



OECD Economics Department Working Papers No. 375

# Fiscal Relations across Government Levels

# Isabelle Joumard, Per Mathis Kongsrud

https://dx.doi.org/10.1787/455513871742





ECO/WKP(2003)29



Unclassified

ECO/WKP(2003)29

Organisation de Coopération et de Développement Economiques Organisation for Economic Co-operation and Development

10-Dec-2003

English - Or. English

# ECONOMICS DEPARTMENT

FISCAL RELATIONS ACROSS GOVERNMENT LEVELS
ECONOMICS DEPARTMENT WORKING PAPERS NO. 375

by Isabelle Journard and Per Mathis Kongsrud

All Economics Department Working Papers are now available through OECD's Internet Web site at http://www.oecd.org/eco

JT00155695

English - Or. Englis

# ABSTRACT/RÉSUMÉ

# How can the challenges associated with fiscal federalism best be addressed

Despite its apparent advantages, devolution of fiscal responsibilities has not proceeded evenly over the past two decades. Decentralisation can strengthen the democratic process, allow governments to tailor the supply of public goods to local preferences and introduce some competition across jurisdictions, thus raising public sector efficiency. It can, however, entail efficiency losses, and make it difficult to implement redistributive policies and complicate macroeconomic management. On the spending side, local provision may fail to exploit economies of scale and internalise territorial spillovers -- a serious issue since few public goods are purely local by nature. On the revenue side, few tax bases can be exploited by subnational governments without risking making national objectives difficult to achieve and raising serious distributive concerns. This paper, which is largely based on country experiences in mitigating the potential drawbacks of decentralisation while obtaining most of its benefits, provides a framework for assessing fiscal relations across levels of government.

JEL classification: H77, E62, R50

*Keywords*: Fiscal federalism, tax assignment, equalisation, fiscal co-ordination.

\*\*\*\*\*

# Cet article décrit les principaux défis posés par le fédéralisme budgétaire et approches pour y remédier

Le transfert de compétences budgétaires aux collectivités territoriales n'a pas toujours procédé de façon linéaire au cours des deux dernières décennies, malgré certains avantages reconnus. La décentralisation peut contribuer au renforcement du processus démocratique, permettre aux collectivités territoriales d'adapter l'offre de services publics aux préférences locales et introduire de la concurrence entre localités, permettant ainsi d'améliorer l'efficience du secteur public. La décentralisation peut néanmoins générer des pertes d'efficacité, rendre difficile la mise en place de politiques redistributives et compliquer la mise en œuvre de politiques macro-économiques cohérentes. Du côté des dépenses, la décentralisation peut être sous-optimale dès lors que sont important les économies d'échelle et les effets de "spillover" géographique — effets fréquents car peu de biens publics sont des biens purement locaux par nature. Du côté des revenus, rares sont les assiettes fiscales qui peuvent être gérées au niveau local sans risquer de mettre en péril les objectifs nationaux ou de soulever des problèmes sérieux de redistribution. Cet article propose un cadre d'analyse des relations budgétaires entre l'État et les collectivités territoriales en s'appuyant sur les expériences mises en place dans différents pays pour bénéficier au mieux des avantages de la décentralisation tout en minimisant les effets pervers potentiels.

Classification JEL: H77, E62, R50

Mot clés: fédéralisme financier, compétences fiscales, péréquation, coordination budgétaire.

# Copyright OECD, 2003

Applications for permission to reproduce or translate all, or part of, this material should be made to: Head of Publications Service, OECD, 2 rue André-Pascal, 75775 Paris Cedex 16, France.

# TABLE OF CONTENTS

1.	Introduction	5
1.1	Scope and rationale	5
1.2	Summary of findings	6
2.	Forces shaping fiscal relations across government levels and recent trends	10
2.1	Extent of decentralisation	10
2.1	Recent trends	13
2.2	Forces shaping fiscal relations across government levels	14
3.	Issues determining the allocation of spending responsibilities	18
3.1	Local provision may fail to exploit economies of scale	19
3.2	and to internalise territorial spillovers	22
3.3	The risk of under-provision of welfare benefits and redistributive services	22
3.4	Inefficiencies due to overlapping responsibilities across government levels	23
3.5	Frequent approaches include: amalgamations or a "two-speed" system	24
3.6	centralisation or norms imposed on sub-national spending programmes	25
3.7	co-operation agreements across and between levels of government	25
4.	Funding principles to promote efficiency	26
4.1	Tax assignment issues.	
4.2	Sub-national government use of taxing powers	
4.3	Intergovernmental grants	
5.	Macroeconomic management in a decentralised setting	
5.1	Overall fiscal discipline could be at risk	
5.2	Strategies to secure fiscal discipline vary	
5.3	Transparency should be improved	49
Annex: 1	Ensuring fiscal discipline at sub-national level: strategies and mechanisms	50
BIBLIO	GRAPHY	58
Boxes		
Box 1	. A checklist for assessing fiscal relations across levels of government	7
	. Arguments in favour of local provision and financing	
	. Fiscal relations within the European Union	
	. Tax-sharing arrangements	
	. Issues in implementing a decentralised VAT system	
	. Designing fiscal rules	

# **Tables and Figures**

# **Tables**

1.	Incators of fiscal decentralisation	
2.	Sub-national government taxing powers in selected OECD countries	14
3.	The consequences of demographic changes on fiscal outcomes in Canada	18
4.	Spending by sub-national governments by main categories	21
5.	Volatility of tax revenues	34
6.	Strategies for ensuring fiscal discipline	43
7.	The use of fiscal rules and sanctions in selcted countries	44
Figu	ires	
1.	Changes in the share of sub-national governments in total public revenues and spending	13
2.	Central government contribution to fiscal consolidation efforts	17
3.	Composition of subnational government financial resources	28
4.	Composition of tax revenues of subnational governments as percentage of total tax revenue	29
5.	Finance resources of municipalities: tax revenues and central government grants in Finland	48

## FISCAL RELATIONS ACROSS GOVERNMENT LEVELS

# Isabelle Journard and Per Mathis Kongsrud<sup>1</sup>

#### 1. Introduction

# 1.1 Scope and rationale

- 1. OECD economies face the common challenge of raising allocative and administrative efficiency in the public sector. In this regard, well-functioning fiscal relations between central and sub-central governments -- defined broadly to cover such relations whether constitutionally federal or non-federal -- are important. In principle, decentralisation can make governments more accountable, allowing a better matching of resources to preferences. It may also introduce competition across jurisdictions and thus raise public sector efficiency. Political factors also often militate for decentralisation since, by bringing government closer to the people, it can strengthen the local democratic process.
- 2. Despite its apparent advantages, devolution has not proceeded evenly over the past two decades and the current state of central-local relations among OECD countries remains very heterogeneous. This may be because decentralisation can entail efficiency losses and/or make it difficult to implement redistributive policies. The weight given to nationwide policy objectives, including distributional ones, may differ across countries while significant -- and, in some countries, growing -- regional income disparities may make some of the issues and trade-offs raised by the decentralisation process more acute. The choice between central and local provision and financing is thus often not clear-cut, and general conclusions about best practice are not easy to draw from a review of country experiences in this area. A forward-looking perspective is also required, in particular since the fiscal consequences of population ageing may have different impacts across government levels, while increasing trade and financial integration as well as people mobility may change the balance between positive and adverse effects of fiscal decentralisation. OECD countries do, however, face common issues and trade-offs and these are the subject of this paper.
- 3. The most notable issues relating to central and sub-central relations to have emerged from recent OECD work, and which are developed in this paper, are threefold:
  - On the spending side, how can sub-national government tailor the supply of public goods, which may have different constituencies, to local preferences while ensuring efficient provision and the fulfilment of distributional objectives?

\_

Isabelle Joumard is a principal economist in the OECD Economics Department and Per Mathis Kongsrud was on secondment from the Norwegian Ministry of Finance at the time of writing. This paper is a revised version of a document originally prepared for a meeting of the Working Party No. 1 of the OECD Economic Policy Committee on 20 and 21 March 2003. The authors are indebted to Robert Price (Head of Division) for substantial drafting contributions and to Jean-Philippe Cotis, Jørgen Elmeskov, Michael Feiner, Christopher Heady, Peter Hoeller, Michael Kiley, Tom Jones, Martin Jørgensen, Willi Leibfritz, Bénédicte Larre, Jørgen Lotz, Flavio Padrini and Eckhard Wurzel for their valuable comments. They are also grateful to Anne Eggimann and Sarah Kennedy for secretarial assistance and to Chantal Nicq for statistical assistance. The opinions expressed in the paper are those of the authors and are not necessarily shared by the OECD.

- On the revenue side, how should financing schemes for sub-national governments be designed so as to allow them to respond to local preferences without creating efficiency concerns and compromising distributional objectives nationwide?
- From a macroeconomic perspective, how can sufficient co-ordination across government levels be engineered, using fiscal rules, co-operation arrangements or market forces, so as to ensure compatibility with national fiscal targets?
- 4. Based on these sets of issues, this paper evaluates practices across a number of areas and consists of four parts. The first describes the relative importance of central and sub-central governments in public finance, as evidenced by aggregate tax and spending indicators, and assesses the forces promoting, or militating against, greater decentralisation. This is followed by an examination of the practical issues which determine the assignment of responsibilities on the spending side. The third section looks at financing issues, from the perspective of individual taxes, and the arrangements for grants and for fiscal equalisation schemes. The fourth section evaluates the arrangements required to achieve consistency between sub-national government fiscal strategies and overall macroeconomic policy aims.
- 5. Public spending and tax systems have been reviewed in in-depth chapters in *OECD Economic Surveys* for more than half of the OECD countries.<sup>2</sup> In this context, the issues of tax and spending assignment across government levels and of fiscal co-ordination in a decentralised framework have surfaced for a number of countries. Work on these issues has also been carried out for some non-OECD countries,<sup>3</sup> extending the geographical scope of the evidence available beyond the OECD area; pertinent conclusions from this work are included in this paper. The work on fiscal relations across government levels is, however, far from comprehensive and this paper has been constrained to draw on information that is incomplete. Further country reviews on these issues are envisaged. Box 1 provides the checklist that would be the starting point for these reviews.

# 1.2 Summary of findings

6. Recent trends in decentralisation. On the basis of aggregate revenue and spending data, subnational spending and revenues display contrasting trends. The sub-national government share of public spending has increased in a majority of countries. However, central governments have increasingly countered this tendency by imposing norms and minimum quality standards on the public goods provided locally. And on the revenue side, the sub-national government share in general government revenues (excluding grants) has failed to follow pace with developments on the spending

<sup>2.</sup> Since 1999, the tax system of 15 OECD countries (Belgium, Czech Republic, Finland, Greece, Korea, Iceland, Japan, Mexico, New Zealand, Norway, Poland, Portugal, Spain, Switzerland and the United States) has been reviewed – Economic Surveys for these countries containing a special chapter on tax reform. Public expenditure reform has been a special chapter for 21 OECD countries since 2000 (Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Japan, Korea, Mexico, New Zealand, Norway, Poland, Portugal, Sweden, Switzerland and the United Kingdom). In addition, two special chapters on fiscal federal relations have been reviewed for Germany since 1996.

<sup>3.</sup> This paper relies in particular on the 2001 *OECD Economic Survey of Brazil*, the 2002 OECD Study on China as well as on the 2000 and 2002 *OECD Economic Surveys of the Russian Federation*.

side and declined in several OECD countries. At the same time, governments have attempted to improve co-ordination in respect of overall macroeconomic objectives through the introduction of fiscal rules which limit sub-national fiscal autonomy.<sup>4</sup>

#### Box 1. A checklist for assessing fiscal relations across levels of government

Based on the issues which have emerged in the context of recent OECD work, a checklist of criteria has been compiled, in the form of questions to be addressed, in order to assess the effectiveness of fiscal relations across government levels.

# Spending assignment issues

- Extent of decentralisation: How are responsibilities for public service provision shared across government levels? Are some jurisdictions, or special zones, given special spending responsibilities (and, symmetrically, revenue-raising powers)? To what extent can and do sub-national governments tailor their supply to local citizens' preferences? In particular, in which areas are national standards and norms binding and is the central government frequently engaged in micro-managing sub-national governments (e.g. setting wages and job status for sub-national government employees)? And are "unfunded mandates" for sub-national government an important issue?
- Size of jurisdictions: What have been the strategies so far implemented to exploit scale economies and internalise spillover effects and are there still some problems? Under what circumstances are amalgamations an attractive option? Are co-operative approaches used, such as joint-provision or the concentration of supply in some jurisdictions with others buying services? If so, how are such arrangements designed? In particular, how are provision costs shared across jurisdictions? Do these co-operative approaches promote cost-efficiency, e.g. by introducing some competitive pressures across providers?
- Overlapping Responsibilities: Are there domains where spending responsibilities overlap? If so, to what
  extent does such overlapping create incentives to shift the financial burden to another government layer and
  result in the sub-optimal or inefficient provision of public services? What are the instruments in place to avoid
  such strategies?
- Social transfers and redistributive goods: To what extent are sub-national governments responsible for delivering social assistance programmes and redistributive services? In particular, do they set eligibility criteria and benefit levels? Is there any evidence of "welfare migration" to jurisdictions providing more generous services and social transfers? Do sub-national governments react to (the threat of) such migration by lowering the generosity of these benefits and/or restricting eligibility to reduce demands from non-residents?

#### Sub-national government funding principles

Tayation nowers: How extensive are

- Taxation powers: How extensive are sub-national government revenue-raising powers? In particular, with
  respect to which taxes can sub-national governments set the bases and rates? Is there room for devolving
  more taxing powers without destabilising sub-national government budgets (e.g. as a result of excessive
  volatility of local tax revenues), raising overall administrative and compliance costs, hindering
  inter-jurisdictional trade and investment flows, and/or harming distributional objectives? What role is there for
  user charges?
- Tax competition: Do local tax rates and bases vary significantly across jurisdictions and what are the main factors contributing to, or limiting, cross-jurisdiction differences? In particular, how does the grant system influence sub-national government tax policies? Is tax competition important and what are the positive and adverse effects of such competition (disciplining sub-national government fiscal behaviour versus an excessive fragmentation/complexity of the tax system and potential distortions to trade and investment patterns)?

<sup>4.</sup> The existence of information asymmetries, the reliance on incomplete contracts and the presumption that individual agents will put their own interest first when interacting with others are at the core of the co-ordination problems. In this respect, principal-agent theories are relevant for better understanding fiscal relations across levels of government.

### Box 1. A checklist for assessing fiscal relations across levels of government (continued)

- Earmarked grants: Do earmarked grants account for a substantial part of the sub-national government budget? If so, how are these grants designed and what are the impacts on sub-national government incentives and overall outcomes? In particular, how is the central government participation rate defined and are spillover effects correctly accounted for? Is the contribution based on actual ex post costs as opposed to standard a priori costs? Is there evidence that earmarked grants have resulted in poor cost-efficiency and had adverse distributional consequences? Has there been a trend to reform the design of earmarked grants (e.g. by giving sub-national governments more flexibility as to how to reach the strategic objectives, by merging earmarked grants which are too narrowly defined and/or by shifting towards a more outcome-oriented approach)?
- Equalisation schemes: Through what channels does redistribution across jurisdictions take place (including explicit equalisation schemes but also progressive income tax systems and social insurance and welfare systems) and how large are these redistributive transfers? What are the main objectives of the equalisation system and the criteria (potential or actual tax revenues, specific topographic and socio-demographic factors influencing sub-national government provision costs, etc.)? How important is central government discretionary financial support to sub-national governments as opposed to formula-based grants? To what extent does the intergovernmental grant system promote or hinder the growth prospects of poorer jurisdictions? Do the design and reform of the grant system face serious equity-efficiency trade-offs? Are central government grants used to minimise fluctuations in sub-national government tax revenues?

#### Macroeconomic management in a decentralised setting

- Macroeconomic consistency: What mechanisms are in place, or should be envisaged, to secure consistency
  between sub-national government fiscal behaviour and overall macroeconomic policy objectives? Have subnational governments experienced fiscal slippage or pro-cyclical behaviour? If so, how have other
  government tiers and/or the financial market reacted? Do sub-national governments facing financial problems
  receive financial support from the central government (in extreme cases being bailed-out)? If so, how is this
  support designed and what are the consequences for sub-national government behaviour?
- Fiscal rules: What fiscal rules apply at a sub-national level? Have they been imposed by the central government or negotiated with sub-national governments? What kinds of rules best avoid fiscal slippage, whether as an increase in sub-national government debt or higher taxes (balanced-budget rules, expenditure ceilings or limitations on borrowing)? Is the framework credible and flexible enough to cope with unexpected events, cyclical developments and investment needs? Have sufficient enforcement mechanisms been introduced? In particular, is there a role for peer-pressure and sanctions and, if so, how should such instruments be applied (e.g. do sanctions require political approval in parliament or in a co-operative institution)?
- Market discipline: Are sub-national authorities allowed to raise money on the financial market? If so, is sub-national debt guaranteed -- explicitly or implicitly -- by the central government? Is there evidence that financial markets play a role in disciplining sub-national government fiscal behaviour (e.g. lending conditions depend on the sub-national government fiscal position)? Do economic instruments play a current or prospective role in securing sub-national government fiscal discipline?

# Information-sharing and transparency

• Are sub-national government spending responsibilities and revenue-raising powers clearly delineated? Is there scope for improving consistency (e.g. all government levels using compatible accounting standards) and transparency (e.g. are sub-national government fiscal positions and information on both the quality of local public services and local tax rates easy to obtain and compare)? Is there any forum allowing sub-national governments to share their experiences in managing public services more efficiently? Are sub-national figures readily available and based on common budget and accounting principles? To what extent has decentralisation made it difficult to enforce national regulations and raised corruption problems?

- 7. Assigning spending responsibilities. By being closer to local citizens, sub-national governments are in principle better placed to respond to their demands for services and to target these at the right people. However, allocative and cost efficiency gains may be difficult to attain:
  - Economies of scale and scope may prevail in supplying some goods and services currently under the responsibility of sub-national governments in a number of countries (*e.g.* in hospital care and tertiary education).
  - Public goods and services provided locally may have spillover effects on other jurisdictions (*e.g.* education, labour market programmes and infrastructure development may affect other jurisdictions, and more generally the growth potential of the country).
- 8. A failure to account for spillover effects may result in sub-optimal public good provision, while the threat of migration across jurisdictions may also prompt sub-national governments to set welfare benefits too low from society's point of view. A similar risk also emerges when spending and financing responsibilities overlap -- as is often the case in health care, labour market and social assistance programmes -- so that a given level of government may try to minimise its costs at the expense of another. To counter these incentive problems and exploit scale economies, central governments have sometimes encouraged sub-national governments to merge (often against fierce political resistance), but optimal boundaries may vary significantly between services. The alternatives to exploit scale economies are joint provision of public services or co-operation approaches, these latter displaying attractive features meriting to be given more consideration in several countries. However, they may be difficult to implement for some services (in particular those for which benefits cannot be easily individualised, *e.g.* roads).
- Funding principles play a key role in shaping sub-national government spending behaviour, but their design raise difficult issues and trade-offs. Most importantly, matching revenue-raising powers to spending responsibilities is desirable to allow sub-national governments to tailor the supply of public goods to local citizens' preferences and willingness to pay, and hence to be held accountable. Potential welfare gains should, however, be weighted against the risks of efficiency losses associated with local taxing powers as well as distributional objectives. There are few taxing powers which can be transferred to sub-national governments without raising efficiency and/or distributional concerns. Property taxes seems more appropriate in this regard but do not play as important a role as could be expected. Granting sub-national governments discretion in setting bases and rates of general consumption taxes (VAT or sales tax) may increase tax fraud and evasion and create distortions in inter-jurisdiction trade. Sub-national income taxes may have undesirable spillover effects as subnational governments fail to account for the impact of their decision on other government levels' finance and on the country's potential growth (as personal income taxes affect individual decisions to work, save and invest). A conflict with the objective of maintaining a redistributive role of personal income tax may also emerge. Corporate income taxes are volatile and the OECD has often recommended reducing sub-national reliance on these. Greater reliance on user fees, by reinforcing market signals, could promote efficiency but may also raise equity issues since sub-national governments are in many cases responsible for the provision of redistributive public services (in particular health care and non-tertiary education).
- 10. Viewed against this limited scope for fiscal autonomy, the role of sub-national government taxing capacity in disciplining fiscal behaviour seems to be more uncertain than usually recognised in the literature. The intensity of tax competition varies significantly both across countries and between tax bases but is sometimes weak, sub-national governments rarely fully exploiting powers to cut local taxes when they are available. More work on key factors shaping sub-national government tax decisions is needed. Recent country surveys have however identified several institutional features

which may need to be adjusted to facilitate a more effective use of sub-national government taxing powers and to foster accountability. In particular, a clear definition of each government level spending responsibilities and comparative information of tax levels across jurisdictions are of paramount importance. Furthermore, the use of discretionary intergovernmental grants and the design of tax-sharing arrangements may need to be reconsidered.

- The grant system has many roles to play, though its design is of paramount importance to avoid conflict between various objectives. Country surveys tend to indicate that the impact of intergovernmental grants on efficiency, fiscal discipline and equity, largely depends on their design. Earmarked grants have been used extensively to minimise the risk of sub-optimal spending in domains characterised by significant spillover effects or to secure minimum standards for specific services. However, co-financing rates above levels which effectively account for spillover effects have often resulted in excessive spending, accompanied by poor cost effectiveness. Given these problems, there has been a move towards general purpose (block) grants, which allow greater local autonomy and should, in principle, generate greater cost-efficiency. Fiscal equalisation schemes -- often an intrinsic characteristic of the grant system -- can promote economic efficiency by avoiding that regional disparities become self-perpetuating and by creating the ground for a fair and effective fiscal competition. However, they may also impede changes in cost differentials and hinder regional adjustment by creating "poverty traps". Although options to reduce the potential disincentive effects associated with the grant system exist, they often imply some compromise with equity objectives. Likewise, using the grant system to smooth cyclical shocks may be desirable but care must be taken to maintain appropriate incentives to secure fiscal discipline. A heavy reliance on discretionary grants may be counterproductive in this regard.
- Options for securing fiscal discipline have recently received more attention in many 12. countries as fiscal consolidation has become more pressing. Countries have relied on a wide array of strategies. In some cases, fiscal rules (e.g. a balanced budget requirement) have been imposed on subnational governments, while in others, mainly federal countries, fiscal co-ordination has been reinforced through co-operative arrangements. Financial or administrative sanctions have also been introduced in many cases. Taking another approach, some countries have relied on market mechanisms to secure fiscal discipline. Despite these efforts, some problems have emerged. Subnational governments have experienced fiscal slippages in a number of countries and/or have implemented a pro-cyclical fiscal policy. The recent economic slowdown may further reveal weaknesses in existing fiscal arrangements since sub-national revenues often are highly sensitive to fluctuations in economic activity and asset prices. These problems may indicate a need for revisiting and strengthening the fiscal framework. In several countries, improving the availability, consistency and timeliness of sub-national government public finance data is a prerequisite. Furthermore, there seems to be scope for clarifying and tightening sub-national fiscal requirements and introducing stronger enforcement mechanisms in a number of countries. On the other hand, too rigid rules may risk undermining public support, while to be credible, sanctions must be carefully designed and represent a reasonable policy response to potential problems.

# 2. Forces shaping fiscal relations across government levels and recent trends

# 2.1 Extent of decentralisation

13. Assessing the degree of fiscal decentralisation and drawing cross-country comparisons are difficult for a number of reasons. Fiscal autonomy has several dimensions – in particular, the authority to decide on the level and composition of spending, revenues and borrowing – which often interact

and which are not always easy to rank. Furthermore, relevant data which can be used for international comparisons are seldom available. Against this background, looking at indicators derived largely from national accounts data (Table 1) suggests that:

Table 1. Indicators of fiscal decentralisation

	Sub-nati	ional governmen	nt spending and emp	Sub-national government revenues					
	Share in general government spending <sup>1</sup>			share of total public syment	Share in gener	ral government nues <sup>2</sup>	Attribution of tax revenues as percentage of total tax revenue <sup>3</sup>		
	1985 <sup>4</sup>	20015	1990 <sup>6</sup>	20017	1985 <sup>4</sup>	20015	1985	2001	
Federal countries									
Australia			76.7	83.3			18.6	17.2	
Austria <sup>8</sup>	28.4	28.5	62.6	62.3	24.6	21.4	23.8	18.9	
Belgium	31.8	34.0			11.4	11.3	4.8	28.6	
Canada <sup>9</sup>	54.5	56.5	84.7	86.0	50.4	49.9	45.4	44.1	
Germany	37.6	36.1	87.6	88.5	31.9	32.4	30.8	29.2	
Mexico							1.0	3.1	
Switzerland							44.1	40.4	
United States	32.6	40.0	81.8	85.5	37.6	40.4	32.7	31.7	
Unitary countries									
Czech Republic			32.3	34.0				10.6	
Denmark	53.7	57.8			32.3	34.6	28.4	33.8	
Finland	30.6	35.5	74.7	77.8	24.8	24.7	22.4	22.4	
France	16.1	18.6		45.8	11.6	13.1	8.7	9.3	
Greece	4.0	5.0		87.8	3.7	3.7	1.3	1.0	
Hungary			65.5	65.1				5.5	
Iceland							18.6	24.3	
Ireland <sup>9</sup>	30.2	29.5	13.2	11.3	32.3	34.6	2.3	1.9	
Italy	25.6	29.7		20.6	10.7	17.6	2.3	12.2	
Japan	46.0	40.7			26.8	26.0	26.0	25.9	
Korea <sup>8</sup>			32.3	34.8				17.8	
Luxembourg	14.2	12.8	94.8	92.5	8.0	7.4	6.6	5.6	
Netherlands	32.6	34.2	27.5	25.6	11.4	11.1	2.4	3.5	
New Zealand			12.2	9.5			6.5	5.6	
Norway <sup>10</sup>	34.6	38.8			22.5	20.3	17.7	16.3	
Poland <sup>8</sup>			6.5	6.2				18.3	
Portugal	10.3	12.8			7.6	8.3	3.5	6.5	
Slovak Republic								3.8	
Spain	25.0	32.2	47.1	63.6	17.0	20.3	11.2	16.5	
Sweden	36.7	43.4			34.3	32.0	30.4	30.8	
Turkey			84.2	85.5			10.2	13.1	
United Kingdom	22.2	25.9			10.5	7.6	10.2	4.1	
Average <sup>11</sup>	29.8	32.2	55.2	57.0	21.5	21.9	16.4	17.8	

- As measured by the share of sub-national governments in general government spending and revenue, the degree of decentralisation varies significantly across OECD countries.
- The institutional structure of a country -- whether or not the country is recognised as a federal country -- does not directly correspond with the spending and revenue share of subnational governments. Sub-national governments in some unitary countries are allocated a larger share of public spending than in countries identified as federal countries. Public

Excluding the transfers paid to other levels of government. National Accounts data.

Excluding transfers received from other levels of government and including tax sharing arrangements. National Accounts data.

<sup>3.</sup> Including tax sharing arrangements. Revenue Statistics data.
4. Or earliest year available: 1986 for Ireland; 1987 for the Netherlands and the United Kingdom; 1990 for Japan, Luxembourg and Norway; 1991 for Germany; 1993 for Sweden; 1995 for Austria,

Belgium, Denmark, Finland, Greece, Portugal and Spain.
Or latest year available: 1996 for Ireland; 1997 for Canada; 1999 for Portugal; 2000 for Japan, Luxembourg and the United Kingdom.

<sup>6.</sup> Or earliest year available: 1991 for Germany and New Zealand; 1994 for Poland; 1996 for the Netherlands; 1997 for Czech Republic, Hungary and Turkey

<sup>7.</sup> Or latest year available: 1998 for Greece and Italy; 1999 for France; 2000 for Austria, Germany, the Netherlands, Poland, Turkey and the United States

<sup>8.</sup> Public sector employment data are registered in full time equivalent. Data based on SNA68 methodology.

<sup>10.</sup> The share in general government revenues is expressed in per cent of mainland government revenues.

<sup>11.</sup> Simple average of federal and unitary countries. Under each heading, the average takes into account only countries for which data are available for both years Source: OECD National Accounts database; OECD Public Sector Pay and Employment database; OECD Revenue Statistics; Statistics Norway.

finance indicators for instance suggest that Denmark and Sweden — recognised as unitary countries — are more "decentralised" than Germany, Mexico and the United States.

- In all countries, sub-national government spending shares widely exceed their revenue share, pointing to the wide use of intergovernmental transfer schemes.
- 14. Information derived from public finance data would, taken at face value, lead to a significant overstatement of the degree of fiscal autonomy of sub-national governments in many countries. On the spending side, such data do not give an accurate picture of where responsibilities lie. The effective power of sub-national governments to manage the programmes under their responsibility is often quite limited, with the central government increasingly engaged in setting standards and/or micromanaging sub-national government implementation of various sectoral policies (Austria, Denmark, Germany and Norway). The education sector provides an illustration. Sub-national governments are responsible for providing non-tertiary education in an increasing number of countries. However, in many cases, the central government sets the curriculum, trains teachers and/or sets wages (Italy, Mexico and Norway). Standards in health care provision are also frequent in many countries. The way intergovernmental grants are specified can further influence sub-national government spending behaviour, but internationally consistent information on both the total amount of intergovernmental grants, and the breakdown between block grants and earmarked grants is unfortunately lacking.
- Indicators of revenue share allocated to lower levels of government do not provide accurate information on their effective revenue-raising powers. Limits on sub-national government discretion to determine tax rates and tax bases significantly reduce local fiscal autonomy. Few synthetic indicators on sub-national government effective autonomy to set tax bases and rates exist. Information based on an OECD survey for 1995, however, revealed that such taxing powers are rather restricted in several countries -- including Austria, Germany, Mexico and Norway (Table 2).<sup>5</sup> Others have more discretion (Canada, Denmark, Sweden, Switzerland and the United States). Tax-sharing arrangements are prevalent in many countries, though their specification varies substantially and can leave sub-national governments with some or virtually no power to influence the revenues accruing to them individually. When tax-sharing arrangements prevail, the degree of local autonomy will further depend on whether their consent is required before the sharing formula can be changed. Furthermore, in some countries, sub-national governments have some de jure autonomy to set the tax bases and rates but rarely use it (including Finland, Korea, Norway and Spain). The benefits from an active use of local taxing powers may be reduced by discretionary elements in the grant system (Norway) and its redistributive nature (Austria and Germany, where the local business tax proceeds are partly shared across jurisdictions). National regulations applying to the scope and level of user charges (e.g. in the education sector) further restrict sub-national government revenue-raising powers.

\_

<sup>5.</sup> Information on the degree of sub-national taxing power for 19 OECD countries in 1995 was published in OECD (1999). Fiscal discretion is considered as greatest if sub-national governments are free to determine both the taxable base and the rates of a particular tax, without any limits on revenues, base or rate enforced by the central government. Since 1995 however, sub-national government discretion has changed significantly in a number of countries. In particular, Spanish and Belgium regions have been granted more discretion in setting tax rates and rebates, in particular on the personal income tax base, while Mexican States are allowed since 2002 to levy a retail sales tax and to add a surcharge on the individual income tax under specific regimes. Similar data have been produced for Estonia, Latvia and Lithuania for 1997 and 1999 (OECD, 2002a).

Table 2. Sub-national government taxing powers in selected OECD countries<sup>1</sup>

1995

	Sub-national governm	ent taxes relative to:	Discretion to set	Summary indicator		
	Total taxes	GDP	taxes <sup>2</sup>	of taxing powers <sup>3</sup>		
Sweden Denmark	32.6 31.3	15.5 15.5	100.0 95.1	15.5 14.7		
Switzerland	35.8	11.9	92.4	11.0		
Finland	21.8	9.8	89.0	8.7		
Belgium	27.9	12.4	57.9	7.2		
Iceland	20.4	6.4	100.0	6.4		
Japan	24.2	6.8	90.3	6.1		
Spain	13.3	4.4	66.6	2.9		
New Zealand	5.3	2.0	98.0	2.0		
Germany	29.0	11.1	12.8	1.4		
Poland	7.5	3.0	46.0	1.4		
United Kingdom	3.9	1.4	100.0	1.4		
Netherlands	2.7	1.1	100.0	1.1		
Austria	20.9	8.7	9.5	0.8		
Portugal	5.6	1.8	31.5	0.6		
Czech Republic	12.9	5.2	10.0	0.5		
Hungary	2.6	1.1	30.0	0.3		
Norway	19.7	7.9	3.3	0.3		
Mexico	3.3	0.6	11.2	0.1		

<sup>1.</sup> The countries are ranked in descending order according to the value of the summary indicator of taxing powers.

# 2.1 Recent trends

16. Subject to the above caveats, two contrasting trends emerge from aggregate public finance indicators.

- On the spending side, the sub-national government share has increased in a majority of countries, but by no means all, over the past 15 years (Figure 1). The rising share partly reflects new responsibilities assigned to them (health care and/or non-university education in Italy, Mexico and Spain; active labour market policies in Canada in 1996; primary education in Hungary; and the management of some welfare programmes in Korea).
- The sub-national government share in general government revenues (both total revenues and tax revenues) has not increased commensurately, thus resulting in a larger "fiscal gap" (defined as the difference between sub-national government spending responsibilities and their revenue-raising powers). In a number of countries, sub-national governments have been granted increased autonomy to set tax bases or rates (such as regional governments in

<sup>2.</sup> The figures show the percentage of their total taxes for which sub-national governments hold full discretion over the tax rate, the tax base, or both the tax rate and the tax base. A value of 100 designates full discretion.

<sup>3.</sup> The summary indicator is the product of the ratio of sub-national government taxes to GDP and the degree of discretion to set taxes. Thus, it measures sub-national government taxes with full discretion as a percentage of GDP.

Source: OECD Revenue Statistics and OECD (1999).

Belgium, Mexico and Spain). However, in other instances effective taxing powers have been restricted, in particular at the local level (France and Germany).<sup>6</sup>

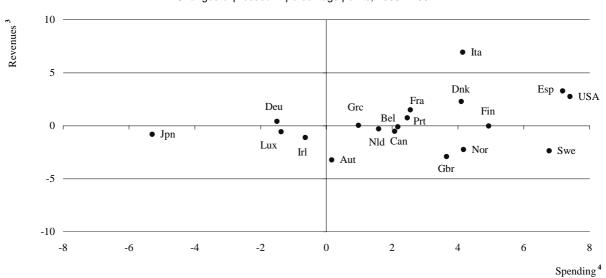


Figure 1. Changes in the share of sub-national governments in total public revenues and spending

Changes expressed in percentage points, 1985¹- 2001²

Or earliest year available: 1986 for Ireland; 1987 for the Netherlands and the United Kingdom; 1990 for Japan, Luxembourg and Norway;
 1991 for Germany; 1993 for Sweden; 1995 for Austria, Belgium, Denmark, Finland, Greece, Portugal and Spain.

3. Excluding transfers received from other levels of government.

4. Excluding transfers paid to other levels of government.

Source: OECD National Accounts database; Statistics Norway.

17. The increasing fiscal gap seemingly conflicts with the traditional view that the benefits from fiscal decentralisation arise when the costs of providing local public goods are borne locally (Box 2), at least at the margin. However, it may reflect an unavoidable tension between proliferating local spending demands and a scarcity of tax instruments with the correct characteristics for being levied locally. This tension has been reinforced by several forces, which are likely to continue to shape fiscal relations across government levels. One of these is that sub-national governments may sometimes be more eager to take over new spending responsibility than taxing powers, as they would have to bear the political cost of raising taxes.

# 2.2 Forces shaping fiscal relations across government levels

18. The forces underlying the above trends are both economic and political and derive from domestic and international sources. At a macroeconomic level, they include the efforts to involve local authorities in the drive for fiscal consolidation and to distribute the burden of population ageing, which will result in higher national and sub-national government spending without adding to the resource base. The process of globalisation has also had an impact, increased international co-operation having

<sup>2.</sup> Or latest year available: 1996 for Ireland; 1997 for Canada; 1999 for Portugal; 2000 for Japan, Luxembourg and the United Kingdom.

<sup>6.</sup> In France, the local business tax and one property tax (*Taxe d'habitation*) -- which accounted for the bulk of the municipalities' tax revenues and over which they have had significant effective taxing powers -- are gradually phased out and replaced by central government grants. In Germany, the abolition of the business turnover tax in the late 1990s reduced municipalities' effective taxing powers.

a counterpart in a decentralising tendency emanating from a heightened cultural awareness at local and regional levels. Indeed, the political dimension inherent in the decentralisation process is as important as economic factors to an understanding of developments in central/sub-central relationships.

## Box 2. Arguments in favour of local provision and financing

Several arguments in favour of fiscal devolution have been developed in the literature, supporting the idea that the provision of public goods and its financing should be assigned to the lowest level of government with the capacity to achieve objectives. These arguments include:

Response to local preferences. The traditional theory of fiscal federalism contends that the central government should have the basic responsibility for macroeconomic stabilisation functions, national public goods, such as defence, and income redistribution in the form of assistance to the poor (Oates, 1972). However, a "one-size-fits-all" approach may not deliver a basket of public goods that is optimal for all citizens. By being closer to local citizens, sub-national governments are, in principle, better placed to respond to their preferences in term of local public goods, to assess willingness to pay and to target services at the right people. Hence, "Pareto efficiency" could be raised -- i.e. resources can be saved without making anyone worse off -- through fiscal decentralisation. Keeping incentives right does not necessarily entail an exact match between spending and revenue-raising powers at each level of government. Central government grants can play a role in sub-national government finances without jeopardising incentives. One important condition, however, is that grants do not accommodate extra spending decided upon by sub-national government, leaving the cost of a marginal change in local spending to be borne locally.

Increased government accountability may enhance the efficiency gain. Since local officials can be easily identified by voters and taxpayers, they are expected to be more accountable, especially if the costs of providing public services are borne locally. Being closer to residents may, however, trigger decisions that favour particular individuals or groups while the public interest sometimes takes a back seat (Tanzi, 1995). Where there is inadequate capacity for the population of some jurisdictions to hold their governments accountable through internal checks and balances, this could spill over into corrupt practices, though the degree of decentralisation and the level of corruption amongst public officials are not directly linked.

Introducing competition across jurisdictions. Diversity in fiscal packages offered by sub-national jurisdictions -- in terms of quantity and quality of public goods and the associated tax burden -- may introduce some competition across jurisdictions, and thus incentives for governments to raise public sector efficiency. Competition between jurisdictions relies on the assumption of mobile citizens ("citizens vote with their feet"). In practice, several factors limit the mobility of citizens, in particular in European countries, especially taxes on property transactions and other rigidities in the housing sector. Moreover, tax competition in areas where the tax base is mobile may be seen as weakening tax capacity. The introduction of competitive pressures across subnational jurisdictions has thus increasingly come to be seen as dependent on informational channels. Some countries (including Scandinavian countries) have developed high-quality information to enable citizens to benchmark the performance of their administration against others and to allow local governments to identify best practices.<sup>1</sup>

Supply-side efficiency. Decentralisation may allow for experimentation in the management of public responsibilities (Oates, 1999). In some decentralised countries, sub-national governments have taken the lead in designing innovative measures to increase public spending effectiveness. In Spain for instance, some regional pilot programmes focusing on containing pharmaceutical costs and reducing public hospitals' waiting lists have shown promising results (OECD, 2000a). In Switzerland, new public management principles have been introduced by some cantons and communes and latter replicated at the Confederation level. In many countries however, an information-sharing forum is lacking, reducing the benefits of these experimentation gains.

<sup>1.</sup> Norway and Sweden have developed a comprehensive dataset, available on Internet, providing indicators on the coverage and costs of public services for each municipality.

Globalisation has had a centralising effect...

19. Increasing trade and financial integration has made for increased centralisation, particularly on the revenue side. Competitiveness concerns associated with cascading turnover and retail sales taxes have reinforced the attractiveness of value added tax systems. Several countries (including Australia, China and Switzerland) have recently moved away from turnover and/or retail sales taxes – some of them formerly under the responsibility of sub-national governments – towards value added tax systems managed by the central government. Enhanced international co-operation in tax policy has been seen as an option to counteract the erosion of internationally mobile tax bases, in particular corporate and financial income. Some of the recent international agreements can be seen as impinging on the tax autonomy of sub-national governments. As an illustration, the EU Code of conduct for business taxation identified 66 harmful tax measures, some of them being implemented by subnational governments.

... but regional disparities remain marked...

20. The reduction of trade barriers, by increasing opportunities to exploit scale economies and potential agglomeration benefits, may have heightened regional income disparities, creating tensions in fiscal equalisation schemes. As an illustration, recent evidence suggests that the convergence in *per capita* income among countries in the EU has not been paralleled by a convergence across regions. Indeed, variations in inter-regional *per capita* income have increased, for example in Italy, West Germany and France (Decressin, 2002). Within regions, also, urban and intermediate areas are likely to benefit most from increased trade openness since they offer various key resources (including proximity to markets, quality and availability of labour and efficient transport and network systems). Regions with a low population density, a lack of critical mass and geographical isolation may benefit least. Dealing with increased regional income disparities may in turn call for a greater central government role, since it is typically involved in redistribution.

... with greater local and civic awareness...

21. Against a background where wider international considerations and bodies are increasingly shaping local economic conditions, the awareness of regional, local and civic identities has tended to grow, providing a momentum towards decentralisation in a number of countries. Empowering subnational governments with more responsibilities, by bringing government closer to the people, is seen as strengthening the local democratic process following a period when civic involvement in decision-making tended to be weak or even declining. Elected sub-national authorities have been established recently in several countries. In Italy, the Parliament voted for the direct election of

<sup>7.</sup> Among the 66 harmful tax measures (which unfairly encourage businesses to locate in one EU country at the expense of another) identified by the EU Code of Conduct groups were: the Aland Islands Captive Insurance regime in Finland, the Basque country and Navarra co-ordination centres in Spain and the Santa Maria (Azores) Free Zones in Portugal.

<sup>8.</sup> Such a process of agglomeration and regional specialisation has been discussed by Krugman (1993) and Krugman and Venables (1993). New growth theories argue that positive externalities at the local level generate increasing returns on investment, such that capital and other production factors are likely to flow to the most advanced regions, leaving poorer regions further behind.

<sup>9.</sup> A discussion on the likely uneven regional distribution of the benefits of trade liberalisation (WTO accession) for China is provided in OECD (2002b) and for Brazil by Haddad *et al.* (2002).

mayors and presidents of provinces in 1993. In Korea, sub-national government representatives are no longer nominated by the central government since 1995, but are elected locally. In Ireland, two regional assemblies were created in 1999 and in the United Kingdom, a new Parliament and elected assembly, respectively, have been established in Scotland and Wales.

... linked partly to heightened mobility across jurisdictions

22. The potential benefits of, and issues related to, fiscal federalism may increase as economies develop. Several factors are at play. First, income growth may spur the demand for a more diversified basket of public goods or, put differently, the "one-size-fits-all" approach may increasingly fail to deliver a basket of public goods that is optimal for all citizens. Second, the rise in human capital (in particular higher education attainment) has raised the ability of local citizens and their representatives to manage efficiently local affairs and participate in the nation's decision process. Third, the spread of new information and communication technologies, together with more efficient transport modes, may increase the mobility of citizens across jurisdictions. Increased mobility of people may reinforce competitive pressures on sub-national government to deliver good public services, at a low cost. It also reinforces spillover-related issues and the need for co-ordination mechanisms to mitigate their potential adverse effects (e.g. how to share the cost of transportation infrastructure between city centres and residential suburb areas? How to account for students residing in one jurisdiction but attending schools or universities in another?).

Fiscal consolidation has brought the need for co-ordination...

- 23. This greater involvement has coincided with a period when the limits on available fiscal resources have become increasingly constraining. Fiscal consolidation efforts have significantly influenced fiscal relations across government levels, as governments have sought to apportion the pain of retrenchment. While changes in fiscal balances since the early 1990s indicate that central governments have contributed most to fiscal consolidation (Figure 2), cuts have often been effected by devolving spending responsibilities to lower levels of government without providing commensurate financial resources. Central government grants to sub-national governments have also sometimes been reduced. In the United States for instance, through much of the 1990s, Congress kept a tight rein on grants to the states, while state income tax revenues increased rapidly. In Canada, the large cuts in federal expenditures included substantial cuts in federal transfers to the provinces.
- 24. Fiscal consolidation efforts have also made it necessary to reinforce co-ordination across government levels, especially in euro zone countries, where the compliance with the Stability and Growth Pact (SGP) rules is assessed by reference to general government performance. The central government is held responsible for non-compliance, both in terms of financial sanctions and credibility loss. But to address potential free-rider problems, fiscal co-ordination across government layers has recently been strengthened in many EU countries, some introducing an internal SGP (including Austria, Germany, Italy, Portugal and Spain), sometimes with sanctions in case of non-compliance.

17

<sup>10.</sup> The fall in nominal and real interest rates during the 1990s also benefited most central governments through reduced debt-related interest payments since, in many countries, the central government holds the larger share of the public sector debt.

... while ageing populations also have consequences for central-local relations

25. Population ageing is also exerting strong upward pressures on public spending, with differential effects on government tiers, reflecting spending responsibilities. Accommodating these pressures will require changes in the distribution of revenue-raising responsibilities and/or in the volume and design of intergovernmental transfers. In some countries, strong demand and/or cost pressures in the health and elderly care sectors have driven up the sub-national government spending share. In Canada, population ageing is projected to result in a slightly faster increase in spending by the provinces and territories over the period 2001-2020 than for the federal government, largely reflecting their responsibility for financing health care services (Table 3). By contrast, in countries such as Australia and Switzerland, upward pressures will largely be felt by the central government since it finances a large part of social insurance and assistance schemes.

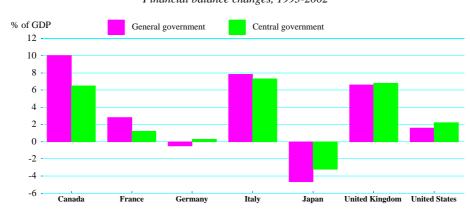


Figure 2. Central government contribution to fiscal consolidation efforts Financial balance changes, 1993-2002

# 3. Issues determining the allocation of spending responsibilities

26. This section presents the main issues that have arisen in allocating spending responsibilities to sub-national government levels and the expedients which have been adopted to deal with them. The economic issues raised are common to federal and non-federal states. They may also apply to the allocation or the use of authority within the EU, although fiscal relations differ considerably from those within both federations and unitary countries (Box 3).

Financial balances used to measure fiscal consolidation efforts are not cyclically-adjusted since no such data exist for central government.
 Source: OECD Economic Outlook, No. 73, June 2003.

<sup>11.</sup> Estimations of the fiscal consequences of ageing for the period 2000-2050, with a breakdown for old-age pensions, early retirement programmes, health care and long-term care, and child/family benefits and education, can be found in OECD (2001a).

<sup>12.</sup> Assuming constant coverage and quality of elderly care services in Norway, municipality employment on these services is projected to rise by 4 per cent over the 1998-2030 period (Journard and Suyker, 2002a).

 ${\sf Table\ 3.\ The\ consequences\ of\ demographic\ changes\ on\ fiscal\ outcomes\ in\ Canada}$ 

Average annual changes over the 2001-2020 period, at current prices

	Federal government	Provinces and territories
Revenues	3.5	3.4
of which: Intergovernmental transfers		3.8
Spending	2.5	4.0
of which: Intergovernmental transfers	3.8	
Elderly benefits	4.2	
Employment insurance benefits	4.2	
Education		3.2
Health care		5.2
Debt service	-6.7	3.0

Source: The Conference Board of Canada, 2002.

27. The fiscal federalism literature contends that the provision of public goods at sub-central level can promote allocative efficiency and democratic choice. However, the key conditions for this to hold are not always fulfilled, in particular the absence of significant scale economies and spillover effects. In practice, there is often potential for scale economies, even though they are difficult to measure. In addition, few public goods are purely local by nature. In many cases, the quality and quantity of public goods provided locally have effects on economic performance in other jurisdictions. Where people in outside jurisdictions cannot be excluded from locally-provided services (education for example) sub-national governments can indulge in a "strategic game", resulting in the under-provision of public goods and/or in an inefficient reliance on some public services. (The financing of local public spending may also have spillover effects on other jurisdictions which are discussed in the next section.) At the same time, responsibility for providing redistributive public goods and services often lies at sub-national government levels, whereas it is typically seen as a central government task in the fiscal federalism literature. Health care, social assistance and education account for the bulk of sub-national government spending in many countries (Table 4), often with significant discretionary powers to set social assistance benefit levels and/or to assess the eligibility for some social benefits (Denmark, the Netherlands, Norway, Spain, Sweden, Switzerland and the United States).

# 3.1 Local provision may fail to exploit economies of scale

28. The smallness of local jurisdictions often implies that they are below the critical size for cost-efficient provision of public goods. Few studies provide direct estimates of the economies of scale attaching to the provision of public services at sub-national levels. However, core services -- in particular education and health care -- provided by lower levels of government are characterised by

<sup>13.</sup> In Denmark, the Ministry of Interior has estimated the "economically optimal size" for a municipality (providing childcare, primary schools, elderly care and administrative functions) to be around 20 000 to 30 000 inhabitants. If all municipalities were of an optimal size, the potential permanent efficiency gains have been estimated at around 1¾ per cent of total local government outlays (about 0.5 per cent of GDP). In Japan the size needed for obtaining the lowest unit costs of public services has been estimated to be a population of 120 000.

scale economies. In the education sector, the recent PISA study reveals that a low student-teaching staff ratio -- a common feature in small jurisdictions -- may not improve education outcomes. <sup>14</sup> In the health care sector, many countries are rationalising their supply of hospital care services. Small hospitals or clinics are being closed down or transformed to deliver services of a more specialised nature, thereby contributing to economies of scale and scope, with the aim of improving health care quality (Canada: British Columbia, Finland, France and Italy). For public procurement, country surveys also reveal that sub-national governments tend rarely to rely on competitive tendering, as information and transaction costs act as a serious barrier for the smallest jurisdictions (*e.g.* in Denmark, Norway but also in Switzerland where regulatory fragmentation further raises

#### Box 3. Fiscal relations within the European Union

Fiscal relations between national authorities and community institutions within the European Union differ considerably from those between levels of government in mature federations or in decentralised unitary countries.

- Under the subsidiarity principle, powers or tasks rest with the sub-units unless a central unit is more
  effective in achieving certain specified goals. In the EU case, the principle results in EU member
  countries having retained most of their fiscal powers. The European Community does not provide core
  public services, such as defence, and has no specific revenue-raising powers. Spending on agriculture
  (appropriations for commitments) accounted for 44 per cent of the general budget of the EU for 2000.
- The European Union's own budget is too small (less than 1.3 per cent of EU-wide GNP in 2000) to allow the pursuit of union-wide macroeconomic stabilisation objectives or to address country-specific shocks. It is mainly made up of a fixed share of VAT revenues collected by EU member countries and a contribution proportional to each member country's GNP. The estimated revenue for a financial year must be equal to the appropriations for payments of that year: no borrowing is allowed to cover a budget deficit. The bail-out of a member country is explicitly forbidden in the Maastricht Treaty.

There are, nevertheless, similarities between fiscal relation issues arising at the EU level and within an individual country, particularly with respect to enforcement of budget discipline, the co-ordination of tax practices and the regional distribution of funds:

- The introduction of the single currency by 12 EU countries has reinforced the need to co-ordinate fiscal policies within the euro area, as fiscal profligacy in some countries could lead to a risk premium for the area as a whole. The Stability and Growth Pact, which embodies fiscal rules agreed by EU countries is supported by multilateral surveillance and peer pressures.
- On the revenue side, creating the appropriate conditions for the free movement of people, goods, services and capital, has entailed some co-ordination of national tax practices across EU countries. In particular, the sixth VAT directive has brought the harmonisation of the VAT bases across EU countries, a key condition to reduce administrative and compliance costs for companies engaged in intra-EU trade. In addition, securing fair competitive conditions has underpinned several initiatives by the European Commission, including the EU Code of Conduct on business taxation, the arrangements on the taxation of e-commerce transactions, the proposed directive on the taxation of pensions and the proposed directive on the taxation of cross-border savings of individuals.
- Inter-regional redistribution schemes are also in place at the EU level, with EU Cohesion and Structural Funds aimed at promoting the growth potential of lagging countries and regions. Structural and cohesion funds amounted to about one-third of the general budget of the EU for 2000. Per capita GDP differences at the European national level are much higher than among the US states and Canadian provinces (Hoeller et al. 1996) and will widen further after the accession of new Eastern European countries.

<sup>14.</sup> The impact of the student-teaching staff ratio on performance may be non-linear. The recent PISA survey estimates that schools with an average student-teaching staff ratio below ten score about five to ten points below the OECD average. Differences in student-teaching staff ratios ranging from ten to 25 are associated with relatively small effects. However, as the student-teaching staff ratio rises above 25, there is a continuous decline in school performance (OECD, 2001b).

Table 4. Spending by sub-national governments by main categories

In per cent of total sub-national governments' expenditure 2001 or latest year available

	General public services				Public order	and safety	Educa	ntion	Hea	lth	Social se welf	-	Housing & c	-	Transpo		Oth	er
	State,		State,		State,		State,		State,		State,		State,		State,	,		
	Region or	Local	Region or	Local	Region or	Local	Region or	Local	Region or	Local	Region or	Local	Region or	Local	Region or	Local		
	Province		Province		Province		Province		Province		Province		Province		Province			
Federal countries																		
Australia (1998)	10.7	13.7	8.2	2.4	29.4	0.4	20.1	2.1	4.8	6.3	3.4	18.7	8.8	27.5	14.7	28.9		
Austria	13.0	17.6	0.5	1.9	19.9	16.1	23.3	12.3	18.4	21.4	4.1	3.9	17.8	17.8	3.0	9.0		
Belgium	14.6	20.7	0.2	10.0	42.9	20.5	0.8	2.0	16.9	15.9	2.5	2.4	17.2	13.0	5.0	15.7		
Canada	1.8	6.1	3.5	8.9	23.2	40.5	31.9	1.1	16.3	7.4	1.4	5.5	3.7	12.6	18.1	17.8		
Germany (1996)	5.8	7.4	8.0	3.4	21.9	13.0	8.0	14.5	17.1	24.6	4.1	15.3	5.7	6.0	29.4	15.9		
Switzerland (2000)	5.1	8.4	8.2	4.5	24.7	23.0	16.6	18.3	17.8	14.8	2.1	8.2	9.8	7.2	15.8	15.5		
United States (2000)	3.4	5.8	4.5	10.8	31.0	44.1	21.9	8.7	18.1	7.5	0.7	2.1	7.9	6.1	12.6	14.9		
Non-weighted average	7.8	11.4	4.7	6.0	27.6	22.5	17.5	8.4	15.6	14.0	2.6	8.0	10.1	12.9	14.1	16.8		
Unitary countries																		
Czech Republic		12.3		1.8		24.2		1.1		8.2		20.9		15.8		15.7		
Denmark		4.1		0.4		13.1		16.5		57.2		0.9		4.2		3.6		
France		36.2		2.3		16.4		0.7		9.9		6.2		10.3		18.0		
Hungary (2000)		15.7		1.1		27.9		16.4		13.3		13.8		3.6		8.1		
Iceland (1998)		4.2		1.2		28.2		0.9		15.5		5.3		9.1		35.7		
Ireland (1997)		2.3		1.8		11.3		45.5		5.2		14.9		11.3		7.8		
Luxembourg		19.5		1.7		16.1		0.9		4.6		9.1		21.0		27.1		
Netherlands <sup>2</sup> (1997)		9.4		3.4		17.9		2.6		22.6		20.0		6.7		17.4		
Norway (1999)		5.5		0.9		22.2		32.5		17.6		6.4		4.5		10.4		
Poland		7.0		4.2		27.8		24.8		8.0		11.4		10.1		6.7		
Slovak Republic		28.4		3.2		0.3		0.7		1.7		41.5		12.7		11.4		
Spain <sup>2</sup> (2000)		25.3		5.7		25.8		4.2		3.9		6.5		18.2		10.5		
Sweden		12.0		1.0		21.0		25.6		27.6		2.9		5.5		4.3		
United Kingdom (1998)		4.0		12.3		28.7		0.0		32.5		5.4		4.9		12.2		
Non-weighted average		13.3		2.9		20.1		12.3		16.3		11.8		9.8		13.5		

<sup>1.</sup> Economic services in the case of Austria, Belgium, Denmark, France, Luxembourg, Spain and Sweden.

2. Provincial and local governments.

Source: OECD National Accounts database for Austria, Belgium, Denmark, France, Luxembourg, Spain and Sweden; IMF (2002) for the others.

inter-jurisdiction transaction costs).<sup>15</sup> In addition, small jurisdictions may not be able to carry out the professional administration of complex tasks such as assessing eligibility for early retirement pension (Denmark), providing active labour market programmes (Switzerland and Denmark), developing appropriate benchmarking between the quality and costs of services by different providers (Hungary) or monitoring the implementation of regulations in the construction sector (Turkey).

# 3.2 ... and to internalise territorial spillovers

29. The absence of a close match between local benefits and costs may result in a sub-optimal provision of public services and goods. This issue can often arise in the case of public services and infrastructure provided by cities which benefit suburban residents who use inner centre services and transport facilities. 16 Commercial centres and leisure facilities located in central areas but used by suburban residents do indeed generate extra financial resources for city administrations, but these may be insufficient to compensate for the costs of building and maintaining city-centre services and infrastructure. This problem will be more acute when income taxes assigned to the jurisdiction of residence and/or property taxes are a key sub-national financial resource. Other territorial spillover issues may arise when education and training programmes are managed at a sub-national level. If they are too targeted on local needs, they may not respond adequately to countrywide needs and hinder the mobility of employees. In Switzerland for instance, primary and secondary education programmes are set under the responsibility of the cantons. The close proximity of managers to the communities which they serve facilitates feedback and adaptation of the system to clients' preferences. However, the absence of a nationwide school curriculum may contribute to reducing the geographical mobility of the parents once they have made a choice of the school for their children, thus hampering labour mobility.

# 3.3 The risk of under-provision of welfare benefits and redistributive services

30. Devolving welfare state programmes to sub-national governments may bring some benefits but also entails some risks. Local provision allows for experimentation and innovation which generate valuable information and has the potential to promote progress in public policy nationwide (Oates, 1999). In the United States, experimentation was key to the success of the waiver programmes for the pre-Temporary Assistance for the Needy Families (TANF) and the replacement of the Aid to Families with Dependent Children (AFDC) with TANF. Local provision also allows for tailoring welfare programmes to local conditions. In particular, the optimal mix of assistance across cash, childcare, training, housing and transportation to facilitate work might be very different across urban and rural areas. In addition, centrally-decided levels of social assistance may result in significant inequalities if benefits are not adjusted for purchasing power (as for instance minimum pensions in Spain). However, local welfare provision and financing may result in even higher differences in living standards for those in need of assistance, raising horizontal equity concerns. Assigning responsibility to finance these programmes

<sup>15.</sup> In some cases sub-national government have not actively sought to rely more on competitive tendering and to encourage the performance of the bidding system because one of their objectives is to support local companies (Japan and Switzerland). This may however hinder cost efficiency.

<sup>16.</sup> There are only few papers trying to quantify these effects. However, Haughwout (1998) found that city-centre infrastructure raises housing prices in the suburbs while Solé Ollé and Viladecans Marsal (2002) estimated that increases in operating spending and in the capital stock in the central areas of Spanish cities have had positive effects on long-run output growth in the suburbs.

<sup>17.</sup> A recent survey on minimum income support for families, under the responsibility of the regions in Spain, provides an example. This support varies significantly across regions once adjusted for differences in purchasing powers (de Ayala Cañón *et al.* 2001). For a household with three children, the benefits in the most generous region (the Basque country) were in 1998 more than twice those in the least generous (Castilla y Leon).

to the sub-national authority can destabilise local finances, especially when the poor are concentrated in city centres and/or rural areas -- an issue in Switzerland and the United States. Moreover, raising local taxes in these jurisdictions would fail to restore sound public finance, but rather may trigger a vicious circle of urban sprawl with middle and upper income groups migrating from inner cities.

31. A risk of under-provision of public services may emerge when jurisdictions providing better quality services attract residents from other jurisdictions. The perceived threat of welfare-induced migration may even trigger a strategic game, whereby sub-national governments set welfare benefits and the quality of social services too low from the society's point of view. Welfare-induced migration in the United States, where the states deliver core social welfare programmes, is a case in point. Though evidence on welfare-induced migration remains mixed, the empirical findings suggest that states do act as if welfare migration was common. <sup>18</sup> They may either set benefits at a low level, so as to avoid becoming a "welfare magnet" or institute "two-tier" schemes with less generous benefits to migrants from other states. The relatively low mobility of people in European countries reduces the need for such devices. However, a reluctance by municipalities to welcome new elderly residents has been reported in Finland (Hemmings et al., 2003) while, in France, municipality discretionary powers in the domain of social housing and elderly welfare benefits have recently been curtailed. The risk of under-provision could also materialise even in the absence of (a threat of) migration flows, when eligibility for local public services is not conditional on residence, while the costs are born by individual sub-national governments. In Brazil, for instance, municipalities are responsible for providing, and financing, most health care services for any citizen, whether or not he/she resides in the municipality. This is an inducement to reduce their services and push people to rely on other municipalities' services (Varsano et al., 2002).

# 3.4 Inefficiencies due to overlapping responsibilities across government levels

- 32. The lack of a clear division between the spending responsibilities of higher and lower-level spending authorities may result in an inefficient use of resources. Responsibilities for implementing and financing health care, for example, are often shared across government levels. In Germany, the statutory health funds finance operating costs for hospitals, the Länder finance hospital investment and regulate hospital capacity while the municipalities provide local health care services. This has created incentives for the Länder to expand hospital capacity, thereby creating local employment, while leaving part of the operating bill to health funds (Wurzel, 1999). In Norway, the central government is responsible for managing and financing the hospital care sector while municipalities are responsible for primary care. Since municipalities do not pay the costs of hospital treatment received by their residents, they have an incentive to under-supply preventive and outpatient care. They may also postpone the reintegration of patients who are no longer in need of hospital-based care into the health care services they finance (Journard and Suyker, 2002a). This creates a risk of an over-reliance on costly hospital resources while waiting lists to get hospital treatment remain long. In the Netherlands, the interaction of local welfare benefits with central government schemes has created poverty traps and sub-national government discretionary powers in these domains are being curtailed.
- 33. Duplication of tasks, or attempts to shift the financial burden to another government layer, are also frequent when labour market and social assistance programmes are under the responsibility of different levels of government. In Norway, some municipalities have complained about the strategic failure of the public employment service (PES) to reduce the number of unemployed. The concern is that, because the government-managed PES fails to take account of the cost of unemployment assistance paid for by municipalities, it tends to underestimate the benefits of investing in active labour market policies. This has led some of the Oslo districts to start their own "miniature employment offices" (Journard and

<sup>18.</sup> For a survey on these issues, see Brueckner (1998).

Suyker, 2002a). In Germany, municipalities are responsible for administering and financing social assistance while unemployment assistance is managed by the Federal Labour Office and financed by the central government. The fact that means-tested benefits, based on different rules, are processed by two different layers of administration increases administrative costs. Splitting budgetary costs for assistance programmes across government layers might also have a negative impact on job placement efforts by the labour office.<sup>19</sup> Furthermore, each government level also has an incentive to shift the financial burden for these programmes to the other layer. At the federal government level, lowering unemployment assistance benefits (as occurred in 1999) effectively shifts part of the costs to municipalities (Wurzel, 2003). Municipalities also have an incentive to induce unemployed social assistance recipients to participate in work provision schemes offered by the Federal Labour Office, which re-establishes eligibility for unemployment benefits. A similar "carousel strategy" on social assistance was common until recently in Finland.<sup>20</sup>

# 3.5 Frequent approaches include: amalgamations or a "two-speed" system

- 34. Merging sub-national governments is one option to exploit scale economies and internalise spillovers. Amalgamations can also help to reduce the duplication of tasks, in particular administrative ones, and to balance intra-regional disparities in income levels with the needs of public services (in particular between city centres and suburban areas). Recent mergers have led to fewer authorities of larger size in a number of countries (including Belgium, Canada, Iceland, Netherlands and Sweden). The upper government tier often contributes financially to improve the attractiveness of amalgamation (Finland, Japan, Norway, and some cantons in Switzerland), as it may benefit from lower costs at a local level through the grant system. However, what may be considered appropriate policy for urban areas may not help much in dispersed rural communities when the delivery of high quality public services is an important tool used for regional development objectives (*e.g.* Norway). Optimal boundaries also vary significantly between different public services (*e.g.* water management *versus* health care provision), implying that the redefinition of borders will never lead to an "optimal area" division for service provision. Amalgamations often meet fierce political resistance, due to vested interests or because sharing taxes and expenditures in a new and larger entity almost inevitably produces winners and losers.<sup>21</sup>
- 35. Designing a "two-speed", or asymmetric, assignment of spending responsibilities could be an option, by transferring spending responsibilities only to jurisdictions with a critical mass and/or sufficient human and technical knowledge. In practice, however, few countries have used such an asymmetric assignment (the exceptions including Brazil, Italy, Russia and Spain) and then mostly for political or geographical reasons.

19. In Austria, the sharing in responsibilities for social and unemployment assistance across government levels is broadly similar and raises the same issues.

<sup>20.</sup> In Finland, municipalities are responsible for providing "bottom rung" social assistance for those who do not qualify or have used up their rights to the safety net provided by the Social Insurance Institution (KELA). Until recently, it was apparently not uncommon for municipalities to wait until the long-term unemployed are close to the end of their KELA benefits and then offer a job (partly subsidised by the central government) until they re-qualify for KELA benefits, thus avoiding payment of municipality social assistance (Hemmings *et al.*, 2003). In the late 1990s, the required working period to qualify for unemployment insurance was raised, making it less attractive for the municipalities to offer subsidised jobs to the unemployed.

<sup>21.</sup> This has often been the main reason for the rejection of mergers of municipalities through referendums in Switzerland.

# 3.6 ... centralisation or norms imposed on sub-national spending programmes

- 36. Strategies to internalise spillovers and exploit scale economies have also included the reassignment of spending responsibilities to an upper government tier. In Norway, responsibility for hospital care was transferred from the counties to the central government in 2002. In Switzerland, professional regional placement offices managed by the Swiss cantons substituted municipal labour offices (over 3 000 before 1995) with low professional abilities and a too local orientation of their training programmes. In Ireland, local government environment responsibilities have largely been transferred to central government agencies and the management of sewage facilities will be transferred from town councils to county councils from 2004.
- 37. In many countries, the central government and/or Parliament has increasingly been engaged in setting standards on the coverage, quality and price of public services provided by lower levels of government. These standards and norms are particularly frequent in the health care and education sector, as well as in welfare programmes (which in most countries account for the bulk of sub-national public spending). They potentially address equity issues but rarely scale economies. In the education sector, rather detailed regulations on the curriculum are imposed by the central government in most decentralised systems (e.g. Denmark, Spain and Mexico). In Germany and Switzerland where education is under the sole responsibility of sub-national governments, most of them have gradually agreed some common rules. For social assistance programmes, where they have significant autonomy, the Swiss cantons have been increasingly involved in setting eligibility criteria as well as benefit levels, as well as in their financing which have long been the sole responsibility of the municipalities. Micro-managing the implementation of sub-national government spending programmes goes quite far in some countries, leaving them, for instance, with virtually no flexibility to set wage levels for their own employees (Germany, Italy, Norway and Portugal).

# 3.7 ... co-operation agreements across and between levels of government

38. Ad hoc co-operation agreements among levels of government have increasingly been used to achieve "optimal" functional areas specific to each public service. There are two broad approaches to such co-operation. The first relies on a purchaser/provider split. The supply of public services is concentrated in some jurisdictions, which receive some compensation from other jurisdictions benefiting from the services. This approach has been implemented in Switzerland, in particular for hospital care services and tertiary education through co-operation agreements between cantons (Journard and Giorno, 2002).<sup>22</sup> Similar horizontal arrangements, with compensation for the providers' costs, are in place in Denmark and Sweden for hospital care where patients have a legal right to choose hospital treatment outside their county of residence. Such a co-operative approach based on a purchaser/provider split can also be extended between levels of governments when spending responsibilities overlap. As an example, the financial responsibility for long-term care in Sweden was shifted to the municipalities in 1992. Municipalities are now required to pay the hospital for care services for patients who are no longer in need of hospital-based treatment (Roseveare, 2002). Apart from allowing the exploitation of scale economies and the internalising of spillover effects, this approach has the advantage of introducing some competition between providers of public-funded services, whether public or private, inducing greater cost-efficiency.

<sup>22.</sup> Since 1981, inter-cantonal agreements have provided payments from cantons without a university in proportion to the number of students they send to other cantonal universities. The compensation varies across study fields to reflect tuition costs. The inter-cantonal agreements recognise that host cantons do benefit from having a university in their jurisdictions and thus set *per capita* compensation slightly below tuition costs.

- 39. The joint provision of public services, through jurisdiction associations, has been another form of co-operation. In some countries, such co-operation arrangements have been encouraged by the government. In Hungary for instance, the central government promotes joint service supply organisations created by municipalities through the Act on Municipal Associations and Inter-Municipal co-operation passed in 1997 (Cekota et al., 2002). Financial incentives amount to an additional 1 per cent top-up to central government grants. In many countries, this form of association has been used to provide public utilities -- e.g. waste water treatment, water provision, and energy distribution -- and for regional public transport system. These associations can contract out by tendering the service or provide it themselves, generally through a jointly owned public corporation. However, in some cases, the lack of division between purchasers and providers has hampered competition to develop and has made it difficult to improve cost-efficiency. As an example, Finnish municipalities acquire services from hospital districts (an association between several municipalities) that they are themselves responsible for running. Since hospital districts are also large local employers, municipalities may not be in a position to force cost-effectiveness (Hemmings et al., 2003). Transferring the responsibility for the provision of a service to an intergovernmental body may also lower democratic accountability, leaving citizens with little influence on local public services.
- 40. There are two main constraints for the co-operative arrangements to develop further. First, it requires appropriate and transparent cost accounting -- which in many cases is not available in the smallest jurisdictions so as to set the financial compensation for the "buying" jurisdictions at a "fair" level. This has led the Swiss confederation to set up a model contract, containing minimal standards with respect to cost transparency, rights and obligations of the partners, and overall democratic accountability (OECD, 2002c). Second, it may be difficult to apply to public services which are non-rival and non-excludable (*e.g.* roads) since free riding could not be discouraged.

# 4. Funding principles to promote efficiency

41. Funding principles play a key role in influencing sub-national government spending behaviour. To be "optimal", financing patterns should meet several, sometimes conflicting, objectives. On the one hand, sub-national governments may better respond to local citizens' preferences where local taxation allows spending to be matched with costs. On the other hand, the need to smooth volatile local tax revenues, efficiency of tax collection, minimisation of compliance costs often argues in favour of some co-ordination/centralisation of taxing powers.<sup>23</sup> In practice, sub-national governments rely on very different mixes of resources -- grants, tax and non-tax revenues (Figure 3). Moreover, the autonomy they are granted to set tax bases and rates varies significantly across countries. In some cases, sub-national government tax revenues derive mostly from tax-sharing arrangements, whereby sub-national governments receive a share of the taxes collected within their jurisdiction, or nationwide, but have virtually no right to set tax parameters (*e.g.* Austria and Germany) (Box 4). Both federal and unitary countries show great variation. The design of intra-governmental transfers also varies substantially. This section discusses both the extent to which control over tax instruments can be decentralised and the issues that arise in designing intra-governmental transfer systems.

# 4.1 Tax assignment issues

42. While it is commonly agreed that some congruence between spending responsibility and revenue-raising powers is needed to exercise fiscal autonomy and improve accountability, there are few

<sup>23.</sup> These costs and risks associated with the devolution of revenue-raising powers to sub-national governments has led Tanzi (1995) to raise the following question: "If decentralisation is defended because it improves the allocation of resources on the expenditure side, how much of this efficiency is lost when the financing of that expenditure is highly distorted?"

taxing powers which can be transferred to subordinate levels of government without raising efficiency and/or distributional concerns. The literature on fiscal federalism contends that sub-national governments should minimise the use of mobile tax bases, redistributive taxes, unevenly distributed tax bases (*e.g.* on natural resources) and taxes subject to sharp cyclical fluctuations. It thus excludes corporate income taxes and redistributive personal income taxes. Consumption taxes could be candidates, but administrative considerations (compliance and collection costs) and the mobility of the base (cross-border shopping in boundary areas and inter-jurisdiction trade) reduce their attractiveness. Property taxes avoid some of these pitfalls, making them attractive for sub-national government use, but raise equity issues and their yield is low: revenues from property taxes amounted to less than 2 per cent of GDP in the OECD area in 2000 (Figure 4). For countries with significant devolution of expenditure powers, this is insufficient. Thus, sub-national governments rely on other tax bases, most often on a shared basis with the central government. Income taxes predominate in the Nordic countries and some Eastern European countries (Poland and Slovak Republic), while consumption taxes play some role in many countries.

# Box 4. Tax-sharing arrangements

Tax-sharing arrangements take various forms across countries, entailing significantly different degrees of effective sub-national influence on the tax revenues accruing to them:

- Sub-national governments may tax the same base as the central government, but may decide
  on their own tax rates. Such "piggyback" tax-sharing is in place in the United States for the
  income taxes and in most Nordic countries for the personal income tax.
- Tax-sharing can mean that sub-national governments are entitled to a given percentage of the tax revenues arising in their jurisdiction. This form of tax sharing is in place for the personal income tax in Spain and the corporate income tax in Finland. By designing the appropriate framework conditions, sub-national governments can promote economic activity within their jurisdictions and thus their own tax revenues.
- Tax sharing can sometimes just be a share of nation-wide tax receipts, rather than the tax collected in each particular jurisdiction. This form of tax sharing resembles a grant as sub-national governments have virtually no power to influence the revenues accruing to them individually.

## User fees and charges

43. User charging follows closely the benefit principle, whereby local households and businesses pay for what they get and get what they pay for. They may also act as price signals, reducing excess demand and encouraging customer-oriented management by subjecting public bodies to a market test. Information on sub-national government revenues from user fees and charges is seldom available, let alone on which services they apply. For some countries however, piecemeal information reveals that user fees and charges account for a significant share of sub-national government financial resources. They are frequent for waste collection and wastewater treatment, while a number of municipalities have introduced road toll systems.<sup>25</sup>

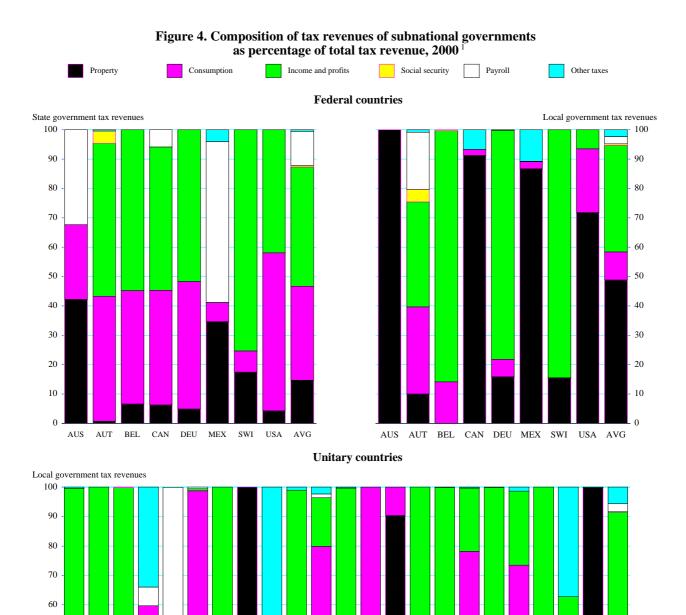
<sup>24.</sup> On this issue, see McLure (2000) and Oates (1999).

<sup>25.</sup> According to information available in individual countries' Economic survey, in 2000 user fees and charges accounted for 26 per cent of Finnish municipalities' financial resources; 14 per cent for Norwegian municipalities and countries; and 23 per cent for Danish local governments. Toll systems have been introduced in some countries (*e.g.* in some large city centres in Norway, the United Kingdom and the United States).

Non-tax revenue 2 Grants Tax revenue Federal countries % of state government resources % of local government resources 100 100 90 90 80 80 70 70 60 50 50 40 40 30 30 20 20 10 10 0 AUS AUT CAN DEU MEX SWI USA AVG AUS AUT CAN DEU MEX SWI USA AVG **Unitary countries** % of state and local government resources 100 90 80 70 60 50 40 30 20 10 0 FIN PRT SVK CZE DNK FRA HUN ISL IRE ITA LUX NLD NZL NOR POL ESP SWE GBR

**Figure 3. Composition of subnational government financial resources**As a percentage of total financial resources, 1999 <sup>1</sup>

For non-tax revenue: 1984 for Switzerland, 1997 for France, Ireland, Luxembourg, Netherlands and Spain, 1998 for Iceland, Norway, Portugal and United Kingdom.
 Non-tax revenues include: operating surpluses of public entreprises controlled by sub-national governments; property income; fee, sales and fines; contributions to government employee pension funds and capital revenues.
 Source: OECD Revenue Statistics, 1965-2001





CZE DNK FIN FRA GRC HUN ISL IRE ITA JPN KOR LUX NLD NZL NOR POL PRT SVK ESP SWE TUR GBR AVG

44. Further reliance on user fees and charges by sub-national governments, however, faces two main constraints. First, increasing sub-national government reliance on user charges may raise equity concerns, especially where applied to core goods and services (namely education, health care and social assistance). Sub-national governments are frequently bound by legal constraints in setting the level of charges. In most countries, they are not entitled to introduce tuition fees for public primary and secondary education, with frequent limitation on user fees for childcare and educational facilities (Denmark and Norway). Second, user charging is an attractive option only if the implementation costs (including administrative costs but also, in some cases, the investment necessary to "individualise" consumption) are lower than the expected efficiency gains. Implementation costs are also likely to reflect scale economies and thus be high in the smallest jurisdictions. Waste collection provides an example of this trade-off between implementation costs and efficiency gains from user charging – sub-national governments having adopted rather different approaches. In some countries, including Australia, Canada, Denmark, Sweden and the United States, certain municipalities have implemented weight- or volume-based charging for household waste, and there is some evidence that this has resulted in reduced waste generation. These charges, however, involve rather high implementation costs.<sup>26</sup> In other countries, waste collection costs are reflected in a resident base tax (e.g. on a per household basis in Ireland) or incorporated into property taxes paid by residents (e.g. through a surcharge on the Taxe d'habitation in France). These formulae provide fewer incentives to reduce the generation of waste but are less costly to implement. Overall, there are serious limits to how much revenue can be generated from user fees at a sub-national level.

# Property taxes

45. Property taxes have key advantages as sub-national taxes. Most notably, the tax base is highly immobile, there is no ambiguity about which authority is entitled to the tax on any given property, the tax is difficult to evade and efforts to improve local infrastructure are likely to be reflected in property values, thus increasing the tax yield for sub-national governments. Property tax revenues are also relatively predictable. These advantages have been exploited in many countries. Property taxes account for all, or most, local government tax revenues in Australia, Canada, Mexico, Ireland, New Zealand, the United Kingdom, and to a lesser extent in France, Korea, the Netherlands and the United States. Furthermore, contrasting with most other tax revenues allocated to them, sub-national governments have significant autonomy in setting property tax rates, though less frequently in setting the base (OECD, 1999). In the context of the OECD Economic Surveys, the OECD has recommended that sub-national government reliance on property taxes be increased in a number of countries (Czech Republic, Finland, Greece, Japan, Mexico, Norway, Poland, and Portugal), *e.g.* by lowering the administrative barriers to their wider use, by giving sub-national governments greater autonomy in setting property tax rates or by updating the land and housing register.

<sup>26.</sup> O'Brien and Vourc'h (2001) discuss the use of various policy instruments by OECD countries to encourage environmentally sustainable growth. Linderhof *et al.* (2001) estimated the costs of implementing weight-based pricing in a Dutch municipality: the annuity costs of investment in weight-based pricing technology amounted to 10-15 per cent of waste collection costs.

<sup>27.</sup> A serious constraint to a wider reliance on property taxes has been the difficulty in assessing land and housing value in some countries, as a land and housing register is lacking (Greece and Poland) or the cadaster is out of date (Austria, France, Mexico, Portugal and Spain).

# General consumption taxes

- Giving sub-national governments discretionary powers with respect to general consumption taxes, either sales taxes or value added taxes, may entail high compliance and administrative costs to contain tax fraud and evasion and may create distortions in inter-jurisdiction trade. The United States is the only OECD country not to have a national value added tax (VAT). Instead, the sales tax accounts for a large share of sub-national government revenues (about one third of state tax revenues in 2000). Each state and municipality has its own exemption rules and its own definition of product and services and they set their own tax rates. The lack of a uniform tax base has however made it difficult to enforce out-of-state collection without increasing significantly compliance costs, and thus hindering interstate commerce. The Supreme Court has ruled that it is illegal for states to attempt to enforce the collection of sales taxes from enterprises that do not have a physical presence in that state (Herd and Bronchi, 2001). This has created significant distortions in competition across jurisdictions while the provision allowing companies to claim exemption from upstream sales tax at the point of sale has not worked well, resulting in tax cascading and tax exporting.<sup>28</sup> To reduce the barriers to trade caused by differential sales tax regulations, thirty-eight states are currently involved in the Streamlined Sales Tax Project, which is an effort to modernise and simplify sales taxes. In particular, the Project's proposals will incorporate uniform definition of tax bases. In Canada, where a dual federal value added tax system (GST) and provincial sales tax co-exist, some harmonisation across provinces has also taken place.<sup>29</sup>
- Value added taxes, which in principle alleviate the cascading problem associated with turnover and sales taxes, can also be administratively cumbersome and create economic distortions when managed in a decentralised manner. This may explain why some countries with a strong federalist tradition (Australia and Switzerland) have opted for a central government VAT system in the 1990s, with no discretionary powers at a sub-national level. In most countries where VAT revenues account for a share of sub-national government resources, tax bases and rates are determined centrally (Austria, Belgium, Germany, Mexico and Spain). In contrast, Brazilian states do have discretionary powers over VAT rates. This has increased the scope for tax evasion and fraud, made the system cumbersome to administer and comply with, and raised the contentious issue of how VAT revenues should be shared across jurisdictions. Similar issues have arisen between countries within the EU area, in particular after the removal of border controls (Box 5).

### Personal income taxes

48. Personal income tax revenues account for a substantial component of sub-central government financial resources in a large number of countries (including Austria, Belgium, Canada, Czech Republic, Germany, Japan, the Nordic countries, Poland, Spain, Switzerland and the United States). Such a reliance on personal income tax could be seen as broadly in line with the "benefit principle" since core public

<sup>28.</sup> Residents of states with high sales taxes undertake more mail-order purchases -- as well as internet purchases -- than those living in states with low sales taxes. Moreover, this system gives out-of-state retailers a competitive advantage over in-state retailers and deters mail-order and electronic commerce sellers from having a physical presence in a large number of states (Herd and Bronchi, 2001).

<sup>29.</sup> Three Canadian Atlantic Provinces agreed to harmonise their sales tax with the federal GST from 1997. Comprehensive Integrated Tax Co-ordination Agreements (CITCAs) are used to achieve consumption tax harmonisation (in terms of base and rate structure) under the CITCAs. The federal government applies a 15 per cent tax rate, rather than the 7 per cent GST rate applying in non-participating provinces, and turns over to the participating provinces their shares based on aggregate consumption estimates (OECD, 1997).

services provided by sub-national governments serve residing individuals (in particular, education, health care and social welfare). However, it could make it difficult to secure a minimum or average standard of merit goods in poorer jurisdictions with a weak taxing capacity. Furthermore, the objective of maintaining a redistributive role of the personal income tax could be weakened. In fact, very few countries have made it possible for lower levels of government to alter the progressive rate structure. In Austria and Germany, they have no autonomy to set the personal income tax base and rates though part of the personal income tax revenues collected within sub-national government boundaries accrues to them. Belgian regions are not entitled to institute surtaxes or rebates which would diminish the progressivity of the federal personal income tax. In Spain, the recently reformed personal income tax system provides more flexibility to sub-national governments but still requires the Spanish regions to impose a progressive (though loosely defined) rate structure. The difficulties in maintaining a progressive income tax at a local level has been recognised in the Nordic countries. There, sub-national governments are allowed only to set a flat tax rate on personal income (subject to band limits set by the central government in Iceland and Norway). In the United States, states have much more freedom in setting the personal income tax base and rate structure. Nine states levy only limited or no individual income taxes and six apply a flat rate.

# Box 5. Issues in implementing a decentralised VAT system

A central question in designing a decentralised VAT system is what to do with trade between jurisdictions. Two principles could be applied -- the destination or origin principles. Not only do they differ in their treatment of inter-jurisdictional trade, but they have different impact on incentives for tax fraud and evasion, on administrative and compliance costs, and on the distribution of VAT revenues.

Under the *destination principle*, consumption taxes are levied where the products are consumed. Goods and services travel tax-free across jurisdictions. In the absence of internal barriers, the destination principle increase the scope for tax fraud, since it creates strong incentives to overestimate exports (zero-rated) and understate imports (since VAT should be paid). Administrative co-operation could help to reduce it. In the EU area, where the destination principle is in place for the business sector, the system is however administratively cumbersome and has been identified as a barrier to trade across countries.

The *origin principle* implies that goods and services are taxed where they are produced. It has advantages in that it can be applied without borders. Since goods do not travel tax free, the potential for tax fraud is lower.

Sharing of VAT revenues across jurisdictions. To ensure that VAT receipts accrue where consumption takes place, a mechanism to redistribute VAT revenues across regions/countries is required when the origin principle applies. This redistribution issue has been contentious at the EU level and in Brazil. With the elimination of customs controls within the EU area in 1993, a move from the destination to the origin principle was envisaged. This would have induced significant changes in the distribution of VAT resources across countries. EU countries with a trade surplus *vis-à-vis* the EU area would have collected extra revenues compared to the existing regime of zero-rating for exports while deficit countries would have lost VAT revenues. In Brazil, the consistent implementation of the origin principle would result in a regressive redistribution of VAT revenues to the relatively prosperous south where imports enter to the poorer north which rebate taxes on exports. To mitigate this regressive effect, rates on exports from wealthier states to poorer ones are taxed at a lower rate than goods moving in the opposite direction. This has however made the Brazilian system a quite complicated system (McLure, 2000) and prone to tax fraud.

49. Local governments may not fully take into account the national externalities resulting from their income tax policies. An increase in local tax rates will lower incentives to work, save and seek education and thus affect the national growth potential. It can further result in lower tax revenues and higher spending for other government tiers (vertical fiscal externalities): higher local tax rates, by reducing work efforts, could result in lower social security contributions and central government tax revenues, combined with higher welfare benefits. Rather limited or non-existent tax autonomy can serve to prevent sub-national governments setting personal income tax "too high". The upward bias issue for local income tax has, however, been an important cause of concern in Denmark and Sweden, where, contrasting with Iceland and Norway, there is no ceiling on local personal income tax rates. To avoid an upward drift in personal income tax rates, in 1996 the Swedish central government introduced "a tax on local government tax", for any municipality increasing its tax rate but this tax was abolished in 1998. 30 In Denmark, a "tax" freeze" was instituted in 2002 as an agreement between the central government and the County Council Association regarding their tax levels. Since the West Zealand County violated the agreement by raising taxes by 0.4 per cent, the central government announced in November 2002 that block grants to all counties would be reduced in 2003.<sup>3</sup>

### Corporate income taxes

Corporate income tax revenues account for a rather large part of total sub-national government tax revenues in several OECD countries (Canada, Czech Republic, Finland, Germany, Japan, Switzerland, Turkey and the United States). This has raised a number of issues, including: the high volatility of the associated revenues, the potential for tax competition, high administrative and compliance costs and distortions in production and trade patterns within the countries. The volatility of corporate income tax revenues compared with other tax revenues (Table 5) is problematic for sub-national government financing needs since their core expenditure is often either largely unresponsive to the economic cycle (e.g. education) or tend to increase during downturns (e.g. social assistance transfers). Constraints on sub-national government recourse to borrowing further limit their ability to smooth revenues over the cycle. This may destabilise sub-national government public finance and may give rise to spending during upswings that may be difficult to prune in less favourable times. In conjunction with balanced budget requirements in place in many countries at the sub-national levels (see below), reliance on volatile corporate tax revenues may generate an undesirable pro-cyclicality in fiscal policy stance. Recognising these drawbacks, Norway abolished the corporate income tax sharing arrangement between municipalities and the central government in 1998. In the context of the Economic Surveys, the OECD has further recommended reducing sub-national government reliance on corporate income tax in a number of countries (including Finland and Japan).

<sup>30.</sup> A 50 per cent surtax on municipal tax increases was decided in 1996, by which individual municipalities were to pay half the revenue raised from increases in their income tax rates to the central government. However, in 1998 the Supreme Court ruled that this violated the municipalities constitutional right to impose income taxes.

<sup>31.</sup> In case of the tax freeze agreement being violated at the county level, block grants will be adjusted both at an individual county level and collectively in the first two years. In the first round, counties raising their tax rates will have their block grants reduced by 50 per cent of the amount of extra tax revenues, while counties lowering their tax rates will have their block grants increased by 50 per cent of the amount of lost tax revenues. In the second round, block grants will be cut for all counties, this collective punishment amounting to half of the net extra tax revenues resulting from changes in the counties' tax rates and distributed proportionally across counties. From the third year, all net extra tax revenues resulting from changes in county tax rates will be confiscated through a reduction in general block grants.

Table 5. Volatility of tax revenues Standard deviation of the real growth rate of tax revenues, 1985-2000<sup>1</sup>

	Personal income	Corporate income	Social security contributions	Property income	Consumption	Total
Australia	6.51	11.26		2.83	9.21	3.87
Austria	6.05	14.32	 1.44	2.98	4.74	1.98
Belgium	4.23	8.91	1.73	6.06	2.66	1.82
Canada	4.83	13.84	3.97	3.12	3.11	2.31
Denmark	2.80	19.46	14.86	9.63	4.39	3.18
Finland <sup>3</sup>	7.34	91.05	5.83	7.49	4.99	5.02
France	12.82	7.78	3.23	19.60	2.27	1.26
Germany	6.90	13.07	5.12	2.97	5.49	4.79
Greece	10.67	20.23	6.50	105.14	6.01	4.35
Hungary <sup>2</sup>	5.24	22.47	4.98	28.95	4.58	3.55
Iceland	7.18	19.53	30.40	6.23	5.74	4.72
Ireland	6.06	16.53	4.86	7.41	4.16	3.92
Italy <sup>3</sup>	5.52	12.45	5.77	4.41	4.75	3.03
Japan	9.52	11.65	3.61	3.76	4.48	4.62
Korea	8.93	26.18	41.09	11.68	9.34	5.73
Luxembourg	4.71	12.95	3.21	3.65	5.15	3.86
Netherlands	10.03	9.38	5.29	3.27	2.85	3.15
New Zealand	5.18	21.58		6.06	11.35	4.66
Norway	6.71	37.86	6.11	8.97	6.25	4.03
Poland <sup>4</sup>	7.43	8.50	8.68	4.67	9.96	5.41
Portugal <sup>5</sup>	10.52	26.17	4.33	7.06	8.49	4.84
Spain <sup>6</sup>	10.78	19.76	2.91	5.34	7.62	4.18
Sweden	6.27	23.52	7.49	25.02	3.85	4.61
Switzerland	5.58	8.12	2.64	3.11	5.11	2.24
Turkey	13.53	18.92	21.65		9.89	8.51
United Kingdom	6.55	14.31	4.77	14.75	2.66	3.89
United States	4.34	8.59	1.71	1.61	1.80	2.14
OECD non weighted average	2.75	6.20	1.69	2.14	1.23	1.35

<sup>1.</sup> Using GDP deflator. The volatility measured here reflects both tax revenues variations throughout the cycle and discretionary tax changes.

Source: OECD Revenue Statistics.

Over the period 1991-2000.

Over the period 1991-2000.

Over the period 1993-2000 for property income.

Over the period 1992-2000.

Over the period 1992-2000 for personal income tax and corporate income tax, 1990-2000 on property income.

Over the period 1987-2000 for property income.

51. The need to split corporate income tax revenues when a company operates in several jurisdictions has posed some problems. In Finland, revenues are shared between municipalities according to the number of employees in each of them. Since municipal public services are more closely related to where people live than where people work, this could create financial imbalances across municipalities.<sup>32</sup> In the United States, there is no co-ordination in the apportionment formula. In determining corporate income tax on the profit earned by a company in a given state, states have long used a formula that accords equal weight to three factors: payroll, property and sales. Recently, individual states have increased the weight of the sales factor and reduced the weight on payroll and property, resulting in a *de facto* partial transformation of the corporate income tax into a quasi sales tax. This is partly paid by companies and households from other jurisdictions and represents an attempt to generate economic development at the expense of other states and, in particular, the hope of attracting new employment (OECD, 2001c). While on average, the states that have lowered the payroll weight have increased employment, aggregate employment effects across the whole country are close to zero (Goolsbee and Maydew, 1998). In this context, promoting uniformity in the apportionment formula, as among the Canadian provinces, has been recommended by the OECD (OECD, 2001c).

# 4.2 Sub-national government use of taxing powers

Varying intensity of tax competition

- The intensity and form of tax competition vary significantly across countries and tax bases, 52. largely reflecting differences in the mobility of citizens and companies but also in the degree of discretionary powers over taxes granted to sub-national governments. While competitive pressures across jurisdictions can help to limit the overall tax burden and public spending, they may also make the tax system more complex, thus raising compliance costs and introducing distortions. Competition to attract companies, and hence create employment, has often been more intense than competition to attract households. In the United States, every state has either enacted or significantly expanded one or more tax incentives in recent years with respect to business location (OECD, 2000b). This has caused other states to adopt retaliatory measures, imposing high costs, further shrinking the tax base and increasing the complexity of the tax system. Similar forces have been at play in Canada, where several provinces have instituted tax credits that reduce the cost of equity financing for businesses which have a presence in their territories above a certain minimum threshold.<sup>33</sup> Such credits can segregate the capital market, providing an incentive for firms to relocate so as to access large capital pools to the detriment of economic activity in smaller provinces. In Switzerland, while corporate income tax bases have been harmonised across cantons since 2001, some of them reportedly negotiate special tax rebates and the overall tax burden on companies has tended to decline while those on individuals has increased over the past 15 years.<sup>34</sup>
- 53. Tax competition to attract companies has also been at play in some countries where sub-national governments have no power to adjust the corporate tax base and rates but receive a share of taxes paid by companies within their jurisdiction. This form of tax-sharing arrangement creates incentives for sub-national governments to improve the framework conditions for economic activities to develop. In Finland, municipalities compete to attract companies by building modern business centres and/or offering business premises, low-priced public services and logistic services (Joumard and Suyker, 2000b). In this

<sup>32.</sup> In Finland, the need to share revenues has raised additional problems: it contributes to the delays in redistributing tax revenues to municipalities and generates some mistrust in the tax administration.

<sup>33.</sup> Investors earn a tax credit determined as a percentage of their investment, provided that the wages and salaries of the firm paid in the province concerned are above some predetermined minimum (OECD, 1997).

<sup>34.</sup> See <a href="http://www.croise.ch/prestations/journal/sept2000p23.pdf">http://www.croise.ch/prestations/journal/sept2000p23.pdf</a>.

context, competition across jurisdictions creates more pressures to increase public spending than to contain taxes. In Germany, tax competition sometimes take the form of a differential interpretation of the provisions of federal tax laws by the *Länder* (Wurzel, 1999). The *Länder* indeed bear the cost of tax administration and tax auditing, but since only a small fraction of additional tax revenues accrues to them, it hardly pays from the individual *Länder* perspective to strengthen their audit procedures, raising the issue of which government level should collect and audit taxes.

*Under-utilisation of sub-national taxing powers* 

Sub-national government powers to adjust less mobile tax levels have not been fully exploited in a number of countries. OECD Economic surveys (including those for Finland, Korea and Norway) point out that variations in personal income and property tax rates across sub-national governments are surprisingly small In Korea, most sub-national governments stick to the guidelines issued by the central government for setting property-related taxes, the inhabitant tax and the tobacco tax, while in Norway the municipalities have all kept the marginal personal income tax rate at the maximum level set by law since 1979. This is all the more surprising as fiscal equalisation schemes in these two countries are based on actual tax revenues collected in their jurisdiction, and not on potential revenues (or taxable income) -- the fall in tax revenues resulting from a cut in a jurisdiction's local tax rate is largely paid for by other jurisdictions. The apparent absence of tax competition could reflect several factors, in addition to rather low population mobility, in contrast to the situation in the United States. First, sub-national governments may be reluctant to enter into aggressive tax competition, as it could be seen as compromising fruitful economic co-operation in a number areas. This has been considered as one possible explanation for Finland where variation in municipal rates for the personal income tax is low considering the freedom municipalities enjoy (Hemmings et al., 2003). Second, comparative information on tax levels across jurisdictions may be lacking, thus reducing pressures for jurisdictions to compete. Tax-sharing arrangements -- whereby several government tiers rely on the same tax base -- may make it difficult for individuals to assess performance at the individual government level and thus further reduce sub-national government accountability.<sup>35</sup> Finally, central government transfers to sub-national governments often contain discretionary features (Finland, Hungary, Korea and Norway), and sub-national governments may be reluctant to cut local taxes because they fear becoming ineligible for these discretionary supports.

# 4.3 Intergovernmental grants

55. Externalities associated with local taxation and provision of public goods, large disparities in fiscal capacities across jurisdictions combined with the society's objective to secure minimum standards in the quality of public services across the whole country, have led many countries to rely extensively on intergovernmental grants.<sup>36</sup> The design of intergovernmental grants varies significantly from one country to another. However, two broad categories can be distinguished as they have a different impact on sub-national government fiscal autonomy and incentives. Earmarked grants have been defended on the ground that they could serve to internalise externalities. On the other hand, by providing strong incentives to spend in specific domains, they may result in overspending. By contrast, block grants leave sub-central government with discretion as to how to organise local provision in the most effective way. They are often seen to be the most appropriate for equalisation purposes, though earmarked grants often contain a redistributive element. The design of formal fiscal equalisation schemes, however, differs significantly

35. In Norway, for instance, taxpayers are largely unaware of what proportion of their personal income tax liability accrues to local *versus* central governments.

<sup>36.</sup> In some countries (including Finland, Germany, Mexico, Norway, Spain and Switzerland), intergovernmental grants also aim at regional development objectives, with formula-based grants including criteria on population dispersion and topographical characteristics.

from one country to another, making it difficult to draw cross-country comparisons on the amount of public resources mobilised to reduce fiscal disparities across regions.

## Earmarked versus block grants

- Earmarked grants have been used extensively to minimise the risk of suboptimal spending in 56. domains characterised by significant positive spillover effects or to secure minimum standards for specific services across the country. Conditions attached to earmarked grants effectively require that they be used to provide particular services. In several countries, sub-national government incentives to spend in these services are increased by topping up their funding via a national/central contribution.<sup>37</sup> In practice, however, measuring economic externalities or defining minimum spending levels to reach a given quality for public services -- so as to set the contribution rates from the central government at an appropriate level -- has proved to be extremely difficult.<sup>38</sup> In Korea, only one fifth of the projects financed by earmarked grants actually demonstrate spillover effects (OECD, 2003a), while in Switzerland, Confederation contribution rates to cantonal expenses primarily reflect the Confederation's fiscal position when specific earmarked grants were introduced (Journard and Giorno, 2002). For the United States, federal matching shares are typically much larger than justifiable by any plausible level of spillover benefits.<sup>39</sup> Managing earmarked grants also entails high administrative costs (Germany, Switzerland, and United Kingdom). 40 Furthermore, since externalities extend both between and within layers of government, extensive reliance on earmarked grants to internalise spillover effects would probably lead to a too complicated transfer system.
- Earmarked grants have resulted in excessive spending and/or poor cost-effectiveness in many countries. In Italy, earmarked grants have largely been set by reference to the previous year's expenditures and without reference to objective performance criteria. This has weakened incentives to contain costs and been a major source of regional over-spending (Bibbee and Goglio, 2002), prompting reforms whereby health care transfers to the regions are now partly based on demographic factors and conditional to the introduction of efficiency- and quality-enhancing measures. In Mexico, the basic education grant from the federal government to the states -- the largest earmarked grant -- is largely determined on the basis of wage costs negotiated at the central government level. This creates an incentive for states to increase the number of teachers instead of putting the weight on school enrolment or educational attainment. It has also resulted in significant variations across states in amounts transferred per pupil (OECD, 2003b). In other countries (including Czech Republic, Ireland, Poland, and Switzerland), earmarked grants are largely based on *ex post* actual costs, instead of *a priori* standard costs, dulling incentives to contain costs. Furthermore, since every expenditure eligible for matching must be defined precisely, earmarked grant systems may limit a sub-national government's ability to be innovative.
- 58. A potential conflict between allocative and redistributive objectives can arise from an extensive reliance on earmarked grants. Earmarked grants could have adverse distribution consequences, since sub-national governments are often required to match the grants together with a certain amount of local

40. For Switzerland, administrative costs were estimated to range from 1.6 to 10 per cent of the grant for four conditional grant programmes (Jeanrenaud, 1994).

<sup>37.</sup> Earmarked grants, however, do not always involve matching funding arrangements. In Australia for instance, the quantum of most special purpose grants is determined without relation to the level of State or local government funding.

<sup>38.</sup> See for instance Brueckner (1998). For welfare programmes, he argues that the theory indicates a qualitative need for matching grants but does not indicate the proper size of the matching rates, which cannot be computed reliably using existing information.

<sup>39.</sup> Oates (1999).

funds. Because poorer jurisdictions may lack this matching ability, this system has been identified as benefiting wealthier jurisdictions in some countries (*e.g.* China). To mitigate this bias, earmarked grants have been designed to contain an element of redistribution in some countries. In the United States, the Medicaid programme managed by the states is largely financed through earmarked grants, with the federal contribution rate in state spending varying from one state to another to reflect their income *per capita*. In Germany, co-funding from the federal government for some investment programmes is conditional on the recipient state having a financing capacity below the federal average or its economy being subject to structural changes (Wurzel, 1999). Similarly, at the EU level, GDP *per capita* in individual countries and regions is a key eligibility criteria for most EU structural and cohesion funds. In Switzerland, the Confederation's participation rate varies from one canton to another to reflect their fiscal capacity. Nevertheless, in some cases the part which the poorer cantons have to pay remains too high for them to benefit from federal grants, thus undermining the redistribution objective (Joumard and Giorno, 2002).

Given these problems, many countries have recently reduced their reliance on earmarked grants or redesigned them. In the 1990s, Canada, Finland, Iceland, Norway and Sweden drastically reformed their grant system, replacing most earmarked grants by general-purpose grants. In Japan, the 2002 budget significantly reduced the matching rate for local government spending on public works. In Ireland the share or earmarked grants in local government revenue declined from over 40 per cent in the early 1990s to between 25 and 28 per cent in the late 1990s. Greater emphasis on outcomes (as opposed to inputs) has also been built into the grant system in some countries, with the objective of raising cost-effectiveness of earmarked grants. In the United Kingdom, Public Service Agreements (PSAs) -- setting out objective outcome-focused targets and linking funding to service delivery -- were extended to local government grants in 2000. In Canada, after abandoning the system of cost-sharing tied to specific expenditure in the 1990s, the central government made federal funding to the Provinces conditional on respect for comprehensiveness and universality in the health care system. Australia has made some grants contingent on States adhering to certain general principles of the National Competition

41. The US State Children Health Insurance Programme introduced in 1997 provides another example. It is a partnership between the federal and state governments. Funds from the federal government are allocated to each participating state according to the number of uninsured and low-income children.

EU Structural and Cohesion funds (euro 195 billion and 18 billion, respectively) will account for one third 42. of the European Community budget for the period 2000-06. The Cohesion Fund contributes to investment which benefits the environment and transport infrastructure in Spain, Greece, Portugal and Ireland, all of which have a per capita GDP of less than 90 per cent of the EU average. (Their eligibility will be reconsidered at the end of 2003 in the light of their GDP levels.) The bulk of the EU Structural Funds are directed at regions whose "development is lagging" (defined as those regions whose GDP per capita does exceed 75 per cent the EU For more information, of average). http://www.europa.eu.int/comm/regional policy/index en.htm.

<sup>43.</sup> In Sweden, 90 per cent of the grants were earmarked in 1992. Currently, some 25 per cent of total grants remain earmarked (Roseveare, 2002). The earmarking of housing assistance transfers accruing to the states has also recently been relaxed in Austria. Canada moved from a system of cost-sharing for health and post-secondary education to a system of block funding in the late 1970s. Cost-sharing of social assistance was changed to block funding in the 1990s.

<sup>44.</sup> The matching rate has been brought down from 60 to 70 per cent for some public infrastructure, to 30 per cent for public works such as river and coastal protection and agricultural roads, and to 45 per cent for ports and dams (OECD, 2003c).

<sup>45.</sup> In 2000, PSAs were concluded between the central government and 20 local authorities as a pilot exercise, containing a package of 12 key outcome targets. If they perform well, local authorities will be rewarded through financial benefits and increased autonomy. The government intended to extend local PSAs to 130 of the largest jurisdictions in 2002 (Van den Noord, 2002).

Policy implementation targets. In Brazil, the transfer of resources to sub-national governments for education and health has been conditional on the quality of services provided since the late 1990s.

60. Over time, this conditionality could create incentives to improve the quality of services, by rewarding co-operative behaviour. The OECD has recommended similar initiatives to improve the incentive structure of the grant system for a number of countries, including Germany for the transfers to new *Länder* under the Second Solidarity Pact (Wurzel, 2003) and Mexico (OECD, 2003b). It remains an open question, however, as to how central governments should react to any sub-national failure to meet the objectives of such grant schemes, especially for those services which affect the whole country's performance. Sanctioning poor performance by cutting grants would exacerbate any deterioration in the quality of services.

Fiscal equalisation schemes: an equity-efficiency trade-off?

- There are significant differences in the design of fiscal equalisation schemes. In many countries, they take the form of the direct allocation of a share in nationally collected taxes. In others, formal fiscal equalisation schemes do not exist. In the United States for instance, they were abolished for states in 1981. However, redistribution across jurisdictions can stem from many channels. As noted above, earmarked grants often contain means-tested elements. Progressive federal income taxes also introduce some form of redistribution across jurisdictions, by taking more from jurisdictions with wealthier inhabitants. Specific rebates on national taxes and/or social security contributions for poorer and/or remote jurisdictions also exist in many countries (France, Italy and Norway). In addition, national social insurance schemes -- and in particular unemployment insurance -- do not set differentiated risk premiums across regions. In Canada, the national Employment Insurance programme further discriminates in favour of high unemployment regions by making it easier to qualify for benefits with the same contribution rates (OECD, 2001d). In the United States, the extended benefits provisions of the federal-state unemployment insurance system also provide an additional 13 weeks of benefits to unemployed workers in states that have recently experienced a sharp increase in unemployment.
- 62. The impact of fiscal equalisation schemes on economic efficiency has been an important issue in many countries. Equalisation could promote efficiency for at least two main reasons. *First*, inter-regional transfers may avoid regional disparities becoming self-perpetuating and help to promote growth in the rest of the country/area. Within the EU area, EU structural funds have for instance played an important role in the modernisation and restructuring of Greece, Ireland, Portugal and Spain, allowing advances in the convergence process and "crowding in" private investments as well as employment. \*\*Second\*\*, fiscal equalisation transfers could be considered as a prerequisite for effective fiscal competition, by allowing levels of public service to be compared at comparable resource levels. By reducing *ex ante* disparities across jurisdictions in providing comparable levels of public services at comparable taxation levels, they

<sup>46.</sup> For Germany, Wurzel (2003) have suggested that the Solidarity Pact II with the new *Länder* could make funding by the federal government conditional on the presentation of appropriate outcome-oriented evaluations of infrastructure investment projects. For Mexico, the Territorial Development Policy Committee has recommended that education and health transfers from the central government to subnational governments be based on output and outcomes -- rather than input indicators or past expenditures.

<sup>47.</sup> According to the European Commission, EU structural funds contributed about ½ per cent per year to economic growth in these countries between 1989 and 1999. The cumulative effect added about 10 per cent to GDP in Greece, Ireland and Portugal and over 4 per cent in Spain (<a href="http://europa.eu.int/comm/regional\_policy/intro/regions10\_en.htm">http://europa.eu.int/comm/regional\_policy/intro/regions10\_en.htm</a>). On the impact of infrastructure investment partly financed by EU structural funds in Portugal, see Bronchi (2003). Recent OECD work (OECD, 2003d) also reveals that the modernisation of a country's infrastructure may also promote trade in services.

act to level the playing field between poor and rich jurisdictions and/or between jurisdictions with differences in costs of providing public services reflecting exogenous reasons (including population density, geographical factors and endowment in natural resources). In the absence of equalisation transfers, rich jurisdictions or those with cost advantages would dominate and competitive pressures would be lower. In a number of countries, large cities also receive some financial compensation through fiscal equalisation schemes to account for the higher costs of producing services and/or the demand from neighbouring jurisdictions (spillover effects). This puts them in a fairer position to compete on the quality of public services and/or the level of taxes with suburban jurisdictions.

- 63. Individual country OECD Economic surveys, however, have revealed cases where fiscal equalisation schemes have failed to improve public sector efficiency and/or reduce regional disparities. In Italy for instance, an over-dependence on transfers appears to have obstructed development in the poorer regions, while equalisation of *per capita* resources produced no convergence in service quality and gave no incentives for better governance (Bibbee and Goglio, 2002). Similarly in Germany and Japan, the high level of investment in poorer areas has had little success in achieving convergence of economic performance (Wurzel, 1999 and OECD, 2000c). At the same time, by impeding changes in cost differentials and reducing migration flows across regions, fiscal equalisation transfers may hold back growth in more dynamic regions and hinder necessary adjustment in less dynamic ones.<sup>50</sup>
- 64. Fiscal equalisation transfers may also create poverty traps, by reducing sub-national government incentives to introduce growth-promoting policies. Of particular concern are schemes that largely offset changes in local government own revenues by fiscal equalisation transfers. The risk of poverty traps associated with fiscal equalisation schemes has been considered an important issue in some countries, including Australia, Austria, Canada, Germany and Japan. In Austria, Schneider (2002) estimated that on average 55 per cent of additional revenues from the communal tax (which is the most important of a local government's own taxes) are compensated by a loss of equalisation grants. In extreme cases, Austrian local governments can lose up to 144 per cent of the additional tax yields resulting from a larger tax base of the municipality. This reduces local government incentives to adapt local conditions so as to facilitate new companies within their jurisdiction (see also OECD, 2001e). In Canada, it has been argued that equalisation can adversely affect economic expansion in the have-not provinces, particularly the lowest-income Atlantic Provinces, and therefore stand in the way of badly needed regional adjustments that would reduce horizontal imbalances. In Japan, also, an increase in local revenues reduces the level of the general grant from the central government: municipal governments only retain 25 per cent of the increase in revenues and the prefecture 20 per cent (OECD, 2000c). While such schemes offer few fiscal rewards for developing local tax base, disincentive effects could be muted by policy makers' efforts to attain other objectives, including employment creation.

<sup>48.</sup> As an example, richer sub-national governments deriving substantial revenues from natural resources (Canada and Norway) should, in principle, only lower their tax rates if they were able to improve the cost-efficiency of their public spending programmes.

<sup>49.</sup> In Germany, the inhabitants of the city *Länder* are weighted at 135 per cent in the equalisation scheme whereas the larger *Länder* are weighted at 100 per cent. The 2001 Austrian *Finanzausgleichsgesetz* mandates that the population of cities with more than 50 000 inhabitants be weighted at 233 per cent before calculating inter-regional transfers according to population criteria (Fenge and Meier, 2002). In Australia, the grant system accounts for the estimated spillover in demand for the Australian Capital Territory from residents of adjacent communities.

As a general point, such an efficiency loss would need to be evaluated in the context of regional development objectives (such as retaining people in sparsely populated areas, *e.g.* in Norway).

65. Countries have implemented two strategies to reduce potential disincentive effects associated with fiscal equalisation schemes, implying in each case some compromise with equity objectives. In the new Spanish transfer system from the central government to the regions, transfers are designed to fill the gap between revenues and expenditure needs for each region for a base year (1999) and will not be adjusted to reflect actual growth performance of individual regions. The OECD has recommended that Germany adopt a similar approach, so as to increase the incentive structure of the equalisation system by relying more on "equalising lump sum transfers", *i.e.* fixed over a multi-annual period. A consequence of this "freezing" of the grant system is likely to be that the equalisation component will gradually be reduced and eventually lost. Another approach has recently been followed by Italy. There, a new equalisation scheme based on national VAT receipts was introduced in 2000, abolishing almost all transfers to the regions. The VAT fund is intended to equalise up to 90 per cent of the differences in standardised *per capita* revenues (contrasting with the previous system with full equalisation), leaving room for incentives to develop local tax bases. Partial equalisation schemes are also in place in Nordic countries, though with significant variations among them.

# 5. Macroeconomic management in a decentralised setting

66. Several macroeconomic management issues emerge in a decentralised fiscal policy setting. One key issue is how to ensure the sustainability of public finances while maintaining a stabilisation role for fiscal policy. A number of countries have experienced fiscal slippage at the sub-national government level, often pro-cyclical. Against this background, this section discusses the use of fiscal co-ordination mechanisms between the different tiers of government and provides an overview of different country strategies. The questions addressed include: Is there a role for sub-national fiscal rules, such as balanced budget or "golden" rules, expenditure ceilings, or limits on the ability to raise money on the financial market? And to what extent could market mechanisms enhance fiscal discipline? Problems of transparency, related to the availability and consistency of relevant public finance data across government levels are also of importance here.

## 5.1 Overall fiscal discipline could be at risk

67. Several factors make it difficult to secure fiscal discipline in a decentralised setting. One problem is that sub-national governments do not take account of all effects at the national level in their decision-making. Higher public spending could have adverse spillover effects on the rest of the economy. Financed through sub-national borrowing, it may affect lending conditions for other public and private agents. Financed by higher taxes, it can undermine incentives to work and invest. Strategic behaviour could also develop in a decentralised setting. In many countries, the central government has provided discretionary financial support to sub-national governments running into financial difficulties (Finland, Germany, Norway, Italy and Sweden) or has bailed them out (Brazil, Italy and Mexico). Expectations of a "rescue package" create a moral hazard problem and make it more likely that sub-national governments implement fiscal policies which are unsustainable. In Sweden for instance, an empirical survey of municipalities' behaviour revealed that those that previously received discretionary financial support failed to comply later on with the balanced budget requirement as they expected their deficit to be covered by future grants from the central government (ESO, 2002). Finally, overlapping responsibilities and the lack of a clear match between decision-making and financial responsibility could weaken accountability and create an upward bias in public spending. Conversely, central authorities have raised minimum

\_

<sup>51.</sup> It should be noted however that transfers under the "Solidarity Pact" for the new *Länder* in Germany are already independent of each individual Land's growth performance. In addition, the reform of the interstate equalisation system – to be effective in 2005 – introduces a "premium" designed to reward *Länder* whose increase in tax receipts (measured against the year before) exceeds the average revenue increase of all *Länder* combined (Wurzel, 2003).

standards or transferred spending responsibilities to sub-national levels without taking full account of all the costs at the sub-national level (including Brazil, Denmark, Norway, Russia and the United States). These "unfunded mandates" may force sub-national authorities to raise taxes or to run deficit.

## 5.2 Strategies to secure fiscal discipline vary

- To address the risks of a loose fiscal policy, countries have relied on a wide array of instruments. Country approaches can roughly be divided into four "stylised" categories (Table 6 and annex, which presents a more detailed overview of strategies in selected countries). In some countries, the central government exercises tight control on sub-national authorities by imposing strict administrative controls. In Greece and Turkey for instance, sub-national government budgets are controlled by higher levels of government while any local authority borrowing is subject to approval by the central government in Ireland, Japan, Korea and the United Kingdom. Combined with little sub-national taxing power, this leaves sub-national authorities with limited fiscal autonomy. At the other extreme, a limited number of countries have maintained extensive fiscal autonomy at a sub-national level, while relying on market forces to secure fiscal discipline. In Canada, Czech Republic and the United States, financial markets play a major role in enhancing fiscal discipline. In Canada and the United States, many intermediate government tiers have voluntarily adopted some sort of balanced budget rules to improve their credit rating. Furthermore, sub-national fiscal policy is subjected to the scrutiny of citizens through popular referenda in Switzerland. Furthermore, sub-national fiscal policy is subjected to the scrutiny of citizens through popular referenda in Switzerland.
- 69. A majority of countries have relied on fiscal co-ordination, either through fiscal rules imposed by the central government (including Brazil, New Zealand, Finland, Italy, Poland, and Portugal) or by setting up co-operative institutions (including Australia, Belgium, Denmark, Germany and Spain). While these two approaches often result in similar fiscal arrangements their implementation is likely to differ. In a co-operative approach, fiscal objectives are established through a negotiation process involving central and sub-national authorities, usually represented by the regional level and/or local government associations. This approach is found in most federal countries, reflecting the constitutional role of the regions, and in unitary countries like Denmark and Iceland. It has also prevailed in the European Monetary Union for designing the Stability and Growth Pact, where participating countries have agreed on a deficit limit, a debt ceiling and procedures in case of non-compliance. This contrasts with the practice in most unitary countries where fiscal rules are imposed by the central government.

52. The classification of country approaches into these four categories is not always clear-cut. In particular, the distinction between "administrative control" and "fiscal rules" imposed by the central government involves an element of judgement. A system of fiscal rules imposed on sub-national governments, combined with close monitoring and enforcement by central authorities, could be easily described as a system of "administrative control". The classification in this paper is thus based on various sources of information, including the degree of autonomy of sub-national governments in drawing up their budget (e.g. right to borrow) and the degree of revenue-raising powers.

54. A general referendum is also required to approve major taxation initiatives in Ontario, Manitoba, Alberta and the Yukon in Canada (Kennedy and Robbins, 2001) and Colorado, Michigan and Missouri in the United States (National Association of State Budget Officers, 2002).

A majority of 45 states in the United States require the governor to present a balanced budget, while 40 states require the legislature to pass a balanced budget and 34 states require the governor to sign a balanced budget. Most states also have ceilings on debt issuance, and about 30 states have tax and expenditure limitations (National Association of State Budget Officers, 2002). In Canada, nine provinces and territories apply some sort of fiscal rules (Kennedy and Robbins, 2001).

Table 6. Strategies for ensuring fiscal discipline<sup>1</sup>

Administrative control <sup>2</sup>	Centrally imposed rules	Formalised co-operation	No institutional co-ordination
France, Greece, Ireland,	Brazil, Finland, Hungary,	Australia, Austria,	Canada <sup>4</sup> , Czech
Japan, Korea,	Italy <sup>3</sup> , New Zealand,	Belgium, Denmark,	Republic, Mexico,
Luxembourg, Turkey,	Norway, Poland, Portugal,	Germany, Iceland,	Switzerland <sup>4</sup> , United
United Kingdom	Slovak Republic, Sweden	Netherlands, Spain	States

- This table emphasises the main co-ordination strategy in place in different countries. However, the relationship between different government tiers is complex and the division of countries in this table is therefore not clear-cut.
- 2. In practice, such controls result in limited fiscal autonomy at the sub-national level.
- 3. A domestic stability pact has been imposed by the central government, but the enforcement of the pact is left to a co-operative institution.
- 4. Canada and Switzerland have loose and informal budget co-ordination mechanisms.

Source: Annex.

70. A co-operative approach offers several advantages. First, it gives a political platform for discussions in an area of significant public interest and importance. It may also help to strengthen political commitments, and hence fiscal discipline, through a consensus-building strategy. Peer-pressure may further act as a control mechanism, with local awareness of the macroeconomic implications of policy choices, making circumvention less likely. On the other hand, it may be difficult to reach an agreement on common fiscal policy objectives and, not least, sufficient enforcement mechanisms. In Germany, for example, a Domestic Stability Pact was finally agreed in 2002 after having been on the agenda since the mid-1990s. No sanction applies in case of non-compliance in Germany. In Austria, the financial sanction is subject to the unanimous decision of a body consisting of representatives from all government tiers.<sup>55</sup> In Denmark, a system implying financial sanctions in case of non-compliance was abolished in the late 1980s after the Local Government Association threatened to withdraw from the negotiations (Lotz, 1991). In some cases, sub-national governments are represented through an association, which may lack legal authority to enforce the agreement, putting it at risk. As an example, local government income tax rates have increased by 5 percentage points in Denmark since the mid-1980s, of which only 11/4 percentage points were foreseen in the agreements with central government (Daugaard, 2002). Furthermore, political compromises may also result in inconsistencies and loopholes in the negotiated agreements, undermining its role as a steering instrument. In particular, there is a risk that agreed fiscal objectives -- once they are biting -- could be waived or changed in the following negotiation round.

A variety of fiscal rules have been implemented

71. A large variety of fiscal rules for sub-national governments exist.<sup>56</sup> Fiscal rules targeting the overall budget deficit (including Austria, Belgium, Finland, Sweden and Spain) or the operating deficit (including France, New Zealand and Norway) are most frequently used (Table 7). A deficit target has the advantage of simplicity and of being easily understood by the wider public, but could fail to prevent debt accumulation due to off-budget items. A recent survey on Swedish municipalities, for example, revealed a

<sup>55.</sup> Similarly, within the EU area, the Council -- composed of one representative at ministerial level from each member state -- decides whether to endorse the early warning procedure and sanctions in case of individual country fiscal slippage.

<sup>56.</sup> See OECD (2002d) for a discussion of fiscal rules at the national level.

very low correlation between deficit and debt accumulation.<sup>57</sup> In some other countries, the fiscal rule takes the form of a ceiling on sub-national debt (Hungary, Portugal and Poland) or debt service (Brazil). These targets may be better suited to addressing considerations of long-term sustainability and inter-generational equity. A debt ceiling can still be circumvented, however, by sales of assets, outsourcing of debt to local public enterprises outside the governmental sector or by selling and leasing back fixed capital. When assessing long-term fiscal sustainability, debt targets should in principle be defined in net terms, but the value of publicly-held assets is uncertain and volatile, making a net debt target unreliable.

Table 7. The use of fiscal rules and sanctions in selected countries

	Sanctions in case of non-compliance		
	No sanctions	Administrative sanctions	Financial sanctions
Deficit target <sup>1</sup> Operating deficit target <sup>2</sup>	Finland, Sweden Italy, New Zealand, Portugal	Belgium, Spain Norway	Austria Slovak Republic
Debt ceiling <sup>3</sup>	Hungary	Poland	Brazil, Portugal
Expenditure ceiling	Germany	Belgium	

- 1. Usually takes the form of a balanced budget requirement.
- May also take the form of a "golden rule".
- 3. Limits on debt service, debt-to-revenue ratio or debt-to-GDP ratio.

Source: Annex.

An important drawback of both debt and deficit targets is that they can be satisfied through higher spending and taxes, with attendant negative consequences for economic growth affecting all jurisdictions. This points towards restrictions in taxing autonomy at a sub-national level (in most countries, see above) and/or an expenditure target (implemented in Belgium and Germany). However, expenditure and debt levels may justifiably vary between different government bodies, making a common ceiling less useful and more difficult to implement on the sub-national level than a deficit target. And, as with a deficit constraint, an expenditure target does not necessarily prevent debt accumulation as spending can be pushed below the line. To prevent mere *pro forma* consistency with the rules, constraints may be needed on both flows and stocks. Hence, in practice, multiple fiscal regulations are usually applied to sub-national governments, with fiscal rules being combined with restrictions on taxing rights and/or borrowing constraints.

Fiscal rules: a trade-off between credibility and flexibility

73. The delicate trade-off between credibility and flexibility in designing fiscal rules is also an issue at the sub-national level. Rigid fiscal rules focusing on the overall annual budget position or debt holding are attractive because they are well defined, simple to understand and to communicate, and because they are transparent and can be readily assessed. These advantages have been considered as important criteria in designing optimal fiscal rules (Box 6). The drawback is that they may lack the flexibility to cope with unexpected events or cyclical downturns, reducing their credibility when they come under strain. A too flexible fiscal rule, on the other hand, could be easy to circumvent and may fail to secure fiscal discipline.

<sup>57.</sup> Based on data from Swedish municipalities for the years 1987-99, Söderström (2002) calculates a correlation of only -0.101 between the financial balance and the change in local debt.

Sub-national authorities may even misuse the flexibility provided to increase spending and indebtedness during upturns, augmenting future adjustment problems.

#### Box 6. Designing fiscal rules

The literature on fiscal rules has suggested that an "optimal" fiscal rule should met several -- and sometimes conflicting -- criteria (see for example OECD, 2002d; Kopits and Symansky, 1998; and Buti et al., 2002).

- Fiscal rules should be adequate relative to the final goal. To achieve fiscal consolidation, for example, the overall debt level should be targeted, or an indicator strongly correlated with debt accumulation. Similarly, an expenditure ceiling might be best suited to curb public spending.
- Fiscal rules should be *consistent* with other policy objectives. Conflicts between fiscal targets and other main policy goals are likely to undermine the fiscal rule as a steering instrument as sub-national governments may try to find ways around it.
- The fiscal target and possible escape clauses should be *well-defined*. A target on the overall budget deficit or debt level may, in this respect, be better than a more sophisticated target focusing on the structural position or excluding special expenditure or debt categories (*e.g.* a golden rule), since such targets may suffer from measurement weaknesses.
- The framework should be transparent. In particular, the division of responsibilities across governments should be clearly stated and the availability and quality of data should be assured. Increased transparency helps to make the rule less easy to circumvent by ad hoc measures and creative accounting techniques and may alleviate the trade-off between accountability and flexibility in designing fiscal rules.
- Rules should be *simple to understand*. By being easy to communicate, simple fiscal rules may be more appealing to the public than complicated rules and thus may gather stronger popular support.
- Fiscal rules should be *flexible* and able to handle unexpected events, cyclical downturns (letting automatic stabilisers work) and reasonable investment needs. This can be obtained by focusing on cyclically-adjusted targets, introducing a medium term framework or specifying escape clauses.
- Fiscal rules should be *enforceable*. This may call for a simple and well-defined fiscal rule. However, a too simple fiscal rule may risk prescribing a harmful fiscal policy reaction in certain circumstances, eroding the political and public support for the rule.
- 74. Some degree of flexibility has been built into the fiscal framework in most countries. In some, the fiscal rule mainly functions as an ex ante budget restriction, and not as an ex post requirement on sub-national accounts (including Germany, Italy and some US states). In other countries, the fiscal rule has to be complied with over the medium term, usually two to four years (including Finland, Norway, Sweden and some Canadian provinces and Swiss cantons). Furthermore, certain expenditure categories -- public investment in particular -- have been excluded from the fiscal target in a number of countries (including France, Italy, New Zealand and Norway). Others have combined simple fiscal rules with mechanisms to increase flexibility. Escape clauses, providing flexibility under special circumstances, have been introduced in Austria, Brazil, Italy, Poland and some Canadian provinces and in the EU Stability and Growth Pact. In the United States, all but five states have budget stabilisation funds ("rainy day funds") and most have contingency funds set aside to provide for unforeseen expenditures.<sup>58</sup> At the EU level, several countries have also introduced more ambitious fiscal targets than the 3 per cent deficit ceiling and the "close-to-balance budget" over the cycle enshrined in the Stability and Growth Pact. This partly reflects the need to cope with fiscal pressures stemming from an ageing population, but it is also designed to provide more flexibility for the operation of automatic stabilisers.

<sup>58. &</sup>quot;Rainy day funds" are however rarely able to fully meet the costs associated with an economic downturn (National association of State Budget Officers, 2002).

## Fiscal rules have been supported by enforcement mechanisms

- A number of enforcement mechanisms are in place across countries to strengthen sub-national incentives to comply with fiscal regulations.<sup>59</sup> In Austria, Brazil and Slovak Republic, sub-national governments failing to reach the fiscal target can be fined, while in Italy and Spain, a region causing the country to breach EMU fiscal rules would have to pay the associated penalty. In Denmark, grants to the counties were cut in 2003 in response to a violation of the agreed tax freeze. Similarly in Portugal, state transfers are to be reduced in 2003 if spending ceilings are exceeded or if financial information is not provided in time. The use of financial sanctions raises problems. In particular, it may not be time-consistent, as fining a sub-national authority already facing financial problems could be politically difficult or even unconstitutional. In fact, sub-national governments in financial distress usually receive increased financial support. In addition, a major requirement for the effective implementation of sanctions is independent arbitration. But it is not obvious that this requirement is met in many countries, in particular when the application of sanctions requires unanimously approval in a body consisting of all involved governments (e.g. Austria) or has to be approved through a majority in Parliament (Brazil and Denmark). Alternatively, financial sanctions may be imposed on the representatives of sub-national government. In Brazil, a comprehensive set of sanctions was introduced in the aftermath of three major state debt crises in the 1990s, including fines or impeachment and imprisonment for individuals responsible for violating the rules (World Bank, 2002).
- A number of countries have introduced some type of "administrative" sanction or procedure. Sub-national authorities in Norway for example, are placed under central administration in cases of non-compliance, 60 while in Belgium and Brazil, central authorities may limit sub-national borrowing. A number of countries have introduced auditing or co-operative bodies to deal with sub-national authorities who fail to comply with fiscal targets. In Finland and Spain, defaulting authorities are obliged to present a plan for correcting any fiscal deficit, while Italy and France have introduced co-operative bodies to deal with sub-national governments which fail to comply with the regulations. Administrative sanctions imply costs in terms of loss of reputation and administrative freedom and are more likely to be implemented than financial sanctions. On the other hand, designing such sanctions is difficult, partly because of information asymmetries. Differences in municipality size, as well as historical and cultural aspects, also make it difficult to design sanctions that fit all sub-national authorities. 61

### Problems have emerged

77. Efforts to co-ordinate fiscal policy across government levels have encountered fairly widespread problems. In Norway, 18 per cent of municipalities had a deficit each year during the period 1980-98, on average (Borge and Rattsø, 2002), and currently 95 out of 434 municipalities and five out of 19 counties are facing administrative sanctions due to non-compliance with the balanced-budget requirement. Likewise, in Sweden and Finland, only approximately two-thirds and three-quarters of the municipalities, respectively, achieved balance in 2001. Fiscal rules have in some cases been circumvented by creative

<sup>59.</sup> Sanctions have also been introduced to enhance the credibility of fiscal rules decided on at the subnational level. In Canada, for example, four provinces have legislated penalties for not achieving the fiscal targets, in the form of a significant cut in wages for ministers or members of the executive council (Kennedy and Robbins, 2001).

<sup>60.</sup> In Norway, a municipality that has not been able to cover an operating deficit over the following two years must obtain the approval of the Ministry of Local Government and Regional Development before raising any loan or enter into a long-term contract (*e.g.* renting offices).

<sup>61.</sup> In Switzerland, for example, cantonal governments have in a few cases forced the amalgamation of a municipality unable to repay its debt with a neighbouring one.

accounting techniques. In Italy, local deficits have partly been financed by arrears to suppliers. Similarly in China, sub-national governments have borrowed from local banks, enterprises, and wealthy individuals although they are not, in principle, allowed borrowing on their own account. Country experiences thus reveal both the difficulty in designing and implementing appropriate fiscal regulations and the need for them to be regularly reassessed and, if necessary, reformed. In Australia, for example, the co-operative framework was rearranged and strengthened in the mid 1990s in response to the increased use of sophisticated financing techniques, such as financial leases, to circumvent Loan Council borrowing limits. And, as a consequence of local bankruptcies in the aftermath of transition, Hungary tightened borrowing restrictions in 1995.

78. Despite the flexibility embodied within existing fiscal frameworks, coping with cyclical developments has not always been satisfactory. In Switzerland, cantons and municipalities have displayed a pro-cyclical fiscal policy in the past three decades (Journard and Giorno, 2002), while both Canada and the United States have invariably experienced periods of pro-cyclical fiscal policy at the sub-national level. In some countries (including Finland, Hungary and Norway), temporarily higher tax revenues have been transformed into permanently higher sub-national spending while lower revenues have been reflected in a deterioration in the sub-national government fiscal position and/or higher intergovernmental transfers (e.g. Spain up to the 2002 reform). Letting automatic stabilisers work in a decentralised setting has, however, been made possible in several countries where central government grants and/or tax shares are adjusted over the cycle to smooth variations in sub-national tax revenues. In Denmark and Norway, sub-national government grants and tax shares are adjusted through the annual budget process to reflect macroeconomic developments. In Finland, the central government has tended to offset the rise in municipal tax revenues in the late 1990s when the economy was booming by reducing state grants (Figure 5).

Market mechanisms could play a role in enhancing fiscal discipline

- 79. Market mechanisms could play a more prominent role in enhancing fiscal discipline at the sub-national level. In Canada and the United States, for example, credit ratings in bond market seem to act as a disciplining factor at all levels of government (Poterba and Ruben, 1997). Financial markets also play a part in disciplining sub-national authorities in countries like Czech Republic, Hungary, Finland and New Zealand, as sub-national debt is not guaranteed by the state. In Norway, restrictions on sub-national borrowing were relaxed in 2000 in an attempt to increase the role of the financial markets in disciplining sub-national government fiscal behaviour.
- 80. For financial markets to exert effective discipline on sub-national government borrowing, several conditions need to be satisfied.<sup>64</sup>

<sup>62.</sup> According to Poterba and Rueben (1997), those states with weak anti-deficit provisions face, in the US market for tax-exempt bonds, borrowing costs ten to fifteen basis points higher than similar states with stricter anti-deficit rules. Furthermore, a state with binding tax limitation rules would face, on average, a borrowing rate fifteen to twenty basis points higher than those which do not have a tax limitation law. A state with an expenditure limitation law in contrast, will face a borrowing rate several basis points lower than that of states without any fiscal limits.

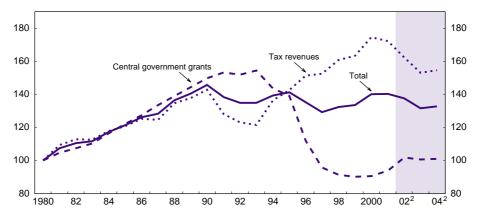
<sup>63.</sup> Since 2000, sub-national budgets and borrowing no longer have to be approved by the central government as long as the authorities comply with the overall fiscal guidelines. As a consequence, credit institutions are likely to get stronger incentives to check local finances before lending money (Borge and Rattsø, 2002).

<sup>64.</sup> See Lane (1993) for a thorough discussion on market discipline and Balassone *et al.* (2002).

- Sub-national authorities should not have privileged access to borrowing in any form. One implication of this is that public loans should be obtained in the private market, and not from publicly owned credit institutions with administratively-decided interest rates, <sup>65</sup> and should not be guaranteed by higher levels of government.
- Adequate information on the borrower's existing liabilities and repayment capacity must be
  readily available, so that potential lenders can correctly discriminate between borrowers.
  Information shortages impair the market's usefulness as a steering mechanism as reactions might
  be too slow or too abrupt and disruptive, with possible contagion effects on other sub-national
  authorities.
- No bailout of sub-national authorities facing problems must be anticipated. In practice, however, this is not politically tenable in many countries because of equalisation objectives. There are very few examples of sub-national governments going bankrupt and causing huge losses for their creditors.<sup>66</sup>
- The borrower must respond to market signals. This may not be the case in practice as short election periods may foster a short-sighted conduct of fiscal policy.

Figure 5. Finance resources of municipalities: tax revenues and central government grants in Finland

Volume indices,  $1980 = 100^{1}$ 



- 1. 1995 constant prices using the deflator for government final consumption expenditure.
- 2. Estimates for 2002 and projections for 2003-2004.

Source: OECD National Accounts, Statistics Finland and the Association of Finnish Local and Regional Authorities.

81. An alternative way to strengthen the role of market mechanisms would be to create a market for tradable deficit permits or taxing rights. A trading mechanism would recognise that fiscal policy slippage -- in terms of deficit or higher sub-national taxes -- creates negative externalities, by putting aggregate

<sup>65.</sup> In United Kingdom, the Public Works Loan Bank has been the most significant source of loans to local government (Watt, 2002). The reliance on public banks has been common in Brazil, Finland, Germany, Italy, Mexico and Sweden.

<sup>66.</sup> In the Czech Republic, a municipality (Rokytnice) recently went bankrupt and some of it assets were auctioned off by creditors.

financial stability or efficiency goals at risk, while minimising the compliance costs of achieving a global target. Such schemes have serious drawbacks, however, which limit their practicality. The initial allotment of permits could be contentious and the supply of permits difficult to change in response to economic shocks without penalising those jurisdictions that have exercised greatest discipline or bought permits at high price. More fundamentally, in a thin market, the price of such permits could be volatile and would not necessarily reflect spillover costs or be high enough to prevent a subsidiary level government from running into an unsustainable fiscal position. It should, however, be noted that a system of transferable deficit rights is in place in Austria. Based on agreed fiscal targets for each individual Land and for municipalities as a group in each Land, a mechanism is in place allowing the transfer of an overshoot to another participant. Such transfers are likely to take place by political agreement between the parties involved, and may include some sort of compensation, although this is not made public. As an alternative economic instrument to limit tax hikes, central authorities could put a tax on sub-national tax increases and a subsidy on tax cuts. In Sweden from 1996, any tax increases by sub-national authorities resulted in a cut in central government transfers amounting to half of the extra revenues raised from the tax increase. This system of a "tax on taxes" was, however, abolished on constitutional grounds in 2000.

## 5.3 Transparency should be improved

82. Transparency is crucial if fiscal rules, co-operative agreements or financial markets are effectively to discipline subsidiary government fiscal behaviour. Budget reports should be comprehensive, encompassing the information needed for the relevant trade-offs between different policy options to be assessed. 69 An important element of fiscal transparency is an accounting system that delivers as accurate and timely a picture as possible, at both budgeting and reporting stages, of the impact of the government's activities on its overall financial positions. In a number of countries, sub-national public finance data are often available with a significant time lag (Brazil, Germany, Italy, Mexico, Poland, Portugal and Spain) and are not consistent with those for the central government (Korea and Switzerland). This makes it difficult to set a consolidated budget and thus to exert effective fiscal control or to determine the stance of fiscal policy. In most countries, sub-national public finance data are on a cash basis. Traditional cash accounting can lead to a misleading picture of commitments undertaken, since payments can be accelerated or deferred. In contrast, accrual accounting recognises the financial implications of transactions when they occur, irrespective of when cash is paid or received. <sup>70</sup> In general, measures to improve transparency by improving data availability and quality are to be strongly recommended. Applying and enforcing fiscal regulations is a political-economy as much as a technical issue. To pre-empt pressures for regulations to be inappropriately modified or set aside, governments should adopt a pedagogic approach. In this effort, transparency is a key issue.

A system of deficit permits has been suggested by Casella (1999) in the context of the EU stability and Growth Pact. Tradeable tax rights have been discussed in Denmark (Dansk Økonomi, forår 2002).

<sup>68.</sup> In 2001, there were two such transfers of deficit rights. In one case, an overshoot of the fiscal balance target was transferred from one *Land* to the municipalities in the same *Land*, while in the other case the transfer was from the municipalities to the *Land* level.

<sup>69.</sup> See OECD (2001f) for a thorough discussion on best practices for budget transparency.

<sup>70.</sup> The move to accruals should not be seen as a move away from cash, since the cash flow statement is an inherent part of an accruals framework, but rather as enriching the information available on government finances. It should also be recognised that a number of issues arise when introducing accruals (e.g. recognition criteria, valuation methods). These issues are discussed in OECD (2002e). Despite potential problems, a number of governments have already moved to accruals, or plan to do so (e.g. in the Netherlands, the municipalities budget system will follow the accrual accounting principles from 2004).

# Annex: ENSURING FISCAL DISCIPLINE AT SUB-NATIONAL LEVEL: STRATEGIES AND MECHANISMS

The purpose of this annex is to highlight some key features of the framework in place to co-ordinate fiscal policy across government levels in different countries. In general, the relationship between governmental tiers is complex and varies substantially across countries. In some, sub-national authorities seem to enjoy relatively limited fiscal autonomy due to strong central involvement in the sub-national budget process and weak revenue-raising powers. In others, sub-national government discretion on fiscal affairs (the power to set spending priorities, take on loans and/or set tax parameters) is combined with different types of "control mechanisms" to co-ordinate fiscal policy across government tiers. Separating country strategies is not clear-cut and involves an element of judgement. Furthermore, this annex must also be viewed in light of possible information shortages as country surveys have put different emphasis on discussing and describing fiscal relations across government tiers, underlining the need for more work in this area.

Table A1. Fiscal framework and enforcement mechanisms for ensuring budget discipline at the sub-national level

Country	Fiscal framework	Enforcement mechanisms
Australia	A co-operative approach: Federal and state borrowing are co-ordinated by The Australian Loan Council, taking into account each jurisdiction's fiscal position and infrastructure needs as well as macroeconomic objectives. Most states have adopted some sort of balanced budget rules.	Market discipline: States has to borrow on their own account, and the Loan Council provides information to the financial market on public sector borrowing plans.      Peer pressure: If non-financial operating receipts are exceeded by more than 2 per cent in either direction, states are obliged to provide an explanation to the Loan Council. This explanation will be made public. The Loan Council is not empowered formally to approve any change, but it could pursue any concerns in the Loan Council.
Austria	• A co-operative approach: An explicit Domestic Stability Pact was introduced in 1999 and the present arrangement, covering the period 2001-2004, was agreed on in October 2001. According to the Pact, municipalities as a group have to balance their budget over the period 2001-2004, while regions as a group have to produce annual surpluses of at least 0.75 per cent of GDP. This commitment is not binding for any individual municipality, but for municipalities grouped according to the <i>Land</i> they belong to. The pact allocates obligations to each <i>Land</i> . The targets have to be complied with ex-post. The pact provides a possibility to transfer surplus/deficit rights to other governments. No specific reference is made to the financing of public investments.	<ul> <li>Peer pressure: through a co-operative framework.</li> <li>Financial sanctions: Governments that fail to reach the target would have to pay a fixed and a variable fine totalling 8 per cent of the stability contribution and 15 per cent of the shortfall, respectively, up to a ceiling. Application of sanctions depends, however, on the unanimous decision of a commission involving the federal government on the one hand, and the Länder and the municipalities on the other. If compliance is re-obtained within one year, the fine is returned; otherwise, the money is allocated across the complying governments.</li> </ul>

\_

<sup>71.</sup> For *Länder* and municipalities, temporary shortfalls of -0.15 and -0.10 per cent of GDP, respectively, are allowed. However, the average stability contribution has to be delivered for the whole period of the pact. If Austria breaches the Maastricht targets, EU sanctions will also be distributed across domestic governments.

Country	Fiscal framework	Enforcement mechanisms
Austria (continued)	Borrowing: No explicit restrictions on borrowing by <i>Länder</i> . For municipalities, borrowing is only allowed to cover extraordinary expenditures. The <i>Länder</i> are obliged by law to regulate local borrowing, but the regulation put in place varies significantly among different <i>Länder</i> .	Escape clause: In case of a serious economic slowdown, the sanctions do not apply.
Belgium	A co-operative approach: Permissible deficit and expenditure growth levels for the different government levels are established on the basis of recommendations by the High Council of Finance. These recommendations are published in annual reports. The deficit target refers to the overall fiscal balance.      Borrowing: Regions and communities can issue bonds, but they must have the approval of central government.	Peer pressure: through a co-operative framework.      Administrative procedures: The federal government is allowed by law to limit the borrowing of regions for a period of two years, following a recommendation from The Supervisory Council and a consultation with the regional governments. The regional level monitors the municipalities' budgets and has the power to enforce expenditure cuts or tax increases if necessary.
Brazil	Fiscal rule: States and municipalities are required to maintain debt stocks below ceilings established by the Senate. The Fiscal Responsibility Law (Lei de Responsibiliade Fiscal) and its companion legislation (approved in 2000) sets out a range of controls and enforcement measures to improve sub-national fiscal discipline. The law requires sub-national governments to establish annual targets for revenues, expenditures, the primary balance and changes in the stock of debt. Compliance with fiscal targets is to be made public every fourth months.  Borrowing: States are free to borrow as long as they comply with the overall guidelines.	Sanctions: A range of sanction mechanisms is provided in the Fiscal Responsibility Law. Sub-national governments failing to comply with ceilings on debt, personnel ceilings or transparency requirements will face financial sanctions. Furthermore, contracts or administrative decisions that violate the terms of the Law will be nullified, while individuals responsible for violations are subject to fines and Governors and mayors may also risk impeachment and imprisonment.      Escape clauses: Debt limits are established by the federal senate, though they may be revised in the context of the annual budget and adjusted to macroeconomic conditions.
Canada	No formal co-ordination: A loose budget co-ordination exists via a dialogue among ministers, which takes place once a year. Most provincial and territorial governments have introduced some sort of balanced-budget legislation, while municipal governments are not allowed to show a deficit.      Borrowing: Provincial and territorial governments have unrestricted access to borrowing, while municipal governments can only borrow for investment projects.	Market discipline: The federal government does not guarantee sub-national debt.     Escape clauses: In most provinces, a surplus in one year can provide an accounting reserve to be drawn on if a deficit is incurred in a subsequent year. In addition, the legislation in many provinces builds in exemptions for special events.
Czech Republic	No formal co-ordination: Sub-national governments are free to take on debt and may approve a deficit budget if municipal guaranties or collateral to cover the planned shortfall is provided.      Borrowing: No explicit restrictions on sub-national borrowing.	Market discipline: Sub-national debt is not guaranteed by the state.

Country	Fiscal framework	Enforcement mechanisms
Denmark	<ul> <li>A co-operative approach: A system of formalised budget co-operation between the central government and the Local Government Association has its roots in the early 1970s. Sub-national governments have to run balanced budgets, but have substantial taxing rights. However, the central government has recently announced a tax freeze, which applies also at the sub-national level.</li> <li>Borrowing: Counties and municipalities have, as a general rule, no access to borrowing. However, there are important exceptions. For counties, long term borrowing within 25 per cent of the total net outlays for investment for the fiscal year is accepted, while municipalities have free access to borrowing for investments in specified sectors that are to a large extent financed by user charges. Furthermore, the Ministry of the Interior could grant municipalities discretionary permissions to borrow.</li> </ul>	<ul> <li>Peer pressure: The agreement between the central government and the Local Government association is not legally binding, and the association has no efficient instruments to ensure aggregate compliance.</li> <li>Financial sanctions: In case of violation of the tax freeze all net extra tax revenues will be confiscated through a reduction in individual and general block grants.</li> </ul>
Euro area/ EU countries	Fiscal rule: The fiscal framework consists of two main requirements; the Treaty requirement to avoid excessive deficit position whereby a deficit above 3 per cent of GDP is considered excessive except it is temporary and exceptional and the requirement of the Stability and Growth Pact to achieve and maintain a budgetary position "close to balance or in surplus" over the medium-term, but also in each year in cyclically-adjusted terms.	<ul> <li>Administrative procedures: Member states submit annual stability or convergence programmes in which they set their short and medium-term fiscal strategies. The programmes are regularly updated and are subject to peer review and monitored by the Commission and Council.</li> <li>Financial sanctions: apply only following a continued failure to take corrective measures in response to Council recommendations. They consist of a non-bearing interest deposit, to be converted into a fine (which cannot exceed 0.5 per cent of GDP) if two years later the excessive deficit persists.</li> </ul>
Finland	<ul> <li>Fiscal rule: A law requiring municipalities to achieve a balanced budget in the medium term was introduced in 2001.</li> <li>Borrowing: No explicit restrictions on local borrowing. All borrowing is co-ordinated by the municipalities' organisation and is not guaranteed by the state.</li> </ul>	No sanctions: Municipalities are obliged to make a plan of how to cover any deficit in the balance sheet.
France	<ul> <li>Fiscal rule: Local governments are not allowed to show an operating deficit.</li> <li>Borrowing: French local authorities are allowed to borrow in order to finance capital investments.</li> </ul>	• Administrative procedures: The local central government representative annually controls local budgets. If the budget breaks legal requirements, it is sent to the Chambre Régionale des Comptes (CRC). The auditing procedure involves both an ex-ante and an ex-post check. If a deficit appears (above a given ceiling) the Regional Chamber of Accounts has to propose appropriate fiscal measures to the local government.

Country	Fiscal framework	Enforcement mechanisms
Germany	<ul> <li>A co-operative approach: The major instrument for policy co-ordination is the intergovernmental Financial Planning Council (Finanzplanungsrat), consisting of the federal government, the <i>Länder</i> and representatives of the communities. A Domestic Stability Pact with spending caps for 2003 and 2004 has been agreed.</li> <li>Borrowing: Most of the sixteen <i>Länder</i> have adopted a golden rule; <i>i.e.</i> borrowing is only allowed for investment expenditure. Municipalities can only use borrowing to finance capital investments if other financing is not feasible or appropriate and it is subject to</li> </ul>	Peer pressure: The Financial Planning Council (Finanzplanungsrat) is attributed the tasks of monitoring fiscal development at all levels of governments and of making recommendations for restoring fiscal discipline in cases of non-compliance.
	regional approval.	
Greece	<ul> <li>Limited fiscal autonomy at the sub-national level: Lower levels of government (prefectures and municipalities) prepare their budgets and submit them to regional representatives for the central government for approval.</li> <li>Borrowing: All borrowing is subject to the approval of the Ministry of Economy and Finance.</li> </ul>	
Hungary	Borrowing: Municipalities are authorised to borrow only to finance capital outlays, up to a ceiling of 70 per cent of their yearly net (after interest payments) own revenues.  72	Market discipline: Sub-national debt is not guaranteed by the state.
Iceland	<ul> <li>A co-operative approach: Regular consultative meetings between the central government and the Association of Local Authorities.</li> <li>Borrowing: No restrictions on borrowing by sub-national authorities.</li> </ul>	Administrative procedures: If a municipality is unable to pay its debt, it can be put under the direct administration of the Ministry of Social Affairs.
Ireland	Limited fiscal autonomy at the sub-national level: Sub-national governments have to run balanced budgets. These are monitored and controlled by the Department of the Environment and Local Government.      Borrowing: This is governed by the Local Government Act, which requires the approval of the appropriate Minister (normally the Minister for the Environment and Local Government) to any borrowing proposal.	Administrative procedures: Defaulting authorities could be removed from office and replaced by a commissioner appointed by the central government.

\_

<sup>72.</sup> New borrowing by municipalities for housing development purposes has been freed from borrowing caps. Municipalities have created local holdings and utility companies, including in the area of housing and other public services, whose revenues and expenditures are off-budget and therefore outside general government accounts.

Country	Fiscal framework	Enforcement mechanisms	
Italy	<ul> <li>Fiscal rule: A Domestic Stability Pact was enacted in 1999, imposing deficit reductions vis-à-vis a no-policy-change baseline on sub-national governments. 73 Debt service cannot exceed 25 per cent of current revenues.</li> <li>Borrowing: Regional and local authorities are allowed to borrow to finance capital investments.</li> </ul>	Peer pressure: The Pact has a co-operative mechanism, mainly in the context of the regional and mayor's conferences, to deal with corrections of eventual overshoots.  Financial sanctions: European sanctions will be shared among non-complying governments according to their contribution to the overshoot.  Escape clauses: In case of unexpected events, borrowing limits can be relaxed.	
Japan	<ul> <li>Limited fiscal autonomy at the sub-national level.</li> <li>Borrowing: Guidelines for borrowing are set out in the annual Local Government Fiscal Plan. The Ministry of Home Affairs supervises and controls all local authority borrowing.</li> </ul>	Administrative procedures: The Ministry of Home Affairs takes control of the local government if borrowing limits are exceeded.	
Korea	<ul> <li>Limited fiscal autonomy at the sub-national level: Sub-national governments have to run balanced budgets. These are monitored and controlled by the Ministry of Government Administration and Home Affairs.</li> <li>Borrowing: All local borrowing has to be approved by the central government.</li> </ul>		
Luxembourg	Limited fiscal autonomy at the sub-national level: Municipalities are not allowed to show an operating deficit. Municipal accounts are scrutinised by the District Commissioners and audited by the municipal audit division of the Minister of the Interior.      Borrowing: Loans exceeding certain limits are subject to the approval of the Minister of the Interior.	Administrative procedures: The Constitution provides for a system of local government control exercised by the Grand Duke, the Minister of the Interior and central government through the District Commissioners. The Grand Duke can annul any general or specific act of local government that is contrary to the law or the public interest and can declare void both regulatory acts and specific decisions of the council, board or mayor.	
Mexico	<ul> <li>A system of administrative control has gradually been replaced by a system relying more on the financial markets to secure sub-national fiscal discipline. State authorities approve their own budgets and control local government budgets and accounts.</li> <li>Borrowing: States are allowed to borrow domestically to finance capital investments, while borrowing by municipalities is subject to the approval of state authorities.</li> </ul>	Market discipline: Sub-national debt is not guaranteed by the central government. New rules were introduced in 2000 to limit states' access to borrowing, increase transparency and to strengthen the central government's commitment not to bailout sub-national authorities.	

<sup>73.</sup> The deficit governed by the rule is on a cash basis and excludes health, capital spending and interest payments on the expenditure side and central government transfers on the revenue side. The pact was continued under the financial laws for both 2000 and 2001. The latter included for the first time the obligation by regional and local governments to show, *ex ante*, that budgets submitted for approval to local and regional assemblies meet the targets assigned to them (Bibbee and Goglio, 2002).

A an anarotive annuagh: Decular meetings are	
A co-operative approach: Regular meetings are held between central authorities and the Dutch Association of municipalities on financial issues. Sub-national governments have substantial taxing rights, but have to run balanced budgets. These are closely monitored and controlled by higher levels of government. Provincial authorities are obliged by law to take over the financial control of a municipality if it has a budget deficit which is likely to be sustained in the years to follow.  Borrowing: Sub-national authorities are free to borrow as long as they run balanced budgets (on an accrual accounting basis).	• Administrative procedures: Central authorities will only lend help to a municipality in financial distress if the municipality itself has taken sufficient measures to increase its income through higher taxes. In exchange for the financial help, the municipality gives up its financial independence.
Fiscal rule: Local authorities are required by law to set operating revenues at a level sufficient to cover operating expenses in any financial year (with a relatively narrow exception to run deficits). Local authorities are largely self-funded and the central government has no formal role in reviewing or approving the budgets of local authorities.      Borrowing: No restrictions on borrowing.	Market discipline: Sub-national loans are not guaranteed by central government.
Fiscal rule: Counties and municipalities are not allowed to show an operating deficit. If a budget deficit is recorded ex-post, this has to be covered over the following two years.      Borrowing: No explicit restrictions on subnational borrowing.	• Administrative procedures: If a county or municipality does not manage to cover an operating deficit over the following two years, any resolution to raise a loan or to enter into a long-term contract (e.g. tenancy agreement) is not valid until the Ministry of Local Government and Regional Development approves it. The Ministry publishes on the web, the list of sub-national governments under administration.
• Fiscal rule: The constitution prohibits the public debt from exceeding 60 per cent of GDP, and the Act on Public Finance requires that both central and sub-national authorities take steps to stabilise the debt at less than 50 per cent of GDP. Sub-national governments are also subject to specific limits on their debt and debt service expenditure, which may not exceed 60 per cent and 15 per cent of their total revenues, respectively.	• Administrative procedures: Sub-national governments are required to submit their draft budgets to Regional Clearing Chambers (RIOs), which are agencies of the central government. The RIOs assess the draft budgets to ensure that each sub-national government has the means to finance any proposed deficit and make an overall assessment of the sustainability of their liabilities. If the opinion of the RIO is negative, the budget in question must be amended as it directs.
	<ul> <li>If debt exceeds 55 per cent of GDP, the Council of Ministers must present to Parliament a fiscal consolidation plan aimed at lowering the public debt. If the public debt reaches 60 per cent of GDP, no new state guarantees may be issued and the council of Ministers must submit a fiscal consolidation plan to Parliament, while subnational governments must pass balanced budgets.</li> <li>Escape clauses: The procedure could be</li> </ul>
	Sub-national governments have substantial taxing rights, but have to run balanced budgets. These are closely monitored and controlled by higher levels of government. Provincial authorities are obliged by law to take over the financial control of a municipality if it has a budget deficit which is likely to be sustained in the years to follow.  • Borrowing: Sub-national authorities are free to borrow as long as they run balanced budgets (on an accrual accounting basis).  • Fiscal rule: Local authorities are required by law to set operating revenues at a level sufficient to cover operating expenses in any financial year (with a relatively narrow exception to run deficits). Local authorities are largely self-funded and the central government has no formal role in reviewing or approving the budgets of local authorities.  • Borrowing: No restrictions on borrowing.  • Fiscal rule: Counties and municipalities are not allowed to show an operating deficit. If a budget deficit is recorded ex-post, this has to be covered over the following two years.  • Borrowing: No explicit restrictions on subnational borrowing.  • Fiscal rule: The constitution prohibits the public debt from exceeding 60 per cent of GDP, and the Act on Public Finance requires that both central and sub-national authorities take steps to stabilise the debt at less than 50 per cent of GDP. Sub-national governments are also subject to specific limits on their debt and debt service expenditure, which may not exceed 60 per cent and 15 per cent of their total revenues,

Country	Fiscal framework	Enforcement mechanisms
Portugal	Fiscal rule: The Local Finances Law states that current spending cannot exceed current revenues and sets a ceiling on annual debt servicing and short-term loans. In addition, the annual Budget Law may set ceilings on the level of indebtedness according to the Budgetary Stability Law approved in July 2002.      Borrowing: Local authorities are free to borrow in order to finance fixed capital investments.	Financial sanctions: According to the Budgetary Stability Law, central government transfers can be reduced or suspended if sub-national governments exceed the limits on indebtedness or if financial information is not provided in time.
Slovak Republic	Fiscal rule: Municipalities and higher territorial authorities have to balance current spending against current revenues. From 2005, sub-national debt and debt service (principal and interest) cannot exceed 60 and 25 per cent, respectively, of current revenues of the previous year.      Borrowing: Sub-national authorities are only allowed to borrow to finance fixed capital investments. Approval from the Ministry of Finance is required if credits amount to more than 75 million SKK. Sub-national debt is not guaranteed by the central government.	<ul> <li>Administrative procedures: Municipalities that are unable to pay their liabilities can be placed under central administration.</li> <li>Financial sanctions: The Ministry of Finance can impose a penalty amounting to one million SKK on sub-national authorities failing to comply with the fiscal requirements.</li> <li>Market discipline: Sub-national debt is not guaranteed by the state.</li> </ul>
Spain	<ul> <li>Fiscal rule: According to the Budgetary Stability Law enacted in 2001 all governments are obliged to maintain at least a balanced budget.</li> <li>Borrowing: Borrowing by regional governments should be used to finance capital expenses. An authorisation from the Ministry of Finance may be required if annual debt service and repayments exceeds 25 per cent of current revenues. The central government can set additional limits and constraints on sub-national borrowing for reasons of macroeconomic policy.</li> </ul>	Administrative procedures: In cases of non-compliance the Law requires the faulty region to present a financial plan to make up for the deficit over-run. This plan must be approved by the Fiscal and Financial Policy Council.      Financial sanctions: If the financial behaviour of a Region were to cause Spain to breach EMU fiscal rules, that region would have to take care of European sanctions.
Sweden	<ul> <li>Fiscal rule: Local government budgets are not allowed to show a deficit. If a deficit occurs, it may be carried over, but has to be repaid within 2 years.</li> <li>Borrowing: No restrictions on sub-national borrowing.</li> </ul>	
Switzerland	No formal co-ordination: But informal co-ordination takes place between the Confederation and the cantons for the preparation of the budget.      Borrowing: Borrowing by cantons and communes is restricted to investment projects	Sub-national fiscal policy is subjected to the scrutiny of citizens through popular referenda.

Country	Fiscal framework	Enforcement mechanisms
Turkey	Limited fiscal autonomy at the sub-national level: Local budgets and accounts are monitored by central government.	
	Borrowing: Loans exceeding certain limits are subject to the approval of the central authorities.	
United Kingdom	• Limited fiscal autonomy at the sub-national level. <sup>74</sup>	
	Borrowing: Sub-national borrowing is subject to approval by central government.	
United states	No formal co-ordination: However, most states have introduced balanced budget rules as a legal requirement.	Market discipline: The federal government does not guarantee sub-national loans.
	Borrowing: No centrally imposed restriction on borrowing by the states.	

<sup>-</sup>

<sup>74.</sup> The administrations of Scotland, Wales and Northern Ireland "have freedom to make their own spending decisions on devolved programmes within the overall totals" (Watt, 2002).

#### **BIBLIOGRAPHY**

- BUTI, M., S. EIJFFINGER and D. FRANCO (2002), "Revisiting the stability and growth pact: grand design or internal adjustment?", paper presented to the CEPII workshop, 21 November, Paris.
- BALASSONE, F., D. FRANCO and S. ZOTTERI (2002), "Fiscal rules for sub-national governments: what lessons from EMU countries?", paper prepared for the conference on "Rules-based macroeconomic policies in emerging market economies", Oaxaca, Mexico, February.
- BIBBEE, A. and A. GOGLIO (2002), "Public spending in Italy: policies to enhance its effectiveness", *OECD Economics Department Working Papers*, No. 324.
- BORGE, L.E. and J. RATTSØ (2002), "Local government budgeting and borrowing: Norway" in B. Dafflon (ed.), *Local Public Finance in Europe*, Cheltenham and Northampton: Edward Elgar.
- BRONCHI, C. (2003), "The effectiveness of public expenditure in Portugal", *OECD Economics Department Working Papers*, No. 349.
- BRUECKNER, J.K. (1998), "Welfare reform and interstate welfare competition: theory and evidence", *Urban institute, Assessing the new federalism Occasional paper*, No. 21.
- CASELLA, A. (1999), "Tradable deficit permits: efficient implementation of the stability pact in the European Monetary Union", *National Bureau of Economic Research Working Paper*, No. 7278.
- CEKOTA, J., R. GÖNENÇ and K.Y. YOO (2002), "Strengthening the management of public expenditure in Hungary", *OECD Economics Department Working Papers*, No. 336.
- DANSK ØKONOMI, Forår (2002), www.dors.dk/rapp/dors121.htm.
- DAUGAARD, S. (2002), "Enhancing expenditure control with a decentralised public sector in Denmark", *OECD Economics Department Working Papers*, No. 320.
- DE AYALA CAÑÓN, L., R. MARTÍNEZ LÓPEZ and J. RUIZ-HUERTA (2001), "La descentralizacion territorial de las prestaciones asistenciales: effectos sobre la igualdad", *Papeles de Trabajo del Instituto de Estudios Fiscales*, No. 16/01, http://www.minhac.es/ief/publicaciones/papelest/01/pt 16 01.pdf.
- DECRESSIN, J. (2002), "Regional income distribution and risk sharing: how does Italy compare in Europe", *Journal of Public Economics*, Vol. 86.
- FENGE, R. and V. MEIER (2001), "Why cities should not be subsidized", *CESifo Working Paper*, No. 546, Munich, Germany. ftp://129.187.96.124/CESifo WP/546.pdf.

- GOOLSBEE, A. and E.L. MAYDEW (1998), "Coveting thy neighbour's manufacturing: the dilemma of state income apportionment", *National Bureau of Economic Research Working paper*, No. 6614, http://papers.nber.org/papers/w6614.pdf.
- HADDAD, E.A., E.P. DOMINGUES and F.S. PEROBELLI (2002), "Regional effects of economic integration: the case of Brazil", *Journal of Policy Modeling*, Vol. 24, Issue 5.
- HAUGHWOUT, A.F. (1998), "Aggregate production functions, interregional equilibrium and the easurement of infrastructure productivity", *Journal of Urban Economics*, Vol. 44, No. 2.
- HEMMINGS, P., D. TURNER and S. PARVIANEN (2003), "Enhancing the effectiveness of public spending in Finland", *OECD Economics Department Working Papers*, No. 349.
- HERD, R and C. BRONCHI (2001), "Increasing efficiency and reducing complexity in the tax system in the United States", *OECD Economics Department Working Papers*, No. 313.
- HOELLER, P., M-O. LOUPPE and P. VERGRIETE (1996), "Fiscal relations within the European Union", *OECD Economics Department Worling Papers*, No. 163.
- IMF (2002), Government Finance Statistics Yearbook.
- JEANRENAUD, C. (1994), «Expertise sur les aides financières et les indemnités de la confédération aux cantons: le point de vue de l'efficacité », in *Expertise relative aux aides financières et indemnités de la confédération en faveur des cantons* mandatée par l'Administration générale des finances et la Conférence des Directeurs cantonaux des finances.
- JOUMARD, I. and C. GIORNO (2002), "Enhancing the effectiveness of public spending in Switzerland", *OECD Economics Department Working Papers*, No. 332.
- JOUMARD, I. and W. SUYKER (2002a), "Enhancing the effectiveness of public spending in Norway", *OECD Economics Department Working Papers*, No. 343.
- JOUMARD, I. and W. SUYKER (2002b), "Options for reforming the Finnish tax system", *OECD Economics Department Working Papers*, No. 319.
- KENNEDY, S. and J. ROBBINS (2001), "The role of fiscal rules in determining fiscal performance", Department of Finance Working Paper, 2001-16.
- KOPITS, G. and S. SYMANSKY (1998), "Fiscal Policy Rules", IMF Occasional Paper, No. 162.
- KRUGMAN, P. (1993), "Lessons from Massachussetts for EMU" in F. Torres and F. Givazzi (eds.), *Adjustment and Growth in the European Monetary Union*, Cambridge University Press.
- KRUGMAN, P. and A. VENABLES (1993), "Integration, specialisation and adjustment", *NBER Working Paper*, No. 4559, http://papers.nber.org/papers/W4559.
- LANE, T. (1993), "Market Discipline", IMF Staff Papers, Vol. 40.
- LINDERHOF, V., P. KOOREMAN, M. ALLERS and D. WIERSMA (2001), "Weight-based pricing in the collection of household waste: the Oostzaan case", *Resource and Energy Economics*, Vol. 23.

- LOTZ, J.R. (1991), Økonomiske aftaler mellem stat og kommuner, Kommunal Årbog.
- McLURE, C.E. (2000), "Tax assignment and sub-national fiscal autonomy", *International Bureau of Fiscal Documentation Bulletin*.
- NATIONAL ASSOCIATION OF STATE BUDGET OFFICERS (2002), "Budget processes in the States", http://www.nasbo.org/Publications/PDFs/budpro2002.pdf.
- OATES, W.E. (1972), Fiscal Federalism, NY: Harcourt Brace Jovanivich.
- OATES, W.E. (1999), "An essay on fiscal federalism", Journal of Economic Literature, Vol. 37.
- O'BRIEN, P. and A. VOURC'H (2001), "Encouraging environmentally sustainable growth: experience in OECD Countries", *OECD Economics Department Working Papers*, No. 293, http://www.oecd.org/pdf/M00002000/M00002553.pdf.
- OECD (1997), OECD Economic Survey of Canada, Paris.
- OECD (1999), "Taxing powers of state and local government", OECD Tax Policy Studies, No. 1.
- OECD (2000a), OECD Economic Survey of Spain, Paris.
- OECD (2000b), OECD Economic Survey of the United States, Paris.
- OECD (2000c), OECD Economic Survey of Japan, Paris.
- OECD (2001a), "Fiscal implications of ageing: projections of age-related spending", *OECD Economic Outlook*, No. 69, <a href="http://www.oecd.org/pdf/M00029000/M00029158.pdf">http://www.oecd.org/pdf/M00029000/M00029158.pdf</a>.
- OECD (2001b), Knowledge and Skills for Life First Results from PISA 2000, Paris.
- OECD (2001c), OECD Economic Survey of the United States, Paris.
- OECD (2001d), OECD Economic Survey of Canada, Paris.
- OECD (2001e), OECD Economic Survey of Austria, Paris.
- OECD (2001f), *OECD Best Practices for Budget Transparency*, Paris, http://www.OECD.org/pdf/M00021000/M00021145.pdf.
- OECD (2002a), "Fiscal design surveys across levels of government", Tax Policy Studies, No. 7, Paris.
- OECD (2002b), China in the World Economy The Domestic Policy Challenges, Paris.
- OECD (2002c), OECD Territorial Reviews Switzerland, Paris.
- OECD (2002d), "Fiscal sustainability: the contribution of fiscal rules", *OECD Economic Outlook*, No. 72, Paris.
- OECD(2002e), Accrual Accounting and Budgeting Key Issues and Recent Developments, Paris.
- OECD (2003a), OECD Economic Survey of Korea, Paris.

- OECD (2003b), OECD Territorial Review of Mexico, DT/TDPC(2002)19, Paris.
- OECD (2003c), OECD Economic Survey of Japan, Paris.
- OECD (2003d), "Policy influences on foreign direct investment", *OECD Economic Outlook*, No. 73, Paris.
- POTERBA, J.M. and K.S. RUEBEN (1997), "State fiscal institutions and the U.S. municipal bond market", *NBER Working paper*, No. 6237, October, <a href="http://papers.nber.org/papers/w6237.pdf">http://papers.nber.org/papers/w6237.pdf</a>.
- ROSEVEARE, D. (2002), "Enhancing the effectiveness of public expenditure in Sweden", *OECD Economics Department Working Papers*, No. 345.
- SCHNEIDER, M. (2002), "Local fiscal equalisation based on fiscal capacity: the case of Austria", *Fiscal Studies*, Vol. 23, No. 1.
- SÖDERSTRÖM, L. (2002), "Combining local self-government with long-run discipline and short-term flexibility with reference to Sweden", paper presented to the Workshop on fiscal decentralisation in the light of the Maastricht Treaty, in Copenhagen, October.
- SOLÉ OLLÉ, A. and E. VILADECANS MARSAL (2002), "Fiscal and growth spillovers in large urban areas" <a href="http://data.vatt.fi/iipf2002/members/papers/Sole\_Viladecans.pdf">http://data.vatt.fi/iipf2002/members/papers/Sole\_Viladecans.pdf</a>.
- TANZI, V. (1995), "Fiscal federalism and decentralization: a review of some efficiency and macroeconomic aspects", Annual World Bank Conference on development economics, 1995.
- THE CONFERENCE BOARD OF CANADA (2002), Projection des équilibres financiers des gouvernements du Canada et des provinces et territoires, <a href="http://www.gov.ns.ca/finance/pdf/FiscalImbalance.pdf">http://www.gov.ns.ca/finance/pdf/FiscalImbalance.pdf</a>.
- VAN DEN NOORD, P. (2002), "Managing the public expenditure: the UK approach", *OECD Economics Department Working Papers*, No. 341.
- VARSANO, R., S. GUIMARAES FERREIRA and J.R. AFONSO (2002), "Fiscal competition" in *Federalism in a Changing World Learning from Each Other*, International Conference on Federalism 2002, St Gallen, Switzerland.
- WATT, P.A. (2002), "Local government expenditure in England" in B. Dafflon (ed.), *Local Public Finance in Europe*, Cheltenham and Northampton: Edward Elgar.
- WORLD BANK (2002), "Brazil issues in fiscal federalism", Report No. 22523-BR.
- WURZEL, E. (1999), "Towards more efficient government-reforming federal fiscal relations in Germany", *OECD Economics Department Working Papers*, No. 209.
- WURZEL, E. (2003), "Consolidating Germany's finances: issues in public sector spending reform", *OECD Economics Department Working Papers*, No. 336.

#### WORKING PAPERS

The full series of Economics Department Working Papers can be consulted at www.oecd.org/eco/Working Papers/

- 374. *Health-Care Systems: Lessons from the Reform Experience* (December 2003) Elizabeth Docteur and Howard Oxley
- 373. Non-Tariff Measures Affecting EU Exports: Evidence from a Complaints-Inventory (December 2003) Peter Walkenhorst and Barbara Fliess
- 372. The OECD Medium-Term Reference Scenario: Economic Outlook No. 74 (November 2003) Peter Downes, Aaron Drew and Patrice Ollivaud
- 371. Coping with Ageing: A Dynamic Approach to Quantify the Impact of Alternative Policy Options on Future Labour Supply in OECD Countries (November 2003) Jean-Marc Burniaux, Romain Duval and Florence Jaumotte
- 370. The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries (November 2003) Romain Duval
- 369. Policies for an Ageing Society: Recent Measures and Areas for Further Reform (November 2003) Bernard Casey, Howard Oxley, Edward Whitehouse, Pablo Antolin, Romain Duval, Willi Leibfritz
- 368. Financial Market Integration in the Euro Area (October 2003) Carl Gjersem
- 367. Recent and Prospective Trends in Real Long-Term Interest Rates: Fiscal Policy and Other Drivers (September 2003) Anne-Marie Brook
- 366. Consolidating Germany's finances: Issues in public sector spending reform (September 2003) Eckhard Wurzel
- 365. Corporate Taxation of Foreign Direct Investment Income 1991-2001 (August 20030) Kwang-Yeol Yoo
- 364. Indicator Models of Real GDP Growth in Selected OECD Countries (July 2003) Franck Sédillot and Nigel Pain
- 363. Post-Crisis Change in Banking and Corporate Landscapes the Case of Thailand (July 2003) Margit Molnar
- 362. Post-Crisis Changes in Banking and Corporate Landscapes in Dynamic Asia (June 2003) Margit Molnar
- 361. *After The Telecommunications Bubble* (June 2003) by Patrick Lenain and Sam Paltridge
- 360. *Controlling Public Spending in Iceland* (June 2003) Hannes Suppanz
- 359. *Policies and International Integration: Influences on Trade and Foreign Direct Investment* (June 2003) Giuseppe Nicoletti, Steve Golub, Dana Hajkova, Daniel Mirza, Kwang-Yeol Yoo

- 358. Enhancing the Effectiveness of Public Spending in Finland (June 2003) Philip Hemmings, David Turner and Seija Parviainen
- 357. Measures of Restrictions on Inward Foreign Direct Investment for OECD Countries (May 2003) Stephen S. Golub
- 356. Tax Incentives and House Price Volatility in the Euro Area: Theory and Evidence (May 2003) Paul van den Noord
- 355. Structural Policies and Growth: A Non-technical Overview (May 2003) Alain de Serres
- 354. *Tax Reform in Belgium* (May 2003) David Carey
- 353. *Macroeconomic Policy and Economic Performance* (April 2003) Pedro de Lima, Alain de Serres and Mike Kennedy
- 352. Regulation and Investment (March 2003) Alberto Alesina, Silvia Ardagna, Giuseppe Nicoletti and Fabio Schiantarelli
- 351. Discretionary Fiscal Policy and Elections: The Experience of the Early Years of EMU (March 2003) Marco Buti and Paul van den Noord
- 350. *The US Health System: An Assessment and Prospective Directions for Reform* (February 2003) Elizabeth Docteur, Hannes Suppanz and Jaejoon Woo
- 349. The Effectiveness of Public Expenditure in Portugal (February 2003) Chiara Bronchi
- 348. Comparative Analysis of Firm Demographics and Survival: Micro-Level Evidence for the OECD Countries (February 2003) Eric Bartelsman, Stefano Scarpetta and Fabiano Schivardi
- 347. Regulation, Productivity and Growth: OECD Evidence (January 2003) Giuseppe Nicoletti and Stefano Scarpetta
- Public Expenditure Management in Poland (December 2002) Andrew Burns and Kwang-Yeol Yoo
- 345. Enhancing the Effectiveness of Public Expenditure in Sweden (December 2002) Deborah Roseveare
- 344. The Decline in Private Saving Rates in the 1990s in OECD Countries: How Much Can Be Explained by Non-Wealth Determinants
  (November 2002) Alain de Serres and Florian Pelgrin
- 343. Enhancing the Effectiveness of Public Expenditure in Norway (October 2002) Isabelle Journard and Wim Suyker
- 342. Productivity and Convergence in a Panel of OECD Countries: Do Regulations and Institutions Matter? (September 2002) Stefano Scarpetta and Thierry Tressel
- 341. *Managing Public Expenditure: The UK Approach* (August 2002) Paul van den Noord
- 340. The Brazilian Pension System: Recent Reforms and Challenges Ahead (August 2002) Marcos Bonturi