



*OECD Network on Fiscal Relations Across Levels of Government*

**FINDING THE DIVIDING LINE BETWEEN TAX SHARING AND  
GRANTS: A STATISTICAL INVESTIGATION**

Hansjörg Blöchliger and Oliver Petzold.

**TABLE OF CONTENTS**

FINDING THE DIVIDING LINE BETWEEN TAX SHARING AND GRANTS: A STATISTICAL INVESTIGATION .....3

1. Introduction.....3

2. Why delineating tax sharing from grants? .....3

3. Current practice.....3

4. A new test to classify SCG revenue arrangements .....4

5. Test results .....5

6. Conclusions.....9

REFERENCES .....10

ANNEX .....11

**Boxes**

Box 1. The practice of statistical manuals .....11

## **FINDING THE DIVIDING LINE BETWEEN TAX SHARING AND GRANTS: A STATISTICAL INVESTIGATION**

### **1. Introduction**

1. Tax sharing and intergovernmental grants are two sub-central funding arrangements that are often difficult to disentangle. The dividing line is not drawn uniformly across OECD countries or across time, and rules established in National Accounts, Revenue Statistics and others give incomplete guidance. Moreover, tax sharing arrangements may differ according to how tax revenue is distributed across individual jurisdictions. In order to ensure that fiscal arrangements are recorded properly and on a comparable basis, a set of clear criteria to delineate them is required. This section presents the results of a test that was applied in order to find the dividing line a) between tax sharing and intergovernmental grants and b) between different categories of tax sharing. The test was performed using questionnaire responses and builds on earlier documents on the same topic presented to Fiscal Network Delegates in 2006 and 2008.

### **2. Why delineating tax sharing from grants?**

2. Both tax sharing arrangements – defined as category “d” in the tax autonomy classification (Blöchliger and King, 2006) – and intergovernmental grants provide resources to sub-central governments. Drawing the dividing line between the two fiscal arrangements proves difficult, however. On the one hand, many tax sharing formulae have become complex and break the link between what a SCG generates 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 look more like a share in the national tax yield. What counts as tax sharing in one country may count as intergovernmental grant in another; in some countries, different central government bodies have even adopted different views on how to classify SCG revenue arrangements.

3. Why is it important to distinguish different SCG revenue arrangements? The reasons are both fiscal and economic in nature. From a fiscal autonomy point of view, resources emanating from tax sharing are thought to convey more power and autonomy to SCGs than intergovernmental grants. Also in a tax sharing system, SCGs tend to bear more financial risk in terms of tax revenue losses or fluctuations than if their revenue was based on grants. From an economic point of view, SCGs’ incentives - *e.g.* to develop their own tax base - may differ considerably depending on how revenues are allocated across individual SCGs. SCGs may adopt different economic and fiscal policies to the extent that their fiscal revenues are the result of economic activities on their territory. The current lack of clarity both limits the comparability of fiscal autonomy indicators and reduces the strength of fiscal impact analysis across countries.

### **3. Current practice**

4. The National Accounts (NA), the European System of National and Regional Accounts (ESA), the Government Finance Statistics (GFS), the Revenue Statistics (RS) and the Council of Europe (CE) provide some guidance on the “tax sharing versus grants” issue. Most manuals apply the concept of “collecting” and “beneficiary” governments in order to distinguish between a SCG tax and an intergovernmental grant. Depending on the authority SCGs have over the share of tax revenue collected by

central government, this share is either regarded as a SCG tax or else a grant. Criteria vary across manuals and there are no paragraphs targeted at the specific question of drawing a line between tax sharing and grants. To sum up, the various manuals apply the following criteria (excerpts of each statistical manual are provided in the Annex):

- *NA*: The revised NA framework, following GFS guidance closely, defines criteria for tax sharing, namely SCG's right to tax, the un-conditionality of the receipts, and the extent to which SCGs can co-determine – together with central government – the tax base and tax rates.
- *ESA*: The ESA framework recommends that revenues which are automatically transferred should be treated as taxes or tax sharing.
- *GFS*: The GFS defines criteria for tax sharing, namely SCG's right to tax, the un-conditionality of the receipts, and the extent to which SCGs can co-determine – together with central government – the tax base and tax rates.
- *RS*: The RS recommends to treat arrangements as tax sharing when SCGs have some power over the tax, when a fixed share of tax receipts collected on its territory are unconditionally and automatically transferred or when the collecting government has no discretion on the amount or the distribution of the tax.
- *CE*: The Council of Europe describes tax sharing as an arrangement where SCGs have the power to set tax rates or where SCG revenues are proportional to total tax revenue.

5. The above criteria do not always help disentangle different arrangements. First, the criteria differ across manuals, so the different databases may treat the same fiscal arrangement differently. Second, some criteria are rather vague and require evaluating the rules and regulations shaping financial arrangements, which can be cumbersome in some countries. Third, some paragraphs require that criteria be *cumulatively* fulfilled (logical “and”), while others require that only one criterion be fulfilled (logical “or”), which can lead to inconsistent results. Fourth, most manuals lack a clear criterion on *individual* proportionality, i.e. whether an individual SCG's share is closely related to what it generated on its territory or whether there is some in-built redistribution. Since horizontal tax revenue redistribution may both change SCG fiscal autonomy and alter SCG's incentives, individual proportionality could be an important criterion to draw the dividing line between different tax sharing arrangements.

#### 4. A new test to classify SCG revenue arrangements

6. What follows is a test that helps classify the various SCG revenue arrangements. The test has a double purpose: Its first purpose is to assess whether the current dividing line between tax sharing and grants – as established by National Accounts and Revenue Statistics – is still accurate. Its second purpose is to classify different variants of tax sharing and to establish the dividing line between them. The test uses four (4) criteria that examine how a certain fiscal arrangement generates and distributes revenue across SCGs. The four test criteria – and the underlying questions - are as follows:

- *Risk sharing*: Is the amount of revenue allocated to the sub-central level strictly related to total tax revenue (*e.g.* as a given share of annual tax revenue), *i.e.* does the sub-central level of government fully bear the risk of tax revenue slack and fluctuations?
- *Un-conditionality*: Is sub-central government free to use the revenue allocated, *i.e.* are the revenues unconditional (non-earmarked)?

- *Formula stability*: Is the revenue share between the central and the sub-central government predetermined in advance and not changed in the course of a fiscal year?
- *Individual proportionality*: Is the revenue share of *each* sub-central government strictly related to what it generates on its own territory, *i.e.* is there no horizontal redistribution or fiscal equalisation across sub-central governments?

7. The first three criteria refer to the relationship between central and sub-central government (vertical relationship), the fourth criterion refers to the relationship between sub-central governments (horizontal relationship). The test should be applied to all arrangements classified under the “d” category in the tax autonomy classification and to all intergovernmental grants in the grants classification. Taxes classified under categories “a”, “b” and “c” are *always* considered sub-central taxes and not grants. Taxes under the “e” category are *always* considered tax sharing fulfilling the individual proportionality criterion<sup>1</sup>.

8. The test is run and arrangements are classified as follows:

- If an arrangement fulfils all four criteria, it will be referred to as *strict tax sharing*.
- If an arrangement fulfils the first three criteria but not the fourth (individual proportionality), it will be referred to as *tax sharing*.
- If an arrangement does not fulfil the first three criteria, it will be referred to as *intergovernmental grant*.

## 5. Test results

9. Test results are shown in figure 2a) and b). 21 countries altogether provided an answer.

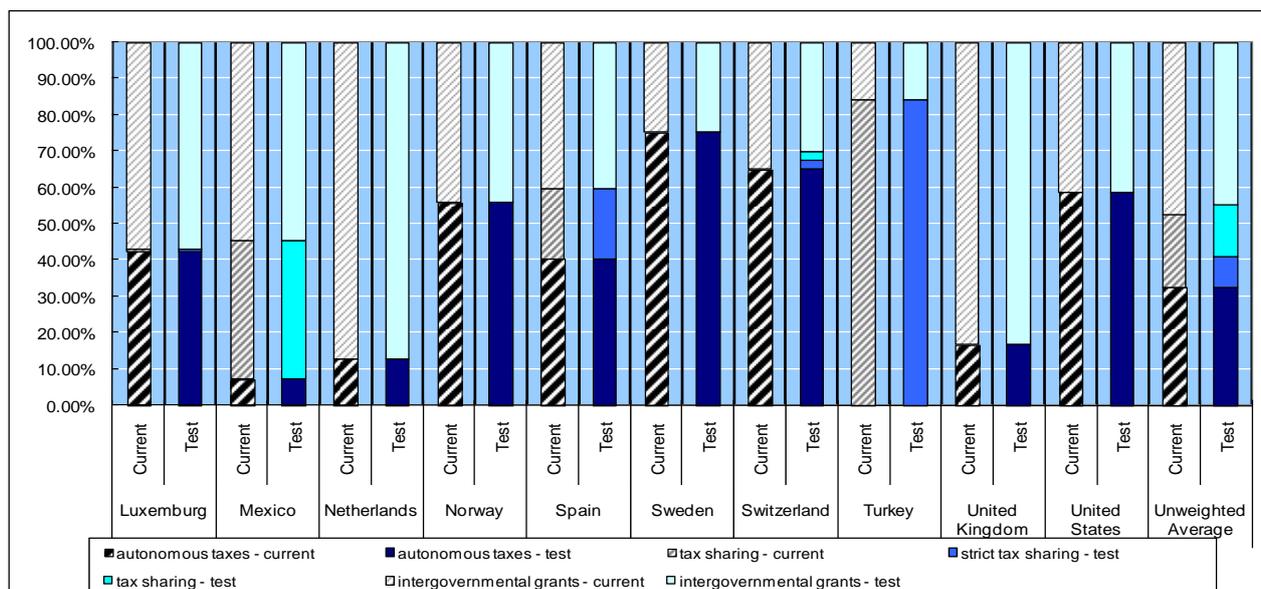
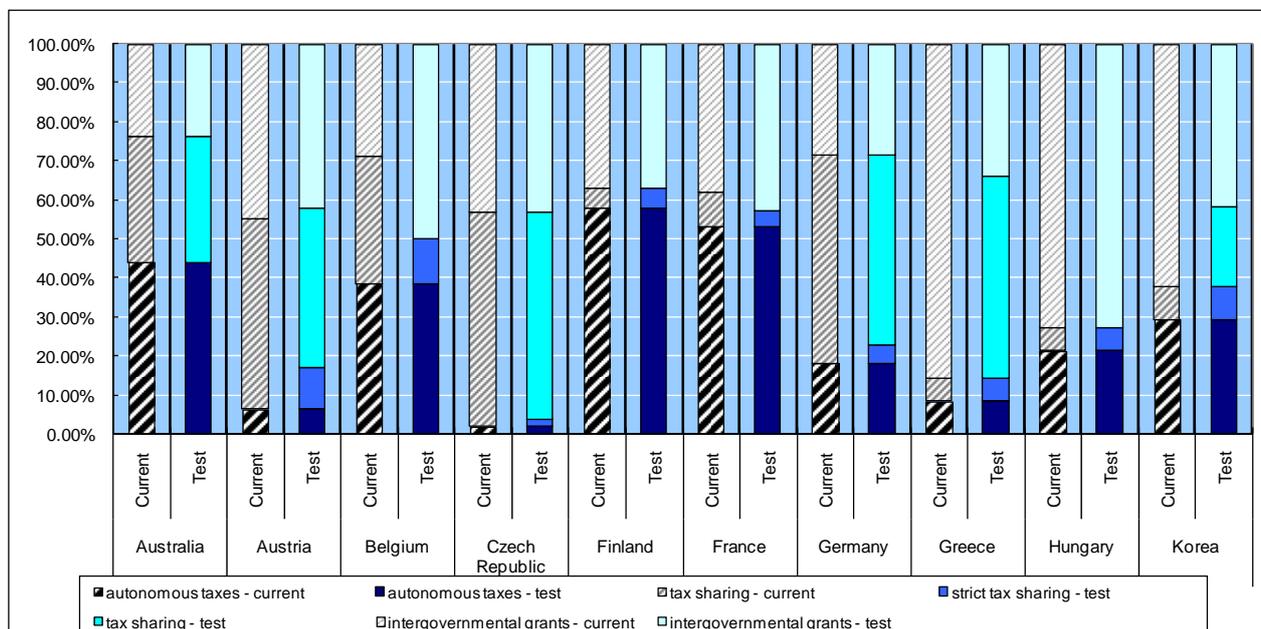
- Figure 2a) shows the revenue mix in percent of total SCG revenue. Each country is represented by two columns. The column to the right shows the classification according to the test where revenues are divided into autonomous taxes, strict tax sharing, tax sharing, and grants. The column to the left shows the current classification according to National Accounts, Revenue Statistics and the Fiscal Network database dividing revenues into autonomous taxes, tax sharing, and grants.
- Figure 2b) shows the revenue mix in percent of general government revenue. To facilitate readability, only the new classification is shown.

---

<sup>1</sup> The “individual proportionality” criterion may require some further clarifications. First, arrangements where tax receipts are distributed on the basis of a close proxy should fulfil the criterion (e.g. a consumption tax whose distribution relies on household income or a corporate income tax whose revenue is distributed according to the number of employees). The choice of proxies matching the criterion should be discussed, however. Second, many countries have tax sharing-*cum*-fiscal equalisation arrangements where it is difficult to decide whether the equalisation part is “separate” from tax sharing (in which case the individual proportionality criterion would hold) or whether it is “connected” (in which case it would not hold), so borderline cases may still lead to an unequal treatment of broadly identical arrangements.

Figure 1. The dividing line between tax sharing and intergovernmental grants

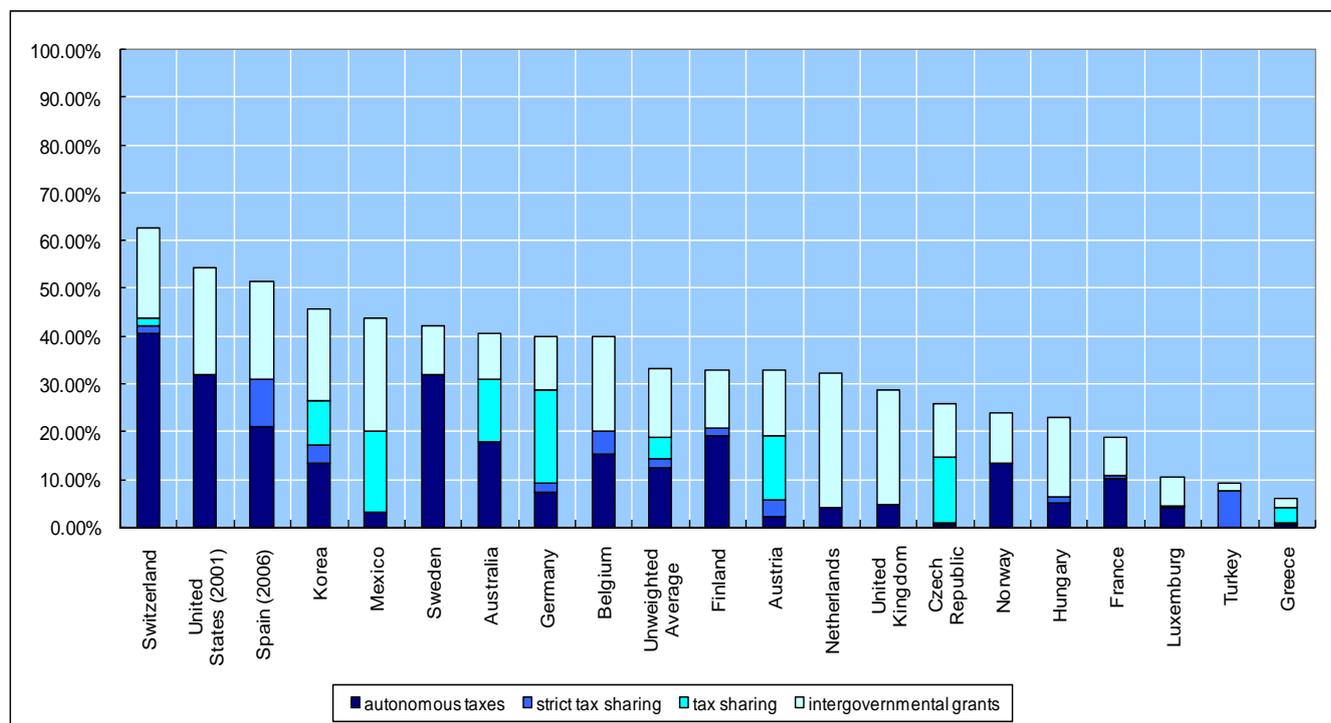
a) In percent of sub-central revenue



Note: The column "current" refers to the classification as used by National Accounts, Revenue Statistics and the Fiscal Network Database. The column "test" refers to the classification resulting from the test described in this document.

Source: questionnaire responses

## b) In percent of general government revenue



Note: The classification results from the test described in this document.

Source: questionnaire responses

10. The results of figure 1 can be summarised as follows:

- More tax sharing arrangements pass under “tax sharing” than under “strict tax sharing”. What is surprising is that under the test results slightly more arrangements are classified as tax sharing than under the definitions currently applied, following a reclassification of grants as “tax sharing” in two countries. Altogether, on average and for the countries under scrutiny, sub-central revenue is composed of 33 percent of autonomous taxes, 8 percent of strict tax sharing, 14 of tax sharing and 45 percent of intergovernmental grants.
- The prevalence of “tax sharing” can be traced back to the tax sharing-*cum*-fiscal equalisation arrangements such as in Australia, Austria, the Czech Republic and Germany. Here tax sharing fulfils the risk sharing, stability and un-conditionality criteria, but since tax revenues are redistributed from affluent/low cost to poorer/high cost SCGs, the individual proportionality criterion does not hold. Belgian and Mexican tax sharing is not explicitly equalising, but tax revenue for a single SCG is again not proportional to what was generated on its territory.
- There are two countries where an intergovernmental grant would pass as “tax sharing”, which are Korea and Switzerland. These arrangements redistribute a fixed share of specific tax revenues to SCGs subject to both fiscal capacity and needs criteria. The sharing formula is stable and revenues are non-earmarked. Japan’s “Local Allocation Tax” resembles the Korean and Swiss arrangements and is also likely to pass the test, but a final assessment is lacking yet.

11. A few more detailed country examples might showcase the results:

- **Australia:** The Australian General Sales Tax (or Value Added Tax) is a tax sharing arrangement whereby 100 percent of total tax revenue is allocated to the States. The GST revenue is “freely available for use by the State and Territories”. The GST is distributed to the States based on the principle of horizontal fiscal equalisation, levelling out differences in potential revenue raising capacity and needs entirely. The GST is hence “tax sharing” since it includes fiscal equalisation violating the individual proportionality criterion.
- **France:** The French *Départements* and *Régions* are entitled to a share of the national petrol tax and of a tax on insurances. The share for each SCG is calculated on the basis of needs and former expenditures of the national government for devolved responsibilities. If the amounts allocated to an individual SCGs falls below a certain threshold, the sub-central share is increased, so there is no SCG risk sharing and – for the tax on insurance - no individual proportionality. The arrangements do not fulfil the first three criteria and are hence reclassified as grants.
- **Germany:** Tax sharing arrangements in Germany cover income taxes and the Value Added Tax. All *Länder* together are entitled to a 50 percent share of the income tax revenue, while their VAT share is periodically negotiated with central government. Tax revenues are first allocated on the basis of what each *Land* (roughly) collected on its territory (individual proportionality), but in a second step horizontal fiscal equalisation redistributes these tax revenues to reduce differences in revenue raising capacity. The German arrangement is hence “tax sharing” since the individual proportionality criterion is not fulfilled.
- **Korea:** A part of local government revenue in Korea is provided by the “Local Allocation Tax” (LAT). The LAT is a fixed share of central government tax revenue, and the share is periodically adjusted. The LAT is redistributed across local governments taking a number of need criteria into account. In the current classification the LAT is classified as a grant. Under the test described above the LAT would classify as “tax sharing” since the three criteria risk sharing, formula stability, and un-conditionality are fulfilled.
- **Mexico:** Mexican *estados* and municipalities are entitled to 20 percent of central government tax revenue. This sharing mechanism is called the “Fondo General de Participaciones”. The Fund was established in the 1980s when it replaced a set of autonomous state level taxes. The state’s share is distributed on the basis of foregone SCG own tax revenues and a number of needs criteria. States and municipalities can use their share freely. The Mexican system would hence be classified as “tax sharing” since the individual proportionality criterion does not hold.
- **Spain:** The Spanish *Comunidades Autonomas* (regions) are entitled to a 35 percent share of the Value Added Tax (VAT) and 40 percent of excise taxes. Tax revenue is allocated across the regions on the basis of an index of consumption, which can be seen as a proxy for VAT and excise tax revenue generated in a region. The Spanish system would hence classify as “strict tax sharing” since the VAT share allocated to *each* region is proportional to what that region generated on its territory (or, more precisely, it is proportional to what households consumed in that region).
- **Switzerland:** Swiss cantons receive a share of 17 percent in the federal income tax based on what they generated on their territory and a further 13 percent inversely related to fiscal capacity (fiscal equalisation). Both arrangements are currently classified as grants. The 17

percent share would classify as “strict tax sharing” while the 13 percent would classify as “tax sharing”. The cantonal share in the federal fuel excise taxes remains a grant since it is earmarked for road investment and maintenance.

## 6. Conclusions

12. Sub-central funding arrangements, particularly tax sharing arrangements and intergovernmental grants, are often difficult to disentangle. Statistical databases, including Fiscal Network statistics, do not always provide coherent and comparable data on these arrangements. To overcome such data weaknesses, a test was applied on all tax sharing systems and intergovernmental grants. This test, using four (4) criteria, can help distinguish the various SCG revenue arrangements. Applying the four test criteria allows drawing a coherent und comparable dividing line:

- between tax sharing arrangements and intergovernmental grants and,
- within tax sharing arrangements, between strict tax sharing and tax sharing

13. The following conclusions are provisionally drawn:

- The dividing line between “tax sharing” and “intergovernmental grants”, as shown by databases such as National Accounts or Revenue Statistics, remains unchanged for most countries. A few countries however would have to reclassify some tax sharing as intergovernmental grants or vice versa.
- Tax sharing is sub-divided into “strict tax sharing” and “tax sharing”, depending whether the tax sharing arrangement fulfils the individual proportionality criterion or not. No reclassification in statistical databases would be currently needed.

## REFERENCES

Bergvall, D., C. Charbit, D. Kraan, and O. Merk (2006): “Intergovernmental grants and decentralized public spending”, *OECD Journal of Budgeting*, Paris.

Blöchliger H and D. King (2006): “Less than you thought: the fiscal autonomy of sub-central governments”, *OECD Economic Studies* 43, Paris

Council of Europe (2005): “A European definition of shared taxes”, *Recommendation Rec(2005)1 of the Committee of Ministers to member states on the financial resources of local and regional authorities*, Strasbourg

OECD (1999): *Taxing powers of state and local government*, Tax policy studies No 1, Paris

OECD (2007): *National Accounts of OECD Countries 1993-2006*, Paris

OECD (2008): “Tax sharing or intergovernmental grant? A test for finding the dividing line“, Paris (OLIS document COM/CTP/ECO/GOV(2008)2)

OECD (2007): *Revenue Statistics 1965-2006*, Paris

## ANNEX

**Box 1. The practice of statistical manuals**

Statistical manuals have established rules meant to help distinguishing between tax sharing and intergovernmental grants. In the following paragraphs the rules applied in the National Accounts (NA), the European System of Accounts (ESA), the IMF Government Finance Statistics (GFS), the Revenue Statistics (RS) and the Council of Europe (CE) are shown. The numbers in brackets refer to the manual's own numbering.

*1. National Accounts (NA) (revised draft version 2007)*

(3.69) Many service activities consist of one unit arranging for a transaction to be carried out between two other units in return for a fee from one or both parties to the transaction. In such a case, the transaction is recorded exclusively in the accounts of the two parties engaging in the transaction and not in the accounts of the third party facilitating the transaction. Some service output may be recognized with the facilitator. For example, purchases a commercial agent makes under the orders of, and at the expense of, another party are directly attributed to the latter. The accounts of the agent only show the fee charged to the principal for the facilitation services rendered.

(3.70) A second example is the collection of taxes by one government unit on behalf of another. The System follows the guidance of GFSM2001 as follows. In general, a tax is attributed to the government unit that

- exercises the authority to impose the tax (either as a principal or through the delegated authority of the principal),
- has final discretion to set and vary the rate of the tax, and
- has final discretion over the use of the tax proceeds.

(3.71) Where an amount is collected by one government for and on behalf of another government, and the latter government has the authority to impose the tax, set and vary its rate, and determine the use of the proceeds, then the former is acting as an agent for the latter and the tax is reassigned. Any amount retained by the collecting government as a collection charge should be treated as a payment for a service. Any other amount retained by the collecting government, such as under a tax-sharing arrangement, should be treated as a current grant. If the collecting government was delegated the authority to set and vary the rate as well as decide on the ultimate use of the proceeds, then the amount collected should be treated as tax revenue of this government.

(3.72) Where different governments jointly and equally set the rate of a tax and jointly and equally decide on the distribution of the proceeds, with no individual government having ultimate overriding authority, then the tax revenues are attributed to each government according to its respective share of the proceeds. If an arrangement allows one government unit to exercise ultimate overriding authority, then all of the tax revenue is attributed to that unit.

(3.73) There may also be the circumstance where a tax is imposed under the constitutional or other authority of one government, but other governments individually set the tax rate in their jurisdictions and individually decide on the use of the proceeds of the tax generated in their jurisdictions. The proceeds of the tax generated in each respective government's jurisdiction are attributed as tax revenues of that government.

*2. European System of Accounts (ESA 1995)*

(4.118) Current transfers within general government do not include transactions on behalf of another unit; these are recorded only once in the accounts, in the resources of the beneficiary unit on whose behalf the transaction is made. This situation arises particularly when a government agency (e.g. a central government department) collects taxes which are automatically transferred, in total or in part, to another government agency (e.g. a local authority). In this case, the tax receipts destined for the other government agency are shown as if they were collected directly by that agency and not as a current transfer within general government. This solution applies *a fortiori* in the case of taxes destined for another government agency which take the form of additional rates superimposed on taxes levied by central government. Delays in remitting the taxes from the first to the second government unit give rise to entries under "other accounts receivable/payable" in the Financial Account.

On the other hand, transfers of tax receipts which form part of a block transfer from central government to another government agency are included in current transfers within general government. These transfers do not correspond to any specific category of taxes and they are not made automatically but mainly through certain funds (county and local authority funds) in accordance with scales of apportionment laid down by central government.

### 3. IMF Government Finance Statistics (GFS):

(5.24) In some cases, one government unit collects taxes and then transfers some or all of them to another government unit. Depending on the arrangement, the taxes passed on to the second government unit may be reassigned as tax revenue of that unit or they can be recorded as tax revenue of the collecting unit and a grant from that unit to the second government unit.

(5.25) In general, a tax is attributed to the government unit that *a*) exercises the authority to impose the tax (either as a principal or through the delegated authority of the principal); *b*) has final discretion to set and vary the rate of the tax; and *c*) has final discretion over the use of the funds.

(5.26) Where an amount is collected by one government for and on behalf of another government, and the latter government has the authority to impose the tax, set and vary its rate, and determine the use of the proceeds, then the former is acting as an agent for the latter and tax is reassigned. Any amount retained by the collecting government as a collection charge should be treated as a payment for a service. Any other amount retained by the collecting government, such as under a tax-sharing arrangement, should be treated as a current grant. If the collecting government was delegated, the authority to set and vary the rate as well as decide on the ultimate use of the proceeds, then the amount collected should be treated as tax revenue of this government.

(5.27) Where different governments jointly and equally set the rate of a tax and jointly and equally decide on the distribution of the proceeds, with no individual government having ultimate overriding authority, then the tax revenues are attributed to each government according to its respective share of the proceeds. If an arrangement allows one government unit to exercise ultimate overriding authority, then all of the tax revenue is attributed to that unit.

### 4. Revenue Statistics (RS)

(94) When a government collects taxes and pays them over in whole or in part to other governments, it is necessary to determine whether the revenues should be considered to be those of the collecting government which it distributes to others as grants, or those of the beneficiary governments which the collecting government receives and passes on only as their agent. As constitutional provisions vary widely in different countries it is not possible to formulate a single rule by which taxes may be attributed to either the collecting or beneficiary government in all countries.

(95) As a general guide tax revenues are attributed to non-collecting beneficiary governments:

- a) When they have exercised some influence or discretion over the setting of the tax or distribution of its proceeds; or
- b) When under provisions of the legislation they automatically and unconditionally receive a given percentage of the tax collected or arising in their territory; or
- c) When they receive tax revenue under legislation leaving no discretion to the collecting government.

(96) A number of more specific rules may be set down as guidelines for the attribution of tax collection among collecting and beneficiary governments:

- a) The revenue of taxes not distributed to any government other than that collecting it should be shown as tax revenue of the collecting government.
- b) The revenue of taxes which a government collects and unilaterally earmarks at its discretion for distribution to another government should be shown as tax revenue of the collecting government.
- c) The revenue of taxes which a government collects on behalf of another government with the beneficiary government unilaterally determining the amount of the tax or distribution of its proceeds, should be shown as tax revenue of the beneficiary government.

- d) The revenue of taxes collected by one government and transferred to another with the amount of the tax or distribution of its proceeds decided upon jointly by both governments, or on the basis of the tax collected or arising in the territory of the beneficiary government, is to be shown as tax revenue of the ultimate beneficiary government.
- e) If a central or regional government authorises or requires local collection of a particular tax, a part of all of which is automatically retained by the collecting government, the local share is shown as tax revenue of the collecting government.

#### 4. Council of Europe

(page 1) This recommendation also makes a distinction between proportional resources (which depend directly on the amounts collected locally) and non-proportional ones and establishes that grants are non-proportional financial transfers:

In conclusion, according to the definition adopted by the Council of Europe and included in its Recommendation Rec(2005)1, tax sharing arrangements may lead to:

- a) either surcharges, i.e. own fiscal non exclusive resources (fiscal resources whose rates can be varied by the local authorities but are levied on the same base as the one used for the tax levied by another authority;
- b) or the type of shared taxes discussed in COM/CTP/ECO/GOV(2006)1, in which central government retains the control over the tax rate and the tax base; according to recommendation Rec(2005)1, these non-exclusive fiscal resources are financial transfers; if they are not in direct relation to the amounts collected locally, they are also considered as grants.

Source : OECD National Accounts, IMF Government Finance Statistics, OECD Revenue Statistics, Council of Europe