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OECD Network on Fiscal Relations Across Levels of Government

FISCAL AUTONOMY OF SUB-CENTRAL GOVERNMENTS

Working Paper N°2

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TABLE OF CONTENTS

FISCAL AUTONOMY OF SUB-CENTRAL GOVERNMENTS.....	1
Introduction and Summary.....	3
Decentralisation ratios.....	5
Revenue structure of sub-central governments.....	7
Taxing power of sub-central governments.....	9
A taxonomy of tax autonomy: history and indicator set.....	9
Level and evolution of taxing power.....	10
Tax autonomy across tax category.....	15
Tax sharing arrangements.....	15
Tax sharing and intergovernmental grants: a first attempt to draw a dividing line.....	16
Intergovernmental transfers.....	18
Donors and recipients of grants.....	18
Taxonomy of grants.....	21
Grants by government function.....	23
Fiscal autonomy: a multi-faceted concept.....	25
Fiscal autonomy indicator set.....	25
A few (non)correlations among fiscal autonomy indicators.....	26
REFERENCES.....	30

Boxes

A short history of taxing power indicators.....	9
“Fiscal rules”: their impact on sub-central government autonomy.....	25

ABSTRACT

State and local governments in OECD countries have access to a variety of fiscal resources. Discretion over these resources varies considerably, and so does sub-central governments' power to shape public service delivery. The design of fiscal autonomy affects sub-central government's behaviour and determines outcomes like public sector efficiency, equity in access to public services or the long term fiscal stance. This paper provides data and interpretation on the fiscal resources of sub-central government in OECD countries. It presents a set of fiscal autonomy indicators such as revenue and expenditure decentralisation, tax autonomy, intergovernmental grants and the stringency of fiscal rules. In sum, the statistics show that taxes are still the most significant revenue source for subcentral governments but that only a part is under their effective control. Fiscal autonomy is further reduced by a high percentage of earmarked grants. The design of fiscal federalism varies considerably across countries, and factor analysis reveals almost no correlation between different fiscal autonomy indicators. Indeed, "fiscal autonomy" appears to have several dimensions.

JEL Classification: H71, H74, H77

Keywords: Fiscal federalism, local taxation, intergovernmental transfers, fiscal autonomy

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Introduction and Summary

1. State and local governments in OECD countries have access to a variety of fiscal resources. Discretion over these resources varies considerably, and so does sub-central governments' power to shape public service delivery. The design of fiscal autonomy affects sub-central government's behaviour and determines outcomes like public sector efficiency, equity in access to public services or the long term fiscal stance. Data to compare and assess the revenue structure of state and local governments would therefore be helpful. But indicators have long insufficiently reflected the way state and local budgets are funded. The main indicator used was the share of tax revenue allocated to sub-central governments, which is a poor measure for the rich and complex pattern of their revenue sources. Since the composition of fiscal revenue is a crucial indicator for sub-central power and a critical determinant for government finance and other outcome variables, a set of more refined indicators for fiscal autonomy should be developed.

2. This document provides data and interpretation on the fiscal resources of sub-central government (SCG) in a majority of OECD countries. The document is organized as follows: the first chapter gives an overview on revenue and expenditure decentralisation. The second chapter deals with tax resources for SCG and the discretion they can exert over them; this chapter includes a special section on how one may distinguish tax sharing arrangements from intergovernmental transfers. The third section deals with intergovernmental grants and the different conditions attached to them. The fourth and final chapter summarises the previous chapters, presenting a set of fiscal autonomy indicators. Data were collected through a questionnaire sent out in 2005 and completed using Revenue Statistics and National Accounts. The purpose of this document is twofold: first it presents the newest available data and ways to produce them, and second it shows how these data may be used for policy analysis.

3. The main results can be summarized as follows:

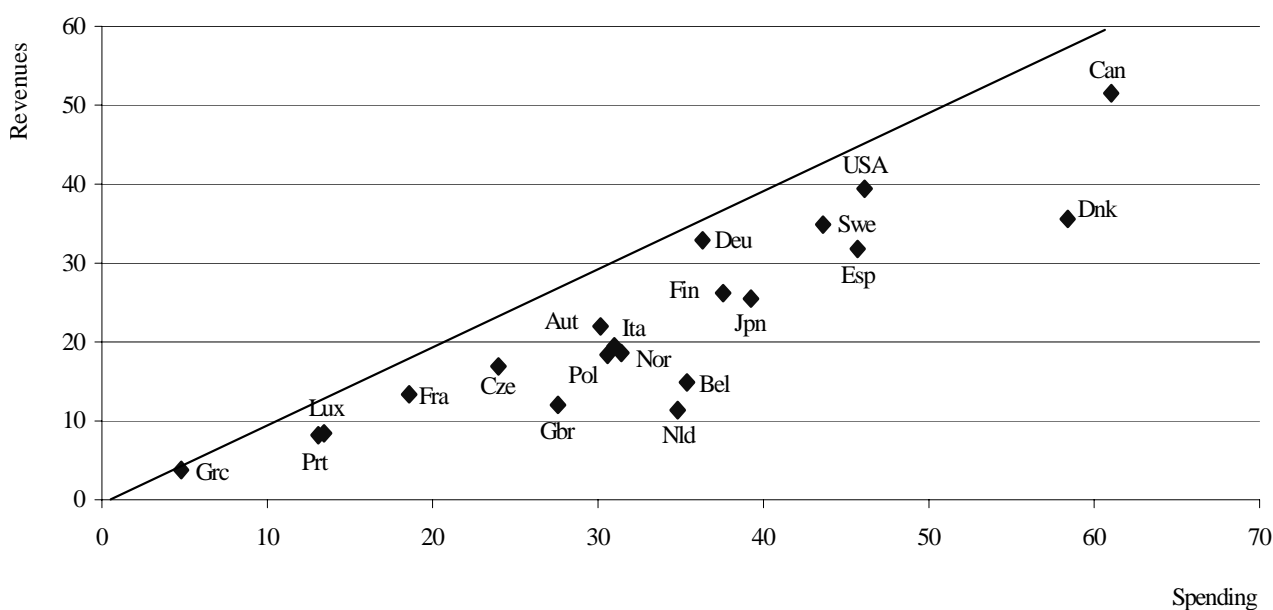
- *Own taxes are more important a revenue source for sub-central governments than grants.* With 60 percent against 40 percent, tax revenue accounts for a larger share of SCG revenue than intergovernmental grants. Taxes over which SCG have at least some discretion account for the largest share of SCG revenue with 38 percent. Earmarked grants follow as the second largest category with 22 percent. Non-earmarked grants account for 19 percent, while tax sharing arrangements account for 16 percent.
- *A part only of tax revenue allocated to sub-central governments is under their control.* Often SCG's power to set and change tax rates and the tax base is restricted. In many federal countries and some unitary ones, SCGs take part in tax sharing arrangements where the tax revenue allocated to a single jurisdiction is either determined by all SCGs together or by central government.
- *Earmarked grants are more important than non-earmarked ones.* The relation between earmarked and non-earmarked grants is 60 to 40 percent. Matching grants account for one third of all grants. Revenue security is rather high: more than 70 percent of grants are mandatory and cannot be changed at short notice by central government. Most grants support current expenditure while capital expenditure grants account for a small percentage.
- *The dividing line between tax sharing and grants is sometimes difficult to draw.* Reforms to the fiscal design sometimes made both tax sharing arrangements and intergovernmental grants look very much alike. To keep data comparable, a clear distinction between the two fiscal arrangements is necessary. This document proposes a set of distinctive features that allow a dividing line to be drawn. Current data are based on countries' own assessment.

- *The correlation between different indicators of fiscal autonomy is weak. Countries with a similar SCG tax share may permit very different discretion over this share. Some countries combine a large tax share with a small share of intergovernmental grants; in other countries both types of fiscal resource are significant. Tax autonomy and fiscal rules stringency are unrelated. In sum, there is no single pattern of sub-central fiscal design.*

Decentralisation ratios

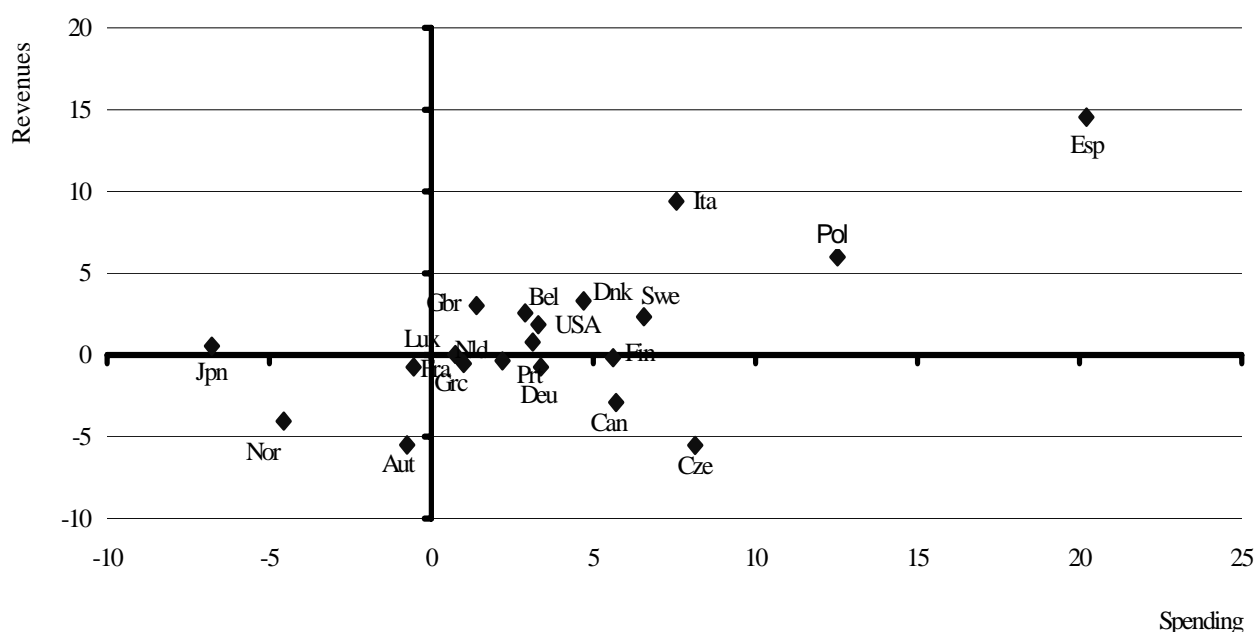
4. Fiscal autonomy is part of the institutional arrangement – such as responsibility and revenue assignment - in which the different levels of government operate. A common way to compare and assess fiscal autonomy is the extent to which resources and responsibilities are under the control of local and regional governments. SCG tax and expenditure indicators (or “decentralization ratios”) can help to assess fiscal decentralization and its evolution over time. While these indicators can hardly capture the complexity and multidimensionality of fiscal arrangements, they can give a first impression of how much power SCGs enjoy. The following figures show the current state of financial decentralization as measured by sub-central government shares of total tax revenue and expenditure in OECD countries (figure 1) and the evolution of these indicators over the last decade (figure 2).

Figure 1. Decentralisation ratios in OECD countries, 2004



Source: National Accounts of OECD countries, 2005

Figure 2. Decentralisation ratios, evolution 1995-2004



Source: National Accounts of OECD countries, 2005

5. The stylized facts shown in these figures can be summarized as follows:

- The degree of decentralization varies greatly across OECD countries. While the sub-central share of total government expenditures varies from less than 6 percent to more than 60 percent, taxes accruing to sub-central governments extend between 3 and 50 percent. The constitutional background of a country – whether it is federal or unitary – says little about actual fiscal autonomy. Local governments in some unitary countries have a higher share in public spending than local and regional governments together in federal countries.
- The sub-central tax share and the sub-central expenditure share have diverged over the last ten years. While the share of sub-national expenditures generally increased, local taxing power - with a few notable exceptions –remained almost stable. The rising expenditure share partly reflects new responsibilities assigned to sub-central governments such as health care and/or non-university education in Italy, Mexico and Spain, or active labour market policies in Canada. In the US, the states took over full responsibilities for a number of programmes formerly supported by the federation. On the other hand, local taxing power was reduced in many countries, such as in France or Japan, where local taxes were replaced by intergovernmental transfers.
- In most countries, sub-central government expenditures by far exceed tax revenue, and this “fiscal gap” has widened in the last decade. The difference between responsibilities and resources points to large intergovernmental transfer schemes. In general, the fiscal gap tends to be larger in countries with high sub-central fiscal autonomy, i.e. local and regional jurisdictions with a large tax share depend more heavily on transfers (Canada, Denmark, and – not shown in figure 1 – Switzerland); somewhat paradoxically, more decentralization can go hand in hand with more dependency on central government resources. Size and structure of intergovernmental grants thus become a particular issue in a decentralized environment.

6. A serious problem with these simple ratios, however, is that they only poorly measure the true degree of autonomy that SCG enjoy in practice. On the revenue side, limits to set own local tax bases, rates and reliefs reduce local fiscal autonomy. On the expenditure side, local spending may be strongly influenced by upper level government regulation, thereby reducing discretion over various expenditure items. In some countries, the transfer of financial responsibility for education or health care was hardly more than a change in accounting procedures, while essential regulatory responsibilities remained with the central government. Moreover, the various strings and conditions attached to intergovernmental transfers may further influence the spending pattern of sub-central governments. To have a more accurate picture of sub-central fiscal autonomy, a more detailed set of indicators is required.

Revenue structure of sub-central governments

7. Sub-central governments (SCG) rely on own tax revenue, shared taxes and intergovernmental grants. In table 1, the three main categories of fiscal revenue are put together, to allow for an overall assessment and comparison of SCG fiscal structure. In order to facilitate the lecture of the table, grant and tax categories developed further down this document are aggregated. Finally nine categories encompass the different revenue sources available to local and regional governments. As for all other statistics in this document, borrowing and fees are not included due to the lack of comparable data.

8. With an un-weighted average of roughly 60 percent against 40 percent, tax revenue accounts for a larger share of SCG revenue than intergovernmental grants. With 38 percent autonomous taxes are the single largest category of total SCG revenue. Earmarked grants follow as the second largest category with 22 percent, indicating that more than one fifth of total revenue is largely outside the discretion of sub-central governments. Non-earmarked grants account for 19 percent, while tax sharing arrangements – widely used in constitutionally federal countries – account for 16 percent. Countries with tax sharing arrangements have a smaller grant system and vice versa, suggesting some substitutability between the two fiscal arrangements. Again there is wide variation between countries; while for some tiers own tax revenue accounts for the overwhelming part (Canada states, Switzerland states), for others it is tax sharing (Australia states, Austria local, Germany states, Czech Republic), for others again it is either earmarked or non-earmarked grants (Greece, Mexico, Netherlands).

Table 1: Revenue structure of sub-central governments, 2002

As a percentage of total sub-central revenue

	Autonomous taxes			Tax sharing				Other taxes	Grants		Total	
	Discretion on rates and reliefs	Discretion on rates	Discretion on reliefs	Revenue split set by SCG	Revenue split set with SCG consent	Revenue split set by CG, pluriannual	Revenue split set by CG, annual		Earmarked	Non earmarked		
Australia												
States	41.1	-	-	-	34.4	-	-	-	21.9	2.7	100.0	
Local	80.6	-	-	-	-	-	-	-	3.1	16.2	100.0	
Austria												
States	3.7	-	-	-	43.5	-	-	5.5	37.4	10.0	100.0	
Local	2.3	4.5	-	-	55.4	-	-	21.2	14.3	2.3	100.0	
Belgium												
States	57.1	-	-	-	32.4	-	-	-	9.7	0.8	100.0	
Local	7.5	65.0	-	-	-	-	-	2.7	23.8	0.9	100.0	
Canada												
Provinces	76.0	-	-	-	5.5	-	-	-	3.0	15.5	100.0	
Local ¹	0.9	47.7	-	-	-	-	-	1.3	48.0	2.2	100.0	
Czech Republic												
Local	3.2	2.4	-	-	-	51.8	-	0.9	41.7	-	100.0	
Denmark												
Local	-	67.9	-	-	-	-	2.2	-	4.8	12.5	12.6	100.0
Finland												
Local	-	60.4	-	-	-	-	-	6.7	0.1	3.4	29.4	100.0
France												
Local	39.3	4.6	5.0	-	-	-	-	-	5.6	5.7	39.8	100.0
Germany												
Länder	-	1.9	-	-	68.2	-	-	-	8.9	21.0	-	100.0
Local	8.7	16.7	-	-	23.7	-	-	-	0.6	50.3	-	100.0
Greece												
Local	-	11.6	-	6.3	-	-	-	-	-	82.1	-	100.0
Italy												
Regional	-	28.4	-	-	11.4	8.5	-	-	-	14.8	36.9	100.0
Local	12.1	22.6	-	-	-	5.9	-	-	4.2	41.7	13.5	100.0
Korea												
Local	-	24.9	-	-	-	-	-	-	12.8	18.0	44.3	100.0
Mexico												
States ³	5.0	-	-	-	-	-	-	-	-	54.4	40.6	100.0
Local												
Netherlands												
Local	-	11.8	-	-	-	-	-	-	0.1	61.7	26.5	100.0
Norway												
Local	1.6	-	45.3	-	-	-	-	-	-	24.2	29.0	100.0
Poland												
Local	-	11.7	-	-	-	38.6	-	-	0.2	17.9	31.6	100.0
Portugal												
Local	-	21.2	-	-	-	8.9	-	-	18.1	5.7	46.0	100.0
Spain												
Regions	32.6	0.1	-	-	23.3	-	-	-	0.0	7.0	37.1	100
Local	16.1	30.4	-	-	12.7	-	-	-	0.0	13.1	27.8	100
Sweden²												
Local	-	74.0	-	-	-	-	-	-	-	7.5	18.5	100.0
Switzerland												
States	57.4	-	-	-	6.1	-	-	-	-	28.0	8.5	100.0
Local	2.0	66.9	-	-	-	-	-	-	-	25.2	5.9	100.0
<i>Unweighted average</i>												
States	30.3	3.4	-	-	25.0	0.9	-	-	1.6	21.9	16.9	100.0
Local	9.2	28.6	2.6	0.3	4.8	5.6	0.4	-	3.8	26.3	18.2	100.0

1. Local figures with Quebec tax autonomy.

2. 2004

3. Including grants to local government.

Source : National sources and OECD Revenue statistics 1965-2004, 2005 Edition.

Taxing power of sub-central governments

A taxonomy of tax autonomy: history and indicator set

9. The term “tax autonomy” captures various aspects of freedom sub-central governments have over their own taxes. It encompasses features such as sub-central government’s right to introduce or to abolish a tax, to set tax rates, to define the tax base, or to grant tax allowances or reliefs to individuals and firms. In a number of countries taxes are not assigned to one specific government level but shared between the central and sub-central governments. Such tax sharing arrangements deny a single SCG any control on tax rates and bases, but collectively SCGs may negotiate the sharing formula with central government. The wealth of explicit and implicit, statutory and common, institutional arrangements has to be encompassed by a set of indicators that are simultaneously appropriate (they capture the relevant aspects of tax autonomy), accurate (they measure those aspects correctly) and reliable (the indicator set remains stable over time). The first indicator set on tax autonomy was published in 1999 (OECD, 1999), and in 2005 the exercise was repeated and extended (see box 1).

A short history of taxing power indicators

In the late 1990s the Working Party on Tax Policy Analysis and Tax Statistics of the OECD Committee on Fiscal Affairs regarded the data on the taxing power of sub-central governments as utterly insufficient. The commonly used ratio “sub-central to total tax revenue” was considered a poor measure for assessing taxing power since it did (and does) not account for the effective discretion or control available to state and local governments. In 1997 the Working Party therefore decided to set up a more detailed database. It established a set of categories - or taxonomy – to account for the various institutional arrangements governing sub central taxing power. Tax autonomy was divided into five categories, from full discretion over tax rates and bases to no discretion at all over any tax variable. In addition the category “tax sharing arrangements” was divided into four subcategories that represent different power of SCG in collectively determining and changing their own share. Data were collected through a questionnaire and for the year 1995. 19 countries participated to the work whose results were published in 1999 (The taxing power of state and local governments”, OECD 1999)

In 2003 the newly created Network on Fiscal Relations across Levels of Government set out to repeat the exercise, in order to assess how tax autonomy had evolved over time and how important it was in countries not covered in 1999. In the light of the 1999 results, the taxonomy was refined and extended. The Network Secretariat divided the various tax autonomy arrangements into five categories reflecting to what extent SCG had the right to change the local tax base or tax rates, whether they needed approval from upper level governments to do so, or whether local tax resources were embedded in national tax sharing arrangements. The Secretariat collected data for the year 2002, which allowed evaluating the change of sub central tax autonomy over a period of seven years. The results of this exercise are presented in this document.

10. The framework for both the 1999 and 2005 indicator set consists of five main categories of autonomy (table 2). Categories are ranked in decreasing order from highest to lowest taxing power. Category “a” represents full power over tax rates and bases, “b” power over tax rates (essentially representing the “piggy-packing” type of tax), “c” power over the tax base, “d” tax sharing arrangements, and “e” no power on rates and bases at all. Category “f” represents non-allocable taxes. In order to better capture the more refined institutional details the five categories were further divided into subcategories: two for the “a” and “b” categories, and three for the “c” category. Special attention was paid to tax sharing arrangements, where the four “d” subcategories are thought to represent the many different rules and institutions for governments to determine and change their own share. Altogether 13 categories were established to capture the various tax autonomy arrangements in OECD countries. Where applicable, countries were asked to send separate data for both the state/regional and the local level. 24 countries responded to the questionnaire, five more than in 1999. Since category six “non allocable” was hardly used, the taxing power universe seems to be well reflected in this taxonomy.

Table 2: Taxonomy of taxing power

a.1	The recipient SCG sets the tax rate and any tax reliefs without needing to consult a higher level government.
a.2	The recipient SCG sets the rate and any reliefs after consulting a higher level government.
b.1	The recipient SCG sets the tax rate, and a higher level government does not set upper or lower limits on the rate chosen.
b.2	The recipient SCG sets the tax rate, and a higher level government does sets upper and/or lower limits on the rate chosen.
c.1	The recipient SCG sets tax reliefs – but it sets tax allowances only.
c.2	The recipient SCG sets tax reliefs – but it sets tax credits only.
c.3	The recipient SCG sets tax reliefs – and it sets both tax allowances and tax credits.
d.1	There is a tax-sharing arrangement in which the SCGs determine the revenue split.
d.2	There is a tax-sharing arrangement in which the revenue split can be changed only with the consent of SCGs.
d.3	There is a tax-sharing arrangement in which the revenue split is determined in legislation, and where it may be changed unilaterally by a higher level government, but less frequently than once a year.
d.4	There is a tax-sharing arrangement in which the revenue split is determined annually by a higher level government.
e	Other cases in which the central government sets the rate and base of the SCG tax.
f	None of the above categories a, b, c, d or e applies.

Level and evolution of taxing power

11. The stylized facts on taxing power of state and local governments in 2002 can be summarized as follows (table 3)¹:

- First, although tax autonomy varies widely across countries, most sub-central governments have considerable discretion over their own taxes. At the average, the tax revenue share with full or partial discretion (categories a, b and c) amounts to almost 60 percent for state and more than 70 percent for local government. In many countries (not shown in the table), permitted maximum tax rates often double minimum rate.
- Second, categories a, b and c put together, state and regional governments have less discretion over their tax revenue than local governments, since their tax revenue is often embedded in tax sharing arrangements. On the other hand, with 51 percent of SCG tax revenue, the state level has a higher share in high-powered autonomous taxes (category “a”), while local governments are often allowed to levy a supplement on selected regional or central taxes only (category “b” or “piggy-packing” tax).
- Third, the c category (representing control over the tax base but not the tax rate) plays a very small role in OECD countries. This probably points to a policy of gradually banning tax reliefs and abatements as a tool for local and regional economic development, particularly in the European Union.

1. Since for some categories no or very small numbers were reported, some categories were merged and their number reduced from 13 to 10.

Table 3. Taxing power of sub-central governments, 2002

		As share of sub-central tax revenues										
	Sub-central tax revenue as % of total tax revenues	Discretion on rates and reliefs (a)	Discretion on rates (b)		Discretion on reliefs (c)	Tax sharing arrangements (d)				Rates and reliefs set by CG (e)	Other (f)	Total
			Full	restricted		Revenue split set by SCG	Revenue split set with SCG consent	Revenue split set by CG, pluriannual	Revenue split set by CG, annual			
Australia	31.4											
States	28.4	54.4	-	-	-	-	45.6	-	-	-	-	100.0
Local	3.0	100.0	-	-	-	-	-	-	-	-	-	100.0
Austria	18.4											
States	8.8	7.0	-	-	-	-	82.7	-	-	9.6	0.8	100.0
Local	9.6	2.7	-	5.4	-	-	66.5	-	-	20.0	5.5	100.0
Belgium	27.8											
States	22.8	63.8	-	-	-	-	36.2	-	-	-	-	100.0
Local	5.0	10.0	-	86.4	-	-	-	-	-	3.6	-	100.0
Canada	44.1											
Provinces	35.5	98.4	-	-	-	-	1.6	-	-	-	-	100.0
Local	8.6	1.8	95.6	-	-	-	-	-	-	2.3	0.3	100.0
Czech Republic	12.5											
Local	12.5	5.5	-	4.1	-	-	-	88.8	-	1.5	0.1	100.0
Denmark	35.6											
Local	35.6	-	86.0	4.7	-	-	-	2.9	-	6.4	-	100.0
Finland	21.5											
Local	21.5	-	85.3	4.6	-	-	-	-	9.9	-	0.1	100.0
France	10.0											
Local	10.0	72.1	-	8.5	9.1	-	-	-	-	3.6	6.6	100.0
Germany	28.7											
Länder	21.8	-	-	2.4	-	-	86.3	-	-	11.2	-	100.0
Local	7.0	17.6	-	33.6	-	-	47.6	-	-	1.1	0.2	100.0
Greece	0.9											
Local	0.9	-	-	64.6	-	35.4	-	-	-	-	-	100.0
Iceland	25.2											
Local	25.2	-	-	91.2	-	-	-	-	-	-	8.8	100.0
Italy	16.4											
Regional	11.3	-	-	58.8	-	-	23.7	17.6	-	-	-	100.0
Local	5.2	27.1	-	50.4	-	-	-	13.1	-	9.3	-	100.0
Japan	26.0											
Local	26.0	0.1	79.7	-	-	-	-	-	-	20.2	-	100.0
Korea	18.9											
Local	18.9	-	-	64.3	-	-	-	-	-	35.7	-	100.0
Mexico	3.4											
States	2.4	100.0	-	-	-	-	-	-	-	-	-	100.0
Local	1.0	100.0	-	-	-	-	-	-	-	-	-	100.0
Netherlands	3.6											
Local	3.6	-	99.2	-	-	-	-	-	-	-	0.8	100.0
Norway	12.9											
Local	12.9	3.3	-	96.7	-	-	-	-	-	-	-	100.0
Poland	17.5											
Local	17.5	-	-	23.2	-	-	-	76.4	-	0.4	-	100.0
Portugal	6.0											
Local	6.0	-	-	44.0	-	-	-	18.5	-	37.3	0.2	100.0
Spain	26.6											
Regions	18.1	58.3	-	0.1	-	-	41.6	-	-	-	0.0	100.0
Local	8.5	27.2	-	51.4	-	-	21.4	-	-	-	0.0	100.0
Sweden	32.1											
Local	32.1	-	100.0	-	-	-	-	-	-	-	-	100.0
Switzerland	43.1											
States	27.0	90.4	-	-	-	-	9.6	-	-	-	-	100.0
Local	16.2	2.9	-	97.1	-	-	-	-	-	-	-	100.0
Turkey	6.5											
Local	6.5	-	-	-	-	-	-	-	-	-	100.0	100.0
United Kingdom	4.5											
Local	4.5	-	-	100.0	-	-	-	-	-	-	-	100.0
<i>Unweighted Average</i>												
States	19.6	52.5	-	6.8	-	-	36.4	2.0	-	2.3	0.1	100.0
Local	12.4	15.4	22.7	34.6	0.4	1.5	5.6	8.3	0.4	5.9	5.1	100.0

Source: National source and OECD, Revenue Statistics 1965-2004, 2005 Edition.

12. In some countries, SCG have the right to vary tax rates but actually set the same rate across the country. Such “unused taxing power” invites a deeper look into fiscal institutions and the incentives they generate for tax competition.

13. Tax sharing agreements account for a large part of sub central tax revenue in most constitutionally federal countries (Austria, Belgium, Germany, Mexico, Italy), in constitutionally non-federal Spain, in the Czech Republic and in Poland. Tax sharing is often considered as providing a balance between granting local/regional fiscal autonomy and keeping the overall fiscal framework stable. In such an arrangement a single SCG cannot set tax rates and bases, but SCGs together may have the power to negotiate their common share. This power varies considerably across countries, from arrangements where sub-central governments are in full control over their share, to arrangements where the share is unilaterally set and modified by the central government. Often the distribution formula is enshrined in the constitution and can only be changed with the consent of all or a majority of sub-central governments. In other countries amendments to the sharing formula are easier to obtain, either with or without prior negotiation involving sub-central governments. In some cases the institutional set up makes it difficult to decide whether an arrangement is tax sharing or intergovernmental transfer; this issue will be dealt with in the next section.

14. While the share of SCG tax revenue remained almost stable, taxing power increased from 1995 to 2002 (table 4). For the 17 countries where time series is available, tax revenue share rose by 0.6 percent points for the state level and remained stable for local governments. In Spain and Poland SCG tax revenue increased by more than 10 percentage points, while it decreased considerably in Mexico and Japan. But, interestingly, the share of tax revenue over which SCG have full or partial discretion rose. States and regions gained more tax autonomy than local governments, revealed by the increase of category “a” tax revenue. Tax sharing agreements lost significance in countries such as Austria, Belgium, Germany, Mexico or Spain, mostly in favour of taxes with more autonomy. In Norway, local governments gained some autonomy over income taxes, while in Austria and Germany, they lost. In some countries (e.g. France and Sweden) the central government is required to compensate the loss of sub-central tax revenue through additional transfers; this effect is not shown in table 3.

15. The forces shaping the evolution of SCG tax revenue and tax autonomy are political, fiscal and economic in nature.

- First and probably most important are policy reforms such as a reassignment of taxes to another government level, a change in tax autonomy or a swap between local/regional taxes and intergovernmental grants. Constitutional and legislative amendments largely account for the rapid change in countries such as Belgium or Spain involved in a secular decentralization process.
- Second, fiscal reasons such as a relative change in tax rates or bases can also affect the pattern of taxing power, e.g. if one government level changes its tax rate or base while another government level does not. In many countries rates and base of local property taxes remain unchanged over long periods of time, while the bases of central government income taxes or goods and services taxes are regularly updated.
- Third, different taxes react differently to the business cycle or to structural change, and this may affect tax revenue of different government levels. A local profit tax reacts more swiftly to an economic downturn than a central government income tax, and a local sales tax on goods reacts more slowly to the rise of the service sector than a central value added tax.

16. Altogether, the net effect of the three forces during the 1995 to 2002 period tended to favour sub-central government’s tax base slightly. For most of them no tax erosion could be detected, either in terms of the revenue share or in terms of discretion. However, the tax share must be set against the expenditure share, which increased in the same period (figure 2).

**Table 4. Evolution of tax autonomy of sub-central governments
Change in 1995-2002**

	Sub-central tax revenues as % of total tax revenues	As a share of sub-central tax revenues									
		Discretion on rates and reliefs	Discretion on rates		Discretion on reliefs	Tax-sharing arrangements				Rates and reliefs set by CG	Other
			Full	restricted		Revenue split set by SCG	Revenue split set with SCG consent	Revenue split set by CG, pluriannual	Revenue split set by CG, annual		
Austria	-0.1										
Länder	-1.2	5.0	-	-	-	-15.3	-	-	9.6	0.8	
Local	1.1	-5.8	-5.9	-	-	-14.0	-	-	20.0	5.5	
Belgium	-0.2										
States	0.3	59.8	-47.5	-	-	-12.3	-	-	-	-	
Local	-0.5	-2.5	2.4	-	-	-	-2.5	-1.0	3.6	-	
Czech Republic	-0.5										
Local	-0.5	3.5	-0.9	-3.0	-	-	-1.2	-	1.5	0.1	
Denmark	4.6										
Local	4.6	-	-3.8	-	-	-	0.9	-	2.9	-	
Finland	-0.5										
Local	-0.5	-	0.9	-	-	-	-11.0	9.9	-	0.1	
Germany	-0.3										
Länder	-0.2	-	2.4	-	-	-13.7	-	-	11.2	-	
Local	0.0	16.6	-18.4	-	-	0.6	-	-	1.1	0.2	
Iceland	5.2										
Local	5.2	-8.0	-0.8	-	-	-	-	-	-	8.8	
Japan	2.0										
Local	2.0	0.1	-8.8	-	-	-	-	-	8.7	-	
Mexico	-16.6										
States	-13.6	86.0	-	-	-	-86.0	-	-	-	-	
Local	-3.0	100.0	-	-	-	-	-74.0	-	-26.0	-	
Netherlands	1.1										
Local	1.1	-	-0.8	-	-	-	-	-	-	0.8	
Norway	-7.1										
Local	-7.1	3.3	94.2	-	-	-	-0.5	-	-97.0	-	
Poland	10.5										
Local	10.5	-	-21.8	-1.0	-	-	22.4	-	0.4	-	
Portugal	0.8										
Local	0.8	-	0.2	-	-	-	-4.3	-	3.8	0.2	
Spain	13.3										
Regions	13.3	44.0	-0.5	-	-	31.7	-	-	-	-75.2	
Local	0.0	-1.5	-2.8	-	-	6.1	-	-	-	-1.8	
Sweden	0.1										
Local	0.1	-2.0	2.0	-	-	-	-	-	-	-	
Switzerland	5.1										
States	5.0	1.4	-	-	-	3.6	-5.0	-	-	-	
Local	0.2	2.9	0.1	-	-	-	-3.0	-	-	-	
United Kingdom	0.5										
Local	0.5	-	-	-	-	-	-	-	-	-	
<i>Unweighted Average</i>											
States	0.6	32.7	-7.6	-	-	-15.3	-0.8	-	3.5	-12.4	
Local	0.9	7.9	0.4	-0.2	-	-0.4	-3.5	0.5	-5.4	0.8	

Source: National source and OECD, Taxing Powers of State and Local government, Tax Policy Studies No1 and Revenue Statistics 1965-2004, 2005 Edition.

Table 5. Tax autonomy of sub-central governments by type of tax

	Discretion on rates and reliefs	Discretion on rates		Discretion on reliefs	Tax sharing arrangements				Rates and reliefs set by CG	Other	Total
		Full	restricted		Revenue split set by SCG	Revenue split set with SCG consent	Revenue split set by CG, pluriannual	Revenue split set by CG, annual			
1000 Taxes on income, profits and capital gains	5.9	9.9	10.3	2.8	-	0.8	9.9	0.3	1.5	0.3	41.7
1100 Of individuals	5.2	9.3	8.1	2.8	-	0.8	8.2	-	1.1	-	35.5
1200 Corporate	0.7	0.6	2.2	-	-	-	1.4	0.3	0.4	0.3	5.9
1300 Unallocable between 1100 and 1200	-	-	-	-	-	-	0.3	-	-	0.0	0.3
2000 Social security contributions	0.1	-	-	-	-	-	-	-	0.0	0.1	0.3
2100 Employees	0.1	-	-	-	-	-	-	-	-	0.1	0.2
2200 Employers	-	-	-	-	-	-	-	-	-	0.0	0.0
2300 Self-employed or non-employed	-	-	-	-	-	-	-	-	-	-	-
2400 Unallocable between 2100, 2200 and 2300	-	-	-	-	-	-	-	-	-	-	-
3000 Taxes on payroll and workforce	2.4	-	0.2	-	-	-	-	-	0.7	-	3.3
4000 Taxes on property	11.5	5.5	9.0	0.3	0.2	-	0.2	-	0.8	-	27.3
4100 Recurrent taxes on immovable property	6.4	5.3	6.4	-	-	-	0.0	-	0.5	-	18.6
4200 Recurrent taxes on net wealth	0.4	-	1.1	-	-	-	-	-	0.0	-	1.5
4300 Estate, inheritance and gift taxes	0.3	-	0.0	-	-	-	0.0	-	0.1	-	0.4
4400 Taxes on financial and capital transactions	2.5	0.0	1.3	0.3	0.2	-	0.1	-	0.2	-	4.6
4500 Non-recurrent taxes	0.1	0.2	0.2	-	-	-	-	-	-	-	0.5
4600 Other recurrent taxes on property	-	-	-	-	-	-	-	-	-	-	-
5000 Taxes on goods and services	3.4	1.5	1.3	0.0	0.9	4.2	5.2	-	4.5	0.3	21.4
5100 Taxes on production, sale, transfer, etc	2.2	0.1	0.2	0.0	0.9	2.8	5.0	-	3.4	0.3	14.9
5200 Taxes on use of goods and perform activities	1.2	1.5	1.2	-	-	-	0.1	-	1.1	-	5.1
5300 Unallocable between 5100 and 5200	-	-	-	-	-	-	-	-	-	0.0	0.0
6000 Other taxes	2.1	0.1	1.4	-	-	-	0.4	-	1.2	0.6	5.9
6100 Paid solely by business	0.9	0.1	1.4	-	-	-	-	-	0.0	0.2	2.7
6200 Other	1.2	-	-	-	-	-	0.4	-	1.1	-	2.8
Total	25.5	17.1	22.3	3.0	1.1	5.0	15.6	0.3	8.7	1.4	100.0

1. Unweighted average. Countries included are : Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Japan, Korea, Mexico, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland and Turkey.

Source : National sources and OECD, Revenue Statistics 1965-2004, 2005 Edition.

Tax autonomy across tax category

17. The data on tax autonomy by tax type defy the beliefs on optimal local taxation (table 5). While fiscal federal theory asserts that mobile taxes should be allocated to higher levels of government, in practice the largest single tax assigned to local and regional governments is the highly mobile income tax on individuals, with more than 36 percent of total SCG tax revenue. If local corporate taxes are added, the share rises to more than 41 percent. Taxes on goods and account for 21 percent of total SCG tax revenue. Taxes on immovable property account for 19 percent only. Although most OECD countries apply some sub-central property taxation, its yield is often limited and supplemented or even replaced by other taxes such as a local income tax. In more decentralized countries, local income tax revenue largely exceeds local property tax revenue. While income taxes may have general negative impacts on labour supply, it appears that government succeeded in tackling the specific drawbacks for local government – e.g. their mobility - using policies such as tax sharing arrangements or fiscal equalisation schemes.

18. A closer look at the table reveals that autonomy varies according to tax type. Property taxes are usually assigned more discretion than other taxes, with almost all tax revenue in category a and b. Around a fourth of income tax revenue is embedded in tax sharing systems, that restrict a single SCG's control over this tax. Since many income tax sharing arrangements include fiscal equalization, they counteract potential drawbacks, such as excessive tax competition, of local income taxation. The right to set tax rates and bases does not mean that SCG actually make use of this right; in some countries tax rates appear to vary very little or not at all across regions. Currently no data is available on the actual range of SCG tax rates, however. It could therefore be rewarding to have data on actual tax rate variations, to have a closer look at how fiscal design actually shapes sub-central behaviour with respect to tax rates, and how fiscal policy can preserve local taxing powers and at the same reduce fiscal disparities.

Tax sharing arrangements

19. Tax sharing is an arrangement where tax revenue is divided vertically between the central and sub-central governments as well as horizontally across sub-central governments. In a tax sharing arrangement, the individual SCG has no power to set tax rates or bases; however SCGs may collectively negotiate policy reforms such as change to the sharing formula or to the tax rates. Often tax sharing arrangements contain an element of horizontal fiscal equalization. Tax sharing has become a means to provide fiscal resources to sub-central governments while maintaining central control over fiscal aggregates. Tax sharing typically involves less autonomy on the part of sub-central governments than autonomous taxes, and it may also change SCGs' fiscal behaviour. By turning SCG tax revenue into a common pool resource for all government levels, tax sharing may change fiscal incentives and the resulting fiscal outcomes. For both statistical and analytical reasons, a careful distinction between both forms of sub-central tax revenue allocation is therefore necessary.

20. Tax sharing arrangements can be analyzed on various grounds: the type of tax that is shared, the legal procedures involved in changing the formula, the frequency of an adjustment to the formula, and whether the sharing formula contributes to an equalizing objective (table 6).

Table 6: Tax sharing arrangements

Country	Tax type shared	Procedure for formula changes	Frequency of formula changes	Horizontal equalisation objective
Austria	PIT, CIT, property tax, VAT	Parliament, Law on Fiscal Equalisation	Every four years	yes
Czech Republic	PIT, CIT, VAT	Government, Law of Tax Assignment	Irregularly	yes
Denmark	PIT, CIT	Government, Law on Tax Sharing	Very rarely	no
Finland	CIT	Government, Law on Tax Sharing		no
Germany	PIT, CIT, VAT	Both Parliaments (Bundestag and Bundesrat)	13 changes since 1970	yes
Greece	Transaction and specific service taxes	Central government	Rarely	no
Spain	VAT, excise duties	Parliament	Rarely	no
Switzerland	PIT	Parliament, Law on Fiscal Equalisation	Never since 1959	yes

Note: PIT=Personal Income Tax, CIT=Corporate Income Tax, VAT=Value Added Tax

21. Most tax sharing arrangements cover major taxes such as personal income taxes, corporate income taxes or value added taxes. Their high yield makes them attractive for SCGs, and the pooling tackles potential drawbacks of purely local taxation. The procedure for changing the sharing formula is mostly laid down in laws on tax sharing, fiscal equalization or the like. For the countries under scrutiny, decisions on the tax sharing arrangements seem to be taken at the parliamentary level; in some countries the share is defined in the constitution and adjustments require a qualified majority in parliament. Consultation of SCG is quite frequent, but their explicit consent for adjustments is needed in some federal countries only. The frequency and regularity of formula adjustment varies across countries, from irregular to never, but it appears that tax sharing arrangements are a comparatively stable item in national fiscal policy. Finally, some countries redistribute tax revenue from affluent to poorer jurisdictions; hence those countries combine tax sharing and fiscal equalization in one single arrangement.

Tax sharing and intergovernmental grants: a first attempt to draw a dividing line

22. Both tax sharing arrangements (category “d” of tax autonomy) and intergovernmental grants provide resources to SCG. Drawing the dividing line between the two fiscal arrangements proves sometimes difficult. On one hand, many tax sharing formulae have become so complex that they break the link between what a SCG collects on its territory, what it sends into the common pool and what it finally gets back. On the other hand, policy reforms have made some intergovernmental grants more look like a share in the national tax yield. While the National Accounts and the Revenue Statistics provide some guidelines, in practice what counts as tax sharing in one country may count as intergovernmental grant in another; within some countries even, different central government bodies have adopted different views on how to classify fiscal resources (e.g. Australia or Belgium). . Such lack of clarity jeopardizes the coherence of SCG revenue statistics, reduces strength and utility of fiscal design analysis and impairs the comparability of true fiscal autonomy. In order to ensure that fiscal arrangements are recorded properly and on a comparative basis, a set of distinctive criteria is required.

23. In the following, we propose criteria that enable a dividing line to be drawn between the two fiscal arrangements more clearly. These criteria include the revenue risk that sub-central governments are exposed to, the freedom of use of the revenue obtained, the rules and formulas that define the distribution of financial revenue, and the institutional decision mechanisms that define each SCG’s annual share. Using the concepts of vertical and horizontal distribution, we then propose asking a sequence of interrelated question where each answer allows determining more precisely whether the fiscal arrangement is a tax sharing or a grant. To be considered as tax sharing, an arrangement must *cumulatively* fulfil all requirements, i.e. all questions must be answered with a “yes”.

- *First question:* Can sub-central governments freely use the tax revenue allocated to them? In other words, is the revenue earmarked or not? If the revenue is entirely unconditional, it can still be considered a tax sharing. If sub-central governments are not allowed to spend the revenue freely, the arrangement should be considered a grant.
- *Second question:* Is the amount of revenue allocated to the sub-central level a fixed proportion of the total revenue from the shared tax(es)? In other words, does the sub-central level of government fully bear the risk of revenue fluctuations? If SCG bear the full revenue risk, the arrangement may still be considered a tax sharing. If the arrangement contains some compensation for the revenue risk or a formula that compensates for fluctuations, the arrangement has to be considered a grant.
- *Third question:* Is the revenue share between the central and the sub-central government predetermined (by the government, by national parliaments) and unable to be changed in the course of a fiscal year? If the revenue share is predetermined, the arrangement may be considered tax sharing. If not, it is considered a grant.

24. The first three steps, which mainly put emphasis on the vertical distribution, should allow for clear-cut answers. Moreover, they do not contradict the procedure the National Accounts apply when recording SCG tax revenue, and the criteria established by the Council of Europe.

25. The fourth step or question is more difficult since it deals with horizontal distribution of tax revenue. Certainly an arrangement that reimburses the tax revenue to the jurisdiction from where it was collected should be considered tax sharing. But many arrangements redistribute tax revenue across SCGs in a way that loosens the link between a jurisdiction's contribution to and its final return from the tax sharing mechanism. In order to allow for redistributive tax sharing arrangements, but to exclude redistributive arrangements not linked to tax issues, we propose to ask the fourth question as follows:

- *Fourth question:* Is the formula that defines the horizontal distribution of the revenue (i.e. the distribution across jurisdictions of the same government level) based on one of the following rules:
 - the revenue is returned to the region from where it was collected, *or*
 - the tax is returned either on a per capita or a per employee basis, *or*
 - the tax is redistributed inversely related to tax raising capacity, i.e. SCG with a lower tax raising capacity receive a higher per capita share than SCG with a higher tax raising capacity.
 If revenue is distributed according to one of these rules, we propose to consider the arrangement a tax sharing. If the redistribution formula contains indicators other than tax revenue collected, population, employees, or tax raising capacity, the arrangement should be rather considered a grant.

26. If all questions are answered with a “yes”, a fiscal arrangement can be viably considered a tax sharing arrangement. A fiscal arrangement between levels of government can be thus called tax sharing if the amount going to each government level is a strict share of total tax revenue, if this share is predefined and cannot be changed in the course of the fiscal year, if the revenue for SCG is not earmarked, and if the revenue allocated to a single SCG either corresponds to the revenue it has collected, or is distributed across jurisdictions according to population, employees, or inversely related to tax raising capacity. For future data collection exercises, it is proposed that countries indicate whether they agree on these criteria.

Intergovernmental transfers

27. Intergovernmental transfers (or grants) provide sub-central governments with additional financial resources, thus filling the gap between own tax revenue and expenditure needs. The main objectives for intergovernmental grants can be roughly divided into: funding of SCG services, the subsidization of SCG services, and the equalisation of fiscal disparities; often these reasons overlap. A flowering garden of intergovernmental grants has evolved, with grants having different purposes and different effects on sub-central governments' behaviour. Rules and conditions attached to intergovernmental grants vary widely, ranging from transfers that grant full autonomy and come close to tax sharing, to grants where central government retains tight control over their use. The following statistics give an overview on grants from a donors' perspective, a classification of grants according to the various strings attached to them, and the policy areas for which grants are predominantly used.

Donors and recipients of grants

28. Table 7 shows a simplified version of the National Accounts donor/recipient matrix of intergovernmental grants, with five donor levels (central, state, local, international and social security) and – depending on the country type – one or two recipient levels (local, or state and local). The category “international” displays funds directly allocated to SCG in some countries². On the average, grants account for 26 percent of total tax revenue³; with Mexico having the largest grant system and Iceland having the smallest in relative terms. With 72 percent central government provides the overwhelming part of grants to local governments in both federal and unitary countries. In federal countries the central level is the main provider for states and regions with 86 percent. In the majority of federal countries (Belgium, Canada, Germany, Switzerland) is state government the main source for local governments. 2.7 percent of all grants flow between states/regions (e.g. Belgium and Switzerland) and 2.5 percent between local governments (e.g. Austria, Korea and Switzerland), pointing at various horizontal agreements or horizontal fiscal equalization schemes. However, such arrangements are not always recorded properly in National Accounts and revenue statistics.

29. In the period 2000 to 2004, the share of grants to total tax revenue remained almost stable with a -0.2 percentage points decrease for grants to states and a 0.2 percentage point increase for grants to local governments (table 8). However, average figures conceal that almost three quarters of countries experienced an above-average growth of transfers, with the Czech Republic at the top with a 6.8 percentage point increase. Grants from the central government, by far the most significant donor, rose annually by 6.4 percent for states and 8.3 percent for local governments, slightly exceeding the growth rate of total tax revenue. Social Security appears to be losing its importance as a source for SCG fiscal revenue, while the international level emerges in the European Union as a source for regional government finance. Grants to local governments are evolving with wide variations, with annual growth rates ranging between 30 percent in the Czech Republic and -2.3 percent in Norway. While large changes mostly reflect institutional reforms such as responsibility reassignment or a swap between tax revenue and grants, a more gradual increase could go back to increased demand for co-funding at the sub-central level.

2. The central government figures for Greece include EU grants. In other countries, grants are directly paid to the receiving sub-central government.

3. Intergovernmental grants are an expenditure item, and they should be set in relation to total expenditure. However, National Accounts data on government expenditure are lacking for a number of countries, so total tax revenue was used as a proxy, which was taken from the Revenue Statistics.

Table 7: Grants by donor and recipient sub-sector, 2004

As a percentage of total grant revenue

Country	As a percentage of total tax revenue	Central level	State level	Local level	International level	Social Security	Total
Australia²	11.0						
State	9.8	100.0	-	-	-	-	100.0
Local	1.3	61.8	38.2	-	-	-	100.0
Austria	15.2						
State	11.5	69.4	5.1	3.8	0.6	21.1	100.0
Local	3.8	49.2	16.1	12.7	0.3	21.7	100.0
Belgium	11.1						
State	3.9	81.3	13.9	3.6	1.0	0.1	100.0
Local	7.1	26.4	73.3	-	-	0.3	100.0
Canada	17.5						
State	9.0	99.8	-	0.2	-	-	100.0
Local	8.5	0.4	99.6	-	-	-	100.0
Czech Republic	12.4						
Local	12.4	99.1	-	-	0.9	-	100.0
Denmark	13.4						
Local	13.4	99.5	-	-	0.5	-	100.0
Finland	12.1						
Local	12.1	98.5	-	-	1.5	-	100.0
France	8.6						
Local	8.6	97.0	-	-	3.0	-	100.0
Germany	12.8						
Länder	5.9	79.0	-	14.7	6.4	-	100.0
Local	7.0	1.4	98.4	-	-	0.2	100.0
Greece²	4.1						
Local	4.1	100.0	-	-	-	-	100.0
Hungary	16.7						
Local	16.7	67.2	-	3.0	0.5	29.4	100.0
Iceland	1.9						
Local	1.9	100.0	-	-	-	-	100.0
Italy¹	19.1						
Regional	12.7	94.8	-	-	5.2	-	100.0
Local	6.4	54.3	45.7	-	-	-	100.0
Korea	34.4						
Local	34.4	82.6	-	17.4	-	-	100.0
Mexico	43.4						
State ³	43.4	100.0	-	-	-	-	100.0
Local							
Netherlands²	27.8						
Local	27.8	100.0	-	-	-	-	100.0
Norway	11.3						
Local	11.3	100.0	-	-	-	-	100.0
Poland²	37.9						
Local	37.9	99.6	-	0.4	-	-	100.0
Portugal	7.8						
Local	7.8	86.5	-	-	12.9	0.6	100.0
Spain	19.4						
Regional	14.0	77.7	-	16.7	-	5.6	100.0
Local	5.5	66.6	31.2	-	-	2.2	100.0
Sweden	9.4						
Local	9.4	100.0	-	-	-	-	100.0
Switzerland	23.4						
State	16.1	73.7	5.6	20.7	-	-	100.0
Local	7.2	0.2	77.6	22.3	-	-	100.0
Turkey	15.8						
Local	15.8	100.0	-	-	-	-	100.0
<i>Unweighted average</i>							
State	14.0	86.2	2.7	6.6	1.5	3.0	100.0
Local	11.8	72.3	21.8	2.5	0.9	2.5	100.0

1. 2002 figures.

2. 2003 figures.

3. Including grants to local government.

Source: National sources and OECD Revenue Statistics 1965-2004, 2005 Edition.

Table 8: Changes to grants by donor and recipient sub-sector, 2000 to 2004
Annual growth rates 2000-2004

Country	Change in total tax revenue	Central level	State level	Local level	International	Social Security
Australia¹	-0.8					
State	-0.7	1.2	-	-	-	-
Local	-0.1	9.3	-7.2	-	-	-
Austria	-0.7					
State	-0.3	3.9	-8.6	0.9	1.8	1.7
Local	-0.5	-0.2	9.8	-7.9	19.4	-0.1
Belgium	1.4					
State	0.8	11.1	1.9	13.6	45.0	-18.4
Local	0.6	14.9	3.0	-	-	-5.3
Canada	1.4					
State	0.9	5.7	-	-31.3	-	-
Local	0.5	-3.9	4.0	-	-	-
Czech Republic	6.8					
Local	6.8	30.8	-	-	-	-
Denmark	2.5					
Local	2.5	8.3	-	-	-	-
Finland	3.9					
Local	3.9	12.1	-	-	6.0	-
France	1.3					
Local	1.3	6.5	-	-	-	-
Germany	-0.1					
Länder	0.0	-0.2	-	0.7	0.8	-
Local	-0.1	4.5	-0.4	-	-	-2.4
Greece¹	0.8					
Local	0.8	13.4	-	-	-	-
Hungary	1.7					
Local	1.7	13.9	-	6.5	-	12.9
Iceland	0.4					
Local	0.4	14.6	-	-	-	-
Korea	1.3					
Local	1.3	9.6	-	11.6	-	-
Mexico	3.6					
State ²	3.6	11.1	-	-	-	-
Local						
Netherlands¹	3.6					
Local	3.6	7.2	-	-	-	-
Norway	-3.5					
Local	-3.5	-2.3	-	-	-	-
Poland¹	2.1					
Local	2.1	8.0	-	-12.4	-	-
Portugal	0.7					
Local	0.7	7.3	-	-	5.0	17.6
Spain	-7.1					
Regional	-6.6	9.7	-	15.3	-	-40.6
Local	-0.5	4.5	10.8	-	-	-17.0
Switzerland	1.5					
State	1.0	2.5	13.8	-0.4	-	-
Local	0.5	-3.1	1.9	6.4	-	-
Turkey	-19.2					
Local	-19.2	10.6	-	-	-	-
<i>Unweighted average</i>						
State	-0.2	6.4	1.0	-0.3	6.7	-8.2
Local	0.2	8.3	1.1	0.2	1.5	0.3

1. 2003 figures.

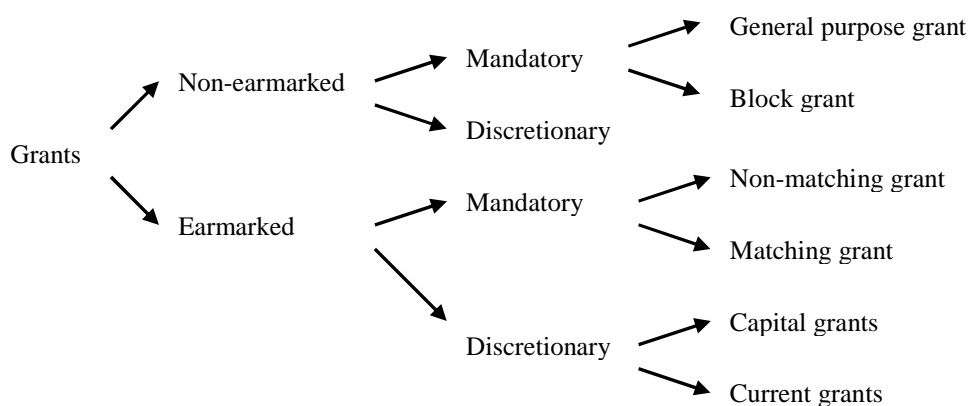
2. Including grants to local government.

Source: National sources and OECD Revenue Statistics 1965-2004, 2005 Edition.

Taxonomy of grants

30. Grant design is captured with a taxonomy that reflects the variety of grants used in OECD countries (figure 3)⁴. The main dividing line separates earmarked from non-earmarked grants where SCGs have to use earmarked grants for a specific purpose while they may spend non-earmarked grants freely. This distinction is crucial for assessing the true fiscal autonomy of SCG. Both types of grants can be divided further into mandatory and discretionary transfers, reflecting the legal background that governs their allocation. Earmarked grants may be further subdivided into matching and non-matching grants, i.e. whether the transfer is linked to SCG own expenditure or not. A final subdivision is between grants for capital expenditure and grants for current expenditure. On the non-earmarked side grants may be further subdivided into block and general purpose grants, where the latter provide more freedom of use; since both forms are unconditional, the distinction often collapses⁵. The taxonomy is consistent with the one established by the Council of Europe.

Figure 3: A taxonomy of grants



31. With a relation of roughly 60 to 40 percent, earmarked grants account for a larger portion than non-earmarked grants (table 9). This means that central governments still have a strong impact on SCG budgets and selected expenditure items. It is slightly surprising to see that earmarked grants, and hence central control, are more important for state and regional governments than for local governments. Around a third of all earmarked grants is matching, i.e. linked to SCG own expenditure. Through lowering the price of local and regional public services matching grants are thought to foster spending, but by doing this may put some pressure on both central and sub-central budgets. Around three quarters of all earmarked grants are mandatory, giving SCG more revenue security but leaving less scope for central governments to adjust expenditures rapidly to overall fiscal conditions. Only one quarter of earmarked transfers can be – at least from a legal, if not political, point of view - adjusted within short notice. Whether discretionary transfers fluctuate more than mandatory grants remains to be analyzed once data for a longer time period are available.

4. A detailed overview on the different grants types can be found in OECD (2005)

5. Details on how block grants are distinguished from general purpose grants can be found in Bergvall, Charbit and Kraan (2006).

Table 9: Grant revenue by type of grant, 2004

As percentage of total grant revenue

	Earmarked grants						Non earmarked grants			Total
	Mandatory				Discretionary		Mandatory		Discretionary	
	Matching		Non-Matching				General purpose grants	Block grants		
	Current	Capital	Current	Capital	Current	Capital				
Australia										
State	-	-	-	-	81.6	11.3	2.9	-	4.1	100.0
Local	-	-	-	-	16.7	-	83.3	-	-	100.0
Austria										
State	57.0	1.8	2.0	18.4	0.6	-	12.5	0.2	7.5	100.0
Local	39.3	3.5	7.4	34.8	1.2	-	13.7	0.1	0.0	100.0
Belgium										
State	67.2	10.9	14.7	-	1.0	0.1	6.0	-	-	100.0
Local	71.6	-	0.1	-	0.5	23.8	4.0	-	-	100.0
Canada										
State	-	-	18.6	-	-	-	81.4	-	-	100.0
Local	-	-	91.4	4.3	-	-	4.3	-	-	100.0
Czech Republic										
Local	12.4	-	-	-	74.1	13.6	-	-	-	100.0
Denmark										
Local	37.9	-	0.8	-	4.9	0.1	56.2	-	0.0	100.0
Finland										
Local	5.7	-	-	-	1.8	1.6	16.3	74.0	0.6	100.0
France										
Local	6.5	-	0.1	-	1.3	3.8	81.9	6.4	-	100.0
Greece										
Local	61.3	38.7	-	-	-	-	-	-	-	100.0
Hungary										
Local	40.1	7.4	-	-	3.8	5.6	41.9	-	1.1	100.0
Iceland										
Local	3.0	-	8.4	-	6.5	3.1	79.0	-	-	100.0
Italy¹										
Regional	-	4.7	-	4.7	10.6	8.7	71.4	-	-	100.0
Local	-	-	-	-	39.4	36.1	24.5	-	-	100.0
Korea										
Local	6.4	-	-	-	11.2	10.2	69.9	-	2.4	100.0
Mexico										
State ²	53.9	-	-	-	5.3	-	40.8	-	-	100.0
Local	-	-	-	-	-	-	-	-	-	-
Netherlands³										
Local	73.6	-	-	-	-	-	26.4	-	-	100.0
Norway										
Local	12.2	-	9.4	-	19.4	3.9	-	55.1	-	100.0
Poland										
Local	24.1	5.4	-	-	-	-	70.5	-	-	100.0
Portugal										
Local	-	-	-	-	11.4	-	85.0	-	3.6	100.0
Spain										
Regional	8.1	5.4	-	-	0.9	0.5	85.2	-	-	100.0
Local	14.3	16.4	3.1	-	-	-	66.2	-	-	100.0
Sweden										
Local	-	-	-	-	0.7	28.1	71.3	-	-	100.0
Switzerland										
State	64.8	12.9	-	-	-	-	22.2	-	-	100.0
Local	71.7	8.7	-	-	-	-	19.6	-	-	100.0
Turkey										
Local	-	-	-	-	-	77.3	-	-	22.7	100.0
<i>Unweighted average</i>										
State	31.4	4.5	4.4	2.9	12.5	2.6	40.3	0.0	1.5	100.0
Local	22.9	3.8	5.7	1.9	9.2	9.9	38.8	6.5	1.5	100.0

1. 2002 figures.

2. Including grants to local government.

3. 2003 figures.

Source : National sources.

Table 10: Grant revenue by type of grant

Change in 2000-2004, percentage points

	Earmarked grants						Non earmarked grants		
	Mandatory				Discretionary		Mandatory		Discretionary
	Matching		Non-Matching				General purpose grants	Block grants	
	Current	Capital	Current	Capital	Current	Capital			
Australia									
State	-	-	-	-	12.0	-0.2	-13.6	-	1.8
Local	-	-	-	-	9.6	-0.5	-9.1	-	-
Austria									
State	2.3	-0.7	-0.9	-1.2	0.0		0.8	0.0	-0.2
Local	0.7	-5.5	2.5	-0.2	-0.3		2.8	0.0	0.0
Belgium									
State	-6.9	9.7	-2.1		1.0	-0.3	-1.3		-
Local	-15.5	-3.2	0.0		-2.0	23.1	-2.4		-
Canada									
State	-	-	-0.6		-	-	0.6	-	-
Local	-	-	-0.4	-0.2	-	-	0.6	-	-
Czech Republic									
Local	-16.8		-	-	33.7	-16.9	-	-	-
Denmark									
Local	-1.9		0.2		0.8	0.0	0.9	-	0.0
Finland									
Local	-4.1		-	-	0.2	-1.5	16.3	-10.1	-0.8
France									
Local	-1.2		0.0		-1.1	-1.1	6.7	-3.3	-
Greece									
Local	7.7	-7.7	-	-	-	-	-	-	-
Hungary									
Local	-0.5	-1.7	-	-	-1.3	0.6	6.0	-	-3.1
Iceland									
Local	-15.4		1.2		-11.3	0.7	24.8	-	-
Korea									
Local	-2.9		-	-	0.7	-1.3	3.2	-	0.3
Mexico									
State ²	3.8		-	-	-0.4		-3.4	-	-
Local									
Netherlands¹									
Local	5.0		-	-	-	-	-5.0		-
Norway									
Local	-8.7		8.4		2.2	0.7	-	-2.6	-
Poland									
Local	-8.4	-1.0	-	-	-	-	9.4	-	-
Portugal									
Local	-	-	-	-	-5.1		1.5	-	3.6
Spain									
Regional	-35.3	0.9	-	-	0.0	0.1	34.3	-	-
Local	-1.5	3.0	0.6		-	-	-2.1	-	-
Switzerland									
State	1.4	-1.9	-	-	-	-	0.5	-	-
Local	-1.9	-2.1	-	-	-	-	3.9	-	-
Turkey									
Local	-	-	-	-		12.4	-	-	-12.4
<i>Unweighted average</i>									
State	-5.0	1.1	-0.5	-0.2	1.8	-0.1	2.6	0.0	0.2
Local	-3.6	-1.0	0.7	0.0	1.4	0.2	3.2	-0.9	0.0

1. 2003 figures.

2. Including grants to local government.

Source: National sources.

Table 11: Grants by government function, 2004

As percentage of total earmarked grants

	General public services 01	Defence 02	Public order and safety 03	Economic affairs 04	Environment protection 05	Housing and community amenities 06	Health 07	Recreation, culture, religion 08	Education 09	Social protection 10	Others	Total
Australia	-	-	0.2	9.0	-	4.9	39.6	0.1	37.5	8.4	0.3	100.0
Austria												
Belgium	-	-	24.3	21.4	-	-	0.1	-	25.3	28.9	-	100.0
Canada												
Czech Republic	9.3	0.0	0.5	6.0	0.3	7.5	2.2	0.7	54.3	17.7	1.4	100.0
Denmark												
Finland	5.5	-	0.6	17.2	1.8	0.4	12.0	16.9	27.0	18.7	-	100.0
France	16.9	1.7	8.0	13.0	2.3	22.4	-	30.8	5.0	-	-	100.0
Germany												
Greece	56.6	-	-	18.9	5.6	5.6	-	7.2	-	6.1	-	100.0
Hungary												
Iceland												
Italy ¹	16.9	-	-	40.6	3.8	-	31.7	-	7.0	-	-	100.0
Korea												
Mexico												
Netherlands	0.0	-	0.6	1.4	1.1	8.6	5.3	0.5	22.4	50.2	9.9	100
Norway	79.3	0.2	0.1	-	0.0	0.1	14.0	-	4.7	1.7	-	100.0
Poland	3.1	3.5	16.2	4.4	8.9	5.5	10.8	5.2	17.9	24.6	-	100.0
Portugal		3.2		26.0	-				61.3		9.5	100.0
Spain	42.4	-	0.2	35.4	0.6	3.2	4.7	0.9	2.5	10.0	-	100.0
Sweden	3.5	1.1	0.0	6.2	3.8	-	56.3	-	29.1	-	-	100.0
Switzerland												
Turkey	43.2	-	-	14.2	19.1	22.2	-	0.9	-	0.5	-	100.0
<i>Unweighted average</i>	20.0	0.5	3.6	15.3	3.4	5.7	17.0	4.5	16.6	11.9	1.5	100.0

1. 2002

Source: National sources.

32. Grant design has evolved little from 2000 to 2004, except for the strong increase in the share of earmarked matching grants to states and local governments, at the expense of almost any other transfer type (table 10). This evolution could mean that matching grants indeed exert some pressure on government budgets. The share of non earmarked grants has slightly increased, pointing at more fiscal leeway for SCG, whereby the local level has benefited more than the state and regional level. Structural change varies widely across countries. In Belgium discretionary grants heavily increased at the expense of mandatory grants at the local level. In the Czech Republic discretionary grants also increased markedly. The Spanish regions increased their share of non earmarked grants.

Grants by government function

33. Grants are used for different policy areas or government functions (table 11). The National Accounts divide government activities into ten functions in the so-called Classification of Functions of Government (COFOG), and this division is also applied to intergovernmental grants. Data are available only for earmarked grants because unconditional grants are not tied to specific government functions. While National Accounts data are available for eight countries, the questionnaire asked all countries to provide data with the same precision as provided by the National Accounts. In the end the data of eleven countries could be used to assess and compare the functional structure of intergovernmental grants.

34. The category “general public services” accounts for the largest, rather unspecific share of intergovernmental transfers. Education is the second largest category, pointing at the weight of local and regional governments in providing primary and secondary education, with central government retaining considerable control over funding and regulation. “Economic affairs” is the third largest category, largely reflecting the weight of shared responsibilities in local and regional development policy. Again the grant structure varies widely, reflecting the different responsibility assignments and funding arrangements in countries. In general, except for “defence” and “public order and safety”, some degree of responsibility sharing and overlapping characterizes most government functions. However, the low number of country responses does not yet allow for stringent conclusions.

Fiscal autonomy: a multi-faceted concept

Fiscal autonomy indicator set

35. Fiscal autonomy is multi-faceted and must be assessed using several distinct indicators. The following table provides a summary of all autonomy indicators developed in the course of this document (table 12). Indicators include the share of tax revenue allocated to sub-central governments, the discretion over those taxes, the share of transfers allocated to sub-central governments and the percentage of earmarked transfers. Although not treated in this document, two indicators for fiscal rules are added, reflecting, respectively, the right to run deficits and the right to borrow (see box).

“Fiscal rules”: their impact on sub-central government autonomy

Rules constraining the discretionary power of sub-central budget policymakers have become quite widespread among OECD economies. While fiscal rules for sub-central governments can be a means to achieve sustainable long-term aggregate finance, they reduce the power governments have over their own budget. The same fiscal rules can therefore be viewed from both a “stringency” and an “autonomy” perspective; with a more stringent rule assumed to reduce the discretion a SCG has over its budget or selected budget items.

In order to assess the extent SCG fiscal autonomy is constrained by fiscal rules, two indicators for fiscal rules stringency were calculated for the Fiscal Network (Sutherland, Price and Joumard, OECD Economics Department Working Paper 465). A simple linear transformation of these indicators yields “fiscal rule autonomy” indicators. The “fiscal rule autonomy” indicators have the same dimensions as the other fiscal autonomy indicators shown in table 12 and the same meaning, i.e. the higher the value, the more lenient the respective rule and the higher sub-central budget autonomy.

Table 12: Summary of fiscal autonomy indicators

	SGG tax revenue/ Total tax revenues	Discretion on rates and reliefs / Total SCG tax revenues	Total grants/ Total tax revenues	Non earmarked grants / Total grants	Budget and deficit autonomy	Borrowing autonomy	SCG autonomous tax revenue / Total tax revenue
Australia	31.4	58.8	11.0	13.1			18.5
States	28.4	54.4	9.8	7.1	10.0	62.5	15.4
Local	3.0	100.0	1.3	83.3	10.0	62.5	3.0
Austria	18.4	7.6	15.2	19.0			1.4
States	8.8	7.0	11.5	20.2	40.0	100.0	0.6
Local	9.6	8.1	3.8	13.9	40.0	100.0	0.8
Belgium	27.8	69.7	11.1	5.3			19.4
States	22.8	63.8	3.9	6.0			14.6
Local	5.0	96.4	7.1	4.0			4.8
Canada	44.1	94.1	17.5	43.9			41.5
Provinces	35.5	93.3	9.0	81.4			33.1
Local	8.6	97.4	8.5	4.3			8.4
Czech Republic	12.5	9.6	12.4	0.0			1.2
Local	12.5	9.6	12.4	0.0	70.0	62.5	1.2
Denmark	35.6	90.7	13.4	56.3			32.3
Local	35.6	90.7	13.4	56.3	0.0	25.0	32.3
Finland	21.5	89.9	12.1	90.8			19.3
Local	21.5	89.9	12.1	90.8	60.0	75.0	19.3
France	10.0	89.8	8.6	88.3			8.1
Local	10.0	89.8	8.6	88.3	60.0	37.5	8.1
Germany	28.7	14.2	12.8	43.4			4.1
Länder	21.8	2.4	5.9	42.5	70.0	87.5	0.5
Local	7.0	51.1	7.0	44.4	0.0	62.5	3.6
Greece	0.9	64.6	4.1	0.0			0.6
Local	0.9	64.6	4.1	0.0			0.6
Hungary			16.7	43.1			
local			16.7	43.1			
Iceland	25.2	91.2	1.9	79.0			23.0
Local	25.2	91.2	1.9	79.0	100.0	62.5	23.0
Italy	16.4	64.7	19.1	55.1			10.6
Regional	11.3	58.8	12.7	71.4			6.6
Local	5.2	77.6	6.4	24.5			4.0
Japan	26.0	79.8					20.8
Local	26.0	79.8			70.0	50.0	20.8
Korea	18.9	64.3	34.4	72.3			12.1
Local	18.9	64.3	34.4	72.3	60.0	12.5	12.1
Mexico	3.4	100.0	43.4	40.8			3.4
States	2.4	100.0	43.4	40.8			2.4
Local	1.0	100.0	0.0				1.0
Netherlands	3.6	99.2	27.8	26.4			3.6
Local	3.6	99.2	27.8	26.4	0.0	75.0	3.6
Norway	12.9	100.0	11.3	55.1			12.9
Local	12.9	100.0	11.3	55.1	40.0	50.0	12.9
Poland	17.5	23.2	37.9	70.5			4.1
Local	17.5	23.2	37.9	70.5	80.0	37.5	4.1
Portugal	6.0	44.0	7.9	88.6			2.6
Local	6.0	44.0	7.9	88.6	60.0	37.5	2.6
Spain	26.6	64.8	19.4	79.9			17.3
Regions	18.1	58.4	14.0	85.2	0.0	25.0	10.6
Local	8.5	78.6	5.5	66.2	0.0	37.5	6.7
Sweden	32.1	100.0	9.4				32.1
Local	32.1	100.0	9.4		40.0	100.0	32.1
Switzerland	43.1	94.0	23.4	21.4			40.6
States	27.0	90.4	16.1	22.2	70.0	75.0	24.4
Local	16.2	100.0	7.2	19.6	60.0	37.5	16.2
Turkey	6.5	0.0	15.8	22.7			0.0
Local	6.5	0.0	15.8	22.7	70.0	25.0	0.0
United Kingdom	4.5	100.0					4.5
Local	4.5	100.0					4.5
<i>Unweighted Average</i>							
States	19.6	58.7	14.0	41.9	38.0	70.0	12.0
Local	12.4	73.1	11.3	45.4	45.6	52.8	9.4

Source: National sources and OECD, Revenue Statistics 1965-2004, 2005 Edition.

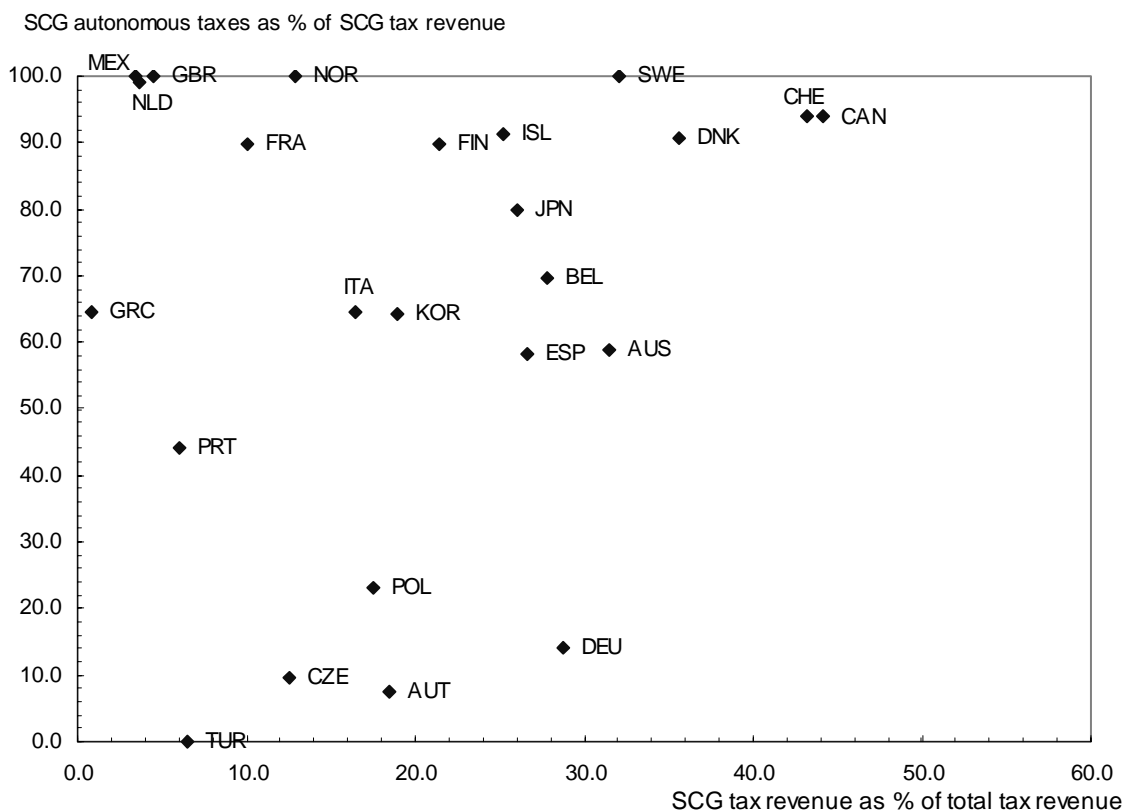
36. Altogether, the table comprises six indicators capturing fiscal autonomy from different angles. The seventh indicator “share of autonomous SCG tax revenue” is the product of the SCG own tax revenue share and the autonomy over those taxes; this product comes closest to what one could call a composite indicator of revenue autonomy. Correlation between all indicators is very weak, and statistical concepts like factor analysis fail to produce a single “summary indicator of sub-central fiscal autonomy”⁶.

A few (non)correlations among fiscal autonomy indicators

37. As described above, the various indicators for fiscal autonomy are not or only weakly correlated, pointing at the multidimensionality of fiscal autonomy and the great diversity of fiscal institutions in OECD countries. Some of these non-correlations are interesting from a policy perspective since they may either support or contradict a number of beliefs on the relationship between policy variables in the area of decentralized public finance. The following scatter diagrams show a number of simple two-dimensional relationships.

Figure 4: Relationship between fiscal autonomy indicators

Chart 1. Subcentral tax share and subcentral tax autonomy



6. This supports the findings of Sutherland, Price and Joumard who found very little correlation between indicators for fiscal rules (Sutherland, Price and Joumard, 2005).

Chart 2. Subcentral tax share and size of the grant system

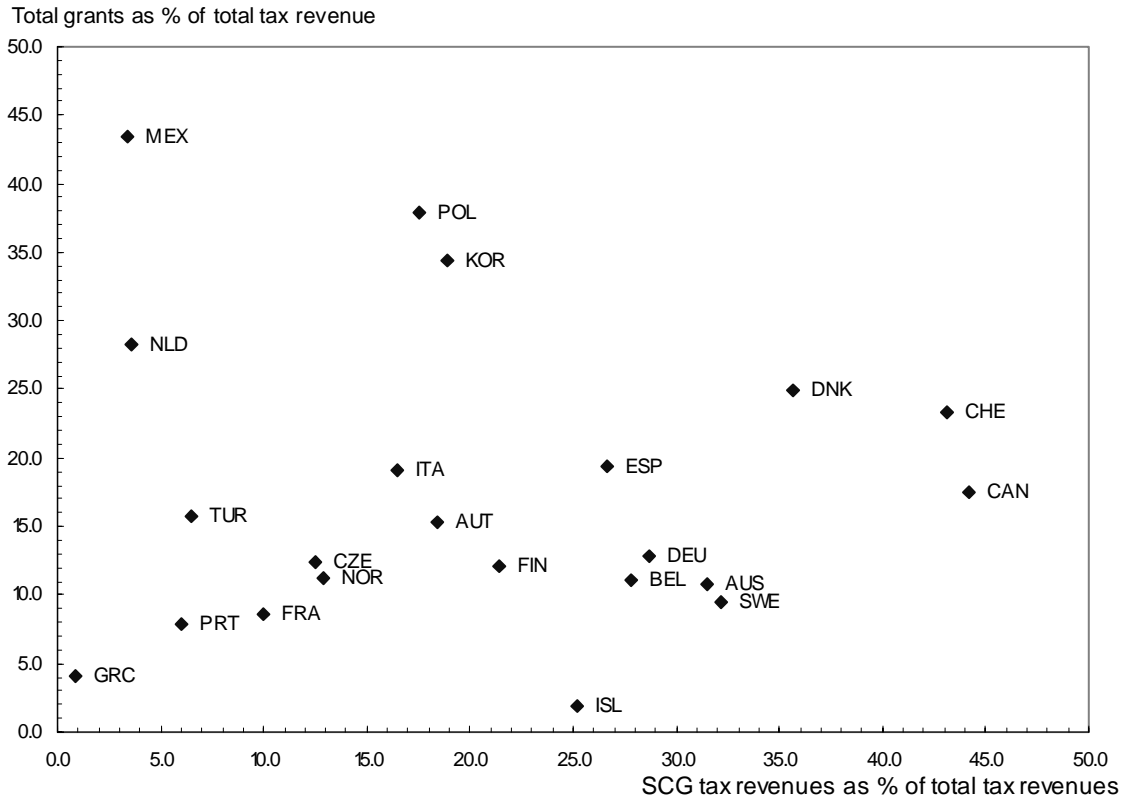
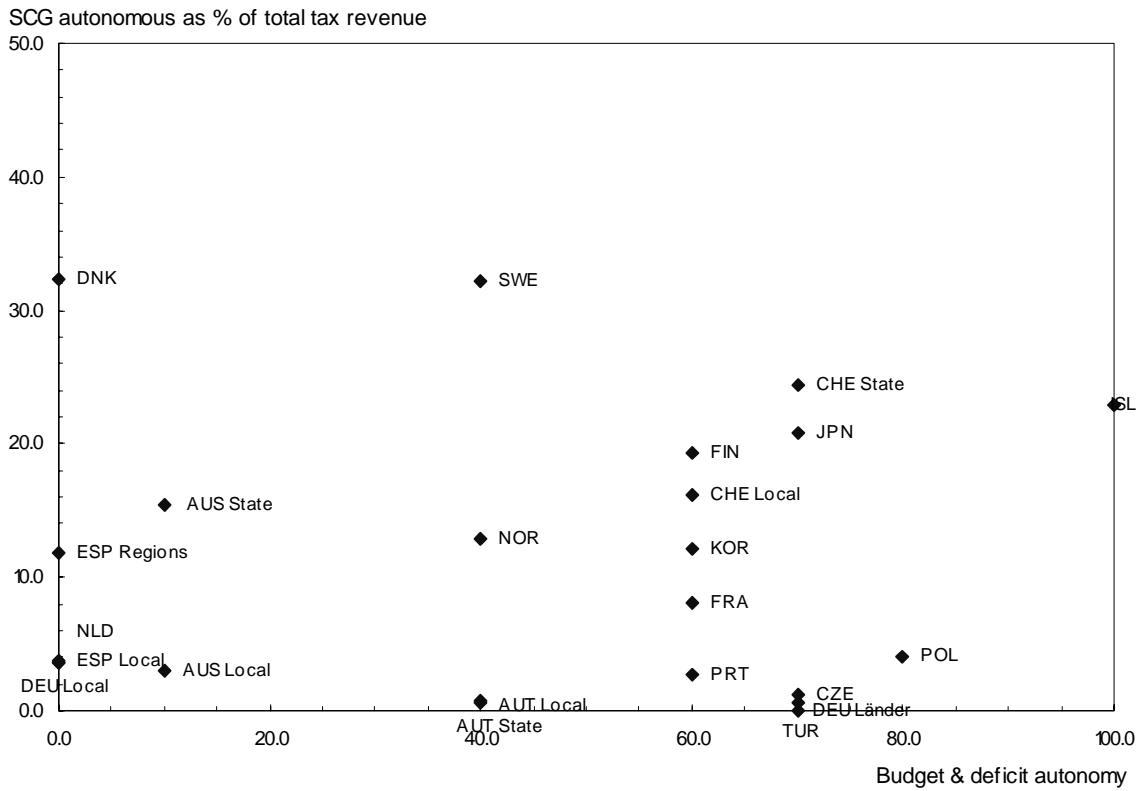


Chart 3. Subcentral tax share and budget autonomy



- The first scatter diagram shows the relationship between the share of sub-central tax revenue and the degree of autonomy over these taxes. The share of SCG's own tax revenue is hardly related to their autonomy over those taxes. While in some countries SCGs have wide discretion over a small tax base, in some other countries with large tax sharing arrangements autonomy has been reduced to virtually zero. The picture again supports the view that a simple share of tax revenue is a poor measure to assess true fiscal autonomy of sub-central governments and that for analytical purposes – e.g. assessing the impact of decentralization on aggregate finance - more sophisticated indicators should be used.
- The second scatter diagram shows the relationship between the share of sub-central tax revenue and the size of the grant system. While fiscal policy could substitute own tax revenue for intergovernmental grants and vice versa, there is actually no relationship between the two fiscal arrangements. While in some countries small local tax revenue meets with a small grant system, others combine large local tax revenue with a large fiscal gap and an extended transfer system to cover it. Only unconditional grants (not shown in the figure) and own tax revenue seem to be substitutes, which points to the close relationship between tax sharing and grants arrangements. Policy makers might actually be interested to know how and under what conditions increased sub-central tax autonomy can reduce the need for intergovernmental transfers. Panel data and a deeper look into the design of intergovernmental fiscal institutions could reveal the dynamics between SCG tax revenue and grants.
- The third scatter diagram shows the relationship between the share of sub-central tax revenue and the extent to which SCG are allowed to run deficits. This figure actually assesses whether countries with high sub-central taxing power apply stricter rules on fiscal behaviour. The lack of a close relationship suggests that in practice fiscal rules are neither a substitute nor a complement for SCG autonomy. Some countries grant SCG large tax autonomy but little budget autonomy, others are likely to do the reverse, while some countries restrict both forms of fiscal autonomy. Large local and regional tax autonomy is neither coupled to strict nor to lenient fiscal rules.

38. Any conclusion with respect to the relationship between different fiscal autonomy indicators must be taken with great care since those indicators represent only one point in time. To assess the dynamics between different autonomy indicators one needs to observe fiscal design and its outcome over several time periods. What those indicators primarily say is that the design of fiscal relations across levels of governments varies greatly across countries and that no single pattern of local and regional finance has yet emerged.

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