<td></td>
<td>IE</td>
</tr>
<tr>
<td></td>
<td>Other social expenditures (+/-)</td>
<td></td>
<td>PT</td>
</tr>
<tr>
<td></td>
<td>Interest payments (-)</td>
<td></td>
<td>BE</td>
</tr>
</tbody>
</table>

Public sector efficiency, Afonso et al. (2003)

<table>
<thead>
<tr>
<th>Expenditure categories related to outcome indicators</th>
<th>‘Opportunity’ indicators representing</th>
<th>Index of performance indicators divided by ‘relevant’ expenditure for each indicator</th>
<th>Ranking of EU countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and services</td>
<td>Administration</td>
<td>UK, ES, EL</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social transfers</td>
<td>Public infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public investment</td>
<td>‘Musgraveian’ indicators representing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expenditure</td>
<td>Stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economic performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from European Commission (2002a) and Afonso et al. (2003).

(1) For a complete overview of the contents of the COFOG classification, see the link to COFOG on http://unstats.un.org/unsd/cr/registry.
expenditure (1). Spending on general public services is the highest in the high-debt countries Italy, Belgium and Greece. Spending on health and education generally amounts to around 5 to 6% of GDP each in most Member States, with highs of 8% GDP on health in France and 8.3% on education in Denmark. In most countries, the category of economic affairs adds up to 5 to 6% of GDP. It covers items such as support programmes and subsidies to mining, manufacturing, agriculture, energy and service industries. It also includes public spending on infrastructure such as transport and communications. Finally, the category of others generally amounts to around 6% of GDP in most Member States. This category covers defence; public order and safety; environment protection; housing and community amenities and recreation, culture and religion.

3.4.2. Changes in the composition of public expenditure over time

Graphs IV.1 and IV.2 show the development of the composition of the budget over time. Data on the functional classification are available since 1991 for eight countries (BE, DK, DE, EL, IT, LU, PT, UK). Therefore, the graphs show the aggregate developments for these countries only. Changes in the composition are shown as a percentage of GDP and as a percentage of total expenditure. Over the period as a whole, total expenditure rose to above 50% of GDP in 1995, then decreased in the run-up to EMU to 46% of GDP and was still at this level in 2002. Regarding the changes in the composition, the biggest increase was recorded in social protection (+1.7 percentage points (p.p.) of GDP and +6 p.p. in total expenditure), followed by healthcare (+0.5 p.p. of GDP and +1.9 p.p. in total expenditure). Expenditure on education remained stable at 4.8% of GDP and thus increased its share in total expenditure (+0.6 p.p.). The biggest decrease in expenditure was recorded for the category of general public services (−2.4 p.p. of GDP and −4.1 p.p. in total expenditure), followed by economic affairs (−1.3 p.p. of GDP and −2.4 p.p. in total expenditure). Overall, at the aggregate level, these data show that the composition of public expenditure has shifted mainly from general public services and economic affairs towards social protection and health over the period 1991–2002.

3.4.3. Explaining changes in the composition of public expenditure

From a policy perspective, an important question is what could have been the driving factors of changes in the composition as registered. In order to investigate this

Table IV.4

Government expenditure by function, 2001 (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>Social protection</th>
<th>General public services</th>
<th>Health</th>
<th>Education</th>
<th>Economic affairs</th>
<th>Others</th>
<th>Total expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>17.2</td>
<td>10.2</td>
<td>6.6</td>
<td>6.2</td>
<td>4.4</td>
<td>4.9</td>
<td>49.5</td>
</tr>
<tr>
<td>DK</td>
<td>24.0</td>
<td>8.6</td>
<td>5.4</td>
<td>8.3</td>
<td>3.8</td>
<td>5.2</td>
<td>55.3</td>
</tr>
<tr>
<td>DE</td>
<td>21.8</td>
<td>6.3</td>
<td>6.4</td>
<td>4.2</td>
<td>4.4</td>
<td>5.3</td>
<td>48.3</td>
</tr>
<tr>
<td>EL</td>
<td>19.4</td>
<td>10.9</td>
<td>3.7</td>
<td>3.1</td>
<td>5.1</td>
<td>5.6</td>
<td>47.8</td>
</tr>
<tr>
<td>ES</td>
<td>13.4</td>
<td>5.5</td>
<td>5.3</td>
<td>4.3</td>
<td>4.3</td>
<td>6.4</td>
<td>39.4</td>
</tr>
<tr>
<td>FR</td>
<td>20.4</td>
<td>6.4</td>
<td>7.9</td>
<td>6.0</td>
<td>5.2</td>
<td>6.5</td>
<td>52.5</td>
</tr>
<tr>
<td>IE</td>
<td>7.2</td>
<td>3.7</td>
<td>6.3</td>
<td>4.3</td>
<td>5.0</td>
<td>7.1</td>
<td>33.6</td>
</tr>
<tr>
<td>IT</td>
<td>17.8</td>
<td>9.6</td>
<td>6.4</td>
<td>5.0</td>
<td>4.0</td>
<td>5.7</td>
<td>48.5</td>
</tr>
<tr>
<td>LU</td>
<td>17.1</td>
<td>4.7</td>
<td>4.9</td>
<td>4.7</td>
<td>2.8</td>
<td>5.0</td>
<td>39.1</td>
</tr>
<tr>
<td>NL</td>
<td>17.5</td>
<td>8.2</td>
<td>4.1</td>
<td>4.8</td>
<td>5.6</td>
<td>6.5</td>
<td>46.6</td>
</tr>
<tr>
<td>AT</td>
<td>21.5</td>
<td>8.5</td>
<td>6.1</td>
<td>5.7</td>
<td>5.2</td>
<td>4.8</td>
<td>51.8</td>
</tr>
<tr>
<td>PT</td>
<td>13.6</td>
<td>6.8</td>
<td>6.8</td>
<td>7.0</td>
<td>5.5</td>
<td>6.6</td>
<td>46.2</td>
</tr>
<tr>
<td>FI</td>
<td>20.6</td>
<td>6.5</td>
<td>6.0</td>
<td>6.5</td>
<td>4.7</td>
<td>4.9</td>
<td>49.2</td>
</tr>
<tr>
<td>SE</td>
<td>23.9</td>
<td>8.5</td>
<td>6.6</td>
<td>7.7</td>
<td>4.4</td>
<td>6.1</td>
<td>57.2</td>
</tr>
<tr>
<td>UK</td>
<td>15.7</td>
<td>4.4</td>
<td>6.2</td>
<td>4.6</td>
<td>2.6</td>
<td>5.8</td>
<td>39.2</td>
</tr>
<tr>
<td>Euro zone</td>
<td>19.1</td>
<td>7.2</td>
<td>6.4</td>
<td>5.6</td>
<td>4.6</td>
<td>5.8</td>
<td>48.1</td>
</tr>
<tr>
<td>EU-15</td>
<td>18.7</td>
<td>6.8</td>
<td>6.4</td>
<td>5.1</td>
<td>4.2</td>
<td>5.8</td>
<td>46.9</td>
</tr>
</tbody>
</table>

Source: Commission services.

(1) Figures for subcategories are not available in the Eurostat database. Therefore R & D expenditure is not shown as a separate category.
Box IV.1: Data availability for assessing the composition of government expenditure

A breakdown of total general government expenditure of EU Member States, on the basis of the data as reported to Eurostat by the statistical authorities of the Member States, can be made according to ESA 95 main aggregates and according to the functional classification of general government expenditure.

In the main aggregates of general government, expenditure is classified according to transactions on the basis of the following main ESA 95 categories:

- collective consumption;
- social benefits in kind;
- social transfers other than in kind;
- interests;
- subsidies;
- gross fixed capital formation;
- other.

This classification is the one used in the annual assessment of budgetary positions according to the code of conduct on the content and format of the stability and convergence programmes. With a delay of three months, data are reported through the data transmission programme under ESA 95. While it is a useful tool to assess the broad development of public expenditures, with some useful breakdowns between current and capital expenditures, it does not give details on which kind of goods and services are provided by the general government.

Data availability: For annual accounts, data are available from 1991 until 2002 for all 15 Member States. For new Member States, data are missing for Cyprus, Malta and Slovenia and are incomplete for a number of other countries.

In the classification of general government expenditure by function (COFOG), total general government expenditure is divided into 10 functional categories:

- general public services;
- defence;
- public order and safety;
- economic affairs;
- environment protection;
- housing and community amenities;
- health;
- recreation, culture and religion;
- education;
- social protection.

This classification gives deeper insight into the composition of public expenditures, and broadly allows identifying the main functions of the State. It allows for the examination of trends in government outlays on particular functions over time, without distortions from organisational changes in government. For every individual function, expenditure can be divided

(Continued on the next page)
question, a regression analysis was carried out using panel data for all Member States. As explanatory variables were included economic variables, demographic variables and political variables (see Box IV.2 for the details). Results indicate that, taken together, these variables do reasonably well in explaining variation in expenditure on relatively homogeneous categories such as social protection, health and education, but that it is more difficult to explain developments in heterogeneous categories such as general public services and economic affairs.

Data availability: Data under the COFOG classification are available from 1990 until 2002, but the data are far from complete. Data are available only for the 10 main categories but not for subcategories. For France, Ireland, the Netherlands, Austria, Finland and Sweden data are only available after 1995. From 1995 until 2001 data are complete for EU-15, with the exception of Spain for which data are available only since 1999. No data are available for the new Member States. According to Regulation (EC) No 1267/2003 of the European Parliament and of the Council of 16 June 2003 amending Council Regulation (EC) No 2223/96 with respect to the time limit for transmission of the main aggregates of national accounts, several countries have a derogation up to 2005 to provide the information under the COFOG classification. In particular, Austria, Luxembourg, Greece and Portugal do not have to recalculate backwards some data, while Spain and Sweden can submit data with a longer delay (21 and 16 months, respectively).

In sum, the most complete and updated breakdown of total expenditure is the classification according to ESA 95 transactions. However, this classification does not provide information on the functions that are carried out by the government, such as education, healthcare and pensions. These data are available in the functional classification of government expenditure. Data availability has improved during recent years, but the coverage is still far from complete, both across countries (since data for the new Member States are not yet available) and over time (EU aggregates are available for three years only). In addition, no data are available for the subcategories, so that it is not possible to assess changes in the composition of total expenditure with respect to important subcategories such as transport, primary, secondary and tertiary education, unemployment and pensions. Thus, an improvement in the analysis of changes in the composition of public expenditure hinges on the availability of longer time-series for the functional classification and its subcategories for all Member States. At the same time, the costs of additional data collection — such as an increased reporting burden for the Member States — should also be taken into account and weighed against the benefits of additional analysis on the composition of public expenditure.
related expenditure (see Part I of this report) show that upward pressures on public spending can be expected to intensify further, while at the same time there would be little scope for strategies of raising additional revenues given the already high ratios of total revenues to GDP. This increases the importance of a clear focus on spending priorities — which includes being selective as to what can or should be achieved through government intervention — and an efficient and effective use of public resources in reaching them.

**Graph IV.1: The composition of expenditure as a % of GDP**

Source: Commission services. Countries included are BE, DK, DE, EL, IT, LU, PT, UK.

**Graph IV.2: The composition of expenditure as a % of total expenditure**

Source: Commission services. Countries included are BE, DK, DE, EL, IT, LU, PT, UK.
Box IV.2: An empirical analysis of changes in the components of public expenditure

In order to investigate the driving factors of changes in the composition, regressions were run using panel data for all EU Member States. The basic approach is to regress individual expenditure items on economic variables, demographic variables and political variables. In vector notation:

$$\Delta ex_{items} = c_{it} + \Delta ec_{it}' + \alpha + \Delta dem_{it}' + \beta + pol_{it}' + \gamma + \epsilon_{i,t}$$

Much of the literature that regresses budgetary variables has used the economic classification of expenditure (e.g. Mulas Granados, 2003) in order to take advantage of long time-series that are available. However, in order to study issues of quality, the functional classification of government expenditure may be more relevant. The drawback is that the longest period over which these data are available is the period of 1990–2002, so one should keep in mind that the period may be too short to properly capture structural trends.

For the economic variables, potential GDP, the output gap and the level of debt are included for all expenditure items. Potential GDP is included since expenditure on a specific item may increase with welfare. The output gap is included in order to capture the effect of the cycle. The debt level is included given that, other things being equal, the larger the stock of accumulated debt, the higher the flow of interest payments to be paid by governments (which may crowd out other expenditure). The debt level may also capture a possible sustainability effect and the need for budgetary consolidation. In addition, the regression for spending on social protection was also run with an alternative specification that includes unemployment instead of the output gap, given that the automatic stabilisers mainly operate on the expenditure side through expenditure on unemployment benefits so that the changes in the level of unemployment may better capture this effect (since unemployment usually reacts with a lag on the cycle).

For the demographic variables, changes in the population aged 24 or younger are included for the category of education. Changes in the population from the age of 65 have been included for social protection (since it includes old age as a sub-category) and health. A prior it would be questionable whether the estimation period of 1990–2002 is long enough for the demographic variables to show a significant effect. Finally, the political variables under consideration contain a dummy for the year preceding the decision on membership of EMU (i.e. 1999 for Greece and 1997 for all other euro-zone countries) given that some countries undertook some special consolidation efforts in this year. Furthermore, an election dummy was included given that several papers have found empirical evidence of an electoral budget cycle (e.g. Buti and van den Noord, 2003). However, the results for this variable were not significant and therefore this variable has not been included in the regressions for which results are reported. A possible explanation for the non-significance of the election dummy might be that Buti and van den Noord concentrate on the role of elections on discretionary expenditure (i.e. corrected for the role of the cycle), while the focus here is on total expenditure which included the effects of the cycle and discretionary changes.

All items have been estimated in first differences, except for debt (in order to better capture a possible ‘sustainability effect’). Debt is lagged one period to overcome endogeneity (reverse causation) problems, given that higher spending may lead to a higher deficit and thus higher debt. Moreover, individual expenditure categories are assumed to be too small to have a direct effect on short-term output and any positive effect of ‘productive’ expenditure (e.g. health, education) on long-term growth will take time to materialise. Therefore, no instrumental variable approach has been used for potential GDP and the output gap. The estimation method is fixed effects panel data, allowing for robust standard errors with respect to autocorrelation and heteroscedasticity.

Table IV.5 contains the result for the estimated equations, with standard errors in parentheses and *, ** and *** indicating significance at 10, 5 and 1% confidence. All expenditure categories are specified in billion EUR in constant market prices, so that the coefficients represent the change in real spending in billion EUR as a result in changes in the explanatory variables. Generally, coefficients have the expected sign. The positive effect of potential GDP (as a proxy of higher welfare) on spending is significant for health and education. Not surprisingly, results also confirm the effect of unemployment on
expenditure on social protection. Furthermore, results show a statistically significant procyclical pattern of expenditure on health. An explanation might be that sick-report incentives are procyclical: in a downturn, with unemployment rising, people might be less tempted to report sick if absenteeism increases the risk of job loss (Arai and Thoursie, 2001). The negative effect of debt is also significant for several categories, which confirms the link between fiscal discipline and quality given that a lower debt level reduces interest expenditure and thereby creates room for ‘productive’ expenditure. Regarding demographics, despite the short period covered by the regression and the fact that the biggest impact of ageing is still to come, the data already confirm a significant effect of ageing on health expenditure. For the political variables, the EMU dummy is not statistically significant for any of the individual expenditure categories, although it is close to significant for the category of economic affairs. In addition, it should be noted that the regressions do much better in explaining variation in spending on homogeneous categories such as social protection, health and education than in explaining composite categories such as general public services and economic affairs (see differences in R-squared in Table IV.5).

### 3.5. The size of the public sector

The possible correlation between the size of the public sector and long-term economic growth, and the robustness of this correlation, is subject to a lively debate in the literature. On the one hand Fatàs et al. (2003) show a negative association between total revenues and the trend growth rate for EU countries. They link this result to the debate on the quality of public finances and recommend reducing the burden of taxes and social contributions on factor incomes (along with shifting public spending to ‘productive’ uses). On the other hand, Levine and Renelt (1992), Easterly and Rebelo (1993) and Agell, Lindh and Ohlsson (1997) all show for different cross-sections of countries that the partial correlation between the size of the public sector and growth (i.e. without checking for other variables that are correlated to long-term growth) is not robust to the inclusion of

### The quality of public finances

#### Part IV

#### 3.5. The size of the public sector

The possible correlation between the size of the public sector and long-term economic growth, and the robustness of this correlation, is subject to a lively debate in the literature. On the one hand Fatàs et al. (2003) show a negative association between total revenues and the trend growth rate for EU countries. They link this result to the debate on the quality of public finances and recommend reducing the burden of taxes and social contributions on factor incomes (along with shifting public spending to ‘productive’ uses). On the other hand, Levine and Renelt (1992), Easterly and Rebelo (1993) and Agell, Lindh and Ohlsson (1997) all show for different cross-sections of countries that the partial correlation between the size of the public sector and growth (i.e. without checking for other variables that are correlated to long-term growth) is not robust to the inclusion of
other explanatory variables of long-term economic growth. In particular, it becomes statistically insignificant already after checking for only one alternative explanatory variable, initial income. This variable is considered since many growth models imply the existence of a catching-up effect: economies which initially have a relatively low GDP level have a tendency to grow faster than richer countries, which are closer to their steady state. But then Fölster and Henrekson (1998) find a tendency towards a more robust negative growth effect of the size of the public sector (i.e. including initial income) for a panel of rich countries after correcting for various econometric problems (1).

A full econometric discussion in the context of the EU is not possible due to the low number of cross-country observations (academic studies typically use large cross-sections of countries) (2). This section therefore only aims to position EU Member States with respect to several possible interpretations of the link between the size of the public sector and the long-term growth rate and to discuss whether such interpretations are supported by empirical data (3). In particular, the following hypotheses are investigated:

**Catching up: countries with a lower initial GDP per capita might show higher trend growth rates**

Graph IV.3 shows the effect of catching up. It confirms a negative correlation between initial income (GDP per capita) and the long-term growth rate. On average, new Member States grow faster than the existing Member States, which had a higher initial income.

**Wagner’s law: the demand for government services and hence the size of the public sector might increase with the level of income**

According to Wagner’s law, one might expect that the demand for government services will grow as countries become richer. Thus, countries that already have a higher GDP per capita would be expected to have a larger public sector. However, Graph IV.4 does not completely confirm this pattern. It shows that many EU countries with similar levels of GDP per capita (measured relatively to EU-15) show large differences in the size of their public sector. For example, GDP per head relative to that of EU-15 is 106 in Sweden and 105 in the UK, but the size of the public sector amounts to 55 % of GDP in Sweden, while it is 37 % of GDP in the UK. In this respect, Fölster and Henrekson (1998) draw attention to the fact that Wagner’s law may operate especially at low levels of income and that the relationship may break down at the highest levels of income. Furthermore, Tanzi and Schuknecht (2000) argue that public spending is not a natural development that accompanies the growth of per capita income, but rather results from explicit policy decisions. An important element in this regard is also the organisation of social protection. If it is mainly provided through the public sector, this will increase the share of the public sector in GDP. Stronger reliance on private social protection arrangements will, by contrast, result in a smaller public sector.

**Differences in preferences across countries: countries with a stronger preference for income equality have a larger public sector and a lower degree of income inequality**

Graph IV.5 investigates the role of differences in preferences across countries, assuming that the size of the public sector is a proxy for public policies to reduce inequality (4). It confirms a negative correlation between the size of the public sector and the degree of income inequality. It shows that differences in the size of the public sector between Member States can — at least partly — be explained by differences in preferences for income redistribution.

**Distortionary taxation: after a certain point, the negative effects of taxation outweigh the positive effects of 'productive' spending on trend growth**

Graph IV.6 shows the correlation between total revenues and average five-yearly growth rates. The negative correlation as found in Fatás et al. (2003) is confirmed. Hence, the data confirm that — on average — countries with a smaller public sector have recorded higher growth rates in recent years. At the same time, the data also confirm that — on average — countries with a smaller public sector had a lower initial GDP. As

---

(1) In particular simultaneity and heteroscedasticity.
(2) Graphs 3 to 6 only show the partial correlations for a cross-section of all EU countries without making statistical inferences about causality or about the significance of the coefficients given that this would give rise to problems of omitted variable bias and reverse causation.
(3) In line with the literature, figures as reported are five-yearly averages. In principle, cyclically adjusted data could also be used, but these are not yet available for all new Member States.
(4) These data on the equality of the income distribution were not available for the new Member States.
a result, it is (indeed) difficult to disentangle the effects of distortionary taxation and catching up on long-term growth in this small dataset. Finally, differences in preferences regarding the income distribution (equity) also play a role in explaining differences in size.

Simulations with macroeconomic models can provide additional insights into the correlation between the size of the public sector and long-term growth, as they provide the opportunity to keep ‘other’ variables such as initial income constant. European Commission (2003) presents an overview of the effects of fiscal consolidation on growth on the basis of the QUEST model. In this model, short-run Keynesian effects and the medium- to long-term effects of distortionary taxation interact when the size of the public sector is changed. It turns out that all simulations of budgetary consolidation through higher taxes show negative growth effects in the medium run, since the tax rises increase the distortions in the economy and lower output. Fiscal adjustment based on expenditure cuts, on the other hand, lead to negative GDP effects in the short run, but these are reversed in the medium to long run. Moreover, empirical evidence in European Commission (2003) on expansionary consolidation suggests that fiscal adjustments based on expenditure cuts are more likely to coincide with higher growth rates than consolidation periods based on tax increases. In terms of policy recommendations, emphasis has therefore been put on growing evidence that successful and lasting consolidation appears to occur when the bulk of the adjustment takes place on the expenditure side, both in terms of sustaining an improved budget balance and achieving a positive growth effect (1). Section 5.1 will continue this analysis by investigating the interaction between budgetary institutions that foster expenditure control and fiscal consolidation on the expenditure side of the budget.

---

Graph IV.3: Catching up: Initial income and growth rates

NB: Real growth as an average of 1998–2002 and initial GDP per head is measured in PPS (EU-15 = 100) as an average over 1993–97. Source: Commission services.

---

(1) See also European Commission (2000a) on the factors determining the success of a budgetary adjustment.
**Graph IV.4: Wagner’s law: Income per capita and size of the public sector**

NB: Size is measured as primary expenditure as a percentage of GDP. GDP per head in PPS (EU-15 = 100). Figures shown are averages 1998–2002. 

Source: Commission services.

**Graph IV.5: Preferences: Size of the public sector and inequality of income distribution**

NB: Figures are for 1998. Inequality of income distribution is measured as the ratio between the top (highest income) 20 % of a Member State’s population and the bottom (poorest) 20 % of the Member State’s population. Size is measured as cyclically adjusted primary expenditure in 1998. 

Source: Commission services.
Graph IV.6: Distortionary taxation: Total revenues and growth rates

NB: Total revenues as a percentage of GDP and real growth rate are averages 1998–2002.
Source: Commission services.
4. A microeconomic perspective on quality

4.1. Institutionalising quality within the budget process

The ‘top-down’ macroeconomic perspective on quality helps to underpin the strategic importance of redirecting public expenditure towards ‘productive’ uses and reducing distortionary taxation in order to raise the growth potential of the EU economy. At the same time, it can only provide for broad generalisations on the question of separating ‘productive’ from ‘unproductive’ expenditure in practice. This is exactly where the ‘bottom-up’ approach of the microeconomic perspective becomes useful as it provides the tools needed to support decision-making in practice. This entails a shift in focus from cross-country differences in fiscal aggregates towards the techniques and institutions that can be used to improve the quality of public finances, i.e. the effective and efficient use of resources in reaching strategic priorities. In particular, it will be shown in this section that the technique of cost-benefit analysis (CBA) provides for the essential criterion for distinguishing between ‘productive’ and ‘non-productive’ public investment in practice. Furthermore, the fiscal institutions for performance-budgeting help to focus on strategic objectives and the most efficient use of resources in reaching them, irrespective of the specific topic they are applied to. In fact, full CBA is especially relevant for large investment projects with a long time horizon, while performance-budgeting offers the opportunity of extending the use of cost-benefit comparisons to all or to a large part of government expenditure, by systematically relating the benefits of government intervention (what is the objective?) to its costs (i.e. public expenditure to reach a particular policy outcome).

Developing such mechanisms for balancing costs and benefits at national level is especially relevant for the ministries of finance given that budgeting is subject to a common pool problem. From the perspective of an individual spending ministry or from the perspective of a local government, the benefits of extra spending can usually be readily identified while at the same time the costs will be less visible given that they are spread out over the public at large. The consequence is that individual ministries or local governments may fail to internalise the full costs when making their spending bids and may thereby create a continuous pressure for increasing the size of the public sector. With limited resources available and pressures on the expenditure side likely to increase further, a strong role for the ministry of finance to internalise the costs of all extra spending and to increase the efficiency of government intervention becomes more important, and with it the development of mechanisms that institutionalise the process of doing so. In this respect, fiscal rules that ensure overall fiscal sustainability need to be complemented with institutions that ensure the effective and efficient use of funds within overall budget constraints. The national fiscal rules for controlling public expenditure in a medium-term framework have already been discussed in European Commission (2003), so that the analysis in this part can concentrate on the ‘quality’ side of the matter.

4.2. Cost-benefit analysis

4.2.1. Micro versus macro

As an introduction to CBA, it may be useful to clarify how the macroeconomic and the microeconomic perspective on quality are related. According to economic theory, what matters in the end is an allocation of resources that maximises social welfare. This allocation, in turn, depends on the social welfare function, which itself reflects the preferences of individuals (hence, the social welfare function can contain ‘traditional’ economic variables such as the level and distribution of income but also ‘broader’ aspects of the quality of life including employment conditions, a clean environment and security). However, the problem with applying this approach in practice is that one cannot measure interpersonal utility directly in a way that allows a comparison across different individuals. As a result, it is also not possible to measure social welfare in a direct way.
Macroeconomic and the microeconomic approaches offer different ways to solve this problem. Macroeconomic studies concentrate on the contribution of fiscal policy to long-term growth and thereby to social welfare by assuming that growth is an intermediate objective that increases welfare. Applied microeconomic studies, on the other hand, solve the problem that the social welfare function is non-discernable in another way and judge the contribution of individual projects to social welfare relative to the base case, i.e. what would have happened in the absence of the project. Hence, the macroeconomic and the microeconomic approaches take a different route towards the same ultimate objective of maximising social welfare.

In this respect, it should also be noted that the philosophy underlying both approaches is very similar. Firstly, in the macroeconomic approach the ability of fiscal policy to have an impact on long-term growth depends on the presence of externalities, which provide the reason why government intervention might be ‘productive’. In the same vein, in cost-benefit analysis the key issue in determining whether public investment is ‘productive’ is to take social costs and benefits into account, including externalities. Secondly, the sections on the macroeconomic approach have stressed the importance of taking both the benefits of public expenditure and their financing costs into account in determining the overall impact of government intervention. CBA does the same and applies the principle not to the economy as a whole but to individual projects instead.

4.2.2. Identifying ‘productive’ public investment

Microeconomic theory provides for a rather nuanced answer to the question of what is ‘productive’ government intervention given that — at the margin — a ‘productive’ project is a project for which the social benefits exceed the social costs (i.e. it creates a ‘social surplus’). For each individual project, CBA examines whether this criterion has been met in calculating its net present value by discounting future social costs and benefits. Put differently, the basic technique and the economic principles of CBA are the same whether applied to, for example, industrial estates and technology parks (with positive social benefits such as the diffusion of entrepreneurial knowledge and the birth of new productive companies and possible negative environmental costs such as noise and pollution), health infrastructure (with positive social benefits such as avoided lost working days due to ill health), infrastructure networks (with positive social benefits such as time saved or increases in local earnings due to the setting-up of new enterprises and negative externalities such as those related to environmental impact).

A comprehensive theoretical description of the use of CBA is outside the scope of this report (1). Several issues are worth mentioning, however, before concentrating on an empirical discussion of the use of CBA across EU countries in Section 4.2.3.

Firstly, the difference between CBA and cost-effectiveness analysis. In cost-benefit analysis, the identification of different project alternatives is essential: the method aims at valuing net costs or benefits of different projects to society and then selecting the best option. Cost-effectiveness, on the other hand, is a method of evaluation that compares the costs of alternative ways of producing the same output. Thus, cost-effectiveness analysis does not include the first step of selecting the best projects and starts with the step of producing the output at the lowest costs. Therefore, CBA is the appropriate method for an economic analysis of different options of reaching a particular objective of government intervention, while cost-effectiveness analysis could be used when benefits cannot be valued.

Secondly, the valuation of non-market costs and benefits. The aim of CBA is to value all costs and benefits of a particular project in order to calculate the net social surplus. Obviously, the process of valuation could be based on market prices where available. However, the common rationale for government intervention is to provide services that are not provided efficiently by the market, so how to value costs and benefits for which no market prices are available? This question goes to heart of the economic rationale of CBA. In essence, the available techniques aim at simulating a market and inferring a value either by using revealed preference techniques or stated preferences. Revealed preferences are based on existing markets and observed prices. From this, implicit prices for non-market aspects are inferred, for example by studying the effect of noise on housing prices. Stated preferences are based on the response to questionnaires, either on the basis of questions that ask for direct valuation or asking preferences and then inferring a value. Naturally, each method has its pros and cons. The scientific basis of revealed preferences is stronger than that for stated preferences, and its results are less easy to

(1) For a theoretical discussion, see Drèze and Stern (1987).
manipulate, but the information required to apply it may not always be available. In practice, the application of these techniques is the topic of specialised research in different sectors (e.g. valuing health benefits, environmental impacts and time saved as a result of infrastructure investment). A recurrent theme in the empirical applications is that the uncertainty margins in various estimates may be large. Obviously, this complicates to some extent the use of CBA in practice and highlights the importance of carrying out sensitivity analysis as a part of CBA (1).

Thirdly, the inclusion in CBA of considerations related to the distribution of income. The standard (normative) criterion underlying CBA is whether or not the project creates a social surplus. A policy creates a social surplus if it leads to a potential Pareto improvement which implies that the ‘winners’ of a project or policy could in principle compensate the ‘losers’ so that the ‘losers’ are at least as well off as in the base case and the winners are better off. In the standard approach, the change in the social surplus simply adds up costs and benefits without considering the distribution of those costs and benefits. However, the effects of different projects on social welfare may depend also on the distribution of the costs and the benefits, given that the marginal utility of extra income may depend on the income of an individual. As a general rule, it is often assumed that as income is doubled, the marginal utility of consumption to individuals falls by half (HM Treasury, 2003; European Commission, 2002). Thus, the traditional criterion in CBA of simply maximising aggregated income has come under criticism given that distributional effects should also be taken into account. There are two ways to do so. The first is to adjust the weighing of costs and benefits for different income groups so that costs and benefits to low-income groups would receive a higher weight. In this way, effects on the distribution of income are taken into account within CBA. The second is to continue to use base CBA on the criterion of maximising aggregate income, to evaluate the redistributive effects of the project separately and then to combine all information in the final decision-making process.

Fourthly, the role of CBA in the decision-making process. CBA can be useful in all stages of the decision-making process. During the first phase of identifying the options, a full CBA may not be feasible for each option, given the large amount of information that is required to make a complete CBA. A pre-feasibility study may help to concentrate on the most promising alternatives. A full CBA should subsequently be prepared in order to allow a well-informed final decision. However, in practice not all costs and benefits can always be valued and the decision-maker may want to consider additional objectives to the one used in CBA of maximising generalised income (for example the distribution of income if it has not been reflected already in the CBA). These effects have to be reported separately as they cannot be included in the CBA. A common technique for including additional objectives in the decision-making process is through multi-criteria analysis. This involves the identification of additional objectives, weighing them and then ranking different projects in terms of their impact on the weighed objectives. However, the process of introducing additional objectives and weighing them inevitably increases subjectivity in the decision-making process. It should reflect political priorities, therefore, and cannot be made by technical experts carrying out CBA.

4.2.3. Cost-benefit analysis: Learning from international experiences

In principle, the use of CBA allows for the comparison across projects in their contribution to social welfare. In practice, however, methodological differences in the application often complicate such comparisons. Therefore, at the national level, many countries have undertaken efforts during the last years to harmonise the methodology used for project appraisal. For example, in the Netherlands a large-scale research project was undertaken on the use of CBA in analysing large infrastructure projects with the aim of improving the scientific basis for decision-making. The project resulted in a broad consensus on the importance of cost-benefit analysis in the evaluation of major infrastructure projects and on the outlines of the way in which such analysis needs to be made (Centraal Planbureau, 2000). In the United Kingdom, the new edition of the ‘Green book, appraisal and evaluation in central government’ (HM Treasury, 2003) incorporates revised guidance to encourage a more thorough, long-term and analytically robust approach to appraisal and evaluation. It is relevant to all appraisals and evaluations and states that the relevant costs and benefits to government and society of all options should be valued, and the net benefits or costs calculated. Furthermore, at the level of the EU, CBA of investment projects is explicitly required for larger projects concern-

---

1 In addition, the pooling of knowledge in overview studies can also be useful for improving the estimates (an example is in the transport sector, ECMT, 1998), although it should always be kept in mind that estimated values depend on the context in which they were estimated.
ing the Structural Funds, the Cohesion Fund and the instrument for pre-accession countries. While Member States are responsible for the prior appraisal, the Commission has to evaluate the quality of this appraisal in order to admit the project proposal to co-financing and to determine the co-financing rate. In this context, the Regional Policy DG has recently updated its guide for CBA of investment projects (European Commission, 2002b). It indicates that, despite differences of procedures and methods among the different funds, the economic logic of analysis and the methodology should be homogeneous.

In sum, both at the national level and also within the European Commission efforts have been undertaken to improve the use of CBA as a decision-making tool for identifying ‘productive’ projects. At the same time, comparative cross-country research on the use of CBA is hard to find. A rare example is Florio (2003), which compares differences in the financial and economic rate of return of investment projects sponsored by the European Union, the EBRD and the World Bank. Its main finding is that cost-benefit analysis generates larger vari- ability of rates of return than financial analysis. The suggested interpretation is that while for financial analysis the techniques are fairly standard across sectors, techniques in cost-benefit analysis (and valuing externalities in particular) are less uniform. The authors therefore call for international comparative research into the methods used across countries, sectors and institutions.

A rare example of such a comparison across EU countries is the study by Dings et al. (2000). It contains a comparison of differences and similarities of the use of CBA for large infrastructure projects in Germany, France, the United Kingdom, Denmark and the European Commission. It finds that in all cases the use of CBA is standard practice or prescribed by law. There is an increasing acceptance of CBA as a decision-making tool and in most individual projects studied CBA played an important role in the political decision-making process. Furthermore, it also finds that the EU fiscal framework, in setting out the rules for fiscal discipline, has played an important role in increasing the acceptance of CBA. It has enhanced the awareness of the importance of fiscal discipline and thus of the need of a well-structured decision-making process. In all countries, projects have been undertaken that aim at refining the methodology. More recent revisions of CBA have increased the degree to which externalities are being valued. However, in line with Florio (2003), the results suggest that the largest part of the uncertainties in the calculation is still due to difficulties and variations in the valuation of externalities.

Another line of research concentrates on the inputs into CBA and compares estimated costs with actual costs. Flyvbjerg et al. (2002) built a database of 258 infrastructure projects and found that costs are underestimated for almost 9 of out 10 projects. For the sample as a whole, actual costs are on average 28 % higher than estimated costs, while for the 181 projects located in Europe, the average cost escalation is 26 %. Cost underestimation appears to be a global phenomenon and has not decreased over the past 70 years. The implication of such systematic misrepresentation at the time of decision-making is a decrease in the quality of public finances, since non-viable projects might go ahead, while alternative viable projects might not go ahead. Thus, the consequences are a less efficient allocation of resources and a decrease in social wel- fare. In explaining the phenomenon, the authors point out that the incentive structures for large projects may be geared towards underestimation of costs. When a project goes forward, the groups that benefit can be readily identi- fied (engineers, contractors, bankers, landowners, construction workers, lawyers, developers), while a large part of the costs would be spread out over the public at large. In fact, this is an example of the ‘common pool’ problem as referred to in Section 4.1 (1). Thus, it would seem that ministries of finance have a key interest in improving the incentive structure in the decision-making process, by improving checks and balances and by involving independent specialists in carrying out the projections underlying CBA (7).

Overall, an appropriate conclusion therefore seems to be that many efforts have been undertaken at national level to improve the consistency and scope of available tech- niques to better distinguish between ‘productive’ and ‘unproductive’ projects, thereby improving the quality of public finances and contributing to a more efficient allocation of resources. At the same time, the evidence suggests that further improvements can be made, in particular with respect to the valuation (in monetary terms) of social costs and benefits in different sectors and the incentives in the decision-making process that lead to a systematic optimism bias. This suggests that there may

---

(1) The theory of the common pool problem has also been applied to the relationship between the Ministry of Finance and individual spending minis- tries in Hallerberg (2004) and to the interaction between the central government and local governments in Rodden et al. (2003).

(7) In this respect, HM Treasury (2003) requires that optimism bias should be accounted for explicitly in all appraisals.
be scope for learning from international experiences by involving national experts that have been involved in projects of improving the consistency in the methodology of CBA and its application to improve the decision-making process in practice.

4.3. Performance-budgeting

4.3.1. Budgetary institutions: Inputs, outputs or outcomes?

As indicated, CBA is used especially for large investment projects with a long time horizon. The concept of quality does not only apply to public investment, however, as it requires that all public expenditure is used to achieve the priorities of society (such as a sustainable development) in the most efficient and effective way. A starting point of the analysis could be the observation that a government that aims at maximising the social welfare of its citizens needs to be constantly informed about the preferences of its citizens and needs to respond to changes in preferences. This is particularly relevant in a context where preferences change over time due to changes in technology, demographics and social structures. It is also relevant in a context where resources are scarce so that their best uses have to be found within a fixed budget constraint. The application of traditional budgeting sometimes created problems in this context. Firstly, a focus on inputs in the budget provides no visibility on how successful a programme is in achieving its objectives. Secondly, it does not allow consideration of alternative and possibly more efficient ways to achieve the same objective. Hence, in response, several countries have explored ways in recent years to shift attention outwards and to increase the responsiveness of the delivery of goods and services in line with changing preferences. A prominent development has been a (renewed) interest for structural reforms to the budget process that aim at strengthening the link between the allocation of resources and performance in reaching stated objectives. A central idea has been that a clearer focus on outputs or policy outcomes (1) may improve the efficiency and effectiveness of the use of scarce resources so that savings can be achieved while at the same time performance in achieving policy objectives would be maintained or even improved.

The question, of course, is whether these reforms have indeed produced the desired effects. The discussion on this question can be summarised on the basis of the three main elements of performance-budgeting as identified by the OECD (2003):

1. A clear ex ante specification of the performance (outcomes/outputs) expected for each programme or agency

The relevant question is whether and how policies contribute to the objectives of government intervention (i.e. outcomes). In practice, however, it may not always be possible to describe policy outcomes in a measurable and specific way. In some cases outcomes can only be achieved over many years, or can only be described in a general way (for example, improving human capital). Furthermore, policy outcomes may be affected by a range of factors outside the direct control of a particular government agency. In this respect, outputs may be more easy to control and specify (for example, years of education or use of R & D funds), but at the same time a focus on outputs might distract attention from the original reason for government intervention. In addition, it has been pointed out that there may be a danger of a certain degree of over-emphasis on objectives that can be quantified at the expense of objectives that cannot be so easily quantified (Smith, 1995). However, applications of performance-budgeting in practice recognise that formulating measurable outcomes may not always be possible and therefore do not establish direct causal links between performance and budget appropriations.

2. Devolution of decision-making authority and freedom to reallocate funds towards ‘productive’ items

The philosophy in performance-budgeting is to shift attention from control ex ante on budgetary inputs to accountability ex post on the basis of results. A relaxation of input controls can give managers and agencies more freedom to use their expertise in finding and designing the best programmes. In return they will be held more accountable for the achieved results (Schick, 2003). Furthermore, there are two preconditions for an approach of relaxing input controls (Diamond, 2003). Firstly, every agency should face a tight overall budget constraint within which it can operate, since increased flexibility requires certainty over the funds that are available to reach the stated targets. Therefore, steps towards performance-budgeting have usually been taken in parallel with introducing or strengthening medium-term expenditure frameworks. Secondly, it also requires the

---

(1) Outcomes refer to policy impact, while outputs measure production or services delivered.
capacity in the central budget office to monitor developments and to intervene if necessary.

3. A link between performance and budget appropriations

The crucial issue is how to link performance and the allocation of resources. In this respect, Schick (2003) distinguishes two definitions of performance-budgeting. Broadly defined, a performance budget is any budget that presents what agencies have done or expect to do with the money provided to them. Strictly defined, a performance budget is only a budget that explicitly links each increment in resources to an increment in outputs or other results.

In practice many countries that measure performance have avoided a direct link between performance and budget appropriations. Canada, Denmark, Finland and Sweden have all introduced initiatives to promote performance without explicitly tying performance to budgeting (Diamond, 2003) (1). In the same vein, on the basis of evidence for the states in the United States, Moynihan (2003) (2) reports that the links between performance measures and resource allocations are weak. While 47 of 50 states claim to use some form of performance-budgeting, there is no evidence that any state relies on a strict performance system. One reason might be that, if performance cannot be precisely defined, it would be difficult to link funding and performance. In addition, it has been pointed out that even if a programme performs badly, it may continue to be funded if it concerns an essential government function, while a well-performing programme may not receive additional funding if it is considered to be a marginal function of government.

To summarise, much of the literature on performance-budgeting stresses the importance of moving ‘beyond rhetoric’ and to give a balanced assessment of what can and has been achieved. In this respect, Moynihan (2003) points out that performance information is most widely used by managers seeking to improve the operational efficiency of their programmes. Furthermore, performance-budgeting can enrich policy debates and help to identify and prioritise desired outcomes, especially when embedded in a broader strategy of managing for results. In the same spirit, and on the basis of an early assessment of reform in Australia, France, New Zealand, Sweden and the UK, the OECD (1997) points out that there are strong reasons to believe that ‘restructuring public management’ has brought sizeable efficiency gains, while there is no reason to believe that outcomes have either improved or deteriorated.

4.3.2. Performance-budgeting by EU Member States: An empirical discussion

Table IV.6 shows an overview of current practices in EU Member States with respect to performance-budgeting on the basis of the OECD/World Bank budgeting practices and procedures database. It is based on answers provided by national authorities to the OECD/World Bank survey of budget practices and procedures that was launched in February 2003. In interpreting the data, it should be kept in mind that the OECD and the World Bank are working to improve the questionnaire and the reliability of the answers. Furthermore, answers may give an overview of institutional arrangements in place, but do not give an indication of the extent to which a culture of performance is embedded in national organisations. Institutional reform is not a sufficient condition for improving performance, and it cannot be concluded on the basis of institutional characteristics alone whether one country performs better than the other.

The survey was set up in a way to obtain information on the extent to which countries measure performance and also on the use of the data in the decision-making process. The first three columns in Table IV.6 summarise the extent to which Member States measure performance (i.e. as reported by the countries themselves). When looking at the degree to which performance data are routinely included in budget documentation, and the extent to which this includes performance targets, it turns out that Spain, the Netherlands, Finland, Denmark, Sweden include performance data for a large majority of programmes, while the UK could also be expected to be in this category (3) (although answers given for the UK are incomplete in this respect). The degree to which the performance data include performance targets differs from all programmes in Spain to around 25% of programmes in Denmark and Sweden. No performance data are included in the budget data in Ireland, Italy, Austria, Por-

(1) In addition, New Zealand and the UK have attempted to employ formal contractual agreements between the government and chief executive offices (New Zealand) or for all main departments covering 130 targets in key areas of government (UK, 2002 spending review) to ensure performance.

(2) Based on the findings of research conducted by the government performance project, see www.maxwell.syr.edu/gpp/

(3) See UK Treasury website on 2002 spending review and public service agreements: http://www.hm-treasury.gov.uk/spending_review/spend_sr02/psa/
tugal and Hungary, while results for other Member States vary from less than 25% of programmes in Belgium to more than 50% in France. The fourth column investigates the question of whether expenditures are specifically linked to output or outcome targets. A large majority of Member States links expenditure to ‘some’ or ‘a few’ targets, while Spain and the Netherlands link expenditure to all output or outcome targets. In sum, the whole range of possibilities is observed in practice, from the inclusion of performance data for all programmes to the use of no performance data in budget documentation at all.

The last three columns summarise the use of performance data in the decision-making process. In a majority of countries, performance data are used in determining budget appropriations, but there is no evidence that appropriations are related to results in a direct manner. This is confirmed by answers in the last column, where only three countries indicate that the size of the budget is affected when performance targets are not met. Therefore, among the EU countries that use performance-budgeting, almost all of them seem to use the broad form of performance-budgeting. Results also indicate that politicians generally use performance measures in the decision-making process, although it is not clear how the information is used, and whether this may have affected the decisions taken. As regards the use of sanctions when performance data are not met (which relates to the question of making managers manage), results generally show that sanctions are absent, or show that compliance with the targets is related to the pay of the persons that are responsible for reaching the targets.

To conclude, the results indicate widely diverging budgetary practices with respect to performance-budgeting among EU Member States. Results range from practices quite close to the strict form of performance-budgeting in Spain, to more broad forms in the Netherlands and the Nordic countries, a middle group of countries which use performance data but not for all programmes and several countries that do not use performance data at all. The wide range of practices would seem to indicate that the scope for learning from international experiences — on the basis of the expertise as concentrated within the OECD — might be large and thereby also the scope for improving the quality of public finances with respect to the identification of key objectives of government intervention and bringing about efficiency savings in reaching them. In particular, this includes the pros and cons of measuring performance for some, most or all programmes and the use of performance data in order to improve the decision-making process.
### Table IV.6

**Performance-budgeting in EU Member States: An overview**

<table>
<thead>
<tr>
<th>Member State</th>
<th>Are non-financial performance data routinely included in budget documentation?</th>
<th>Do the performance data include performance targets?</th>
<th>Is actual performance against targets reported?</th>
<th>Are expenditures specifically linked to each output of outcome target?</th>
<th>Is there evidence that performance results are used in determining budget allocations?</th>
<th>Is it common that politicians use performance measures in decision-making?</th>
<th>Are rewards and/or sanctions applied if performance targets are met or not?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, occasional reports for some programmes</td>
<td>Yes, for some targets</td>
<td>Yes, within government organisation/programmes</td>
<td>Yes, the responsible minister</td>
<td>There are no rewards or sanctions</td>
<td><img src="BE" alt="Cell" /></td>
</tr>
<tr>
<td>DE</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, for more than 25% of programmes</td>
<td>Yes, occasional reports for some programmes</td>
<td>Yes, for a few targets</td>
<td>Yes, within ministries; by the Ministry of Finance to decide funding between programmes</td>
<td>Yes, the responsible minister</td>
<td>There are no rewards or sanctions</td>
</tr>
<tr>
<td>EL</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, occasional reports for some programmes</td>
<td>Yes, for some targets</td>
<td>Yes, by the Ministry of Finance to decide funding between programmes</td>
<td>No</td>
<td><img src="EL" alt="Cell" /></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>Yes, for all programmes</td>
<td>Yes, systematic annual report for most programmes</td>
<td>Yes, for all targets</td>
<td>Yes, by the Ministry of Finance to decide funding between programmes</td>
<td>Yes, the responsible minister; politicians in the budget committee in the legislature; politicians in the committee overseeing the ministry entidad which is supposed to deliver on the performance target</td>
<td><img src="ES" alt="Cell" /></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>Yes, for more than 50% of programmes</td>
<td>Yes, for less than 25% of programmes</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td><img src="FR" alt="Cell" /></td>
</tr>
<tr>
<td>IE</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td><img src="IE" alt="Cell" /></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>No</td>
<td>No</td>
<td>Yes, for all targets</td>
<td>No</td>
<td>Yes, the responsible minister; the Head of Government; the Cabinet</td>
<td>It is reflected in the pay of the heads of ministries/entities with responsibility for delivering the target</td>
<td><img src="IT" alt="Cell" /></td>
</tr>
</tbody>
</table>

(Continued on the next page)
Table IV.6 (continued)

<table>
<thead>
<tr>
<th>Member State</th>
<th>Are non-financial performance data routinely included in budget documentation?</th>
<th>Do the performance data include performance targets?</th>
<th>Is actual performance against targets reported?</th>
<th>Are expenditures specifically linked to each output of outcome target?</th>
<th>Is there evidence that performance results are used in determining budget allocations?</th>
<th>Is it common that politicians use performance measures in decision-making?</th>
<th>Are rewards and/or sanctions applied if performance targets are met or are not met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL</td>
<td>Yes, for all programmes</td>
<td>Yes, for more than 75% of programmes</td>
<td>Yes, systematic annual report for most programmes</td>
<td>Yes, for all targets</td>
<td>Yes, within government organisation/programmes; within ministries; by the Ministry of Finance to decide funding between programmes</td>
<td>Yes, the responsible minister; the Cabinet</td>
<td>It is reflected in the pay of the heads of ministries/entities with responsibility for delivering the target</td>
</tr>
<tr>
<td>AT</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes, the responsible minister</td>
<td>It is reflected in the size of the budget for the department or government organisation/agency</td>
</tr>
<tr>
<td>PT</td>
<td>No</td>
<td>No</td>
<td>n.a.</td>
<td>Yes, for a few targets</td>
<td>Yes, within government organisation/programmes</td>
<td>Yes, the responsible minister</td>
<td>It is reflected in the size of the budget for the department or government organisation/agency</td>
</tr>
<tr>
<td>FI</td>
<td>Yes, for more than 75% of programmes</td>
<td>Yes, for more than 75% of programmes</td>
<td>Yes, systematic annual report for some programmes</td>
<td>Yes, for some targets</td>
<td>Yes, within ministries</td>
<td>No</td>
<td>There are no rewards or sanctions</td>
</tr>
<tr>
<td>DK</td>
<td>Yes, for all programmes</td>
<td>Yes, for more than 25% of programmes</td>
<td>Yes, systematic annual report for most programmes</td>
<td>Yes, for some targets</td>
<td>Yes, within government organisation/programmes; by the Ministry of Finance to decide funding between programmes</td>
<td>Yes, the responsible minister</td>
<td>It is reflected in the pay of the heads of ministries/entities with responsibility for delivering the target</td>
</tr>
<tr>
<td>SE</td>
<td>Yes, for all programmes</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, systematic annual report for most programmes</td>
<td>Yes, for some targets</td>
<td>No</td>
<td>Yes, the responsible minister; politicians in the committee overseeing the ministry/entity which is supposed to deliver on the performance target</td>
<td>There are no rewards or sanctions</td>
</tr>
</tbody>
</table>

(Continued on the next page)
### Table IV.6 (continued)

<table>
<thead>
<tr>
<th>Member State</th>
<th>Are non-financial performance data routinely included in budget documentation?</th>
<th>Do the performance data include performance targets?</th>
<th>Is actual performance against targets reported?</th>
<th>Are expenditures specifically linked to each output of outcome target?</th>
<th>Is there evidence that performance results are used in determining budget allocations?</th>
<th>Is it common that politicians use performance measures in decision-making?</th>
<th>Are rewards and/or sanctions applied if performance targets are met or are not met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Yes, systematic annual report for most programmes</td>
<td>No</td>
<td>Yes, by the Ministry of Finance to decide funding between programmes</td>
<td>Yes, the responsible minister</td>
<td>Other</td>
</tr>
<tr>
<td>CZ</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, systematic report for some programmes</td>
<td>Yes, for some targets</td>
<td>Yes, within ministries</td>
<td>Yes, the responsible minister</td>
<td>It is reflected in the size of the budget for the department or government organisation/agency</td>
</tr>
<tr>
<td>HU</td>
<td>No</td>
<td>No</td>
<td>Yes, occasional reports for some programmes</td>
<td>Yes, for a few targets</td>
<td>No</td>
<td>No</td>
<td>There are no rewards or sanctions</td>
</tr>
<tr>
<td>SI</td>
<td>Yes, for more than 50% of programmes</td>
<td>Yes, for less than 25% of programmes</td>
<td>Yes, systematic annual report for most programmes</td>
<td>Yes, for some targets</td>
<td>No</td>
<td>No</td>
<td>There are no rewards or sanctions</td>
</tr>
</tbody>
</table>

Source: OECD/World Bank 2003 budgeting practices and procedures database.
5. Expenditure control, reallocation and fiscal consolidation

5.1. Expenditure control, reallocation and fiscal consolidation: Formulating hypotheses

5.1.1. Expenditure control and reallocation

Improving the quality of public finances requires that resources are (re)allocated in line with strategic priorities. In this respect, Section 3.4.3 highlighted that existing trends in public expenditure such as those related to ageing cannot be ignored in the discussion on reallocating funds towards the priorities. In addition, this section investigates the topic of reallocation further. The purpose is to investigate whether and how budgetary institutions can facilitate the process of reallocation. This section formulates hypotheses that will be confronted with available empirical evidence in Section 5.2.

In this context, the previous section already discussed that effective medium-term expenditure frameworks are a precondition for increased managerial flexibility to reallocate funds to their most ‘productive’ uses within broad expenditure classes. In addition, Schick (2002) argues that medium-term expenditure frameworks can also be used to facilitate reallocation between broad expenditure categories. In this case, reallocation should take place not at the level of spending departments, but within the Cabinet when the envelopes for each sector are set, by permitting some sectors increases above the baseline projections while others should produce decreases.

These two aspects of the link between expenditure control and reallocation have been summarised in the two boxes on the left of Graph IV.7. The hypothesis that follows is that only countries with effective control of broad categories of expenditure will be able to pursue a successful strategy of giving managers the freedom to reallocate resources within broad expenditure categories. This hypothesis is relevant given that managing and budgeting for performance — if implemented through proper sequencing — may possibly lead to sizeable efficiency gains (Section 4.3.1). In addition, it also contains the hypothesis that the use of these medium-term expenditure limits for each spending sector or major spending department may facilitate reallocation between broad expenditure categories. In essence, these hypotheses focus on ways to better spend (allocate) a given amount of public money (resources), whereby reallocation towards ‘productive’ items can be one element of a strategy for increasing the growth potential.

5.1.2. Expenditure control and fiscal consolidation

Apart from the recommendation to reallocate funds towards identified priorities, previous policy recommendations have also focused on the topic of ‘high quality’ fiscal consolidation. As indicated also in Section 3.5, the available evidence seems to suggest that fiscal adjustments based on expenditure cuts are more likely to coincide with higher growth rates than consolidation periods based on tax increases. Furthermore, Alesina and Ardagna (1998) point out that fiscal consolidation efforts based on expenditure cuts, especially where they focus on reducing transfers and government wages, are more likely to have a lasting effect on budget deficits than consolidations based on higher revenues. If, in turn, such a lasting reduction in budget deficits translates into a permanent reduction in budget deficits, then it should lead to increased capital accumulation and translate into a higher per capita potential output (see Part III of this report).

A previously unaddressed question is whether and how budgetary institutions might facilitate expenditure-based fiscal consolidation. An obvious starting point would be to ask whether a stronger institutional setting for controlling expenditure facilitates expenditure-based fiscal con-
5.2. Expenditure Control, Reallocation and Fiscal Consolidation: Empirical Discussion

Table IV.7 confronts the hypotheses of Graph IV.7 with available empirical data. The first column is taken from the survey into national medium-term expenditure rules in European Commission (2003a). It summarises the experience with expenditure rules in EU countries. As can be seen in Table IV.7, in the Netherlands, Austria, Finland, Sweden, and the UK there was a general perception (2) that the expenditure rules had contributed to expenditure control. Overall, these countries were characterised by expenditure rules that were more binding and more ambitious than in other countries.

The second and third columns refer to the question whether fiscal consolidation efforts were balanced towards the expenditure or the revenue side of the budget and whether the consolidations were lasting. A practical question is which definitions to use for consolidation periods and lasting effects. As argued in European Commission (2003a) the definition of fiscal consolidation can be based either on the size of the fiscal consolidation or on the persistence of the fiscal consolidation. The second column uses a definition based on the size of fiscal consolidation, in line with definitions used in the literature (3). In this way, the table focuses on large consolidation efforts in a single

---

(1) European Commission (2003a) also addresses the consistency between expenditure rules and automatic stabilisation, by allowing the automatic stabilisers to operate on the expenditure side.

(2) Given the difficulty of isolating the impact of expenditure rules on expenditure trends from other relevant factors, the survey asked for a summary statement on the experience with the expenditure rules.

(3) See notes under Table IV.7 for the exact definitions.
The outcome shows that, where countries with stronger expenditure control consolidated, the efforts were indeed balanced towards the expenditure side (i.e. in Finland, Sweden and the UK). An exception is the Netherlands that showed a consolidation on the revenue side in 1993, which can be explained by the fact that this was one year before the introduction of its expenditure rules in 1994. However, a problem with the definition on the basis of the size of the consolidation is that only a few observations are available since expenditure rules were introduced in most Member States in the 1990s. Therefore, the third column uses an alternative definition that significantly reduces the size of the consolidation in a single year and stresses the persistence of the fiscal consolidation over consecutive years. The justification for using this definition could be that if fiscal institutions would have an impact on the composition of fiscal consolidation, one might expect a gradual, structural and lasting impact, while any large fiscal consolidation in a particular year might be expected to be due more to political factors. The outcome in the fourth column of Table IV.7 now shows that in all countries with stronger expenditure control periods of fiscal consoli-

Table IV.7

Expenditure control, fiscal consolidation and performance-budgeting

<table>
<thead>
<tr>
<th>Member State</th>
<th>Experience with expenditure rule: Contribution to expenditure control? (^{(1)})</th>
<th>Fiscal consolidation expenditure or revenue based? (^{(2)})</th>
<th>Fiscal consolidation expenditure or revenue based? (alternative definition) (^{(3)})</th>
<th>Index of performance-budgeting (^{(4)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>DK</td>
<td>Difficult to assess given specification of average target over several years</td>
<td>E (1996–99)</td>
<td>E (1996–99)</td>
<td>4.25</td>
</tr>
<tr>
<td>FR</td>
<td>No</td>
<td>R (1994–97)</td>
<td>n.a</td>
<td></td>
</tr>
<tr>
<td>IE</td>
<td>Rule abandoned</td>
<td>R (2003)</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

\(^{(1)}\) European Commission (2003a), Table V.3.
\(^{(2)}\) Definition of fiscal consolidation: the primary cyclically adjusted budget balance improves by at least 2 percentage points of GDP at time \(t\) or by at least 1.5 points in two consecutive years.
\(^{(3)}\) Definition of fiscal consolidation: any period in which the primary cyclically adjusted budget balance shows a cumulative improvement of at least 1.5 percentage points and in which the budget balance does not deteriorate in a single year.
\(^{(4)}\) Index as calculated on the basis of Table 7, where scoring for the first four columns/questions in Table 7 is based on the percentage of programmes (e.g. 0.5 points if performance data are included for more than 50 % of programmes) and scoring is based on answer of ‘yes’ or ‘no’ in last three columns (i.e. 0.5 points for yes and 0 points for no).

Source: Commission services.
dation were expenditure-based, including the Netherlands that switched to expenditure-based consolidation after the introduction of its expenditure rule in 1994. In almost all other countries, periods of fiscal consolidation where balanced towards the revenue side. In interpreting these results one should keep in mind, however, that the causality may not necessarily run from expenditure frameworks to expenditure-based consolidation, since it might also be that countries with stronger preferences for expenditure-based consolidation have introduced more effective expenditure frameworks to implement such strategies.

In addition, if the control of broad classes of expenditure is indeed a precondition for the devolution of managerial power within these classes, as part of a strategy of managing and budgeting for performance, the Netherlands, Austria, Finland, Sweden, and the UK would be candidates for pursuing such strategies. Furthermore, other candidates could be Spain, which introduced expenditure ceilings for the first time in 2003 so that its contribution to expenditure control could not yet be assessed and Denmark, which used an ambitious expenditure target but formulated it over a number of years and also changed it during those years so that it became difficult to assess its effectiveness.

In this respect, Section 4.3.2 concludes that apart from Austria (1) all these countries are using strategies of performance-budgeting. This conclusion is repeated in the third column of Table IV.7 on the basis of a simple index of performance-budgeting. The crucial question, of course, is whether these institutional reforms have led to efficiency savings and a more effective use of resources. As indicated already, available studies point to the importance of moving ‘beyond rhetoric’ while still indicating that efficiency gains can be sizeable. Unfortunately, the hypothesis that expenditure control facilitates reallocation between broad categories could not be tested due to a lack of available data.

Taken together, these results indicate that controlling public expenditure may be an important precondition for improving the quality of public finances. Establishing fixed budget constraints for broad classes of expenditure may support a better use of expenditure within these fixed constraints. When needed, it may also facilitate the political decision-making process for reallocation expenditure between these categories in line with changing priorities and support a strategy of expenditure-based fiscal consolidation.

### 5.3. The return of politically motivated fiscal expansions?

In interpreting the results of the previous paragraph, it should be kept in mind that the introduction of institutional arrangements is not a sufficient condition for strengthening either expenditure control or performance, since institutions can be effective only when they are supported by political will and by a culture of budgeting for discipline and performance. In order to illustrate this point, Table IV.8 shows developments in cyclically adjusted primary public expenditure in recent years. It appears that many of the countries with positive experiences with expenditure rules have slackened the reins in recent years, since the UK, Sweden and the Netherlands and to a lesser extent Finland and Denmark all show a recent substantial

| Table IV.8 Cyclically adjusted primary expenditure (% of GDP) |
|-----------------|-----------------|
| 2000            | 2003            |
| BE              | 42.9            | 45.7            |
| DK              | 51.1            | 52.7            |
| DE              | 44.9            | 45.7            |
| EL              | 42.0            | 41.5            |
| ES              | 36.8            | 36.9            |
| FR              | 49.8            | 51.8            |
| IE              | 30.6            | 33.4            |
| IT              | 41.6            | 43.6            |
| NL              | 43.2            | 45.3            |
| AT              | 49.0            | 47.8            |
| PT              | 42.3            | 44.9            |
| FI              | 46.9            | 48.6            |
| SE              | 53.7            | 56.7            |
| UK              | 36.7            | 40.7            |

*Source: Commission services.*

---

(1) In this respect it should be pointed out that Austria did not use a rule that aimed at controlling broad classes of expenditure. Instead, it used a rule that focused on administrative expenditure at the central level of government (i.e. planned cuts in personnel). See European Commission (2003a), Table V.3.
upward movement in public expenditure (1). In other words, countries that have created room for manoeuvre through prudent behaviour in the past seem to have used at least part of it in recent years. The reasons for the expansionary periods may be different — such as an expansion in expenditure after years of high growth and in the face of elections in the Netherlands or decisions to follow an expansionary policy as in the UK — but results are similar: a weakening of fiscal discipline so that two of these countries are now close to or above that 3% limit of the EU fiscal rules and may have (had) to prepare themselves again for new rounds of fiscal consolidation. More generally, the erosion of political ownership of the discipline rules has also been analysed in political-economy terms in Buti and Giudice (2002) and Buti and van den Noord (2003), where it is stated that short-term gains at the national level of higher deficits may have outweighed the systematic costs in violating the rules.

(1) In addition, Ireland, Belgium, Portugal, France and Italy also show substantial increases on the expenditure side in recent years.
According to the definition as proposed in this part, enhancing the quality of public finances requires the allocation of budgetary resources and the effective and efficient use of those resources towards identified strategic priorities. With respect to the priorities, the analysis in this part concentrates on the link between fiscal policy and long-term growth. Overall, it confirms the relevance of reallocating public expenditure towards ‘productive’ uses and lowering the burden of distortionary taxation in a context where priority is given to raising the growth potential of the EU economy. At the same time, it stresses the importance of microeconomic analysis on the question of separating what is ‘productive’ from what is not.

If priority is given to stepping up the debate on the quality of public finances at the level of the EU, it seems necessary to start with the exchange of information with respect to national priorities regarding the composition of the budget, as well as the development of the budgetary tools and institutions that support decision-making in practice. The aim of this part has been to contribute to such a debate by analysing not only broad trends regarding the composition of public expenditure at macroeconomic level, but also the role of cost-benefit analysis in identifying ‘productive’ investment, the contribution of budgetary institutions to better using existing funds and the role of effective medium-term expenditure frameworks as a precondition for reallocation of expenditure within broad categories, while at the same time facilitating the political decision-making process on reallocation of expenditure between broad categories.