EXPENDITURE COMPOSITION AND INSTITUTIONAL REFORM IN EUROPE: A POLICY PERSPECTIVE

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1. Introduction

As part of the Lisbon strategy, EU Member States have agreed on the recommendation to enhance the contribution of the public sector to growth by:¹

- "redirecting, *i.e.* while respecting overall budgetary constraints, public expenditure towards growth-enhancing cost-effective investment in physical and human capital and knowledge..."; and by
- "increasing the efficiency of the public sector, inter alia, by introducing mechanisms to assess the relationship between public funds and policy objectives and to help control spending"

The purpose of this paper is to evaluate actual developments in EU Member States from the perspective of these agreed policy recommendations. Section 2 puts the discussion into perspective, by briefly reviewing the literature on the link between public expenditure and long-term growth. Sections 3 and 4 then evaluate developments in the composition of public expenditure. In doing so, Section 3 investigates the long-term trends while section 4 takes a detailed look at changes in the composition of public expenditure since the start of the Lisbon strategy in 2000. In discussing policy options, Section 5 then stresses the importance of budgetary institutions. It maintains that, although it would be difficult to establish a direct link between institutional reform and the degree to which expenditure has been directed towards productive items, the data indicate that all countries that have been at the forefront of institutional reform also managed to redirect their public expenditure towards public investment (as a proxy for physical capital) and education (as a proxy for human capital).

2. Fiscal policy and long-term growth: A brief review of the literature

2.1 Conceptual issues

Most 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

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¹ European Commission (2003b).

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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 can not be ignored, however, given that it may take a long time for the economy to adjust to a new steady state.²

One of the criticisms of the neoclassical growth model points out that it is difficult to find reasons in these models why the government might intervene at all. Endogenous growth models 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).³

$$Y_t = f[A_t K_t, B_t L_t]$$
⁽¹⁾

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 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.

2.2 Empirical issues

2.2.1 Fiscal policy and results from growth regressions

Before concentrating on empirical research that has investigated the link between fiscal policy and long-term growth, it should be recognised that fiscal policy is only one of many variables that may be related to long-term growth.

² See Barro and Sala-i-Martín (1995): "convergence speeds that are consistent with the empirical evidence imply that the time required for substantial convergence is typically on the order of several generations".

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

Table 1

Budgetery Aggregates	Classification	Theory: Effect on Growth	Possible Examples
F	Productive	Positive effect on marginal productivity of capital and labour	Investment in transport and communication, education, R&D, health care
Expenditure	Unproductive	Effect on marginal productivity zero or negative	Expenditure on economic services, recreation
Taxation	Distortionary	Distorting supply or demand of capital and labour	Taxation on income and profit
Taxation	Non-distortionary	No distortion of supply or demand of capital and labour	Proportional tax on consumption

Fiscal Policy Aggregates and Long-term Economic Growth

Source: adapted on the basis of Gemmell and Kneller (2003) and Gerson (1998).

Levine and Renelt (1992) and Sala-i-Martín (1997) have identified more than 50 variables that are significantly correlated to growth in at least some study. 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 includes the partial correlations for government spending (including public investment). 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.⁴ 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 the variables that cause economic growth is very limited. From a policy point of view, a broad perspective is therefore needed to identify policies that could raise low structural growth rates within the EU.⁵

⁴ Nevertheless, the share of pubic investment in transport and communication and the government's budget surplus are consistently correlated with growth in their cross section of countries. Furthermore, government's revenue-to-GDP ratio rises with per capita income (Wagner's law) in both the cross-section and the historical data sets.

⁵ See for example the Sapir report (2003), which identifies a six point agenda for improving the growth potential of the EU economy It 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.

2.2.2 Empirical support for endogenous growth theory

When focusing specifically on endogenous growth through fiscal policy, it turns out that the empirical evidence in support of it remains mixed. Jones (1995) presents evidence against the endogenous growth hypothesis on the basis of time series data for the US that indicate a lack of persistent change in growth rates. By contrast, several recent empirical studies have also attempted to estimate the combined impact of productive expenditure and distortionary taxation (as well as several "control" variables in some cases) on growth (Kocherlakoty 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 estimating 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 offsetting. 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 composition of both expenditure and revenue could have positive effects on long term growth.

Research has also attempted to measure the productive effects on individual expenditure categories. EC (2002a) reviews the literature and finds that public infrastructure investment, education and R&D are positively correlated to growth, even if the magnitude of the impact is uncertain and the effects are non-linear. For similar conclusions, see Colombier (2004).

In sum, the literature points out that the transmission linkages between the composition of public expenditure and long-term growth that operate through the effects of public expenditure on the marginal productivity of capital and labour (e.g. through a well-educated population, better infrastructure, spill-overs from technological innovation, etc.). These transmission mechanisms can be expected to depend crucially on the needs of individual countries, such as the level of development and the quality of its infrastructure and education systems, and on how efficiently the money is spent. A mechanical approach on the question of identifying productive expenditure should therefore be avoided and it seems more appropriate to start from the needs of individual countries instead. At the same time, partial analyses can also improve understanding of the linkages between public expenditure and growth. The remainder of this paper performs such analysis with respect to the composition of public expenditure and the impact of the institutional process in steering the composition of public expenditure.

3. Trends in public expenditure: 1970-2004

3.1 The economic classification of public expenditure: 1970-2004

Figures 1 and 2 show the dynamics of the main components of public expenditure since 1970 for EU15 countries,⁶ both as a percentage of GDP and as a percentage of total expenditure. Figure 1 shows how total expenditure rose quickly during the Seventies, reached a peak in the early Nineties, and by 2004 had fallen to the level of the early Eighties. Over the period of 1970 to 2002 as a whole, the largest increase is recorded in the category of *transfers*⁷ (+5.7 percentage points, both as a percentage of GDP and total expenditure). The category of interest payments also shows strong dynamics, increasing sharply up to 1992 (+3.7 p.p. of GDP and +6.0 p.p. in total expenditure), and then declining strongly, while still showing and increase over the period 1970-2004 as a whole (+1.8 p.p. of GDP and +1.3 p.p. in total expenditure). Final government *consumption* also increased as a percentage of GDP (+4.4 p.p.), but saw its share in total expenditure declining (-0.3)p.p) given the rise in total expenditure since 1970. The biggest decline is recorded for the category of *public investment* (-1.8 p.p. of GDP and -6.2 p.p. in totalexpenditure), reaching a low of 4.6 per cent of GDP in 1997 and then slightly increasing to 5.0 per cent of GDP in 2004. Finally, the category of subsidies also declined both as a percentage of GDP (-0.3 p.p.) and as a percentage of total expenditure (-1.5 p.p.). Overall, these data show that the composition of public expenditure has shifted from public investment and subsidies to transfers and interest payments over the period 1970-2004.

Regarding the explanatory factors of these changes, the major factor that has put total expenditure upwards during the Sixties and Seventies has been the establishment of the welfare state, including expenditure on public pensions, income support, health care and education. See, e.g., Tanzi and Schuknecht (2003): most spending growth has been absorbed by expanding social programmes and has often taken the form of cash *transfers*. As for the dynamics in the other components, the development in *interest payments* is, of course, related to the build-up of debt and the subsequent improvement in fiscal discipline and convergence of interest rates in the run-up to EMU during the Nineties. The long-term decline in *public investment* since the Seventies is analysed in detail in EC (2003a).

It points to factors such as economic development and structural change (with developed countries already having acquired a high stock of physical capital) and the changing boundaries between public and private investment, which are in part linked to processes of privatisation. Expenditure on public investment is also of a more discretionary nature than other items that reflect a high degree of past-related

⁶ 1970 was chosen for reasons of data availability. For an evaluation of the public spending over a longer time frame, see Tanzi and Schuknecht (2000).

⁷ In terms of ESA95, transfers is social benefits other than social transfers in kind; public investment is gross fixed capital formation; consumption is final consumption expenditure.





Source: Commission services.

Countries included are BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE and UK.

Figure 2

Economic Classification of Public Expenditure (percent of total expenditure)



Countries included are BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE and UK.

commitments, and some of the decline in public investment also appears to be related to efforts to consolidate public finances.⁸

3.2 The functional classification of public expenditure: 1991-2002

Figures 3 and 4 show the development of the main items of the functional classification of public expenditure over time, for a subset of eight Member States for which data are available since 1991 (BE, DK, DE, EL, IT, LU, PT, UK). Over the period 1991-2002 as a whole, the biggest increase was recorded in social protection (+1.7 p.p. of GDP and +6 p.p. in total expenditure). Expenditure on social protection increased the most during the early Nineties, reaching a high in 1996 and then declining slightly. However, the share of expenditure on social protection in total expenditure continued to increase until 2000 given that total public expenditure declined. *Health* care expenditure also increased, by +0.5 p.p. of GDP and +1.9 p.p. in total expenditure. Expenditure on education remained stable at 4.8 per cent 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.

Apart from the fact that these functional data show no overall decline in the welfare state in recent years (see also Lindert, 2004), the rise in *health* care expenditure is another remarkable feature of expenditure developments. In this respect, the literature has pointed to factors such as technological progress (See Jones, 2004: "medical advances allow diseases to be cured today, at a cost, that could not be cured at any price in the past"), social preferences about longevity and the consumption of non-health goods and services (see Hall and Jones (2004): "the account that emerges is that the marginal utility of non-health consumption diminishes faster than the marginal utility of health spending. As a result, the composition of total spending shifts towards health"), and ageing populations (EPC, 2003). Regarding expenditure on education, EPC (2003) draws attention to the fact that expenditure did not decrease its share in GDP despite the sharp fall in the number of young persons in most countries. This is attributed to policy measures to improve the quality of education via a lowering of the pupil/teacher ratio, to inefficiencies in expenditure, or to the labour intensive nature of education provision, which may result in faster cost increases than in the economy as a whole. The decline in expenditure on general public services - which includes interest payments and other expenses related to debt, expenses related to executive and

⁸ In addition, the European Commission (2003a) finds no clear-cut link between changes in investment ratios and the provisions of the EU framework for fiscal surveillance.

Figure 3

Functional Classification op Public Expenditure (percent of GDP)



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

Figure 4

Functional Classification of Public Expenditure (percent of total expenditure)



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

legislative organs, financial and fiscal affairs, external affairs and, foreign economic aid – is largely consistent with the decline in interest payments as reported in Figure 2. Finally, the decline in the category of *economic affairs* – which includes covers items such as support programmes and subsidies to mining, manufacturing, agriculture, energy, and services industries – is in line with the decline in spending on subsidies.⁹

Taken together, the long-term trends of expenditure increases on transfers/social protection and decreases on public investment have clearly led to worries that the composition of public expenditure might have become less supportive to long-term growth over the last decades. The agreed policy recommendation to redirect public expenditure towards growth-enhancing investment in physical and human capital, as mentioned in the introduction to this paper, can therefore be seen as a direct response to these trends. The question is: how to evaluate actual trends in the composition of public expenditure in this respect since the start of the Lisbon strategy in 2000?

4. Redirecting public expenditure: The Lisbon experience

The policy prescription of *redirecting* public expenditure towards productive items implies that increases in productive expenditure need to be compensated by decreases in other expenditure categories. Therefore, it seems appropriate to use relative changes in expenditure categories -i.e. expenditure as a percentage of total expenditure - as a yardstick for evaluating changes. Using this yardstick would imply that an *increase* in total expenditure due to a rise in expenditure on public investment would classify as redirecting, just as a *decrease* in total expenditure due to a reduction in other categories such as transfers or interest payments.

Table 2 evaluates changes in the composition of public expenditure since the late Nineties. On the horizontal axis it measures the size of relative changes in the composition, while on the vertical axis it shows the main components of public expenditure, as part of the economic and functional classification of public expenditure. Data have been measured as averages over 1998-99 and 2002-03/4, in order to avoid that developments in a particular year (e.g. elections) heavily influence the measured changes.¹⁰

Based on the economic classification, interest payments show by far the biggest relative *decrease*, except from countries that saw their debt increasing (DE, FR), where debt remained relatively constant (AT, PT) or that have low debt (LU). In addition, NL and UK show strong decreases in transfers, whereas public

⁹ For a breakdown of the expenditure data of the functional classification of pubic expenditure into the economic classification, see Revelin (2003).

⁰ 2000 has not been used as a starting year given that the data are influenced by the UMTS sales in this year while 1997 is not included given that during this year special consolidation efforts related to qualification for EMU where made.

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Averages 2003/4 ve	ersus 199	98/99 (Ecoi	nomic	Classif	ficatio	n) and 200	2/3 versus	5 1998/99	(Functi	ional Cla	ssification)
Economic classification:	-10.0	-5.0	-2.0	-1.5	-1.0	-0.5	+0.5	+1.0	+1.5	+2.0	+5.0	+10.0
Subsidies				DE	SE, IE	FI, NL, IT, LU, DK, ES, FR, EL	PT, AT, BE, UK					
Interest payments	EL	IE, SE, IT, BE, NL, ES, UK, DK, FI		PT	DE, FR, AT	LU						
Public investment		PT			AT, DE	BE, SE	DK, LU, FI, IT	FR, UK, EL, ES	NL	IE		
Consumption						LU	AT, DE, FR			DK, PT	EL, ES, FI, UK, SE, IT, BE, NL	IE
Transfers		UK, NL		FI		ES, FR	IE, LU, DK	BE, IT, SE		DE, AT, EL, PT		
Functional classification:												
Economic affairs		PT		DK, FR		DE, IT, FI	ES, BE	SE, LU	NL, UK, AT	EL, IE		
Education						DE, FR, LU, PT	BE, ES, EL, SE, AT, NL, IT	IE, FI, DK, UK				
Health				EL, AT		ES	LU, DE	PT, DK	NL, BE, FR, FI	UK, IT, SE, IE		
General Public Services	EL	IE, SE, IT, NL, UK, DK	BE, AT	ËS	FI, DE	LU	PT	FR				
Social Protection		IE	UK, FR, NL			FI	ES, BE, LU	IT, DK, DE	AT	EL, SE, PT		

Relative Changes in Composition of Public Expenditure: Averages 2003/4 versus 1998/99 (Economic Classification) and 2002/3 versus 1998/99 (Functional Classification

Source: Commission services.

Note: Changes are measured in percentage points of total public expenditure.

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investment declined heavily in PT. The biggest *increases* in expenditure are recorded for most countries in the category of consumption, while several countries also recorded substantial increases in transfers (DE, AT, EL, PT). and noticeable relative increases in public investment (FR, UK, EL, ES, NL, IE).

In terms of the functional classification, many countries show decreases in general public services (which includes interest payments) and increases in health care. The picture for social protection is more mixed, with substantive relative decreases in IE, UK, FR and NL and substantive increases in SE, EL and PT. Furthermore, IE, FI, DK and UK show noticeable relative increases in public expenditure on education.

Overall, while strong decreases in interest payments have been used mainly for relative increases in consumption, several countries also saw strong increases in transfers. Results for the categories of public investment (which could be used as a proxy for investment in physical capital) and education (which could be used as a proxy for investment in human capital) show a mixed picture, but more countries show relative increases than decreases. Finally, given that strong relative decreases in interest payments cannot last, it seems that the process of redirecting will have to involve decreases in other categories of public expenditure, *i.e.* mainly transfers and consumption. However, these are the categories where, in the absence of policy changes, underlying pressures for expenditure increases will remain the highest.

5. Redirecting public expenditure: the role of budgetary institutions

5.1 Redirecting public expenditure between broad expenditure categories

Long-term projections indicate that, in a no-policy change scenario, ageing populations will lead to an increase in public spending of between 3 and 7 percentage points of GDP up to 2050 in most Member States (EPC, 2003). In particular spending on pensions (increase between 3 and 5 p.p. of GDP up to 2050) and health care (between 1.4 and 4 p.p.) show strong upward pressures. Such mechanic projections imply strong dynamics in the composition of public expenditure away from any reasonable proxy of productive expenditure. As a result of these – and other¹¹ – projections, a growing literature has investigated possible policy reactions in response to increasing pressures on the public sector. A first strand of this literature focuses mainly on institutional reform for improving expenditure control and the efficiency of public spending (e.g. Atkinson and van den Noord, 2001, Joumard *et al.*, 2004, EC, 2004a), while a second strand concentrates on options for policy reform or increasing market solutions (CPB, 2003, Lindert, 2004, Tanzi, 2004, Schuknecht and Tanzi, 2004).

¹¹ See Heller (2003) on the impact of a range of factors such as ageing populations, climate change and technical progress.

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The purpose of this section is to contribute to the first strand, from the perspective of the agreed policy recommendation to introduce institutional mechanisms for improving the control and efficiency of public expenditure, as mentioned already in the introduction. The starting point is a possible link between Medium Term Expenditure Frameworks (MTEFs) and expenditure rules and the ability of countries to redirect public expenditure. This is based on the hypotheses that effective medium-term expenditure frameworks facilitate the reallocation of public expenditure by extending the planning horizon and improving the consistency in the implementation of expenditure priorities. When embedded in a medium-term framework, expenditure rules may also contribute to containing expenditure categories subject to underlying upwards pressures (e.g. health, pensions) and protect future-oriented expenditure – for which the degree of discretionary decision-making often is large - from being crowded out (e.g. public investment). In this respect, Schick (2002) argues that medium-term expenditure frameworks can be used to facilitate reallocation between broad expenditure categories, by permitting some sectors increases above the baseline projections while other should produce decreases.

Thus, is it true that countries with more advanced institutional frameworks for managing public expenditure show better results in terms of redirecting public expenditure? In order to address this question, the Appendix shows the results of an empirical investigation by the European Commission into the design of expenditure rules (European Commission, 2003). Results in the first column (coverage of expenditure items), the fourth column (date of introduction) and the fifth column (time span) show that expenditure rules that cover all or a substantial part of central government expenditure, and that are embedded in a medium-term framework, were reported for BE, DK, DE, FR, IT, NL, FI, SE, and UK. In most (but not all) cases these reforms were introduced at the end of the Nineties, while ES introduced a multi-annual framework for medium-term budgeting in 2003.¹² Of those countries, the rules were perceived to have had a significant impact on expenditure developments in NL, FI, SE and the UK (see last column "experience with the rule"). No clear judgement on the experience with the rule could be given for BE and DK (difficult to judge adherence given definition of target over a number of years) and ES, IT (too early to assess given recent introduction of the framework). Finally, it was not possible to detect a restraining impact in FR (no enforcement, original objectives not respected) and DE (ceiling not respected in 2002). These findings are in line with those of Dában et al. (IMF, 2001) that state that FR, DE, IT and ES have not been at the forefront of recent experimentation with multiyear fiscal frameworks and argue that these countries should place more emphasis on spending rules. However, as indicated, ES has introduced such a framework in 2003.

¹² Unfortunately, this survey did not cover expenditure rules for individual expenditure categories. Therefore, a follow-up survey might investigate the link between the ability to redirect public expenditure and experience with expenditure rules and medium-term projections for specific categories of public expenditure.

In principle, it would be difficult to establish a direct link between institutional reform and fiscal policy outcomes, given that expenditure outcomes are driven by a range of other factors (e.g. ageing, unemployment, policy reforms) so that the effects of institutions can be overshadowed by the effects of other factors. It is noteworthy, however, that all countries that have been at the forefront of institutional reform (*i.e.* ES, NL, FI, DK, SE and UK) also managed to redirect their public expenditure towards public investment and education.¹³

5.2 Redirecting public expenditure within broad expenditure categories

Apart from redirecting public expenditure *between* broad classes of public expenditure, which requires the identification of priorities and political decision-making at the highest political level, redirecting public expenditure can also take place *within* broad classes of public expenditure. See Schick (2003): a relaxation of input controls can give managers and agencies more freedom to use their expertise in finding and the designing the best programmes. In return they will be held more accountable for the achieved results. Such institutional reforms to the budget process shift attention from public expenditure by achieving expenditure savings while maintaining or improving performance in terms of policy outcomes (*i.e.* improving the allocative efficiency of scarce public resources). In this context, Section 2 already indicated that the productive effects of public expenditure ultimately depend on policy outcomes achieved (positive spillover effects from better infrastructure, better educated population, etc.) and not necessarily on the amount of money spent.

The question thus arises which countries have introduced institutional reforms for increasing the focus on policy outcomes, and whether this may qualify conclusions reached so far.¹⁴ In this context, the literature on performance budgeting stresses that a tight budget constraint is a precondition for performance budgeting 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. In this respect, the available empirical data for EU countries in EC (2004a)¹⁵ indeed confirm that the countries that are more advanced in introducing

¹³ With the only exception of public investment for SE, which shows a small relative decrease.

¹⁴ A different question concerns the effectiveness of reforms of performance budgeting. To summarise, much of the literature on performance budgeting stresses the importance of moving "beyond rhetoric" and giving a balanced assessment of what can and has been achieved through such reforms. Still, Moynihan (2003) points out that 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, while 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.

¹⁵ On the basis of the OECD/Worldbank Budgeting Practices and Procedures Database.

institutional reforms related to performance budgeting (ES, NL, FI, DK, SE, UK) indeed also introduced medium-term expenditure frameworks.

6. Conclusion

Overall the available data indicate that the countries that have put stronger emphasis on institutional reforms for controlling public expenditure within medium-term expenditure frameworks (i.e. ES, NL, FI, DK, SE, UK) have also introduced institutional reforms for increasing the focus on policy outcomes and improving the efficiency of public expenditure. It would be difficult to establish a direct link between institutional reform and the degree to which expenditure has been directed towards productive items, not only since expenditure outcomes are driven by a range of other factors (e.g. ageing, unemployment, policy reforms) but also given the lack of a direct measure of productive expenditure. It is noteworthy, however, that countries that have been at the forefront of institutional reform (i.e. ES, NL, FI, DK, SE, UK) also managed to redirect their public expenditure towards public investment (as a proxy of physical capital) and education (as a proxy for human capital). Finally, some countries that recorded large decreases in interest payments (EL, IT) mainly used this room for manoeuvre for increasing expenditure on government consumption and on transfers, while opportunities for redirecting were more limited in other countries due to a relative increase in interest payments linked to increasing budget deficits (DE, FR).

APPENDIX

THE FEATURES AND IMPLEMENTATION OF EXPENDITURE RULES WITHIN MEMBER STATES

	Expendit- ure item	Definition of target	Level of application	Date of introduction	Time span	Action in case of non-compliance	Exceptions to rule in case of economic shocks	Experience with the rule
BE	Primary expenditure	Annual real growth rate to 1.5 per cent, in the medium term	Originally: federal government and social security (entity 1). From 2001 onwards: federal government	First mentioned at end of 1998 as "point of reference"	Medium term (time frame as covered by stability programme)	No measures specified <i>ex ante</i>	No automatic exceptions specified <i>ex ante</i>	Limit was respected in 2000 and 2001, but not in 1999. Difficult to judge adherence given status of medium term benchmark
DK	Public consumption	Annual real growth rate to 1 per cent on average during 1999-2005	Central government	First mentioned in 1997, but became fully binding in 1999	Multi-annual rule (three years)	No measures specified <i>ex ante</i>	No automatic exceptions specified <i>ex ante</i> . However, discretionary revisions of target have taken place, e.g. in 2001 when target was raised from 1 per cent to 2.2 per cent	Difficult to judge adherence, given specification of average target over several years and revisions of the target during that period. New government is implementing system that aims at recuperating slippage in subsequent years
DE	Overall expenditure	Annual nominal growth rate to be agreed on yearly basis by Finanzplanungsrat (FPC)	Central, regional and local governments	Beginning of the Eighties	Current and following four years	From 2004 onwards, the FPC would discuss deviations and could agree upon recommendations	No automatic exceptions specified <i>ex ante</i> . However, discretionary revisions of targets have taken place, at least in downswings	Ceiling not respected in 2002; it remains to be seen how possible recommendations by the FPC on non-compliance would affect outcomes
EL	Compens- ation of employees	Recruitment norm 5:1 (one new recruitment for every five civil servants leaving service), except for health, education and armed forces where the norm is 1:1	Central government	1997	Indefinite	No measures specified <i>ex ante</i>	No automatic exceptions specified <i>ex ante</i>	Political commitment, not legally binding. Difficult to assess the implementation of the recruitment norm

	Expendit- ure item	Definition of target	Level of application	Date of introduction	Time span	Action in case of non-compliance	Exceptions to rule in case of economic shocks	Experience with the rule
ES	Non financial expenditure	Fixed ceiling set up annually in the budget Law	Central government	2003	Annually	No measures specified <i>ex ante</i>	This limit includes a contingency fund, set at 2 per cent within this limit, so as to meet unforeseen events in the budget. Therefore, any unexpected non-financial expenditure increases have to be met throughout this contingency fund and/or by decreasing other spending items	To be assessed since 2003 is the first year of application
FR	Total expenditure	Cumulative real growth rates, as established each year for the next 3 years	Mainly central government	1997	Medium term, rolling	No measures specified <i>ex ante</i> . These targets are not legally binding and are usually adjusted in medium term programmes of later years and the final budget for any particular year	No automatic exceptions specified <i>ex ante</i>	The original medium term objectives have not been respected. However, in general the increases fixed in the yearly budget have been respected, except in 2002
IE	Total expenditure	Annual nominal growth of 4 per cent on average during 1998-2002	Central government	1997	5 years of the government's term: 1998-2002	No measures specified <i>ex ante</i> . Target abandoned in budget for 2001as the ceiling of 4 per cent in nominal terms turned out to be ambitious given high nominal GDP growth	No automatic exceptions specified <i>ex ante</i>	Rule abandoned in budget for 2001 rather than adjusted to reflect higher than expected nominal GDP growth

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	Expendit- ure item	Definition of target	Level of application	Date of introduction	Time span	Action in case of non-compliance	Exceptions to rule in case of economic shocks	Experience with the rule
	Primary expenditure	Nominal ceilings or "safeguard rules" for all provisions included in all legislation introducing new and higher expenditures	General government	End 2002	Indefinite	Application of legislation is frozen until new legislation makes funding available	No automatic exceptions specified ex ante	Too early to assess. However, some evidence of a reduction in general government consumption on quarterly data
IT	Current primary expenditure of regions	In 2002, +4.5 per cent compared to 2000 engagements. In 2003, 2004 and 2005: 2002 absolute value + target inflation of DPEF	Regions	End 2001	2002-2004	None direct. Remote action only in case of EU sanctions following a breach of the Maastricht Treaty 3 per cent of GDP deficit threshold	No automatic exceptions specified ex ante	Too early to assess
	State funding of healthcare expenditure	Ceilings on expenditure by regions over a 3-year period. Revised in 2001: ceiling of \in 71.3 billion in 2001, with annual increases in 2002-04 equal to nominal GDP growth as estimated in the medium-term plan (DPEF)	Regions	2000	2000-2003 (revised target for 2001-04)	None. State-Regions agreement. However, any extra deficit should be covered by regions through own resources or by expenditure cuts	No automatic exceptions specified ex ante	The ceiling was not respected and a new agreement between state and regions was negotiated in 2001. According to provisional figures, the ceiling was breached also in 2001
NL	Expenditure as defined by the ceilings	Medium term real expenditure ceilings, translated each year into nominal amounts	General government	First introduced in 1994; adapted in 1998 and 2002	Medium term: coverage according to cabinet period	Commitment to offset overruns of expenditure ceilings by expenditure cuts	Specific rules formulated for dividing windfalls between lowering the deficit or the tax burden	General expenditure ceiling has been adhered to, but overruns have occurred as regards the specific targets for subsectors (health care). It is generally assumed that the framework has had a restraining impact on expenditure

	Expendit- ure item	Definition of target	Level of application	Date of introduction	Time span	Action in case of non-compliance	Exceptions to rule in case of economic shocks	Experience with the rule
	Administr- ative expenditure	Cuts in personnel, mostly through not replacing civil servants leaving for retirement	Central government	Previous rule: 2000 Forthcoming rule : 2003	End of legislation period (previous rule: 2003 in theory but government collapsed in 2002; for forthcoming rule: end of 2006)	No measures specified <i>ex ante</i>	No automatic exceptions specified <i>ex</i> <i>ante</i>	The planned personnel cuts were implemented as planned from 2000-02. Despite an increase in pension expenditure for public servants, it is assumed that this rule has had a restraining impact on expenditure
AT	Total expenditure	Budget balance rule. However, budgetary targets can be attained via expenditure side measures only	Regional and local governments	2001	End of the current financial equalisation	Financial sanctions similar to those of the excessive deficit procedure of the SGP, via revenue distribution mechanism between central and lowers levels of government	The flood disaster in 2002 led to a temporary suspension of the rule, <i>i.e.</i> not taking into account of flood-related expenditure in the years 2002 and 2003	Ceiling not respected in 2001. Not respected in 2002 but suspended for that year. In general, difficult to measure structural savings of regions
РТ	Compens- ation of employees	No new labour contracts in the central administration are to be signed unless authorised by the Minister of Finance	Central government	2002	Current legislature (2002-05)	No measures specified <i>ex ante</i>	The Finance Minister alone can override the freezing, in particular for sensitivity areas like health care	Too early to be assessed
FI	Total expenditure	Freezing real central government spending at the level of 1999 outcome	Central government on-budget expenditure excluding extra- budgetary funds (pension, etc.)	1999 but annual frames for central government spending were designed already at the beginning of Nineties	Cabinet period (1999-March 2003)	No measures specified ex ante	No automatic exceptions specified <i>ex</i> <i>ante</i> . However, declining government debt and falling unemployment have created leeway for additional expenditure	Overruns occurred in 2001 and 2002 and according to the 2003 spending guideline central government budgetary spending is estimated at €1.2 billion over the outcome of 1999. It is generally assumed that the framework has had a restraining impact on expenditure

	Expendit- ure item	Definition of target	Level of application	Date of introduction	Time span	Action in case of non-compliance	Exceptions to rule in case of economic shocks	Experience with the rule
SE	Primary expenditure plus expenditure for the old-age pension system outside the budget	Annual ceiling on nominal expenditure: expenditure covered by the ceiling should not rise faster than (projected) nominal GDP	Central government	1997	3 years ahead, rolling	Biannual monitoring required by the Budget Law. If there are signs of overruns (overall) the government shall prepare a proposal for correction	No automatic exceptions specified ex ante	The expenditure ceilings have been respected in each year since 1997 when they were first introduced. It is generally assumed that the framework has had a restraining impact on expenditure
UK	Departmental Expenditure Limits (DEL) ¹⁶	Government Departments are set spending plans for the level of nominal expenditure for three years ahead in so-called Comprehensive Spending Reviews (CSR). Parliamentary authority to spend must still be obtained each year	Government Departments	First launched under the 1998 CSR for the period 1999-2002. A new batch of three years was set in the 2000 CSR and again in the 2002 CSR	3 years. The CSR take place every two years – the third year of the previous exercise becomes the first year of the succeeding exercise	The DEL plans are binding, but they can be altered in the budget process and are subject to approval by government and parliament. Under- or overspending in one year can be offset in another year within the current 3-year batch	No automatic exceptions specified ex ante	The government's medium-term plans published in the Budget report, and which form the framework for DEL programmes, are required, under the terms of the Code for Fiscal Stability, to meet the government's fiscal rules. They have satisfied these rules so far

¹⁶ The two main parts of the UK's budgeting and control framework are DEL (Departmental Expenditure Limits) and AME (Annually Managed Expenditure). Government departments are given 3-year spending limits: the DELs. Any spending that cannot reasonably be subject to such multi-year limits is included in AME (e.g. social security spending, net payments to the EC). All AME projections for future years are estimates which are updated twice-yearly in the Budget and Pre-Budget Reports. Together, AME and DEL sum to Total Managed Expenditure (TME), a national accounts measure defined as public sector current expenditure plus net investment plus depreciation. In the attached tables, only DEL spending is included, since this is the only part of TME which is subject to multi-year limits.

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