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FISCAL RULES FOR SUB-CENTRAL GOVERNMENTS: DESIGN AND IMPACT

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ABSTRACT/RÉSUMÉ

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Against a background of mounting demands for spending on services provided by sub-central governments, this paper examines how fiscal rules can help to ensure that pressure on resources is minimised and available resources are used efficiently. Drawing on questionnaire responses and other sources, this paper gives a detailed picture of fiscal rules for sub-central governments in place among a number of OECD countries. The paper examines the rationales for using fiscal rules, the various impacts fiscal rules can have, the factors making for effective implementation and the interactions between the various types of rule. It then constructs a number of synthetic sub-indicators designed to assess the extent to which sub-central government fiscal frameworks exhibit favourable characteristics for the achievement of fiscal objectives. It concludes with the construction of a composite indicator based on the combined impacts in the different areas of fiscal policy.

JEL codes: C43, D78, H71, H72, H74, H81
Keywords: Sub-central government, fiscal rules, fiscal discipline, indicators

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Règles budgétaires des collectivités territoriales: leurs caractéristiques et leur impact

Face à l’augmentation des dépenses au titre des services assurés par les collectivités territoriales, cette étude examine comment les règles budgétaires peuvent contribuer à atténuer les pressions sur les ressources et à garantir une utilisation efficiente des ressources disponibles. S’appuyant sur les réponses à des questionnaires et sur d’autres sources, elle présente une description détaillée des règles budgétaires applicables aux collectivités territoriales dans plusieurs pays de l’OCDE. Elle analyse les raisons qui motivent l’utilisation de règles budgétaires, les divers effets que ces règles peuvent avoir, les facteurs qui contribuent à l’efficacité de leur mise en œuvre et les interactions entre les divers types de règles. Un certain nombre d’indicateurs synthétiques sont ensuite élaborés dans le but de déterminer dans quelle mesure les règles budgétaires des collectivités territoriales présentent des caractéristiques favorisant la réalisation des objectifs de finances publiques. L’étude s’achève par la construction d’un indicateur composite des effets combinés dans les différents domaines de la politique budgétaire.

Classification JEL : C43, D78, H71, H72, H74, H81
Mots clés : Collectivités territoriales, règles budgétaires, discipline budgétaire, indicateurs

FISCAL RULES FOR SUB-CENTRAL GOVERNMENTS: DESIGN AND IMPACT

by

Douglas Sutherland, Robert Price and Isabelle Joumard[1]

1. Introduction and summary

1. Rules constraining the discretionary powers of budget policymakers have become quite widespread among OECD economies at the national level, at the same time as the role of decentralised institutions in achieving the effective provision of public services has been increasingly recognised.[2] The extent to which decentralised fiscal relations impact on long-term fiscal sustainability, the aggregate resource claims of the public sector and stabilisation objectives depends on the governance of sub-central institutions, and most specifically on the hardness of the budget constraint they face. Well-designed rules can be important in that respect. They offer the means of achieving the efficiency gains accruing from local autonomy while meeting the objectives of sustainable longer-term finances, helping policymakers resist temptations to renege on previous commitments, providing a cushion against shocks and facilitating the fiscal consolidation that may be needed to attain a sustainable path.

2. At the sub-central level, the motivation for reviewing the role of fiscal rules in controlling spending is made more pressing by the mounting challenges confronting sub-central governments. In many countries, demands made by ageing populations for services currently provided by sub-central governments will have profound implications for the relative size of budgets across levels of government if current expenditure assignments remain unchanged. In this context, even OECD economies with apparently sound fiscal positions and frameworks may wish to lock in prudent sub-central fiscal policy by design. Against this background, the paper examines how fiscal rules can help to ensure that pressure on resources is minimised and available resources are used efficiently.

3. 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 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 an overview of the rationales for sub-central rules and recent trends in that direction. 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 composite indicators based on the desirable properties of sub-central government fiscal rules; it initially replicates indicators of rule stringency developed in the literature and then constructs a number of synthetic sub-indicators designed to assess the extent to which sub-central

1. The authors are members of the Monetary and Fiscal Policy Division of the Economics Department. Chantal Nicq provided invaluable statistical assistance. Veronica Humi, Sandra Raymond and Paula Simonin provided secretarial assistance. The authors wish to thank Mike Feiner, Jørgen Elmeskov, and other members of the Economics Department, as well as participants at the 2005 meeting of the *OECD Network on Fiscal Relations across Levels of Government* for useful comments and discussions. The views expressed here are those of the authors and do not necessarily represent those of the OECD.

2. Joumard and Kongsrud (2003).

government fiscal frameworks exhibit favourable characteristics for the achievement of fiscal objectives, from which a composite indicator is constructed, based on the combined impacts in the different areas of fiscal policy.

4. The main conclusions and policy implications are:

- *Governments have often adopted or strengthened fiscal rules at the sub-national level to correct or pre-empt unsustainable increases in debt or public spending,* often at times of budgetary crisis or when expenditure or tax assignments across levels of governments have been changed. In strategic terms, the implementation or reform of fiscal rules usually aims at 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.
- *The 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 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.* Rather, 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.
- *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.
- *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.* Tax limits are affected by institutional factors. They would appear to be less necessary the more transparent is the impact of the tax on the local population where the tax base is less mobile 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 procyclical fiscal policy responses and thus ward off potential ratchet effects.
- *Enforcement mechanisms are necessary to ensure objective-setting budget rules are implemented* but 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.
- *The extent of financial market oversight also impacts on rule choice.* Balanced budget rules and spending constraints count more for enhancing credibility towards lenders than limits on tax

revenue. 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 partial, implicit guarantees exist). Sub-central governments have often introduced their own fiscal rule to enhance their credibility towards lenders.

- *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 the current budget and allows some carry over while the time horizon has been lengthened in a number of countries; however, defining current and capital spending remains problematical.
- *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 sub-central 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.
- *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.

2. Sub-central fiscal rules: rationales and recent trends

5. 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.

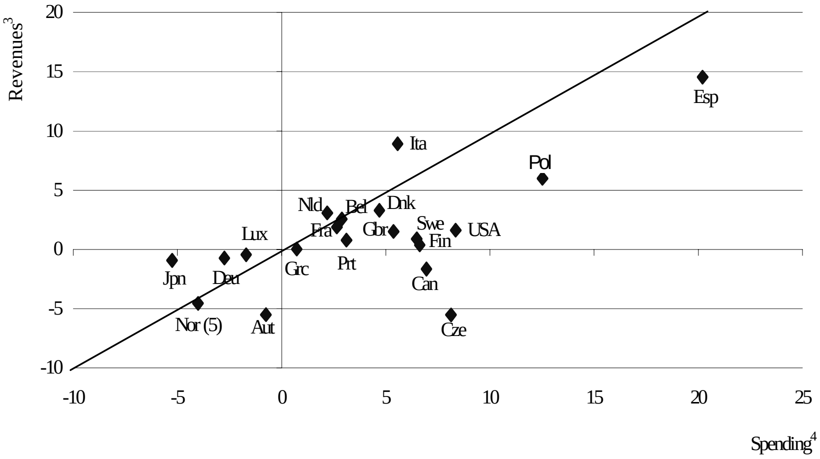
2.1 Supporting fiscal sustainability and short-term stability

Fiscal rules can help prevent local policy autonomy from undermining sustainability…

6. 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.[3] 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. These considerations motivated recent reforms in Mexico following a bail out of sub-central governments, and in Japan a central concern in ongoing reforms is how to induce sub-central governments to adopt sustainable fiscal policies, following the more-than-doubling of sub-central government debt over the 1990s to amongst the highest debt levels in the OECD (Figure 2).

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

7. For sub-central governments who have enjoyed borrowing autonomy and have adopted fiscal rules to restrain their own policymakers,[4] the experience of fiscal crises has provided an important motivation for adopting such rules. For example, in some sub-central governments in Canada and Australia, recession in the early 1990s coupled with chronic deficits and mounting debt levels strained the existing fiscal frameworks, leading to rating downgrades (Figure 3).[5] Not surprisingly, these events spurred

3. 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.

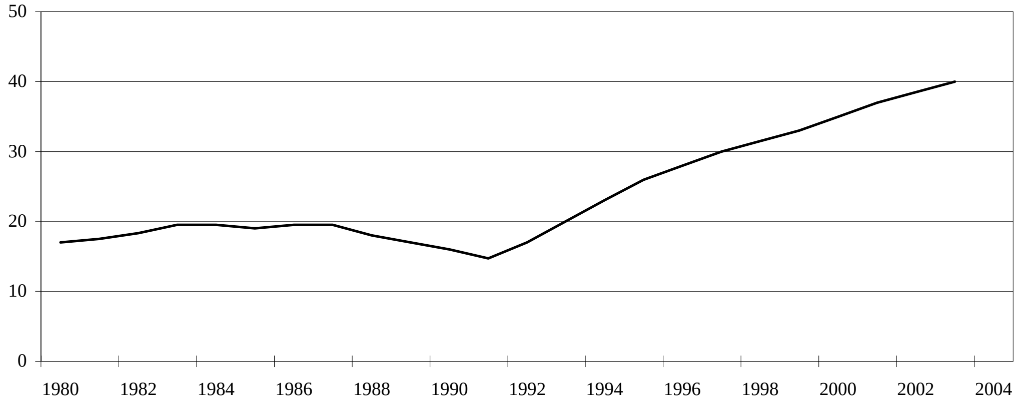
4. Even if the government has good intentions, the fiscal rule helps prevent the government reneging on previously announced commitments. Kydland and Prescott (1977) demonstrated that an optimal policy is not a consistent policy with this knowledge affecting the behaviour of forward looking rational agents. Rules could counter incentives for governments to leave large debt loads that limit future governments' ability to provide the goods they prefer (Alesina and Tabellini, 1990).

5. Landon and Smith (2000) report some evidence of spillover effects from mounting debt levels in some Canadian provinces on the credit ratings of other provinces.

a number of sub-central governments to adopt rules requiring balanced budgets and medium-term debt reduction or elimination strategies.

Figure 2. **Evolution of Japanese sub-central government debt**

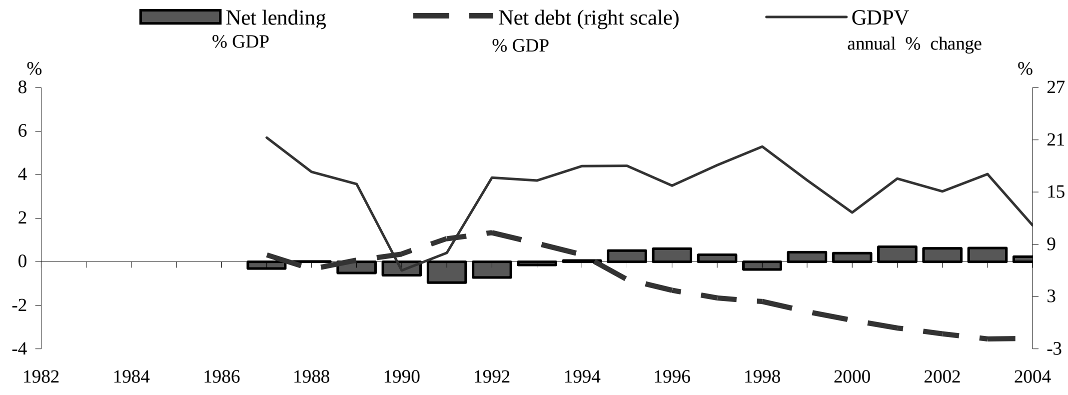
Per cent of GDP



Source: Ministry of Internal Affairs and Communications.

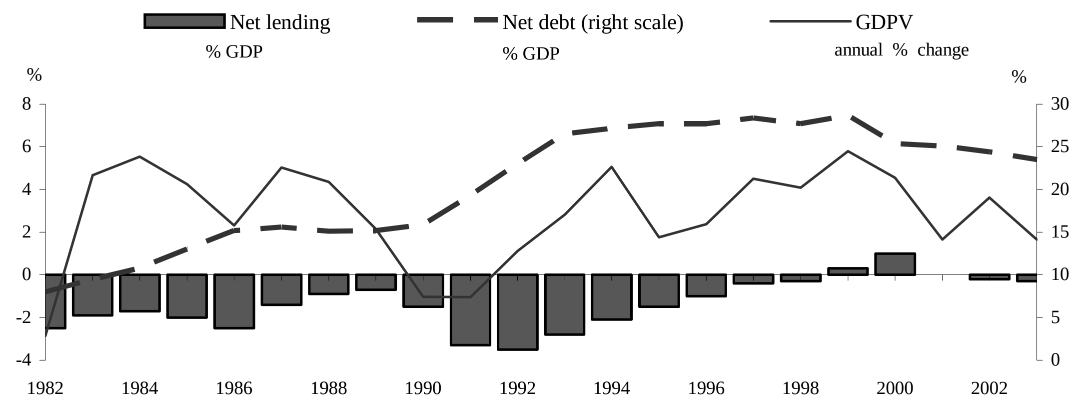
Figure 3. **Sub-central government net lending, debt and growth**

Australia



Source: Commonwealth Treasury of Australia.

Canada



Source: Provincial Public Accounts, 2004 Budgets and National Income and Expenditure Accounts.

8. The need for aggregate fiscal consolidation has also been a motivation. 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 (or are considering aligning) domestic fiscal rules for sub-central government with their supra-national commitments (Box 1).

…or aggregate fiscal targets while contributing to national fiscal consolidation programmes…

Box 1. **Domestic stability pacts in selected EU countries**

In Austria, a domestic stability pact, introduced in 1999 and revised in 2001, sets obligations and sanctions for sub-central governments. This includes balanced budgets for municipalities and surpluses for the regions, with financially-stronger Laender contributing more to the overall target. The design of the stability pact included the possibility of establishing a market for deficit permits and indeed a handful of transfers of rights to run a deficit have occurred between *Land* governments and municipalities in the same *Land*. However, incentives to develop the market further have been blunted because the stability pact has been implemented in such a way as to soften the budget balance objective. There has been considerable *ex post* adjustment of targets to take account of unforeseen shocks. Committees monitor implementation and slow provision of information (using ESA95 accounting) is liable to fines. In cases of fiscal rule violation, a conciliation committee can on the basis of expert advice impose a fine, which is refundable if compliance is re-attained within a year.

In Italy, a domestic stability pact was imposed in 1999. In essence, this sets limits at which deficits can grow (though excluding some important expenditure items, such as healthcare). Local governments are allowed to redress deficit overruns in subsequent years. However, if Italy is fined under the European Union's Excessive Deficit Procedure, the fines are allocated to the governments that failed to meet their targets in proportion to their contribution to the national overshoot. The impact of the pact has been modest. Repeated reform reflects the failure to implement both effective monitoring and the absence of timely data. From 2006, the monitoring framework and sanctions will be tightened.

In Spain, the Fiscal Stability Law of 2001 determined that from 2003 budgets of all levels of government should be at least in balance. If a sub-central government does run a deficit it must submit an action plan to resolve the situation within 4 years. A supervisory Council for Fiscal and Financial Policy – composed of officials from central government's Ministry of Finance and sub-central government – monitors implementation and is required to ratify delinquent governments' action plans. There are no sanctions embodied in the Fiscal Stability Law unless Spain is sanctioned under the Excessive Deficit Procedure. In this case, the sanction is distributed amongst the governments that were responsible for breaching the general government deficit limits.

In Germany, there have been no explicit fiscal rules to enshrine Stability and Growth Pact objectives. However, following the early warning issued in 2002, successive agreements between federal and laender governments have set expenditure limits and allocation of permissible deficits. More recently, the national authorities have mooted the introduction of a constitutionally binding domestic stability pact.

1. This box draws on Balassone, Franco and Zotteri (2002), Joumard and Kongsrud (2003) and OECD (2005a, 2005b).

…though they may hinder short-run stabilisation

9. Fiscal rules adopted to lock in long-term fiscal sustainability may also be advantageous for short-term stability, by anchoring expectations. A motivation for sub-central rules may thus be that they help create the framework conditions for balanced economic growth. However, certain types of rule may have detrimental effects on stability. For example, procyclical fiscal policy was a problem that emerged with the first generation of fiscal rules introduced in Canada and Australia, and more recently in Spain. With the move towards a medium-term budget framework (and introduction of accrual accounting in Australia), some sub-central governments altered their rules to damp the procyclicality.[6] In Spain, reform

6. Robinson (2002).

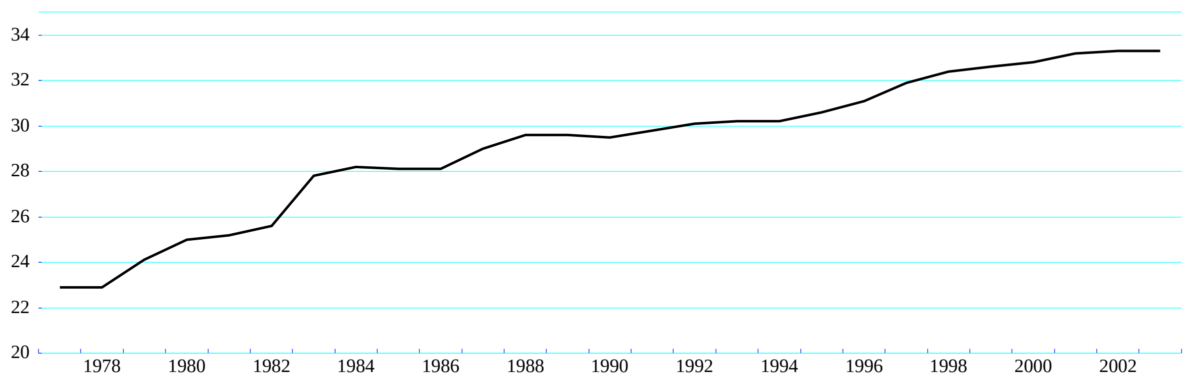
of the Fiscal Stability Law is currently under discussion, with the objective of allowing automatic stabilisers to work across the cycle; though this would require ensuring that sub-central governments run surpluses during upturns. Dealing with the stability implications of rules has been an important element of the recent debate.

2.2 Limiting the overall size of the public sector

10. 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. This is the case, particularly, when sub-central government possesses autonomy over taxation, where it is not constrained by tax competition, giving rise to losses in aggregate efficiency where the marginal excess burden of taxation exceeds the marginal benefit of public spending. In a decentralised setting, spending may rise to sub-optimally high levels due to common resource pool type problems, when sub-central policymakers 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.[7] Alternatively, a degree of irreversibility of public spending decisions can give rise to expenditure drift, leading to an inefficiently large size of government.

11. On average, the size of sub-central governments has been increasing in OECD countries. This is partly the result of changes in expenditure assignments and partly the effect of higher demand in areas of local responsibility. The difficulty in restraining spending in some area of key sub-central government spending responsibilities due to the difficulties in raising productivity in services such as long-term care (a relative price effect sometimes referred to as "Baumol's cost disease") may put pressure on sub-central governments to increase tax rates. Such pressure has played a role in Denmark, where sub-central governments have increased expenditures and taxes significantly over the past few decades, even correcting for changes in expenditure responsibilities (Figure 4.). The expected increase in demand for services from adverse relative price effects raises the saliency of this motivation for adopting fiscal rules.

Figure 4. **The ever-growing Danish municipalities**
Average county and municipality tax rates, per cent



Source: Ministry of Taxation. 1981-94 Kommunal Budgetoversight December 1995. Ministry of Finance-annual Kommunale regnskaber, Ministry of Interior

7. Weingast, Shepsle and Johnsen (1981).

2.3 Promoting allocative efficiency

12. 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. In principle, where the spending is linked to local resources, local autonomy should contribute to greater allocative efficiency in spending. But the achievement of efficiency gains may be impeded by a number of constraints. The first is that fiscal rules adopted to restrain aggregate spending or to achieve stabilisation objectives, may lead to distortions in spending patterns where some programmes are less amenable to short-term discretionary control than others. The second is that maintaining an equitable distribution of services may require a system of transfers that creates perverse incentives to spend. Micro-based rules, in the form of indicators of best practice by which performance may be judged, can play a role in this case, although an operational constraint is the difficulty of measuring public service outcomes so as to monitor the flow of such services. Such rules may be used to enhance the efficiency gains from giving greater autonomy in budgetary policy to sub-central governments in situations where the market is not fully effective, while reconciling such gains with distributional objectives.

13. As the case study in Box 2 shows, the central government in the United Kingdom has also been concerned with improving allocative efficiency and the approach adopted has included a rules-based shift towards performance budgeting. By reducing the emphasis of the more traditional approach on directly controlling inputs, performance budgeting is meant to exploit the benefits of giving greater autonomy to sub-central governments to manage, and hence to allow the attainment of greater efficiencies in resource allocation. However, the micro-management involved in programme-level rules inevitably entails a reduction in local discretion.

Box 2. **Fiscal rules in the United Kingdom**

The United Kingdom is one of the most centrally controlled countries in the OECD with all sub-central government powers and responsibilities deriving from central legislation. This has led to a system of very strict rules and regulations. Recent initiatives have aimed to relax central control in an attempt to attain gains in the allocative efficiency of spending, for example by altering the requirement for local authorities in England to obtain central government approval before borrowing to a prudential borrowing regime. But other measures aimed at monitoring and standardising outputs have giving rise to a complex web of rules and regulations governing relations between central and sub-central government which reduce local autonomy. The devolved administrations in Scotland and Wales have greater autonomy in determining spending patterns, while Northern Ireland and particularly Scotland enjoy somewhat greater revenue autonomy than the rest of the country, so that the remainder of this box concentrates on English local authorities, which have experienced significant changes in fiscal rules.

There is broad agreement that the present very limited tax autonomy given to local authorities, based on a very visible, unpopular and regressive residential property tax (council tax), is suboptimal as it fails to promote effective local accountability, leading to current consideration of means to augment revenue autonomy (Fender, 2005; Muellbauer, 2004). But while granting greater autonomy is under discussion, the central government has actually reasserted its right to "cap" the council tax demands of some local authorities in 2004 (setting an upper limit on total revenue), following substantial council tax increases across local authorities the previous year (Fender and Watts, 2002).

Similar tensions attach to grants, the main source of revenue for sub-central governments coming from a block grant (revenue support grant), which has the attraction of extending local autonomy but which also targets a substantial amount of equalisation across the country. Over time the share of this source of "external" revenue has been falling as the share of "special and specific" grants has risen and the importance of the block grant is set to decline further for English local authorities. Furthermore, during 2003 when there was concern about a funding "crisis" in schools, a few local authorities did not direct all of the *increase* in the revenue support grant to education that a new more flexible formula attributed to education (passing on this increase was called "passporting"). As a consequence, from 2007, central government will "ring-fence" the grant for schools (education being a major component of local spending), Ring-fencing is a form of rule which substantially curtails the potential spending autonomy of local authorities. This is indicative of enduring tensions between a commitment to distributional objectives and attempts to use policy options that can enhance the autonomy of local authorities.

The UK differs from most other countries in its shift to performance budgeting at the sub-central government level, which combined with high-powered incentives also creates the danger that local policy may become unduly subject to rules which are skewed towards meeting the priorities of central government. The aim of performance budgeting is to assist policymakers and the population by identifying best practice and this innovation has been welcomed by service providers. There are three main elements to the system in England. First, there are currently 97 Best Value performance indicators -- which can potentially change annually – gauging local government performance. Second, local government inspectorates assess the quality of service provision (Comprehensive Performance Assessment, CPA). Third, since 2000, Public Service Agreements (PSAs) made with the Treasury have established objectives that are not necessarily limited to the Best Value performance indicators. The latest wave of agreements (Local Area Agreements) brings all interested service providers together to harmonise the objectives and reduce the danger of co-ordination failure between the PSAs of local authorities and spending ministries. Initially, PSAs were supported with improved financing conditions and later with permission to provide a broader range of services than mandated by legislation, while a good rating in the CPA should now result in a reduced inspection burden.

In sum, the need for improvement and greater standardisation of services may be difficult to reconcile with greater autonomy and local choice. Indeed, the experience of the United Kingdom highlights the fact that expenditure rules, when specified at the sub-programme level to facilitate output-budgeting may lead to central supervision and micro-management, making it difficult to create a coherent set of rules. More generally, the difficulty of specifying expenditure rules without becoming intrusive may help to explain why they are the least frequently found type of sub-central budget rule among the OECD economies covered in this paper.

3. A typology of fiscal rules in OECD countries

14. 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).[8] 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.

15. 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 Konsgrud (2003) and the results of previous questionnaires sent to senior budget and tax officials, as well as other sources.[9] In order to simplify presentation in the following tables, intermediate tier governments (states, provinces, territories, laender, regions, counties) are labelled "states", while lower tier governments (local, municipal, communal) are designated as "local".

3.1 Budget balance requirements

Budget balance requirements often have limited coverage…

16. 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). The most common objective from the questionnaire was one which encompassed the current budget and capital account. Targeting the current budget alone, which allows sub-central governments to borrow for public investment, was somewhat less common among reporting countries. The restriction that borrowing is limited to financing (net) investment is sometimes referred to as the "golden rule" of public finance.[10] In Austria, some Canadian provinces, Poland and Spain off-budget items are included in the objective.

… are frequently set on an annual basis…

17. The relevant time horizon for budget balance requirements is overwhelmingly annual, though in Australia, 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 the Netherlands and 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 the three year period. If this is not the case, a municipality needs to submit budgets to higher levels of government for approval.

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8. The literature typically refers to limitations rather than limits.

9. 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).

10. This is sometimes justified by appeals to inter-temporal equity being served by spreading payment over time so that financing burden also falls on future beneficiaries of the investment.

..and imposed by a higher level of government for the outturn

18. 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 budget balance requirements apply to budgetary outturns, with a slight majority reporting that no carry-over is 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 Korea and Portugal, both proposed and approved budgets need to be balanced.

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

Note: When additional information to that provided by questionnaire responses is available, this is given in italics. The response for Canada (state) also indicated that some states have no budget balance requirements.

3.2 Borrowing constraints

Access to borrowing is typically controlled but with substantial variation in terms of restrictiveness…

19. Borrowing constraints cover a range of restrictions on sub-central government recourse to debt financing. With the exceptions of Australia, Canada, Spain (states) and Switzerland, a higher level of government typically imposes these constraints (Table 2, Panel A).[11] 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.[12] A few countries apply limits on borrowing for specific purposes. For example, in Spain, local authorities can borrow up to 30 per cent 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 (see Table 1) may also have the effect of outlawing in practice the need for borrowing constraints.

11. In Germany, the laenders' access to borrowing is almost totally unconstrained. Technically, there is a provision to limit borrowing to prevent major macroeconomic disturbances, but this has never been invoked.

12. Maintaining limits on deficits was important due to the vertical fiscal gap that opened during the process of decentralisation. More recently, as greater revenue sources have been assigned to sub-central governments, macroeconomic considerations would suggest they target minimum surpluses.

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	Canada local	Germany local	Canada state
	Korea local (current)	Japan (capital)	Norway local	Czech Republic local
		Korea (capital)	Spain local (capital)	France local
		Spain local (capital)	Portugal local	Netherlands local*
		Turkey local	*Canada local*	Japan local (current)
		Greece local	*France local*	Poland local
		Ireland local	*Hungary local*	
		Luxembourg local	*Italy state and local*	
		Mexico local	*Slovak Republic*	
		United Kingdom local		
Negotiated binding	Spain region (current)	Spain region (capital)		
Self imposed			*Switzerland state*	Canada state

* In the Netherlands, only local governments with balanced budget can borrow and only in euros.

B. Restrictions 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		√	√	√	√			
The Netherlands				√	√			
Norway	√				√			
Poland			√	√			√	
Portugal		√	√	√	√			
Spain state		√	√		√			
Spain local					√			
Turkey				√			√	

… though borrowing is usually subject to numerical constraints and rarely explicitly guaranteed

20. The majority of countries that submitted responses impose numerical constraints on sub-central government borrowing. For example, such as 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, 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.

Relations with enterprises and banks are sometimes subject to extra restrictions.

21. 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 as noted in Denmark. In Canada, Denmark, Germany, Korea, Portugal and Spain additional limitations on borrowing by and from these enterprises may also be required (Table 3). 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", although strictly speaking this is not a credit institution. In the Czech Republic, while bank ownership by a sub-central government has occurred this is not currently the case.

Table 3. **Relations with banks and public enterprises**

	Own, control, or special relationship with banks	Special restriction on borrowing from these banks	Own or control enterprises	Special restrictions on borrowing from or by these enterprises
Austria	√			
Czech Republic	√ (but not currently)		√	
Canada state			√	By
Canada local			√	By
Denmark	√ (jointly owned)		√ (public utilities)	Require long-term balance
Finland			√	
France				
Germany state	√		√	From and by
Iceland			√	
Germany local	√	√	√	From and by
Japan	√		√	
Korea			√	By
The Netherlands	√(jointly owned)			
Norway	√(jointly owned)			
Poland				
Portugal			√	By
Spain state			√	√
Spain local			√	
Turkey			√	From and by

3.3 Tax and expenditure limits

Tax and expenditure limits have become more popular…

22. Although tax and expenditure limits (TELs) have a long history in public finance, dating from the late nineteenth century, they regained popularity relatively recently with the rapid expansion in their use during the "tax revolt" across the United States that followed a referendum in California in 1978 (Proposition 13) on property tax rates. Most US states now have some form of TEL, mainly on property taxes.[13] In most countries, central governments impose limits on tax rates or reliefs that can be set by sub-central governments. Explicit restraints on expenditures are less common. The main types of TELs include:

- *Overall limits on tax rates or reliefs*. In most OECD countries the form of the tax limit is in the form of an explicit limit on tax autonomy. In Denmark, Japan and Mexico, implicit sanctions on sub-central governments serve to restrain increases in tax rates. In contrast to limits on rates or reliefs, 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.

- *Expenditure increase limits* This type of limitation is 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).

...though most sub-central governments possess some tax autonomy…

23. In an earlier questionnaire on the tax autonomy of sub-central government, tax autonomy is assessed in relation to how much control the sub-central government has over taxes. 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. The results from the new questionnaire and the earlier survey of tax autonomy reveal that most sub-central governments possess some tax autonomy, typically over the rate or reliefs, though not always both (Table 4). 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.

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13. Mullins and Wallin (2004).

Table 4. **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	
Australia state	100					
Australia local	100					
Belgium state	100					
Belgium local	46.6	51.3				2.1
Belgium communities			100			
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	65.4			
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
				(In 1995)		
Austria	2	98				
Hungary local		30			70	
Iceland local	8	92				
Mexico local				74		26
Mexico states	14		86			
The Netherlands		100				
New Zealand local	98					2
Poland local		46		54		
Sweden municipalities	4	96				
United Kingdom		100				

Source: Questionnaire responses and OECD (1999).

…and are rarely subject to expenditure limits

24. Explicit limits on expenditures are rare in OECD countries (Table 5). 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. 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. 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.

Table 5. **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.

3.4 Process rules and rule implementation

Process rules can help ensure that budgetary objectives are met…

25. 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.[14] 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.[15]

…and include requirements for transparency in financial accounting…

26. Greater transparency is likely to complement objective-setting fiscal rules.[16] 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

14. Drazen (2002), Hallerberg, Strauch, and von Hagen (2004a).

15. Inman (1996).

16. See for example, the *OECD's Best Practices for Budget Transparency* (OECD, 2001).

consideration given that fiscal rules can create adverse incentives for administrations to circumvent them through accountancy gimmickry.[17]

27. The transparency of accountancy reporting standards varies considerably across the OECD (Table 6). 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, central government in agreement with the local authorities established a system of accrual accounting, which is also the object of reforms in Belgium.

Table 6. **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		
The 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.

…and monitoring and reporting…

28. When the informational asymmetry between sub-central governments and both the population and higher levels of government is large, effective systems of monitoring are particularly important. Whether monitoring is *ex ante*, *ex post*, or both has a bearing on the likely effectiveness of a fiscal rule. In general, *ex post* monitoring should contribute more to ensuring rule adherence than *ex ante* monitoring on its own. Nonetheless, ex ante monitoring to assess *inter alia* the economic assumptions included in budget forecasts may be necessary to prevent sub-central governments laying the blame on forecast error rather than inappropriate fiscal policy.[18]

29. External monitoring could enhance fiscal policy by determining whether policy abides by its set of fiscal rules. Independent monitoring, by bodies such as audit offices, can strengthen monitoring. This

17. Milesi-Ferretti (2003).

18. Annett, Decressin and Deppler (2005).

can be particularly important in assessing whether budgets are sufficiently transparent in making reasonable assumptions for grounding policy, for example. To a varying extent, several countries have largely independent bodies that monitor, audit, and report on sub-central government budgetary actions. These include bodies that are centrally directed or based on central and sub-central government co-operation to perform these roles. For example,

- In the United Kingdom, the (operationally independent) Audit Commission has been charged with auditing local governments and making the results public in annual audit letters. In addition, the Audit Commission conducts value-for-money assessments and comparisons of sub-central government.

- In Australia, the Loan Council, which brings together representatives of central and sub-central governments, reviews proposed borrowing plans and can request sub-central governments to make adjustments if they threaten macroeconomic objectives. The Loan Council also publishes its recommended borrowing limits.

30. While many sub-central governments themselves undertake the monitoring of whether fiscal rules are being met, in a significant number of countries either a higher level of government or an external and often independent body is responsible for monitoring (Table 7). Monitoring most often involves reporting to a higher level of government. Independent monitoring is also undertaken in Italy, the Slovak Republic and the United Kingdom and in all cases results are reported to the national legislature.[19] 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.

31. 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.

19. In Italy, reporting is also to the Treasury.

Table 7. **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			BBR				BBR
Canada state	BBR, TL, BC			TL	BBR, TL	BC	
Canada local		BBR, TL, BC				BBR, TL, BC	BBR, TL, BC
Czech Republic	BBR, BC	TL, BC			BBR, TL, BC	TL, BC	
Denmark	BC	EL, TL	BBR, BC			EL, TL	BBR, BC*
Finland	BBR, EL, BC		TL	BBR, TL			
France		BBR, TL, BC	BBR, TL, BC	BBR, TL, BC		BBR	
Germany state	EL, BC		EL	EL, BC	EL, BC		EL
Germany local	BBR, EL, BC					BBR, EL, BC	
Iceland		TL			TL		
Japan	BBR, EL	BC		BBR, EL		BC	
Korea	BC	BC		BC**	BC	BC	
The Netherlands	EL, TL	BBR, BC			BBR, EL, TL, BC	BBR, BC	
Norway		BBR, BC				BBR, BC	
Poland	BBR, EL, BC	BBR, EL, BC	BBR, EL, BC	BBR, EL, BC	BBR, EL, BC	BBR, EL, BC	BBR, EL, BC
Portugal		BBR, BC, TL, EL				BBR, BC, TL, EL	
Spain state		BBR, BC	TL			BBR, BC	BBR, BC
Spain local	EL, TL	BBR, BC				BBR, BC	
Turkey	EL, BC	EL, TL, BC			EL, BC	EL, BC	

Note: BBR stands for budget balance requirement, TL for tax limitation, EL for expenditure limitation, and BC for borrowing constraint.

* In case of trouble.

** Planned from 2006.

…as well as the imposition of sanctions…

32. The design of effective sanctions is complicated, particularly when economic conditions change sufficiently to make rule observance problematic. Nonetheless, sanctions may be necessary to complement other process rules in ensuring compliance.[20] 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.[21] The severity of

20. 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).

21. The expenditure targets set for fiscal policy in France (at the national level) operate in this manner (Moulin, 2004) as well as the repeated deviations from the successive vintages of Stability and Growth

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.[22] Financial sanctions, in particular, may lack credibility as sub-central governments in budgetary distress are often more likely to receive additional support.[23] 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).

Table 8. **Sanctions**

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

Note: BBR stands for budget balance requirement, TL for tax limitation, EL for expenditure limitation, and BC for borrowing constraint.

33. In the countries responding to the questionnaire, financial sanctions were reported in eight cases, though breach of fiscal rules can also have repercussions for eligibility for grants (Table 8). In the Czech

Pact programmes (OECD, 2005c). 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).

22. For example, the sanction mechanism in the Italian domestic stability pact that could impose the 0.2 per cent of GDP deposit envisaged by the Excessive Deficit Procedure is unlikely to be implemented if only a handful of sub-central governments are responsible (Balassone and Franco, 2001).

23. Bodmer (2003) argues that Swiss canton tend to get larger transfers when they are in financial trouble as transfers are based on financing needs. Seitz (1999) reports that in Germany financially distressed local government are likely to be eligible for a loan from the laender that they may not even need to repay.

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. With the exception of sub-central governments in Austria, some Canadian states, Finland, and Spanish states, administrative sanctions can be applied when fiscal rules are breached.

34. In a number of countries, sub-central governments violating their fiscal rules have to justify the event or produce a plan for rectifying the situation.

- In Australia, the Loan Council can require a state to provide an explanation for breaching a tolerance limit on its projected deficit.

- In the Czech Republic, when a municipality or region exceeds the debt service ratio of 30 per cent of current revenue it is obliged to explain this to the Ministry of Finance and prepare a plan for rectifying this situation.

- In Denmark, the *Statsamtmanden* (the regional representative of central government) can request a new budget if the municipality fails to balance its budget.

- In Finland, when municipalities run budget deficits they are required to prepare plans for rectifying the situation.

- In the Netherlands, the Minister of Home Affairs can require that a provincial authority submit budgets for approval if the provincial budget is not in balance and not likely to be balanced in the near term. Provincial authorities can exert a similar control over municipal budgets.

- In Spain, state governments that fail to meet a fiscal target must produce a medium-term consolidation plan. The Fiscal and Finance Policy Council then adjudicates whether the plan is adequate.

- In Sweden, if a municipality does not meet its obligation to balance its budget on an annual basis it is obliged to run an offsetting surplus in the following three years.

…but also rules which allow flexibility of response

35. 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 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.

Table 9. **Escape clauses**

	Fiscal rules are relaxed if there is			
	A shock to sub-central government revenue	A shock to the local economy	A natural or other disaster	Another cause
Austria	BBR	BBR	BBR	BBR
Canada state		BBR	BBR	BBR, TL
Canada local				
Czech Republic			BBR, BC	
Denmark				
Finland				
France				
Germany state		BBR, BC		
Germany local				
Iceland				
Japan			BBR, EL	
Korea			BBR, BC, TL, EL	
The Netherlands				
Norway				
Poland			EL, BC	
Portugal			BBR, BC, EL	
Spain state				
Spain local				
Turkey				

Note: BBR stands for budget balance requirement, TL for tax limitation, EL for expenditure limitation, and BC for borrowing constraint.

36. 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. In the Netherlands, accrual accounting allows municipalities to form reserve-funds that are drawn on during the troughs of the cycle.

Table 10. **Coping with the cycle**

	Sub-central governments					
	Can draw on		Can cut mandated expenditures	Revenues are adjusted to		Receive special financial support
	Rainy day or reserve funds	Off budget funds		Projected cyclical fluctuations	Actual shocks	
Austria						
Canada state	√	√		√		
Canada local	√					
Czech Republic		√				
Denmark				√		
Finland	√	√	√		√	√
France						√
Germany state			√			
Germany local					√	
Iceland						
Italy						
Japan	√					
Korea						
The Netherlands	√					
Norway						
Poland						
Spain state						
Spain local						
Turkey						√

4. Structural influences on the need for fiscal rules

37. 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.

4.1 Expenditure assignments

Expenditure assignments can influence the types of rules needed…

38. The particular expenditure assignments given to sub-central authorities can give rise to a number of problems which influence the choice of fiscal rule and which account for the infrequency of rules which directly impact on spending. Where decentralised provision involves local responsibility for politically-sensitive public services it can make it difficult for central governments to resist bailing out deficit-prone sub-central governments, while strong cost and demand pressures for particular types of locally provided public services can also serve to undermine attempts to restrain the growth of the public sector. These problems may require corrective action via the adoption of an appropriate fiscal rule. However, an aggregate spending ceiling may cause distortions to the composition of spending. Furthermore, the difficulty is to find a rule -- or set of rules –– that does not reintroduce central direction by the back door, via the application of programme-level rules ceilings.

…especially when they are politically sensitive…

39. 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.[24] 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.[25] 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 (Table 11). 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.

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24. This is related to the "too-big-to-fail" type argument (Wildasin, 1997; 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.

25. The requirements for euro area membership made no bailout expecrtations creditble, and Italian local governments managed to restrain health expenditure during that period. Following the introduction of the euro, fiscal positions again deteriorated [OECD (2002b and 2005d), Bordignon (2004)].

Table 11. **Sub-central shares of politically sensitive spending**

In per cent of general government spending, 2003

	Health		Education		Social protection	
	State[1]	Local	State[1]	Local	State[1]	Local
Austria	27.0	20.7	29.7	23.5	9.0	6.9
Belgium	1.5	1.9	91.8	21.1	12.8	5.9
Denmark	..	97.4	..	54.4	..	75.2
Finland	..	82.5	..	62.9	..	21.0
France[2]	..	0.7	..	27.4	..	5.1
Germany	2.4	2.0	77.4	28.1	13.9	9.7
Greece	..	52.7	..	2.3	..	0.1
Italy	..	98.2	..	30.4	..	3.7
Luxembourg	..	0.3	..	21.7	..	1.3
Netherlands	..	5.2	..	79.4	..	16.7
Norway	..	30.4	..	65.6	..	21.1
Portugal	..	3.7	..	7.7	..	0.9
Spain[2]	2.5	2.1	83.6	4.4	2.8	3.2
Sweden	..	97.3	..	75.1	..	28.5
United Kingdom	..	0.1	..	71.1	..	22.4
United States[3]	55.2	..	96.1	..	16.3	..

Note: Data are not consolidated at the state and local level, which explains that the sum of state and local expenditure can exceed 100 % of general government expenditure in some cases.

1. State, region or province when separately available in the National Accounts.
2. 2002 data for France and Spain.
3. In the case of the United States, both state and local expenditure are aggregated at the state level.

Source : OECD National Accounts Database.

40. 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 will ultimately be responsible for failures in service delivery, lead to an expansion of performance measures on a programme-by-programme basis that in effect reintroduces central direction (see above).[26]

…and subject to demand and cost pressures

41. 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 more mandated services and increases in transfers from central government. However, unexpectedly strong growth in demand for services -- often healthcare -- has also been a contributing factor, compounded by significant cost pressures in health and long-term care provision, where productivity gains are hard to achieve. In Finland, the rapid ramp up in

26. In this context, the political importance of performance indicators, which in the United Kingdom the sub-central governments themselves may be responsible for collecting on the basis of non-standardised metadata, can give rise to the perception of data unreliability. This is not restricted to the United Kingdom. Laking (2002) noted the "gaming" in setting performance indicators and misrepresentation of performance statistics in other countries moving to performance based systems.

expenditures and increasing pressure for additional resources from central government has threatened to undermine aggregate fiscal policy objectives for spending restraint and reducing personal income tax rates.[27] The central government in Denmark has sought for ways to include sub-central governments in decision-making that considers the aggregate implications of local actions as a means to addresses possible co-ordination failures to complement existing fiscal rules. This is particularly important given the municipalities' predominant weight in aggregate expenditure and substantial taxation autonomy. To encourage compliance central government has offered inducements as well as threatening sanctions.[28]

4.2 Revenue assignments

The choice of fiscal rules …

42. The extent and source of income assigned to sub-central governments also affects the case for introducing fiscal rules. In the first place, a disparity between expenditure and income assignments often makes for a soft budget constraint, which may require mitigation from a fiscal rule: strict borrowing requirements are more frequent when sub-central governments are relatively more dependent on intergovernmental transfers.[29] Secondly, and by contrast, sub-central governments with more revenue autonomy tend to run smaller deficits, and where there is a degree of tax competition there can also be pressure to keep taxes down, reducing the need for rules to address possible losses in aggregate efficiency. However, expanding the sub-central tax autonomy can expose a sub-central government to a greater degree of cyclicality in its revenues which can create conditions for expenditure drift. Pitfalls in design associated with the concurrency of central and local tax bases can likewise give rise to weakened incentives for sub-central governments to restrain expenditure.

…is different if tax competition is possible…

43. 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.[30] This has been a notable feature and accounts for the lack of fiscal rules in many cantons in Switzerland until the 1990s (Box 3). 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.

27. In Finland, municipalities can apply for discretionary grants that are available during periods of exceptional circumstances. This system has in practice significantly reduced the incentives for fiscal discipline at the municipal level and "exceptional" grants are disbursed on an annual basis (OECD, 2004).

28. Blom-Hansen and Pallesen (2001).

29. Rodden (2002).

30. 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.

… from when revenue sources are procyclical…

44. 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. The extent to which sub-central governments are exposed to revenue cyclicality is explored in Table 12. This shows that for a number of countries, notably Mexico and Turkey, the coefficient of variation in tax revenue as a share of GDP is actually larger for local government than for higher levels of government. In some cases, this is a result of trend increases or declines in tax revenue as a share of sub-central government revenues (Hungary, Italy, Poland, Spain). At the same time, overall instability as measured by the coefficient of variation in the levels of tax revenue can be seen to be important in several countries and while it affects all levels of governments may be harder to cope with at the sub-central level to the extent that variations are asymmetrically experienced across the country.

Table 12. **Tax revenue volatility**

	1991	1996	2003 [1]	Average 1991-2003 [1]	Average annual change	Coefficient of variation (tax revenues in % of GDP)	Coefficient of variation (tax revenues in levels)	Tax revenue in % of total government revenue (1999-20031)
	(Per cent of GDP)							
Federal countries								
Australia								
Total	27.7	30.3	31.5	29.9	1.2	0.05	0.25	84.8
State	5.1	5.8	4.8	5.4	-0.6	0.09	0.18	..
Local	1.1	1.0	1.0	1.0	-1.1	0.05	0.16	..
Austria								
Total	40.9	43.5	43.0	43.2	0.4	0.03	0.16	86.3
State	4.4	4.4	3.7	4.2	-1.6	0.06	0.09	39.5
Local	4.6	4.7	4.0	4.5	-1.1	0.05	0.11	48.7
Belgium								
Total	43.4	45.0	45.8	45.1	0.4	0.02	0.17	91.3
State	9.4	10.2	10.9	10.3	1.2	0.05	0.19	77.7
Local	2.0	2.3	2.4	2.2	1.6	0.07	0.19	33.7
Canada								
Total	36.4	35.9	33.9	35.6	-0.6	0.03	0.18	83.2
State	13.0	13.1	11.9	12.8	-0.7	0.04	0.18	61.0
Local	3.7	3.4	2.9	3.3	-2.1	0.11	0.09	40.2
Germany								
Total	36.8	37.4	36.2	37.3	-0.1	0.02	0.10	80.3
State	7.7	8.3	7.8	8.1	0.1	0.03	0.11	63.6
Local	2.9	2.7	2.4	2.8	-1.4	0.06	0.08	36.3
Mexico								
Total	17.3	16.7	18.1	17.5	0.4	0.04	0.64	..
State	0.4	0.3	0.4	0.4	1.4	0.08	0.64	..
Local	0.2	0.2	0.2	0.2	-0.2	0.20	0.57	..
Switzerland								
Total	25.7	28.3	29.8	28.3	1.2	0.06	0.13	84.1
State	6.4	6.7	7.3	6.8	1.1	0.05	0.12	49.7
Local	4.5	4.9	4.8	4.8	0.6	0.03	0.10	54.9
United States[2]								
Total	27.1	28.3	25.4	27.9	-0.5	0.05	0.20	81.9
State	5.4	5.6	5.1	5.5	-0.4	0.03	0.19	51.6
Local	3.9	3.7	3.8	3.7	-0.2	0.02	0.19	..

(Continued ….)

Table 12. **Tax revenue volatility** (*continued)*

	1991	1996 (Per cent of GDP)	2003[1]	Average 1991-2003[1]	Average annual change	Coefficient of variation (tax revenues in % of GDP)	Coefficient of variation (tax revenues in levels)	Tax revenue in % of total government revenue (1999-20031)
Unitary countries								
Denmark								
Total	46.8	49.9	49.0	49.3	0.4	0.02	0.18	85.9
Local	14.5	15.5	17.0	15.8	1.3	0.05	0.18	51.8
Finland								
Total	46.0	47.3	44.9	46.2	-0.2	0.02	0.21	84.9
Local	9.6	10.8	9.5	10.0	-0.1	0.04	0.18	53.9
France								
Total	43.2	45.3	44.2	44.6	0.2	0.02	0.15	88.5
Local	4.0	5.0	4.5	4.6	1.0	0.06	0.10	44.6
Greece								
Total	29.4	40.1	35.9	34.5	1.8	0.09	0.39	79.2
Local	0.3	0.3	0.3	0.3	1.3	0.13	0.21	11.3
Hungary								
Total	45.9	40.7	38.3	41.3	-1.6	0.07	0.53	87.4
Local	0.7	1.5	2.1	1.6	10.1	0.29	0.66	17.5
Iceland								
Total	31.7	32.9	40.3	35.2	2.0	0.10	0.37	85.9
Local	6.4	6.5	9.8	7.8	3.6	0.17	0.41	73.7
Ireland								
Total	34.1	32.8	30.0	32.4	-1.0	0.06	0.39	86.4
Local	0.8	0.7	0.6	0.7	-2.4	0.16	0.29	4.4
Italy								
Total	39.3	42.7	43.4	42.4	0.8	0.03	0.20	93.1
Local	1.1	2.4	7.2	3.8	17.2	0.62	0.63	47.0
Japan								
Total	29.8	27.7	15.3	26.6	-5.4	0.13	0.13	86.6
Local	7.4	6.8	6.5	6.9	-1.1	0.04	0.04	..
Korea								
Total	18.3	20.0	25.5	21.2	2.8	0.12	0.45	80.7
Local	3.5	3.9	4.6	3.9	2.3	0.10	0.35	..
Luxembourg								
Total	38.9	42.5	41.5	41.0	0.6	0.03	0.29	89.6
Local	2.5	2.8	2.2	2.4	-0.9	0.08	0.21	38.2
Netherlands								
Total	45.3	41.5	38.8	41.9	-1.3	0.05	0.15	85.9
Local	1.0	1.2	1.5	1.2	3.1	0.14	0.29	8.8
New Zealand								
Total	35.9	34.9	34.8	35.1	-0.2	0.04	0.18	..
Local	2.2	1.9	1.9	2.0	-1.2	0.05	0.15	..
Norway								
Total	41.4	41.1	43.9	42.1	0.5	0.03	0.29	76.7
Local	8.3	7.9	6.5	7.5	-2.1	0.12	0.14	41.9
Poland								
Total	34.8	36.8	32.6	35.1	-0.6	0.07	0.53	74.3
Local	3.0	3.2	5.9	4.0	6.3	0.33	0.69	32.6
Portugal								
Total	30.3	34.4	33.9	33.8	1.0	0.06	0.30	83.8
Local	1.6	1.8	2.3	1.9	3.1	0.11	0.31	36.8
Slovak Republic								
Total	..	..	33.1	33.6	-0.7	0.04	0.11	70.6
Local	..	..	1.5	1.4	0.5	0.09	0.17	42.9
Spain								
Total	33.5	32.6	35.8	34.2	0.6	0.03	0.28	89.5
Local	4.1	4.4	10.2	5.7	7.8	0.35	0.57	45.6
Sweden								
Total	50.7	50.4	50.8	50.4	0.0	0.04	0.19	86.0
Local	15.7	15.3	16.5	15.7	0.5	0.03	0.16	62.6
Turkey								
Total	21.0	25.4	32.9	27.3	3.8	0.18	1.38	..
Local	1.9	3.2	2.1	2.8	1.0	0.33	0.97	..
United Kingdom								
Total	35.4	34.7	35.3	35.4	0.0	0.03	0.23	89.4
Local	1.5	1.3	1.7	1.4	1.2	0.09	0.27	13.2

1. 2002 in the case of Australia, Mexico, Greece, Poland, Portugal and the Slovak Republic.
2. In the OECD National Accounts Database, the state government level includes the local level, hence the tax revenue expressed in perc ent of total tax revenue at the state level corresponds to both state and local government tax revenues expressed as a per cent of total state and local government receipts.

Source: OECD Revenue Statistics, 1965-2003; OECD National Accounts database.

Box 3. **Fiscal rules in Switzerland**

Switzerland is a highly decentralised federal country, where the cantons are autonomous in all the spheres of competences where the confederation is not authorised by the constitution. This constrains the ability of central government to impose fiscal rules on sub-central governments (and as a result the confederation can face difficulties in conducting counter-cyclical fiscal policy). The confederation changed the constitution in 2001 to the effect that the budget is balanced over the cycle, but this "debt brake" does not apply to the cantons.

There is considerable variety in the cantons' own fiscal rules and the rules they impose on their communes. For example, 13 cantons have their own "debt brakes" of various degrees of restrictiveness and requirements to hold referenda on expenditure vary across the cantons. The cantons determine budget balance objectives and debt service limits for the communes. In some cases, the cantons are responsible for deficits experienced at the communal level.

A number of studies have identified features that have helped restrain the growth in the size of government. These include most notably the institution of direct democracy (the requirement to hold referenda on expenditures that exceed certain thresholds). Tax competition between the cantons has helped maintain pressure on policymakers to keep rates low, particularly on the more mobile tax bases. As a result, the argument that sub-central government have a tendency, from political myopia, to tax inefficiently or excessively has not been an important motivation for fiscal rules in Switzerland. Other factors that lead to smaller government include the small size of the cabinet, bodies that oversee the finance commissions and, in some cantons, rules that debar bailouts of communes (Schaltegger and Feld, 2004; Schelker and Eichenberger, 2005; and Blankart and Klaiber, 2005). And a recent federal court ruling that a canton (Valais) did not have the obligation to bail out a delinquent commune (Leukerbad) has further strengthened the position of the cantons *vis-à-vis* the communes and enhanced the potential monitoring and sanctioning role financial markets can play.

Notwithstanding these aspects of the fiscal policymaking landscape, during the 1990s, the growth of sub-central government as a share of GDP increased and liabilities almost doubled in real terms. This occurred despite most cantons having adopted recommendations contained in the Conference of Cantonal Ministers of Finance's *Handbook of Public Budgeting* to balance their budgets over the business cycle and to reduce debt over a 10-year period. The growing debt levels provoked over a third of cantons to introduce new limitations on the accumulation of debt. These "debt brakes" have proven to be successful at preventing deficits (Feld and Kirchgässner, 2004, 2005). Another source of pressure has been exposure to guarantees given to canton owned banks. The recent experience of a few cantons having to bail out publicly owned banks has led to a reassessment of these types of guarantees.

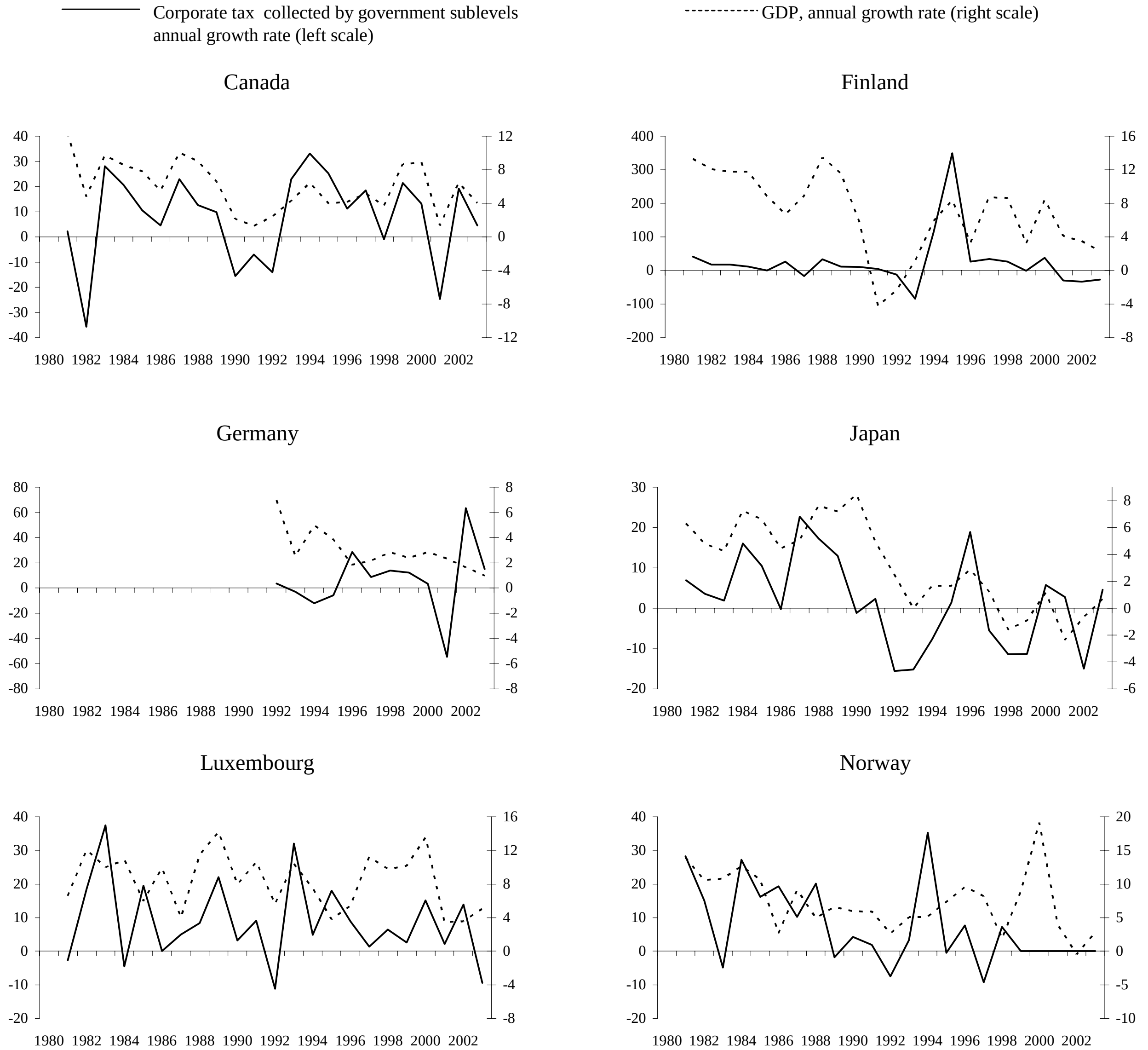
The problems of the 1990s emerged because the existing fiscal rules were ill adapted to cope either with cyclical variations in revenue or the secular upward pressures on spending (Bodmer, 2004). Direct democracy -- by voting on *new* spending -- is weak in addressing growing programme spending. Thus, as programme spending rose during the 1990s, both as a result of the economic downturn leading to larger social security spending and the consequences of population ageing, this has led to a severe squeeze on spending, which may be leading to allocative inefficiencies. Furthermore, the constraints of the rules have led some canton to shift expenditure off-budget and increasingly resort to non-tax revenue. This serves to reduce the transparency of budgetary reporting, which is already murky with respect to social security and health spending and only weakly constrained by a recommendation to use a common reporting standard. On the other hand, no investment insufficiency has arisen because debt brakes have usually differentiated between current expenses and investment.

The experience of Switzerland highlights the fact that certain institutional features, such as direct democracy and tax competition can help constrain the size of the public sector and obviate the need for tax rules. It also shows that appropriate borrowing and debt rules can enhance fiscal policy even where there is financial market oversight: cantons with stronger debt brakes have experienced a slower growth of expenditure than those with weaker brakes. Nevertheless, such rules need to be flexible with respect to cyclical shocks -- a significant minority of cantons now allow a correction with respect to the business cycle -- and forward looking if they are to deal effectively with spending pressures stemming from ageing and demand driven growth of entitlement spending.

45. 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 (Figure 5). 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.

Figure 5. **Economic Growth and sub-central government corporate tax revenues**



Source: OECD, Revenue Statistics, 1965-2003.

...and when there is concurrent control over taxes and negative spillovers

46. 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.[31] 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.[32] 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.

4.3 Financial market oversight

47. Financial markets can substitute for other monitoring mechanisms of sub-central governments and through imposing higher borrowing costs can impose sanctions for imprudent fiscal policy. To the extent financial markets perform these roles they reduce the necessity for formal fiscal rules (Box 4). In this context, reforms in Mexico and Norway (and proposals in Japan) attempt to give financial markets a greater weight in disciplining sub-central government fiscal policy. However, even in countries where financial markets provide effective discipline on sub-central government fiscal policy, these governments have found it advantageous to adopt fiscal rules, such as expenditure limitations and balanced budget requirements to signal their budgetary commitment. Explicit bankruptcy laws for sub-central government may help to ensure that financial markets perform the monitoring and sanctioning roles effectively, and avoid the danger that financial markets believe that higher levels of government will bail out sub-central governments. However, respondents to the questionnaire reported that bankruptcy was either not allowed or impossible in practice.

4.4 The political setting

48. 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 laender of Saarland and Bremen. The consequences of this ruling make it nearly impossible for central government to resist bailout in the future.[33] This has led to consideration of ways in which the powers of the Financial Planning Council, which brings federal and state finance ministers together, can be strengthened within the bounds of the constitution.[34] One of the more effective means of reconciling budget discipline with the benefits of local choice is the "direct democracy" requirement of holding referenda, which are sometimes referred to as "think twice" obligations. 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.[35] 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

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31. In 2003, the average tax hike by the municipalities was 0.65% of taxable income. In the mid 1990s, municipalities also increased tax rates when a freeze was lifted. This prompted central government to reduce grants to municipalities that raised tax rates until the end of the decade (Fischer, 2005).

32. OECD (2005e).

33. Seitz (1999). While it existed, these two laender also benefited from not having to contribute to the Germany Unity Fund for the eastern laender.

34 . See Höppner and Kastrop (2004).

35. Feld and Matsuaka (2002), Kiewiet and Szakaly (1996).

size of government and may lessen the need for explicit objective setting fiscal rules to control the size of government.[36]

Box 4. **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. But the interests of financial market participants imply that this discipline is unlikely to lead to effective restraint on the growth in the overall size of the public sector. In addition, 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 discipline is likely to impinge upon an unsustainable fiscal policy when it is threatening to undermine borrowing commitments, thereby requiring 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 Laender, where a constitutional clause makes it almost impossible for central government to refuse to bail out derelict Laender. 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 due to the significant role of transfers in revenue being 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 are not 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); Poterba and Rueben (1997); Brumby and Cangiano (2001); Drudi and Prati (2000); Balassone, Franco and Giordano (2004).
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.

4.5 The choice of rules is state contingent

49. From the above, fiscal rules would be seem to be highly state contingent, in the sense that their appropriateness depends upon a range of institutional factors which determine the extent of any bias, based on local choice, towards excessive deficits and/or taxation. Rules are less necessary where there is a close match between local taxes and spending responsibilities, or where there is effective tax competition or direct democracy on the tax front. Depending on the circumstances, they may either be useful substitutes for, or factors reinforcing financial market discipline, reinforcing inter-temporal fiscal discipline. More generally, the rule choice is shaped to a large extent by political and constitutional constraints.

5. Trade-offs and side-effects

50. 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-

36. 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).

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.

5.1 Budget balance requirements and borrowing constraints

Budget balance requirements and borrowing constraints may support fiscal sustainability…

51. In their impacts, budget balance requirements and borrowing constraints have very similar effects, in that they essentially set objectives for the flow and stock of debt, respectively. Although the empirical evidence is mixed, several studies have shown that a budget balance requirement can help ensure 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.[37] While most of the empirical evidence comes from the United States, where most states have had fiscal rules in place for considerable time, studies of Canada, where fiscal rules were self-imposed by some provinces during the 1990s and some developing countries support these findings.[38] 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.[39] 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.[40]

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37. On the effects of budget balance requirements in the US, see Bayoumi and Eichengreen (1995), Bohn and Inman (1996), Poterba (1994), and Sørensen *et al*. (2001).

38. See Tellier and Imbeau (2004) for Canada. Alesina *et al*. (1996) provide comparison with Latin American countries.

39. 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.

40. Bayoumi, Goldstein and Woglom (1995), Eichengreen and von Hagen (1996), Poterba and Rueben (2001).

Box 5. **The US "state budget crisis"**

The recent "state budget crisis" in the United States highlights the effects budget balance requirements can create for fiscal policy. During the high growth years of the 1990s, states cut personal income tax rates on the back of buoyant receipts. With the onset of recession in 2001 and the consequences of a fall in the labour share, many states responded by raising tax rates again, albeit fewer than during the 1990-91 recession.[1] Furthermore, during the budget years for 2002 and 2003, 37 states cut their budgets, both on programmes and personnel (Table). Some states raised additional revenue from user charges, while others covered short-run financing needs by securitising their awards from the tobacco settlements.

Policy responses to the state budget crisis

	Number of states reporting taking a given measure			
	2001	2002	2003	2004
Increasing fees	0	5	16	2
Layoffs	1	15	16	3
Furloughs	0	6	9	2
Early retirement	1	5	13	1
Across-the-board cuts	10	5	32	6
Reduce local aid	0	27	11	2
Programme reorganisation	1	13	13	2
Privatisation	0	2	0	0
Drawing on rainy day fund	4	26	25	4
Other*	12	32	29	30

* Other includes *inter alia* selective cuts in spending as well as the securitisation of Tobacco Settlement Awards.

Source: NGA, NASBO (2001-2004).

1. Garret and Wagner (2004).

… at the cost of procyclicality …

52. A fundamental problem with budget balance requirements and debt rules is that fiscal policy risks becoming procyclical, the more stringent the rule and the shorter the relevant budget time horizon.[41] 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 (Box 5). 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.[42]

…and losses in aggregate and allocative efficiency

53. 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,

41. Levinson (1998) Cross-sectional evidence from the US states suggests that balanced budget rules exacerbate business cycles.

42. 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.

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.[43]

54. 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.[44] 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. [45] 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."

5.2 Tax and expenditure limits

55. Tax and expenditure limits may be well suited to restraining the growth of spending (and taxation), but this may be at the cost of introducing allocative distortions.[46] In the United States, in the period immediately following the enactment of a TEL the rate of growth of expenditure slows. Though the longer-term impact is more ambiguous, the presence of a TEL is associated with smaller expenditure in relation to personal income.[47] Expenditure limits are associated with lower borrowing costs, while more stringent tax limits tend to be related to higher borrowing costs, suggesting that tax limits are seen by financial market participants as introducing a greater risk of default.[48]

56. Weighing against these advantages is the fact that expenditure limits can give rise to distortions in public spending patterns. Not only can expenditure limits applied only to current budgets provoke a

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43. 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).

44. 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).

45. 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).

46. In some circumstances a ratchet effect can shift expenditure to a lower path than may be warranted during an economic downturn (OECD, 2005f). Fiscal rules may also have wider impacts on economic efficiency than through distortions to spending. Wasi and White (2005) study the impact of limits on uprating the property tax base in California. In this scheme the tax is reassessed (at market prices) on purchase and in the interim uprating is limited to the lower of the rate of inflation or 2% annually. This has led to reduced turnover of owner-occupied homes and longer tenure particularly in areas where property values rose most markedly.

47. Stansel (1994). While, expenditure limits in US states have a weak correlation with *per capita* expenditure on their own, when in combination with a budget balance requirement the negative correlation is substantially augmented (Bails and Tieslau, 2000).

48. Bayoumi and Eichengreen (1994), Poterba (1994), Poterba and Rueben (2001).

switch in expenditure to budget items which are unconstrained by the same rules[49] , 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.[50] On the other hand, expenditure limits that do attempt to prioritise through selective application also risk introducing administrative decision-making for market choice.

5.3 Susceptibility to fiscal gimmickry

57. Evading the constraints of fiscal rules may give rise to fiscal gimmickry.[51] 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. This can lead to expenditure at other levels of government rising as well as the creation of "special districts" that are not covered by the rule.[52] 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.[53] 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 budget balance requirements have only moderate impacts partly due to states evading constraint by shifting resources between the (controlled) general fund and other funds that are unconstrained by the fiscal rule.[54] Finally, when borrowing restrictions are subject to definitional ambiguity or limit only certain types of borrowing, as with the golden rule, 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.[55]

58. Sub-central authorities may own or control local enterprises and financial institutions. In such cases, the effect of a fiscal rule on formal budget may be effective, but do little in effect to stop the build up of contingent liabilities that are effectively guaranteed by government.[56] The growth of debt in Spanish

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49. Von Hagen and Wolff (2004).

50. Downes and Figlio (1997, 1999), Mullins (2004). The relation is complicated, since deteriorating performance may be linked to declining teacher quality; better students may also leave the TEL-affected schools resulting in a fall in (measurable) ability. Council tax "capping" (*i.e*. imposing an upper bound on permissible tax increases, and thereby spending) in the United Kingdom, has been seen to lead to cuts in education spending and rising class sizes relative to other councils (Emmerson *et al*., 1998).

51. See Koen and van den Noord (2005) for evidence at the national level.

52. Mullins and Joyce (1996) and Bowler and Donovan (2004). In the case of France, the impact of an expenditure limition on central government has contributed to a transfer of spending responsibility to local authorities, which are not included in the expenditure limit (OECD, 2005e). 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, 2002c).

53. OECD (2005b).

54. Sørensen *et al*. (2001). Canova and Pappa (2005) argue that the ease with which fiscal rules can be evaded is one of the reasons that there appears to be almost no identifiable impact of fiscal rules on macroeconomic variables.

55. 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).

56. Von Hagen (2002) cautions that findings of fiscal rules having larger effects on budgets are often not robust to wider definitions of the public sector.

public enterprises is one example of how evasion of strict budget balance requirements can manifest itself, at least temporarily.[57]

5.4 Dealing with trade-offs and side-effects

59. When faced with different objectives or possible trade-offs, as described above and summarised in Table 13, 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.[58]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-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.[59] 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 can help insulate sub-central governments from such pressure. To an extent, the operation of the grants system in Denmark also helps damp cyclicality when revenue shocks are un-anticipated.[60]

57. OECD (2005a).

58. Of the 20 sub-central governments included in the questionnaire responses all were subject to budget balance requirements, 18 to some form of borrowing constraints, 17 to tax limits and 10 to expenditure limits.

59. 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.

60. 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. This is the case in Austria for a wide range of causes and to a lesser extent in some Canadian provinces, the Czech Republic, German laender, Italy, and Poland. However, there are limits in the degree of desired leniency, as escape clauses could serve to reintroduce unwarranted discretionary policy.

Table 13. **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

Improved monitoring is important for preventing fiscal gimmickry

60. The "negative spotlight" of breaching a rule can raise the cost to policymakers and thus provoke a change to the rule if this is possible.[61] In general, the more difficult it is to change a rule, the greater the rule's impact on ensuring sub-central fiscal policy is orientated to meeting the objective.[62] However, even a difficult-to-change rule may be circumvented by fiscal gimmickry, particularly if the rule is not well defined, as in the case of the golden rule or where the rule only covers part of the budget, and monitoring is weak. Due to the informational asymmetry, opportunities for sub-central governments to evade the constraints of fiscal rules are an intractable problem for central government alone to guard against. However, increasing the availability of information to different monitors, including local tax payers, on a standardised and regular basis can make it far more difficult for sub-central governments to evade the strictures of the rules.

6. Ranking fiscal rules for sub-central governments

6.1 Ranking fiscal rules according to strictness

61. Previous empirical studies have attempted to rank fiscal rules according to their strictness. Two main methodologies exist: the Advisory Commission on Inter-governmental Relations (ACIR) index for strictness of balanced budget rules and the Inter-American Development Bank (IADB) index of borrowing autonomy. The responses from the OECD Network questionnaire allow these indices to be reproduced, with some modification (Box 6). The components of these indices are given in Table 14.

61. Drazen (2002).

62. Bohn and Inman (1996).

Table 14. **Indices of rule stringency**

Panel A. ACIR budget balance requirement stringency

	Rule basis		Budgetary objective					Total of highest ACIR scoring shown
	Imposed	Self-imposed	Submitted budget	Approved budget	Deficit carry over - multi annual	Deficit carry over - one year	No carry over	
ACIR scoring	2	1	1	2	4	6	8	
Australia		√					√	9
Austria	√				√			6
Czech Republic	√		√					3
Denmark	√						√	10
Finland					√			4
France	√			√				4
Germany state		√		√				3
Germany local	√						√	10
Iceland								0
Japan		√		√				3
Korea	√			√				4
The Netherlands	√						√	10
Norway	√				√			6
Poland		√	√					2
Portugal	√			√				4
Spain state	√						√	10
Spain local	√						√	10
Sweden	√				√			6
Switzerland state		√		√				3
Switzerland local	√			√				4
Turkey	√		√					3

Note: the scoring is from 0 (the least stringent) to 10 (the most stringent).

Table 14. **Indices of rule stringency** (continued)

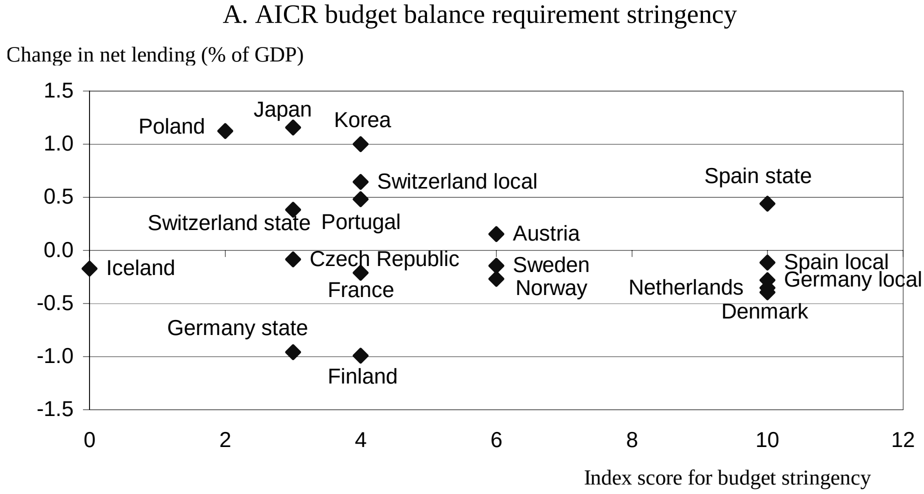
Panel B. IADB Borrowing autonomy index

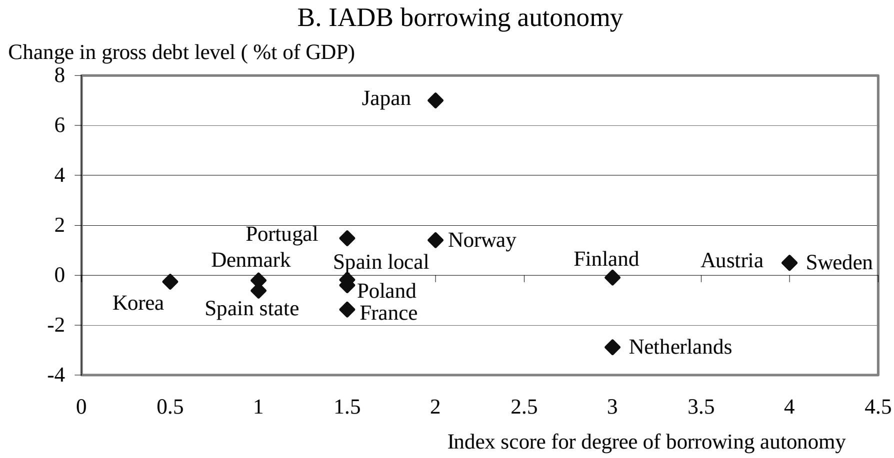
	Access and borrowing restrictions				Relations with banks and public enterprises			Total of 3 previous columns
	Cannot borrow	Only if authorized	Numerical constraint	Limits of debt	Sub index	Publicly owned banks	Publicly owned enterprise	
IADB scoring	2	1	0.5	0.5 if excludes current budget	2 minus total of previous 4 columns	0.5/1 depending on control	0.5/1 depending on control	
Australia					2		0.5	2.5
Austria					2	1	1	4
Czech Republic				0.5	1.5	0	1	2.5
Denmark	2				0	0.5	0.5	1
Finland					2	0	1	3
France			0.5		1.5			1.5
Germany state					2	1	0.5	3.5
Germany local			0.5		1.5	0.5	0.5	2.5
Iceland			0.5		1.5		1	2.5
Japan		1	0.5		0.5	0.5	1	2.0
Korea		1	0.5	0.5	0		0.5	0.5
The Netherlands			0.5		1.5	0.5	1	3
Norway			0.5		1.5	0.5		2
Poland			0.5		1.5			1.5
Portugal			0.5		1.5			1.5
Spain state		1		0.5	0.5		0.5	1
Spain local		1		0.5	0.5		1	1.5
Sweden					2	1	1	4
Switzerland state					2	0.5	0.5	3
Switzerland local		1			1		0.5	1.5
Turkey		1	0.5		0.5		0.5	1

Note: the scoring is from 0 (the most stringent restrictions) to 4 (greater borrowing autonomy).

Figure 6. **Stringency indices, net lending and debt dynamics**

Change over the last 5 years





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

62. Movements in sub-central net lending and indebtedness seem to be only loosely correlated with budget balance requirements or local borrowing autonomy over the most recent five-year period (Figure 6). In some economies with little apparent local borrowing autonomy, debt may still rise (Portugal), while local autonomy does not preclude debt stability (Austria). Partly, this lack of correlation may reflect the different institutional settings – off-budget operations or financial market oversight for example. A second drawback of these indicators is that their limited focus means that they fail to take account of the impact of fiscal rules on other objectives of fiscal policy, such as public sector size: it matters considerably whether budgets are balanced by raising taxes or reducing spending. The indicators also give little insight into the issue of trade-offs between objectives, such as that between debt sustainability and stabilisation.

Box 6. **The ACIR and IADB indices**

The ACIR index for strictness of balanced budget rules (ACIR, 1987)] is constructed from two scores. The first score is based on whether the rule is either imposed by (or agreed with) a higher level of government and binding or self imposed (the ACIR index is coded on the basis of whether the rule has a constitutional basis). The second score is the highest score assigned for different budgetary objectives given below, ranking from the most flexible to the least flexible: the submitted budget meets the budget balance requirement; the approved budget meets the budget balance requirement; a deficit may be carried over for correction the following year; no deficit can be carried over from a multi-annual period; no deficit can be carried over from a single year.

The index of borrowing autonomy developed by the Inter-American Development Bank (IADB, 1997), is somewhat more complicated to construct. The indicator is again the sum of two sub-components:

The first sub-component examines the explicit restrictions on sub-central governments borrowing. The restrictiveness of borrowing rules is tighter - if it is allowed - when the following conditions hold: authorisation is required for new borrowing; a numerical constraint is imposed on debt levels or servicing costs; limits are imposed on the use of debt (only for capital spending). The same criteria are used here. However, the OECD coding scores the existence and absence of a numerical constraint 0.5 and 0, respectively, rather than making a subjective interpretation of the stringency of the numerical constraint. The first indicator is the maximum possible score (2, or no access to borrowing allowed) minus the actual scoring to give an indicator of formal borrowing autonomy.

The second part of the index assesses the extent to which ownership of public enterprises or banks may increase sub-central government borrowing autonomy. The OECD coding assigns a value of 1 if only ownership or control was noted and 0.5 if ownership or control was marked and either a specific borrowing restriction was in place or the questionnaire response included another qualification (such as the bank being owned by all municipalities and central government). This score is added to the sub-index of formal borrowing autonomy to give the overall indicator score.

6.2 Towards a composite indicator

Constructing a composite indicator

63. While earlier studies on the impacts of fiscal rules generally examined the effect of rule stringency in isolation, recent studies have broadened the approach to include procedural rules and institutional factors. For example, several studies have examined the impact of hierarchical budget processes, accountability and transparency.[63]

64. The responses to the OECD questionnaire have been used to construct an indicator to assess how a country's set of fiscal rules potentially contribute to restraining the size of the public sector and ensuring the sustainability of public finances, as well as noting the possible trade-offs they may introduce. The individual responses from the results of 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 the appendix). The low-level indicators are 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 preferred attributes of fiscal rules for sub-central governments (Figure 7).

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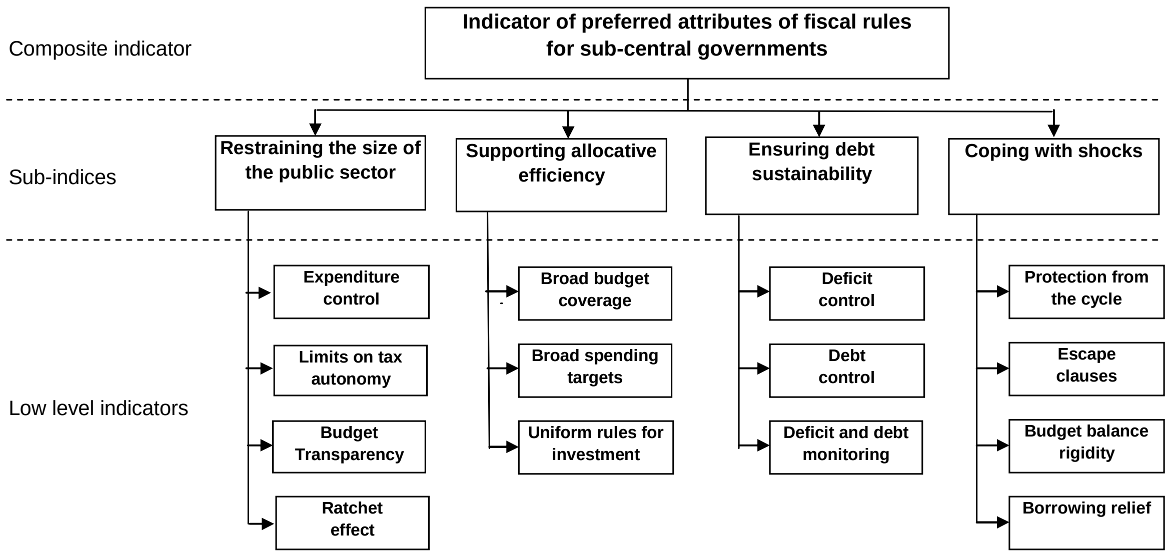
63. Alesina *et al*. (1996); Campos and Pradham (1996); Gleich (2003); and von Hagen (2002). Of particular interest is the recent work of Filc and Scartascini (2004) who build on earlier IADB work to derive a broad-based indicator for fiscal rules for central governments in developing countries. This index is based on sub-indices for debt, expenditure, and deficit rules, the relevant time horizon, control over sub-central government borrowing, whether the government could draw on reserve funds, as well as indicators for the domains of hierarchical procedures and transparency.

Figure 7. **Hierarchy of the fiscal rules indicator**



65. 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 7).[64] 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 or overall composite indicator could take if different weightings are assigned to the low-level indicators.

Box 7. **The random weights technique**

Starting with low-level indicators, this technique uses 10 000 sets of randomly-generated weights to calculate 10 000 overall indicators for each sub-central level of 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 level of 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 (see the appendix) has not been tested.

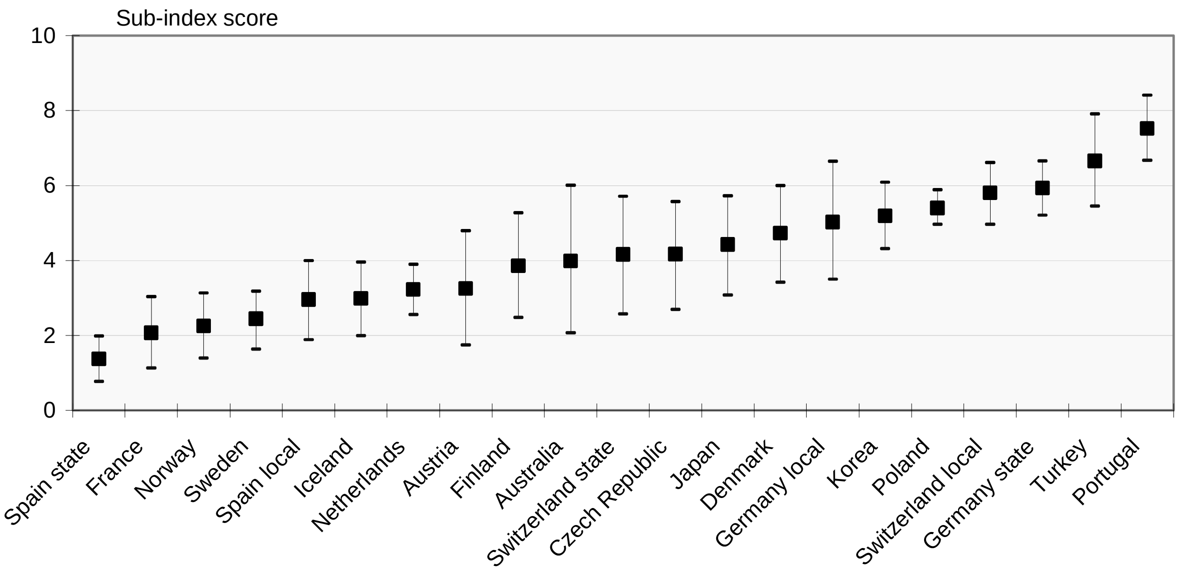
2. Note that this is not equivalent to having no *a priori* information on the most appropriate set of weights given that the sum of two or more uniform distributions is not uniform.

64. See Conway, Janod and Nicoletti (2005) for another application of the random weights technique.

Restraining the size of the public sector

66. The first sub-indices assess whether fiscal rules impose restraint on the growth of the public sector (Figure 8). 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. For most sub-central governments, the difficulty in changing rules is assessed by whether the rule is imposed or negotiated and binding. Due to the constitutional rights that mid-tier governments in federations possess, the more binding constraints in this indicator are assessed to be either negotiated and binding or self-imposed constraints. (This distinction in the binding nature of rules for mid-tier governments in federations is also applied in the following indicators). The tax limit is a measure of the autonomy a sub-central government has over its tax revenue.[65] 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 takes account of whether budget balance requirement and borrowing constraints could lead to pressure for a sequential increase in tax rates. The rule is evaluated as having a stronger ratchet-type influence if the rule is binding, and in the case of the budgetary objective applies to the outturn with no carry-over possible. The existence of escape clauses or specific mechanisms to cope with cyclical pressures will attenuate the ratchet-type effects. If capital borrowing is treated separately, the severity of the constraint is also considered. Thus, in a country with a stringent budget balance requirement but neither expenditure nor tax limits, the set of fiscal rules will be generally weaker in countering pressure for a growing size of government, which may be intensified by the ratchet effect.

Figure 8**. Restraining the size of the public sector**



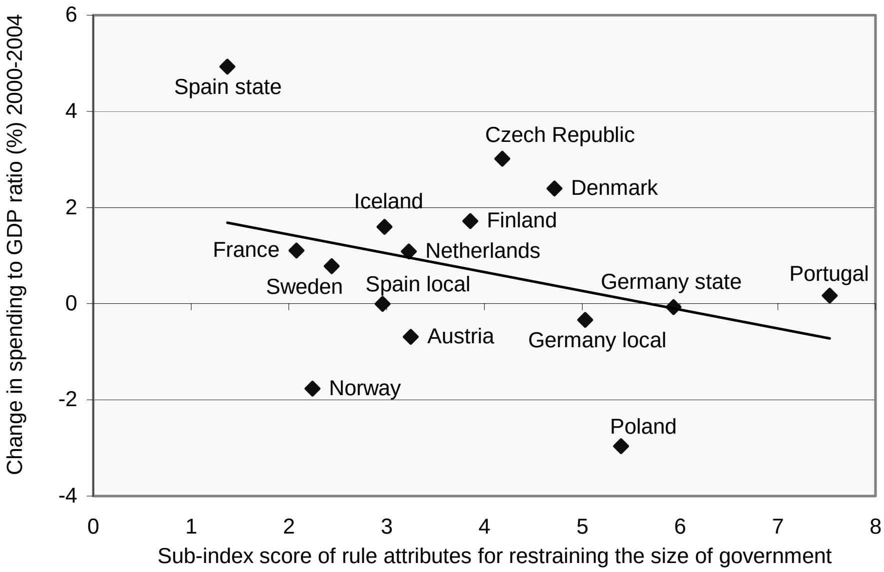
Note: The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

65. The indicator used is based on the autonomy sub-central governments possess in altering tax rates and reliefs. This is admittedly a rough proxy for an indicator of tax limits and 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. This is unavoidable in light of the responses to the questionnaire. In some cases, the explicit tax limits affected only very minor taxes. In such cases and lacking detailed information for other countries to make corrections for the coverage of tax limits, the broader measure of tax autonomy used here should be more robust despite the drawbacks.

67. The individual country scores for the sub-index on restraining the size of the public sector exhibit large variance, which is partly driven 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. This constellation of fiscal rules contributes to the limited variation in the random weighted sub-indexes for these countries, with 90% of the indices 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. It should be noted that the ratchet effect in Finland derives from the cyclicality of revenue, which the current set of fiscal rules appears ill-suited to counter, although they do not exacerbate it.

68. Overall, the sub-index reveals a rough negative relationship with the growth in sub-central government spending (Figure 9). The correlation may be obscured by the fact that strong fiscal rules may be endogenous to past expenditure growth. Modifications to the expenditure assignments given to sub-central entities may further cloud the relationship.

Figure 9. **Rule attributes and spending restraint**



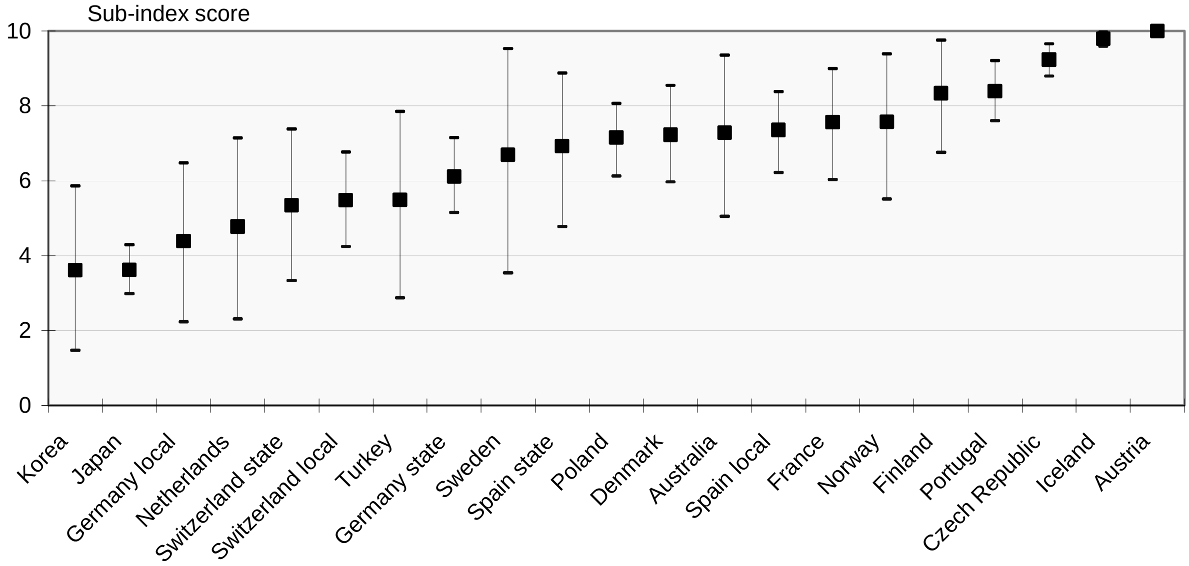
Source: OECD Secretariat calculations based on the Network questionnaire responses.

Supporting allocative efficiency in spending

69. The second sub-indicator 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 carryover 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 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-indicator, countries received more favourable rankings where they reported that there were no rules that discriminated between parts of the budget (Figure 10).

Figure 10. **Supporting allocative efficiency**



Note: 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.

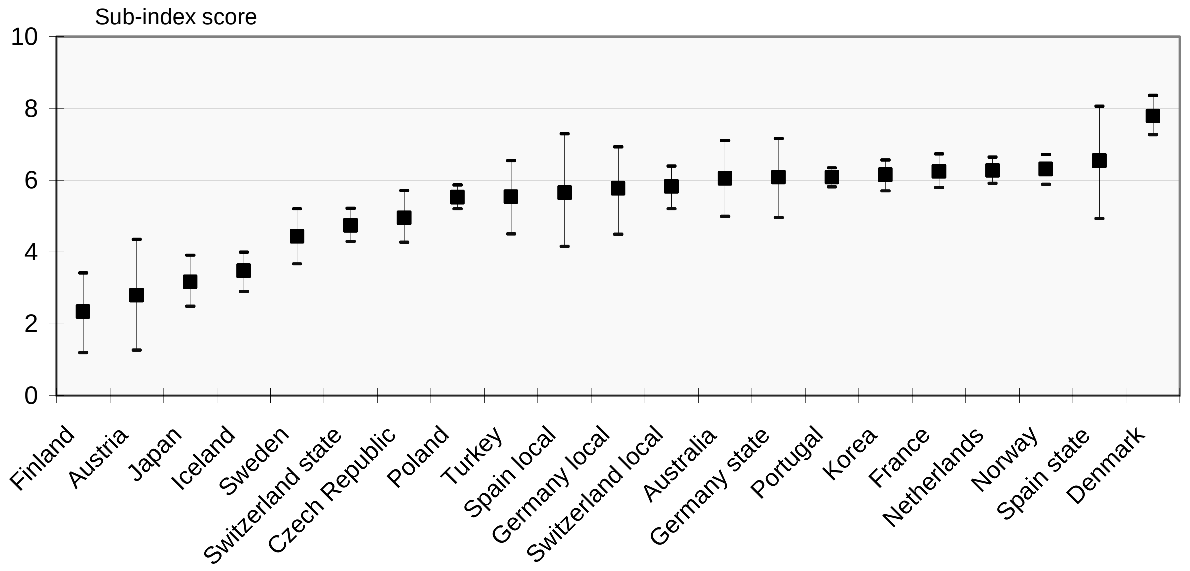
70. The scores for the allocative-efficiency sub-index are quite dispersed. Fiscal rules for sub-central governments are applied broadly and uniformly in some cases (as in Austria the Czech Republic and Iceland), while others impose strict restrictions on different spending components and types of borrowing (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. It should be stressed that this sub-index only assesses the *potential* to undermine or support allocative efficiency in fiscal policy. The extent to which this occurs is likely to be influenced by the process rules, but their effect is ambiguous in that the strict application of objective-setting rules may run the risk of inducing allocative inefficiency while greater transparency in budget policy may help hold the sub-central government more accountable.

Ensuring long-term debt sustainability

71. The third sub-indicator (Figure 11) 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 the outturn of a target set for a wide definition of the budget. Escape clauses and the possibility of receiving special financial support during cyclical downturns are evaluated as weakening the (overall) target, while the ability to cut mandated expenditures is evaluated as helping to attain budget balance objectives. Borrowing 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 and reporting are augmented by information on the likely guarantees available from higher level governments, the possibility of sub-central government bankruptcy, and whether sub-central governments reported implicit liabilities to give an indication of whether financial markets could play an effective role in monitoring fiscal policy.

Figure 11**. Ensuring long-term debt sustainability**

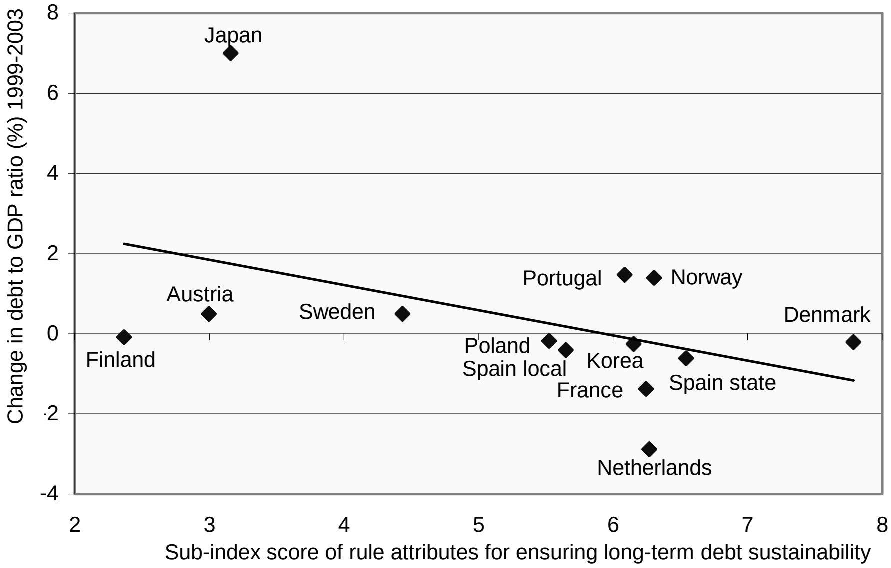


Note: The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.

Source: OECD Secretariat calculations based on Network questionnaire responses.

72. For the sub-index on ensuring long-term debt sustainability, the low-level indicators for most countries tend to be quite similar. 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), Austria, and Turkey. The sub-index when plotted against a measure of debt dynamics reveals a tentative relationship that is consistent with a higher score being correlated with smaller changes in debt over the most recent five-year period, especially so in light of the recession that occurred (Figure 12).

Figure 12. **Rule attributes and trends in debt**

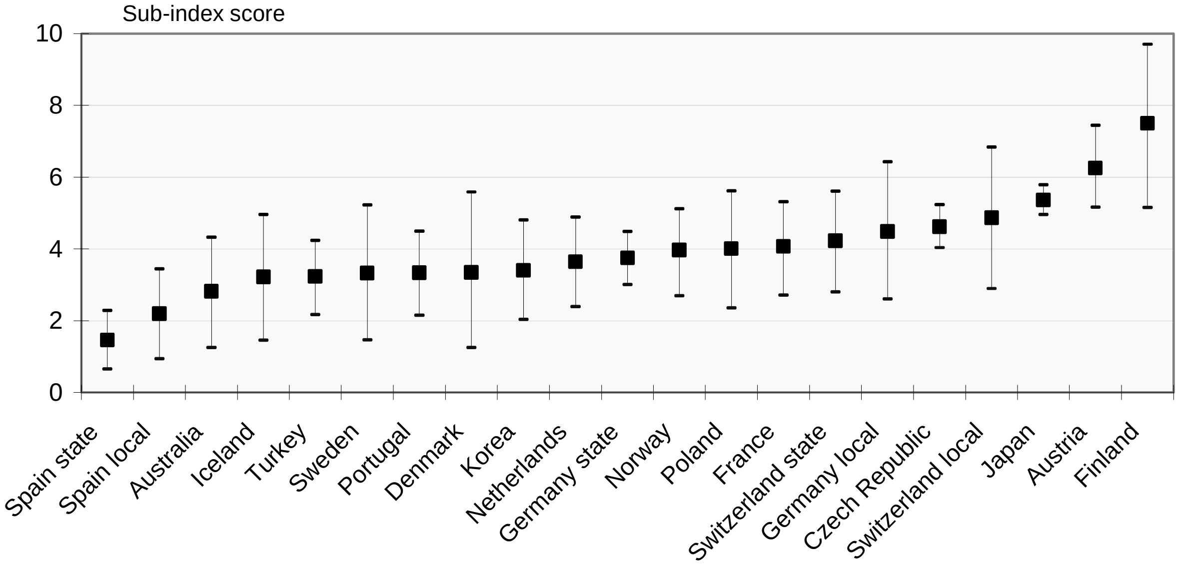


Source : OECD Secretariat calculations based on the Network questionnaire responses.

Coping with shocks

73. The final sub-indicator (Figure 13) 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 in that respect than mechanisms which rely on the resources of sub-central governments themselves. 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 are 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 procyclical policy and exacerbate non-cyclical shocks. More restrictive access to borrowing is also likely to exacerbate procyclical policy and also restricts one potential means for coping with non-cyclical shocks.

Figure 13. **Coping with shocks**

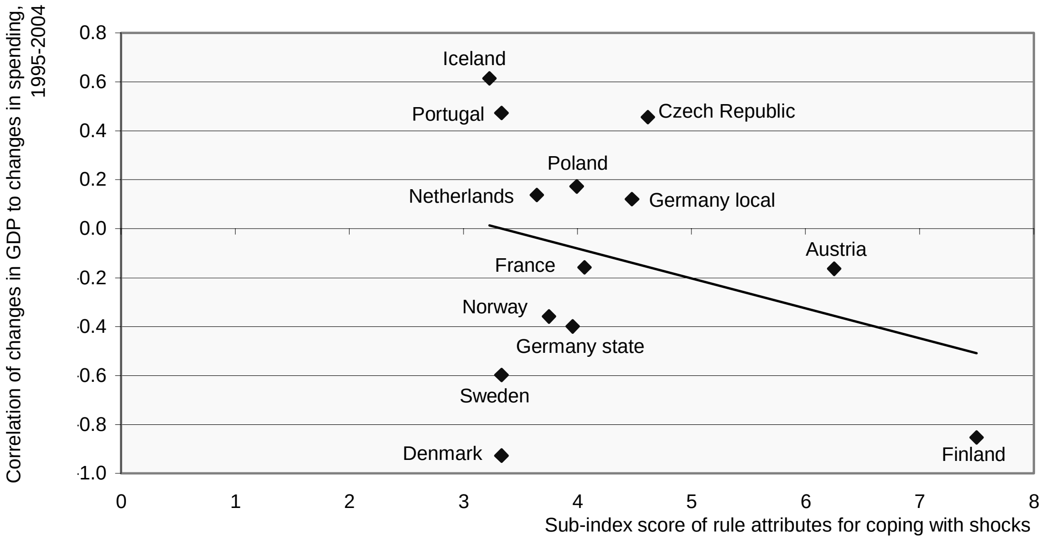


Note: The figure gives the average and the range that contains 90% of the 10 000 random weighted sub-indices.
Source: OECD Secretariat calculations based on Network questionnaire responses.

74. 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. Fiscal rules that leave little room for manoeuvre for sub-central governments when confronted by shocks are penalised in this sub-index.

75. Figure 14 plots the sub-index scores against the correlation coefficient of changes in sub-central spending to changes in GDP, to give an indication of how well sub-central governments are able to smooth spending. The relationship at best offers only very tentative support to the premise that a greater ability to smooth expenditure across the cycle and adapt to non-cyclical shocks necessarily leads to less volatile spending patterns. The relationship is complicated by the negative correlation in a few countries, notably Finland, Denmark and Sweden, where expenditure assignments may contribute to counter-cyclical spending patterns.

Figure 14. **Rule attributes and coping with shocks**



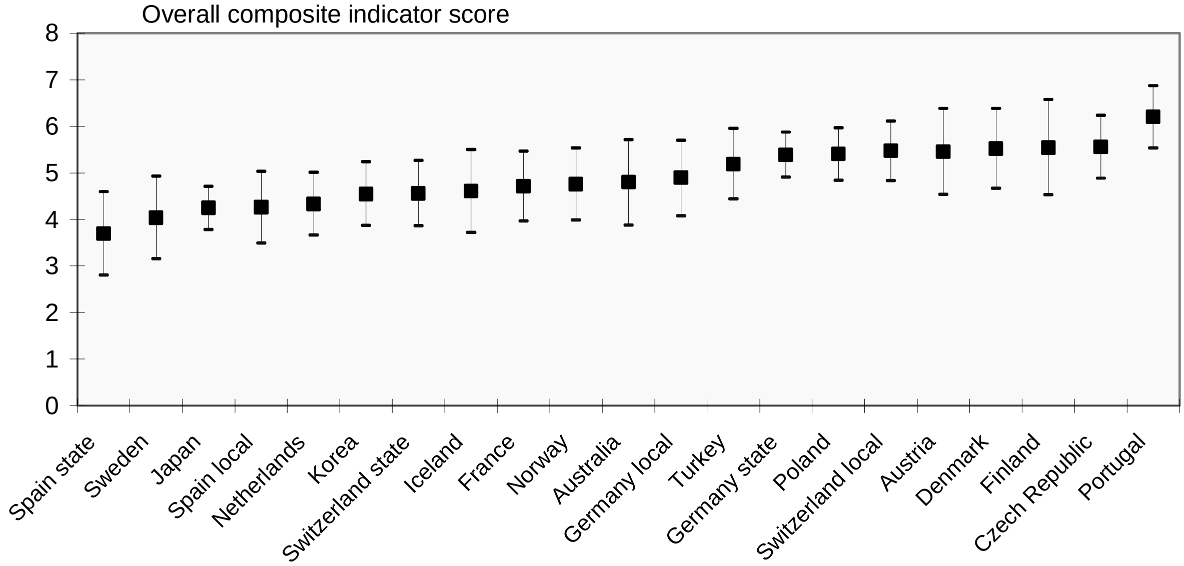
Source: OECD Secretariat calculations based on the Network questionnaire responses

The composite indicator

76. The composite indicator, measuring the preferred 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 15). The range of average scores 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.[66] As a result, the random weighting schemes will tend to yield random overall composite indices and only the extremes of the sub-central government scores can be considered to be significantly different from one another.

66. As such, the weights may not lie within the same 0 – 1 interval.

Figure 15. **Overall composite indicator**



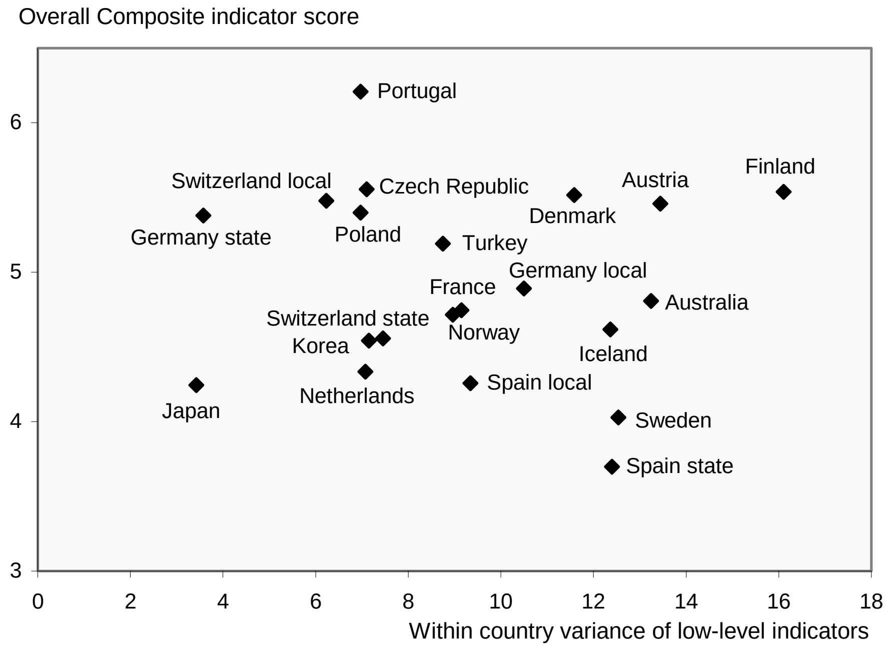
Note: The figure gives the average and the range that contains 90% of the 10 000 random weighted overall composite indicators

Source: OECD Secretariat calculations based on Network questionnaire responses.

77. 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 16 plots for each country the variance of the low-level indicators against the composite indicator score. A consistent set of fiscal rules across the various policy dimensions considered here would be relatively uniform and hence have a comparatively low variance. That is the case for only a minority of countries. In general, the graph shows a significant dispersion, reflecting a high degree of heterogeneity in rule application. For a significant number of countries, sub-central governments fiscal rules exhibit comparatively high variance in the desired qualities of their low-level indicators which may be related to a high composite indicator score (as in Finland) or a relatively low one (Spain).

78. In some cases, a high variance will reflect the particular challenges facing a country, requiring greater effort in meeting a particular objective of fiscal policy. 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 a measure of deviation from some optimal level. For example, a sub-central government with a highly cyclical revenue base may wish to ensure that upward pressure on the size of the public sector is constrained. 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. Overall, while a composite indicator may be useful as a depiction of the extent of the application of fiscal rules at lower levels of government, a balanced assessment of their adequacy requires an examination and understanding of the interactions between the component indicators and the country-specific priorities given to the purposes that rules are intended to serve.

Figure 16. **Overall composite indicator and variance in sub-components**



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

APPENDIX: CODING FOR INDICATORS

79. This Appendix provides detail on the construction of low-level indicators from the questionnaire responses, giving details of the coding and weights used (Tables A1-4), as well as the values for the low-level indicators (Table A.5) and the scoring for the sub-indices and overall composite indicator (Table A.6).

80. The empirical evidence has generally paid greater attention to the impact of budget balance requirements and borrowing constraints, identifying features that make such fiscal rules more effective. This work has influenced the questionnaire and as a result has given a greater wealth of information on these types of fiscal rules. To avoid this asymmetry in information skewing the composite indicator unduly the aggregation of low-level indicators has not aggregated information for different objective-setting fiscal rules.

Table A.1**. Coding for putting a limit on expenditure growth**

Low-level indicator	Weight 1	Weight 2	Coding
LLI-1 Expenditure control			
Expenditure limitation coverage	½		
Wide			10
Partial			5
No expenditure limit			0
Binding	½		
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			10
Self-imposed or non-binding			5
No expenditure limit			0
LLI-2 Limit on tax autonomy			
Sub-central government has:			
(where S_i is the share of tax revenue from that category)			
Control over rates and reliefs	S_i		0
Control over rates or reliefs	S_i		3.33
Shared taxes	S_i		6.67
No control over tax revenue	S_i		10
LLI-3 Budget transparency			
(for this low-level indicator, the given scoring if present, 0 otherwise)			
Monitoring	¼		
External monitor			
Tax limit		½	10
Expenditure limit		½	10
Reporting	¼		
For each group reported to			
Tax limit		½	+2.5
Expenditure limit		½	+2.5
Transparency	¼		
Common reporting standard		1/3	
Independent audit		1/3	10
Deadline for submission of audit		1/3	10
Sanctions	¼		
Financial sanctions for tax limits		1/6	
Mandatory			10
Discretionary			5
none			0
Financial sanctions for expenditure limits		1/6	
Mandatory			10
Discretionary			5
none			0
Measures for tax limits		1/6	
Mandate measure to take			10
Suggest measures to take			5

Table A.1. **Coding for putting a limit on expenditure growth** (*continued*)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-3 Budget transparency (*cont.*)			
Measures for expenditure limits		1/6	
Mandate measure to take			10
Suggest measures to take			5
Administrative sanctions for tax limits		1/6	
Sanction officials			+5
Constrain actions			+5
Administrative sanctions for expenditure limits		1/6	
Sanction officials			+5
Constrain actions			+5
LLI-4 Ratchet effect			
Access to borrowing	*1/4*		
Current budget		1/2	
Prohibited			10
Prior approval required			5
No restrictions			0
Capital budget		1/2	
Prohibited			10
Prior approval required			5
No restrictions			0
Binding	1/4		
(if the capital budget is not treated separately, weight 2 is set to 1 for the budget balance rule and 0 for the capital budget)			
Budget balance requirement		1 or 1/2	
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
Self imposed or voluntary			5
No balanced budget requirement			10
Capital budget		1/2 or 0	
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
Self-imposed or voluntary			5
No borrowing constraint exists			10
Budget objective	1/4		
Applies to an outturn with no carryover			0
Applies to an outturn with carryover			5
Does not apply to an outturn			10
Escape clause and means to cope with the cycle	1/4		
If escape clauses exist		1/2	
Budget balance requirements			+5
Borrowing constraints			+5
Means to cope with the cycle		1/2	
Transfers are adjusted			10
Other mechanisms			5
None			0

Table A.2. **Coding for supporting allocative efficiency**

Low-level indicator	Weight 1	Weight 2	Coding
LLI-5 Broad budget coverage			
Balanced budget coverage	*1/3*		
Current budget only			0
Wide budget objective			10
Balanced budget binding	*1/3*		
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective			10
Applies to single year	*1/3*		
Annual and no carry over allowed			0
Annual with carry over allowed or multi-annual with no carry over allowed			5
Multi annual and carry over allowed			10
LLI-6 Broad spending targets			
Expenditure limit coverage	*1/2*		
Current budget or individual items only			0
Wide budget objective or none			10
Expenditure limit binding	*1/2*		
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective or none			10
LLI-7 Uniform rules for borrowing			
Access rules (prohibited, unrestricted access, or subject to prior approval)	*1/4*		
Current and capital borrowing treated differently			0
Current and capital treated identically			10
Access restrictions (limited to special purposes or prior approval is required)	*1/4*		
Current borrowing		1/2	
No restrictions			10
1 restriction			5
2 restrictions			0
Limits on the use of capital borrowing		1/2	-5
No restrictions			10
1 restriction			5
2 restrictions			0
Numerical constraint	*1/4*		
No constraints			10
For each constraint			-2.5
Borrowing constraint binding	*1/4*		
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
If narrow budget and voluntary or self-imposed			5
If wide budget objective			10

Table A.3. **Coding for ensuring debt sustainability**

Low-level indicator	Weight 1	Weight 2	Coding
LLI-8 Deficit control			
Balanced budget requirement coverage	*1/5*		
Current budget only			0
Wide budget objective			10
Balanced budget binding	*1/5*		
Self imposed or voluntary			0
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			10
Budget objective	*1/5*		
No outturn objective			0
Outturn with carry over allowed			5
Outturn with no carry over allowed			10
Escape clauses	*1/5*		
No escape clauses			10
For each possible escape clause			-5
Means to cope with the cycle	*1/5*		
Special financial support		1/2	
Available			0
Not available			10
Cut mandated spending		1/2	
Not possible			0
Possible			10
LLI-9 Debt control			
Access to borrowing	*1/5*		
Current borrowing		1/2	
Unrestricted			0
Subject to prior approval			5
Prohibited			10
Capital borrowing		1/2	
Unrestricted			0
Subject to prior approval			5
Prohibited			10
Restrictions on borrowing	*1/5*		
Limiting uses		1/2	
No limits on use			0
If limited to particular uses			+5
Numerical constraints		1/2	
No numerical constraints			0
For each numerical constraint applied			+2.5
Borrowing constraint binding	*1/5*		
None			0
Self-imposed or voluntary			5
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			10

Table A.3. **Coding for ensuring debt sustainability** (*continued*)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-9 Debt control (*cont.*)			
Escape clauses	*1/5*		
No escape clauses			10
For each escape clause			-2.5
No borrowing constraint			0
Relations with enterprises	*1/5*		
Enterprise ownership or control			
No ownership or control			10
Ownership or control, but subject to restriction			5
Ownership or control with no restriction			0
LLI-10 Deficit and debt monitoring			
(for this low-level indicator, the given scoring if present, 0 otherwise)			
Monitoring	*1/6*		
External monitor			
Budget balance requirement		½	10
Borrowing constraint		½	10
Reporting	*1/6*		
For each group reported to			
Budget balance requirement		½	+2.5
Borrowing constraint		½	+2.5.
Transparency of budgetary reporting	*1/6*		
Common reporting standard		1/3	10
Independent audit		1/3	10
Deadline for submission of audit		1/3	10
Transparency of balance sheets	*1/6*		
Common reporting standard		1/3	10
Independent audit		1/3	10
Deadline for submission of audit		1/3	10
Possible financial market monitoring	*1/6*		
Bankruptcy possible		1/3	10
Higher level of governments guarantees borrowing		1/3	10
Implicit liabilities are reported		1/3	10

Table A.3**. Coding for ensuring debt sustainability** (*continued*)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-10 Deficit and debt monitoring *(cont.)*			
Sanctions	*1/6*		
Financial sanctions for budget balance requirements		1/6	
Mandatory			10
Discretionary			5
none			0
Financial sanctions for borrowing constraints		1/6	
Mandatory			10
Discretionary			5
none			0
Measures for budget balance requirements		1/6	
Mandate measure to take			10
Suggest measures to take			5
Measures for borrowing constraints		1/6	
Mandate measure to take			10
Suggest measures to take			5
Administrative sanctions for budget balance requirements		1/6	
Sanction officials			+5
Constrain actions			+5
Administrative sanctions for borrowing constraints		1/6	
Sanction officials			+5
Constrain actions			+5

Table A.4. **Coding for coping with shocks**

Low-level indicator	Weight 1	Weight 2	Coding
LLI-11 Protection from the cycle			
Means to cope with the cycle			
Transfers are adjusted			10
Other mechanisms			5
None			0
LLI-12 Protection from non-cyclical shocks			
(For this low-level indicator, the escape clauses have been weighted by a measure of the stringency of the objective-setting fiscal rule S_i. For the Budget balance requirement this includes the duration, whether it applies to an outturn and is binding; For the Expenditure limit this depends on whether it is binding and applies to overall spending; For the tax limit this depends on the inverse of the tax autonomy measure used in LLI-2; For the borrowing constraint this depends on restrictions on access to borrowing, restrictions on use and numerical constraints, as well as whether the rule is binding)			
Budget balance requirements	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_{i.} * 10$
It no rule			10
Expenditure Limit	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_{i.} * 10$
It no rule			10
Tax limit	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_{i.} * 10$
It no rule			10
Borrowing constraint	1/4		
If rule and no escape clause			0
If rule and escape clause			$S_{i.} * 10$
It no rule			10
LLI-13 Budget balance rigidity			
Budget balance requirement binding	1/3		
Self imposed or voluntary			10
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0
Budget objective	1/3		
No outturn objective			10
Outturn with carry over allowed			5
Outturn with no carry over allowed			0
Budget period	1/3		
Annual			0
Multi-annual			10

Table A.4. **Coding for coping with shocks** (*continued*)

Low-level indicator	Weight 1	Weight 2	Coding
LLI-14 Borrowing relief			
Access to borrowing	1/3		
Current borrowing		1/2	
Unrestricted			10
Subject to prior approval			5
Prohibited			0
Capital borrowing		1/2	
Unrestricted			10
Subject to prior approval			5
Prohibited			0
Restrictions on borrowing	1/3		
Limiting uses		1/2	
No limits on use			10
If limited to particular uses			-5
Numerical constraints		1/2	
No numerical constraints			10
For each numerical constraint applied			-2.5
Borrowing constraint binding	1/3		
None			10
Self-imposed or voluntary			5
Imposed (self-imposed if mid-tier government in federation) or negotiated and binding			0

Table A.5. **Low-level indicator scores**

	Low-level indicator													
	LLI1	LLI2	LLI3	LLI4	LLI5	LLI6	LLI7	LLI8	LLI9	LLI10	LLI11	LLI12	LLI13	LLI14
Australia	10.0	0.0	2.3	3.8	10.0	2.5	9.4	8.0	6.3	3.9	0.0	0.0	5.0	6.3
Austria	0.0	6.5	0.8	5.6	10.0	10.0	10.0	6.0	0.0	3.0	5.0	5.0	5.0	10.0
Czech Republic	0.0	6.2	3.6	6.9	8.3	10.0	9.4	6.5	3.8	4.6	5.0	3.9	3.3	6.3
Denmark	7.5	3.9	6.3	1.3	6.7	5.0	10.0	9.0	7.0	7.4	10.0	0.0	0.0	3.3
Finland	0.0	3.7	4.3	7.5	5.0	10.0	10.0	3.0	0.0	4.1	10.0	0.0	10.0	10.0
France	0.0	0.7	3.2	4.4	8.3	10.0	4.4	6.0	7.3	5.5	5.0	0.0	6.7	4.6
Germany state	7.5	7.0	4.3	5.0	8.3	5.0	5.0	8.0	6.5	3.8	5.0	1.7	3.3	5.0
Germany local	10.0	4.4	2.0	3.8	0.0	5.0	8.1	7.0	7.3	3.1	10.0	0.0	3.3	4.6
Iceland	0.0	3.1	3.9	5.0	10.0	10.0	9.4	4.0	2.3	4.2	0.0	0.0	6.7	6.3
Japan	5.0	4.7	0.5	7.5	3.3	5.0	2.5	2.5	4.8	2.2	5.0	5.2	6.7	4.6
Korea	7.5	5.7	3.1	4.4	8.3	0.0	2.5	6.5	6.8	5.2	0.0	7.3	3.3	2.9
Netherlands	5.0	3.3	1.5	3.1	0.0	5.0	9.4	7.0	6.3	5.6	5.0	0.0	3.3	6.3
Norway	0.0	2.9	1.7	4.4	3.3	10.0	9.4	7.0	6.5	5.4	5.0	0.0	5.0	5.8
Poland	5.0	5.1	4.6	6.9	8.3	5.0	8.1	5.0	6.3	5.3	0.0	2.2	6.7	7.1
Portugal	10.0	8.0	5.8	6.3	8.3	10.0	6.9	6.5	6.3	5.5	0.0	6.3	3.3	3.8
Spain state	0.0	2.9	2.0	0.6	8.3	10.0	2.5	9.0	7.5	3.1	0.0	0.0	3.3	2.5
Spain local	5.0	4.3	0.0	2.5	8.3	5.0	8.8	9.0	4.8	3.2	0.0	0.0	3.3	5.4
Sweden	0.0	3.2	2.8	3.8	0.0	10.0	10.0	6.0	3.0	4.3	0.0	0.0	5.0	8.3
Switzerland state	7.5	0.0	2.9	6.3	1.7	5.0	9.4	4.5	5.8	4.0	0.0	4.0	6.7	6.3
Switzerland local	7.5	3.2	6.3	6.3	3.3	5.0	8.1	4.5	6.8	6.2	0.0	3.3	10.0	6.3
Turkey	7.5	10.0	4.8	4.4	8.3	0.0	8.1	6.0	7.3	3.4	5.0	0.0	3.3	4.6

Table A.6. **Sub-indices and composite indicator scoring**

	Restraining the size of the public sector	Supporting allocative efficiency	Ensuring debt sustainability	Coping with shocks	***Composite indicator***
Australia	4.0	7.3	6.0	2.8	***4.8***
Austria	3.2	10.0	2.8	6.3	***5.5***
Czech Republic	4.2	9.2	5.0	4.6	***5.6***
Denmark	4.7	7.2	7.8	3.3	***5.5***
Finland	3.9	8.3	2.4	7.5	***5.5***
France	2.1	7.6	6.2	4.1	***4.7***
Germany state	5.9	6.1	6.1	3.8	***5.4***
Germany local	5.0	4.4	5.8	4.5	***4.9***
Iceland	3.0	9.8	3.5	3.2	***4.6***
Japan	4.4	3.6	3.2	5.4	***4.2***
Korea	5.2	3.6	6.2	3.4	***4.5***
Netherlands	3.2	4.8	6.3	3.6	***4.3***
Norway	2.2	7.6	6.3	4.0	***4.7***
Poland	5.4	7.2	5.5	4.0	***5.4***
Portugal	7.5	8.4	6.1	3.3	***6.2***
Spain state	1.4	6.9	6.5	1.5	***3.7***
Spain local	3.0	7.4	5.6	2.2	***4.3***
Sweden	2.4	6.7	4.4	3.3	***4.0***
Switzerland state	4.2	5.3	4.7	4.2	***4.6***
Switzerland local	5.8	5.5	5.8	4.9	***5.5***
Turkey	6.7	5.5	5.5	3.2	***5.2***

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