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SUB-CENTRAL GOVERNMENT FISCAL RULES

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INTRODUCTION

Rules constraining the discretionary powers of budget policymakers have become widespread among OECD economies, and the expanding role played by decentralised institutions in providing public services has led to their increasing adoption at the sub-central level. Well-designed rules offer the means of achieving efficiency gains from local autonomy while facilitating fiscal consolidation, providing a cushion against economic shocks and meeting the objectives of sustainable longer-term finances – challenges made more pressing by the prospective demands on sub-central government services arising from ageing populations.

The paper draws on responses to a questionnaire distributed to members of the OECD *Network on Fiscal Relations across Levels of Government* and other sources to give a detailed picture of fiscal rules in place for sub-central governments in a number of countries. It examines the impact of fiscal rules, the factors making for effective implementation and the interactions between the various types of rule. It begins with a brief overview of the rationales for sub-central rules. This is followed by a definitional section, aimed at classifying fiscal rules by type, relying largely on the distinction between objective-setting rules and those concerned with implementation. The paper then examines the extent to which the choice of rules is conditioned by the institutional arrangements governing central-sub-central relations – the extent of revenue autonomy, expenditure responsibilities, the role of financial market oversight, and the political setting. The fifth section then looks at the trade-offs and side effects that fiscal rules can introduce and the extent to which they can be shaped to deal with these. The final section extends the analysis by using the questionnaire responses to create a number of synthetic indicators designed to assess the extent to which sub-central government fiscal frameworks exhibit favourable characteristics for the achievement of different fiscal objectives. A composite indicator is constructed, based on the combined impacts in the different areas of fiscal policy.[1]

RATIONALES FOR SUB-CENTRAL FISCAL RULES

Fiscal rules are a set of institutional constraints on policymakers' decision-making discretion. Such rules may be imposed on sub-central governments by a higher level of government, or sub-central governments may adopt them themselves where constitutional arrangements grant them the autonomy to do so. The four primary and inter-related objectives on which such rules impinge, and which are treated here, are: *i*) long-term *fiscal sustainability*, *ii*) short-term *economic stability*; *iii*) *aggregate efficiency*, in the form of balancing the marginal benefits of public spending with the marginal excess burden of taxes; and *iv*) the *allocative efficiency* of public spending, as reflected in the matching of public services to local preferences. Distributional objectives may also be affected by sub-central fiscal rules. However, the impact of rules on horizontal equity – the equalisation of resources among sub-central governments via the grant system – is not treated in this paper.

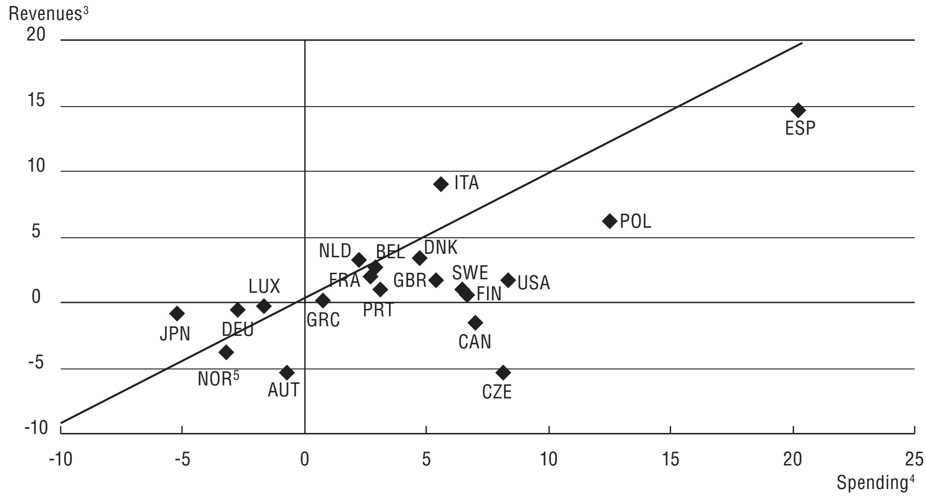
Fiscal rules have acquired greater importance as the autonomy granted to sub-central entities has increased. Thus, one factor influencing central government interest in such rules has been the wave of decentralisation, which has often seen the reassignment of spending responsibilities to sub-central governments proceeding in advance of increases in tax autonomy (Figure 1). Where they are allowed access to capital markets, sub-central governments without significant revenue raising autonomy are more likely to be perceived by lenders as borrowers that are implicitly guaranteed by central government.[2] The costs to the rest of the country of profligate fiscal policy can thus arise through the moral hazard of bail-outs from central government, rising overall borrowing costs and higher and more volatile public spending and tax rates.

For sub-central governments who have enjoyed borrowing autonomy and have adopted fiscal rules to restrain their own policymakers, the experience of fiscal crises has provided an important motivation for adopting such rules. For example, recessions in the early 1990s strained the existing fiscal frameworks in a few sub-central governments in Canada and Australia, spurring governments to adopt rules requiring balanced budgets and medium-term debt reduction or elimination. In other cases, the need for aggregate fiscal consolidation has been a motivation behind the introduction of fiscal rules. Setting borrowing targets in terms of the general government deficit made central government accountable for deficits and debt incurred by sub-central government actions under the European Union's Stability and Growth Pact (SGP) and Maastricht Treaty. In this context, several European countries have aligned domestic fiscal rules for sub-central government with their supra-national commitments.

Fiscal rules adopted to lock in long-term fiscal sustainability may also be advantageous for short-term stability where they provide the framework conditions needed for the effective operation of automatic stabilisers. However, certain types of rule may trigger destabilising discretionary action. For example, pro-cyclical fiscal policy at the local level emerged as a problem with respect to the first generation of cyclically unadjusted fiscal rules introduced in Canada and Australia, and more recently in Spain.

Figure 1. **Decentralisation in OECD countries**

Changes expressed in percentage points, 1985[1]-2003[2]



Note: Decentralisation is measured by the changes in the share of sub-central governments in total public revenues and spending.

1. Or earliest year available: 1987 for the United Kingdom, 1989 for Canada, 1990 for Japan, Luxembourg and the Netherlands, 1991 for Germany, 1993 for Sweden, 1994 for Finland, 1995 for Austria, Belgium, the Czech Republic, Denmark, Greece, Poland, Portugal, and Spain.
2. Or latest year: 2000 for Japan and 2002 for Denmark.
3. Excluding transfers received from other levels of government.
4. Excluding transfers paid to other levels of government.
5. The share of sub-central revenues is expressed in percent of total government mainland revenues.

Source: OECD National Accounts database; Statistics Norway; Statistics Canada; US Bureau of Economic Analysis.

In a number of countries the motivation for examining and implementing fiscal rules has arisen from concerns related to the adverse effects of central-local co-ordination problems on the overall size of the public sector. When sub-central governments possess a degree of tax autonomy and there is no tax competition between them, the marginal excess burden of taxation exceeds the marginal benefit of public spending leading to losses in aggregate efficiency. In a decentralised setting, spending may rise to sub-optimally high levels, when sub-central policy-makers face incentives to increase their spending beyond what is economically efficient due to the attenuation of the link between the geographical benefit of spending and burden of taxation. Alternatively, a degree of irreversibility of public spending decisions can give rise to expenditure drift, leading to an inefficiently large size of government.

A final consideration motivating the adoption of fiscal rules is the contribution they may make to promoting allocative efficiency in sub-central government spending in the absence of market mechanisms. The use of fiscal rules, as opposed to administrative controls, provides sub-central governments with much more fiscal autonomy, and thus allows them to better respond to local demands. For example a prudential, rules-based borrowing regime may substitute for the requirement that sub-central authorities obtain prior central government borrowing approval, thereby enhancing local discretion. In a similar vein, funding formulae based on set criteria can allow greater scope for local choice while meeting broadly-defined national priorities and achieving distributional objectives. Such rules may be reinforced by imposing performance targets, thus imposing an element of "best practice". However, where these become too detailed – as when performance budgeting leads to a proliferation of targets – they may actually serve to re-impose central authority and limit local autonomy, so that the allocative efficiency benefits of decentralisation may not always be achieved.

A TYPOLOGY OF FISCAL RULES IN OECD COUNTRIES

There are two broad types of fiscal rules used in OECD countries. The first sets intermediate objectives that contribute to meeting the overarching fiscal policy goals set out in the preceding section. These rules include setting requirements for budget balances, constraints on debt accumulation, and limits on the ability to increase spending or the tax burden (these are often referred to collectively as tax and expenditure limits or TELs). The second type of rule is one concerned with the process of implementing objective-setting fiscal rules. These include requirements for accounting transparency, reporting and monitoring, the possible sanctions, and in certain circumstances the establishing of mechanisms that relax the stringency of objective-setting fiscal rules.

This section documents the results of a questionnaire sent to the OECD *Network on Fiscal Relations across Levels of Government* in early 2005. This questionnaire requested information on the types of fiscal rule and associated regulations that are currently in use. This section also draws on the information contained in Joumard and Kongsrud (2003) and the results of previous questionnaires sent to senior budget and tax officials, as well as other sources.[3] In order to simplify presentation in the following tables, intermediate tier governments (states, provinces, territories, länder, regions or counties) are labelled "states", while lower tier governments (local, municipal, communal) are designated as "local".

Budget balance requirements and borrowing constraints

At the sub-central government level, budget balance requirements can vary across several dimensions (Table 1). The first relates to the targeted aggregate (Panel A). A common objective for sub-central governments is one that encompasses the current budget and capital account (and off-budget items in the case of

Table 1. **Budget balance requirements**

A. *Coverage and duration*

	Current budget balance	Current budget balance and capital account	Current budget balance, capital account and off-budget items
Annual	Germany local Japan local Netherlands local Italy state France local New Zealand local Sweden local Switzerland local	Canada state Czech Republic local Denmark local France local Germany state Korea local Portugal local Turkey local	Canada state Poland local
Multi-annual	Canada local Finland local Norway local	Canada local Spain local	Austria state Spain state

B. *Budget concept used for application of rule*

	Submitted budget	Approved budget	Realised budget with carry-over allowed	Realised budget with no carry-over allowed
Imposed	Czech Republic local Turkey local Greece local Poland local	France local Korea local Portugal local	Canada local Norway local Finland local New Zealand local Sweden local	Denmark local Germany local Netherlands local Spain local Slovak Republic local
Negotiated binding			Austria state	Spain state
Self-imposed	Poland local Switzerland state	Canada state Germany state Japan local	Canada state	Canada state

Austria, some Canadian provinces, Poland and Spain). Targeting the current budget alone, which allows sub-central governments to borrow for public investment, is also common among countries. The restriction that borrowing is limited to financing (net) investment is sometimes referred to as the "golden rule" of public finance. The relevant time horizon for budget balance requirements is overwhelmingly annual, though in Austria, Canada (local), Finland, Norway, and Spain the budget periods have moved to a multi-annual basis, partially following trends in central government budgetary practice. In Spain, the budget period is three years, with specified annual targets. In the Netherlands, if a municipality experiences a deficit, the higher level of government can allow this as long as the budget is in balance over a three year period. If this is not the case, a municipality needs to submit budgets to higher levels of government for approval.

In almost all cases, budget balance requirements are imposed by higher levels of government (Panel B). Self imposed requirements are restricted to mid-tier governments in explicitly federal states, Poland and Japan. In Austria and Spain, fora that bring representatives from central and sub-central governments are instrumental in setting or approving the budget balance requirements. Most of the respondent countries noted that budget balance requirements apply to budgetary outturns, often with no carry-over allowed. In the Czech Republic and Turkey, the constraint only applies to proposed budgets. Furthermore, in the Czech Republic the budget can include projected deficits, but only in the case of drawing on accumulated surpluses or by contractually guaranteeing resources for repayment. In France, Korea and Portugal, approved budgets need to be balanced.

Borrowing constraints – typically imposed by a higher level of government – cover a range of restrictions on sub-central government recourse to debt financing (Table 2, Panel A). In the most restrictive cases, borrowing may not be allowed at all (as in Denmark, or in Korea and Spain for current expenditure). In Poland, no borrowing is allowed if general government debt levels exceed 60% of GDP. The requirement of prior approval from higher levels of government is also quite widespread, including permission to borrow in foreign currency as in Mexico and Turkey. The need for prior approval on a project-by-project basis is gradually being relaxed in OECD countries, such as Mexico which abandoned such a system in 2000. In Japan and Korea the formal requirement to obtain permission from a higher level of government is being relaxed. In Norway and Spain, prior authorisation can be imposed when sub-central governments breach agreed deficits or the proposed borrowing is substantial. In Belgium, in large part due to complicated inter-governmental relations, there are no explicit sanctions for breaching consensual targets set by the *Conseil Supérieur des Finances* (CSF) for each local government and local government as a whole. However, legislation permits the federal government to limit borrowing by non-compliant regions for two years. A few countries apply limits on borrowing for specific purposes. For example, in Spain, local authorities can borrow up to 30% of current revenues to cover short-term liquidity needs, while long-term borrowing is restricted to capital investment. No constraints on access to borrowing are applied in the Czech Republic, Finland, the Netherlands, and Japan. In interpreting this information, it should be kept in mind that strict budget balance requirements may also have the effect of eliminating in practice the need for borrowing constraints.

The majority of countries that submitted responses impose numerical constraints on sub-central government borrowing. Examples include debt levels, limits on the rate of new debt creation, and indicators of debt servicing costs (Table 2, Panel B). In Japan, Korea, and Portugal borrowing is constrained by all three types of numerical constraints. In addition to the countries in the table, central governments impose borrowing restrictions on sub-central governments in Belgium,

Table 2. **Borrowing constraints**

A. *Access conditions*

	Prohibited	Prior approval is required	Restricted to certain purposes	No restriction on access to borrowing
Imposed	Denmark local Korea local (current)	Canada local Japan (capital) Korea (capital) Spain local (capital) Turkey local Greece local Ireland local Luxembourg local Mexico local United Kingdom local	Germany local Norway local Spain local (capital) Portugal local Canada local France local Hungary local Italy state and local Slovak Republic	Canada state Czech Republic local France local Netherlands local[1] Japan local (current) Poland local
Negotiated binding	Spain region (current)	Spain region (capital)		
Self imposed			*Switzerland state*	Canada state

1. In the Netherlands, only local governments with balanced budgets can borrow and only in euros.

B. R*estrictions on borrowing and guarantees*

	Numerical constraints				Guarantees			
	None	New borrowing	On debt level	On debt service	None	Exceptional basis	Case-by-case basis	Yes
Austria	√				√			
Canada state		√	√		√			
Canada local			√	√				√
Czech Republic				√		√		
Denmark					√			
Finland	√					√		
France		√			√			
Germany state	√				√			
Germany local		√			√			
Iceland				√	√			
Japan		√	√	√	√			
Korea		√	√	√	√			
Netherlands				√	√			
Norway	√				√			
Poland			√	√			√	
Portugal		√	√	√	√			
Spain state		√	√		√			
Spain local					√			
Turkey				√			√	

Greece, Ireland, Luxembourg, and the United Kingdom. Higher levels of government rarely explicitly guarantee sub-central government debt, but such guarantees are available from most Canadian provinces for municipal borrowing, on a case-by-case basis in Turkey and Greece and in exceptional cases in the Czech Republic and Finland.

An additional channel for sub-central borrowing that may not be fully captured in objective setting fiscal rules for the budget may operate through the ownership and control of local enterprises and banks. Ownership or control is quite widespread with respect to enterprises, including public utilities. In Canada, Denmark, Germany, Korea, Portugal and Spain additional limitations on borrowing by and from these enterprises may also be required. Around a half of the sub-central governments report some ownership or control of banks. Only in Germany were special restrictions on local government borrowing from these banks noted, though banking regulation on connected lending would most likely apply in other cases. In the Netherlands and Norway sub-central governments have ownership stakes in a national municipal bank, while in Denmark municipalities jointly own "KommumeKredit". In the Czech Republic, while bank ownership by a sub-central government has occurred this is not currently the case.

Budget balance requirements and borrowing constraints have very similar effects, in that they essentially set objectives for the flow and stock of debt. Although the empirical evidence is mixed, several studies have shown that a budget balance requirement can help ensure sub-central debt is maintained at levels that are consistent with the long run sustainability of fiscal policy. The evidence for the United States tends to suggest that states with more stringent budget balance requirements have lower levels of debt. Budget balance requirements have also been associated with smaller deficits and more rapid financial adjustments to shocks, particularly on the expenditure side. Tighter conditions, such as whether the rule is more difficult to override (*i.e.* whether the requirement is written into the state constitution), have also been associated with lower borrowing costs.[4] While most of the empirical evidence comes from the United States, studies relating to Canada, where fiscal rules were self-imposed by some provinces during the 1990s, and some developing countries support these findings.[5] Similarly, a borrowing constraint that targets the level of debt is in principle well suited for respecting sustainable fiscal policy, though in practice defining the optimal level of debt is difficult.[6] The empirical literature has revealed that borrowing constraints can have an impact on debt dynamics being linked to smaller deficits. Stricter borrowing rules are associated in several studies with a smaller the size of government debt and where financial markets are an important source of financing with lower borrowing costs, though this is not found in all studies.[7]

Tax and expenditure limits

Tax and expenditure limits (TELs) have a long history in public finance, dating from the late nineteenth century and have regained popularity recently. Following the rapid expansion in their use during the "tax revolt" across the United States that followed a referendum on property tax rates in California in 1978 (Proposition 13), most US states now have some self-imposed form of TEL, mainly on property taxes.[8] Elsewhere, and more generally, most OECD central governments impose limits on tax rates or reliefs that can be set by sub-central governments. The tax limit is usually in the form of an explicit limit on tax autonomy, but in Denmark, Japan and Mexico, sanctions are used to restrain increases in tax rates. The tax limits imposed in some US states and also the United Kingdom target the revenue raised from a specific tax base or the annual increase in revenue from a given tax base.

The degree of sub-central tax autonomy may be assessed in relation to how much control the sub-central government has over tax raising. Thus, the least restrictive is full autonomy in setting the rate and reliefs (that is both tax allowances that modify the tax base and tax credits that are deductible from tax payables). Slightly more restrictive is possessing control over either the tax rate or reliefs, but not both. The degree to which the sub-central authority has control over how shared taxes are allocated may also affect tax autonomy. It should be noted that in some cases central government control over shared taxes may in effect be equivalent to central government control over tax rates and reliefs. Using this approach, the questionnaire – in conjunction with an earlier survey of tax autonomy – reveals that most sub-central governments possess some tax autonomy, typically over the rate or reliefs, though not always both (Table 3). Lower-tier governments tend to have less tax autonomy. These data give the broad overview, though in some cases the actual autonomy is tempered somewhat. For example, although in Belgium regions can levy supplements on national taxes, they have to consult central and other regional governments first. In the United Kingdom, the central government can "cap" the revenue from the sole tax over which sub-central governments can exercise autonomy in cases where expenditure growth is deemed excessive.

Explicit limits on expenditures are rare in OECD countries (Table 4). Only in Germany, Korea, Portugal and Turkey are expenditure limits binding on sub-central government. In Korea, they are quite detailed in determining different expenditure categories and associated unit costs. In Turkey, the expenditure limits mainly restrain sub-central government personnel costs. Expenditure limits are often linked to income, inflation or population growth (or to a needs-based criterion), or some combination of these (such as in Korea). Limits can also be set in terms of ceilings on expenditures. Furthermore, they can be set for annual or multi-annual periods. One of the possibly most restrictive rules is the requirement to hold referenda for expenditure above a given threshold (in some cantons in Switzerland). There are also less formal agreements in place in a number of countries that have a similar effect to expenditure limits. For example, Denmark has set longer-term targets of the desired annual nominal growth rate of sub-central government expenditure, including recommendations on capital spending. In Japan, the Netherlands, Poland, and Spain (local), expenditure limits are self-imposed.

Table 3. **Tax limits**

Per cent of sub-central tax revenue

	Sub-central government autonomy over		Taxes are shared			Central government control
	Rate and reliefs	Rate or reliefs	With consent	By stable formula	Decided on an annual basis	
Questionnaire responses						
Australia state	100					
Australia local	100					
Belgium local	46.6	51.3				2.1
Czech Republic	5.5	4.1		88.8		1.5
Denmark		90.5		3.0		6.5
Finland		89.9			9.9	
France	72	17.8				1.2
Germany state		2.4		86.3		11.3
Germany local		33.6		47.6		1.0
Greece		64.7	35.4			
Italy		55.9				44.1
Japan		79.7				20.2
Korea		64.3				35.7
Norway		88.0				
Portugal		21.0				73.4
Spain state	53.7		43.2			
Spain local	2.9	74.5				18.5
Switzerland state	100					
Switzerland local	3	97				
Turkey						100
OECD data						
Austria	2	98				
Hungary local		30			70	
Iceland local	8	92				
Mexico local				74		26
Mexico states	14		86			
Netherlands		100				
New Zealand local	98					2
Poland local		46		54		
Sweden local	4	96				
United Kingdom		100				

Source: Questionnaire responses and OECD (1999).

In some Australian states, expenditure limits are applied within medium-term strategies. In Switzerland, some cantons have rules in place that require spending cuts when budget deficits increase.

The evidence shows that tax and expenditure limits can restrain the growth of spending (and taxation). In the United States, the period immediately following the enactment of such limits saw the rate of growth of expenditure slow. Though

Table 4. **Expenditure limits**

	Expenditure limits			
	Are not used	Are set for total spending	Are set for current spending	Are set for individual spending items
Imposed		Germany local Portugal local		Korea local Turkey local
Negotiated but non binding		Germany State Denmark local		
None	Austria state Canada state Canada local Czech Republic local Finland local France local Iceland local Norway local Poland local Spain state			

Note: Responses for Japan, the Netherlands, Poland and Spain (local government) noted that expenditure limits are self-imposed but gave no further details.

the longer-term impact is more ambiguous, the presence of a TEL is associated with smaller expenditure in relation to personal income.[9] As for their effects on borrowing costs, expenditure limits tend to be more effective in reducing these, stringent tax limits tending to be related to higher costs of credit, suggesting that tax limits are seen by financial market participants as introducing a greater risk of default.[10]

Process rules and rule implementation

A set of objective-setting fiscal rules does not necessarily constrain a government from reneging on these commitments in the future, by either changing or ignoring the rules or evading their strictures by manipulating accounts. In this light, the "commitment technology" is important as a means to make it costly for policymakers to resort to inappropriate discretion in the future. The degree of commitment largely depends on the impact of process rules that govern implementation. This type of rule – as opposed to objective-setting rules – includes the obligation to produce financial accounts (transparency); monitoring and reporting whether rules are being upheld; the sanctions levied on sub-central governments and officials in the case of violation; the difficulty in evading the rule's constraint by simply changing the rule, and special procedures that permit some flexibility in fiscal policy.[11]

Greater transparency is likely to complement objective-setting fiscal rules. Central governments themselves have increasingly attempted to improve transparency in recognition of its contribution to better policymaking. In some cases, there is good cause to seek improvements in transparency at the sub-central government level. For example, cash accounting is often the norm, reporting standards can vary across sub-central governments within a country and information may only be available with substantial delay. Conventional accounting practices do not capture the importance of off-balance sheet items or contingent liabilities if sub-central governments are implementing policy off-budget. This is an important consideration given that fiscal rules can create incentives for administrations to circumvent them through accountancy gimmickry.

The transparency of accountancy reporting standards varies considerably across the OECD (Table 5). In a number of countries no common reporting format exists and in a number of others the reporting standard is not harmonised with that of the central government. In most countries responding to the questionnaire there were requirements for independent auditing of accounts, though in some cases without apparent deadlines for submission. Sub-central governments report on implicit liabilities in only a handful of countries. In the case of the Netherlands,

Table 5. **Accounting for fiscal transparency**

	Reporting standard	Independent auditing	Submission deadline	Implicit liabilities reported
Austria	None	Yes		
Canada state	None	Yes	Yes/No	Yes
Canada local	None	Yes		Yes
Czech Republic	Uniform		Monthly	
Denmark	Common	Yes	6 months after budget year	Guarantees
Finland	Common	Yes	3 months after budget period	Guarantees and off-budget liabilities
France		Yes	Yes	
Germany state	Uniform	Yes		Yes
Germany local	None			
Iceland	Common	Yes		Yes
Japan	None			
Korea	Common	Yes		
Netherlands	Common			Yes
Norway	Common	Yes	Yes	
Poland	Uniform	Yes		
Portugal	Common	Yes	Yes	
Spain (state and local)	Uniform			
Turkey	Uniform		Yes	

Note: Common denotes that reporting standards are common for sub-central governments; uniform is for when both sub-central and central use the same reporting standards.

central government in agreement with the local authorities established a system of accrual accounting, which is also the object of reforms in Belgium.

An effective monitoring system is particularly important when the informational asymmetry between sub-central governments and both the population and higher levels of government is large. While many sub-central governments undertake the monitoring themselves, in a significant number of countries either a higher level of government or an external and often independent body is responsible for monitoring (Table 6). That is the case in Italy, the Slovak Republic and the United Kingdom and in all cases results are reported to the national legislature. In Spain, the Constitutional Court is responsible for deciding whether sub-central governments exercise their tax autonomy in accordance with the law. In some Australian states (Queensland, South Australia, and Australian Capital Territory) the fiscal frameworks have set objectives to maintain AAA credit ratings, thereby requiring external monitoring by credit rating agencies. Mexico has recently introduced a system that requires prospective sub-central government borrowers to obtain two credit ratings

Table 6. **Monitoring and reporting**

	Monitoring by			Reporting to			
	Sub-central government	Higher level of government	Other	Population	Sub-central legislature	Higher level of government	Other
Austria			√				√
Canada state	√			√	√	√	
Canada local		√				√	√
Czech Republic	√	√			√	√	
Denmark	√	√	√			√	√
Finland	√		√	√			
France		√	√	√		√	
Germany state	√		√	√	√		√
Germany local	√					√	
Iceland		√			√		
Japan	√	√		√		√	
Korea	√	√		√	√	√	
Netherlands	√	√			√	√	
Norway		√				√	
Poland	√	√	√	√	√	√	√
Portugal		√				√	
Spain state		√	√			√	√
Spain local	√	√				√	
Turkey	√	√			√	√	

When sufficient standardised information is available, the local population and politicians can play an enhanced monitoring role. This need not only be limited to observing whether budgets are in compliance with objective-setting rules, but also to observe whether budgetary policy is achieving its goals efficiently. Considerable progress has been made in several countries – notably Norway, Sweden and the United Kingdom – in devising standardised measures and making them publicly available. As such, benchmarking can have an effect in spurring sub-central governments in innovation and moving towards best practice in service delivery.

The design of effective sanctions is complicated, particularly when economic conditions change sufficiently to make rule observance problematic. Nonetheless, sanctions may be a necessary complement to other process rules in ensuring compliance. In the absence of effective sanctions, failure to meet targets may only lead to a change in the baseline for the target over the next budgetary period. The severity of the sanction itself is important in establishing the credibility of the rule, as there is likely to be an upper bound beyond which it is difficult to implement.[12] Financial sanctions, in particular, may lack credibility as sub-central governments in budgetary distress are often more likely to receive additional support. Alternatively, higher level governments may make recommendations, dictate corrective policy actions, or restrict the freedom of policymaking while the sub-central government is in breach of the rules. In some countries, individual budget officials may be held liable for failure to meet targets and suffer reductions in performance related pay (Canada is a notable example, where self-imposed sanctions can lead to officials' pay being cut by almost half in some states).

In the countries responding to the questionnaire, the availability of financial sanctions was reported in six cases (Table 7), though breach of fiscal rules can also have repercussions for eligibility for grants. In the Czech Republic, violation of the conditions surrounding the budget balance requirement incurs a fine, while breaching borrowing constraint procedures will lead to potential ineligibility for financial support from central government. In the case of Denmark, there is no explicit financial sanction, but the government has altered the grant allocation formula to impose a "tax" on the additional revenue raised by a county when it raises tax rates above those agreed with central government. Sweden operated a similar system in the late 1990s. The most frequent type of sanction applied when fiscal rules are breached is an administrative one, which either recommends or mandates action or limits the policy options for sub-central governments.

Permitting some closely-circumscribed flexibility in implementation would ease some of the problems associated with coping with unanticipated economic shocks. For example, enforcement difficulties may arise if the breach of the fiscal rule is due to fiscal policy which in the given situation is appropriate. In a number of cases, the rules described above have escape clauses that allow the sub-central

Table 7. **Sanctions**

	Higher level of government can					
	Impose financial sanctions	Sanction officials	Recommend actions	Mandate actions	Constrain actions	Other
Austria	√					
Canada state				√		
Canada local	√		√	√	√	
Czech Republic	√			√		
Denmark		√	√			
Finland						
France			√	√	√	
Germany state			√			
Germany local	√				√	
Iceland			√	√	√	
Japan			√		√	
Korea	√	√		√		
Netherlands			√	√	√	
Norway				√	√	
Poland	√		√	√		
Portugal					√	
Spain state						√
Spain local			√	√		
Turkey		√	√		√	

government to breach the rule in case of certain predetermined events. These reasons generally encompass large revenue shocks, downturns in the local economy, and the impact of natural or other disaster, as well as special cases, such as in Austria where judgements of the constitutional court or European Court of Justice that reduce revenue relax the budget balance requirement of the domestic stability pact.

Of particular importance are mechanisms that allow sub-central governments to deal with cyclical pressures on their budgets. Such mechanisms include access to off-budget funds or "rainy day" funds; facilities for sub-central governments to cut expenditures mandated by higher levels of government, and mechanisms that aim to smooth sub-central government revenue fluctuations. The system in Denmark has evolved to insulate municipal government finance from cyclical developments. In this system, central government transfers resources to the municipalities in line with sub-central governments' *projections* of revenue from personal income tax – which is their main source of tax revenue – with a reconciliation of accounts conducted two years later. In the Rhineland-Palatinate, a centrally-run stabilisation fund protects municipal governments from large swings in revenues.

STRUCTURAL INFLUENCES ON THE NEED FOR FISCAL RULES

The choice of an appropriate fiscal rule and to some degree whether one is needed is influenced by the wider budgetary setting. In particular, the expenditure responsibilities assigned to sub-central authorities and the degree of revenue autonomy they are given can make rules more appropriate and in other cases also create conditions that can lead to a deterioration of sub-central government fiscal policy which make aggregate rules difficult to apply. Financial market discipline can provide an independent constraint on sub-central governments, which may suggest that openness to borrowing could substitute to some extent for formal fiscal rules. Finally, political factors may interact with the need and effectiveness of particular fiscal rules.

Expenditure assignments

Where the provision of politically-sensitive services is in the hands of sub-central governments, pressure on an upper level government to renege on a "no bail out" commitment may be particularly intense and compounded if expenditure responsibilities are not clearly demarcated between central and sub-central governments.[13] For example, central government has been unable to resist pressure for compensating overruns of health spending, which is largely a sub-central government expenditure assignment, in Italy and of city housing in Sweden.[14] The expenditure assignment of health, education and social protection – possibly services that are among the more politically sensitive – vary substantially across some OECD countries, and in some cases sub-central governments are responsible for the provision of the bulk of these services. The assignments of social protection, in particular, can also introduce an element of (counter) cyclicality in sub-central government spending, which if not respected in the choice of fiscal rule can lead to highly uneven patterns of spending in the rest of the budget over the cycle.

A further complication that can emerge with the assignment of politically-sensitive expenditure to sub-central governments is that the intervention of higher levels of government may undermine the achievement of the allocative efficiency gains which should accrue with decentralisation. This is particularly so in the case of performance-based budgeting, for example, which should allow sub-central governments more autonomy in determining how to meet agreed strategic objectives. In the United Kingdom, difficulties in monitoring sub-central government performance, coupled with fears on the part of the higher level government that it would ultimately be responsible for failures in service delivery, led to an expansion of performance measures on a programme-by-programme basis that in effect reintroduces central direction.[15]

Demand and costs pressures for particular services are also important drivers of sub-central government spending and can complicate achieving national policy goals. In both Denmark and Finland, sub-central government expenditure has grown at far higher than expected rates over the past decade. In part, these increases are attributable to the provision of mandated services. In particular, unexpectedly strong growth in demand for services – often healthcare – has been a contributing factor, compounded by significant cost pressures in health and long-term care provision, where productivity gains are hard to achieve.

Revenue assignments

Granting sub-central governments some autonomy over (mobile) tax bases can introduce conditions that are conducive to tax competition, which can serve to restrain the growth in the aggregate tax burden and as such the overall size of the public sector.[16] This has been a notable feature and accounts for the lack of fiscal rules in many cantons in Switzerland until the 1990s. However, the restraint that tax competition introduces may leave sub-central government finances susceptible to debt accumulation when economic conditions deteriorate and as such may be inconsistent with guaranteeing the longer-term sustainability of public finances. While tax competition can lead to a degree of harmonisation in rates and reliefs, variations across jurisdictions can raise compliance costs. In this context, tax limits that require some or complete harmonisation of tax reliefs may reduce these costs for taxpayers with tax liabilities in more than one jurisdiction but preserve the benefits arising from competition based on tax rates. To prevent "harmful" tax competition from eroding the tax base via cross-border transactions, the central authority may apply a minimum tax rate, such as that for VAT in EU member countries.

The greater the amount of tax autonomy assigned to sub-central authorities, the more sub-central governments can become exposed to cyclicality, since additional revenue sources (such as income taxes) are more closely linked to economic conditions than traditional sub-central tax sources (such as property taxes). In turn, this exposure can lead to aggregate efficiency losses if expenditure rises in good times and governments find it harder to cut spending than raise taxes during a downturn, leading to a ratchet effect. Tax revenue instability is significant in a number of countries, particularly Mexico and Turkey. While such instability generally affects all levels of governments it may be harder to cope with at the sub-central level to the extent that variations are asymmetrically experienced across the country.

This problem of tax volatility is particularly acute with respect to corporate income tax. Exposure to revenue cyclicality from corporate income taxes has been particularly pronounced in Finland, where personal income tax rates have been raised to compensate for falls in corporate income tax revenue. Other countries where sub-central governments receive revenue from corporate income taxes are also vulnerable to significant swings in revenue from this source. In the late 1990s, Norway altered the tax assignment to remove this source of instability. If the tax assignment is unaltered, some form of fiscal rule that prevents swings in revenue from leading to expenditure drift may be needed.

Shared central and local tax bases can create co-ordination difficulties between levels of government. In the extreme, a higher level of government which is concerned about the effects of too-high an overall tax rate may incur costs in attempting to offset sub-central government actions. For example, attempts by national authorities in Sweden to reduce the tax burden on labour were largely thwarted by municipal increases in the rate of personal income tax. In France, central government attempts to minimise the local enterprise tax (*taxe professionnelle*) burden on businesses has resulted in an administratively complicated system with numerous exemptions and reliefs. As a result, net revenues for general government are 40% lower than local government's revenues from this tax.[17] Thus, rules which set upper limits on tax rates may help reduce the costs of co-ordination failure in cases where tax bases are relatively immobile.

Financial market oversight

Financial markets can substitute for sub-central monitoring mechanisms by imposing higher borrowing costs in cases of imprudent fiscal policy. In that case, there is less necessity for formal fiscal rules (Box 1). In this context, reforms in Mexico and Norway (and proposals in Japan) have attempted to give financial markets a greater weight in disciplining sub-central government fiscal policy. However, even where financial markets do provide discipline governments may impose expenditure limitations and balanced budget requirements. Financial market discipline is not an effective curb on public spending where this can be financed by higher taxes. While explicit bankruptcy laws for sub-central government might help to ensure that financial markets perform the monitoring and sanctioning roles effectively, respondents to the questionnaire reported that bankruptcy was either not allowed or impossible in practice.

The political setting

The political setting can influence the need for particular types of fiscal rules for sub-central governments. Constitutional limits can weaken incentives for sub-central governments to behave prudently. The most egregious example of this is the constitutional court ruling in Germany that required the federal government to provide financial support to the heavily indebted länder of Saarland and Bremen. The consequences of this ruling make it nearly impossible for central government to resist bailout in the future. This has led to consideration of ways in which the

Box 1. **Fiscal rules and financial market discipline**

There is less need for higher level governments to impose fiscal rules when financial markets are effective in disciplining sub-central government fiscal imprudence. There is also evidence that the more transparent the financial reporting – such as accrual accounting – the more favourable the terms of access to financial market borrowing. While debt remains at low levels, a deterioration in fiscal policy is unlikely to alter borrowing costs substantially. However, consistent with market discipline, empirical work from the United States suggests that the risk premium of a state general obligation bond rises nonlinearly with the debt level. In this context, financial market discipline is likely to result in a late and large correction in fiscal policy. US states appear unwilling to borrow to cover current expenditures, fearing that reputational consequences will raise future borrowing costs.[1]

The experience of American states and Canadian provinces with respect to financial market discipline stands in marked contrast to German Länder, where a constitutional clause makes it almost impossible for central government to refuse to bail out derelict Länder. This has been recognised by financial markets, and as such, yields across Germany are similar irrespective of the financial state of the laender.[2] Differences in spreads have also been low in Mexico, where banks have had little incentive to exert discipline over sub-central government borrowing, in large part because transfers from higher levels of government have been used as collateral. In addition, in countries where the central government controls access to borrowing, the implicit guarantee that requiring permission to borrow creates can weaken the effectiveness of financial market discipline.

There are several requirements for financial market discipline to be effective on sub-central government fiscal behaviour. First, the commitment by a higher level government not to bail-out a fiscally irresponsible government needs to be credible, at least to the extent that expectations for a bailout are less than certainty. This in turn suggests that significant sub-central government revenue (and expenditure) autonomy is desirable and that sub-central governments should not be afforded privileged access to finance. Second, financial markets need to be sufficiently developed to be able to withstand a sub-central government default. Third, accurate and timely provision of budgetary information to the financial markets would assist the sector in determining relative credit worthiness.

1. Bayoumi, Goldstein and Woglom (1995).
2. Lemmen (1999). Buiter and Grafe (2003) note low dispersion of risk premia on bond issues of euro area members, arguing that default risk is more likely to be perceived at the level of the euro area rather than for the individual country.

powers of the Financial Planning Council, which brings federal and state finance ministers together, can be strengthened within the bounds of the constitution. One of the more effective means of reconciling budget discipline with the benefits of local choice is the "direct democracy" requirement of holding referenda to authorise changes to spending growth or tax rates. Such restrictions are fairly widespread in Switzerland, being used in 17 out of 26 Swiss cantons, and to a lesser extent in the United States, particularly in school districts. There have also been experiments with this type of mechanism in other countries, such as in the United Kingdom. The evidence from these countries suggests that rules requiring that such referenda be held do help restrain the size of government and may lessen the need for explicit objective setting fiscal rules to control the size of government.[18]

TRADE-OFFS AND SIDE-EFFECTS

The adoption of a particular type of rule may entail a trade-off in terms of objectives served. This section analyses these trade-offs and how their impact may be mitigated. It first considers the type of trade-offs and side-effects created by objective-setting fiscal rules. Fiscal rules are evaluated with reference to their contribution to constraining the size of the public sector, whether they distort public spending and lead to allocative inefficiency, and whether they support or undermine short-run stabilisation policy and achieving longer-term sustainability. How rules can lead to fiscal gimmickry is then assessed. Finally, the section considers appropriate response and how the interaction between rules can mitigate unintended consequences.

Budget balance requirements and borrowing constraints

A fundamental problem with budget balance requirements and debt rules is that fiscal policy risks becoming pro-cyclical, the more stringent the rule and the shorter the relevant budget time horizon. As with all fiscal rules specified over an explicit accounting period, an end-point problem can arise where budget balance requirements induce spending sprees to exhaust unused resources, inappropriate cuts in expenditure or fiscal gimmickry. On the other hand, extending the budget horizon or introducing mechanisms to address cyclicality and the end-point problem may make monitoring and enforcement more difficult and governments less accountable.[19]

Losses in aggregate efficiency are a potential problem with budget balance requirements and borrowing constraints via the cyclically-induced ratchet effect discussed above. Significant allocative inefficiencies may occur because a rule which covers total spending may be biased against investment, since capital spending is the more easy to change than current expenditure in the short term. An evaluation of sub-central governments in Denmark, Norway, and Sweden found that Danish municipalities, being highly constrained by borrowing restrictions, achieve consumption smoothing through adjustments in investment activity. In contrast, Swedish and Norwegian local authorities had smoother investment expenditures across the cycle although consumption expenditure was more volatile.[20]

Golden rules, which allow borrowing for capital purposes, can introduce the opposite allocative inefficiency, by leaving capital spending relatively unconstrained in comparison to current expenditure.[21] The primary advantage of the golden rule is to allow governments to undertake (socially efficient) investments. However, defining investment is important for guaranteeing that this is the case, and the difficulty in doing so is the main impediment to its wider adoption.[22] In the extreme case of Mexico, sub-central governments can borrow to finance investment, but the rule fails to be binding as no effort has been made to define what constitutes "investment".

Tax and expenditure limits

The principal problem with expenditure limits is that they can give rise to distortions in public spending patterns. Not only can expenditure limits applied only to current budgets provoke a switch in expenditure to budget items which are unconstrained by the same rules (von Hagen and Wolff, 2004), but expenditure limits which apply across-the-board irrespective of priorities may lead to rationing of key public services. Some studies of the effects of TELs in the United States have reported that consequent reduced inputs to education may contribute to poorer educational performance.[23] On the other hand, expenditure limits that do attempt to prioritise through selective application also risk introducing administrative decision-making for market choice.

Susceptibility to fiscal gimmickry

Evading the constraints of fiscal rules may give rise to fiscal gimmickry.[24] In general, the more limited the coverage of the rule, the more easily will sub-central governments evade it by channelling fiscal policy around the rule. This is particularly the case for TELs.[25] In Spain, attempts to restrain the marked growth in public sector employment by setting detailed limits on the numbers of permanent employees and pay scales (together with their annual adjustments), gave rise to an expansion of temporary contracts.[26] Similarly, tax limitations may be ineffective by provoking a shift in revenue-raising to user charges and service fees. Similar outcomes can emerge in relation to budget balance requirements. Evidence from the United States suggests that the impact of budget balance requirements may be moderated by states shifting resources between the (controlled) general fund and other funds that are unconstrained by the fiscal rule.[27] Finally, when borrowing restrictions are subject to definitional ambiguity or limit only certain types of borrowing, sub-central government can evade the restriction by pushing the assumption of debt to another level of government or through the extension of implicit guarantees of quasi fiscal or public bodies.[28]

Sub-central authorities may own or control local enterprises and financial institutions. In such cases, the fiscal rule may be effective in terms of the formal budget, but do little in effect to stop the build up of contingent liabilities that are effectively guaranteed by government.[29] The growth of debt in Spanish public enterprises is one example of the evasion of strict budget balance requirements can manifest itself, at least temporarily.

Dealing with trade-offs and side-effects

When faced with different objectives or possible trade-offs, as described above and summarised in Table 8, the response is usually to adopt multiple rules. Indeed, among respondents to the questionnaire the median number of fiscal rules for sub-central governments is three.[30] Alternatively, flanking measures can reduce the severity of the impacts when they are more apparent:

- In dealing with trade-offs and side-effects, rule design needs to be sensitive to the main source of bias in spending. In particular, a borrowing constraint-

Table 8. **Rule impacts**

	Effects on			
	Size of the public sector	Allocative efficiency	Deficits and debt sustainability	Pro-cyclicality
Budget balance requirements	"Ratchet effect" will lead to aggregate efficiency losses	Neutral if covering all spending Can lead to losses if partial	Stricter rules have a greater effect in preventing deficits arising and can ensure long-run debt sustainability	Induces pro-cyclical fiscal policy
Borrowing constraints	Can act as a budget balance requirement	If coverage partial, can distort spending and lead to inefficiencies	Can reduce the deficit bias and ensure debt is maintained at sustainable levels	Induces pro-cyclical fiscal policy
Tax limits	Can help restrain the size of government More successful the wider the coverage		Can lead to deficits if spending is not controlled	Pro-cyclical if revenue-based
Expenditure limits	Can help restrain the size of government More successful the wider the coverage	Neutral if wide coverage Introduces inefficiencies if partial coverage or no prioritisation		Can help smooth spending, but If linked to income can lead to pro-cyclicality

induced ratchet effect may call for an upper limit on permissible tax rates. Indeed, a combination of deficit and tax rules is more commonly found than a deficit-spending rule combination.

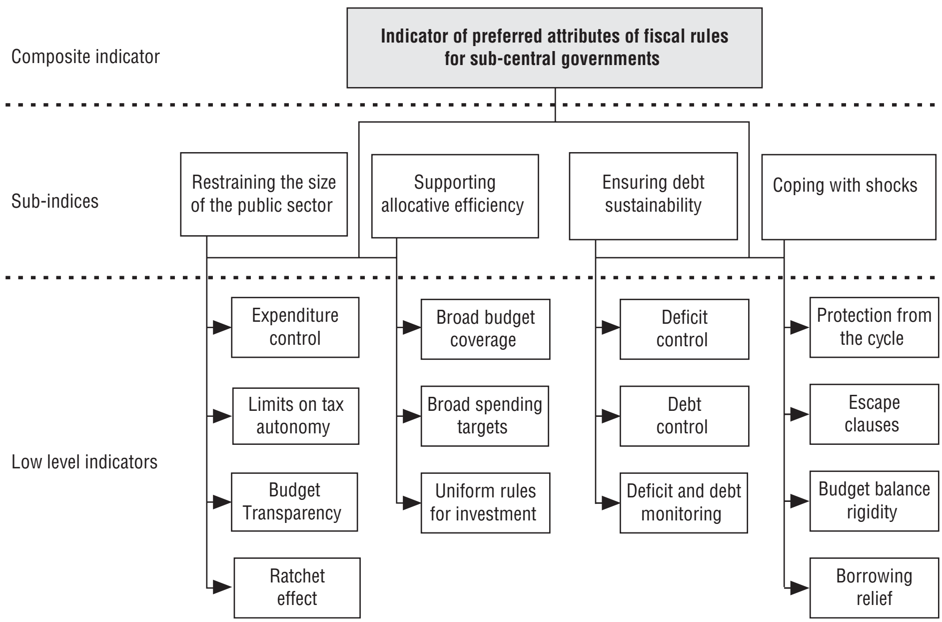
- When expenditure drift is the result of myopic politically-induced spending an expenditure limit may be better suited to restraining public sector growth. But the difficulty is to define the coverage of the expenditure rule. The distortions caused by partial coverage can be prevented by ensuring that the whole of the budget is subject to the constraint, but in that case longer-term expenditure planning horizons are essential to prevent a bias emerging against expenditure items that are flexible in the short term (including investment spending).
- When cyclical variability in revenues is important, three options are possible. First, multi-annual budgets may allow a degree of flexibility over the cycle, which could have desirable features in allowing autonomic stabilisers to work more effectively, though at the cost of reduced transparency.[31] Second, expenditure limits can be designed such that cyclically-influenced expenditures (largely unemployment related transfers) are excluded from the rule. Alternatively, linking transfers to cyclical conditions (or projections in the case of Denmark) can help insulate sub-central governments from such pressure.[32]

RANKING FISCAL RULES FOR SUB-CENTRAL GOVERNMENTS

The responses to the OECD questionnaire have been used to construct indicators to assess how a country's fiscal rules potentially contribute to restraining the size of the public sector, keeping it efficient and ensuring the sustainability of public finances. The individual detailed responses the questionnaires are aggregated into "low-level" indicators for both objective-setting and process rules. These indicators are scaled on the interval 0 to 10, with a higher score associated with a more desirable outcome (full details of the coding are given in Sutherland, Price and Joumard, 2005). The low-level indicators are then used to construct sub-indices of the quality of fiscal rules in pursuing various objectives of fiscal policy, as well as an overall composite indicator of fiscal rules for sub-central governments (Figure 2).

Constructing either a sub-index or the overall composite indicator requires an assessment of the relative importance ascribed to different rule attributes, which, as noted, may vary both across countries given different institutional settings and across time. To help overcome the difficulties in assigning the relative importance of individual aspects of fiscal rules in widely different budgetary and institutional frameworks, the approach adopted here is to use random weights (Box 2). These do not assume any detailed knowledge of how rule attributes interact in a given setting, but they allow the identification of ranges of possible values the sub-index

Figure 2. **Hierarchy of the fiscal rules indicator**



or overall composite indicator could take if different weightings are assigned to the low-level indicators.

The first sub-index assesses whether fiscal rules impose restraint on the growth of the public sector (Figure 3). The index is composed of four low-level indicators. The first two indicators consider whether there are limits on spending and taxes. For the expenditure limits, fiscal rules receive higher scores if they apply widely across the budget and are difficult to change. The difficulty in changing rules is assessed by whether the rule is imposed and whether it is binding. The tax limit is a measure of the autonomy a sub-central government has over its tax revenue.[33] The third low-level indicator measures the potential influence of process rules on the tax and expenditure limits. In this context, stronger requirements for the transparency of reporting, external monitors and potential sanctions for transgression are expected to perform a disciplining role on sub-central governments. The final low-level indicator gauges the risk of ratchet-type effects leading to higher spending and taxes. The rule is evaluated as having a stronger ratchet-type influence if it is binding, and in the case of the budgetary objective applies to the outturn with no carry-over possible. The existence of escape

Box 2. **The random weights technique**

Starting with low-level indicators, this technique uses 10 000 sets of randomly-generated weights to calculate 10 000 observations for each sub-index and the overall composite indicator for each sub-central government.[1] The random weights are drawn from a uniform distribution between zero and one and then normalised so as to sum to one. This is equivalent to assuming complete uncertainty about the most appropriate value of each of the individual weights used to construct the sub-index and overall composite indicator. Accordingly, the resulting distribution of indicators for each sub-central government reflects the possible range of values given no *a priori* information on the most appropriate value for each of the weights.[2] Confidence intervals and the probability of a given country achieving a given rank are calculated from these distributions.

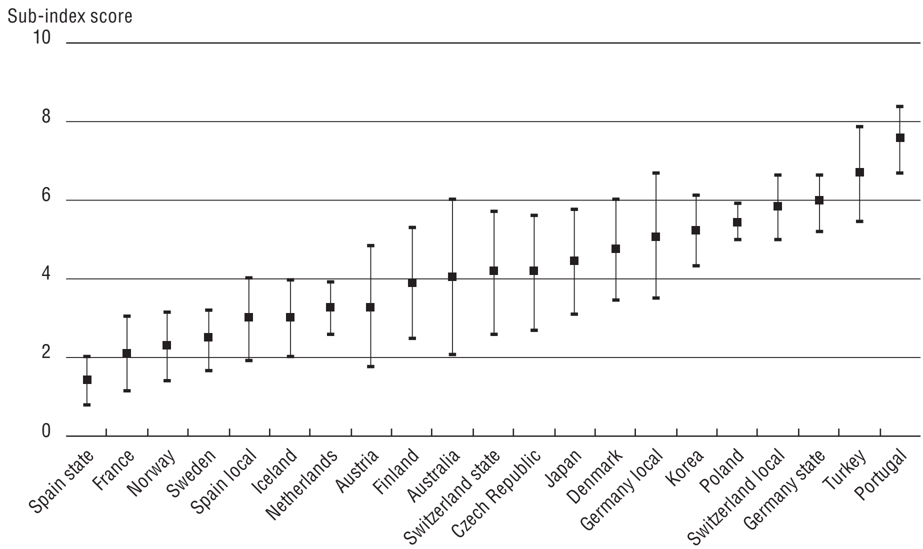
The confidence intervals are centred on the mean value of each country's 10 000 indicator values. Given that the weights are drawn from a uniform distribution between zero and one, the mean indicator values are asymptotically equivalent to indicators calculated using equal weights on each of the low-level indicators.

1. The sensitivity of the indicators to changes in the subjective weights used to construct the low-level indicators has not been tested.
2. Note that this is not equivalent to having no *a priori* information on the most appropriate set of weights given that the sum of two or more uniform distributions is not uniform.

clauses or specific mechanisms to cope with cyclical pressures will attenuate the ratchet-type effects.

The individual country scores for the sub-index on restraining the size of the public sector exhibit large variance, driven to a significant degree by the low-level indicators for expenditure limits and tax autonomy. In particular, few countries noted expenditure limits amongst their set of fiscal rules and those that did also tended to have less tax autonomy (German state and local, Portugal, and Turkey). Sub-central governments with expenditure limits and limited tax autonomy also tended to have comparatively robust monitoring and reporting frameworks, which as stressed above is an important element in preventing sub-central governments meeting their rules through fiscal gimmickry. The high correlation between the various sub-components of fiscal rules that restrain government size contributes to the limited variation in the random weighted sub-indexes, with 90% of the observations generated for each country tightly clustered. In the case of Denmark (and to a lesser extent in Spanish states), the potential for a policy-induced/intensified ratchet effect drags down the score of the sub-index.

Figure 3. **Restraining the size of the public sector**

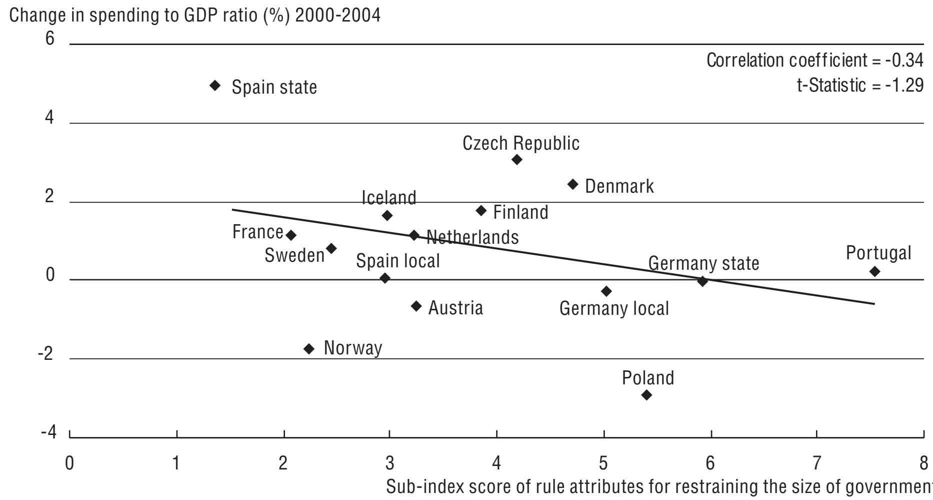


1. The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

Overall, the sub-index is negatively correlated, albeit weakly, with the growth in sub-central government spending (Figure 4). The correlation may be obscured by the fact that strong fiscal rules may be an endogenous response to past expenditure growth. Modifications to the expenditure assignments given to sub-central entities may further cloud the relationship.

The second sub-index examines the impact rules may have with respect to the allocative efficiency of spending. As the main text describes, no spending rule is devoid of allocational problems. However, in this particular context, a partial coverage of rules is taken as likely to create incentives to bias expenditure towards the areas of the budget that the rule either excludes or makes subject to a less restrictive requirement. Thus, budget balance requirements, expenditure limits, and budget constraints are scored according to whether they create partial requirements for budgetary outcomes or not. In addition, the potential impact on allocative efficiency is greater for a binding annual budget objective with no carry-over for a budget balance requirement and if there is a binding expenditure limit. For the borrowing constraint, the criteria for judging possible distortions to spending are: differences in credit-market access conditions for current and capital-borrowing; restrictions on the type of borrowing that can be undertaken (which

Figure 4. **Rule attributes and spending restraint**



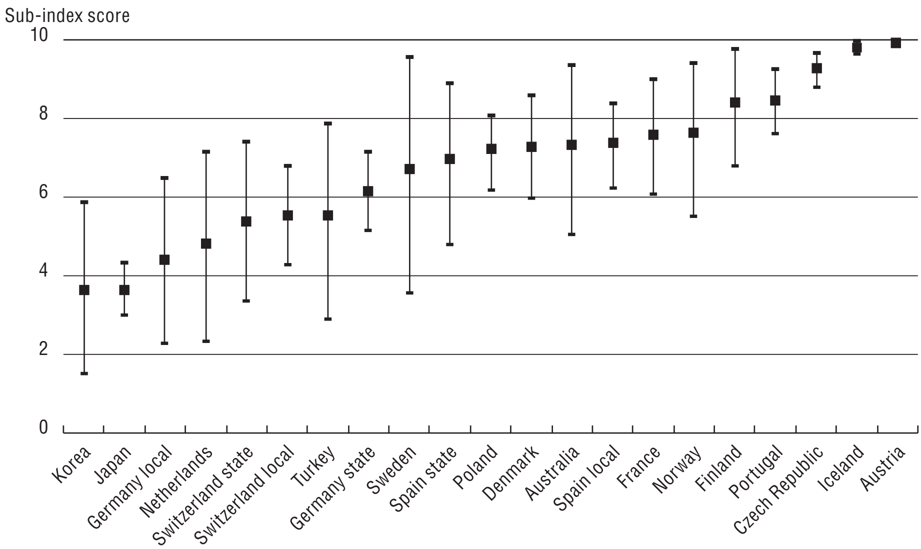
Source: OECD Secretariat calculations based on the Network questionnaire responses.

assumes that a requirement for obtaining prior approval will potentially lead to biases); the numerical constraints applied, and whether they are binding. For this sub-index, countries received more favourable rankings where they reported that there were no rules that discriminated between parts of the budget (Figure 5).

The scores for the allocative-efficiency sub-index are quite dispersed. Fiscal rules for sub-central governments are applied broadly and uniformly in some cases (as in Austria, the Czech Republic and Iceland), while others impose differential restrictions on different spending components and types of borrowing (such as Korea). In the intermediate ranges, altering the weighting for the low-level indicators can lead to substantial changes in the sub-index score, particularly so for Sweden. This reflects a mixture of stringent and lax requirements applied to different objective-setting fiscal rules.

The third sub-index (Figure 6) evaluates the strength of borrowing constraints and budget balance requirements in ensuring long-term debt sustainability. For this dimension of fiscal policy the budget balance requirement is evaluated as stronger if it is binding and applies to a wide definition of the budget. Escape clauses and the possibility of receiving special financial support during cyclical downturns are evaluated as weakening the rule, while the ability to cut mandated expenditures is evaluated as helping to attain budget balance objectives. Borrowing

Figure 5. **Supporting allocative efficiency**

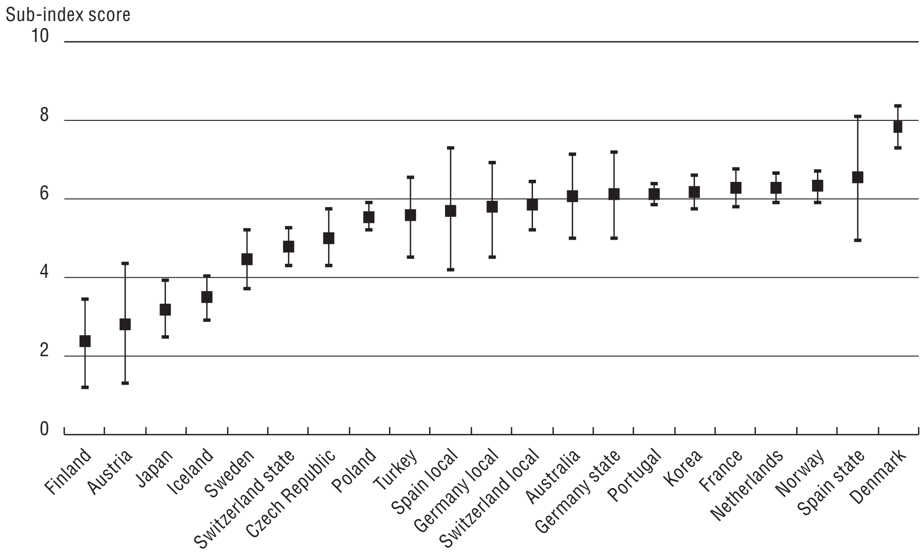


2. The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

constraints are more binding where the access to borrowing is more restrictive and if borrowing is subject to numerical constraints. Escape clauses and unregulated relationships with enterprises that are owned or controlled by sub-central governments are assessed to weaken the borrowing constraint. The process rules on monitoring, reporting and transparency are augmented by whether the pre-conditions are present for financial markets to play an effective role in monitoring fiscal policy.

For the sub-index on ensuring long-term debt sustainability, the low-level indicators for most countries tend to be highly correlated. Thus, sub-central governments constrained by stringent budget balance requirements are also likely to face strong controls on debt and in most cases more rigorous accountability mechanisms. Deficit and debt monitoring are particularly important in this context as a means to avert objective-setting fiscal rules being met by fiscal gimmickry. From the questionnaire responses, the requirements for accounting transparency and the monitoring and reporting frameworks vary considerably, from the robust requirements in Denmark and Portugal to the apparently modest transparency demands imposed on sub-central governments in Japan, Spain, Germany (local),

Figure 6. **Ensuring long-term debt sustainability**

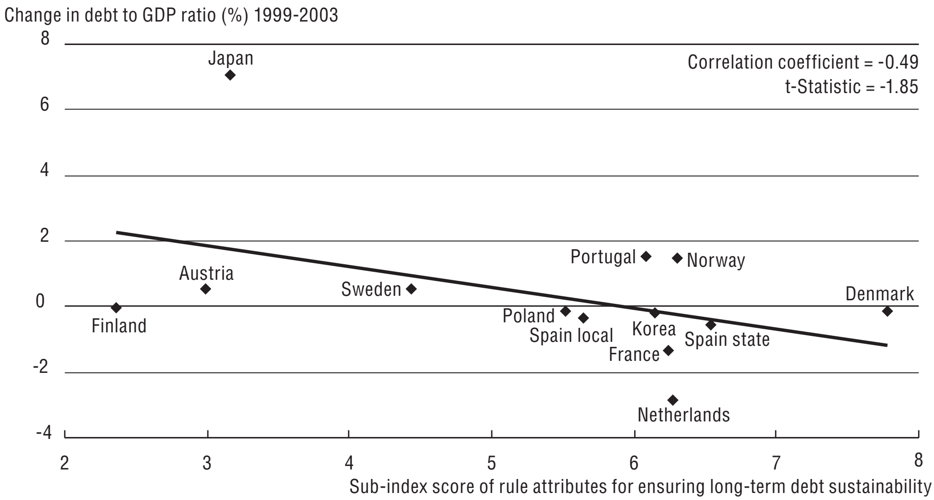


3. The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

Austria, and Turkey. The sub-index is negatively but weakly correlated with debt dynamics (Figure 7).

The final sub-index (Figure 8) considers the impacts of the various rules in place on the ability of policymakers to cope with shocks and the pressure on the budget generated by the cycle. In particular, this index considers the explicit mechanisms that permit flexibility in rule implementation. The first low-level indicator considers the existence of a means to cope with the cycle, assessing transfer systems that damp cyclical fluctuations in revenue as being potentially more effective than sub-central government ability to draw on rainy day type funds. The second low-level indicator considers the presence of escape clauses, which receive a larger weighting if the objective-setting fiscal rule is more stringent. The third and fourth low-level indicators represent the impact of budget balance requirements and borrowing constraints. In the case of budget balance requirements, binding objectives set for outcomes for short budgetary periods are likely, other things being equal, to generate more pro-cyclical policy and exacerbate non-cyclical shocks. More restrictive access to borrowing is also likely to exacerbate pro-cyclical policy and also restricts one potential means for coping with non-cyclical shocks.

Figure 7. **Rule attributes and trends in debt**

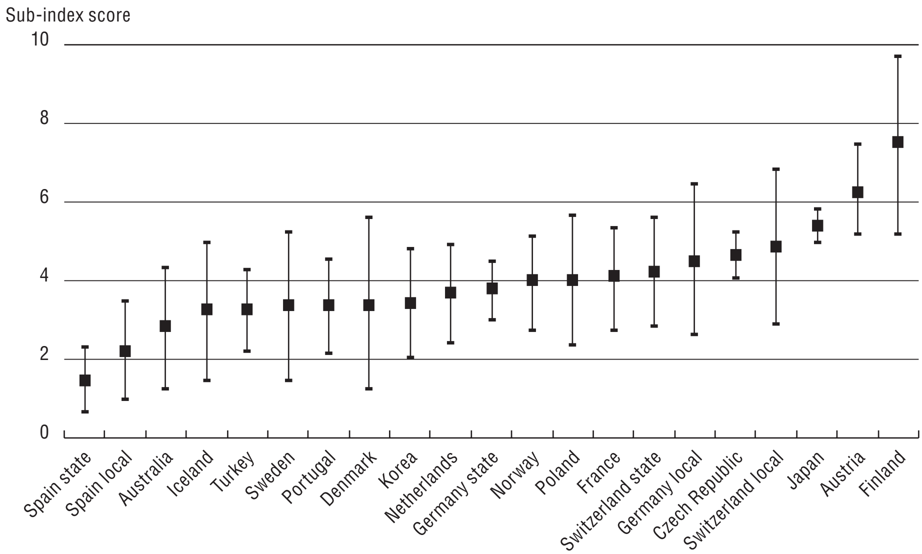


The scoring for the sub-index for coping with shocks is, to an extent, inversely related to the strength of fiscal rules in achieving other fiscal objectives. Sub-central governments facing comparatively weak constraints on borrowing and budget balances are other things equal more able to deal with both cyclical and non-cyclical shocks. With the exceptions of Australia, Iceland, Poland and Switzerland, these sub-central governments also benefit from special mechanisms to cope with cyclical pressures. However, not all sub-central governments that benefit from a means of dealing with cyclical pressures also benefit from a capacity to deal with non-cyclical shocks, such as in the case of local government in Denmark and Germany.

Towards a composite indicator

The overall composite indicator, measuring the properties of a set of fiscal rules in all the dimensions of fiscal policy, is derived directly as the random-weighted average of the low-level indicators (Figure 9). The range of average scores across countries is quite limited, partly as a result of the inverse correlation among low-level indicators, particularly the opposing effects objective-setting fiscal rules can have in different sub-indices as a result of the inherent trade-offs.[34] As a result, only the extremes of the sub-central government scores can be considered to be significantly different from one another.

Figure 8. **Coping with shocks**



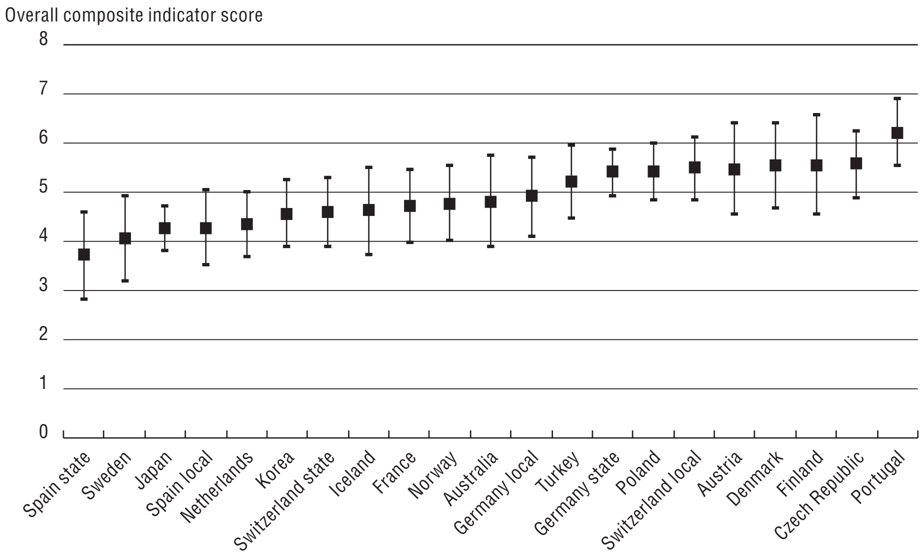
4. The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

To some extent the confidence intervals around the index scores give an indication of the consistency of fiscal rules, but to examine this more explicitly, Figure 10 plots the variance of the low-level indicators against the composite indicator score. A consistent set of fiscal rules have a comparatively low variance, but that is the case for only a minority of countries. In general, the graph shows a considerable dispersion across the various policy dimensions, reflecting the different degrees of vigour with which they are pursued. In some cases, a high variance stems from country-specific challenges, and in that sense a composite indicator based on a simplified and standardised weighting system of desirable properties cannot be taken as a cardinal indication of rule operation in particular countries. Still less is it a measure of deviation from some optimal level. However, large variance may also be an indication of potential weakness, meaning that the set of fiscal rules is inappropriate in meeting other challenges confronting fiscal policy.

CONCLUSIONS

Governments have often adopted or strengthened fiscal rules at the subnational level to correct or pre-empt unsustainable increases in debt or public spending. Indeed, the implementation or reform of fiscal rules is usually aimed at

Figure 9. **Overall composite indicator**



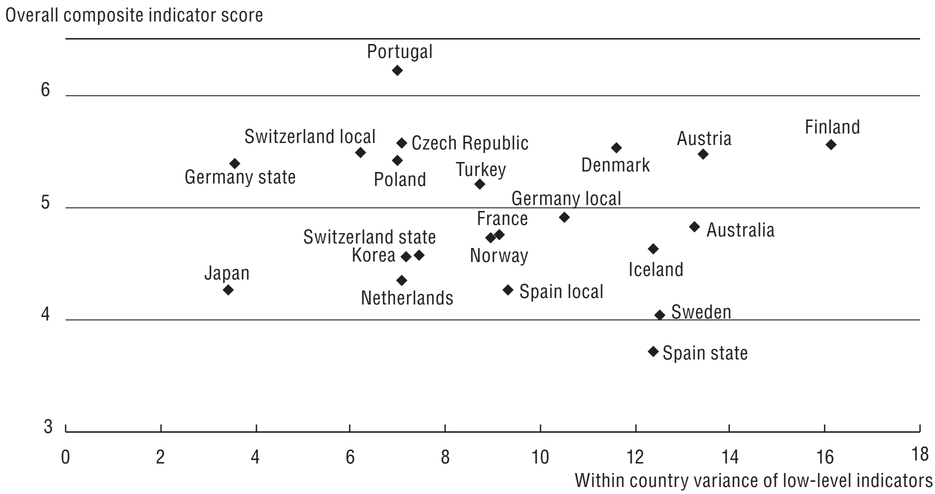
5. The figure gives the average and the range that contains 90% of the 10 000 random weighted overall composite indicators

Source: OECD Secretariat calculations based on Network questionnaire responses.

safeguarding macroeconomic objectives – most notably the containment of the public sector, and hence the tax burden, long-term debt sustainability and short-term stability – while exploiting the potential allocative efficiency gains of decentralisation. However, no "ideal" rule or set of rules can be identified, not just because the institutional and constitutional backgrounds differ from country to country but also because welfare functions differ. This means that the design of fiscal rules in practice largely depends on the priority given by governments to different macroeconomic objectives (such as debt sustainability and short-run stabilisation) as well as other objectives such as revenue equalisation (via the inter-governmental grant system), the type of tax base to which sub-central governments are given access, and the emphasis placed on the standardisation of services. Conflicting objectives can create problems in designing a coherent set of rules.

T*he most common fiscal rule is the budget balance requirement*, which predominantly targets the outturn of an annual budget. Most sub-central governments also face a restriction on borrowing. There has been a move in a number of countries away from

Figure 10. **Overall composite indicator and variance in sub-components**



Source: OECD Secretariat calculations based on the Network questionnaire responses.

micro-management through a prior approval system on a case-by-case basis towards aggregate and numerical targets. Borrowing is rarely explicitly guaranteed by a higher level of government, but implicit guarantees may be more widespread.

Few countries apply fiscal rules directly to sub-central government spending. The nature of local spending assignments makes expenditure difficult to contain directly via rules-based controls. Local spending often involves politically-sensitive, mandated programmes, which make aggregate objective-setting spending rules difficult to implement without accurate forward planning. On the other hand, programme level rules, designed to monitor and standardise output at the local level may involve higher-level governments in micromanagement, which may be at odds with the objective of greater local autonomy which rules are meant to facilitate. Rather than spending rules, many countries simultaneously apply limits both to the sub-central budget balance or borrowing and to tax autonomy. This combination should, in principle, restrain sub-central government spending while retaining a degree of local autonomy as to the allocation of resources. However, local expenditure is not always controllable enough to prevent *ex post* breaches of tax and borrowing rules, or compositional distortions to spending.

Experience shows that *effective enforcement mechanisms* are necessary to ensure objective-setting budget rules are implemented. At the same time, information on and monitoring/auditing of sub-central fiscal performance are often poor and sanctions are not always credible or effective. Increased transparency surrounding budgetary policy may help ensure that objective-setting rules are observed and reduce the temptation to meet them through fiscal gimmickry. Greater transparency can also assist the population to hold sub-central governments accountable.

With respect to *taxing powers*, in most OECD countries, central governments impose limits on tax rates and reliefs that can be set by sub-central governments, but most possess some tax autonomy. The need for tax limits are affected by institutional and economic factors. Such limits would appear to be less necessary the more transparent is the impact of the tax on the local population in the case of less mobile tax bases and the greater the degree of tax competition, where the base is mobile. More generally, local democracy makes tax rules less necessary, but in that instance, rules may be required to contain any compensatory upward pressures on sub-national borrowing or spillovers. Revenue assignments that expose sub-central government budgets to cyclical variation may require fiscal rules to damp pro-cyclical fiscal policy responses and thus ward off potential ratchet effects.

T*he extent of financial market oversight* is a factor here and also impacts on rule choice. Several countries have opted to strengthen the role of financial markets in disciplining sub-central government fiscal behaviour. However, the framework conditions are not always in place for financial markets to play an effective role (*e.g.* information on financial accounts is not consistent or only partial, implicit guarantees exist). Sub-central governments have often introduced their own fiscal rule to enhance their credibility towards lenders. Balanced budget rules and spending constraints count more for enhancing credibility towards lenders than limits on tax revenue.

In applying fiscal rules, *trade-offs and side effects* need to be carefully managed. In practice, to achieve several objectives at the same time often requires that sub-central governments implement more than one fiscal rule, in some cases to mitigate potential adverse side-effects of one objective-based fiscal rule on another objective. Although rules can be designed to prevent some undesirable side-effects, trade-offs are unavoidable. To cope with cyclical developments and/or avoid a bias against investment, the rule often covers only the current budget and allows some carry over while the time horizon has been lengthened in a number of countries; however, distinguishing current and capital spending remains problematical.

The above analysis shows that *composite indicators* may prove analytically helpful in that they can help both to identify sets of fiscal rules that possess generally favourable characteristics and to identify the types of trade-offs and side effects they engender. However, a composite indicator based on a simplified and standardised weighting system of desirable properties cannot be taken as a deviation from some optimal level of rule application.

Notes

1. See Sutherland, Price and Joumard (2005) for full details.
2. Eichengreen and von Hagen (1996) and Rodden (2002) argue that a large vertical fiscal imbalance or "fiscal gap" (*i.e.* sub-central government expenditure obligations exceed revenue raising competencies) can require tighter or prohibitive fiscal rules.
3. Results of a joint OECD and World Bank questionnaire on budgeting practices are available online at *http://ocde.dyndns.org/*. Details on sub-central government tax autonomy for many OECD countries are contained in OECD (1999).
4. Bayoumi and Eichengreen (1995); Bohn and Inman (1996); Poterba (1994); and Sørensen *et al.* (2001).
5. Tellier and Imbeau (2004); Alesina *et al.* (1996).
6. While targeting an optimal level of debt may be appropriate, determining the operational target is difficult in practice, particularly if account is taken of often poorly documented contingent liabilities. The optimal degree of debt financing is also related to the depreciation rate, with a higher degree of debt financing warranted for long-term (slower depreciating) infrastructural projects. Limiting the debt-to-GDP ratio has the advantage of focusing on the tax implications of borrowing, or the risk of default, but flow targets, such as surpluses or limits on debt servicing costs, may be easier to implement over a shorter time frame in the context of budget policy.
7. Echengreen and von Hagen (1996); Poterba and Rueben (2001).
8. Mullins and Wallin (2004).
9. Bails and Tieslau (2000); Stansel (1994).
10. Bayoumi and Eichengreen (1994); Poterba (1994); Poterba and Rueben (2001).
11. Inman (1996).
12. The credibility problems created by opportunities for *ex post* renegotiation suggest that the sanctions should be invariant to external circumstances, particularly if the fiscal policy of the sub-central jurisdiction has a tendency to be of poor quality (Beetsma and Debrun, 2005). A budget balance requirement for Flemish municipalities (in place since 1945) began to have a marked effect on behaviour from 1982 when provincial governments were given the power to impose administrative sanctions (Ashworth, Geys and Heyndels, 2005).
13. This is related to the "too-big-to-fail" type argument. Inman (2001) identifies efficient redistribution policies as a means of avoiding sub-central governments running unsustainable policies in an effort to obtain a bailout. The tension created by a no-bailout stance potentially threatening the welfare of a particular subset of the population (for

example, capital cities or disadvantaged regions) could be alleviated with efficient redistribution policies.

14. The requirements for euro area membership made no bailout expectations credible, and Italian local governments managed to restrain health expenditure during that period. Following the introduction of the euro, fiscal positions again deteriorated (OECD 2002a and 2005b; Bordignon 2004).
15. In this context, the political importance of performance indicators can give rise to the perception of data unreliability. Laking (2002) noted the "gaming" in setting performance indicators and misrepresentation of performance statistics in countries moving to performance-based systems.
16. In Japan and Norway, sub-central government autonomy over some tax rates has not lead to tax competition as a result of fear that the transfer systems may penalise jurisdictions that reduced tax rates.
17. OECD (2005c).
18. There is a vast related literature on the impact of various budgetary institutions. See Besley and Case (2003) and Hallerberg, Strauch and von Hagen (2004b).
19. The recent experience of procyclical sub-central fiscal policy in Spain after the introduction of strong budget balance rules in 2001 has led to proposals in June 2005 to amend the General Budget Law. These include making the budget targets conditional on growth projections, such that the target would be relaxed during downturns.
20. Borge *et al.* (2001). In Norway, borrowing rules have led to public investment becoming a shock absorber in local government fiscal policy, while evidence from federal countries suggests that fiscal policy is more procyclical if borrowing rules are in place (Rattsø, 2004).
21. Suggestive evidence comes from comparison of American states with and without separate budgets for current and capital expenditures. States with split budgets tended to have higher levels of investment spending (Poterba, 1995).
22. There are considerable accounting and methodological difficulties in determining what spending constitutes investment and determining the depreciation rate of the public capital stock, which is necessary when the golden rule is set for net investment. Even the use of the conceptually simpler gross investment can give rise to a lack of definitional clarity and lax implementation, as in Germany which has allowed the laender governments to borrow without significant restriction (Wendorff, 2001).
23. See Downes and Figlio (1997) and Mullins (2004). In some circumstances a ratchet effect can shift expenditure to a lower path than may be warranted during an economic downturn (OECD, 2005d).
24. See Koen and van den Noord (2005) for evidence at the national level.
25. Mullins and Joyce (1996). In the case of France, an expenditure limit only constraining central government has contributed to a transfer of spending responsibility to local authorities (OECD, 2005c). In Sweden, expenditure limits have been met though changes in tax reliefs to favour particular groups have come at the cost of a deterioration in the budgetary position (OECD, 2002b).
26. OECD (2005a).
27. Sørensen *et al.* (2001).

28. Von Hagen and Wolff (2004) note that earlier empirical work shows that debt limits on American states and municipalities led to increases in debt issuance by unconstrained public bodies or provoked larger debt issuance by another level of government. See also von Hagen (1991) and Poterba (1994).
29. Von Hagen (2002).
30. Of the questionnaire responses for 20 sub-central governments all were subject to budget balance requirements, 18 to some form of borrowing constraints, 17 to tax limits and 10 to expenditure limits.
31. This approach, however, runs the risk that limited progress early in the rule period could require large corrective movements in fiscal policy in the final years of the rule period. This attribute could be exploited by sub-central government through ensuring that the required fiscal adjustment is too large to be credible.
32. Other techniques of cyclical smoothing include "rainy day" funds and escape clauses. Evidence from the United States suggests that "rainy day" funds can help smooth fiscal policy over the cycle and have been the source of saving, particularly if there are no limits placed on how much can be saved. However, the trade off is that rainy day funds weaken the desired disciplining effect on fiscal policy and may require substantial sums being tied up in jurisdictions subject to large revenue swings across the cycle. Predetermined escape clauses can also allow sub-central governments to address shocks. However, there are limits in the degree of desired leniency, as escape clauses could serve to reintroduce unwarranted discretionary policy.
33. The indicator used is based on the autonomy sub-central governments possess in altering tax rates and reliefs. This indicator fails to take into account to the extent sub-central governments are bound by explicit tax limits and the assignment of unpopular tax bases that are difficult to change. Without detailed information for all countries to make corrections for the coverage of tax limits, the broader measure of tax autonomy used here should be more robust.
34. As a result, the weights for the objective setting rules may not lie within the same 0-1 interval.

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