CHINA DECENTRALIZATION FINANCE ISSUES: LESSONS FROM INTERNATIONAL EXPERIENCE

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Overview

The current system of fiscal decentralization in China has a number of serious problems. Whereas it has clearly assigned revenues between the central government and provincial governments, the current system does not provide clear expenditure assignments for almost all levels of governments. In practice, the widely unfunded responsibilities have been taken up by local governments, in particular, by the governments at and under county level. Since 1994, the responsibilities for these local governments have continued to expand. On the other hand, the "tax sharing reform" of 1994 led to a very limited tax bases for local governments. In fact, a significant amount of local governments in China face serious fiscal crisis.

First, the vertical and horizontal fiscal gaps are significant in China. The revenue assignments are highly centralized, however the expenditures are highly decentralized. In 2003, major taxes and 54.6% of total tax revenues belonged to the central government, but local government expenditures accounted for 69.9% of total government expenditures. Furthermore, total provincial own revenues only financed 57% of provincial expenditure.

Second, the fiscal system has also led to considerable regional disparities. Fiscal revenues in per capita term were US$36.6 and US$39 in Tibet and Guizhou, respectively, in 2003, representing only about 6 % of Shanghai's US$627.8 of per capita own fiscal revenues.

Third, the intergovernmental transfer system in China has been poorly designed. The transfers from the center have to be one of the most important channels for subnational governments to balance their budgets each year as a result of their significant fiscal gaps. In addition, intergovernmental transfer is one of areas that has least transparency in China's fiscal system. According to the budget process, a lower level government submits the budget to an upper level government and so on to the central government, and the central budget is the last to be approved. Consequently, the intergovernmental transfer for local government is unknown until the budget of the central government is approved. Obviously, the local budget is not able to take account of the intergovernmental transfer. In fact, the intergovernmental transfer is difficult to track partially because of this budget process. According to the report from the State Audit Bureau, only 27% of total intergovernmental transfer from the central government was reported in the provincial accounts. The intergovernmental transfer is also complicated by the fact that the MOF is not the only department that determines the intergovernmental transfer. Several departments under the State Council own fiscal resources and also allocate the resources to provincial and sub-provincial governments. However, there is no clear procedure in the decision-making process for the fiscal transfer. Obviously, the arbitrary nature of central grant allocation has led to extensive negotiations and rent-seeking by local authorities, tying up valuable administrative resources.

Fourth, soft budget constraint is still a serious problem in China's fiscal system. According to China's 1994 budget law, local governments are forbidden from borrowing on the capital market. However, local enterprises (that provide public services) can and do borrow from banks and on the capital market—despite their dependence on government subsidies of various kinds, which often makes them de facto government agencies. Given the still limited direct and indirect transfers from the center to provinces, such borrowing from local commercial banks by enterprises (under the jurisdiction of local governments) actually finances much subnational spending. This in turn creates contingent liabilities for local governments, and given the lack of transparency, is less easily controlled than explicit government borrowing. In fact, the deficits have been accumulated into a significant debt for these governments. Currently, debt becomes very heavy burden of these governments. According to the Audit report to the National Congress in June 2002, the total debt for 49 counties (cities) audited was about US$ 8 billion, about 2.1 times of the yearly disposable fiscal resources. For the county and under county public finance, it is estimated that the total debt was about US$ 40 billions in 2001, where the debt for the township was over US$ 20 billions. If including the implicit debt such as the unpaid civil servants and farmers' services, the total debt should be much higher.

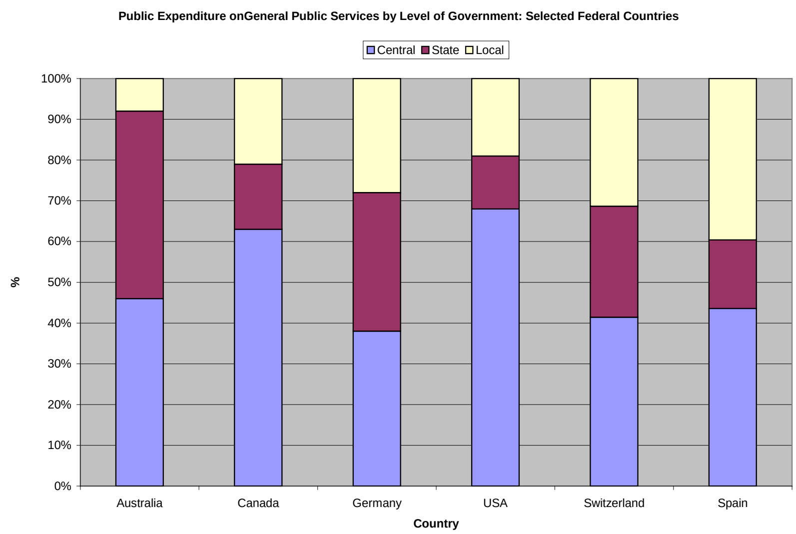
In addition, extrabudgetary funds together with local government's self-raised funds, which are all off the budget, are used virtually in ways that supplement the budget—to finance fixed-asset investment, major maintenance, bonuses and welfare payments, administrative expenditures, expenditures in the social sectors, transfers and taxes paid to the central government, increases in working capital and other earmarked programs.

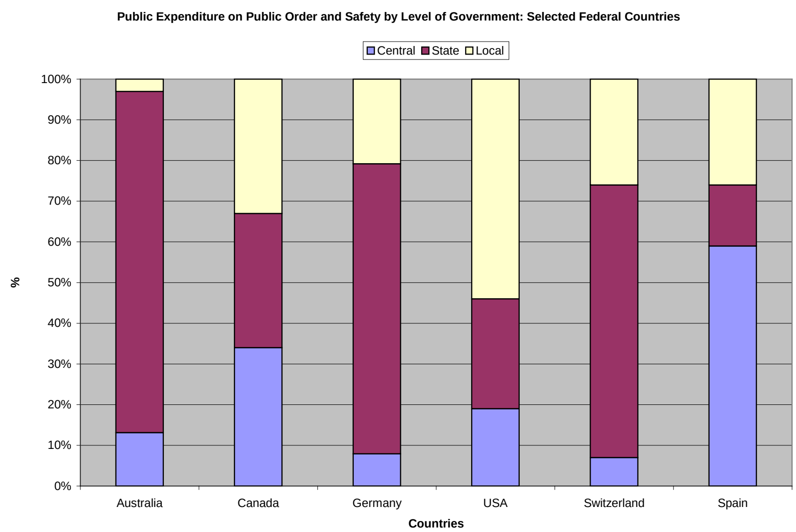
The probem becomes more serious for the governemnts at and under the county level in China as the issues mentioned above is combined with the impact of the less well-defined revenue assignment for the sub-provincial governments. Currently, the majority of county and under county government cannot provide basic public services, and some of them cannot finance its operational expenditure. Limited fiscal resources do not prevent local governments from expanding their heavy overhead expenditures. As local officials are not restrained by any form of institutionalized local political participation so that they can even devolve their deficits to local residents.

No doublt current China fiscal system, particularly the local fiscal system faces serious chanllenges. International experiences show that the same issues more or less arised in other countries, or happened during some periodsof time for other countries, rather than a particular phonoman only in China. This note will not go into detail on the nature and extent of those issues but rather will take a brief overview drawing upon international experience to extract lessons to address the difficult issues currently confronting China's intergovernmental fiscal system. The analysis draws from many countries but pays special attention to the experiences of a set of large countries with decentralized systems of finance.

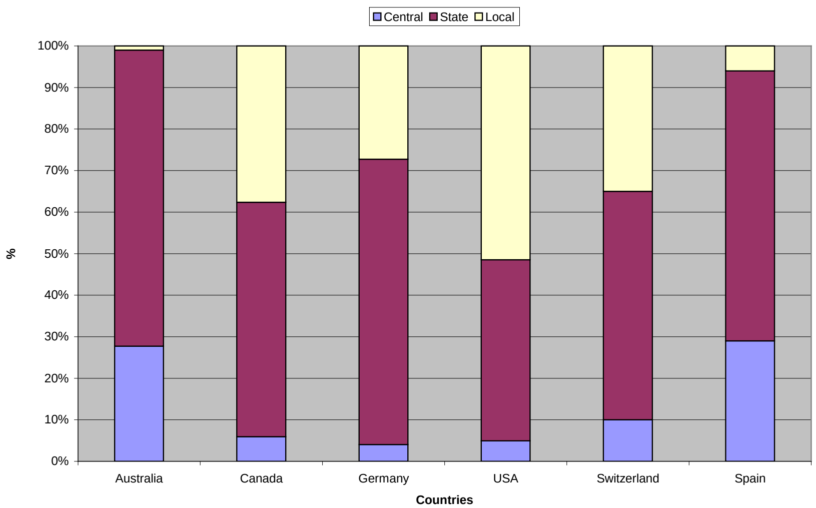
I. Expenditure Assignments Issues and Policies

The expenditure assignment differs significantly across countries and functional areas of public expenditures. In general, the unitary countries have higher percentage of central expenditure that of the federal countries, however, it varies on different functional areas. Some federations tend to assign major welfare functions such as health, education and social welfare to state/local jurisdictions, others still retain control over some key functions, for example Health in Germany and France and Social Security in most of country. The distribution patterns for selected federal countries are shown in the following diagrams:

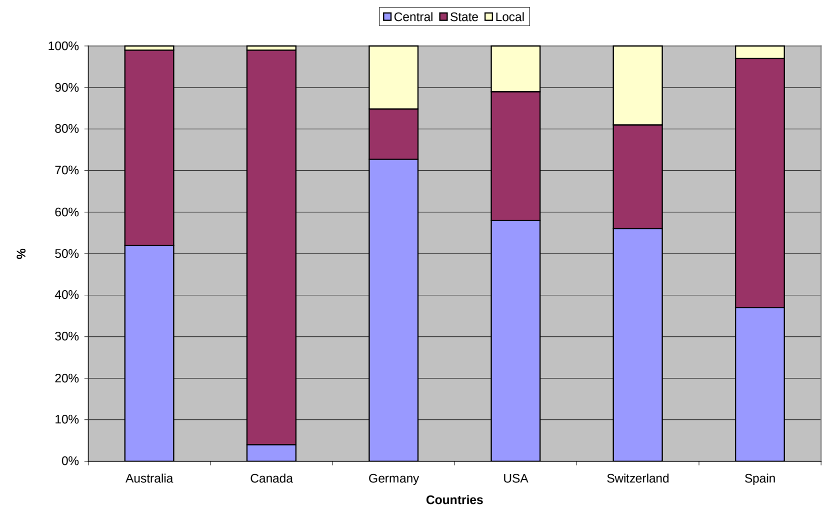




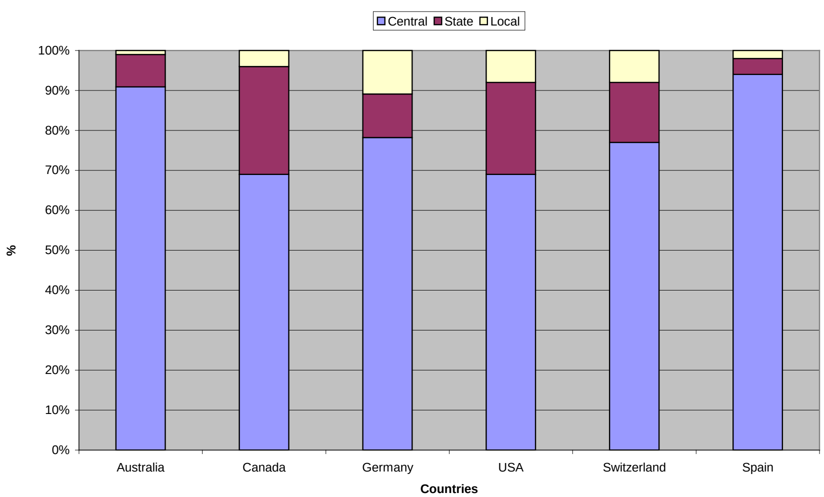
Public Expenditure on Education by Level of Government: Selected Federal Countries



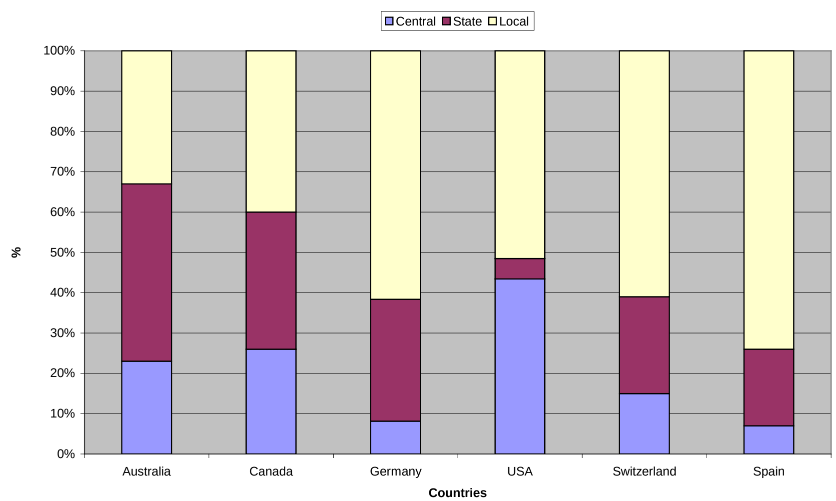
Public Expenditure on Health by Level of Government: Selected Federal Countries

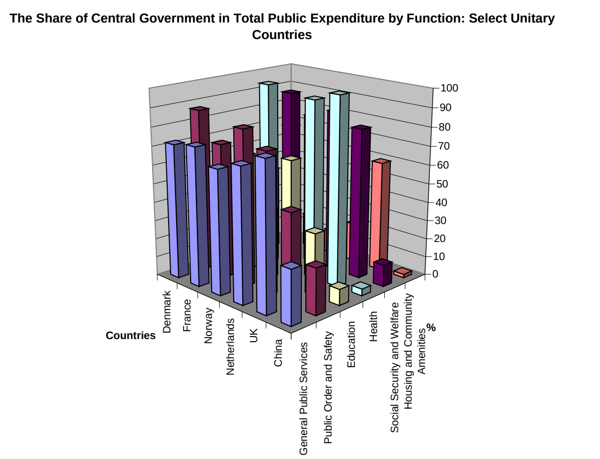


Public Expenditure on Social Security and Welfare by Level of Government: Selected Federal Countries



Public Expenditure on Housing and Community Amenities by Level of Government: Selected Federal Countries





Source: IMF Government Financial Statistics 2001 edition

Although unitary countries have engaged in considerable decentralization, the central government still controls significant part of major welfare expenditures. In contract, China has significantly decentralized its central expenditures in almost all major functional areas of public expenditures as shown in this diagram..

Most decentralized countries have at some point or another struggled with instability, lack of clarity, and controversy in the practice of the assignment of competencies and expenditure obligations at different levels of government. A major problem has been the failure to recognise that the assignment of any expenditure responsibility also implies responsibility for a multi-dimensional array of attributes, including: (i) actually producing a good or delivering a service, (ii) providing or administering the service, (iii) financing a service, and (iv) setting standards, regulations, and policies guiding the provision of government services. While there is no problem, with assigning competencies over these attributes in the case of exclusive assignments, there is a need to be explicit about their assignment in the case of concurrent expenditure assignments.

International experience

In Brazil, India, and the Russian Federation, there is still a lack of exclusive responsibilities to sub-national governments and a lack of clarity regarding who is responsible for what in the case of many overlapping functions. The lack of clarity in assignments is more acute in the division of responsibilities between the intermediate level and local governments. In the Russian Federation, for example, the lack of clarity in the assignment of responsibility for primary and secondary education between the regional and local levels of government has meant that in some regions teacher salaries simply went unpaid as different government levels argued about who was responsible for paying teacher salaries. In India, this has meant that an estimate of half of all teachers may not regularly be at the schools

Highly decentralised and successful federations such as Canada and the United States (U.S.) have taken years of friction and disputes to reach their current distribution of responsibility across levels of government. Thus practice can substitute for explicit assignments in the law, but relatively younger federations may avoid these costly transactions through more explicit and clear assignments.

This is precisely what the Russian Federation attempted to do in the comprehensive Budget Code of 2002, although it fell short of achieving this aim.

One lesson is that besides clarifying the assignments of attributes for concurrent responsibilities, the best way to deal with the lack of clarity is to seek ways to assign exclusive responsibilities wherever this is possible. Practically in all decentralised countries, and this is certainly true of Australia, Brazil, Canada, the Russian Federation, and the U.S., there are a number of responsibilities that are exclusively assigned to local governments This is even true in countries like Canada and the U.S. where the local governments are ”creatures” of the states. In United States, the Constitution (10th Amendment) explicitly states that “The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people”. In Canada, the Constitution only mentions municipalities to declare that they are the exclusive jurisdiction of the provinces, and the authority of local is derived entirely from the provinces. In particular, the provinces have the power to modify those responsibilities and powers and it is at the province’s will to create, change and abolish municipalities.

The fact that the devolution of expenditure functions often involves several levels of government emphasises the need for intergovernmental cooperation in order to assure the successful implementation of decentralisation reforms. This is especially necessary in some priority sectors, such as education and health. When multiple levels of government are involved in the same sector, governments need broad and formal coordinating institutions. In Germany’s “cooperative federalism” all decisions are coordinated through an extensive net of multilevel committees. In the U.S., the pattern of assigning responsibilities varies widely from sector to sector and state to state, so sectoral coordination is done by technocrats in some areas where there is a clear need, such as highways and law enforcement. Somewhere in between the German and U.S. models are the practices of Australia, Canada, and New Zealand, countries that use periodic formal meetings of elected officials and bureaucrats to discuss mutually important fiscal issues. For example, Canada has two organisations for coordination, dialog, and conflict resolution: (i) functional federalism, ministers and officials from federal and provincial departments meet to discuss issues of policy coordination and programme delivery mechanisms; (ii) summit federalism, where first ministers meet for negotiations of difficult “horizontal” problems, that is problems of one specific government department. Similarly, in Australia, the Council of Australian Governments (COAG) initiates, develops, and monitors the implementation of policy reforms that are of national significance and which require cooperative action by Australian governments.

On the other hand, problems with implementating exclusive responsibilities of expenditure assignments are also apparent in international experience, particularly for developing countries and transitional countries. Some central governments play a larger direct role in service provision than theory and international best practice would suggest. In Brazil, for example, in a three-tier federation the municipalities share the same rights and duties of the states as a result of the 1988 Constitution. However, the central government has found it difficult to withdraw from some purely local functions such as public markets, local schools, and local bridges after more than a decade since adoption of the 1988 Constitution which assigned these functions to local governments. In Indonesia, decentralisation policy shifted the responsibility for all but five exclusive national functions to regional governments. Although the definition of these exclusive national functions is well guided by the general principles of expenditure assignment, for example, the national government has to remain responsible for functions affecting the entire nation, and the functions of local governments include infrastructure (public works), health, education, agriculture, communication, industry and trade, cooperatives, land, capital investments, environment, and employment,etc., the prevailing reliance on transfers to finance local government operations creates fiscal incentives that undermine accountability of sub-national governments. Another type of problem is unfunded expenditure mandates. These were very common in the Russian Federation, until the approval of the Budget Code in 2002 that made them an illegal practice and forced the federal government to provide targeted transfers for each mandate. In Canada, local governments have complained of provincial abuse due to unfunded mandates, and in the U.S. there is still an ongoing debate between the federal and state authorities on this issue.

II. Expenditure management and macrostability

The international experience is filled with examples of subantional governments experiencing budget problems and even behaving in a fiscaly irresponsible way. The international experience also offers a good array of approaches for how to fight those problems. Here are some of these approaches.

1. *Formal deficit and debt rules*. An increasing number of countries, federal and unitary, have recently adopted formal fiscal rules, such as a balanced-budget rules that limit discretionary fiscal policy, and new budget procedures, such as new multiyear frameworks to impose controls on government spending. The proponents of rules contend that the commitment to these rules makes it easier for fiscal authorities to withstand pressures for higher spending. The good news is that most countries adopting such rules have experienced substantial fiscal consolidation. The approaches followed exhibit considerable variety regarding the choice of target, degree of flexibility, and so on. Such institutional reforms can be classified into three broad groups, which are sometimes used alone or in combination. Regardless of how they are introduced, however, they often seem to have an ameliorative effect on expenditure trends.

2. *Expenditure limits*. Finland, the Netherlands, Sweden, and the U.S. have emphasised expenditure limits, supported by procedural requirements, whereby proposals resulting in overruns in certain expenditure areas must be accompanied by offsetting expenditure cuts elsewhere or by revenue increases. Expenditure rules typically impose ceilings on specific areas of expenditure or for particular programmes. The advantage of capping expenditure is that the process is well understood by players in budget negotiations and the wider public, and it tackles deficit bias by addressing the principal source of rising deficits. In addition, governments are made accountable for what they can control most directly, in contrast with deficit limits. A disadvantage of an expenditure limit is that it does not necessarily correct a tendency toward excessive deficits, for instance through large tax cuts or the systematic over prediction of revenues. To overcome this deficit risk, the expenditure rule can be combined with a medium-term target for budget balance as is the case in Sweden.

3. *Transparency*. New Zealand pioneered an approach to fiscal management that places primary and explicit emphasis on transparency with the Fiscal Responsibility Act of 1994. Australia and the U.K. have since adopted similar approaches, as has Brazil and other countries in Latin America.

4. These three approaches are sometimes combined. For example, Australia, New Zealand, and the U.K. combine legally mandated transparency with rules or objectives for deficits and debt levels. In contrast, the Netherlands uses expenditure and revenue rules to meet its requirements under the Stability and

Growth Pact. By and large these approaches have worked. In Australia, for example, the new framework contributed to a decline in the deficit from about 4 per cent of GDP in 1992-93 to a surplus of 2 per cent of GDP in 1999-00. Spending has increased only slightly, and the tax burden has remained constant. In addition, transparency improved as a result of new reporting requirements (Daban et al, 2003).

Brazil has also combined all three types of policies (formal deficit and debt rules, expenditure limits, and transparency) into one fiscal responsibility legislation. The Fiscal Responsibility Law (FRL) provides for the following: (i) defined ceilings for payroll expenses; (ii) defined sub-ceilings for the same expenses by branch of government; (iii) fixed limits on official actions, with certain restrictions in election years; (iv) transparency rules for reporting public sector accounts; and (v) prohibits new refinancing of the debt of sub-national states by federal authorities. Regarding expenditure ceilings, the FRL provides targets for a limit on wages. The FRL states that expenditures on personnel should not exceed 60 per cent of the net current revenue of the state, and similarly 60 per cent for municipalities. While some states have proven to be successful at containing committed expenditures, others have turned to virtually zero investment.

In Canada, the Fiscal Spending Control Act of 1992 established a nominal expenditure limit for the period 1992 to 1996. In addition, since 1994 the government introduced several policy rules that were not formally legislated. The main objective was to control public expenditure growth, reduce fiscal imbalances, and stop the increase in public debt. The deficit of 5 per cent of GDP in 1995 became a surplus of more than 1 per cent of GDP by 1999, and the ratio of net public debt to GDP was reduced from around 70 per cent in 1995 to 52 per cent in 2000. (Daban et al, 2003).

In the U.S., many studies have concluded that the specific expenditure ceilings embodied in the Budget Enforcement Act have played a significant role in reducing expenditure. This approach may have been better suited to the U.S. budget process than the earlier deficit reduction targets contained in the Gramm-Rudman-Hollings Act, which provided for automatic spending cuts to take effect if the president and Congress failed to reach established targets; the U.S. comptroller general was given the right to order spending cuts.

In UK, the government's efforts to influence the level of local authority spending by (a) grants encouraging squeezes or expansions in local spending by reducing or increasing the overall level of grants; (b)Capping was essentially a way of limiting increases in spending by individual local authorities. The legal and administrative arrangements behind capping were quite complex. In principle an authority could go ahead with an excess budget and set the requisite tax rate. But it would then be investigated by the government, and would almost certainly have to make a retrospective and administratively cumbersome reduction to its budget and tax rate. In practice, almost all authorities proposed budgets that are within the rules.

III. Quality of Social Services

The quality of social services in many developing countries is low, resulting in poor performance indicators, namely, high illiteracy rates, high infant mortality rates and malnutrition, and low access to education. In some cases, local government schools may lack textbooks, other school supplies, and teachers; health clinics may lack medicines and doctors; clean water may unreliable or unavailable and roads and transport inaccessible to many areas.

The international experience provides some success stories for how to improve the quality and management of social services. The discussion below focuses mainly on the delivery of education services, as an example.

Re-assignment of expenditure responsibility and decision-making: The expenditure assignment shows significnt difference across countries. In Agentina, functions like education or health care are kept by provincial government although they are also performed in some major municipalities, and the overlapping assignment exists between the intermediate and local government to improve the offer of public services. In Poland, nation-wide regulations on education or some of social welfare benefits are so strict that local government's role is to a huge extent reduced to the agent of central government and implementation of central policies.

In France, althorugh all four levels of government are very much involved in education, the bulk of education expenditures remains centralized. In particular, the central government is responsible for labor, i.e. for recruiting, monitoring, promoting —and paying— teachers, and also for curriculum development, and recruitment and wages are uniform throughout the territory. The local governments are responsible for developing and maintaining the physical stock of capital, i.e. school buildings,. Communes are responsible for primary school buildings, départements for junior high school buildings (called collèges in French), and regions for senior high school buildings (lycées). The local government of Germany has the similar function as that in Franch, however, the major educational function is concentrated in the State government rathern than in the central government as in Franch.

However, most countries have taken decentralisation to lower level bodies under the assumption that these arrangements lead to a closer match between services and the needs and preferences of the beneficiaries; increase accountability of local decision-makers; and use localised information in decision-making. Decentralisation of education and health services has characteristically proceeded through the devolution/delegation of key functions or responsibilities to different government levels, including institutions (i.e., schools and hospitals), rather than decentralisation of the whole set of functions to sub-national governments or to a facility. In fact, countries such as Canada, Germany, Spain, and the U.S. among others have devolved most functions in education and health to the local and institutional level, especially those related to personnel management (i.e., compensation, hiring, firing, etc). In United States, education is controlled locally from historic point of view, and local constituents commonly oppose efforts to permit states or the national government to “interfere” in education decisions. States leverage control over the rules governing the curriculum, sizes of classes, minimum requirements for graduation, as well as subtle and not-so-subtle pressures on schools to consolidate, etc., which locally elected school boards are permitted to do, by providing the revenues available to local schools. In Canada, within the bounds of the provincially provided funding, locally elected school boards have discretion in spending to deliver schooling subject to substantial oversight of the provincial ministries of education including defining curriculum, requirments for common exams, teacher qualifications, requirements for the schooling of challenged students, etc. In United Kingdom, local authorities provide the primary and secondary schools which most children attend, some schools for under-5 year olds and subsidise many others, and special education for children with various serious problems, and they provide some adult education. However, the local authorities did not have responsibility for universities.

School-based management (SBM): the most radical form of educational decentralisation involves the transfer of decision-making to the school level. Variations of SBM generally are defined by which stakeholder group holds decision-making authority. Generally there are four distinct forms of SBM: principal control, professional control (teacher majority), community control (community majority), and balanced control (teacher and community equally represented). SBM reforms have been implemented in a variety of countries, such as autonomous schools in Nicaragua, community-managed schools (EDUCO) in El Salvador, self-managed schools in New Zealand, the District Primary Education Programme (DPEP) in India, and local school council in Chicago. These reforms have contributed to improvements in access to education, for example in El Salvador and Nicaragua; student learning, again in El Salvador and Nicaragua; student attendance in India and Chicago; teacher attendance in El Salvador, India, and Nicaragua; and parental involvement (all cases).

Nicaragua’s autonomous school (AS) model offers an interesting lesson. In contrast to reforms in New Zealand and Chicago, Nicaragua’s AS reform has been implemented gradually, starting with those schools that have the strongest capacity. To become an AS school, teachers at the school must vote in favour of AS status. Then, the principal files an application with the municipality. The application is then reviewed and approved by the Ministry of Education (MoE), which evaluates the capacity of the applicant to undertake the responsibility of being an AS. AS schools are required to establish self-governing councils composed of the school director, teachers, and parents. The council has broad authority over a wide range of school issues, including hiring and firing school staff; salary incentives, and training support; setting student fees; and establishing and administering school budgets. In the AS model, rural schools use a different decentralisation structure. The new rural model involves the creation of a cluster of schools (*Núcleos Educativos Rurales Autónomos)* in which the largest one acts as the nucleus. The group acts as one autonomous school with a shared school director and local school council (*Consejos Directivos*), which is based at the largest school. This means that urban school councils operate at the school level, whereas in rural areas they operate at the municipal level.

School grants have been used in countries such as Chile, Guinea, Indonesia, and Nigeria as a means to improve efficiency, quality, and equity. School grants are transfers of decision-making authority and financial resources from governments to schools or small networks of schools. These can be managed by an individual or organisation with the legal authority to receive and spend public funds, usually the school director, a governing board council of the school, or a parent-teacher association. School grants are used in numerous developing countries and are often supported by education development projects, such as community-managed schools and school-based management (discussed below). The scope of a grant's activities include, among other things, training of teachers and administrative staff, new organisation of school management with community and teacher participation, and integration of children with special needs into the educational process.

Corporatisation and/or privatisation reforms of hospitals are being implemented in different countries in order to improve performance of publicly run health services. This allows hospitals to be operated by a variety of public and private organisations, based on hospital specific contracts that would define each hospital's mission, guarantee public funding, and ensure accountability. Reforms include various degrees of autonomy of ownership (i.e., fully public to fully private ownership), and management functions (i.e., governance, management, and financing) of hospitals. These reforms have recently been implemented to various degrees in California, Denmark, France, Holland, Italy, New Zealand, and the U.K. and among developing countries in Indonesia, several Latin American countries, the Philippines, and Singapore. While there are mixed results, most success stories relate to increased accountability, lower staff absenteeism, and better allocation of funds towards materials and equipment.

IV. Revenue Assignments and Autonomy

Revenue autonomy can be indicated by (a). the extent to which sub-central governments rely on their own taxes, which gives a measure of how important local taxes are in the total tax burden of citizens; and (b), the degree to which sub-national governments control their own tax base or tax rates. For example, in UK, local government layer has a reasonable degree of autonomy, however, the sub-central levels of government in the UK control a very small proportion of total taxation. Sub-national jurisdictions in Scandinavia, Belgium and Japan have slightly lower degrees of fiscal control, but the total importance of sub-national government is much greater. In Brazil, each government at any level has the right and exclusive responsibility to establish the taxes assigned to it, and there is no overlap of responsibilities in relation to taxes.

Most subnational governments need to augment their revenues due to the large share of committed expenditures and increasing needs This can be accomplished in any number of ways, including increasing own source revenues, improved tax administration, and increasing intergovernmental transfers. Enhancing the revenue autonomy of sub-national governments would have the added advantage of tightening the Wicksellian link between costs and benefits which would help foster greater fiscal discipline.

An important isssue is that typically is the case that central goverments reserve for themselves the most productive tax bases. In addition, the constitution of some countries prohibits local governments to tax the same bases that are already taxed by the central government. For example, a distinctive feature of India's intergovernmental fiscal system is the adherence to the constitutional principle of separation of tax bases in the assignment of revenues. In Indonesia, it is required that to create new taxes and user charges should be reviewed and retrospectively approved by the national government partially because of the concerns that uncoordinated access by various levels of government to a common tax bases might deprive tax bases in the long run.

But other countries allow at least some concurrent taxes. For example, many countries allow sub-national governments, regional and local, to levy taxes on income. International practice shows that the arrangement of concurrent tax bases has more advantages than disadvantages, in contrast to the exclusivity principle.

Several levels of government often levy tax on exactly the same tax base. Multiple use of the same base, if properly coordinated, is found to simplify administration and reduce compliance costs. Canada, the U.S., and many European countries have concurrent powers to levy income taxes at the federal, provincial/state, and local levels.

In Australia, the federal government has retained the exclusive power to tax income. Although this arrangement has ensured that the tax system has a high degree of uniformity in tax rates and tax bases, there is a high rate of transfer dependency in Australia. In Australia, however, this high transfer dependency has not led to fiscal profligacy, in part, perhaps because there is a remarkable consensus on the need to maintain fiscal discipline at all levels of government. Further, the States of Australia face hard budget constraints.

In Canada, tax collection agreements between the federal and provincial governments provide for joint use of the same income tax base. The provinces, with the exception of Quebec and Ontario, set their own personal and corporate income tax rates as a proportion of the rate charged by the Centre. The taxes are collected by the central government and then remitted directly to the provinces in a piggyback approach. In most Canadian provinces, a local surcharge is levied at a flat, locally-established rate as a percentage of the national tax liability rather than the national tax base, and collected by the central government. This arrangement is known as “tax supplementation.” Similarly, in Switzerland, most cantons allow local governments to levy surcharges at locally-established rates on the cantonal income taxes.

In the U.S., many states piggyback on the federal income tax, but the piggybacking does not extend to central collection, only to reliance by states, if they wish, on federal tax definitions, structures, and reported amounts. Most states levy income taxes separate from, but coordinated with, the federal income tax. There are two major coordination mechanisms in the U.S. These mechanisms are complementary not mutually exclusive. First, states may choose to cooperate on tax administration with the higher level government through a regular exchange of information. Work by one level of government can generate revenue for another level at little or no additional cost. For example, at the federal level, the Internal Revenue Service may inform a state of an audit finding regarding an individual residing in that state. Second, states may choose to coordinate their tax base with the higher level government. For example, several U.S. states levy their state individual income tax on a taxpayer’s amount of federal adjusted gross income, so that the state income tax form simply begins with a number extracted from the federal income tax form. Coordinating tax bases reduces administration and compliance costs and fosters greater coordination on tax enforcement between levels of government.

Other examples of countries with piggyback income taxes include Belgium, Denmark, Norway, Spain, and Sweden. Piggybacking arrangements provide sub-national governments with considerable revenue autonomy because they can set the tax rate, administer the tax, and even limit the ability to define the base. Piggybacking arrangements allow the states and the Centre to exchange information which can increase the effectiveness of enforcement activities. A drawback of piggybacking arrangements is that there are fiscal externalities across different levels of government; a simple form of fiscal externality is that state revenues may change whenever the federal government changes the income tax base. There other taxes besides income and property taxes that may be assigned to local governmentgs. In most countries, special excise taxes are levied on all manner of transportation fuels, beverage alcohol, tobacco products, vehicle registration, and automobile tires. In Australia, these special excises are levied by both the Commonwealth and the states. In Brazil, there are no special excise taxes on these products, except for a tax on vehicle property which is levied at the state level. In Germany, there are special excises levied on tobacco, coffee, tea, salt, petroleum products, and beverage alcohol, excepting beer, by the federal government. The States of Germany levy special excises on motor vehicles, gambling establishments, and beer; local governments levy taxes on beverage alcohol. In Canada, the federal and provincial governments levy taxes concurrently on all manner of transportation fuels, beverage alcohol, and tobacco products. The provincial governments levy a tax for motor vehicle registration. In the U.S., the federal and state governments levy taxes concurrently on all manner of transportation fuels, beverage alcohol, and tobacco products. In addition, the states and local governments levy vehicle registration fees.

Special excises are a reliable source of revenue because the demand for these commodities is typically relatively inelastic. In developing countries, high income people may spend a greater share of their income on these luxury items, and therefore these taxes may increase the progressivity of the tax system. These taxes can be used to discourage the consumption of harmful commodities (i.e., tobacco products and alcoholic beverage), and polluting commodities like transportation fuels. Often the revenues from transportation fuels, tires, and the like are earmarked for building and repairing transportation infrastructure (e.g., airports, railroads, highways, and urban transportation). Similarly, taxes on tobacco products and beverage alcohol can offset the added burdens that heavy consumers of these commodities often place on the health system.

In the U.S., entertainment and hotel taxes, electricity taxes, and transportation taxes are assigned to local governments. In the case of entertainment, hotel taxes, and rental car taxes, these are viewed as a means to get tourists to help pay for the costs that they impose on local governments. Similarly, electricity and transportation taxes may be levied by states and/or local governments. Tolls, bus fares, and levies on the transportation of goods are often used to finance transportation infrastructure in Australia, Canada, and the U.S.

In Brazil, the municipal own tax revenue is constituted by the following species: taxes on personal and professional services (ISS), urban property (IPTU), and real estate transfers; fees; and improvment charges. The tax rates are set by individual municipalities, subject to ceilings set by the federal government. Rates can vary considerably across sectors. In Brazil, tax legislation is designed to avoid overlap with federal corporate income and state value added taxes. In the banking sector, for example, the ISS is imposed on non-lending services such annual credit card fees, ATM fees, and check issuing, but not on the interest charged on loans. In the case of bus transportation, the tax is imposed on intra-municipal buses, but not on intercity or interstate bus transport, which are subject to the state value added tax).

V. Intergovernmental Transfer System

Generally speaking, intergovernmental fiscal transfers are used to correct for vertical and horizontal imbalances, inter-jurisdictional spillovers, and promote national objectives. Most countries, the U.S. appears to be the lone exception, use equalisation grants to address horizontal fiscal disparities among jurisdictions. All countries, the U.S. included, use special purpose grants of one type or another to promote national priorities and address inter-jurisdictional spillovers. Equalisation grants and special purpose transfers also help reduce vertical imbalances or the mismatch between expenditure responsibilities and own sources of revenues for sub-national governments. Often different forms of revenue sharing, in themselves a type of transfer, are used to address vertical imbalances. However, the only fail proof way to address vertical imbalances is to provide sub-national governments with an adequate level of revenue autonomy. In summary, a system of transfers is needed for many good reasons, but it can easily be misused, and transfers are not a substitute for a healthy degree of tax autonomy. We proceed with a discussion of international experience with transfer dependency; then we discuss international experience with equalisation grants, special purpose grants, and capital grants.

High Transfer Dependency

The size of a country's vertical imbalance is largely a function of expenditure and revenue assignments. Generally speaking, central governments retain control over the most productive tax bases because they have an inherent advantage in administering broad based taxes on income and consumption. Consequently, it is common for there to be an imbalance between the expenditure responsibilities of sub-national governments and their revenue assignments. A dependence on transfers is not unusual and may help reduce vertical fiscal gaps. However, a high transfer dependency may contribute to problems with fiscal profligacy.

There is no best way to measure the vertical gap. One approximation is to compute the percent of total expenditures of sub-national governments that are *not* financed with own revenues: taxes and others sources of revenue over which sub-national governments have discretion. An important caveat with this approach is that the revenue statistics reflect actual receipts, and not the potential yield of the assigned revenue autonomy to local governments. At any rate, this measure indicates that countries like Canada and the U.S. have relatively small vertical gaps; countries like Australia, India, and Russia have larger ones.

The smaller vertical gap in Canada, for example, can be attributed to the fact that the Provinces of Canada have access to all the major broad-based taxes: there are no constitutional rules on exclusive use of certain bases by different levels of government. The provinces are also able to set their own rates. Currently, provinces raise most of their funds from own-source revenues, and overall federal transfers account for only 13 per cent of total revenues of the provinces. However, transfer dependency varies greatly among the provinces, from 10-12 per cent in the high-income provinces to nearly 40 per cent in the low-income provinces.

There is no consensus on the optimal vertical gap. On the one hand, economic intuition suggests that allocative decisions are likely to be more efficient if sub-national governments internalise the full costs of providing services. The result of a greater reliance on own revenues, at least at the margin, is greater accountability to local residents, improved creditworthiness, and so on. The surest way to make sub-national governments internalise costs is to give sub-national governments as much revenue autonomy as feasible and make them responsible for raising the necessary revenue to fund services, especially at the margin. Also the surest way to reduce vertical gaps is to assign sub-national governments with adequate revenue autonomy. Brazil, Canada, and the U.S. provide sub-national governments with considerable revenue autonomy. In Brazil, increasing revenue autonomy and decreasing transfer dependency is seen as an important means of fostering greater fiscal discipline among sub-national governments. However, tax autonomy is not a sufficient condition for reducing the vertical gap. Sub-national governments have to feel the need to use the provided revenue autonomy. For this to happen, sub-national governments need to operate under a hard budget constraint. For example, the conventional vertical fiscal gap is quite pronounced in Spain despite the fact that sub-national governments have been provided with substantial revenue autonomy. The problem in Spain is that sub-national governments have been able to convince the central government to increase their revenue sharing any time they have needed more revenues; i.e., they have been operating under a soft budget constraint. Elected officials, of course, find it much more attractive to receive transfers than to tax their own constituencies.

Lack of Adequate Equalisation

Requiring sub-national governments to rely too heavily on own revenues to close vertical imbalances may give rise to economically and/or politically unacceptable differences in the quality and quantity of critical social and economic services among jurisdictions. However, a well-designed equalisation grant is often used in many countries to reduce horizontal fiscal disparities among sub-national governments arising from differences in expenditure needs and fiscal capacity.

Australia, Germany, and Russia have chosen to use equalisation grants to close vertical imbalances and reduce horizontal fiscal disparities among sub-national governments. Germany, in particular, achieves very high levels of equalization and considerable uniformity of service levels among the states. But German States have exhibited signs of fiscal profligacy. In fact, Germany recently had to bailout two states that were in fiscal distress. The initial signs of fiscal indiscipline are attributed to design flaws in Germany's intergovernmental fiscal system, specifically the combination of high transfer dependency, high expenditure autonomy, low revenue autonomy, extremely high levels of equalisation, and finally high borrowing autonomy of sub-national governments. Like Germany, Australia also achieves a considerable degree of uniformity in sub-national service levels; but, unlike Germany, the States of Australia show no signs of fiscal profligacy. In fact, the States of Australia are in outstanding financial condition. One reason may be a better designed transfer system. Finally, Russia is making progress in fostering greater fiscal discipline at the sub-national level. Australia and Russia show that transfer dependency and equalisation need not give rise to fiscal profligacy, but the key may be a well designed transfer system.

In Australia, the gap between state own-revenue and spending is filled by Commonwealth grants in the form of general purpose payments and specific purpose payments (SPPs). The Commonwealth Grants Commission (CGC) allocates transfers to the States of Australia based on a calculation of revenue capacity and expenditure needs from comparisons of 18 revenue categories and 41 expenditure categories. Since 2000, the equalisation fund has been financed by receipts from the central government’s GST. The transfers from this fund are based on relativities or disabilities (differences in the costs of service provision, higher incidence of dependent populations, etc.), which are used to achieve greater horizontal equalisation. To put things another way, the equalisation transfers are meant to provide the states with the means to achieve greater uniformity of service levels, though there is no requirement that they actually provide a uniform level of service delivery. The Australians are very keen on making this distinction. More specifically, equalisation transfers provide states with the means to provide uniform service levels, though there is no mandate that they do so. In contrast, Germany creates mechanisms to ensure that resource transfers have the intended result: more uniform service levels.

In Brazil, the equalisation transfer represents a very large allocation of resources. These include the State and Municipal Participation Funds (FPE and FPM, respectively), which are funded from centrally collected income taxes and the national VAT (IPI), with 21.5 and 22.5 per cent, respectively, going into these funds in aggregate. The distribution of state participation funds (state share of three major federal taxes) is based on a participation coefficient for each state. The formula for calculating the participation coefficient is based primarily on equalisation or redistributive criteria. As a result, 85 per cent of the fund goes to low-income jurisdictions in the North, Northeast, and West.

The primary goal of intergovernmental fiscal transfers in the Canadian system is to maintain minimum national standards in provincial-local public services, thus compensating for vertical and horizontal imbalances between provinces. Accordingly, unconditional block transfers are made to low-income provinces to provide a minimum national standard of public services. The major two are the Canada Health and Social Transfer (CHST) and Equalisation Transfer. While the equalisation programme focuses on horizontal imbalances, the CHST is the primary means for closing the vertical fiscal gap. The Equalisation Transfer is based exclusively on tax capacity: Canada does not take into account differences in expenditure needs in the equalisation grant. As such, the equalisation formula is based on the province's tax base relative to the national average, which provides an incentive to provinces to design policies that affect the tax base to attract more equalisation transfers. The CHST is provided to fund health, post-secondary education, and social services according to provincial priorities. Equalisation transfers are under constitutional provision, and they are aimed at reducing the horizontal imbalances among provinces; thus, only the low-income provinces are eligible to receive them based on tax capacity.