Subtheme

Managing Fiscal Conflicts

Work Sessions 5 and 17: Fiscal Equalization and Fiscal Conflicts are like the Chicken or Egg Question: Which Came First?

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1. Introduction

The decentralization of expenditure and public functions is only "one side of the coin" of fiscal federalism. Just as well it has to be settled how this delegation is financed and how independent the subnational and local authorities are in their provision of public goods and services. A reasonable intergovernmental financial system has to consider the following principles[1]: revenue autonomy, subsidiarity and connectivity (local accountability), transparency of the tax system and direct impact of the tax burden (benefit tax link), reference to local circumstances and neutrality of the taxes with regards to the private sector, tax bases, which are not affected by economic fluctuation and are also viable, and simplicity of tax system.

At first glance, these five principles seem to be trying to "square the circle" and even at second glance, it has to be admitted that no federal or unitary country in the world has implemented a public finance system that fulfils these five principles completely. Various countries have chosen different ways to reach these goals and thus the conception of how to finance subnational and local services differs significantly. The respective advantage and disadvantages of each method can best be assessed in a general comparison.

The Anglo-Saxon countries like Canada, the USA and the United Kingdom provide their local authorities with a very extensive system of property taxation. A local property tax has the advantage that a direct link between benefit and cost of the public goods can be established. This direct link between the preference of the citizens in local public goods and the policy makers, who have to provide the local public goods, cannot be created by grants or transfers. Besides a local property tax, a group of European countries, namely, Switzerland, Belgium, Croatia and the Scandinavian countries—give significant tax autonomy to their local authorities and therefore a local surcharge on the personal income tax is common.

Furthermore, a third possibility to finance local authorities has been chosen by Austria, Germany and Poland, who developed a local tax system with its own revenues as well as tax-sharing. Nevertheless, vertical grants are also needed in the Anglo-Saxon model, the Scandinavian model and the German model. Grants and transfers avoid external effects and spillovers, for example, a local jurisdiction benefits from services of other local authorities without participating in the cost. This situation often exists in the relationship between a metropolitan city and its suburbs. A reasonable solution of this problem is the FOCJ (functional, overlapping, and competing jurisdiction) concept (see Frey/Eichenberger, 1995), but for developing countries the FOCJ concept is not comprehensible. Moreover, the school communities of the Swiss canton of Zurich and the North American special districts are the only successful examples of the FOCJ concept.

Sometimes a country restricts the local accountability, because it substitutes local taxation for vertical grants. These negative scenarios can be found in the Netherlands, Wales, Ireland and Scotland. In the case that local authorities cannot generate sufficient finances from taxes and grants, municipalities will use charges and fees to fill the financial gap. These developments do not only occur in China (see World Bank, 2002) but also in such a rich country as Norway, where "since 1980 user charges have been the fastest growing revenue component of Norwegian local and county governments" (Borge, 2000).

2. Revenue or Cost Equalization

An equalization system can be mainly based on revenue equalization or cost equalization. Well known examples of revenue equalization are the Canadian equalization system between the provinces (see Boadway, 2004 and Bird and Vaillancourt, 2007) and German equalization between the Länder (Werner, 2003 and Spahn and Werner, 2007). In contrast, Australia and Scandinavian countries such as Denmark or Sweden (see Werner/Shah, 2005) base their respective equalization systems on the concept of cost equalization. In the following paragraphs the different ideas of revenue and cost equalization are explained, illustrated by the examples of Germany and Switzerland.

Germany is a federal state with a three-level administrative structure. In addition to the federal government, whose ministries are based both in Germany's capital, Berlin, and in Germany's former capital, Bonn, there are 16 federal states (Bundesländer) and 13,897 municipalities.

In Germany, tax revenues are distributed among the individual regional administrative bodies both according to own assigned revenues and revenue sharing. This, for example, means that the tax receipts from the real property tax are available to the municipalities in full, while they also receive a fixed percentage of the tax receipts from the value added tax (VAT) and the personal income tax (PIT).

The distribution of the most important tax revenues is shown in Table 1.

Germany's fiscal equalization among the federal states is based on Article 107 of the German constitution and consists of several levels. Generally, the horizontal fiscal equalization among the federal states can be classified as; the distribution of corporation tax and personal income tax, the distribution of value added tax, fiscal equalization among the federal states (narrow definition), and the allocation of additional funds by the central government.[2]

Table 1. Tax revenues assignments between the central government, the federal states and the municipalities in 2006

	Central Government (%)	*Federal States* (%)	*Communities (%)*	*Revenues in 2006 (billion)*
Consumption tax*	100			72. 938
Inheritance tax		100		3.763
Property tax			100	10.398
Personal income tax	42.5	42.5	15	152.082
Value added tax	51.4	46.4	2.2	146.688
Corporate income tax	50	50		22.808
Interest rebate	44	44	12	7.633
Trade tax**	14.8	7.7	77.5	38.369

Notes: * Tax on mineral oil, electricity, tobacco, spirits, coffee and sparkling wine.

** The breakdown refers to the 2001 tax year. The municipal share of the "German Unity" fund as well as the municipal share of the reformed fiscal equalization system were added to the central government.

Source: Author.

Generally, the fiscal authorities in the respective federal states are entitled to receive, in full, the tax revenues from the states' own taxes and a share of both the income tax and the value added tax, according to the principle that taxes are collected in the place where they were generated.

The principle of collection of taxes where they are generated runs counter to the law of tax segmentation (Zerlegungsgesetz) and the sharing of income and corporation tax. This is meant to prevent a company with several outlets in different federal states from paying its taxes exclusively in the federal state where its head office is based, while the remaining federal states are not able to take advantage of any tax revenues.

When apportioning the corporation tax, the principle of the business location of the trade tax applies, while the apportioning of the personal income tax between the federal states is based on the principle of the taxpayer's place of residence.

This principle of apportioning the taxes is also applied when determining the percentage that the federal states receive of the value added tax. Article 107, section 1, clause 4 of Germany's constitution stipulates that at least 75 per cent of the generated VAT to which the federal states are entitled has to be distributed among the federal states according to the number of their inhabitants. The remaining 25 per cent is distributed as an additional percentage to the financially weak states. Particularly because of Germany's reunification and the resulting incorporation of the new federal states into the Federal Republic of Germany, this financial redistribution has gained enormous significance.

Under the narrow definition of the fiscal equalization system among the federal states, there are direct horizontal transfer payments between the federal states.

So as to determine the financial strength of every single federal state, one has to calculate the financial strength indicator in the fiscal equalization system. This figure is composed of a state-specific total sum of state taxes as well as 64 per cent of the municipal taxes. Under the fiscal equalization system, the financial requirements of each state are determined on the basis of an equalization indicator. This equalization indicator is calculated by multiplying the number of inhabitants of that state by the average nation-wide per-capita figure of the state and municipal tax revenues. While state tax revenues are considered completely, the municipal taxes are only taken into account at 64 per cent of this collection. Moreover, the inhabitant numbers of the city-states of Hamburg, Bremen and Berlin have been "readjusted", i.e. their inhabitant numbers have been multiplied by the factor 1.35.

If the financial requirements of a federal state are higher than its financial strength, this state will receive equalization funds from the financially stronger states, whose financial strength is higher than their requirements. By means of these equalization funds, the "recipient states" among Germany's federal states are able to increase their financial strength to at least 95 per cent of nation-wide financial strength. At the same time, the financial strength of the "donor states" must not fall below 100 per cent of the average nation-wide financial strength.

On account of the additional funds allocated by the central government, there are vertical grants from the federal government to the federal states. Regarding the central government's allocation of additional funds, a distinction can be made between the allocation of deficit-coverage funds and special requirement funds. The deficit-coverage funds enable the financially weak "recipient states" to reach 99.5 per cent of the average financial strength of the federal states. The allocation of special requirement funds means that for particular reasons, some federal states receive additional funds from the federal budget. Thus, for example around 0.75 billion a year flows to all those federal states with less than four million inhabitants in order to compensate for the disproportionately high political and administrative costs. In addition, there are special allocations of funds for the abolition of special charges relating to Germany's division (Berlin and all new federal states).

In Switzerland all three tiers of government can levy their tax rates independently on the direct taxes, but since 2001 the tax base of the direct taxes as well as the tax year have been completely harmonized. Therefore the tax "jungle" (Duss/Bird, 1979) has now dwindled a bit but it has not yet been fully cut back, especially regarding the PIT and the wealth tax.

On the other hand, all revenues from indirect taxes like the VAT or all excises belong to the central government and only a small tax-sharing between the central government and cantons exists for the stamp taxes and the withholding taxes.[3]

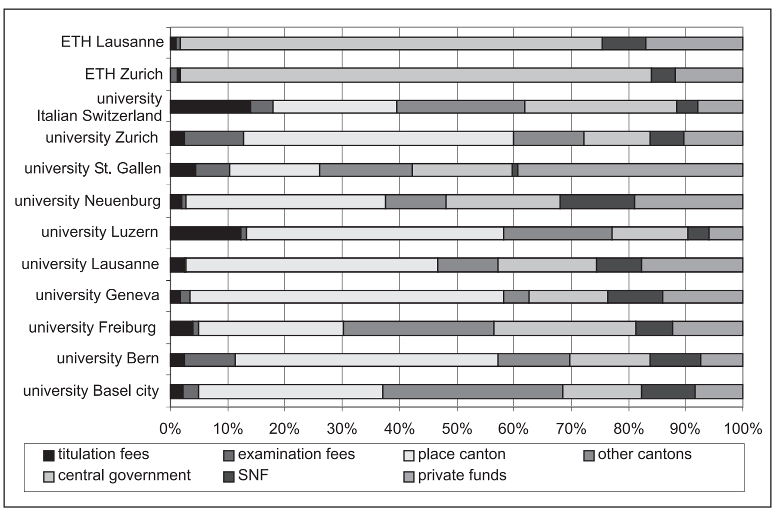
In the context of the educational cost, in Switzerland a very smart solution for the financing of the universities exists. In Switzerland 12 universities exist and 2 of 12—the Swiss Federal Institutes of Technology (Eidgenössische Technische Hochschule, ETH) in Lausanne and Zurich—are institutions of the central government. The remaining 10 universities are located in 10 cantons and therefore 16 of 26 Swiss cantons do not have to finance a university directly. However, it happens very often in Switzerland that a student has his residence in one canton but he attends the university of a neighbouring canton. This situation can be used as a classical example of spillovers, and a possible solution could be the concept of functional, overlapping, and competing jurisdictions (FOCJ) developed by Frey and Eichenberger (see Frey and Eichenberger, 1995).

Nevertheless, the cantons do not use the FOCJ concept to solve this problem, but the canton where a university is placed receives funds from the other cantons, where the commuting students have their residence. The calculation of the funds is very detailed, which means that the different costs of a faculty towards a university as well as the respective duration of every student have to be borne in mind for the calculation.

The total expenditure cost of 12 universities amounted to 3.16 billion in 2004, while nearly 20 per cent originated at the ETH Zurich and 52 per cent was generated by the ETH Zurich, the University of Zurich, and the University of Geneva. Moreover, the impact of the inter-cantonal university equalization differs from university to university and has it highest influence at the University of Basle city and the University of Italian Switzerland.

A detailed overview of the financial structure of the twelve universities can be observed in Figure 1.

While the German system mainly equalizes revenue disparities between the Länder, the Swiss university education equalization system considers the different expenditure needs of each canton.



Source: Werner/Shah, 2006.

Figure 1. Financing structure of the 12 Swiss universities in 2004

Hansjörg Blöchinger from the OECD mentioned in the discussion of the working session 5 that he prefers revenue equalization systems, because they are easier to administer and more transparent. Professor Lars Peter Feld from the University of Heidelberg and a supporter of the idea of cost equalization replied that revenue equalization systems are generally unable to consider spillover. In the view of the author, both economists are right and for this reason revenue equalization should be used solely for regions or provinces, while a local equalization system should be based on cost equalization.[4]

3. Pros and Cons of Independent Drant Commissions

The institutional arrangements for fiscal transfer and their respective equalization system differ. Anwar Shah has created very sound categories for classification:[5] central government agency (Poland, Italy, and China), national legislature (Brazil), intergovernmental forum (Canada, Germany, and Indonesia) and independent agency (Australia, India, and South Africa).

In the following paragraphs the different concepts of an independent agency and an intergovernmental forum are explained using the examples of Australia and Canada.

Australia has a strong, vertical fiscal imbalance in favour of the central government. It corrects this imbalance by using asymmetric vertical grants (based on the goods and services tax) with an implicit equalizing effect. The Australian Commonwealth Grants Commission (CGC), set up in 1933, advises the central government and the Australian states. As an advisory body, the CGC is asked to calculate appropriate ratios of per capita grants for the distribution of general revenue assistance from the Australian Government to the states and territories. The central government as well as states and territories accept the suggested distribution of the grants to the states, even though de jure the right to make the final decision belongs to Commonwealth Minister for Finance and Administration.

The Australian system of fiscal equalization is one of or even the most complex and thorough of all federations worldwide.

Australia has put in place an explicit and ambitious equalization scheme that aims at full, standardized budget equalization. In establishing a point of reference for such a scheme, Australia not only attempts to evaluate the standardized taxing capacity of its states, but also of standardized expenditures adjusted for needs and cost differentials among jurisdictions.

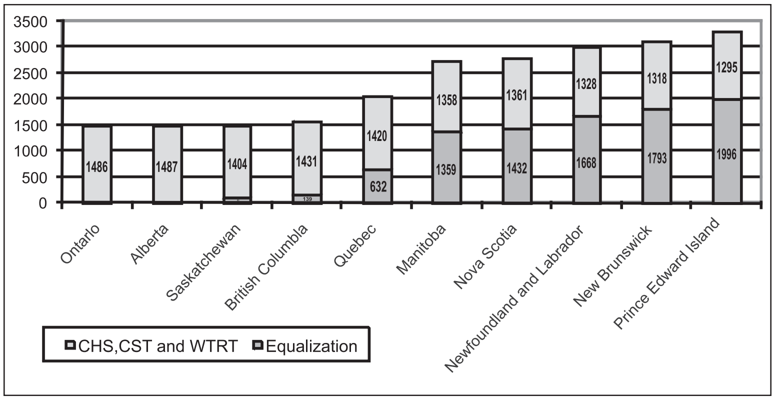
This all-embracing approach to equalization in Australia is often criticized for its complexity and lack of transparency. Even the CGC itself observes that "the simplification of methods should be a priority going forward" (see CGC, 2004,).

The Canadian equalization system is imbedded in heterogeneity of different forms of cultural heritage with the major French speaking province of Quebec, the bilingual mixed province of New Brunswick and the eight English-speaking Anglo-Saxon Provinces. On the one hand, Canada has one of the highest forms of subnational tax sovereignty in the world,[6] but on the other hand, the economically weak provinces, which are mostly located on the Atlantic Ocean coastline, are heavily influenced by the vertical equalization grants of the central government in Ottawa.

The Canadian transfer system consists of four[7] pillars: the Canadian Health Transfer (CHT), the Canadian Social Transfer (CST), the Territorial Formula Financing (TFF), and the Canadian equalization. Figure 2 demonstrates the fiscal impact of all four pillars in the fiscal year of 2005-6.

The Canadian equalization system is based on the fiscal capacity of every province. The measurement of the fiscal capacity includes 33 provincial tax bases.[8] With clear transparency and low cost of administration, the Canadian system has similar advantages to the German equalization system, compared to their counterparts in other federal or unitary countries. In contrast to the German equalization system, the Canadian equalization allows the reflection of different subnational tax rates.

Legal responsibility for the Canadian equalization system falls within the scope of the federal government, which proposes the volume and the formula, and the national parliament finally approves the proposal of the central government. However, the central government and the provinces cultivate intergovernmental



Source: Werner, Guihéry and Djukic, 2006.

Figure 2. Transfer from the Canadian central government to the provinces in the fiscal year 2005-6 (measured in CAN $ per capita)

discussion, through the Fiscal Arrangements Committee. The provinces and the central government consequently share information, consider technical issues involved in the equalization process and discuss problems with less political rivalry.

During the discussion of work session 17, Michael Willcock from the Australian Government highlighted the advantage of the CGC; in his explanation he mentioned that the proposals of the CGC were mostly accepted by all tiers of governments and politicians. David Peloquin from the Canadian Ministry of Finance pointed out the huge complexity of the Australian model and rejected this kind of system for Canada. The author of this paper agrees with the opinion of Mr Peloquin, nevertheless cedes that there was an equal number of supporters and critics of the Australian model among the participants in the round table discussions.

The level of the marginal rates of compensation, the equalization model and the institutional arrangements for intergovernmental fiscal transfers are always the subject of a fundamental political decision which could be a "hard row to hoe", if we were to consider the lengthy political reform discussions in Germany and Switzerland. For example, the only way of avoiding this political "hot potato" is to delegate the whole equalization measurement to an independent council of economic experts such as the Australian Commonwealth Grant Commission. On the other hand, however, such "political outsourcing" always leads to a lack of democratic control and increases the complexity of the system. This is because bureaucratic experts have to consider other principles than an elected representative.

4. Conclusion

The reasons for fiscal equalization are manifold and are influenced by political and economic views. Fiscal equalization can be used to solve or ease fiscal conflicts between the different tiers of government. However, if the political stakeholders do not possess a common interest such as the continuance of a country as one unit and would prefer to see the secession of a region, even a well designed equalization system would not able to prevent such a situation. The case of Bosnia and Herzegovina is quite unique (see Werner, Guihery and Djukic, 2006), because on the one hand the respective ethnic groups in this country use the distribution of tax revenues to heat up national tension, and on the other hand the international community is working to avert a separation through external political pressure as well as an internally controlled institution named OHR. In some countries like Spain, fiscal conflicts are the result of an unfulfilled wish for independence by the regions and if one erroneous trend in the intergovernmental system is rectified, the political leaders of the autonomous communities bring up another painful subject, instead of considering their huge autonomy and the successful development of Spanish democracy over the last decades.[9]

Another dimension of fiscal conflicts is natural resources and therefore Spahn's suggestion that "such conflicts are best avoided *a priori* through a clear tax and revenue assignment rules" (see Spahn, 2007) is more than reasonable.

Sometimes fiscal conflicts are brought to an end by external shocks as in Indonesia. Since the central government of Indonesia mandates funds to the regions destroyed by the tsunami, the wish for independence in the region of Aceh has decreased enormously.

However, the question as to whether fiscal equalization came first or fiscal conflicts, cannot be clearly answered. Rather, every federal and unitary country has to find its own link between solidarity and subsidiarity.

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Notes

1. For detailed description see, for example, Spahn, 1995 as well as Werner, 2006b.

2. To facilitate the description as a whole, the new regulations in the "Solidarity Pact II" are not mentioned, such as, for example, the so-called premium model which will be newly introduced from 2005 onwards.
3. The new § 132 of the Swiss constitution introduces a tax sharing at the withholding tax, in which the cantons are receiving 10 per cent of the whole tax yield (5 per cent based on the population number and 5 per cent for equalization purpose between the cantons.) Moreover, Switzerland has recently approved a new inter-cantonal fiscal equalization system (*Neuer Finanzausgleich*, NFA) and this equalization system will be fully implemented in 2008 (see Schaltegger and Frey, 2003 as well as Dafflon, 2004).
4. A general description of a local equalization system based on revenues and local needs see Werner, 2006a.
5. See Shah, 2005 as well as Shah, 2007
6. See Hayashi/Boadway, 2001 and Esteller-Moré / Solé-Ollé, 2002
7. The Health Reform Transfer has been introduced recently, and therefore are sometimes mentioned as five pillars of the Canadian transfer system.
8. The calculation of the tax base uses nation wide average tax rates. Furthermore, the Canadian standard measures uses the average fiscal capacity of the five "middle income" provinces.
9. The 17 Spanish regions, called Autonomous Communities, can be characterized as two different groups. The two Autonomous Communities of Navarre and the Basque county possess a special status called "foral" and therefore their independence from the central government in Madrid was extremely high, e.g. they had their own tax administration and a huge tax sovereignty, which was quite similar to that of an independent state. The residual 15 regions, which are called regions of the common rights (*Comunidades Autónomas de Régimen Común*), can influence their tax revenues from the personal income tax by different tax rates or by the arrangement of the tax exemptions. This concept is not similar to the Nordic local surcharges on the PIT, where the municipalities add a proportional surcharge to the national tax rate. The Spanish concept could be compared more with the Swiss solution, where cantons and municipalities can levy their own tax rates and tax exemption for every citizen and only the taxable income is fixed by national laws. If a region uses the same tax rates and exemptions like the central government, the region will receive 33 per cent of the total personal income tax, which is paid by their respective citizens. A huge difference between Switzerland and Spain is that in Spain an upper and lower limit exists for the tax rate.