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Macroeconomic Management and Fiscal Decentralization

Edited by
Jayanta Roy

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Foreword

This publication consists of a set of papers prepared for a Senior Policy Seminar on *Intergovernmental Fiscal Relations in China* held in Dalian, China in September 1994. The seminar was organized jointly by the Dongbei University of Economics and Finance (DUFE), the Economic Development Institute (EDI) of the World Bank, and the Ministry of Finance of the People's Republic of China. It was directed by Jayanta Roy of EDI, as part of an ongoing program of activities in Macroeconomic Management and Policy.

Thirty participants from China attended the seminar, including senior representatives from several provincial administrations. They were joined by senior officials from the International Monetary Fund (IMF) and the World Bank, and by distinguished experts from India, the United States, Germany, and Canada.

Comprehensive tax reforms were undertaken in China in January 1994 with a view to broadening the tax base and simplifying the system of tax sharing between central and provincial administrations. The seminar was designed to alert participants from all levels of the Chinese government to the major elements in a strategy for effective intergovernmental fiscal arrangements and to help them build consensus for change.

This book, which is intended to be of use to policymakers and practitioners, reviews the fundamental principles underlying a system of good intergovernmental fiscal relations; examines the development of the Chinese system of fiscal relations up to and including the reforms of January 1994; evaluates intergovernmental fiscal arrangements in a range of countries (including both developed and developing countries) with the purpose of drawing lessons for China; and presents views of Chinese and foreign experts on China's fiscal relations problems. The primary focus of the book is on center–state relationships; it only briefly addresses state–local relationships.

Jayanta Roy edited and prepared the manuscript for publication. The summary proceedings of the seminar, as reported in Chapter 1, were prepared by Allan Roe who acted as seminar rapporteur.

Vinod Thomas, Director
Economic Development Institute

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Intergovernmental Fiscal Relations in China: Report of a Senior Policy Seminar

Alan Roe

A Senior Policy Seminar on Intergovernmental Fiscal Relations in China was held in Dalian, China, September 12-17, 1994. The context for this seminar was the comprehensive tax reforms recently undertaken in China that will significantly broaden the tax base and simplify the complex system of tax sharing between central and provincial administrations.

These reforms could strain many aspects of the relationships between national, provincial, and local fiscal administrations. For example, the achievement of macroeconomic stability and a more equitable distribution of income between and within provinces necessitates more resources being placed at the disposal of the central government. However, this will need to be achieved at a time when the burdens on the subnational authorities are intensified by having to absorb new expenditures for social welfare as well as other expenditures associated with reform. In that sense, the timing of the seminar, just a few months after the latest fiscal reforms were introduced, was extremely timely. It also complemented the work already undertaken by the International Monetary Fund on the same topic. The seminar broadened both the scope of the issues under discussion (the IMF's current focus is mainly on the establishment of a grants system) as well as the geographical extent of the Chinese participation.[1]

The seminar was designed to alert participants from the central and provincial levels of the Chinese government to the major elements in a strategy for effective intergovernmental fiscal arrangements and to help them build consensus for change. To this end, the seminar involved in-depth explanations and discussions of experiences with intergovernmental fiscal arrangements in other relevant countries, as well as presentations and workshop sessions focused explicitly on various aspects of the fiscal problem in China itself.

The seminar was organized jointly by the Dongbei University of Economics and Finance (DUFE), the Economic Development Institute of the World Bank (EDI), and the

1. For a synthesis of the earlier IMF-World Bank seminar on a similar theme, see E. Ahmad, Jon Craig, and Zuliu Hu, *Conference on Intergovernmental Fiscal Relations: Summary Conference Proceedings*, IMF (mimeo), October 25, 1993.

Ministry of Finance of the Government of the People's Republic of China (MOF). It was directed by Mr. Jayanta Roy of the EDI. There were thirty participants from China, including senior representatives from thirteen provincial administrations—namely Jilin, Hebei, Shanxi, Anhui, Jiangxi, Henan, Hunan, Guangdong, Guizhou, Quhai, Ningxia, Liaoning, and Inner Mongolia.

The proceedings comprised four separate elements, and the report presented here has adhered to this four-way division of material as closely as possible even though this results in some minor contraventions of the chronological order of the seminar itself. The first element was the definition of the basic principles underlying a good system of intergovernmental fiscal relations. This discussion, led by Ved Gandhi of the IMF, is summarized in the first section of this chapter.

The second element comprised presentations and papers, mainly from Chinese experts, describing the gradual development of the Chinese system of fiscal relations up to and including the reforms of January 1994. This is summarized in the second section.

I then cover the third element of the seminar—a series of presentations by international experts about intergovernmental fiscal relations in other countries, including Australia, Canada, Germany, India, Indonesia, Russia, the United States, and Switzerland.

Finally, the views of Chinese experts on particular aspects of the country's fiscal relations problems are considered. These views emerged from workshops during the five days of the seminar. Comparable reflections of the foreign experts regarding some of the same issues are also represented.

In his introductory remarks, Mr. Liu Jubin, vice-minister of finance, drew attention to the previous initiatives to adapt the Chinese system of intergovernmental arrangements since the opening up of the economy in the late 1970s. These had included the 1980 system of "revenue-expenditure assignment and contracting," which was adjusted further in 1985. Then, in 1988, the government introduced a revised system that included "incremental revenue contracts" and "gross revenue sharing." Mr. Jubin argued that these systems had been reasonably well-adapted for their own times: they certainly provided both central and local governments with incentives to raise more revenue and moderate expenditures and, in this way, contributed to the broader reforms of the country.

Reviews of these systems, however, identified important weaknesses. They criticized the lack of standardization and concluded that the systems were poorly adapted to the next stages of development of China's socialist market economy. Hence, further reforms were introduced at the beginning of 1994. These were integrated into the broader reforms of the Chinese tax system and sought, among other things, to clarify the functions of the different levels of government, to improve budget management, and to promote the aims of rational resource allocation and sound macreconomic management. Mr. Jubin noted that the reforms had been well received both nationally and internationally and were already being reflected in faster revenue growth at central and local government levels.

However, he recognized that some established market economies had been operating with systems of fiscal relations for as long as 100 years. Relative to this, China has taken only the first steps. He also noted that the basic framework now in place is still not a fully standardized one and that there are numerous practical problems in developing it further and consistently with the distinctive characteristics of the Chinese economy. In his opinion the search for these solutions should incorporate ongoing study of international practices in the area of intergovernmental fiscal relations. These practices should then be evaluated in relation to the circumstances in China.

He noted that his own Ministry had already collaborated with the World Bank, the IMF, and other international agencies through symposia and seminars on particular aspects of the problem. He fully expected that this latest seminar would provide an excellent opportunity for Chinese officials to learn more about the fiscal arrangements of other countries and to consider their suitability for China. He expressed his thanks to all the organizers for their extensive preparation and for arranging such a strong team of international and domestic experts to lead the discussion.

These sentiments were endorsed by the seminar director, Jayanta Roy, who noted that the importance of an optimal structure of intergovernmental relations in large economies had been recognized in the work program of the Economic Development Institute of the World Bank for several years. That work had culminated in a seminar in New Delhi in 1991 on Intergovernmental Fiscal Relations and Macroeconomic Management in Large Countries; at this seminar China had been represented. A similar seminar that focused on Russia had been held in April 1993.

In reviewing the content of the present seminar, Mr. Roy agreed with Mr. Liu Jubin that foreign experts and the existing literature on the subject can provide important lessons and principles about the design of an efficient multitiered system to meet national objectives. However, the foreign experts and literature cannot set the national objectives and cannot present a fully worked out system designed to meet them. Mr. Roy very much hoped that the Chinese experts present at the seminar would learn from the foreign experts "best practices" as well as the pitfalls but would then regroup to continue the work of designing a system specifically suited to Chinese circumstances.

Fiscal Relations and Economic Performance: Some General Principles

In the opening keynote address, Ved Gandhi from the Fiscal Affairs Department of the IMF sought to examine the effects that a system of intergovernmental fiscal relations can have on economic performance both in general terms and in the specific circumstances of China.[2] In particular, he posed the question of whether the exceptional Chinese growth performance of 12 to 13 percent per annum in the previous two or three years might be damaged by a failure to modernize the existing fiscal arrangements.

He began by defining a few basic terms used during the seminar (see Annex at the end of this chapter). He then addressed two specific questions. First, can the lack of an appropriate intergovernmental fiscal structure seriously affect the continuation of rapid economic growth in China? And is it possible to design a "good" intergovernmental fiscal structure that will be conducive to continuing strong economic performance? Second, do countries generally and China in particular have intergovernmental fiscal structures that meet the tests of economic principle against which the design of the "good" system is assessed? Gandhi suggested that this was not the case generally or in China in particular. Partly this is because of the conflicting demands involved in the design of such systems.

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2. It should be noted that a later session of the seminar, and especially the presentation by Anwar Shah, provided further definitions of the basic principles underlying a sound system of fiscal federalism. That presentation is not reflected in the write-up here because most of the points raised are covered more fully in his already published paper on this subject. See Anwar Shah, *The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies,* Policy and Research Series, No. 23, World Bank, Washington, D.C., 1994.

Fiscal Relations and Economic Growth in General

Gandhi pointed out that there are four main factors that influence directly the performance of an economy. These are the microeconomic efficiency of resource allocation; the degree of macreconomic stability that is achieved; the extent to which the fiscal system of an economy is believed to be fair and equitable; and the degree to which the growth potential, conditioned by these first three factors, is actually achieved.

He explained how fiscal interrelations could negatively affect growth through each of these four factors. First, the tax system could encourage a significant migration of the resources of either labor or capital between provinces and localities. This in turn might arise if the fiscal system resulted in wide differentials in the taxable capacities of different locations, as well as in their access to grants, subsidies, and other transfers from higher levels of government. The same problem might also be associated with a situation in which provinces and localities were assigned expenditure responsibilities, the benefits of which spilled over beyond their own geographical jurisdictions to result in expenditure levels considerably in excess of available revenues.

Second, the achievement of macroeconomic stability could be problematic if the central government was not given the responsibility for those categories of public expenditures that could be adjusted reasonably quickly through the course of the business cycle. Similarly, the central government's responsibility for macroeconomic stability might be more difficult to achieve if the provincial and local governments were given the right to borrow on their own account or to run up large arrears. This is not to say that such borrowing should not be permitted—only that the possible consequences and the need for some controls should be well understood.

Third, the equity in the fiscal system could be greatly impaired if redistributive taxes (the personal income tax, wealth and inheritance taxes) and redistributive expenditures (social welfare expenditures) were assigned too heavily to subnational governments rather than to the central government.

As a final example, growth prospects would be impaired if provincial and local governments were assigned the responsibility for taxes on those essential raw materials and natural resources that happened to be located in their geographical locations, and if they also sought to levy excessively high tax rates on such resources. The burden of these rates would then be exported to manufacturing industries in other regions.

Gandhi argued that if the economic principles underpinning these four examples were the only factors conditioning intergovernmental fiscal structures, then such structures would tend to have relatively uniform features across different countries. In practice, differences between countries, in terms of both economic and other characteristics, operate to prevent such uniformity.

Strong Features of the Chinese System

The Chinese system as reformed in early 1994 has several important qualities as judged against his general principles. First, most of the public services with benefits widely distributed across the population (for example, national defense, internal security, external trade, other aspects of foreign relations, macroeconomic management) have been assigned to the central government. So, too, have those expenditures where the geographical spill-over effects are likely to be large (for example, higher level education and health, scientific research, technical renovation, new product development, and regional devel-

opment). On the other hand, those expenditures where the benefits accrue essentially to the local populations (for example, lower level education, basic health, and investment in locally owned enterprises) have been made the responsibility of lower level governments.

A second good feature is that the taxes applying to mobile economic bases, including some that can usually generate very large revenues (for example, enterprise profits tax and value-added tax) have been assigned to the central government. By contrast, taxes on immobile factors of production (such as land and property taxes, agricultural and husbandry taxes), have been assigned to subnational governments. So, too, have taxes with a mainly local incidence (such as the slaughter taxes, stamp taxes, city maintenance and construction taxes and taxes on contracts).

Third, arrangements are in hand to ensure that the revenues from relatively buoyant taxes such as the value-added tax, and the securities transaction tax, are shared with provincial and local governments even though they are collected centrally. This is an eminently sensible arrangement and one that is extremely important for the balancing of provincial and local government budgets.

Fourth, the recent separation of the National Tax Service from Local Tax Services, and the withdrawal of the rights of subnational governments to grant tax exemptions and reliefs from central government taxes, is an important step that will considerably enhance the efficiency of tax collection.

Fifth, the central government in China retains the power to legislate the rates and bases of most taxes assigned to subnational governments, and this seems desirable on the grounds of economic efficiency. It should also help to ensure that the burdens of provincial and local taxes, which can be exported beyond their own borders, will remain moderate.

Finally, by restraining the powers of provincial and local governments in China to finance their budget deficits through bank and other borrowing, the authorities seem to have improved greatly the prospects of effective macroeconomic control and inflation control by the central government.

What Are the Remaining Problems?

Notwithstanding the soundness of the basic structure referred to in the introductory remarks by Mr Liu Jubin, Gandhi suggested that a number of problems remain to be resolved.

The first problem he referred to concerns the lack of clarity about the matching up of the expenditure responsibilities of the different levels of government with their corresponding tax assignments plus shared taxes. Serious "vertical imbalances"—chronic deficits for one or more levels of government matched by chronic surpluses elsewhere—could arise from the present system. If this indeed were the case, it would have major implications for the provision of essential services by some provincial and local governments, as well as for the operations and maintenance expenditures on the investment capital needed for economic growth.

Second, "horizontal imbalances"—imbalances between the fiscal positions of different governments at the same level (for example, local or provincial) — were also foreseeable. This being so, it was still unclear what the system of corrective transfers might be and also how the transfers might affect allocative efficiency and economic growth.

Third, it was his understanding that many of the important price subsidies for food grains, cooking oil, meat, and other essential consumer goods continue to be administered and controlled by governments at the subnational level. These responsibilities could give rise to budgetary problems for at least some subnational governments. Normally, the main responsibility for redistributive policies lies with central governments.

A related concern is that personal income taxation, as well as inheritance and gifts taxes, have been assigned to subnational governments, which probably have some authority to grant exemptions. Gandhi suggested that the redistributive effects of such taxes would be eroded as individuals at the margin changed localities in order to escape the full brunt of such taxes. In addition, any remaining powers to grant exemptions and reliefs would be likely to encourage undesirable competition between provinces and localities to attract a fixed total supply of labor and capital.

A fifth problem related to the treatment of natural resource taxes in China. It was his understanding that the revenues from these taxes are shared with provinces and localities partly on the basis of their geographical origin. He wondered whether this was a desirable arrangement. In particular, was it right for the population of a particular region or locality to benefit disproportionately from such revenues just because of where the resources in question were located?

Finally, he questioned the present system of grants and subsidies in China and asked whether such a system is adequately transparent and is effective from the point of view of encouraging subnational tax effort, improved fiscal discipline, and strengthened budget accountability.

He conceded that he was not aware of the answers to all the problems that he had posed and was naturally less well informed than the local participants about the particular historical, political, and cultural factors in China that needed to be factored into their resolution. However, he presented his ideas as a useful organizing agenda for the discussion that would follow in the remainder of the seminar.

Discussion from the floor noted that the good and bad features of the Chinese assignment of taxes, as noted by Gandhi, had been substantially preserved by the January 1994 reforms. The major change had been that the important new value-added tax (VAT), which is likely to attract 40 percent or more of total tax revenues, will share those revenues between central and provincial administrations. The share of revenues accruing to the central government, which until 1992 had been about 39 percent of the total, was expected to increase. Why then had the provincial authorities accepted the new arrangements? Apparently, the higher tax base and prospective revenues from the VAT will result in a higher guaranteed revenue base for subnational administrations, as well as a rising share for them of any revenues over and above that base.

A more serious problem was felt to be the absence of any real scientific basis for assessing the expenditure needs of the local administrations. This assessment is done at present by incremental adjustment to a base-year allocation, which itself was not scientifically established.

A related issue of concern was that some of the tax revenue sharing arrangements, including the new arrangements for VAT sharing, were ad hoc. Some participants argued that little serious effort has been made to link these sharing arrangements to any assessment of the taxable capacity of different provincial and local governments, or to their expenditure responsibilities.

On the basis of the discussion of Gandhi's paper, participants earmarked three main topics for in-depth consideration by working groups: the manner in which expenditure responsibilities should be assigned between central and provincial government administrations; the manner in which taxation responsibilities might best be assigned between the various tiers of government; and the manner in which an intergovernmental transfer system might be designed to support the needs of vertical and horizontal equalization between and within the provinces. Working groups were set up to consider each of these matters, and their reports back to the main seminar are described later in this chapter.

The Main Features of the Reformed Chinese System

The next important task of the seminar was to define and discuss the present Chinese arrangements in more detail, including the nature of the reforms recently introduced. This task fell to Xu Shanda, Chen Gong, Ding Xianjue, and Liu Minhyuan.

The Chinese System

Liu Minhyuan began by providing a broad perspective on the Chinese arrangements. From the earliest days of the People's Republic, the major taxes were levied on a nationwide basis including some that would have been better regarded as subnational taxes. Only a few minor taxes (for example, the slaughter tax and the tax on the licensing of ships) were assigned specifically to provincial and other subnational authorities. This was because the imperatives of a highly planned economy saw no obvious role for any real autonomy in subnational taxation. During the period 1953 to 1980, tax revenues in total amounted to only 50 percent of total fiscal revenues and, within this, subnational taxes amounted to only a few percentage points.

Both Liu Minhyuan and Chen Gong explained that with the general economic reforms of the 1980s, matters began to change. Beginning in 1983, a comprehensive reform of industrial and commercial taxation was carried out. This had the effect of raising the overall tax share in total fiscal revenues quite considerably. The reform also included the introduction of the fiscal rationing system. Until 1988, revenues from some taxes were shared between different jurisdictions according to a predetermined formula. In essence, the system provided that the revenues from specific taxes would be shared between central and provincial governments according to tax sharing contracts that varied across regions and also over time. The idea was that the subnational governments should have just enough revenue to provide a reasonable *basic level* of service in their areas, with the balance of revenues being surrendered to the center. In 1988 the system was put on a more negotiated basis whereby different provinces were able to establish different marginal retention rates for the tax revenues concerned.

This system, however, had many problems, not the least of which was the declining share of central government revenues, especially after the 1988 reforms (51.6 percent of total revenues went to the center in 1981 but only 38.6 percent by 1992). Another problem was the regional imbalances that the system tended to promote: the more prosperous regions kept and invested all revenues above a certain base, while the poorer regions failed to reach that base and needed special subventions. In addition, the incentives within the system encouraged too many quick payoff investments in terms of revenue (for example, tobacco industries yielding high excises) rather than more basic industries.

Finally, the system lacked uniformity across regions as well as certainty in the revenues generated.

Xu Shanda and other Chinese participants explained that the focal point of the 1994 reforms is the designation of three important taxes—the VAT, the new securities trading tax, and the resources tax—as shared taxes. All other taxes are now assigned explicitly to either the central government or to the subnational governments. The other major innovation has been the establishment of separate national and local tax services, effective since July 1994.

As regards the shared taxes, it was explained that 25 percent of the 1994 VAT revenues will be apportioned to the provincial governments with the rest to the center. Although the main securities market activity is in Shanghai and Schenzhen, the tax resources that are generated from this activity come from many different parts of the country and hence a 50:50 sharing of the securities tax revenue between the center and local governments has been agreed. As regards natural resources, only the tax take from off-shore oil will be regarded as national, while all other resource-based taxes will be shared. As regards the main assigned (nonshared) taxes, the central government has been assigned customs duties and the new excise taxes as well as almost all other indirect taxes. The local governments have been assigned a number of minor taxes as well as the revenues from the enterprise income tax for those enterprises that are owned locally.

The new system is regarded as something of a compromise but one that should leave no province worse off than in 1993. This is because parity with the 1993 outcome will be achieved by a central government transfer to any province that, on the basis of the new system, achieves less revenue than it retained after tax sharing in 1993. At the same time, the new tax sharing system, especially for the VAT, preserves some incentives for the faster growing provinces. If a province's actual VAT and excise duty collections under the new system exceed its actual 1993 transfers to the center, the center will transfer back an amount equal to 30 percent of the VAT plus excise duty increase compared to 1993. Presumably, this means that the local share of the VAT revenues in some provinces will gradually rise above the 25 percent level.

In addition to eliminating some of the inefficiencies of the previous system, the new system is expected to lead to a significant increase in centralization: the share of central taxes in the total is expected to rise from 27 percent to about 80 percent by the end of the decade. However, the part transferred back to the subnational level would also rise from a presently negative amount to more than 30 percent over the same period. This would mean a rise in the retained or accrued revenue at the center from less than 40 percent of the total tax-take to well over 50 percent by the year 2000. [3]

A corresponding explanation of expenditure assignments was provided in the paper by Ding Xianjue. He noted that there were some broad listings of the expenditure responsibilities assumed by central and local governments respectively. In the postreform period these assignments had been amended to give the local governments a great deal more power in areas such as enterprise promotion and local economic development more generally. However, the system was characterized by considerable ambiguity at the margin and by several manifest weaknesses that needed to be resolved. It was quite common, in relation to functions such as disaster relief, environmental welfare, and new settle-

3. This explanation is derived in part from *China: Macroeconomic Stability in a Decentralized Economy*, Country Economic Memorandum, World Bank, August 1994.

ment, to observe considerable confusion about where the expenditure responsibilities actually lay.

In recent years, when the fiscal resources of the central government have been under strain, the center has failed to discharge some of the functions that are its notional responsibility—for example, key construction projects—and also has resorted to passing down certain of its functions to the subnational governments. The practice of the central government deciding on policies, and the subnational governments providing the money to pay, unfortunately has become more common. This problem has been compounded, Ding Xianjue explained, by the practice of faster growing provinces financing quick payoff industrial projects and at the same time looking for central government funding of certain infrastructure projects. Meanwhile, lower revenue provinces are unable to find the funds to discharge even their basic functions. The net result of this essentially ad hoc decentralization of expenditure functions has been significant loss of central control in relation to macroeconomic management.

While these problems were widely recognized, it was noted both in the presentations and in the discussion that the 1994 reforms had not really progressed far in defining expenditure responsibilities. However, the speakers offered a number of suggestions, many of which conformed to the principles presented earlier by Ved Gandhi. One was that with the evolution of the market culture in China, the government at all levels should withdraw more and more from direct investment in competitive industries. This would leave more resources for infrastructure projects. Certain major highway, railway, aviation, and shipping projects could be designated as national ones requiring central government financing. Similarly, infrastructure projects providing narrowly local benefits should be mainly financed by local governments. In areas such as education, health, international relations, scientific research, and cultural promotion, the assignments could follow the classical principles discussed above.

Finally, other weaknesses were identified: in recent reforms the absence of clear arrangements to allow local government borrowing consistent with national macroeconomic objectives; the absence of clear proposals for a grants mechanism that could handle the horizontal imbalances not resolved through revenue sharing; and remaining limitations on revenue autonomy at the local government level.

Decentralization and Macreconomic Control

In a later session of the seminar, Rajiv Lall of the World Bank linked these assessments of the present arrangements in China to an analysis of how the Chinese system of fiscal relations had affected the country's problems of macroeconomic management and control. He also assessed the extent to which the recent reforms might be expected to improve upon what had gone before.

Although China has enjoyed exceptionally high growth rates in recent years, growth has been increasingly associated with a risk of rising and destabilizing inflation. It was the view of the World Bank that inflation in China is conditioned by deep structural causes. The present arrangements for, and reforms of, fiscal interrelations are an important part of the problem and its possible solution. In particular, the high level of fiscal decentralization in the past had contributed to a low degree of tax buoyancy, and this in turn had intensified the inflationary pressures coming from the government's own budget.

Looking more closely at this diagnosis, Lall noted that the inflation rate in China in July and August 1994 was about 3 percent a month and that the primary cause of this had been the monetary financing of a large government deficit. However, the total of budgetary expenditures no longer provides an accurate guide to the extent of government activity in the economy. Prior to China's economic reforms, that total was more meaningful because "public sector" and "government" activity were largely synonymous. Now that state-owned enterprises (SOEs) have achieved various degrees of autonomy from central and subnational government, the government's involvement in economic activity needs to be measured in terms less broad than the total public sector borrowing requirement but broader than the narrow budget deficit. In his opinion the most appropriate concept for this purpose is the consolidated government deficit, which reflects the financing needed to cover both the government's own expenditures as well as the government-directed expenditures by the rest of the "public sector."

This consolidated deficit has risen in recent years and now amounts to about 9 percent of GDP. At the present time, it is predominantly financed using monetary methods (that is, borrowing from the Central Bank). However, a deficit of this size and financed in this way is not consistent with the achievement of control over inflationary pressures. Nor would be a deficit of the same size but financed through the issue of government bonds, Lall argued. Simulations have shown that this would rapidly increase the interest element in total government expenditure and would lead to unsustainable deficits, even assuming that economic growth continues at a high rate.

This being the case, it is clearly important to ask why the government deficits have become so large and what might be done to reduce them. The first explanation suggested by Lall is the sharp fall in the share of budgetary revenues in GDP, which went from 34.4 percent in 1978 to 15.4 percent by 1993. This, in turn, is associated strongly with the fall in budgetary contributions from the SOEs—only 4 percent of GDP by 1992 compared with 20 percent in 1978. This is a direct consequence of economic reform and the greater autonomy and profit retentions allowed to enterprises. A second explanation lies in the progressive devolution of administrative authority to lower levels of government, a feature of China's reform experiences since 1978. Lall argued that the complex system of revenue sharing described above had shifted the de facto control over tax policy to the subnational authorities. This had included active subnational authority negotiations with local enterprises leading to tax incentives/exemptions not authorized by the center. In addition, local tax bureaus were far less vigorous in their collection and remittances of taxes to the center than they were supposed to be.

These problems, taken in isolation, need not have caused the large increases in the consolidated deficits that have occurred. But, as Lall emphasized, central government expenditures have not been reduced in line with the reduction in the available revenues. On the contrary, weak control over the expenditure side of the budget has been an important cause of the deficit problem. Three aspects of the postreform period are significant here. First, the investment planning/control of the central government, through the State Planning Commission (SPC), has deteriorated. This is because of the progressive transfer of responsibility for SOEs to the local authorities (80 percent of output was controlled in this way by 1988) and also because of local authorities' limited incentives to exercise the same tight control over SOE investment approvals that was exercised formerly by the SPC.

Second, the "investment hunger" manifest by many local authorities—especially in the priority sectors including social and physical infrastructure as well as basic industries (for example, steel and coal) and so-called "pillar industries" (automobiles and electronics)—has led to a big increase in the priority investment program of the government from 8.4 percent of GDP in 1989 to over 11 percent by 1992. This tendency has been exacerbated by the fact that neither central nor local governments bear any direct investment risks: the consequences of bad decisions have been, in effect, socialized via losses in noncommercial banks. The whole issue of what actually constitutes a "priority" also has been clouded by the decentralization process.

Third, the SOEs, in spite of reforms, still bear a large part of the burden for providing basic social services such as health care, child care, and some schooling, and they are also required to maintain excessive work forces. This results in an ongoing and justified SOE claim on the government for special assistance in addition to any help needed to cover genuine operational deficits. Lall noted that explicit and implicit government subsidies to the SOEs at the present time amount to at least 3.5 percent of GDP—equivalent to 1.5 times the narrow budget deficit.

In short, the decentralization process of the reform period combined with the lack of real progress on many aspects of SOE reform accounts for a significant part of the large and rising consolidated deficit of the central government.

In this context, Lall felt sure that the reform measures recently put in place represented a good framework to tackle at least a part of the problem he had described. The tax reform measures, in particular, were extremely ambitious in their scope—more so, it can be argued, than those in any other country. The reform measures recognize that macroeconomic stability in China calls for a substantial increase in the ratio of tax revenues to GDP. Lall agreed only partly with a questionner who said that raising the tax:GDP ratio in the short term might be difficult given the continuation of a large social burden on the SOEs—traditionally a main source of tax revenues. Lall pointed out that economic activity in China was continuing to diversify away from the SOEs and that substantial additional revenues, even from the enterprise sector, were a real possibility.

So far the results of the tax reforms seem to be encouraging. Nominal tax revenues in the period January to July 1994 turned out to be 24 percent higher than in the corresponding period in 1993. However, nominal GDP is also rising fast, and so the size of any increase in the tax : GDP ratio is still unclear. In addition, certain aspects of the reforms give rise to concern.

First, the effect of the reforms on government revenues was likely to be dampened by the special treatment to be allowed to soften the impact on certain adversely affected enterprises. For example, there is a grandfathering arrangement to hold down the sales tax burden for foreign enterprises and joint ventures.

Second, the scale and the breadth of the reforms mean that their implementation poses a tremendous challenge. Lall was not certain that the preparations, training, and equipping of the new national and local tax services were yet adequate for the task involved.

Third, the increasing expenditure responsibilities of the government in the future and, in particular, the absorption of the social burdens from the SOEs, argued for a further broadening of the tax base. Lall suggested that prime candidates for consideration in this regard might be environmental taxes, the personal income tax, revenues from divesti-

tures, property taxes, and increases of several fuel taxes, some of which are very low by international standards.

Fourth, Lall agreed with earlier speakers that the reform proposals seemed to be much weaker or more vague in relation to expenditure control than in relation to taxation. The resolution of the problems associated with the control of public investment, in particular, required a stronger framework than at present involving a much clearer definition of the national public investment program (NPIP). Japan's Fiscal Investment and Loan Program (FILP) might provide one useful model to consult in this regard. In any event, the new framework ought to include a clear definition of the role of government even in relation to those investments projects falling outside the budget. It would also be desirable to have the funding of all public investment approved by the National Peoples' Congress. Under the present arrangement, the State Investment Plan is approved only by the State Council and is subject to numerous changes through the year.

As a final example of the gaps in reform so far, he repeated the need to assign expenditure responsibilities more clearly between the various levels of government.[4] This is not a trivial task. The Chinese authorities might begin by identifying the best practice, least cost provision of government functions between provinces and the center based on international experiences. National consensus then needed to be built regarding the division of responsibilities. This should be codified in a new law on intergovernmental fiscal relations.

These changes on the expenditure side should be accompanied by arrangements to provide the local governments with more revenue authority to ensure that they can meet their expenditure responsibilities. If properly done, this should enhance the accountability of the local governments and discourage them from searching for extra budgetary sources of revenues, most of which would be inefficient compared with more traditional sources of tax revenue.

Comparative Arrangements in Russia and the United States: The Main Lessons for China

A series of sessions sought to put most aspects of the Chinese fiscal relations problem into a comparative context. Roy Bahl of Georgia State University opened this next stage of discussion by presenting a paper that compared the situation in China with the situations in Russia and the United States.

He began by considering the general advantages and disadvantages of fiscal decentralization. China is already quite decentralized, although it has some strong centralist tendencies. He noted that there is, above all, an economic efficiency argument for decentralization. So long as preferences differ across subgroups of the population, national welfare is more likely to be maximized if local communities are able to express their own preferences and so have a say in persuading local governments to provide a mix of services that match these preferences. The noneconomist might couch this argument in terms of "getting the government closer to the people," but the recommendation is broadly the same.

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4. For a more complete assessment of the possible gaps in the reforms, see Chapter 8 by Rajiv Lall and Bert Hofman.

However, this theoretical argument for decentralization is likely to be far stronger in already industrialized countries than in transitional ones. One reason for this is that the theoretical model of fiscal assignment has been developed in the context of industrial countries and is strongly reliant on democratic processes of budget-making and on the high degree of responsiveness of both the tax effort and the expenditure mix to changes in relative prices and income. In these circumstances, the efficiency losses associated with interference from a higher level of government can be considerable.

In transitional economies, such as those in Russia and China in the 1990s, the efficiency gains from decentralization may not be so obvious or large. This is partly because voter preferences are not so readily translated into budget outcomes and also because of the limited dependence of some parts of government on elections and so on voter preferences. Decentralization is more likely to be justified the greater is the electoral accountability of local governments; the greater is the subnational taxing power to capture significant proportions of community income increments; the greater is the subnational discretion in shaping the budget and setting tax rates; and the greater is the efficiency of the local government in administering an efficient tax system and collecting the taxes. This tableau of conditions conforms with present circumstances in the United States quite well but does not, he suggested, fit the current situation in China.

At the same time, the arguments for fiscal centralism are stronger in transitional economies. There are for four main reasons. First, periods of major economic transition are often extremely difficult from the viewpoint of macroeconomic stabilization, and this is an area of economic management that must be assigned to the center. Second, investment capital is likely to be scarce, and this argues for its central allocation, at least for the provision of new public infrastructure. Third, a limited total tax capacity may argue against giving subnational governments too much tax discretion in case they compete too effectively with the center for access to the major tax bases.

Finally, in those cases—the majority—where the inherited regional and other income disparities of transitional economies need to be changed, a strong central government coordination of the equity aspects of fiscal management is likely to be important. Russia and China, Bahl noted, face difficult choices as regards their spatial equalization policies. Russia must make the hard choice between fiscal equalization, central government fiscal solvency, and the appeasement of the potential break-away provinces. China is forced to choose between funneling more resources to the lower income provinces or leaving the retained revenues at a higher level in the faster growing coastal provinces. However, both countries still retain a high degree of fiscal centralism and so can still make such decisions. By contrast, the United States, which is much more decentralized fiscally, has only limited power to affect a regional redistribution of resources.

An Overview of Main Differences

A detailed comparison and analysis of the main differences between the Chinese, Russian, and U.S. fiscal arrangements are set out in Chapter 4. In Table 1-1, the most important differences, are presented.[5]

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5. For an excellent summary of cross-country tax and expenditure assignments see "The reform of Intergovernmental Fiscal Relation in Developing and Emerging Market Economies," Anwar Shah, World Bank 1994 (Appendix C, D, and E).

Table 1-1. Chinese, U.S., and Russian Fiscal Systems Compared

Characteristic of system	*China*	*United States*	*Russia*
Degree of local autonomy	Limited (no scope to set tax rates or to borrow)	High; states have wide powers but cannot affect interstate commerce	Limited discretion on tax rates and bases
Local government activity as share of total government activity	50 - 60 percent	40 percent	47 percent
Expenditure assignments to local governments	Not at all clear	More or less clear who should do what	Not at all clear
Revenue sharing	Tax sharing (derivation basis); equalizing grants largely ad hoc	Mixed approach dependent on political process. About 60% formula determined; 40% ad hoc	85% tax sharing using derivation basis; 15% ad hoc
Degree of transparency	More after 1994 reforms	Ad hoc	Limited
Expenditure per capita (variation across provinces: ratio of "best" to "worse")	6 to 1	Connecticut (best = 2.5 times Arkansas (worse)	11 to 1
Does central government equalize?	Tax sharing system is equalizing (richer provinces pay more); earmarked grants system is not (one part of system neutralizes the other)	No real relationship between income levels and center to local transfers	No - policies accentuate inequalities
System of tax administration	n.a.	Federal and states totally independent	n.a.
Recent trends	Moving to centralize	Becoming more centralized	Moving to decentralize

n.a. Not applicable.

The fifty states in the U.S. system have a very high degree of fiscal autonomy. This decentralization is in contrast especially to Russia but also to China. In the United States, the states are quite free to choose their own tax structures as long as these do not violate the federal constitution. Hence, tax rates, tax bases, and user charges may be set by the states without federal approval. In general terms, expenditure autonomy is also high, and states can determine which expenditures to provide. This general arrangement is overridden, however, by federal government mandates, some of which restrict expenditures on, for example, health and environmental grounds and others of which require certain expenditures by the state governments to match the provision of federal grants. Likewise, state governments have mandated certain actions by the lower levels of local government. The fiscal autonomy of local government in general is more restricted than that of the state governments, although this also varies from state to state.

The U.S. trend for the past fifteen years has been toward reducing federal transfers to both state and local governments. "General revenue sharing," formerly the only program of general assistance to state and local governments, has been eliminated. The 1986 federal tax reform eliminated the deductibility provision for state and local government general sales tax against the liability of individuals for federal income tax, thereby ending the shifting of a substantial part of the burden of such taxes on to the federal government.

The net effect is that the price a state resident must now pay for each dollar's worth of public expenditures is higher than before. This has resulted both in greater accountability of state government officials and in some increased hesitancy about fiscal decisions by state and local governments.

Although there have always been large interstate variations in per capita fiscal expenditures, the federal grant system is not designed systematically to equalize these disparities. This is in sharp contrast to the arrangements in, for example, Australia and Germany (see discussion later in this chapter). Additionally, the state-by-state competition for industry and scarce mobile resources, which Ved Gandhi had earlier suggested might be wasteful, is not restricted in any significant way by the U.S. arrangements.

The present Russian system summarized in Table 1-1 offers a very significant contrast to the U.S. system. It operates as a three-tier system: the federal government, ninety-one provinces/states such as oblasts, and a lower level of government known as rayons. The revenues of the subnational units are derived mainly from four shared taxes, but predominantly from the enterprise income tax and VAT, with the rates and bases set by the federal government. The sharing is on a derivation basis (that is, point of collection), with the sharing rates set by the Parliament. These can vary from oblast to oblast, but they are set in an ad hoc fashion and have been subject to frequent amendment in the past few years in response to changing political pressures.

The assignment of public expenditures in Russia is made on the basis of the geographical dimension of benefits—an arrangement deriving from the system operated formerly in the Soviet Union. In brief, public service activities whose "benefit area" is the whole nation (for example, defense, international trade expenditures/subsidies) are assigned to the federal government. Those services with an identifiable regional benefit area (such as universities and certain specialized hospitals) are provided at the oblast level or a similar level. Elementary schools, parks, and other services with a narrower benefit area are provided by the lower levels of government. Among other things, this means that most forms of social welfare are provided at the subnational level.

Bahl noted that while this conceptual assignment of expenditures fits with good practice and accepted norms as explained by Gandhi, the actual practice in Russia often fails to do so. Because of a serious lack of clarity in the assignment of specific services to specific levels of government, there is often some duplication of provision or provision of services at the "wrong" level. This problem has been compounded in the recent transitional period by ambiguity about the assignment of responsibility for the ownership of certain commercial and industrial enterprises as well as ambiguity about the expenditures associated with that ownership.

Recent trends in the fiscal arrangements have been driven by the dictates of the transition to a market economy and have been colored significantly by the need to restore macroeconomic stability. The latter has constrained the government in its ability to run fiscal deficits, but at the same time there has been a need to hold the Russian federation together by new revenue sharing devices. The consequence has been frequent changes in the details of both revenue sharing and expenditure assignment arrangements.

Some of the more recent changes have violated accepted principles in very fundamental ways. For example, early in 1992 the central government shifted the responsibility downward for most of its price subsidy and income maintenance programs, but it failed to provide the necessary transfers—approximately 5 percent of GDP—to fund these programs. No plans have been developed about how these extra costs will be matched by

available revenues at the oblast level. Somewhat later in the same year, the responsibility for many investment expenditures, including several with obvious national significance, were also shifted down to the oblast level. This change was motivated apparently by the need to balance central government budgets but also to claw back some of the gains that the oblasts had derived short term by the introduction of fixed sharing rates.

Whatever the rights and wrongs of these particular changes, the system, in recent years, has evolved on the basis of a bargaining approach rather than as the consequence of the concrete implementation of clear principles. Bahl argued that such arrangements cannot continue for much longer. If the central government continues to eschew its expenditure responsibilities in the interests of a balanced budget, it may be contributing to the realization of its own worst fears—namely, the disintegration of the Russian federation.

On the subject of equalization, Bahl noted that the Russian approach to tax assignment on a derivation basis necessarily means that high-income territories will derive more revenue than low-income territories. This, in turn, means that some forms of subvention must be provided to protect the position of territories that would otherwise be unable to provide adequate public services. In practice, the federal government in Russia uses three types of discretionary actions to influence the fiscal resource positions of the lower level authorities. Specifically, it approves the budget of each oblast, it determines the subventions that each will receive, and it sets the VAT retention rates.

It would be reasonable to suppose, he argued, that in such a system the oblasts with the greatest expenditure needs and the lowest fiscal capacities would enjoy the highest retention rates. In reality, multiple regression analysis indicates little evidence of such systematic relationships. Those systematic relationships that can be found suggest a higher retention rate in cases where the rate of urbanization is lower and where there is a smaller concentration of elderly people. However, the most significant result is that oblasts having lower per capita incomes do not benefit disproportionately from fiscal redistribution. The system, in other words, cannot be regarded as an equalizing one.

Further Aspects of the Russian System

Roy Bahl used his comparison of the U.S., Russian, and Chinese systems to identify a number of main issues that need resolution in the ongoing Chinese reforms. However, before we consider these issues it is useful to summarize the further analysis of the Russian system provided in a separate presentation by Christine Wallich.

She emphasized that a successful resolution of the Russian problem of intergovernmental fiscal relations lies at the very heart of that country's attempts to make the transition to a market system with well-functioning democratic arrangements. Failure to resolve the fiscal problems would affect not only Russia's efforts to achieve the privatization of the majority of its enterprises but also its prospects for macroeconomic stabilization, for regional coherence, and for the viability of the federal political structure.

At the core of the problem, she argued, was the serious lack of correspondence between the expenditure responsibilities of the different levels of government and their access to revenues. The intergovernmental fiscal system that is now evolving gives subnational governments new expenditure responsibilities as well as new budgetary rights and financial resources. However, many of the laws passed since 1991 to enact these changes have not been implemented, and much of what is currently happening is authorized if at

all by transitional rules and decrees. On the spending side, the subnational governments still have less than full budgetary discretion, and on the revenue side, the old tax sharing system still has not been phased out. The Ministry of Finance effectively determines the resources to be transferred to individual oblasts, and arrangements in this area generally remain ad hoc and contentious.

As regards expenditure assignments, Wallich reiterated Bahl's earlier remarks about the serious absence of clear-cut rules in Russia. She noted that the dictates of macroeconomic stabilization had resulted in an implicit strategy of "pushing the deficit downward." The unarticulated hope was that the subnational governments would somehow succeed in cutting expenditures even though the national government had failed to do so. This had applied in particular to social safety net expenditures since early 1992 and from mid-1992 to most categories of capital spending. These reallocations, she noted, are against most principles of sound expenditure assignment and compromise the prospects of efficient service delivery by shifting matters of national priority to the local level and, at the same time, failing to accompany the new mandates with adequate funding.

Of course, the realities of the transition period have increased, not reduced, public expenditure needs at the local levels and especially for social safety net purposes. Caught with insufficient revenues to cover their new expenditure responsibilities, many oblasts have accumulated significant payment arrears and have also delayed the remittances of tax revenues to the federal level. Extra-budgetary funds (fines, funds from auctions, some loans) that the local authorities do not need to share with the federal government have grown rapidly in relative importance in response to the increased local-level expenditure responsibilities. In a situation where the subnational governments account for almost half of total budgetary outlays, these various ad hoc outcomes are clearly inimical to Russia's efforts to improve budgetary management and macroeconomic stability.

Wallich stressed that these developments also impede privatization objectives. Because the oblast governments derive significant extra-budgetary funds from the enterprises that they own and because they also benefit from the social and other expenditures that local enterprises presently finance, it is in their interest to oppose privatization, especially of the stronger enterprises.

The Russian system differs from most Western systems in that revenue is "shared upward" from the rayons and oblasts that collect it to the federal budget. Wallich noted that this system was clearly one factor contributing to the break up of the former Soviet Union in 1990 when Ukraine, Russia, and then the other Republics ceased to make their revenue payments to the Union budget. Likewise, the persistence of the same system in the Russian federation leaves that system itself exposed to breakaway pressures.

The Basics Principles law of 1991, which sought to reform this system, assigns revenue sources to one or another level of government. In practice, as Bahl explained, most taxes remain shared, and most subnational revenues are derived from four shared national taxes with all the sharing being done on a derivation basis. All tax administration and collection remain federal responsibilities but are executed locally by local tax offices. With the setting of all tax rates and bases the responsibility of the federal level, subnational governments have no fiscal discretion except in relation to the extra-budgetary charges referred to earlier. Nor is there any system to ensure a correspondence between the current tax assignments/shares and the new expenditure responsibilities. In some oblasts, the sharing of personal and corporate tax revenues result in "over-financing,"

which there is no legal basis to claw back. Likewise, in oblasts that are underfunded, there is no legal right to subventions from the center to make up the shortfalls.

One possible but partial solution to this problem that has been discussed would involve moving from a tax sharing system to a tax assignment system in which each local administration would receive the revenue from its own assigned taxes. However, Christine Wallich had serious doubts about whether the assignment approach could really enhance the autonomy of the subnational governments while they lacked the discretion to set tax rates and establish tax bases. So long as this power was left with the federal authorities, local authorities would remain vulnerable to the revenue volatility of their assigned taxes. At the same time, revenue assignments would be likely to encourage even more domestic protection and interoblast trade barriers in order to protect local monopolies and the revenues that they were capable of generating.

Wallich drew attention once again to the serious inadequacies of the Russian system for fiscal equalization. The new Russian legislation makes no provision for this. As in the system inherited from the former Soviet Union, transfers between the different levels of government still play only a limited role. Until 1994, most subventions that were paid were provided on an ad hoc and ex post basis to oblasts arguing some special needs. From 1994 onward, this bargaining system is to be based on a more transparent arrangement, with subventions going to all oblasts whose per capita revenue is below the national average. Some 22 percent of federal VAT revenue is being set aside for this purpose, and it is reckoned that forty-three needy oblasts will receive transfers as a consequence. This arrangement will be supplemented in the case of the most seriously needy oblasts.

The difficulties of the present system of intergovernmental fiscal relations in Russia are further complicated by the demands of some territories for special fiscal treatment. In some cases, greater autonomy is claimed because of the presence of non-Russian ethnic groups such as the Tatars. Others cite the presence of valuable natural resources; the local governments feel that the benefits from such resources should accrue disproportionately to them. Finally, some strong industrial areas are looking for increased fiscal autonomy to ensure the fullest possible benefits from this strength. Wallich noted that in the absence of more transparent fiscal arrangements, the better-off oblasts may feel that they are cross-subsidizing the others, even though this may not be the reality of the situation.

Issues for China

The presentations by Roy Bahl and Christine Wallich and the discussion that accompanied them suggested issues requiring further consideration for the Chinese case—recent refoms notwithstanding.

(i) What is the overall goal of the Chinese government in establishing its system of intergovernmental fiscal relations? In particular, what are the main motivations for, and the weights to be given to, decentralization versus centralization in that system?

(ii) Can the expenditure responsibilities of the different levels of government be clearly assigned? In China as well as in Russia, tradition and inertia have characterized past efforts in this area, and while this continues, it is very difficult to design a sound overall system of intergovernmental fiscal relations. Both countries have put the cart

before the horse by concentrating initially on tax and transfer systems rather than on expenditure assignments.

(iii) Will or can the Chinese national government grant subnational authorities some freedom to set the tax rates and bases for certain large taxes as, for example, in the United States? For the moment, both the Russian and the Chinese systems are highly "unified," meaning that subnational authorities have been assigned only minor nuisance taxes that do not generate much revenue.

(iv) Which taxes, if any, will be assigned to the subnational authorities, and which ones will be shared? The present Chinese system of regarding the VAT as the main shared tax may not be appropriate. The VAT might be more usefully treated as a central government tax. Other candidates for tax sharing or assignment were listed by Ved Gandhi.

(v) How will horizontal and vertical imbalances be addressed, and will transfers from and to the center be based on a formula approach? The Russian situation indicates the dangers of not making the arrangements transparent. For the moment, neither China nor Russia seems to have faced up to equalization as an issue, in spite of the very substantial inequalities that prevail. Possibly this is the correct approach in a transition era where particular poles or regions of growth are crucial to overall strong performance and so to investment growth and fiscal resource mobilization. However, China has made some important recent moves away from the contracting system and in the direction of a formula-based transfer system.

(vi) What approach if any will the central government take to problems in the relationships between provincial and lower level local governments? In cases where there is clearly a significant degree of nonequalization of fiscal positions within a particular province, will there be any role for the central government? In Russia, the federal government seems to want to retain power even for allocating resources to the lowest levels of government. This implies limited trust in the oblasts in this regard. The problem is particularly important because in China, as in Russia, the inequalities within certain provinces are far more substantial than those between provinces.

(vii) How will tax administration be streamlined to make it generally more efficient but also to ensure that it is adequately structured to deal with whatever new system of intergovernmental arrangements emerges? The initial steps already taken in China to establish a unified National Tax Service are an important potential improvement on the former "bottom-up" system. As Russian experience indicates, that system renders central government revenues extremely vulnerable. In particular, what role will the subnational tax administrations play in the event that there are few if any purely subnational taxes in the new system?

(viii) How will China modernize its personal income tax arrangements and ensure compatibility of this tax with the system for taxing enterprises?

(ix) What arrangements will be made to deal with the thorny problem of natural resource taxes? For the moment, both Russia and China seem to be operating on the basis that the territories where the resources are located should benefit disproportionately from the associated fiscal revenues. However, this approach can be very divisive, and there is now an (academic) consensus that the bulk of such revenues should accrue initially to the center.

Lessons from Australia and Canada

Australia

Berndt Spahn noted that in China there is considerable interest in the Australian fiscal system, especially because of its scientific basis for fiscal equalization. However, Australia is a proper federation of states (as is Canada) rather than a unitary state like China. It was founded on the principle that the central government should be of minimal size with most of the main government functions residing with the state administrations as in the United States. However, the expansion of social and welfare functions since the establishment of these federations has changed this original conception quite considerably.

In the nineteenth century Australia had two main revenue sources, customs duties and excises, and these were collected centrally. About three-quarters of the revenues were paid to the state administrations as tax reimbursement grants. This system changed over time. Inflation eroded the value of the grants, set initially in nominal terms. However, states showed a reluctance to levy income and other unpopular taxes, and so large vertical imbalances emerged. In the 1930s the establishment of the Commonwealth Grants Commission was the solution to this problem.

Spahn explained that today the Australian federation (or "Commonwealth") is the most centralized of the major federal countries of the Western world as far as revenue collection is concerned. Hence, it is an important counterexample among relatively developed economies to the United States (considered in the previous section) and to Canada (considered below). Some four-fifths of total tax collections in Australia are accounted for by the federal government. The states collect the bulk of the remainder, with the lower levels of local government having an extremely tiny share. In spite of this, the states still carry the responsibility for most major expenditure functions (except defense, foreign affairs, and interstate affairs). Thus, the system results in substantial vertical imbalances (own-resources minus expenditure needs) at the various subnational levels of government and in a high degree of dependence by the states on the federal government. Approximately 50 percent of state revenue came from this source in 1992-93 with the vertical imbalances being filled predominantly through general revenue sharing—unconditional bloc grants—as well as through specific or categorical grants. The general revenue grants account for about 45 percent of the revenue going to the states and provide for the financing of basic services. Specific purpose grants (for example, to hospitals) amount to about 35 percent of the total. Additionally, there are some grants that are paid through to the municipalities.

More specifically, as regards tax assignment, the federal government in Australia collects all the major taxes including taxes on income and capital gains (some 70 percent of all tax revenues in 1988), sales tax (16 percent), and customs duties (5 percent). The state and municipal governments collect payroll taxes, stamp duties, motor vehicle taxes, gambling taxes, and other taxes. Collectively—the payroll tax excepted—these taxes constitute a small part of total revenue. In the past, opposition political parties have proposed a broader based consumption tax, but since it has not gained acceptance, an exceptionally high reliance on the income tax is the result. A more likely reform will be the reintroduction of tax sharing, an arrangement that was in operation for a time from 1976 to 1985. It was then abandoned for reasons connected with the vulnerability of the states'

revenues to unilateral federal tax decisions: an outcome that echoes Christine Wallich's earlier reservations about such a system in Russia.

In the absence of reform along these or other lines, grant money remains the most important single source of revenues to the subnational governments. Many regard the Australian grants system as one of the more significant of the equalizing mechanisms now in use worldwide. The system has certainly been widely advocated as a possible basis for a new Chinese approach to the problem of interprovincial inequalities in fiscal resources.

In broad terms, Spahn noted that the distribution of total resources among the Australian states depends on four elements: the size of each state's own tax base; the distribution of general revenue grants according to the recommendations of the Commonwealth Grants Commission; the distribution of specific purpose grants; and the distribution of states' loan moneys, which are also centrally controlled. Within this list, the proportion of the total attributable to specific purpose grants—many of them requiring local matching revenues—has increased dramatically during the past twenty years. This trend is much resented by states as a source of Commonwealth intrusion into their sovereignty—undermining their freedom to determine the size of the services for which the states nominally carry the responsibility. However, since the availability of the specific grants broadens the overall funds available to the states, this criticism of them, Spahn argued, is only partly valid. In any case, the general revenue grant constitutes the main instrument for achieving horizontal fiscal balance.

The Commonwealth Grants Commission that advises on these grants has been operating—albeit with some variations in approach—since 1933. In the early days, the needs of claimant states were assessed relative to two designated "standard" states—namely, New South Wales and Victoria. Grants tended to be quite small because the claimant states were those with generally quite small populations.

By contrast, the present distribution model in operation since 1981 embraces all states and territories. It calculates each state's share of the total general revenue grants by assessing its relative per capita revenue—raising capacities, standardized against its own-resource revenue sources; its receipts of most specific grants; its relative per capita expenditure needs as assessed against the costs of providing standard services—costs that vary considerably depending on the population sizes and densities of different states. In effect, the calculation is of the "standardized" deficit of each state defined relative to population and per capita grant relativity. It is this that the system seeks to equalize.

The specifics of this system were described in rather more detail by Anwar Shah. He explained that the goal was to provide reasonably even levels of public services as well as taxation across the federation. The total pool of revenues available for distribution is equal to 40 percent of the income tax collections of the previous year. This is an arbitrary figure chosen independently from the formula that governs distribution. The formula itself takes account of the factors already listed in the previous paragraph. Revenue needs are determined as in Canada by reference to a standard national average rate of tax applied to the tax base of each state. Unlike the Canadian system that ignores expenditure needs, the Australian system recognizes explicitly the possible differences of such needs across states. Shah explained that this is done very rigorously by reference to all major expenditure categories. The general formula is linked to population and the per capita standard expenditure but adjusted by reference to, for example, scale factors, dispersion and urbanization factors, and cultural and environmental factors. To the extent possible,

the adjustment parameters are determined objectively using regression and other technical methodologies. In many cases, subjective assessments also need to be made. The calculations involve some thirty revenue categories, more than sixty expenditure categories, and more than twenty grant categories.[6]

Shah's own assessment is that this system, impressive as it is, nonetheless has serious flaws and imprecisions. Many of the judgments about allocation remain purely subjective. Moreover, the data needs for implementating the system are very demanding, and much of the relevant data are seriously outdated by the time they are used. Finally, the main decision to endorse allocations remains a matter controlled by Parliament and so by a political process.

Spahn's assessment of the system is that it provides a secure revenue base and so supports a stable environment for the planning of state-level policy decisions. The absence of a more conventional link between tax assignments and expenditure assignments has not necessarily meant that the Australian states have lost out in terms of total revenue or autonomy. Although specific purpose grants have risen in importance relative to the general purpose ones, the "fungibility" of the specific grants has meant that federal power over the states has not necessarily increased as a consequence. However, the matching requirements may have introduced some biases into the structure of state government outlays (for example, too much university-level education and not enough primary). This criticism, in Spahn's view, argues for some improvements in the present arrangements and not for their fundamental reform.

Above all, the analysis of the Australian system shows that it has generally preserved state independence. The lower tiers of government are far from being at the mercy of the federal government in spite of their limited powers to levy taxes and the large vertical imbalances.

Canada

Anwar Shah noted that Canada is a country manifesting considerably less centralization than Australia. It has a very large land area but a relatively small population. Its provinces are characterized by large differentials in both their per capita incomes and their resource bases: agricultural, mineral, and industrial. Canada operates a two-tiered and decentralized fiscal system that contrasts sharply with that operated in its neighboring country, namely the United States. In particular, the Canadian provinces, the second tier of the system, enjoy a far stronger de facto influence on revenues and expenditures than do their U.S. counterparts, and they also have a strong influence over decisionmaking at the federal level. Similarly, the local administrations in Canada enjoy a fairly strong influence on provincial decisionmaking. Another important difference is that while interstate fiscal equalization arrangements are implicit and piecemeal in the United States, they are constitutionally mandated and of considerable importance in Canada.

In Canada, unlike in Russia and China, expenditure responsibilities are clearly defined. Broadly speaking, expenditures subdivide into those that are exclusively the responsibility of the federal government; those that are exclusively the responsibility of provincial and local governments; and those that are discharged as shared responsibili-

6. A more formal explanation of the system is provided in Shah, *The Reform of Intergovernmental Relations*, Annex B.

ties. These assignments tend to conform quite closely with the general principles discussed earlier but with some important exceptions. For example, the responsibility for immigration policy is shared between the federal and the provincial governments, and unemployment assistance, although a formal responsibility of the provincial governments, is largely implemented at the federal level. As these examples illustrate, there is generally more coordination and cooperation between the different tiers of the government than, for example, in the United States.

A more complete summary of the structure of responsibility sharing is set out in Table 1-2. Note should be taken of the relatively high share (almost 60 percent) of the subnational levels of government in total expenditures.

Taxation assignments are equally transparent, although they have been subject to significant changes over time. In the British-North America Act of 1867 that established the initial system, the federal government was authorized to levy all taxes, while the provinces obtained the authority only to level "direct" taxes. However, periodic court challenges to the interpretation of the term "direct" taxes have progressively extended the scope of the taxing power of the provinces—a development that was confirmed by the Constitution Act of 1982.

The present system is one involving considerable overlapping of taxation responsibilities between federal and provincial administrations but with a great deal of consent, cooperation, and harmonization concerning bases and rates of most taxes. A summary of the arrangements as regards the corporate and personal income taxes is shown in Table 1-3. This essentially harmonized system provides scope for different rates of tax as well as for different choices about the location of the responsibility for administration and collection. For the most part, the federal administration accepts the main responsibility for fixing the bases of these two taxes.

Table 1-2. Expenditure Responsibilities in the Canadian System

	Percentage of total expenditures	
Activity	*Provincial and local expenditures*	*Federal expenditures*
Defense, police, etc.	38	62
Transport	73	27
Health	97	3
Social services	35	65
Education	97	3
Debt service	42	58
Other activities	57	43
All activities	59	41

Table 1-3. Federal and Provincial Responsibilities for Income Taxation in Canada

	Level of government		
Tax type (number of provinces)	*Base determined*	*Rate determined*	*Administration & collection*
Corporate (7)	Federal	Federal (27%) + Provincial (9-17%)	Federal
Corporate (3)	Provincial	Provincial	Provincial
Personal (9)	Federal	Federal (17-29%) + Provincial (45-69%)	Federal
Personal (1)	Provincial	Provincial	Provincial

Table 1-3 also illustrates the scope that is possible in the Canadian system for the provincial administrations to "piggy-back" their own local taxes on to otherwise federal systems of tax. Hence, in seven provinces there is a local corporate income tax at the rate of between 9 and 17 percent in addition to the federal tax levied at 27 percent.

Full harmony, however, is certainly not achieved. When the value-added tax was introduced, the federal government asked the provinces to accept it and apply a harmonized tax base and joint administration. However, only Quebec accepted this proposal and now collects a federal VAT at the rate of 7 percent in addition to its own provincial VAT at the rate of 8 percent. All but one of the other provinces (Alberta) still retain their own sales taxes.

The transfer system in Canada's form of fiscal federalism is mandated by the country's Constitution. In essence, this system provides equalizing transfers to ensure that all provincial governments are able to provide comparable levels of public services at comparable levels of taxation. The system provides a simple alternative to the Australian model described earlier, and it co-exists happily with the Canadian arrangements in which some provinces take the major responsibility for total revenue generation (Table 1-3).

The system comprises three transfer programs. Each has different rules but contributes jointly to the objective just defined. The first transfer program governs federal to provincial transfers for major programs such as education and health. These transfers are paid on the basis of equal per capita transfers to each province but are conditional on the provinces adhering to established standards of access and service. To qualify fully for this type of transfer as exampled by the health program, the provinces must meet certain basic conditions: comprehensive coverage (all medical services must be offered); universality (the whole of the provincial population must be covered); portability of access from one region to another; public insurance coverage (although the service delivery can be either public or private); and free access (no user charges). Some dilution in relation to these five conditions is allowed, but this will normally result in some reduction of the transfer below that otherwise provided. For example, if provinces decide to impose user charges for some classes of medical provision, they will be subjected to a dollar-for-dollar reduction of transfer for all income so generated.

The second transfer program is the Canada Assistance Plan designed to help finance social assistance for needy groups and individuals. It is provided to provinces on a 50:50

matching basis, implying a large provincial commitment to all the expenditure activities that it finances. Although designed rather differently from the first transfer program, it results in broadly similar per capita transfers to each province.

The third program is the Fiscal Equalization Program, which has been described as "the glue that holds the federation together." Unlike the other two transfer programs, it results in transfers that are highly uneven across provinces. Some provinces derive some 20 percent of their total revenues from this source, and others derive nothing. Shah explained that the equalizing transfers are calculated separately for each revenue source. They are calibrated against the average tax rate (for each revenue source) across all provinces and by reference to a standard per capita tax base as calculated on a five province "standard" (British Columbia, Saskatchewan, Ontario, Manitoba, and Quebec). The per capita equalizing transfer (E) received by province "i" for each revenue source is given by the following formula:

$$Ei = [(R_{10}/B_{10} \times B_5/P_5) - (R_{10}/B_{10} \times B_i/P_i)]/P_i$$

where R = total revenues; B = the tax base; P = population, and the subscripts have the meaning 10 = ten province total; 5 = total for the five "standard" provinces.

The equalizing transfers associated with each revenue source are added together. If the resulting total is positive, the province in question receives a payment from the federal government of that amount. Negative sums are ignored. The system makes the implicit assumption that the per capita expenditure needs are the same across all the provinces. Because the formula uses an average tax rate (R10/B10), it adjusts revenues mainly for different tax *bases* as between provinces rather than for any decision to set differential provincial tax *rates*. However, as Shah emphasized, the system determines both the pool of funds to be transferred and the allocations themselves in an objective manner (consider the case of Australia). In 1989-90 all but two of the provinces received some positive transfers under this scheme, but the variations in the amounts received were extremely large, both absolutely and relative to total revenues.[7]

Lessons from India, Switzerland, and Germany

India

Amaresh Bagchi explained that the foundations of India's present system of fiscal federalism were laid down in the pre-Independence Government of India Act of 1935. This Act assigned the revenues from most of the high-yielding tax sources—personal income tax, customs, corporation tax, and so on—to the Center at the same time it assigned to the provinces (later states) responsibilities for delivering a wide range of public services. The considerable vertical imbalances that arose from these assignments were dealt with by sharing of certain central taxes combined with a system of grants-in-aid.

This division of functions and responsibilities was continued in many respects after independence, when the 1950 Constitution listed the respective responsibilities of the center—the "Union"—and the States. The Union list of responsibilities includes expenditures such as defense, foreign affairs, national highways, railways, posts and telecommu-

7. Ibid., Figure A.1.

nications, shipping and navigation, as well as responsibility for the main economic functions such as the currency, foreign exchange, foreign borrowing, external trade, interstate commerce, banking, and finance more generally.

Although the tax means provided to the states continued to fall well short of their overall expenditure needs, the Constitution did assign the states the rights to revenues from taxes on the sale of goods, agricultural taxes, land taxes, vehicle taxes, stamp duties, and taxes on trades and professions. Major taxes remained the prerogative of the center, and the Constitution also stipulated that borrowing by any state would be subject to the approval of the center so long as the state had any debt outstanding to the central government.

The prospective expenditure: revenue gaps at the state level associated with this system were filled by arrangements for the compulsory sharing of the personal income tax and also, with the approval of Parliament, Union excise duties. Additionally, some taxes to be collected by the center were to be assigned to the states. This applied, for example, to estate duties and to some succession duties. Finally, a grant system was confirmed as an important part of the system of center to state supports.

In order to ensure that the states could rely on objectivity and fairness in the application of these various principles, a Finance Commission—to be re-appointed every five years—was appointed to oversee the implementation of the arrangements for sharing taxes and transferring grants-in-aid. Bagchi also noted that once planning began in earnest in India and a Planning Commission was established, large "Plan Grants" emerged as an important but problematic feature of the fiscal arrangements.

The retention of broadly similar arrangements for more than forty years is evidence that the devolution of federal funds based on the Indian Constitution and the work of the Finance Commission has operated quite well. However, that same experience has indicated several weaknesses that provide important lessons to other countries including China.

The first problem to which Bagchi drew attention, a problem also evident in the Chinese experience, relates to the disparate trends between the levels of state and federal government expenditures. Between 1960-61 and 1993-94, the taxes and other revenues raised by, and otherwise accruing to, the states increased from 59 percent of the national total to 64 percent. But this did not prevent the states from collectively moving from a situation of budget surplus to one of significant deficit. This was partly the result of larger devolutions of expenditures recommended by the Finance Commission since the mid-1970s. The deficit has raised serious questions as to whether the assignment of expenditures and revenues is out of balance or whether the system of transfers itself is flawed.

The "gap-filling" approach followed by the Finance Commission until quite recently provided little incentive for economy or efficiency in expenditure management or improved revenue effort at the state level.[8] In addition, large devolutions out of particular taxes are believed to have acted as a disincentive for the center to raise more revenue and as an encouragement to turn instead to nonshared categories of taxation to meet the cen-

8. The total of tax and nontax revenues collected by the states on their own behalf fell from 61 percent of their total revenues in 1960–61 to 57 percent by 1993–94. During that same period, the taxes devolved to them from the center rose from 16 percent of the total to almost 23 percent. Grant receipts fluctuated through time but accounted for a slightly larger share of the total in 1993–94 than they had in 1974–75. Within this, Plan Grants accounted for a larger share.

ter's own requirements (for example, surcharges on income and corporation taxes). A further and related problem is that a rising share of Plan Grants (controlled by the Planning Commission) has encouraged the states to expand capital expenditures beyond the levels that can be supported adequately by recurrent expenditures. This has resulted in the neglect of the maintenance of existing assets.

The second main problem referred to by Amaresh Bagchi is that horizontal equalization has been only partially achieved through the transfer system. Specifically, the richest states in India achieve own-revenue per capita that is up to 5.2 times higher than that of the poorest states and a revenue:expenditure ratio that is 2.3 times higher.[9] Despite attempts at equalization, the richer states have much larger surpluses in their revenue budgets, they have been able to deploy more resources under successive Plans, and the gaps have been widening. Bagchi suggested two main reasons for this. First, tax devolution constitutes the dominant component of the transfers recommended by the Finance Commission and overshadows the grants in this regard. Second, the equalizing characteristics of the devolved taxes are much weaker than those of grants. Even states with large surpluses in their budgets before devolution can receive substantial shares of the transfers and so mount even larger expenditures than would otherwise be possible.

Although the Finance Commission has endeavored to tilt the transfers more to the poorer states by including an equity criteria into the formula for allocating shared taxes, the different objectives of tax sharing and grants have become blurred. The multiple and overlapping criteria now used make it difficult to orient the transfers to any clear central objective.

The third problem commented on by Bagchi concerns the overlapping tax jurisdictions of the center and the states. This is a particularly serious problem in relation to domestic trade taxes such as the Union excise and the sales tax. The problems are also acute in terms of the overlapping and cumulation involving the Central Sales Tax (CST). Because the CST is levied on the basis of the origin of the goods, it has enabled the relatively advanced states in terms of industry to export the burden of their own taxes to the consuming states, which are often less developed. The result is a considerable concentration of CST revenues: 40 percent of total collections go to just four states, which account for only 20 percent of India's total population. The system is a considerable incentive to "competitive federalism" and also to distortions such as the camouflaging of interstate sales as transfers on consignment to branches or depots of the same company.

Bagchi noted that efforts to better harmonize the main domestic trade taxes to avoid these and related problems have been relatively unsuccessful. In particular, the substitution of the sales tax on three major commodities (textiles, tobacco, and sugar) by a centrally levied additional excise duty has come under pressure with the states attempting to circumvent it in various ways. However, the main issue still to be resolved is that the excessive complexity and competition associated with the separation of powers to levy domestic trade taxes have been inimical to the development of a more effective common market in India. Since such a market is surely one of the main justifications for a federal form of government in a large country with distinctive regional characteristics, this is a very serious comment on present arrangements.

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9. This compares with a per capita income differential of 3.1 between the richest and the poorest states.

Bagchi concluded by noting a number of lessons that can be drawn from the Indian experience, some of which are also pertinent to the discussions now taking place in China. First, some vertical gaps at the subnational level are likely to be unavoidable since taxes with the broadest bases are collected most efficiently at the national level. To keep these gaps to a minimum, expenditure responsibilities should be defined in such a way that only those of clear national concern are dealt with at the center. Subnational governments should be assigned as many taxes as is consistent with the ease of administration of those taxes. However, this assignment should leave the center in a strong enough revenue position to macro-manage the economy effectively and also to deal with spillovers, externalities, and a degree of equalization in the provision of public services across different regions.

Second, with the main revenue taxes being assigned to the center, the transfer of funds from the center to the subnational governments is unavoidable. However, the design of the system of transfers should endeavor (a) to link the expenditure and revenue-raising decisions at least at the margin; (b) to avoid any adverse incentive effects for revenue raising and excessive expenditures at subnational levels; and (c) to respect as far as possible the preferences of local populations regarding the public services to be provided to them. Among other things, this second point argues for some conditionality in the transfers linked, for example, to tax effort, as well as for some monitoring by the center of the purposes for which transfers are used.

The third lesson is that the correction of horizontal imbalances should not rely only on specified selected taxes. This reduces the incentive of the center to exploit the tax capacity of the shared taxes to the full. More certainty and less distortion can be generated by a system that specifies a share of central taxes as a whole to belong to the divisible pool to be transferred.

Finally, the experiences of India show that even a long-lived system of fiscal relations is subject to a complex web of ever-changing pressures. Although the broad structure of the system might remain unchanged, the details of its implementation need to be kept under constant and objective review. The Finance Commission in India is supposed to play this role, but its efficacy is undermined by the temporary character of the appointees who serve on it as well as by its lack of research-underpinning on a sustained basis. Bagchi was strongly of the view that a permanent body could more effectively discharge the tasks assigned to the Finance Commission.

Further Examples from Europe

In the final presentation relating to the experiences of other countries, Berndt Spahn compared the arrangements in the two neighboring European countries of Germany and Switzerland. He noted that the two countries have adopted radically different approaches to fiscal relations. Switzerland provides its lower levels of government with high degrees of independence, while the German system emphasizes centralization, standardization, and equalization.

Switzerland

Spahn explained that in this country, which is the oldest federation in the world, having been established in the thirteenth century, there is an explicit federal system. It treats the

twenty-three cantons as sovereign states for most purposes. The lower levels of government enjoy a high level of independence and in that sense have much in common with the provinces of China. "Direct" democracy also applies in that the electorates are required to vote on changes to the Constitution and on all other major pieces of specific legislation. This imposes considerable complexity on the processes of government at the higher levels. For example, the attempt to introduce a modern value-aded tax has involved ten years of wrangling and even now is accepted only up to the year 2006. Thereafter, further voter approval needs to be sought.

In spite of this lower level independence in most areas of government, in the area of *expenditure assignment,* the Constitution of 1848 attributes so-called "principal" responsibilities to each layer of government. Thus, the cantons have exclusive responsibility for public order, public welfare, health care, schools, regional and local land planning, highways, and water and other resources. The Confederation government has the responsibility for defense, citizenship, asylum, civil and penal law, social protection, economic and monetary management, energy policy, national transportation, and telecommunications. However, the complex network of payments, subsidies, incentives, joint financing, and delegation that has evolved over the years tends to blur these apparently clear-cut lines of responsibility.

As regards *tax assignment,* the original vertical separation gave the center the responsibility for all the indirect taxes, while the cantons and municipal governments were ascribed the direct taxes on income and wealth. Over time, the center has acquired powers in the area of income taxation, mainly as a result of the evolving vertical imbalances inherent in the previous system and the diverging revenue needs of different regions. There are now twenty-six separate income tax regimes at the lower levels of government in addition to the federal income tax and some municipal direct taxes. This is in sharp contrast with the uniformity now emerging in China.

In spite of this evolution of the initial design, each tier of government retains either full or partial authority for a number of taxes and not only one. The subnational governments, for example, have a right to levy, in addition to income tax, user charges and fees, and they have an exclusive right to tax motor vehicles (cantons).

The Confederation now obtains about 41 percent of its total revenue from direct taxes, originally assigned to the lower levels of government, and 52 percent from indirect taxes. The cantons derive 50 percent of their total revenue from direct taxes and only about 8 percent from indirect taxes and licenses and other fees. Both federal and lower level governments are able to discharge their responsibilities without being financially too dependent on each other. Thus, the grant element of cantonal revenues is equal to only 21 percent of the total, which is considerably lower than in the more centralized case of Australia.

Spahn noted, however, that the competing tax powers at the different levels of government and the great diversity in fiscal federal arrangements create enormous problems of tax coordination, competition, and harmonization. In this regard, the Swiss case parallels that of the United States, which also has a varied and complex system of subnational taxes.

As regards equalization issues, another objective firmly embedded in Swiss law is that of providing for a similar level of public service in each canton without the need for taxes in some to be significantly more onerous than in others. This objective is achieved

through three types of vertical financial adjustment: some reimbursement of federal taxes; tax sharing; and specific purpose and normally conditional grants from the center.

The federal government reimburses part of its collections of custom duty revenues to lower level governments. This is because certain responsibilities, including road building, have been passed down to the cantons for administration on behalf of the central government.

Tax sharing is done partly to compensate the cantons for the dilution of their tax sovereignty associated with the transfer of some greater tax powers to the center as explained above. The tax-share revenues can be viewed as the main source of unconditional general revenue grants of the lower level governments. The tax shares are distributed in accordance with regional revenue collections, population, the level of private incomes, and by reference to a measure of fiscal needs including a limited set of identified expenditure needs—but far fewer than in the Australian case. The last of these criteria is accepted by the Swiss as a simple and fair way of compensating the special needs of particular regions.

In 1992, the cantons received 30 percent of the federal direct taxes on income and profits, 10 percent of the withholding tax, and 20 percent of the tax on exemptions from military service, which together constituted a distributable pool. The distribution criteria applied to this pool have similarities with the systems in both Canada and Germany. Above all, the fiscal revenue of the cantons is standardized so that distribution shares cannot reflect the differential tax effort of different cantons. In Germany, where tax rates are more standardized, this step is less important.

Vertical intergovernmental transfers have been dominated by conditional grants-in-aid allocated in accordance with the policy priorities of the donor government. Many have strings attached in the form of matching requirements, and most have conditions requiring their pass through to lower levels of government such as the municipalities. While some equalization is involved in all three aspects of this system (that is, poorer cantons are certainly subsidized), the general judgment reported by Spahn is that equalization in grant programs is a matter of subsidiary interest only in the Swiss case. This is a significant contrast with, for example, Canada and also Germany.

Germany

The German Constitution established after World War II created the states (or Lander) as the first organs of government. The states continue to have a very important role in the legislative process, and they have provided some sort of model for the political structure of the present-day European Union. These constitutional arrangements were used from an early stage, Spahn explained, to establish the regional shares of the turnover tax as an important mechanism to rectify vertical imbalances as they occurred. In 1969 shared taxes were extended to include the income tax as well, and these are shared on a rigid one-to-one formula. But the vertical imbalances are still addressed only by way of the turnover tax or more correctly by its modern equivalent, the value-added tax. Overall shared taxes are very important in the German system, accounting as they do for about two-thirds of all tax revenues.

Spahn noted that China, like Germany, has a uniform tax law, and it separates certain taxes to individual levels of government. Recently, China also has followed the German example of tax sharing.

In its early years the German system resulted in large fiscal imbalances as the federal government expanded relative to the states, particularly when Germany was remilitarized within NATO. But later that situation reversed, with the expenditure shares of the states increasing relative to the federal government. Many labor-intensive services, such as education and health, expanded more rapidly in cost of provision than most federally provided services.

A few of the shared taxes are assigned individually to the federal level, and this provides some fiscal basis for alleviating vertical imbalances. Unlike Australia, where most revenues first accrue to the center for distribution to the states, for the most part, Germany avoids major vertical fiscal imbalances, and this has major consequences for fiscal equalization. The way this problem is solved is via special agreements among the states. Germany is unique in that it has fully horizontal redistribution of resources without central governmental involvement. The conclusion for China is clear. If you want the government to do the job of equalization, you must leave the central government with some surplus of fiscal means for redistribution. If you do not do this, you must rely, as in Germany, on explicit cooperation among the provinces to arrange the process of redistribution and regional equity.

Spahn explained that there are three levels of redistribution in the German system. The first involves the tax assignments, including the tax-sharing arrangements already described. Personal income taxes are shared among the federation, states, and municipalities. The criteria for horizontal distribution is the residence principle—significantly different from the derivation principle used in China for the value-added tax sharing.

The corporate income tax is shared using a "modified residence principle" as the criterion. It is difficult to apportion the income accruing to any one firm, and so the taxes it pays, to the different states in which that firm operates. The modified residence principle provides one reasonable solution to that problem through the use of a formula including local turnover and the local wage bill paid out in the different locations of the firm. This issue proved particularly interesting to the Chinese participants, especially because of the task of allocating the corporate profits and taxes of multinationals. It was noted that there is no unique theoretical solution to this problem: normally a formula approach as in Germany is the way to solve the problem.

As regards the value-added tax, the German and the Chinese arrangements differ significantly. Presently, the federal government receives about 56 percent of the total compared with 44 percent for the Lander.

The second element of the redistribution system is a definition of fiscal capacity for each state, which is roughly the sum of state tax revenues corrected for special burdens, population density, and urbanization. An equalization yardstick is then derived as the average per capita fiscal capacity calculated across all states and multiplied by each state's population. The final step is the equalization of revenues in accordance with that yardstick but using graduated rates. There is an underlying guarantee that fiscal capacity including the equalization transfers should reach at least 95 percent of the average across all states.

Spahn noted that over time this German system resulted in a very even regional distribution of infrastructure and a reasonably even regional distribution of income. This is in sharp contrast with concentration of development on certain "growth centers." He suggested that as China's development proceeds, more attention would need to be paid to regional equalization and "cohesion," if only for political reasons. But how much you

should equalize is a political matter depending on the willingness of the richer provinces to sacrifice some resources. The question of how to organize an equalization scheme is more straightforward, even though there are wide variations in international experiences as evidenced by the contrasts between Canada and Australia.

Spahn argued that the Australian system, although it may seem to provide a rigorous and scientifically based set of criteria, includes many criteria that are arbitrary and politically influenced as is the size of the pool to be distributed. Spahn advised against the adoption of such a scheme in China mainly because of the formidable informational requirements that its application would require (for example, regionalized data on female fertility and by age group) and the likelihood of a proliferation of informational requirements.

It was suggested that if China wishes to give the provinces general revenue to cover their basic expenditure needs, there are simpler methods available than those implicit in the Australian approach. Revenue equalization along Canadian lines would be preferable, for example, provided that it could ensure some elements of basic needs satisfaction.

Finally, Spahn spoke briefly about investment grants. In the area of capital formation, the systems used in Germany, and in the European Union more generally, involved transfers requiring matching contributions. This system encourages good coordination between regional and center governments and might also be a useful model for China.

Reflections on Remaining Problems in China

The final substantive session of the seminar provided an opportunity for the three working groups to present and discuss their findings. As was noted earlier, the topics given to the working groups were expenditure responsibility assignments; taxation responsibility assignments; and the design of an intergovernmental transfer system for vertical and horizontal equality. Each of the three working groups considered some or all of these topics.

Group One

This group reported first their conclusion that the problem of assigning expenditure responsibilities was a crucial one still needing resolution. It was noted that this was a conclusion that had surfaced at several earlier stages of the seminar proceedings.

Next the group focused on a variety of issues pertaining to the Chinese system of intergovernmental transfers. The present arrangements, founded as they are on adjustments to a base-year allocation, lack flexibility and adaptability to changing circumstances. Moreover, it was recognized that there is presently no transparency in the system and no scientific base against which to assess the levels of the needs of different regions. Thus, some scientific formula ought to be established to provide this, when adopting a more robust system.

The issue was addressed of whether, within a new system of transfers, a formal Finance or Grants Commission was needed along Australian or Indian lines. It was felt that such an arrangement was not necessarily required in China and that much of the work could be done within the Ministry of Finance itself. The more important thing, the group argued, was to establish a clear and transparent mechanism for deciding on the allocation

of grants. Above all, this should reduce the amount of discretion left to individuals or to the political process more generally.

As regards taxation and the assignment of taxation responsibilities, the group expressed concern about the relatively low level of the revenue:GDP ratio in China. Although that there was plenty of scope for raising it, such an improvement would require stronger laws, especially in relation to joint ventures and other foreign enterprises. It was also felt that there was scope for an improved revenue from the personal income tax and that higher receipts from nonwage income would need some significant redesign of the arrangements for reporting such incomes and for checking on evasion.

It was not entirely clear from the group report what the implications of its findings were for the level of government at which the personal income tax should be assigned. However, it became clear in the ensuing discussions that there was much disagreement on this issue among the Chinese experts. Because of the relatively limited revenues to be expected from the personal income tax, some felt that it could be assigned safely to the local government rather than to the central level of government. Others, however, saw a considerable potential for revenues from this tax in some provinces, and they felt it needed to be assigned to the central government.

Group Two

This group also focused initially on expenditure responsibilities. It argued that the main issue for the near future in China is to establish an appropriate standard for public service provision in each province. Population size, the degree of urbanization, the size of the land area, cultural and ethnic differences, and the fiscal capacity of each province should be taken into account. The emerging gaps between provinces due to reforms were not primarily attributable to weaknesses in the scope of expenditure responsibilities between the center and local governments, the group argued. However, it did recognize some problems associated with the fact that policies and prescriptions were made at the central government level, while the expenditures themselves were generally more localized.

As regards the assignment of tax responsibilities, the group broadly supported the status quo and saw no inherent problems with the 75:25 sharing of VAT revenues already agreed. It felt that without this level of revenue from one of the main taxes, the central government would find it extremely difficult to meet its expenditure responsibilities. However, there was room for an overall increase in the total of revenue collected, and the group agreed with Group One that the critical issue was the corporate income tax. Group Two was worried in particular about the taxation of large foreign investment companies that spread their activities over several provinces. On balance, the problems of competition for the tax base and excessive incentives for interprovincial protection would be resolved best if the corporate income tax was assigned to the central government. However, there was a good case for sharing some of the revenues with the local governments.

As regards transfers, it was explained that the Chinese system had three elements: the surrender of any local government surpluses of revenues over expenditures to the central government (this is equivalent to 72 percent of revenues in the case of Dalian); some earmarked grants; and some special grants to the poor regions. These three arrangements together result in some equalization, but the basis on which this occurs is an arbitrary one. The group agreed on the need for a more scientifically based system capable of contributing to the delivery of some minimum standards of public service across the country

as a whole. However, it anticipated that any such system would and should leave some discrepancies favoring the more economically successful provinces.

Group Three

This group began with the issue of taxation and argued that a modern international system of tax sharing was required in China. The reforms of January 1994 were likely to result in an increase in the aggregate ratio of revenue to GDP, but at the same time they could reduce the revenues received by some of the local levels of government. Some additional ingredient seemed to be necessary to ensure that the richer provinces were asked to make a larger sacrifice of revenues as a response to the rapid changes in the balance of the economy. It was not entirely clear what this implied about the suitability of the VAT sharing system recently introduced. However, the group did note that the 75 percent share for the center would be greatly affected by the rules about incremental shares and that these would mean the receipt of far more than a 25 percent share in some localities. As regards the allocation of the revenues from corporate income tax, it was argued that the state enterprises had emerged from the Chinese system of planning and that those local authorities that had made investments under this system should receive the benefits in terms of the tax revenues.

The group argued that any decisions regarding revenue sharing should be linked more directly with the issue of the expenditure responsibilities assigned to the local tiers of government. In this regard it was also important to ensure that the quality as well as the quantity of provision of public service were properly catered for and monitored.

As regards the system of transfers, the group supported the need for a more scientific basis for making the allocations. However, it pointed to the enormous variation in conditions in the different provinces of China. The needs of high altitude, mountainous, cold, inland, remote provinces such as Shanghai were radically different from the needs of the more accessible coastal provinces. These differences argued for some blending of conditional and unconditional grants and for the inclusion of both real and nominal criteria in the allocation formulas. Chinghai, for example, has a high average wage but generates little in the way of other incomes. Hence, a wage-based formula for allocating transfers would be quite misleading.

The Views of the Foreign Experts

We can conclude this report by contrasting these Chinese judgments about the emerging system of intergovernmental fiscal relationships with the views presented by foreign experts during earlier sessions of the seminar. These opinions are arranged by topic rather than speaker, and it should be noted that some of the points were made by more than one speaker.

EXPENDITURE ASSIGNMENTS. There was widespread agreement that expenditure assignments is one of the most important areas still needing the attention of the Chinese authorities. Until this assignment is well defined, it is very hard to do what recent Chinese reforms have attempted—namely, to establish a sound basis for revenue assignment and tax sharing.

In this area of system design, there was strong support for relying on the benefits principle as explained earlier by Ved Gandhi. However, where functions clearly overlap, it was also thought to be useful to establish a centralized framework, albeit one with various degrees of administration at the subnational levels as in Germany. Some of the subnational governments might not be able to administer properly everything that ideally is assigned to them. Hence, some residual central government powers (for example, to ensure reasonable minimum standards of provision) were called for. This could apply, for example, to some aspects of university administration.

Given these exceptions, there was a great deal to be said for assigning expenditure responsibilities to the lowest possible levels of government consistent with the coherence of the nation as a whole and the economic efficiency of service delivery (the "subsidiarity" principle of the European Union). This approach would be likely to improve incentives for the deliverers of services and also keep them closely in touch with the needs of the beneficiaries. It was noted that present arrangements in China tend to make the provincial governments the agents of the center and not equal partners in decisionmaking and delivery as they are, for example, in the Canadian system.

The subsidiary issues raised in relation to expenditure assignments were as follows. First, it was pointed out that many of the services already provided by, or prospectively provided by, local governments in China involve zero or extremely low user charges. Examples included water, power, gas, and the Beijing subway services. Many felt these arrangements should be reviewed and more realistic user charges introduced in some cases.

Second, there was thought to be a strong cases for removing the responsibility for as many as possible of the social services presently provided by SOEs and reassigning these explicitly as responsibilities of local governments. Among other things, this could greatly ease the tasks of enterprise restructuring and reform. Conversely, there were strong arguments for removing the local governments from direct involvement in the ownership and management of joint ventures and other commercial activities in their areas. This reassignment would be greatly eased if local governments were given more revenue autonomy in the conventional sense (see the next paragraphs).

TAX ASSIGNMENTS AND TAX SHARING. The general opinion was that the decisions already taken in China on this subject conform reasonably well to theoretical principles and also with international experience. In particular, the treatment of customs duties and the VAT as central taxes seems to be correct. The main exception to this was the present assignment of the business income tax and the sharing of the revenues according to the location of the enterprises being taxed. It might be preferable, it was argued, to assign this tax as a central tax but then provide revenue to subnational governments through a formula-sharing approach as in Germany, or by allowing local surcharges on top of the central rate of tax as in Canada. There was general agreement that the sharing of the VAT revenues on the basis of a 1993 allocation and the derivation principle would be an insufficiently flexible arrangement to meet the needs of a rapidly changing economy. It was argued also that there was much to be said for unifying the control over tax bases so as to avoid the competition for tax bases that has been experienced in India.

Chinese arrangements so far have provided subnational governments with only limited autonomy on the revenue side of the budget. Unless tax assignments and present tax

sharing arrangements are amended, the central government will collect considerably more revenue than it needs for its own purposes, and the subnational governments will become very dependent on transfers from the center to meet their needs. This situation is not necessarily unmanageable, as the Australian experience illustrates, but it is likely to cause difficulties. Thus, the vertical imbalances might be reduced somewhat by introducing additional sources of tax revenue of relevance to local governments such as property taxes or a strengthened personal income tax. For the reasons already given, the vertical imbalances should not be reduced by limiting the scope of the expenditure responsibilities assigned to the local level.

TRANSFERS TO ADDRESS VERTICAL AND HORIZONTAL IMBALANCES. A general view was expressed that a close matching of expenditure and tax assignments was desirable in order to limit the scale of transfer-dependence of the subnational governments. However, given that some vertical imbalances would be likely in the Chinese system, the advice offered was to avoid a gap-filling approach of the type used in India, especially one that merely provides money to cover the unmet costs of certain local activities. Such an arrangement almost certainly would result in wasteful spending. It was suggested that a gap-filling approach should be considered only where a genuine central government function was transferred explicitly to the local governments. In these cases transfers should normally be conditional on the delivery of some adequate level of service. Special purpose transfer programs should be avoided if possible since they tend to proliferate in both number and total cost. Their use for certain special purposes such as disaster relief and help to ethnic minorities was probably unavoidable, but attention should always be given to the negative disincentive effects. It is preferable to provide most transfers as general revenue grants using an approach like Canada's that avoids possible revenue-effort and other disincentive effects. However, objective rules for the allocations as well as monitoring of those parts of the transfers that are conditional are also called for. Some but not all of the speakers advocated for China a special Finance Commission or Grants Commission along Australian or Indian lines.

The issue of horizontal equalization was acknowledged to be an inherently political one. China essentially had to decide whether it wished to pursue such equalization as a high-level policy goal (like Germany has) or accept a significant degree of ongoing interprovincial inequality. More specifically, the tradeoff in the Chinese case seemed to be between, on the one hand, some curtailment of growth by requiring larger transfers from the fast-growing Eastern and Southern provinces and, on the other, some risks to national political cohesion if the inequalities became too great and the fast-growing provinces were asked to bear only a modest additional fiscal burden.

In the event that horizontal equalization arrangements were adopted in China, several reservations were expressed about the suitability of the Australian system based on apparently scientific formulas and objective principles. The informational requirements of such a system were once again argued to be prohibitive for the Chinese circumstances, and the residual scope for political interference, overriding scientific judgments, was argued to be considerable. Instead there was considerable support among the foreign experts for a simpler system, possibly along the lines of that presently operated in Canada.

Annex: List of Main Terms

1. *Intergovernmental fiscal relations.* Relations between different levels of government involved in government financial activities such as taxation, expenditure, borrowing, subsidies, transfers, and grants.
2. *Vertical imbalances.* Imbalances between the fiscal positions of various levels of government: chronic deficits for some levels of government (for example, the central government) and surpluses for other levels (for example, the provincial governments).
3. *Horizontal imbalances.* Imbalances between the fiscal positions of different governments at the same level such as provincial, local, county, or prefecture levels.
4. *Resource allocation efficiency.* The allocation of economic resources (labor, capital, land) is efficient when it takes place in response to the returns, rewards, and economic signals given by market conditions, unaffected by government intervention.
5. *Fiscal equity.* Equity between people, regions, industries, and economic sectors that results from the operation of the fiscal system and so from taxes, expenditures, borrowing, subsidies, and transfers.
6. *Tax assignment.* The formal assignment of sources of tax revenue to the different levels of government.
7. *Tax exporting.* The shifting of the burden of taxes imposed by one government onto the populations or industries of other provinces, regions, or localities.
8. *"Piggy-backing" of taxes.* This occurs when tax revenues are raised not by levying a new tax but by superimposing an additional rate on a tax that already exists and which is possibly imposed by some other authority.
9. *Revenue sharing according to the derivation principle.* The sharing of revenues according to where they have been derived or where they have originated.
10. *Expenditure responsibilities.* The formal assignment of spending responsibilities to different levels of government.
11. *Benefit spillover.* This occurs whenever the benefits of expenditures incurred by one government level accrue to the population or industries of other provinces, regions, localities. (This concept is the expenditure counterpart of tax exporting.)
12. *Conditional grants.* Grants provided by one level of government to another level of government if it meets certain conditions.
13. *Open-ended grants.* Grants without any cap or limit of Yuan amounts and which will be provided in the amounts needed to meet the objectives of the grant.
14. *Fiscal accountability.* Expenditures that are incurred must reflect the tastes and preferences of the public at large, and public services should be provided at minimal cost in terms of the real resources used.
15. *Macreconomic stability.* Control of inflation of domestic prices as well as the volatility of the rate of change of the value of foreign currency.

2

Intergovernmental Fiscal Relations and Economic Performance

Ved P. Gandhi

It is well known that the public-private sector split of an economy (that is, the level of real resources absorbed by the public sector and the manner in which these resources are mobilized and utilized) can affect its performance significantly. What is less well known, however, is that the split of a given level of public resources between different levels of government can also affect an economy's performance for lack of a good fiscal policy. For example, it can make the establishment of an efficient and modern tax system extremely difficult, if more important taxes essentially belong to lower level governments. As another example, it can create difficulties for the implementation of an optimal and (macroeconomically) sound public debt policy, if lower level governments have complete authority to borrow from whatever source they may wish.

This chapter attempts to suggest the ways in which intergovernmental fiscal relations can influence (i) the efficiency with which public resources can be mobilized and utilized; (ii) the degree to which macroeconomic stabilization can be attained; (iii) the extent to which fiscal equity can be achieved; and (iv) the feasibility that a high level of overall performance of the economy can be continued. Before the chapter concludes, a few general principles, based primarily on economic considerations, are set out. These principles can guide the prospective reform of intergovernmental fiscal relations in China.

The chapter is divided into four sections. The first identifies the major parameters of intergovernmental fiscal relations. The second section highlights the effects that each parameter of intergovernmental fiscal structure could have on the determinants of a country's economic performance. In the third section the economic principles for designing a good intergovernmental fiscal structure are outlined. The fourth section offers general observations concerning reform of intergovernmental fiscal relations.

The views expressed in the paper are strictly personal and should in no case be attributed to the organization to which the author belongs. The author is grateful to Angelo Faria for his comments on an earlier draft.

Major Parameters of Intergovernmental Fiscal Relations and the Diversity of Country Practices

Major Parameters

Intergovernmental fiscal arrangements are a necessary requirement of decentralized government administration, particularly in a large country.[1] At least, five, generally interrelated parameters define these arrangements.

EXPENDITURE RESPONSIBILITIES. What level of government (central, provincial, or local) will be responsible for which public expenditures and which public services? The answer is often the result of historical, constitutional, and social developments in a country.

TAX ASSIGNMENTS. What level of government (central, provincial, or local) will have the right to levy, collect, and retain which categories of taxes, and what will the methods of their collections and administration be? This, too, is frequently the consequence of historical, constitutional, and other factors.

FISCAL IMBALANCES, IF ANY. Given their established expenditure responsibilities and tax assignments, and varying cost structures of public services (due to demographic factors and urbanization) and taxable capacities (due to resource endowments and degree of industrial development), different levels of government can end up with either fiscal surpluses or fiscal deficits, implying "vertical" and/or "horizontal" imbalances of varying degrees.[2] How serious these imbalances are, can define the relative stability of intergovernmental fiscal arrangements.

AVAILABILITY OF FINANCING ALTERNATIVES. A level of government facing fiscal deficits may truly have financing alternatives. Among others, these can include transfers from other (usually higher) levels of government in the form of revenue sharing (fixed proportions of revenue yields of certain taxes), grants (specific purpose or general grants, tied or untied grants, matching or nonmatching grants, conditional or unconditional grants, open-ended or closed grants), or subsidies. All these alternatives may be subject to criteria that the levels of government having fiscal deficits must meet. Financing their deficits through borrowings from banks, other financial institutions, the public at large,

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1. There is some evidence that decentralization increases as a country moves away from central planning (for example, the Russian Federation). There is also evidence that, at times, autonomous governments may be willing to give up some of their national sovereignty, and form a confederation, in the interest of reaping the benefits of a more unified economic space and larger markets (for example, the European Community).

2. Fiscal surpluses for one level of government, while other levels of government face chronic fiscal deficits, imply "vertical fiscal imbalances." Similarly, fiscal surpluses for wealthy and economically advanced provinces or localities, while less wealthy and economically backward provinces or localities face serious fiscal deficits, imply "horizontal fiscal imbalances." Horizontal fiscal imbalances also exist whenever the governments of richer and economically advanced provinces or localities are able to provide very high levels of public services, while the governments of poorer and economically backward provinces or localities are unable to provide even the most basic public services.

and even higher level governments are other alternatives, and these, too, may be subject to preconditions. Where none of these financing alternatives is available, the levels of government with fiscal deficits must either curtail their public expenditures and lower the levels of public services or raise additional revenues from their "own" tax bases and other nontax sources.

INSTITUTIONAL PARAMETERS. Finally, intergovernmental fiscal arrangements everywhere contain some elements that are strictly institutional. Examples of these include the degree of autonomy and independence that governments enjoy in planning for and administering the public expenditure responsibilities given to them[3] or levying or raising taxes assigned to them without interference from or support of other levels of government; freedom to grant tax reliefs or expenditure subsidies with "own" resources to entice enterprises and businesses from other jurisdictions; rules of contracting and purchasing for the provision of public services from "own" revenues, and so on.

Effects of Intergovernmental Fiscal Structure on Economic Performance

This section illustrates how each of the five major parameters of intergovernmental fiscal structure identified earlier can affect the workings and the performance of an economy.

Expenditure Responsibilities

Economic efficiency requires that expenditure responsibilities be allocated between levels of government in a way that provides public services according to citizens' preferences and at lowest possible resource cost. However, expenditure responsibilities will not meet these criteria in the following situations.

- If public services whose needs can best be gauged by lower levels of governments (for example, needs for police and fire protection, water and sanitation, urban transport and road network) are not assigned to them, they will not be provided in adequate quantities or will not be provided most efficiently.
- If public expenditures that can be quickly accelerated or slowed down (for example, public works program) or which automatically adjust with natural ups and downs of business activity in the economy (for example, unemployment benefit program) are not allotted to the central government, the capacity of the government to moderate fluctuations in private business activities, and to achieve macroeconomic stabilization, will be seriously eroded.

3. Perhaps the autonomy and independence of the lower levels of government will always be limited, because economic policies designed by the central government often have serious implications for the budgets of provincial and local governments. For example, policy declarations by the central government relating to universal primary education and free health services may directly affect the expenditure levels of lower level governments. Other examples of central government policies bearing on the budgets of lower level governments are: interest rate policy on the cost of their borrowings; incomes policy on their civil service wage bills; pricing policy on the budget subsidies; and excise duties on energy products on the costs of urban transport and utilities. Trade and exchange rate policies, too, can affect the economies of provinces and localities, depending upon the composition of output and natural resources of the region. The intergovernmental fiscal structure must be able to deal with the budgetary consequences of central government policies for the provincial and local governments and vice versa.

- If central governments were allotted public services whose overhead costs tended to grow with expansion or which suffered from "diseconomies of scale" (for example, provision of law and order or maintenance of smaller roads and urban streets), such public services would not be provided in optimal quantities. Similar problems would arise if lower levels of governments were allocated public expenditures whose benefits accrued widely and far beyond the frontiers of provincial or local areas (for example, provision of university education, financing of major roads and highways, or specialized hospitals).
- If provincial and local governments incurred widely different amounts of public expenditures per capita, or provided public services at widely different levels, this could easily encourage unnecessary migration of labor and capital, unless high levels of public expenditures per capita in those areas were financed through high levels of taxes per capita as well.
- If lower level governments are responsible for expenditures with large potential benefits to other regions or "spillover effects" on other jurisdictions (for example, on education, road maintenance, or environmental improvement), they are unlikely to be adequately provided for with local fiscal resources alone, and this could have serious consequences for the performance of the economy.

Tax Assignment

Economic efficiency requires the assignment of taxes to different levels of government in a way that the built-in elasticity, equity, and administrative ease of different taxes is fully exploited and the incidence of taxes is borne by those for whom it is intended and who benefit from the use of revenues raised from them. The way taxes are assigned should also support such desirable goals as economic growth, macroeconomic stability, and distributive justice. However, in reality, this may not be so:

- If taxes were assigned to provincial and/or local governments whose burden could easily be shifted or exported to consumers of other provinces and localities (for example, natural resource tax, manufacturing level sales tax or excise duty, import and export duties at the ports, airports or border areas, taxes on tourism), this not only could be grossly unjust, but also could encourage lower level governments to pitch those taxes at excessively high levels to the detriment of the growth of the national economy.
- If taxes were assigned to central governments whose administration required detailed information (for example, property tax, land tax), and which the central government could gather but only at high costs, such taxes would be poorly administered and easily evaded, and the cost of their collection would be undesirably high.
- If taxes that were primarily redistributive in character (for example, a progressive personal income tax, a progressive wealth tax, or a progressive inheritance tax) were not levied by the central government, and on a global basis, the overall equity orientation of the tax system could be seriously jeopardized.
- If taxes that normally have large built-in elasticity (for example, personal income tax, enterprise profits tax, sales tax, or value-added tax), and whose revenues

grow automatically in boom periods and decline in recessionary periods, were not assigned to the central government, the ability of the government to achieve macroeconomic stabilization would be greatly curtailed.

Fiscal Imbalances

Maintaining macroeconomic stability and providing for economic growth require that overall fiscal imbalance for all levels of government, net of transfers and grants, is such so as not to cause inflation or create shortages of investible funds for either the private or productive sectors of the economy. Nevertheless, this may not always be the case:

- If expenditure responsibilities of central governments were mismatched with taxes assigned to them (that is, public expenditures were far more income elastic than tax revenues), central government budgets would chronically be in deficit, with serious implications for macroeconomic stabilization.
- If any level of government often had budgetary surpluses because of given expenditure responsibilities and tax assignments, it would have an incentive either to overspend or to lower tax burdens on its citizens. The former would become a source of inefficient spending, while the latter could become a source of tax competition with governments of other jurisdictions.
- If there were serious vertical imbalances, and appropriate mechanisms for the transfers of resources from the surplus governments to deficit governments did not exist, governments with budgetary deficits would be forced to scale back their public expenditures, including expenditures on social and economic infrastructure, or to increase the ratio of taxes and user charges, including those with serious disincentive effects. Either way, the performance of the economy would suffer, and fiscal equity would be seriously eroded.
- If serious horizontal imbalances existed and certain governments were unable to provide even minimum levels of public services while others were able to offer levels of services far above the average, it would encourage undue movement of labor and capital, which in itself may be undesirable. With increasing population density, such movement of labor and capital could raise the "average cost" of providing public services in well-off areas and result in their inefficient provision.

Financing Alternatives

Macroeconomic stability requires that financing alternatives for meeting fiscal imbalances should be noninflationary. Besides, neither the curtailment of essential public services nor the raising of distortionary and disincentive causing income and profit taxes should be used as financing alternatives, since they can seriously curtail the pace of economic growth. In reality, however, inappropriate financing alternatives often tend to be used to "finance" fiscal imbalances:

- If the only financing alternative for governments with fiscal deficits were to cut their public expenditures (including those on essential public services and the operation and maintenance of infrastructure) or to raise their taxes to excessively high levels, there could be serious equity and efficiency consequences. In other

words, such decisions could seriously affect overall fiscal equity and/or cause undesirable mobility of labor and capital. They could also affect the performance of the national economy, if the province or the locality were an important element of the national economic space for the transportation of a country's imports or exports or the supply of raw materials and natural resources to industries in other areas of the country.

- If the central government shared revenues from its most buoyant taxes with the lower levels of government, it could discourage local tax effort and encourage wasteful spending.
- If the lower levels of government received subsidies, which were not earmarked to pay for local expenditures with positive externality or "spillover" effects or which did not require that those goods be provided at minimum possible costs, much wasteful use of limited fiscal resources may take place.
- If the lower levels of governments had fiscal deficits and could easily borrow from banks and other financial institutions (as in Brazil and India), it could seriously erode the capacity of the central governments to formulate and implement a monetary policy consistent with macroeconomic stability, crowd out availability of credit to the private sector, encourage undesirable interprovincial competition for borrowed funds, and raise the interest cost of productive investment.
- If the lower levels of governments with fiscal deficits depended heavily on central government budgets for revenue sharing, transfers, and subsidies (all with rigid formulas), the flexibility of the central governments to manage their fiscal policies consistent with macroeconomic stability would be seriously curtailed.
- If the budget of the higher levels of a government was in deficit while the budgets of the lower levels of government were in surplus, or the budgets of certain provincial or local governments were in deficit while those of others were in surplus, and if no mechanisms existed for the transfer of fiscal resources between governments, allocation of fiscal resources nationwide will be grossly inefficient. There could be serious implications for macroeconomic stability as well as overall performance of the economy, depending upon how governments with deficits financed their deficits (for example, through monetary expansion, curtailing their public expenditures, or increasing revenues from disincentive causing and distortionary taxes).

Institutional Aspects

Resource allocation in the economy and the costs at which public services are provided can also be seriously affected by the institutional aspects of intergovernmental fiscal relations, as follows:

- Providing a large degree of independence and autonomy to lower levels of government in carrying out their expenditure responsibilities or formulating their policies with respect to assigned taxes can help ensure their accountability (matching local preferences for public services) and allow efficient allocation of their fiscal resources.

- If lower level governments are given the responsibility for administering central government taxes, and if they enjoy a large degree of autonomy in doing so, they can erode central government revenues through generous tax incentives, and they can seriously affect macroeconomic stability. The loss of revenues to the central government, if those revenues are large, can curtail its capacity to meet its public expenditures, including providing grants to local governments in poor regions to meet the most basic needs of the population. At the same time, the local governments that brought about this loss of revenue will enjoy prosperity without paying for it. This is a clear case of undesirable inequity.
- Allowing lower levels of government complete independence with respect to their tax policies can result in competition among them for tax reliefs and concessions to entice businesses and enterprises (with serious implications for the efficiency of allocation of resources nationwide). It can also mean unnecessary duplication of tax administration efforts, and an inefficient use of limited tax administration resources available nationally, if the relevant information gathered by one taxing jurisdiction about taxpayers and their economic characteristics goes unused by other taxing jurisdictions.
- Permitting provinces and localities to limit contracting and purchasing within their own borders (and not nationwide) could result in the provision of public services at higher costs that will be inefficient.

Economic Principles for Designing a "Good" Intergovernmental Fiscal Structure

Clearly, the major parameters of an intergovernmental fiscal structure can affect the efficiency of allocation of resources in an economy as well as other determinants of its performance.[4] Nowhere are intergovernmental fiscal structures designed from scratch (or de novo), and economic considerations are not the only factors in their design. Nevertheless, certain economic principles have been developed that can help guide the reform of intergovernmental fiscal structure in any federal country, provided its policymakers are concerned about the efficiency of resource allocation and the performance of the economy. I would now like to highlight a few of these economic principles.

Expenditure assignments to different levels of government should be guided by at least three economic principles. First, public services that benefit everyone (for example, defense) and whose supply benefits from economies of scale (for example, electricity generation) should be provided by the central government. Second, public services whose benefits are localized (for example, law and order) and for which different people can have different preferences (for example, local roads) should be provided by local governments. Third, public services whose benefits spill over to jurisdictions other than those where they are actually provided (for example, public education and public health)

4. The intergovernmental fiscal structure can affect the performance of the economy, and the economy's performance, in turn, can affect intergovernmental fiscal outcomes. For example, the buoyancy of taxes assigned to the central government can affect the size of the revenue sharing pool, and the buoyancy of taxes assigned to lower level governments can reduce their needs for grants from higher level governments.

either should be provided centrally or should be subsidized by the central government, depending on the estimated value of the spill-over benefit.

Tax assignments to different levels of government could be guided by at least three basic principles. First, taxes that are levied on (a) relatively mobile factors of production (for example, labor and capital), (b) at progressive rates (for example, personal incomes), (c) cyclically sensitive tax bases (for example, personal incomes and corporate profits), and (d) tax bases that are unevenly distributed among jurisdictions (for example, natural resources) should all be assigned to the central government. Second, taxes that are levied on immobile tax bases (for example, land and property), and whose burden is not exportable to other jurisdictions, should be assigned to local governments. (Neither taxes on the consumption of goods and services, nor the corporate income tax, meet this criterion.) Third, large revenue yielding taxes that are inherently buoyant (for example, personal income tax, enterprise profits tax, broad-based consumption tax) can be assigned to the central government or to local governments. If they are assigned to the latter, their rates should vary within a limited range, and their base should be more or less uniform, if tax competition among jurisdictions is to be avoided.

Expenditure assignments should match tax assignments, as far as possible, in order to avoid large *fiscal imbalances* at different levels of government. If they are unmatched, and lower level governments are likely to face chronic fiscal deficits, "piggybacking" of the more elastic taxes of central governments (for example, of income taxes and/or value-added tax), or of overlapping assigned taxes, should be allowed. If, despite this strategy, fiscal imbalances continue for lower levels of government, alternative financing methods may have to be considered.

Revenue sharing should relate to any central government tax that (a) is progressive and/or has a large built-in elasticity (for example, personal income tax or enterprise income tax) and (b) is less distortionary and is a large revenue source (for example, value-added tax or excise duties). No economic principles exist that can help decide the exact proportions of the revenues of these taxes to be transferred to the revenue sharing pool. Whatever the size of that pool, its distribution among different lower level governments, as I mentioned earlier, can be guided by either the "needs" principle or the "derivation" principle. Depending upon whether the equity or the efficiency objective is considered paramount, the former or the latter will become the main basis for distribution. "Tax effort" made by the lower level government could be added as yet another factor in designing the revenue distribution formula.

Grants are of different kinds, and each one has its own raison d'être and meets one or more special needs. Generally, however, matching or conditional grants are preferable to nonmatching or unconditional grants (since they can encourage local tax effort and discourage wasteful spending); closed grants are preferable to open-ended grants (since they will imply constrained and quantifiable costs to the central budget); and earmarked grants are preferable to nonearmarked grants (since they will ensure that grant objectives will be achieved, such as meeting otherwise unmet basic needs of the local population). Whatever forms grants take, at least two principles must guide their design. First, they must make a measurable contribution to a clearly defined goal. Second, they must be inversely related to the grantee government's "fiscal capacity" and directly related to its "fiscal needs." "Fiscal capacity" and "fiscal needs" of each jurisdiction must be estimated with a clear, quantifiable, and transparent formula, as far as possible.

Subsidies should be limited to finance spill-over benefits, if any, from the public expenditures of lower level governments, and they should be transparent as far as possible. Hidden subsidies, in the form of tax reliefs (for example, to holders of local government bonds), should be avoided.

Borrowings by lower level governments from the public to finance their deficits are legitimate, if they are not so excessive as to "crowd out" the private sector, and if the funds are raised at market interest rates, without any implicit or explicit subsidy. Borrowings by them from the banking system should be limited and from the central bank prohibited, if the central government is not to lose its control over the country's monetary policy and if local government finances are not to become a major cause of macroeconomic instability and inflation in the economy.

The foregoing principles are primarily derived from economic considerations. However, intergovernmental fiscal relations in no country of the world are based upon economic considerations alone. It is, therefore, quite reasonable to expect that historical, political, social, and other noneconomic considerations will continue to play an important role in the design of the intergovernmental fiscal structure in your country.

Final Words

Before concluding the paper, I must reiterate that intergovernmental fiscal relations in every country of the world will continue to remain prisoners of history, traditions, institutions, and politics. What can be expected, at best, is only an incremental change from the present reality rather than a very profound and fundamental change. Whatever the extent and form of change, one hopes that it will make the structure transparent, stable, and predictable. Changes along these lines alone will be deserving of being called reform.

Would the establishment of an autonomous intergovernmental fiscal commission on a permanent basis, with a secretariat of its own, or on an ad hoc basis every five years (as in India) help? It would certainly make intergovernmental fiscal relations more transparent. Whether or not the structure will become more stable and predictable is less clear. This will depend upon how autonomous and apolitical a body that commission will be.

A review of experiences of intergovernmental fiscal relations in different countries of the world can help one see what the alternative solutions to common problems are, and it can help one decide if any of the alternative solutions adopted elsewhere are applicable to a given country. It is hoped that this chapter has provided a framework to understand and debate the various alternatives that a country may have in the reform of its intergovernmental fiscal structure.

3

Intergovernmental Fiscal Relations in Australia

Paul Bernd Spahn and Anwar Shah

General Characteristics of the Australian Federation

Australia was established as a federation at the beginning of this century when six separate British colonies formed the Commonwealth.[1] The aim of this political confederation was twofold: defense, and a more intensive economic cooperation and exchange on the Australian continent.[2] The Commonwealth obtained relatively few exclusive powers, but its responsibilities to be exerted concurrently with the states were quite extensive. In these areas of concurrent responsibilities, Commonwealth legislation is paramount. Thus concurrency provisions have remarkably strengthened the center over the years. Nevertheless, the Australian states retain substantial power in terms of spending functions.[3] As to government revenue, the states had expected their financial independence to be preserved under the Constitution. However, legal constraints as well as historical events have led to centralization of revenue functions and an ever-increasing financial dependence of the states on the central government.

Australia has a two-tiered highly centralized federation of six states (New South Wales, Victoria, Queensland, Western Australia, Tasmania) and two federal territories (Australian Capital Territory and the Northern Territory) with a total of 1994 end-year population of 17.9 million. The center emphasizes uniformity of public services across the nation and uses conditional grants to achieve that purpose. Tax administration and collection are central, representing 80 percent of revenues. Local governments are extensions of states but are given reasonable autonomy in local service delivery.

The national government has sole responsibility for defense, trade, immigration, external affairs, social security, and employment. States are responsible for education, health and social services, transport, railways, electricity, and water. (See Figures 3-1 and 3-2 for composition of public spending by various levels of government.)

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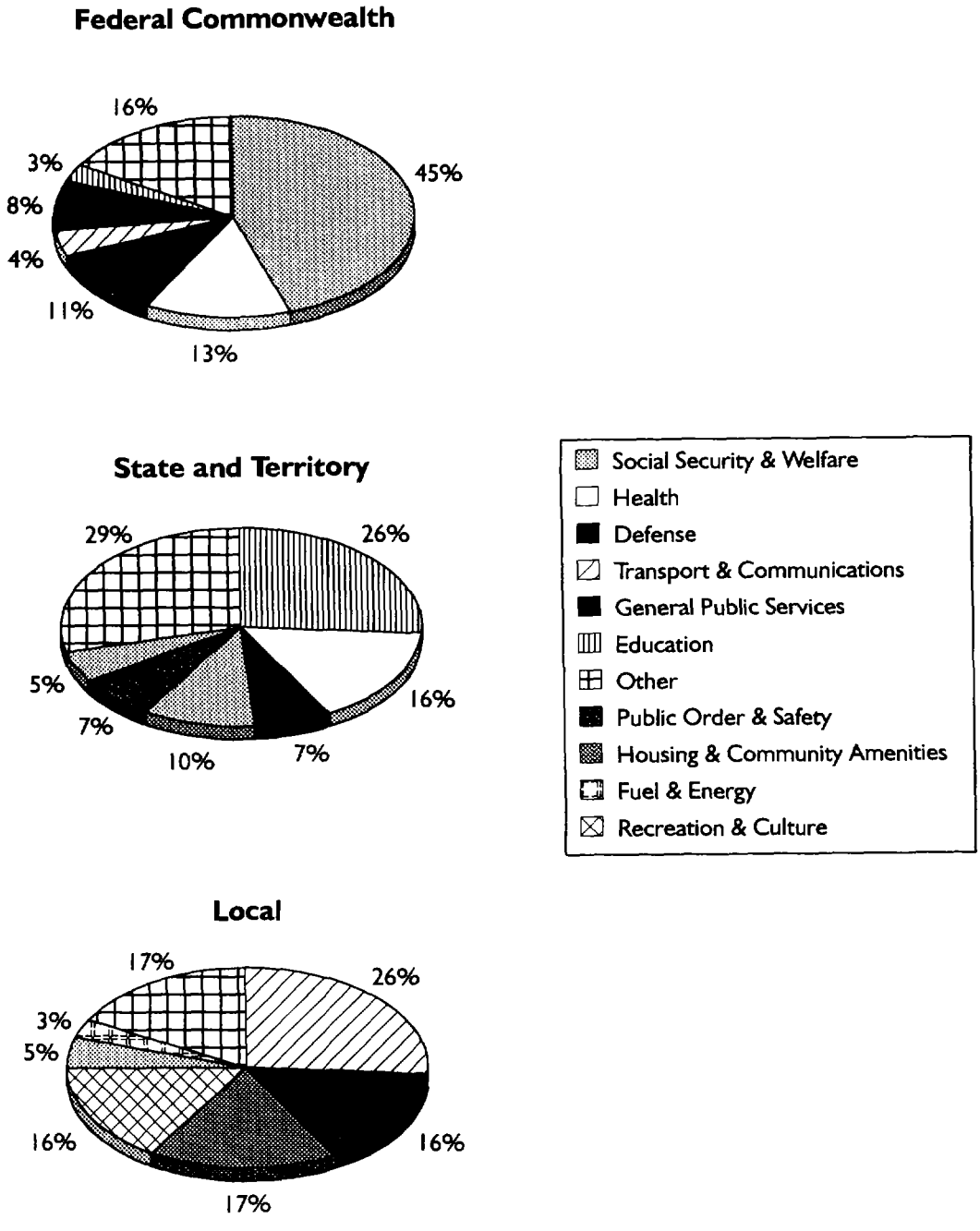
1. In addition to the six founding states, two territories have more recently achieved self-rule, the Northern Territory (in 1978) and the Australian Capital Territory (in 1989).

2. At that time, the states' overseas trade connections were generally much more developed than interstate trading within Australia.

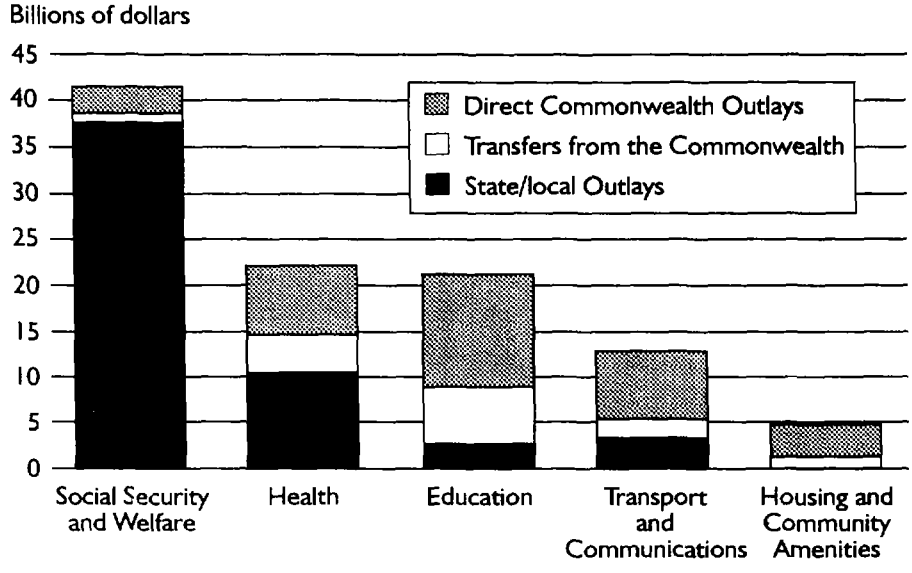
3. The following account is largely based on Mathews and Jay (1972), Hunter (1977), Mathews (1982), Galligan and Walsh (1990), Walsh (1990), Groenewegen (1991).

Figure 3-1. Own-Purpose Outlays by Category, 1992-93



Source: The Treasurer of the Commonwealth of Australia (1994).

Figure 3-2. Commonwealth and State/Local Outlays by Major Function, 1992-93



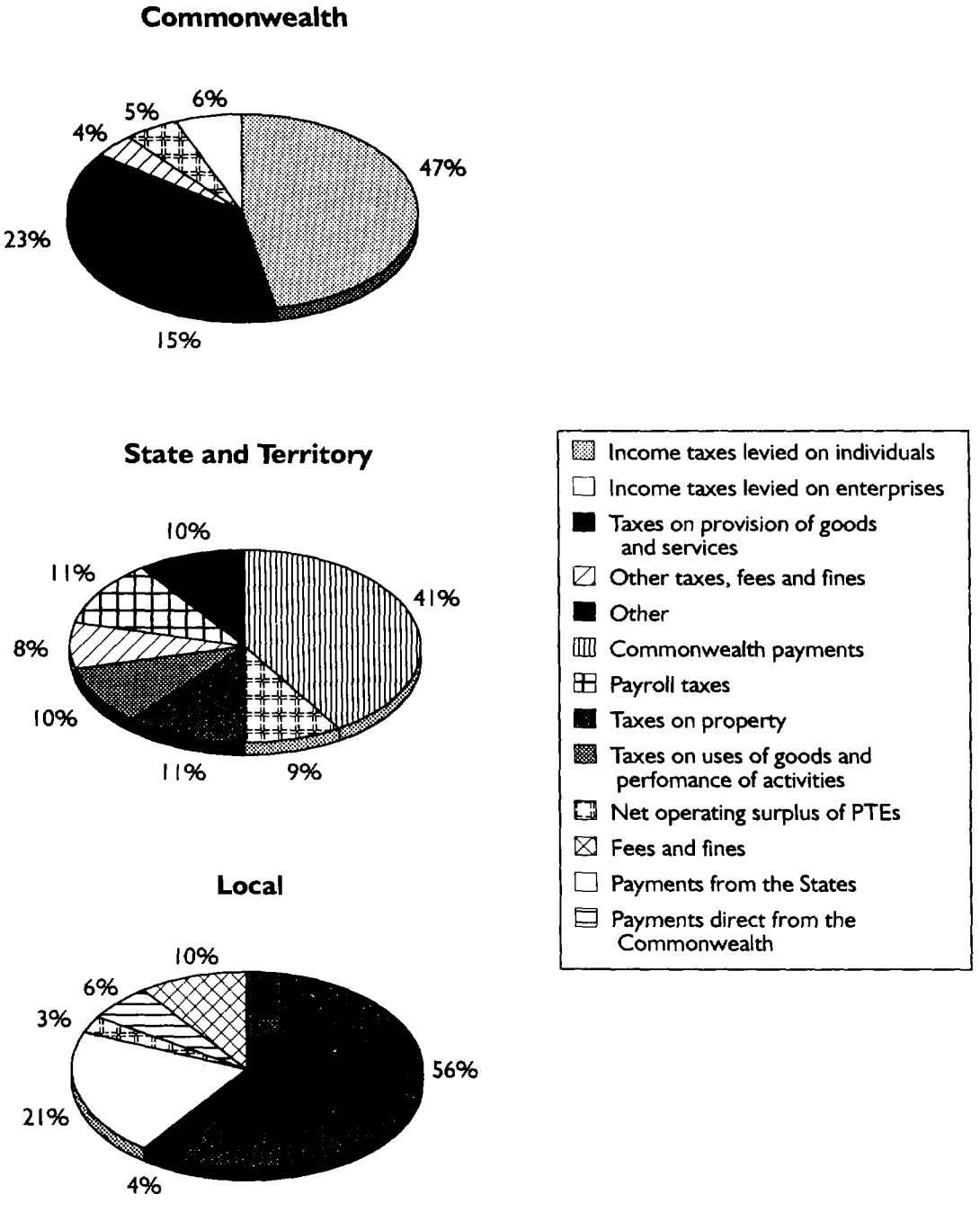
Source: The Treasurer of the Commonwealth of Australia (1994).

The federal government nonetheless exercises strong influence in areas of state responsibility through conditional transfers. In tax assignment, customs and excises are reserved for the center, and concurrent responsibilities are assigned in all other areas. One half of customs proceeds are mandated for states. The Uniform Taxation Act of 1942 eliminated the role of states for income taxes, and subsequent court rulings closed sales and excise taxation fields to states. State-local governments are responsible for 50 percent of the total outlay of the public sector but raise less than 20 percent of revenues (see Figure 3-3).

Vertical Tax Assignment, Federal and State Taxation, and Grants

Tax assignment in Australia may be seen as strictly following the layer-cake approach whereby each level of government is reserved its own tax base. The strict separation of taxable sources avoids tax competition among governments; only fees and fines are employed by all levels of government. A separation of tax sources is also found in other federations, like the United States, Canada, or Switzerland, but, contrary to the latter,the prescript has led, under the conditions prevailing in Australia, to the federal government controlling virtually all lucrative taxes in the end. It may be useful to review some of the major historical events that have led to this consequence. The historic perspective illustrates the importance of idiosyncratic constitutional and political constraints that have shaped intergovernmental fiscal relations in Australia and continue to bear on modern arrangements.

Figure 3-3. Revenue by Source, 1992-93



Source: The Treasurer of the Commonwealth of Australia (1994).

A Brief Historic Outline

The following historical events have contributed to the steady erosion of state tax competences in Australia:

- At the inception of the federation, the Australian states transferred, via the Constitution, exclusive powers on customs and excise revenues to the Commonwealth. However, starting in 1908, the High Court has consistently interpreted these powers more and more generously in favor of the central government by extending the definition of excises.[4] In particular, state sales taxes, as they exist in the United States, or a value-added tax operating at the state level, as in the member states of the European Union, could not be reconciled with the Constitution in Australia.
- To compensate them for the loss of customs duties and excise taxes, which then were relatively more important than today, the states were originally handed back three-quarters of "surplus" revenue collected (Section 87 of the Constitution). Yet on the expiry of the clause, the central government did not continue this form of tax sharing. It accorded per capita financial assistance instead (1911–27), a lump-sum grant that was rapidly eroded in real terms by inflation.[5] A special grant was accorded to Western Australia in view of its high contribution of customs duties.
- An offer was made in the early 1920s by the Bruce-Page government to vacate the area of personal income taxation in favor of the states. This failed on the rejection of New South Wales (all other states had accepted). A similar move to hand over smaller taxes and to reduce income taxation was also discarded at a Premiers' Conference in 1926. The states had then no desire to administer these unpopular taxes.
- A change in the provision of financial assistance through the Financial Agreement of 1927 led to the Commonwealth intruding on state sovereignty: the (unconditional) per capita grants were transformed into annual contributions toward interest charges on the public debt of states. The Agreement also introduced greater Commonwealth control of state borrowing through the establishment of a Loan Council.
- In the early 1930s, discontent with the fiscal federal arrangements was at a peak. Western Australia passed a referendum in favor of secession. A system of fiscal equalization for the financially weaker states, involving special grants from the Commonwealth, was introduced in 1933. An independent Commonwealth Grants Commission was established to review states' claims for special assistance and make recommendations.
- The most important fiscal development during World War II was the taking-over, in 1942, of all income tax by the Commonwealth as a wartime emergency act. The federal government, "having tasted the delights of full control of this great revenue machine, wanted to retain that control" (Bird 1986, p. 110)—and was success-

4. The important rulings in 1908 were the Wire-netting Case and the Steel Rails Case.

5. "The real burden of grants (to the Commonwealth) had been at least halved by the increase in prices during the war, and of course was far less than 75 per cent of customs and excise revenue would have been" (Mathews and Jay 1972, p. 118).

ful in doing so.[6] At the same time, income tax rates that had varied across states became uniform across Australia. Uniformity of the income tax has been preserved until now despite various attempts to give the states more "flexibility" in revenue raising, for instance through a surcharge on the Commonwealth income tax.

- Financial compensation for the loss in income tax was given through "tax reimbursement grants," which became—with amendments—the cornerstone of today's intergovernmental fiscal arrangements in Australia. This issue will be discussed in more detail later in this chapter.
- The only (minor) reversal of this centripetal trend came in 1971 with the handing over of payroll taxation to the states.[7]
- Since World War II, there has been a massive increase in specific-purpose payments to the states in the main functional fields for which they have constitutional responsibility (such as education and health).[8] The states resent this as another form of Commonwealth guardianship.

The Present Tax System

The important income taxes on individuals, enterprises, and nonresidents are now assigned to the Commonwealth. Furthermore, it collects the sales tax, excise taxes, and taxes on international trade. The states' most important own revenue sources are the payroll tax, taxes on financial and capital transactions, and taxes on gambling, on insurance, and on motor vehicles. Moreover, the states employ "franchise fees," taxes on excisable goods converted into service taxes for constitutional reasons.[9] Local governments, finally, are given taxes on immovable property, the municipal rates.

The assignment of taxes has lead to a significant "vertical fiscal imbalance" in Australia, a mismatch between own resources available and expenditure needs at the various levels of government. The Commonwealth's own revenues greatly exceed its outlay responsibilities.[10] However, the states—which retain control over almost all major government functions (except defense, foreign affairs, interstate matters, social welfare, postal and communications, and banking and insurance) are denied access to the two

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6. Four of the states challenged the validity of the legislation that transferred income taxes to the Commonwealth government. Yet to the dismay of the states, the High Court declared the essential parts of this legislation valid, not merely under defense powers, but also under normal conditions of peace (Mathews and Jay 1972, pp. 171-174).

7. Arguably, legislation under the Fraser government allowed the states to impose surcharges (or give rebates) on federal income taxation. However, this provision was never applied. The Commonwealth scrapped the legislation in 1988 because it feared the provision might be employed.

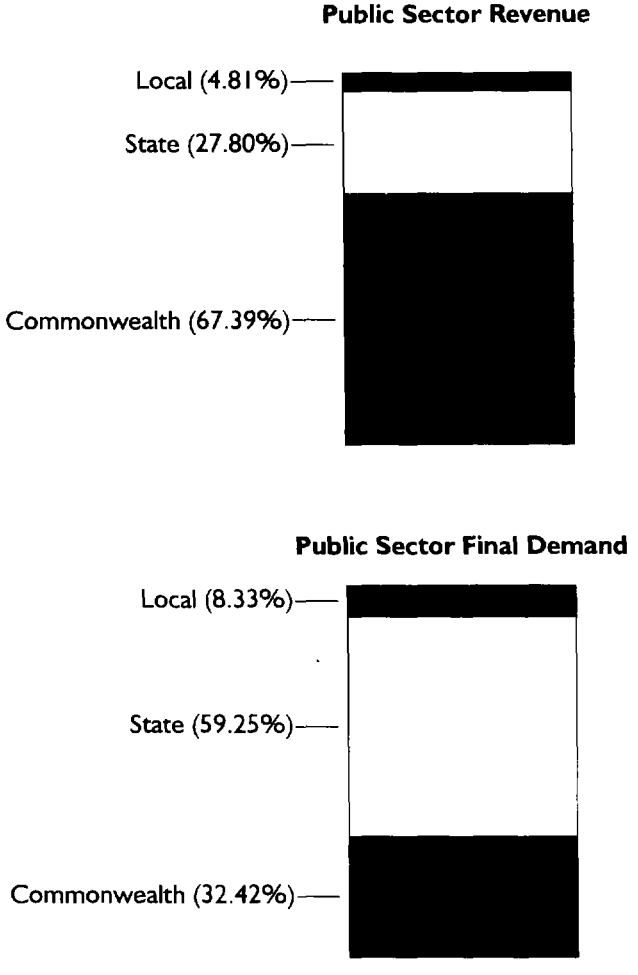
8. In 1982-92, 44 percent of Commonwealth transfers to the states were specific purpose payments (tied grants).

9. These taxes have emerged in response to the states being denied access to excises by the Constitution. The states have argued that a franchise is a legal entitlement, accorded to the suppliers of goods, to deliver certain commercial services (the distribution of goods). But such license taxes have emerged in typical areas of excise taxation (on alcoholic beverages, on tobacco, and on petroleum products), and the tax base is often indistinguishable from the excise tax base itself. It is therefore a puzzle that constitutional lawyers and even the Courts have accepted state franchise fees.

10. In 1992-93, Commonwealth revenue was 67 percent of total public sector revenue, while final demand for Commonwealth services was only 33 percent (Rye and Searl 1994).

major sources of revenue in Australia: income taxation and taxes on the production and distribution of goods.[11] Commonwealth taxes were about two-thirds of all public sector revenue in fiscal 1992–93, while public sector final demand corresponded to only one-third of total government spending.[12] The states, however, met about 60 percent of public sector final demand, and collected only 28 percent of all revenue, leaving a significant "fiscal gap" to be closed. Local governments collected about 5 percent of revenue while satisfying 8 percent of total public sector demand (see Figure 3-4).

Figure 3-4. Public Sector Revenue and Demand in Australia, Fiscal 1992-93



Source: The Treasuer of the Commonwealth of Australia (1994, 1994-95 Budget Paper No. 1).

11. The High Court has ruled the states out of taxes on goods but not services; this is the reason why the states imposed "franchise fees" on liquor and tobacco and petroleum, which are calculated on the value of past period sales (see also footnote 9).

12. Final public demand is measured by public final consumption expenditure (which excludes transfer payments) plus public gross fixed capital expenditure. In terms of total government outlays (that include transfer payments for social welfare, health and other purposes), the Commonwealth's share is higher. It was around 43 percent in 1992-93 (1994-95 Budget Paper No. 1, Statement 6, p. 6.5).

Australian states thus depend largely on revenue to be transferred from the Commonwealth. The financing of state budgets is predominantly effected through unconditional general revenue assistance as well as specific-purpose payments or categorical grants (according to Section 96 of the Constitution). In 1992–93, the states relied for more than 40 percent of their revenue needs on Commonwealth grants.[13] This fact made some authors speak of the states' dependence "on federal largesse" (Bird 1986, p. 125) or of the Commonwealth's "financial domination over the states" (Mathews and Jay 1972, p. 291).

Apart from vertical fiscal imbalance, the Australian tax system also relies heavily on the income tax. Income taxes alone account for about 60 percent of total revenue. The next single tax, sales tax, constitutes only one-sixth of the magnitude of income taxes. There is wide agreement among scholars of federalism that both the lopsided reliance on the income tax and the vertical fiscal imbalance among the tiers of government constitute the chief deficiencies of the modern Australian tax system.

In order to remedy the excessive reliance on income tax, the opposition parties at the Commonwealth level proposed, in their latest electoral platform "Fightback!", the introduction of a broader based consumption tax; their defeat in the elections is widely ascribed to this particular reform proposal. For political reasons, a broad-based goods and services tax (GST) seems to be out of the question for some time, all the more as the present Commonwealth government is strongly opposed to such a tax. As to the vertical assignment of taxes, a Premiers' Conference in 1990 essentially affirmed the present system,[14] although the position is now being reviewed as part of a general process of reforming intergovernmental relations. Tax sharing had been tried earlier (under the Fraser government in the 1970s) but was later abandoned. Since a reassignment of taxes seems to be out of the question, tax sharing is likely to come back on the political agenda.

Vertical fiscal imbalance is now essentially dealt with through an extensive system of grants. The contribution of taxes and grants to total revenue at each level of government is depicted in Table 3-1 (for 1989–90).

Financial Assistance and Revenue Sharing

By far the most important single revenue source of subcentral governments in Australia is grant money. These grants are mainly paid in the form of general purpose financial assistance, which is explained by their historic roots as "income tax reimbursements" following the implementation of uniform income taxation in 1942. The Tax Reimbursement Act provided the legal basis for grants to any state that abstained from levying income tax.[15] In addition, more than half of Commonwealth assistance is in the form of tied or conditioned grants (for health, education, roads, and public housing). In 1992–93, the total of transfers from the Commonwealth to the states was $31.7 billion in gross terms, whereas state expenditures amounted to $51.8 billion.The various categories of grants are shown in Figure 3-5.

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13. 1994-95 Budget Paper No. 1, p. 6.7.

14. At a Special Premiers' Conference in July 1991, there were signs that the Commonwealth was prepared to accept greater revenue freedom for the states; for a summary of results see Walsh (1991, pp. 18-20).

15. The states were thus not prohibited from exploiting this tax base; yet they were encouraged to refrain from doing so (Mathews and Jay 1972, p. 175).

Table 3-1. Sources of Revenue for Each Level of Government in Australia, 1991-92
(Percentage of total revenues)

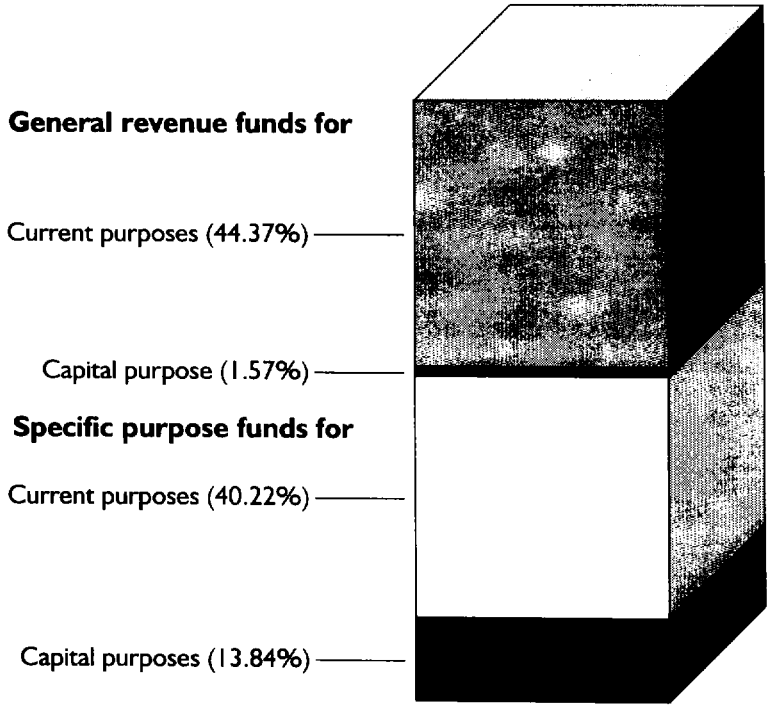
Revenue source	*Commonwealth*	*State*	*Local*
Own-source revenue			
Taxes, fees and fines:			
Personal income tax	48	-	-
Company income tax	16	-	-
Excises	11	-	-
Sales tax	9	-	-
Customs duty	3	-	-
Payroll tax	1[a]	9	-
Stamp duties [b]	-	6	-
Motor vehicle taxes	-	4	-
Franchise taxes	-	4	-
Municipal rates	-	-	51
Other	3	11	3
Total	**91**	34	**54**
Net operating surplus[c]	3	10	7
Other	6	14	17
Total	***100***	***58***	***78***
Payments from higher levels of government			
From Commonwealth[d]	na	42	14
From state	na	na	8
Total revenue	***100***	***100***	***100***

a. Includes fringe benefits tax.
b. Includes financial institutions duties.
c. Net operating surplus is included as revenue in the ABS Government Financial Estimates.
d. Payments from the Commonwealth to states for on-passing to local government recorder under local.
Source: Fletcher and Walsh (1993).

The more recent history of general revenue assistance to the Australian states falls into three phases: from 1959 to 1976, when general revenue funds were given to the states under the label of "financial assistance grants"; from 1976 to 1985, when such revenue was transferred to the states through revenue sharing; and from 1986 onward, when financial assistance grants were reintroduced.

Financial assistance grants were increased annually (from 1959 to 1976) by a formula stressing, for each state, three factors: population changes, average wage increases, and a so-called "betterment factor" designed to allow the states to expand their relative level of services.[16] On their reintroduction, these grants have been determined "by fiscal equalization factors based on revenue/expenditure disabilities for different states while the size of the pool is determined by a percentage growth rate set to reflect specified real (inflation-adjusted) changes in assistance which can be negative when fiscal restraint is

Figure 3-5. Commonwealth Transfers by Category, Fiscal 1992-93



Source: The Treasurer of the Commonwealth of Australia (1994, 1994-95 Budget Paper No. 3, Table 17).

16. This betterment factor was 1.2 percent in the beginning; it was then raised to 1.8 percent in 1971 and 3 percent in 1975.

called for" (Groenewegen 1991). Since 1990 the Commonwealth has agreed to maintain the real value of such grants in order to provide greater certainty in the funding of state budgets. The Premiers' Conference of March 1994 extended this commitment in per capita terms for the following three years.[17]

The revenue-sharing interlude had been initiated by Fraser's "New Federalism" policies. Sharing was first adopted for the income tax alone. The pool was formed by applying first a fixed proportion and later an increasing proportion of the tax proceeds collected in the states. This led to the states' revenues being determined by factors similar to those used for financial assistance grants before. Later, revenue sharing was extended to federal tax receipts as a whole, which somewhat lowered the rate of growth of the states' revenue pool (since revenue elasticities of other Commonwealth taxes are typically lower than for the income tax).[18]

As noted before, the revenue-sharing experiment was abandoned largely because of uncertainties about the Commonwealth's planned tax policies and for political reasons—since the states had found themselves to be "more vulnerable to unilateral federal decisions on tax policy" (Bird 1986, p. 116).

General revenue assistance is given for recurrent and for capital purposes in Australia. The latter reflect the fact that the Commonwealth used to borrow on behalf of the states and distribute the funds through the Loan Council. This program, however, has become an anachronism, and the Premiers' Conference decided to abolish this type of grant in 1994.

Specific purpose grants in the form of recurrent and capital grants are given for specific state functions like social services (health, education), social security and welfare, economic services (roads, transport, industry assistance, water resources), and other services (like housing and urban renewal, regional development, disaster relief and debt charges). Three types can be distinguished: (i) payments "to" states for funding direct state outlays, (ii) payments "through" states to be passed on by the states to other bodies or individuals,[19] and (iii) direct payments to local governments. The conditions attached to these grants vary widely. One category simply requires the payment to be made for a specified activity, with varying degrees of budgetary discretion available to the states; another entails program stipulations (for instance, for a hospital funding grant, that free public hospital treatment to Medicare patients is provided). Or grants may hinge on the observance of principles of service provision and program delivery mechanisms as established by Commonwealth state agreements (1994-95 Budget Paper No. 3, p. 31).

From a political point of view, specific-purpose grants are a way to "signal" the grantor government's concern for specific public functions that lie outside its own realm of competence. This may pay off in national elections, yet it may also be resented by state legislators and governments (as well as "informed" voters). From an economic

17. Adjustments are made not only for inflation, as has been recent practice, but also for total population growth in Australia.

18. During the period of revenue sharing (1975-1985), the proceeds from income taxes were experiencing high income elasticities through the fiscal drag induced by high inflation rates (and a failure to index taxes consistently).

19. The main payments relate to institutions of higher education, nongovernment schools, and local government general-purpose payments.

point of view, however, the budgetary effect of specific-purpose grants is questionable. Specific-purpose grants for recurrent purposes may not differ much from general purpose grants to the extent that they release resources in the tied area for general purposes. This is true whenever the specific function would have been financed at the state level anyway. In this case, the "tied" grant money is "fungible" (that is, it cannot be attributed to the public function performed).[20] If, on the other hand, the amount of the specific-purpose grant exceeds the amount that would reflect public demand for that service at the state level, and the central government insists on it being spent in the specific area, then waste and inefficiencies would result since the grant does not reflect the regional pattern of demand for the public service.

Some specific-purpose grants in Australia are provided with matching requirements and/or they depend on project approval, information requirements, and conditions for operation. To this extent, the Commonwealth is able to impose some standards, and one may even speak of "joint decisionmaking" although not in the institutionalized sense of the German arrangements (see Chapter 6). Moreover, there is evidence that these grants are associated with substantially increased state-local taxation.[21] This indicates conforming additional increases in state-local expenditure (or saving) through expenditure requirements and relative price effects. In any case, the specific nature of the grants affects the horizontal regional distribution of these resources, subject however to the Grants Commission taking grant differentials for most of the recurrent specific purpose grants into account in assessing general revenue grant relativities.

Over the past twenty years the percentage of specific purpose grants increased dramatically, from about one-quarter in the early seventies to more than one-half today. This occurred in two leaps during the second half of the seventies and over the past five years. It is very much resented by the states as Commonwealth intrusion into their sovereignties. The states have typically accepted this form of grant money since they realized the high degree of discretion remaining through their "fungibility." Recently, however, the major growth in tied grants has been in areas where the states' own expenditures are limited and so free up very little state money. The Council of Australian Governments has recently established a working group whose role is to improve the efficiency of specific purpose payments as well as to reduce their interference with state responsibilities.

Equalization and the Role of the Commonwealth Grants Commission

General Remarks

The horizontal allocation of government resources among the Australian states depends on the distribution of the *states' own tax revenue;* on the distribution of *specific purpose*

20. The 1994-95 Budget Paper No. 3 recognizes that "for some of the large state expenditure items that are funded through SPPs (for example, hospital funding grants and government schools), a relatively large percentage of these funds would be directed to the same purpose regardless of the form of the funding" (p. 32).

21. The propensities for taxes to increase in response to this type of grant money were about 35 percent for grants for recurrent purposes and nearly two-thirds for capital grants (Spahn 1977, pp. 140-42).

payments; on the distribution of the *general revenue grants* (respectively, tax-sharing funds); and on the distribution of loan money. The distribution of the states' loan monies is centrally controlled in Australia through the Loan Council, discussed later in this chapter. As to the distribution of own revenue, this may vary across regions because of an inequitable dispersal of tax bases and because of variations in tax rates. For reasons of equalization, own revenue of states is standardized, however. Equalization formulae are always based on a standard tax effort that renders explicit equalization independent from regional tax policy and strategies. Own revenue is, of course, unconditional as are the means obtained from general revenue grants. These grants are apportioned on the recommendation of the Commonwealth Grants Commission which uses a sophisticated model that is described below.[22] Since the distribution formula chosen for allocating these funds leads to varying weights to be attached to different states, a gradual change in the relative provision of state revenue may result.

The distribution of specific purpose payments hinges on several factors, including the historical distribution, which was often arbitrary or reflected state expenditure policies and the Commonwealth's policy priorities (for example, road construction, university education). Specific purpose payments are related to specific programs but are not always granted on the basis of relative economic advantage or needs. The Grants Commission should take most of these grants into account when assessing the transfers needed to achieve horizontal fiscal balance. The Commonwealth Grants Commission's methodology takes four different approaches to dealing with specific purpose payments:

- *Inclusion* is used for those grants that are considered to meet in part state expenditures needs (for example, government schools). In these cases, special purpose funding is a full substitute for general revenue assistance.
- *Absorption* is a variant of the inclusion method. Specific purpose payments are added to the pool of financial assistance grants, and per capita relativities recommended by the Commission are determined with regard to that pool (for example, for unquarantined hospital funding grants).
- *Deduction* is used when specific purpose grants are considered to finance expenditure in addition to what the states would otherwise have undertaken. In these cases, only the state-funded portion of expenditure is included in the Commission's assessment for general revenue grants (for example, a number of health grants).
- *Exclusion* is used where the Commonwealth has largely accepted financial responsibility (most grants "through" the states). In this case, all expenditure in the particular area is excluded from the assessment.

Intergovernmental distribution of funds in Australia may be typified as "asymmetrical vertical grants"—except for states' own revenue. In designing these grants, relative costs of providing standard services at the state level, relative specific purpose grant differentials, and relative revenue-raising capacities are all taken into account. These relativities are assessed by the Commonwealth Grants Commission,

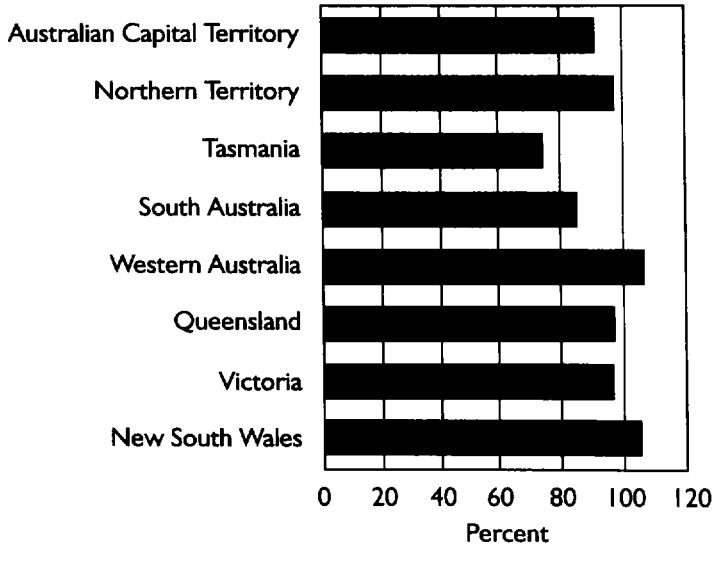
22. General revenue grants are the main instrument for achieving horizontal fiscal balance through the formula designed by the Grants Commission. One major specific grant (for hospital funding) is also distributed on the basis of the Commission's advice.

following detailed submissions from and exhaustive discussions with the states and the Commonwealth Treasury.

Relative per capita revenue capacities of the Australian states are depicted in Figure 3-6. Compared with most other countries, notably China, the regional variations of fiscal capacity seem to be small. The "richest" states (Western Australia and New South Wales) exceed the "poorest" state (Tasmania) by only about 3 percent. The standard deviation for fiscal capacity of all states is only 11 percent.

Apart from standard revenue capacities, the methodology also examines relative standardized expenditure needs for all states. The problems of defining standard needs are further discussed later in this chapter. It is obvious that standardization requires specification of a basket of state functions, which may vary across regions in accordance with different locational criteria—whether a service must be provided extensively over vast geographical areas or intensively in urban agglomerations; whether it must be provided at different quality levels among regions (for example, basic versus highly specialized medical service), or at different quantitative levels in accordance with differences in local demand patterns (for example, a different proportion of school-aged children). Furthermore, the differences in relative costs must be taken into account (for example, different wage levels, transportation costs).

Figure 3-6. Relative Revenue Capacities of Australian States and Territories, Average 1988-89 to 1992-93



Source: Rye and Searl (1994).

As to the relative costs of public services, the discrepancies in the Australian federation are significant (see Figure 3-7). The cost of providing services in the Northern Territory, for instance, is almost three times as high as in Victoria. However, the Northern Territory is clearly an exception, and it could be dealt with separately without the need to consider relative cost elements for *all* states. The standard deviation for the relative cost of service is only 7 percent for all states if the Northern Territory is excluded.

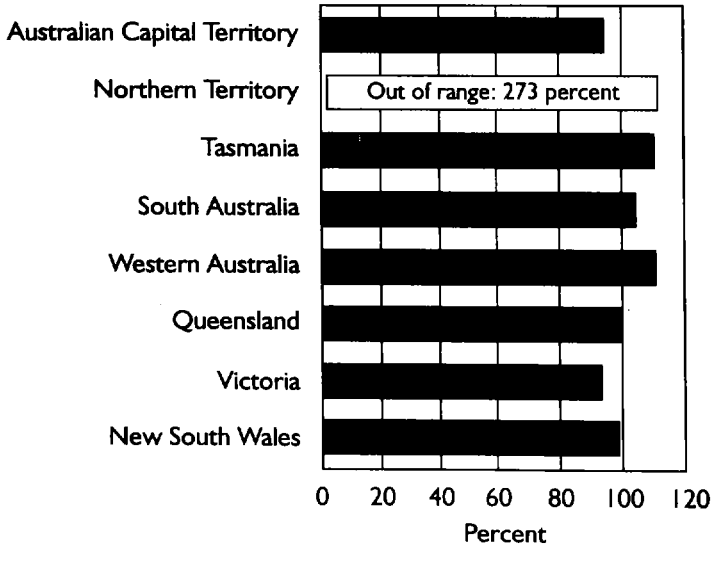
The Commonwealth Grants Commission

The Commonwealth Grants Commission was set up in 1933 and charged with the task "of inquiring into and reporting on applications by the states for financial assistance under Section 96 of the Constitution" (Mathews and Jay 1972, p. 154). The Commission defines its own role as "an independent, impartial and authoritative arbiter in relation to distributional aspects of fiscal federalism in Australia" (Commonwealth Grants Commission 1983, p. 160).

Over the years the Commission developed and refined criteria for horizontal fiscal equalization. The guiding principle for supplying special grants was initially that of regional "financial needs." A few points explaining the history of horizontal equalization in Australia are worth mentioning.

For many years, the system was restricted to "claimant" states, the needs of which were compared with the two "standard" states (New South Wales and Victoria). The horizontal review was hence only partial. With some states ceasing to claim special

Figure 3-7. Relative Costs of Public Services in Australian States and Territories, Average 1988-89 to 1992-93



Source: Rye and Searl (1994).

grants the scope for equalization through the Grants Commission was further reduced. The special grants recommended by the Commission (its recommendations were always accepted by the Commonwealth) were relatively small because they reflected the distribution of the financial assistance grants and because the financially weaker states were also the states with the smallest populations. The special grants were financed from the Commonwealth budget and did not affect the total amount of the financial assistance grants.

Both "revenue needs" and "expenditure needs" were assessed comprehensively for all recurrent revenue/expenditure categories. This was different from the formula governing German *Finanzausgleich*, for instance, which essentially emphasizes aggregate fiscal capacity, leaving expenditure functions aside.[23]

However, the needs criteria developed by the Commission had (and have) some more general bearing on the philosophy governing horizontal equalization in Australia—even for general financial assistance. This point was ostensibly made clear when the Commission was asked to review the initial allocation of tax-sharing funds introduced in 1976 through the New Federalism Policy. The Grants Commission's detailed reports on tax sharing led to a great deal of controversy in Australia. Initial reactions were described "as cold, if not actively hostile" (Bird 1986, p. 138). There were two main reasons for the controversy. First, a full review of state relativities was to define losers and winners of the proposed redistribution exercise—which always meets political resistance. Second, the report was so specific in many ways—for instance addressing outlays on shark and crocodile protection (Commonwealth Grants Commission (1985, vol. 2, p. 66)—that people started to wonder what it had to do with the transfer of general revenue to states—although it has to be acknowledged that a systematic assessment would have to include *all* state revenue and expenditures.

Despite some criticism, the Commission has been "the cynosure of federal finance specialists throughout the world" (Bird 1986, p. 142) for over fifty years and its achievements are out of question. What may have been overlooked, however, was the fact that the recommendations initially affected only a small pool of redistributive means—the special grants for the claimant states—and that these grants were far from being comprehensive equalization payments, both quantitatively and as to their coverage of regions. When the recommendations started addressing a broader range of issues, the obvious emerged: that horizontal equalization is essentially a political process. This process may follow the advice of "independent experts"—yet only as long as it suits existing political interests.

Another lesson to be learned from the Grants Commission's tax-sharing exercise is that too specific horizontal redistribution formulae for a substantive amount of general revenue are likely to meet political resistance. In addition, overly specific formulae are likely to jeopardize any move aiming at establishing a greater degree of cohesion.[24]

Nevertheless, the basic methodology developed by the Commission with the assistance of the states and the Commonwealth Treasury—the equalization model for assess

23. The Australian model also defines relative "tax effort" (own "tax effort" relative to standard "tax effort"). Such a distinction would make little sense in Germany, where legislation governing state taxation is uniform.

24. A similar conclusion may be drawn from the German horizontal *Finanzausgleich*.

ing general revenue grant relativities—has now been accepted by all parties. The main issue between them is the extent to which the equalization process should be carried—a political question—and the details of revenue and expenditure assessments, which involve technical and data considerations. While the political question—the extent of equalization—needs to be determined by governments, it is generally accepted in Australia that an independent body is more likely to achieve an equitable distribution of grants than is a process of political bargaining by governments of different political complexions and different fiscal strengths. The present Australian system developed because of the perceived unfairness of the previous arrangements.

Assessing Standard Revenue and Expenditure Needs: The Distribution Formula

The distribution model that has been used in Australia since 1981, replacing the special grants arrangements, embraces all states and territories and determines the distribution of the total amount of Commonwealth general revenue grants. It involves the calculation of grant relativities by reference to the relative per capita revenue-raising capacities for all recurrent own-source revenues, the relative per capita expenditure needs (costs of providing standard services) for all recurrent expenditures, and the differential per capita amounts of most recurrent specific purpose grants (those for the expenditures that have been equalized). In effect, each state's or territory's share of the total Commonwealth general revenue grants depends on its standardized deficit, which is the product of its population and its per capita grant relativity. The latter is assessed as its per capita standardized expenditure minus its per capita standardized own-source revenues, plus (or minus) its differential per capita specific purpose grants. Separate assessments are made for nineteen revenue categories, forty-one expenditure categories, and several grant categories. The grant relativities are assessed following a major review every five years. Methodological issues are also reviewed between the major inquiries.

Of all federal countries, Australia is best noted for its balanced emphasis on expenditure need and revenue means factors in determining state relativities for the distribution of unconditional equalization transfers. Section 13(3) of the States (Personal Income Tax Sharing) Act of 1970 contains general guidelines concerning equalization as follows:

> ...respective payments to which the states are entitled under this act should enable each state to provide, without imposing taxes and charges at levels appreciably different from the levels of the taxes and charges imposed by other states, government services at standards not appreciably different from the standards of government services provided by the other states.

Total equalization pool is determined by 39.87 percent of personal income tax collections for the previous year. The Commonwealth Grants Commission is entrusted with the task of developing state relativities based upon the above principle for use in grant allocation. These relativities are defended in open adversary proceedings by the Commission, and a final report is presented to the Commonwealth cabinet for review. The cabinet occasionally revises the recommended relativities based on its own view of relative fiscal needs. Following this review, a final determination is made in the annual Premiers' Conference. The Commission's approach to fiscal equalization is summarized here briefly.

Tax sharing entitlement of state i:

$$G_i = B_i / \sum(B_i)G$$

where G is 40 percent of personal income tax collection in the preceding year, G_i is the state's entitlement, and $B_i / \sum B_i$ is state i's proportion of total entitlement.

Assessed grant:
(B_i) = Revenue + expenditure needs – assessed needs met by other federal transfers.

Revenue:

$$= P_i(R_s / P_s)\theta_i \equiv P_i(R_s / P_s)/(Y_s / P_s - Y_i / P_i)$$

where P_i is population of state i, R_S/P_S is per capita standard tax revenue, θ_i is relative revenue capacity of state i, Y_S/P_S is per capita standard tax base, and Y_i/P_i is per capita tax base of state i. The Commission measures each state's expenditure needs for a service or category of expenditure by calculating the differential cost, for the state whose needs are being assessed, of providing services at a standard level, range, and quality. Thus, per capita expenditure need is per capita differential cost—or per capita standardized expenditure minus per capita standard expenditure. Standardized expenditure is the amount the state would need to spend to provide a standard level and range of public services and operate at standard efficiency, and standard expenditure is the population weighted average expenditure of all six states.

Standard expenditure:

$$= \frac{\text{Total of six states' expenditure on category}}{\text{Total population of six states}}$$

Mathematically,

Expenditure need = $P_i\,(E_S/P_S)V_i = P_i\,(E_S/P_S)\,[(U_iS_id_i)e_i) - 1]$

where P_i is populations of state i, E_S/P_S is per capita standard expenditure, V_i is expenditure need of i relative to standard, U_i is eligible population, S_i is scale factor, d_i is dispersion factor, and e_i is social, cultural, and environmental factors.

Expenditure need factors can be categorized as follows:

- Scale factors
- Population and related factors
  - Dispersion
  - Urbanization
  - Social composition
  - Age structure
- Environment factors
  - Physical
  - Economic

An example:

• Expenditure category	Health
• Subexpenditure	General medical services
• Units of use	Total population

Other adjustment factors

- Age and sex composition factor based on hospital bed use data.
- Index of health status based on standardized mortality rates adjusted by female fertility rates.
- Social composition factor based on aboriginal populations.

A state's expenditure as measured by these procedures is either positive or negative. Sociodemographic composition, population density, urbanization, and physical environment factors figure predominantly in assessing differential costs.

Table 3-2 provides details on the 1994-95 distribution of these transfers and Table 3-3 using 1991-92 data compares the allocation of transfers under the existing system with alternate distributions using equal per capita and income tax payments criteria.

The Australian approach to fiscal equalization is more comprehensive than that found in Canada and Germany. An attempt is made to equalize both the revenue raising capacity and the ability to provide a given level of services. Municipal revenues are, however, not included in revenue equalization. The Australian procedure for the assessment of expenditure needs has some elements of subjectivity. Determinants of expenditure need are sometimes arrived at using broad judgment rather than hard quantitative analysis. These calculations are done every five years and projected for interim years. The data used for some of the need calculations can be quite dated. Past allocations influence current entitlements, and any major change in fiscal position is accommodated with a significant delay. The fixed nature of overall allocations negated open-ended commitment. While the Australian Grants Commission's philosophical attachment to a comprehensive system of fiscal equalization is commendable, actual procedures used by the Commission may be open to further refinement.

Table 3-2. Commonwealth Payments to the States and Direct to Local Government Authorities, 1994-95 (Estimates)
(dollars per capita)

Payment	*New South Wales*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*Australia Capital Territory*	*Northern Territory*	*Total*
General revenue assistance	701.0	691.3	863.9	911.6	1,005.8	1,325.7	1,073.7	4,974.8	836.4
General purpose capital assistance	17.7	14.3	8.1	12.9	15.1	12.7	18.6	30.6	14.5
Total general purpose payments	718.7	705.5	872.0	924.5	1,020.9	1,338.4	1,092.4	5,005.4	850.9
Specific purpose payments 'to' the states	515.3	512.5	587.3	632.1	801.9	695.4	561.1	1,245.8	586.9
Specific purpose payments 'through' the states	357.3	392.4	346.7	366.1	363.8	364.0	200.9	407.4	363.5
Total specific purpose Payments	908.5	904.9	933.9	998.3	1,165.7	1,059.4	762.0	1,653.2	950.5
Total payment to states and local government authorities (net)	1,530.8	1,526.3	1,739.1	1,829.1	2,038.6	2,113.8	1,796.7	6,269.3	1,702.3
Population, December 1, 1994 (in thousands)	6,079	4,490	3,228	1,711	1,474	474	305	170	17,931

Source: The Treasurer of the Commonwealth of Australia (1994).

Table 3-3. Impact of Horizontal Fiscal Equalization on the Distribution of the Pool of Financial Assistance Grants and Hospital Funding Grants, 1991–92
($ million)

State or territory	*Distribution of pooling using relativities* (1)	*Distribution of the pool on an equal per capita basis* (2)	*Difference in distribution* (1) – (2) (3)	*Distribution of the pool on the basis of income tax paid* (4)	*Difference in distribution* (1) – (4) (5)
New South Wales	5,251	6,002	-751	6,501	-1,250
Victoria	3,709	4,433	-724	4,589	-880
Queensland	3,325	3,187	138	2,641	684
Western Australia	1,830	1,690	140	1,630	200
South Australia	1,772	1,456	317	1,316	457
Tasmania	709	468	241	402	308
Australia Capital Territory	270	301	-31	465	-195
Northern Territory	837	168	669	159	678
Total	17,704	17,704	"	17,704	"

Source: The Treasurer of the Commonwealth of Australia (1994).

Constraints on Deficit Financing

A full discussion of revenue instruments would have to include loan monies to be raised at vertical levels of government as well. Loan money—if not controlled—may help soften budget constraints at all levels of government; loan control is thus most delicate for multilayer government finance. Moreover, government borrowing is intertwined with monetary policy and macroeconomic demand management (through its impact on capital markets). Effective control of public sector borrowing is hence a major concern for all federations. State borrowing (general government as well as state business enterprises) is determined by the Loan Council, which determines not only the total amount, but also the allocation among Australian states. The Loan Council was set up by the Financial Agreement of 1927. It provides essentially what may be called a "joint-decisionmaking" machinery, yet the Loan Council's decisions throughout its history have predominantly reflected the interests of the Commonwealth.[25]

In the early 1980s, it appeared that the Australian Loan Council was relaxing control. The 1980s brought about an increase in "off-program-borrowing" activities at all levels of government. Furthermore, the states had increasingly developed devices to circumvent Loan Council control. State budget constraints had thus been softened quite considerably. And the constraints on regional loan financing appeared to be softer than it seems at

25. The federal government must convince only two states in order to have a motion passed, but in any case it is able to control the Council's decisions because of its dominating fiscal strength and grant powers.

first sight. Nevertheless, the Commonwealth retains control over the total borrowing program, and it has introduced a new global limits formula, which was used restrictively.[26]

Recently, the Loan Council has reformed its proceedings. Under the new arrangements, each jurisdiction nominates an amount to be allocated under the proceedings of the Loan Council in accordance with "its estimated general government deficit/surplus ..., public trading enterprise sector ... net financing requirement and certain memorandum items. These nominations are considered by Loan Council having regard to each jurisdiction's fiscal position and reasonable infrastructure requirements, as well as to the macroeconomic implications of the aggregate figure" (1994-95 Budget Paper No. 2, p. 42).

Summary and Outlook

The lack of flexible tax resources under state control is often cited as a severe problem for multilevel government finance in Australia. Yet it is questionable whether the states have really been "at the mercy" of the Commonwealth. A number of factors suggest that the states have been able to preserve—and even extend—their responsibilities:

- General revenue grants based on quasiconstitutional rules and institutional inertia ("no one should lose a benefit once received") provide a secure revenue source covering half of state resources on average. This is prone to foster a stable environment for state policy decisions and for long-term planning of public sector developments. In recent years, however, general revenue grants have been cut substantially in real terms.
- If the states had continued to impose their own income taxes, they would probably have received less revenue than they obtained through general revenue assistance. This was certainly true for the postwar period until the mid-sixties (Mathews and Jay 1972, p. 317); and it is probably true for the initial tax-sharing phase in the 1970s. The fact that the Commonwealth was able on several occasions to reverse these trends is not an argument for Commonwealth dominance; it is rather an indication that intergovernmental financial control may work even without the often cited tax/outlay link.
- Specific purpose payments have almost certainly released the states' own funds in certain policy areas that could be used for general purposes. This is true in spite of matching requirements in some instances. Matching requirements sometimes may have introduced a bias in the structure of state government outlays—creating, for instance, an incentive to increase expenditure on university education relative to primary and secondary schooling. Deploring this type of inefficiency is justified; but it calls for a revision of the set of matching requirements associated with specific purpose grants—not for a revision of the whole system of federal finance, and this has generally been achieved in Australia.
- Special grants and, later, the general revenue equalization arrangements have helped to ease the budgetary constraints of the poorer states.

26. This was facilitated politically because high real borrowing costs have reduced the desire of states to borrow.

- The states have recently started to exploit more heavily some own resources — notably user charges, resource taxation, and business franchise tax revenue.
- The consistent reduction in the Loan Council's role in controlling state borrowing has further contributed to easing budget constraints at state levels.

However, important flaws in the Australian federal arrangements remain. In addition to the vertical fiscal imbalance and the lopsided dependency of the fiscal system on income taxes, recent reform proposals have focused on how the special grants system has interfered with equity and the definition of relative needs. Proposals also were made to strengthen general revenue grants at the expense of specific purpose payments.

A Premiers' Conference in 1992 acknowledged the need for further reforms, and a working party was set up to examine the adequacy of the current fiscal system. The working party found the system of equalization to be highly complex by international standards, and it considered simplification of the scheme (for instance, the distribution of a part of the grant on a straightforward per capita formula or the reduction of the formula to fiscal capacity equalization only). The working party also looked into some of the possible implications for economic efficiency arising from the practical operation of the methodology.

Whatever the prospects for reform in Australia, the fiscal federal machinery is an interesting object of study for the scholar of federalism. Despite the highly centralized revenue functions and the importance of Commonwealth interference in state affairs through its specific purpose payments, the significance of the lower tier of government for the provision of public goods cannot be denied. There is no doubt that the states are resilient and play an important role in Australia. The Commonwealth cannot ignore the states and cannot keep cutting back grants to them. It is forced to reach broad agreements with the states (Fletcher and Walsh 1991) in order to preserve political stability. An outside observer of Australian federalism may well come to the conclusion that" overall, the pattern of Australian fiscal federalism seems to be fairly stable" (United States Advisory Commission 1981, p. 78). Despite this positive interpretation of the effects of multilevel finance on state sovereignty in Australia, a number of writers continue to underline the inefficiency of these provisions—notably by stressing the missing tax/expenditure link. The importance of this link may be debatable—in particular for smaller vertical fiscal imbalances (Spahn 1993). The question is whether the vertical imbalance in Australia is severe enough to warrant such concern.

It should not be overlooked that the political process may generate a corrective response—a response different from the traditional median voter model, yet one that leads to similar results. The Commonwealth government may thus come under direct pressure from its own electorate to constrain the overall level of taxation; the Commonwealth may then pass this pressure on to the states by demanding a revision of the revenue-sharing formula. Indeed, such revisions have been taking place in Australia; the mechanism may in fact be fully appropriate for a polity in which "neither the Senate nor the Cabinet provides adequate regional representation at the national level, because they are primarily dominated by party rather than by regional considerations" (Bird 1986, p. 130). Federal financial arrangements in Australia have preserved and secured state independence. The lower tier of government is far from being at the mercy of the Commonwealth.

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4

Comparative Federalism: Trends and Issues in the United States, China, and Russia

Roy Bahl

The United States, China, and Russia share some features: large populations, large land areas, and historical pressures for decentralization in governance. The United States and Russia are formally federal countries, and China in many ways behaves as though it is a fiscal federalism.[1] In the past few years, all three countries have undergone substantial changes in their intergovernmental systems, and central governments in all three countries are under fire from lower level governments.

Many observers would see intergovernmental fiscal relations in the United States vs. Russia and China, as being so different as to be incomparable. Likewise, it might be argued that the same theoretical model cannot explain changes in central-local relations in a capitalist transition and socialist economy. The objective of this paper is to compare the systems of intergovernmental fiscal relations in these three countries and to ask whether the theory of fiscal federalism can explain the differences and similarities in the structures of tax and expenditure assignment, and the recent trends that have occurred. The next section deals with the theoretical model, that is, the reasons why one would expect more or less decentralization in government finance from countries such as these. I then turn to a description of each of the fiscal systems, and recent trends in each country, and finally to some attempt at explaining the impacts and potential reasons for these changes.

Theory and Fiscal Decentralization

Fiscal decentralization has to do with the amount of fiscal autonomy and responsibility given to subnational governments. It is a subject on the policy agenda in many developing, transition, and industrialized countries. There always has been a cry for more decentralization of government, resulting from a combination of people wanting to get

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1. In fact, China is a unitary state. It is part of this comparison because its fiscal system shares many of the features of fiscal systems in federal countries.

more involved in the process of government and the inability of central governments to "get the job done."

Many countries around the world have moved toward more decentralized structures in the past two decades, but quite different paths have been taken. Many other countries have remained highly centralized and have been loathe to relinquish any taxing and spending powers to lower level governments. China and Russia are examples of countries that have been decentralizing the flow of resources, that is, subnational governments have been claiming an increasing share. Current policy, however, seems to be in the direction of finding a way to reclaim a larger share for the center. In the United States, policy and practice have been in the direction of cutting the dependence of the state and local sectors on the federal government. Unlike the United States, neither China nor Russia has granted taxing autonomy to their subnational units of government.

Empirical research has shown that countries that have given greater fiscal powers to their state and local units tend to be higher income, larger in population and land area, and to have a more heterogeneous mix in their populations. It also has shown that countries at war or threatened by war tend to be more centralized (Bahl and Nath 1986). By these criteria, Russia, China, and the United States are all countries that would seem to be candidates for a strong degree of fiscal decentralization.

Another way to examine the determinants of fiscal decentralization is to consider the *a priori* reasons why a country might choose decentralization of its fiscal structure, that is, the theory of fiscal federalism (Oates 1972). These reasons might be broken down, as below, into the advantages and disadvantages of fiscal decentralization.[2]

Advantages of Decentralization

Economists would invoke efficiency criteria in arguing for smaller local government, that is, in arguing for fiscal decentralization. If preferences for public services do differ across subgroups of the population, and if externalities are not present, then national welfare is maximized if local communities vote their preferences and provide the level and mix of public services that they want. Noneconomists might take the same view but couch it in different terms: getting government closer to the people will lead to more participation in government, will likely provide an outcome that is closest to the preferences of the median voter, and will allow the political process to guarantee a more efficient operation of local government. Either way, the results should be the same:

- The mix of services provided will match the demands of the local population.
- Government officials will become more accountable to voters for the quality of services they provide.
- Local populations will be more willing to pay for public services, since their preferences will be honored.

A second argument for fiscal decentralization, not often made, is that it can enhance revenue mobilization. Some taxes are suited to local government in that their assessment and collection require familiarity with the local economy and population, and because they are perceived as quasi-benefit charges that finance local area services. The property

2. The arguments concerning the advantages of decentralization are developed more fully in Bahl and Linn (1992, 385-427).

tax and other land based taxes are usually thought of as local government taxes. It is also true that central government value added and income taxes often do not reach far down in terms of the amount of the tax base that they pick up. Typically, small firms and workers outside the larger formal sector firms are left out of the tax net for administrative reasons. Local governments, it is argued, might be able to capture this untapped fiscal capacity because of their greater familiarity with the local tax base. The United States, Russia, and China all have capitalized on this advantage of fiscal decentralization but in different ways. Only the United States among this group, however, makes extensive use of property taxation.

Are these arguments really valid? Can local governments actually respond to citizens' preferences for many or few local services, or to a willingness to pay more tax to receive local services? In fact, the efficiency case for fiscal decentralization is much stronger in industrial than in developing or transition countries. Consider first the notion that moving service provision closer to the people can lead to gains in the welfare of consumer-voters. Because the theory of fiscal assignment was developed in industrialized countries, it was heavily influenced by democratic processes of budgetmaking (for example, the median voter theories of public expenditure determination). In this model, the level of tax effort and the expenditure mix in local areas are responsive to changes in relative prices and income, and the potential losses in efficiency caused by interference from a higher level of government can be substantial (as can the potential efficiency gains from the greater fiscal autonomy of local government). Although the model is based on a number of questionable assumptions, empirical research has shown that the behavior of U.S. state and local governments more or less squares with it (Bocherdering and Deacon 1972).

The model does not so easily fit transition countries such as China and Russia, however, and the efficiency gains from decentralization therefore may not be so great. This is partly because voter preferences are not as readily translated into budget outcomes in transition countries as in industrial countries. Local councils are often not elected, chief officials are often not locally appointed, and adjustments in the allocation of local resources are often severely constrained by central government controls. These controls include approval of the budget, central appointment of chief local government officers, central government regulations of tax administration, mandates as to salary levels of local government employees, and the general absence of a mechanism by which local voters can reveal their preferences for a larger or smaller government. In this setting—where the devolution of revenue authority and expenditure responsibility is not accompanied by a relaxation of central government control over local fiscal decisionmaking—there is less to be gained from decentralization of taxes and expenditure than would be the case in industrial countries.

Given this state of affairs, a transition country that could derive maximum gains from a more decentralized local government structure would have the following characteristics: (a) enough skilled labor, access to materials, and capital to expand public service delivery when desired, (b) an efficient tax administration, (c) taxing power able to capture significant portions of community income increments, (d) an income-elastic demand for public services, (e) popularly elected local officials, and (f) some local discretion in shaping the budget and setting the tax rate. This list suggests that the setting for decentralization is clearly present in the United States, but that the case for efficiency gains in China and Russia is much less easy to make.

Advantages of Centralization

The arguments for fiscal centralization are stronger in transition countries than in industrial countries. As recent history has shown, stabilization is especially important in such countries. This argues for central government control of the main tax and borrowing instruments. It has also become a concern in the United States as the federal government tries to cope with a substantial budget deficit.

In transition countries that are undergoing privatization and building a public and industrial infrastructure, the need for a coherent growth policy is also an argument for fiscal centralization, because investment capital is scarce and must be controlled by the central government to maximize returns. If local governments are given access to major tax bases, they may compete with the central government and therefore limit the amount available for the central tax. As a corollary, centralization allows the national government to allocate fiscal resources to goods and services with national benefits, whereas local autonomy would inevitably lead to greater expenditures on those services that have more local benefits. The struggle over financing health care in the United States is a good example of this issue.

Several arguments for income distribution also support fiscal centralization. The most important is that regional (and rural-urban) disparities in income and wealth may be accentuated by fiscal decentralization because wealthier urban governments will benefit most from greater taxing powers. Centralization allows the national government more discretion in shaping regional differences in levels of public service and taxation, which is an especially important consideration for governments that intend to use tax and subsidy policy to shape the spatial distribution of economic development. China, Russia, and the United States are all characterized by significant fiscal disparities. China and Russia in particular have faced difficult choices as regards equalization. China was forced to choose between funneling more resources to the lower income provinces or to leave the retained revenues higher in the coastal growth provinces. Russia has faced the difficult decision of choosing among equalization, central government fiscal solvency, and appeasing the potential breakaway provinces. In both cases, the central governments retained control over the fiscal resources and were in a position to make the decision. The U.S. federal government would have been in much less of a position to affect a regional redistribution of resources.

The U.S. Federal System

The system of fiscal federalism in the United States gives substantial autonomy to subnational governments on both the tax and expenditure sides of the budget and relies heavily on these governments for revenue mobilization and the provision of social and infrastructure services. The subnational government sector is composed of fifty states and, within each, numerous local governments (counties, cities, towns, school districts, and other special districts). Each state may decide on the powers and responsibilities that it will give to its local governments.

Tax and Expenditure Structure

Subnational governments in the United States (states and local governments) spend an amount equivalent to 13 percent of GNP (1993), less than the federal government share

when defense and international assistance are excluded (18.4 percent). State and local governments raised about 41 percent of all tax revenues in 1993. For every one federal government employee, there are 5.5 state and local government employees (1993). Clearly, the state and local government sector is an important part of the American economy.

The federal government relies almost exclusively on income taxation, with almost two-thirds of tax revenues coming from the individual income tax. None of the revenue is directly shared with state and local governments, and collections are made by a federal agency, the Internal Revenue Service. Many subnational governments have chosen to adopt the same base as the federal income tax for their own individual and corporate taxes, and there is a system of information sharing between the Internal Revenue Service and the states' tax collection agencies.

State and local governments have chosen a wide variety of tax structures and depend, to varying degrees, on taxes on individuals and businesses (see Table 4-1). There is a relatively even split among income, consumption, wealth taxes, user charges, and intergovernmental assistance. The U.S. fiscal system is relatively balanced. State governments tend to rely heavily on income and sales taxation, though six states impose no income tax, and four do not impose a retail sales tax—the preferred form of indirect tax in the United States. Local governments tend to rely heavily on the property tax, user charges, and state government grants.

Table 4-1. The United States: State and Local Government Fiscal Structure, 1991

Category	*State and local governments*	*Local governments*
Total revenue (millions)	$902,177	$541,791
Income tax	14.6%	2.2%
Sales tax	13.9	4.1
Property	18.6	29.8
Federal (and state) grants	17.1	37.3
User charges	13.9	14.4
Other	10.8	8.7
Total expenditures (millions)	$908,470	$542,045
Education	32.7%	39.9%
Highways	7.1	4.8
Health	8.9	7.9
Police and fire	—	5.2
Public welfare	14.0	5.0
Interest on debt	5.7	5.3
Other	31.2	31.1
Total	99.6%	99.2%

Note: In 1993, state and local government expenditures as a share of GNP = 13.9%; state and local government taxes as a percentage of personal income = 11.8%; and federal grants as a percentage of state and local government revenues = 21.0%.

Source: U.S. Department of Commerce (1994).

Fiscal Autonomy

State and local governments have substantial fiscal autonomy. They are free to choose their own tax structures, so long as they do not violate the federal Constitution. The primary issues of concern here are that states not restrict interstate commerce and that they not discriminate against any subgroup of the population. Likewise, they may deliver expenditures in any manner they desire, except that the federal Constitution requires that they provide citizens "equal protection." In recent years, the courts have been hearing challenges against the method of financing public schools in U.S. states. In some cases, they have ordered states to change the method of financing to provide more equal services to all students in the state.

Tax rates, tax bases, and user charges may be set by states without approval by the federal government. States may borrow from whatever source they choose, subject only to the limitations on general financial practices (for example, disclosure) laid down by federal agencies. Finally, states have independent tax collection agencies and are only loosely tied to the federal government (information sharing).

On the expenditure side, the states may select whatever number of employees, and whatever compensation rates for those employees, it chooses. Likewise, it is free to deliver services at whatever level it chooses. There are, however, some restrictions on expenditure autonomy. States have restricted themselves, through state constitutions, to disallow deficit financing. In other words, states must balance their recurrent budgets every year. Borrowing is only for capital financing purposes. Moreover, the federal government has laid down some mandates that restrict state and local government expenditure decisions: environmental and health regulations; conditionality on the receipt of federal grants, particularly for health and welfare services, and so on. Likewise, state governments have mandated certain actions by their local governments. Various analysts have estimated the costs of such mandates at substantial levels.

The fiscal autonomy of local governments is more limited and is determined by each state. The taxes that local governments may levy are prescribed, and though there is usually some freedom in choosing tax rates, the state usually provides for a maximum levy. The rules under which local governments must seek voter approval for fiscal actions (tax rates, annexations, new borrowing, and so on) are carefully prescribed. The fiscal importance of local governments in the United States varies widely, from 40 percent of total state and local government spending in Vermont to 68 percent in Nevada. State governments also give grants to local governments, and sometimes share the proceeds of tax revenues on a derivation basis, but there is no single pattern that best describes the practice.

Recent Trends

Over the past fifteen years, the federal government has reduced the level of its explicit and implicit transfers to state and local governments. This has had important effects on the activities of the state and local government sectors. Three important issues stand out: the decline in the federal subsidy, the pattern of disparities and interstate competition that has accompanied this "fend-for-yourself" federalism, and the offsetting pattern from federal mandates and court cases on school finance.

Fiscal Dependence

The federal government has taken a series of actions to increase the fiscal independence of state and local governments, that is, to make them more independent. It has reduced the rate of increase of federal assistance, particularly the level of federal grants to state and local governments. It also has eliminated the only program of general assistance to state and local governments (general revenue sharing), and it has all but eliminated the direct flow of aid to local governments.

Between the late 1960s and the late 1970s, federal grants increased dramatically in real terms, as a share of the federal budget and as a share of state and local government expenditures (see Table 4-2). The 1980s saw a decline in the reliance on federal grants by state and local governments, and a declining emphasis on grants in the federal budget. The real level of grants was lower in 1990 than in 1980. The first three years of this decade saw a resurgence in federal grants to state and local governments, by all indicators, except that the increase was concentrated in grants that are passed to individuals rather than grants to the governmental units.

The federal government also reduced an implicit subsidy that operated through the federal income tax. In the past, all state and local government general purpose taxes were allowed as deductions on the federal individual income tax. This preferential treatment was available to those who itemized deductions (approximately the one-third highest income taxpayers). At a 50 percent marginal income tax rate, this meant that itemizers could shift, at the margin, about half of their taxes on to the federal government. This reduced the resistance to higher state taxes and, therefore, acted as a subsidy to state and local governments. The 1986 federal tax reform eliminated the deductibility provision for general sales taxes[3] and reduced the top marginal income tax rate to 33 percent, thereby reducing the value of the remaining deductibility provision for income and property taxes.[4]

Table 4-2. The United States: Federal Grants to State and Local Governments, Selected Years 1970–1993

Year	*Real amount (billions)*	*Percentage of state and local expenditures*	*Percentage of federal government expenditures*	*Grants for payments to individuals (% of total)*
1970	73.6	19.0	11.5	36.3
1975	105.4	22.6	13.7	33.7
1980	127.6	25.8	15.2	35.7
1985	113.0	20.9	10.8	46.6
1990	119.7	19.4	10.7	57.0
1993	163.2	23.0	13.6	62.0

Source: U.S. Department of Commerce, *Survey of Current Business,* National Income and Product Accounts, Tables 3.2 and 3.3, selected years; and Advisory Commission on Intergovernmental Relations (1993).

3. The gasoline tax deduction had been disallowed earlier.

4. The Clinton Tax Reform of 1993 increased the top marginal tax rate to 39 percent thereby restoring some of the value to deductibility.

The net effect of these changes is to increase the price that a state resident must pay to buy a dollar's worth of public expenditures. This means that states must be more hesitant to propose budget increases, and there is a kind of dampening effect introduced into state and local government fiscal decisionmaking. On the other hand, state government officials must be more accountable to their constituencies. Even so, the state and local government tax share of personal income rose from $19.90 per $100 of personal income in 1986 to $22.40 in 1991.

Disparities and Interstate Competition

The United States has always been characterized by wide fiscal disparities. There has been no major trend of lessening these disparities, even though personal income disparities among the states are converging. Per capita expenditures vary from highs of $5,482 and $5,064 in New York and Wyoming to lows of $2,664 in Missouri and $2,440 in Arkansas, a range equivalent to approximately 77 percent of the mean. The federal grant system is not systematically related to the level of personal income and therefore does not equalize these fiscal disparities.

Interstate competition for industry is a significant part of state tax policy in the United States. To some extent, this competition is regulated by interstate compact, under which states share the proceeds of corporate income taxes according to a three-factor formula based on the share of a multistate company's activities in each state. States compete aggressively with one another to attract industry by giving preferential tax treatment—most notably income and property taxes—and direct subsidies for infrastructure development and worker training.

The Russian Federal System

The Russian Federation is a three-tiered federal state, consisting of ninety-one provinces or states directly subordinate to the federal government. With varying degrees of administrative autonomy, the ninety-one states "directly subordinate" to the federal government comprise (1) the oblasts, okrugs, and krais, (2) metropolitan cities with "oblast status" (Moscow and St. Petersburg), (3) republics, which until mid-1992 were called "autonomous republics," (4) autonomous regions, and (5) national regions. Some republics have their own governments (Soviets) with defined degrees of autonomy, and some have declared independence (although these declarations have not been recognized by the Supreme Soviet of the Russian Federation or by any other country). Within each oblast are local governments, cities, and smaller units called rayons.[5]

Tax and Expenditure Structure

Most subnational government revenues are derived from four shared taxes whose rates and bases are set by the federal government. The system is not well balanced, and about two-thirds of all tax revenues come from two taxes—the enterprise income tax and the value added tax. All taxes are shared on a derivation basis (that is, by point of collection),

5. In this section on Russia, I draw heavily from Bahl and Wallich (1995); Bahl and Wallace (1994); and Bahl (1994b, 129-180).

and the sharing rates are set by the government and the Parliament. The basic sharing system is summarized in Table 4-3.

The individual income tax is fully retained by local governments (rayons) on the basis of place of employment. Coverage of the self-employed and small firms is limited, and revenue yield is sensitive to the present high rates of inflation and to the resulting changes in the tax brackets, personal exemption levels, and wage levels. The tax is largely administered by the enterprises, which collect it on a withholding basis and keep all employee records. Most workers are subject to a 12 percent rate.

The enterprise income tax is levied at a 35 percent rate on company profits. Oblast level governments may retain an amount equivalent to that derived from a 22 percent tax, and they must turn the remainder over to the federal government. Oblasts may increase the tax rate to 38 percent or reduce it to 33 percent, but the federal claim must remain at 13 points. Revenues from the enterprise income tax are sensitive to federal decisions about input and output prices, capital allocations (past and present), and redefinitions of the tax base. In 1992, about two-thirds of the enterprise income tax was retained by local governments (Table 4-4).

Table 4-3. Russia: Revenue Sharing by Revenue Source

Revenue source	*Amount allocated to subnational governments*	*Method of distribution among oblasts*	*Comments*
Individual income tax	100 percent	Derivation, by place of employment	Fully allocated to the rayon level
Company income tax	Tax rate is 32 percent; 22 percent rate belongs to the oblast	Derivation	Oblast may reduce rate by 2 percent
Value added tax	20 to 50 percent of collections, depending on the oblast	Derivation, with an ad hoc determination of the percentage for each oblast	
Excise on vodka	50 percent of collections	Derivation	
Other excises	100 percent of collections	Derivation	Excise on motor vehicles to center
Subventions and transfers to autonomous regions	Ad hoc determination	Ad hoc determination	Distribution largely based on "approved" deficits, and special projects

Source: Bahl and Wallace (1994).

Table 4-4. Russia: Revenue Structure and Revenue Sharing in 1992
(in billions of rubles)

Tax/revenue	*Total collections*	*Subnational amount*	*Percentage retained by subnational governments*	*Budgeted average retention rate for 1993*
Individual income tax	31.3	431.3	100.0	100.0
Enterprise income tax	1,566.8	920.9	58.8	66.7
Value added tax	1,998.9	498.7	24.9	30.4
Excises	211.5	110.8	52.3	61.5
Foreign trade taxes	467.4	8.0	1.7	n.a.
All other taxes	573.8	374.3	65.2	n.a.
Total revenue	5,249.7	2,344.0	44.7	43.4[a]

a. This total refers only to the income and value added taxes and excises.
Source: Bahl and Wallace (1994).

The value added tax is shared among subnational governments on a derivation basis, but the percentage of collections that may be retained varies by oblast. These retention rates have been established in an ad hoc way and have been changed frequently in the past two years. In 1993, most oblasts retained half of VAT collections, but in 1992, only about 30 percent was locally retained.

Until November 1991, tax administration was the responsibility of the Ministry of Finance, and the State Tax Service (STS) was a department within that ministry. Highly decentralized oblast and rayon (local) offices were supervised by their respective oblast and rayon level Departments of Finance *and* by finance officers of the federal ministry. No single authority (such as a "revenue commissioner") was in charge of all tax administration activities. This "dual leadership" of the tax officers was a source of major conflict of interest, often resolved by giving precedence to interests of the lower level. Since 1991, the STS has been an autonomous agency with ministerial ranking, and it is now in charge of administering all taxes in the Russian Federation. Its organizational structure has three levels: central, oblast, and rayon.

The assignment of public expenditure responsibility to different levels of government in Russia is based on the principle of geographical dimension of benefits (Martinez-Vasquez 1994). This economic efficiency rule, rather than an equalization rule, was inherited from the former Soviet Union. Public service activities whose "benefit area" is the entire nation are provided by the central government. Those with a regional dimension (for example, universities and tertiary and psychiatric hospitals) are provided by the oblast and autonomous republic level of government; and those with a local dimension (elementary schools and parks) are provided by rayon and city governments.

The federal budget includes large and important enterprises, pipelines, electric power, marine transport, and national (but not local) environmental problems. The federal government also is responsible for international trade activities (export and trade subsidies) and fundamental science. In the social sector, the federal budget accounts for a small

share of financing universities, higher learning institutions, specialized health-care facilities, and culture and museums. This is in keeping with the principle of minimizing federal involvement in cases where the "benefit zone" is local or regional.

The oblast level is responsible for facilities of an interjurisdictional nature: river transport, oblast roads, environment at the oblast level, the preservation of forests, oblast-run vocational schools, health care for oblast hospitals, and specialized clinics. The oblasts and republics are also responsible for small and medium enterprises—local light industry and consumer goods. Oblasts are increasingly transferring such enterprises down to the rayon level. The expenditure responsibilities of rayons and townships are concentrated in the social services area. Rayon budgets account for almost 100 percent of total expenditures on basic education, 85 percent of total expenditures on health, 60 percent of kindergarten services, 60 percent of housing expenditures, and 80 percent of public utility expenditures.

While this basic assignment fits the accepted norms, the actual practice does not. There is a lack of clarity in the assignment of specific service responsibilities to specific levels of government. This has led in some cases to provision by more than one level of government and in others to provision at the "wrong" level. To make matters more complicated, the assignment of responsibility has included not only the traditional public service functions, but also ownership of certain commercial and industrial enterprises and the expenditure responsibilities related to that ownership.

Fiscal Autonomy

Subnational governments have relatively little autonomy on the revenue side of the budget. All tax rates are set at the federal level, and taxation is uniform across the country. All major user charge rates are nationally set. Subnational governments must simply adjust to the level of taxation chosen by the federal government. Technically, subnational governments may not borrow, although they do manage some credit financing by borrowing through their enterprises.

The level of expenditures is largely controlled by the federal government in four ways. First, the sharing rates for all major taxes are determined by the federal government. Second, the oblasts are required to gain federal approval for their budgets each year. Third, the federal government provides a set of ad hoc grants to supplement shared taxes. Fourth, the assignment of expenditure responsibilities is determined by the federal government. This is not to say that the subnational government sector has no voice in the determination of the budget, because these decisions are all negotiated and subnational governments are an important force in Russia.

Subnational governments have much more discretion when it comes to the composition of government expenditures. Basic pay rates are centrally set, but otherwise local governments have a good deal of flexibility in choosing how to allocate their budgets among competing expenditure needs. While the unit cost "expenditure norms" of the past have been rendered obsolete by high rates of inflation, the federal government still imposes some mandates on the subnational governments.

Each oblast may decide how it will treat its constituent local government units. Oblasts determine the tax sharing rates, give grants to the local governments under ad hoc distributions, and approve the budgets of local units. Cities and rayons have rela-

tively little discretion when it comes to determining the overall size of the budget but considerable discretion when it comes to determining the mix of expenditures used.

Recent Trends

The Russian Federation is too new to be characterized by fiscal trends. All changes in fiscal structure now are driven by the transition to a market economy and by the extremely unstable macro economy. There have been major annual changes in the tax structure, and frequent changes in both the system of revenue sharing and the assignment of expenditure responsibilities to lower level governments. The underlying theme of these policy changes seems to be a mix between finding the right balance of fiscal powers between the levels of government and holding the federation together by quieting the calls for separation with revenue sharing devices. The constraint, however, is the pressure on the central government to find resources to resolve its economic problems.

SHIFTING CENTRAL FUNCTIONS DOWNWARD. Recent changes in the assignment of expenditure responsibility have violated these principles in very fundamental ways. For example, in early 1992, the central government shifted responsibility to the oblast and rayon governments for most of the price subsidy and income maintenance programs. These programs had previously been financed with transfers from the central government (equivalent to about 5 percent of GDP). While the burden of price subsidies will cease after prices are freed, the underlying problem of financing social protection for those most hurt by economic change will not. The government has neither generated estimates of the cost of financing this social protection nor developed a plan as to how this cost might be matched with revenues available in each oblast.

Until recently, the federal level was responsible for approving, financing, and implementing all subnational capital investment. In mid-1992, many investment responsibilities—both those with national significance (such as highways, military housing, and airports) and those with local significance—were shifted to subnational budgets. This policy decision took place after the second quarter (1992) revenue-sharing agreement yielded apparent budgetary surpluses for many oblasts. Shifting these responsibilities down to lower-level governments may have been a response to short-run budget pressures, but it is inconsistent with expenditure assignment principles.[6]

Moreover, it was a badly timed action. The assignment of fixed and uniform sharing rates to oblasts from the second quarter of 1992 made oblasts much less willing to accept additional expenditure responsibilities. The main rationale for the reassignment of expenditure responsibilities appears to have been to balance the budget of the central government and to "claw back" the apparent surpluses of subnational governments, which were thought to have been created by the introduction of fixed sharing rates. In fact, the shift in responsibilities appears to have placed serious budget pressures on some subnational governments, creating the risk that important social expenditures (health care and education) would be crowded out.

The more general issue here is the absence of concreteness in assigning responsibilities. Both subnational and central governments reap advantages from the continued

6. This discussion, and later references to intergovernmental fiscal relations in Russia, draw from Wallich, ed., *Russia and the Challenge of Fiscal Federalism* (Washington, D.C.: World Bank, 1994), Chapter 1, "Russia's Dilemma," pp. 9-10. —Christine Wallich.

murkiness. Subnational governments use their broader responsibilities to bargain for a larger share of revenue, and the federal government has an additional instrument—jettisoning expenditure responsibilities—to balance its own budget. This lack of definition cannot be perpetuated much longer if the system of intergovernmental relations in the Russian Federation is to move away from a "bargaining" mode of budget determination toward greater certainty and predictability.

More important, if this trend persists, what important expenditure functions will the central government perform to justify its existence to skeptical regional governments? By eschewing the concrete assignment of responsibilities, the federal government may inadvertently be contributing to its worst fear — the disintegration of the Russian Federation (Martinez-Vazquez 1994). An important part of social expenditures and most capital expenditures have been delegated to the subnational governments; however, revenues provided to subnational governments may not have taken these new responsibilities into account.

REVENUE SHARING. The Russian system of revenue sharing has two distinct features. First, unlike most systems of intergovernmental finance, in which the center collects and shares most national revenue with lower levels of government, revenue in the Russian system is "shared upward" from rayons, to oblasts, and then to the federal budget. Second, the system is not a "system," but a collection of ad hoc, bargained, nontransparent agreements whose effects are not well understood. The bargaining inherent in this system makes subnational governments highly dependent on the center and creates considerable uncertainty about their fiscal autonomy and responsibilities.

The sharing rates for the enterprise income tax and the VAT changed significantly during 1992 and early 1993. The direction appears to favor subnational governments, though it is not clear whether the increased claim on local revenues has been adequate to offset the increased expenditure responsibilities assigned (Martinez-Vazquez 1994). The retention rate on the enterprise income tax increased from 15 to 22 points (on the 32 percent rate) between early 1992 and early 1993. The increase in the value added tax sharing rate is more difficult to estimate because the sharing rate varies by oblast. However, the median VAT retention rate doubled during this period (Bahl 1994b).

REVENUE DETERMINATION. Is there some rough justice in the present system of revenue sharing? In other words, are revenues implicitly distributed among the oblasts in some systematic way? To try and answer this question, Bahl and Wallace (1994) carried out a multiple regression analysis on actual 1992 data for eighty-eight oblasts with per capita retained revenues (excluding subventions) as the dependent variable.

Three results from this analysis stand out. First, oblasts with a larger population retain more revenue on a per capita basis. Second, oblasts with a higher average wage, and with a higher growth rate in the average wage, retain significantly more on a per capita basis. Third, there does not appear to be a strong association between indicators of need in the population and per capita retained revenues. Neither hospital beds, infant mortality rates, nor highway density turned out to be significant determinants of the share of retained revenues. Taken together, these results suggest that in 1992, revenue distributions were driven in significant part by the strength of the economic base (wage levels, wage growth, and population size). This finding is consistent with the results of a similar analysis carried out by the World Bank on data for the first half of 1992 (Bahl 1994b).

Equalization

The assignment of the individual and corporate taxes to the subnational level on a derivation basis necessarily means that higher income territories will derive more revenue. Since this system is likely to allocate more revenues to higher income oblasts, some form of subvention must be provided to protect the budgetary position of territories whose economic base is not strong enough to support an adequate level of public services. In fact, the federal government undertakes three types of discretionary action to equalize the distribution of fiscal resources. First, it approves the final budget expenditures of each oblast. Second, it determines the level of subventions that will flow to each oblast, and this is partly determined by the approved budget level. Third, it determines the VAT retention rates.

How does one measure the "success" of the Russian system in equalization? First, in an equalizing system, oblasts with a higher level of expenditure needs and a lower level of fiscal capacity would have a greater tax retention rate. Bahl and Wallace attempted to measure this effect by regressing the ratio of taxes retained to taxes collected, against general indicators of need and fiscal capacity.

The multiple regression results showed that relatively little of the variation in the level of the retention rate across oblasts could be explained, suggesting that much of the process is ad hoc. However, there were some systematic relationships. The tax retention rate was significantly higher where the rate of urbanization was lower and where there was a smaller concentration of elderly population. The results also indicated that, other things being equal, the autonomous republics have a higher retention rate than do other oblasts. Perhaps the most significant finding here is that the tax-sharing system does not redistribute resources toward oblasts with a lower per capita income. One may not call this tax-sharing system an equalizing scheme.

If the system in operation in 1992 had an equalizing element, it would have to be subventions (grants). The allocation of the subvention among oblasts is not done according to a strict formula but appears to take the form of an ex-post, deficit-filling grant. The (unweighted) mean level of subvention among the eighty-eight oblasts studied was about 25 percent of total revenues, and it ranged from a low of zero to a high of over 90 percent. Were the subventions distributed on an equalizing basis? Bahl and Wallace (1994) estimated that per capita subventions are significantly higher in oblasts with a greater fiscal capacity (measured by enterprise profits), suggesting a counterequalizing pattern.

The Chinese "Federal" System

China is not a federalism. It is a unitary state. But in many ways, the Chinese public finance system has characteristics in common with a fiscal federalism.[7] There is a distinct middle level of government, the Province, which is free to determine the fiscal responsibilities of its subordinate local governments. There is a type of formula system for allocating revenues among provinces, and provincial governments have some discretion in forming their budgets.

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7. This section on the Chinese "federal" system draws on Bahl and Wallich (1992) and Bahl (1994a).

Other features make China less of a federal structure. The central government and only the central government sets the tax rates and the tax bases, and it even determines most of the rates of user charges. Provincial and local governments cannot borrow.

Tax and Expenditure Structure

The Chinese tax structure is dominated by the income tax on enterprises and by a family of indirect taxes (the product tax, the business tax, and the value added tax). The enterprise income tax is levied on all companies with a maximum rate of 33 percent. The biggest departure of the Chinese company tax from traditional company income taxes is that all the wages are not deductible, and depreciation rates are low. The indirect taxes are dominated by the value added tax, which is now levied at two rates. Services and small traders are taxed under a "business tax," which is a turnover tax on gross sales, and certain manufacturers are taxed under the product tax, which is a gross receipts tax.

All taxes are collected by the State Tax Administration, a central government agency, but the collection machinery is decentralized to the lowest level. As in Russia, taxes are collected at the bottom and "shared up."

Revenues are shared between the central and provincial governments according to a negotiated formula. Provinces then determine sharing rates in any way they choose. Up until 1994, the tax sharing system involved the determination of tax retention rates by central government negotiation with each province. In addition, there is a system of earmarked grants distributed on an ad hoc basis.

Local Autonomy

By comparison with most countries in the world, subnational governments in China have little formal, or legal, independence in matters of structuring their tax system or deciding on the level and composition of expenditures. All tax rates and bases are set centrally, and so there are no truly local taxes—defined as those whose rate or base the subnational government can unilaterally fix—at the subnational level. Moreover, the central government determines, for each province, a share of taxes to be turned over to the center. In effect, subnational tax collections in China are central government taxes whose revenues are allocated among provinces, municipalities, and the central government.

Even with this degree of centralization in the rules, however, subnational governments have an important impact on spending levels and on the amount of revenues raised within their provincial jurisdiction. This follows because provinces design and implement the system of intergovernmental relations between the province and local governments. Moreover, a substantial amount of autonomy arises because local governments exert some central control over tax collection and assessment. Local governments also have considerable freedom in awarding tax contracts to their enterprises.[8] Responsibility for implementation of the tax system is a very powerful policy instrument in the hands of local governments, and indications are that they use it.

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8. A 1994 change in the tax law eliminated this feature.

Expenditure Autonomy

Autonomy on the expenditure side of the budget is limited for provinces. Subnational government budgets are determined as part of a consolidated central, provincial, and local budget and as such must satisfy the (negotiated) fiscal targets laid down by higher level government. The budgetary choices of provincial governments are further limited by expenditure rules, mandates, and monitoring by higher level government.

Within the province, there is more room for discretion. At the local level, provincial governments are responsible for approving the budgets and financial plans of municipal and county governments. This means they can control the spatial distribution of expenditures within the province. There appears to be great variation in the system of provincial-local relations across provinces, suggesting that the provincial governments have significant room to adjust fiscal decisions to accommodate local needs and preferences within the parameters set by the central government.

Within the system of "vertical" responsibility, each province must account to the central government for its activities. In this process of vertical accountability, the following principles restrain, or guide, budgetary choices of provincial governments: (a) there cannot be a deficit; (b) current expenditures to maintain infrastructure have the highest priority among urban construction-related expenditures; (c) the provision of social overhead facilities (such as education, scientific research institutes, and hospitals) take a high priority; expenditures on culture and education are mandated to increase by at least the same rate as total expenditures; (d) employment levels and wage rates are fixed by the central and provincial governments; (e) all revenues from the urban maintenance and construction tax must be spent for urban maintenance and construction, that is, for public utilities and public facilities.

Recent Trends

The intergovernmental fiscal arrangement has remained a point of debate in China during much of the past decade. With rapid economic growth has come a demand for more resources to cover central government needs, and a demand for a greater share of revenues at the lower levels to support local projects. Three important issues have arisen: the shifting balance between the central and subnational level, continuing fiscal disparities among the provinces, and equalization policies.

THE DIVISION OF REVENUES: VERTICAL BALANCE. Between 1983 and 1992, real expenditures of provincial and local governments increased by 35 percent. While many countries in the world could not boast such an increase, it is in some respects modest for China. The data in Table 4-5 show that, between 1983 and 1992, budgetary revenues collected by local governments have not grown as fast as total output, or as fast as local government budgetary expenditures. In fact, at the time of the income tax reform in 1983, the local government *sector* was spending an amount equivalent to 73 percent of what it collected and turning a net amount of 27 percent over to the central government for national purposes. By 1992, the local government sector was spending an amount equivalent to their total collections and was receiving an additional subsidy from the center equivalent to about 6 percent of expenditures (See Table 4-5).

Table 4-5. China: Revenue Collections as a Percentage of GNP

Year	*Total budgetary revenues collected*	*Local government budgetary collections*	*Central government budgetary collections*[b]	*Local collections as a percentage of total collections*	*Local government expenditure as a percentage of local government collections*
1983	27.4	15.1	12.3	55.1	83
1988	19.9	11.2	8.7	56.3	106
1992	16.6	10.1	6.5	60.8	106
Income elasticity (1983-1992)[a]	0.57*	0.76*	0.47*		

* Statistically significant at the .05 level.

a. Estimated from

ln R= a + b *ln* GNP

where R = revenues (with 0 adjustment for discretionary changes)

b= revenue-income elasticity

b. Estimated as the difference between total revenue for the consolidated government sector (IMF definition) and local government budgetary revenue (Chinese definition).

Source: World Bank estimates and Bahl (1994b).

The problem that has arisen is that the central government share of total revenue is not sufficient to cover central government expenditures. Historically (through the mid-1980s), central fixed revenues were considerably less than central government expenditures, and the difference was made up with net transfers from the local government sector. For example, in 1984, the local governments ran a "collections surplus" of about 17 billion yuan, while the central government ran a "collections deficit" of about 21 billion yuan (see Table 4-6). The net transfer was from local to center. However, by 1989, the situation was reversed: the central government was collecting more than it spent, and the local government sector was running a collection deficit. In fact, in 1990, there was a net transfer from the center to the local sector (excluding any earmarked grants) equivalent to about 10 percent of central collections. It is this change in the division of revenues, and the consequent growth in extrabudgetary revenues, that has prompted a proposed reform of the revenue sharing system.

FISCAL DISPARITIES. Revenue collections are roughly proportional to income level. The five highest income provinces in China account for 18 percent of local government revenue collections and 19 percent of national income. However, these provinces account for only 10 percent of the national population. This suggests that there are significant disparities in per capita revenue collections among the provinces. In fact, this disparity is from 1,180 yuan in Shanghai to 96 yuan in Anhui and 8 yuan in Tibet—a substantial range (see Table 4-7).

Table 4-6. China: Tax Collection and Expenditure of Central and Local Governments, 1984, 1989, 1990
(in billions of yuan)

Category	*1984*	*1989*	*1990*
Central government			
Revenue collections	52.4	110.6	136.8
Expenditures	72.8	110.5	137.3
Collections deficit/surplus	-21.4	0.1	-1.5
Local government			
Revenue collections[a]	97.7	184.2	194.5
Expenditures	80.8	193.5	207.9
Collections deficit/surplus	16.9	-9.3	-13.4

Note: The difference between the local governments' surplus and the central government's deficit is the central government's foreign borrowing and domestic budget deficit.

a. Central and local government collections are before transfer from local governments to the central government, and before earmarked grant distribution to the local governments.

Source: World Bank estimates and Bahl (1994b).

What are the determinants of this variation in per capita revenue collections across provinces? The revenue collection statistics and income rankings shown in Table 4-7 suggest that per capita income is a major determinant. Provinces with higher per capita incomes, other things being equal, collect more revenue. One might also argue that the rate of urbanization (or conversely the agricultural share of GDP) would be major determinants because the tax system covers urban industrial and commercial activity, and urban business activity, to a much greater extent than it does rural and agricultural activity. Finally, because some of the less populous provinces tend to have greater rates of urbanization and less of an agricultural sector, one would expect them to raise more on a per capita basis.

We have tested these hypotheses by estimating an ordinary least squares (OLS) regression of per capita budgetary collections against per capita income, the rate of urbanization, and population size. The results of this OLS regression, presented in Table 4-8, more or less confirm these hypotheses. There is a strong significant relationship between per capita revenue collections and per capita income. The relationship holds over the 1987 and 1990 period, and it was also reported for 1985 (Bahl and Wallich 1992). The income elasticities are high. In 1990, a 10 percent difference in per capita income tended to be associated with a 16 percent difference in per capita revenue collections.[9] Population size did show the expected negative relationship with revenues but was not significant in either the 1987 or the 1990 equations.[10]

9. Hofman (1993) has pointed out that virtually all of the variation in per capita collections can be explained by a *squared* per capita income term.

10. Urbanization was not included in the final equations because of collinearity with income.

Table 4-7. China: Collection and Expenditure Disparities Among Provinces

	Collections		*Budgetary expenditures*			
Province	*Per capita amount (in yuan)*	*Percentage of total*	*Per capita amount (in yuan)*	*Percentage of total*	*Percentage of total population*	*Per capita income rank*
Beijing	702	3.85	633	3.22	0.95	2
Tianjin	508	2.27	455	1.88	0.78	3
Hebei	132	4.11	142	4.09	5.40	20
Shanxi	185	2.72	196	2.67	2.54	12
Inner Mongolia	151	1.66	282	2.86	1.90	16
Liaoning	326	6.54	308	5.73	3.48	4
Jilin	204	2.56	289	3.36	2.18	9
Heilongjiang	216	3.87	262	4.35	3.11	6
Shanghai	1180	7.98	566	3.55	1.17	1
Jiangsu	201	6.89	149	4.73	5.94	10
Zhejiang	244	5.14	192	3.76	3.66	5
Anhui	96	2.76	108	2.89	4.98	29
Fujian	187	2.87	225	3.21	2.66	11
Jiangxi	107	2.05	133	2.38	3.34	27
Shandong	129	5.55	146	5.81	7.45	21
Henan	99	4.35	106	4.31	7.59	28
Hubei	143	3.94	156	3.98	4.77	18
Hunan	118	3.66	134	3.86	5.38	22
Guangdong	206	6.63	237	7.06	5.57	8
Guangxi	112	2.41	154	3.08	3.74	24
Hainan	111	0.37	263	0.82	0.58	26
Sichuan	111	6.06	132	6.69	9.48	25
Guizhou	113	1.87	149	2.28	2.87	23
Yunan	208	3.92	243	4.26	3.27	7
Tibet	8	0.01	582	0.61	0.19	30
Sha'anxi	134	2.25	172	2.68	2.91	19
Gansu	152	1.73	204	2.15	1.98	15
Qinghai	163	0.37	382	0.80	0.39	14
Ningxia	143	0.34	318	0.70	0.41	17
Xingjiang	165	1.28	313	2.24	1.34	13

Source: Computed from data provided by Ministry of Finance.

Table 4-8. China: OLS Regression Results for Local Government Revenues and Expenditures Against Selected Independent Variables, 1987 and 1990

Dependent variable	*1990* *Per capita collections*	*1987* *Per capita collections*	*1990* *Per capita expenditure*	*1987* *Per capita expenditure*	*1990* *Per capita collections*	*1987* *Per capita collections*
Constant	-113.70	-156.330	244.245	217.856	80.987	28.46
	(1.82)	(2.65)	(3.23)	(3.61)	(2.15)	(0.86)
Per capita income	0.250	0.362	0.088	0.07		
	(17.63)	(21.73)	(5.14)	(4.13)	...	...
	[1.605]	[1.933]	[0.487]	[0.377]		
Per capita income squared	...	...	...	...	0.052	0.131
					(31.36)	(45.74)
Population	-0.454	-0.478	-2.974	-2.707	...	...
	(1.01)	(1.05)	(5.493)	(5.79)		
R^2	0.93	0.95	0.74	0.73	0.97	0.99
N	30	30	30	30	30	30

Note: The t-statistics are shown in parenthesis below the regression coefficients. Elasticities are shown in brackets.

There appears to be some weakening in the relationship between collections and income. In 1985, the four provinces with the highest levels of per capita income (Shanghai, Beijing, Tianjin, and Liaoning) raised 31.7 percent of revenues and accounted for only 6.4 percent of the national population. In 1990, these same provinces raised only 20.6 percent of locally raised revenues. In fact, virtually all of the higher income provinces had growth rates in budgetary collections that were below the 1987-92 average (see Table 4-9).

Disparities are much less pronounced on the expenditure side, with a per capita variation from 633 yuan in Beijing to 106 yuan in Henan and 108 yuan in Anhui (Table 4-7).[11] The five highest income provinces, with 10 percent of the population, account for 17 percent of the expenditures. The pattern of variation across provinces might be explained in the following way. Higher income provinces spend more because of the greater demand for public services by their citizens and their enterprises, their ability to raise more "local fixed" revenues, their ability to attract more grants, and very importantly, their ability to slow the flow of revenues from the center. More urbanized provinces spend

11. The range in 1991 per capita state and local government expenditures in the United States (excluding Alaska) was from $6,525 in New York to $2,715 in Arkansas.

Table 4-9. China: Percentage Increase in Revenues and Expenditures, by Provinces, 1987-92

	Budgetary collections			*Budgetary expenditures*			*Per capita income rank (1990)*
Province	*Percentage increase*	*Relative (average = 100)*	*Rank*	*Percentage increase*	*Relative (average = 100)*	*Rank*	
Beijing	28.36	44.12	27	46.57	59.01	27	2
Tianjin	12.85	19.99	28	49.29	62.47	26	3
Hebei	72.87	113.37	16	87.60	111.00	6	20
Shanxi	72.51	112.80	17	54.58	69.16	23	12
Inner Mongolia	101.13	157.33	8	58.19	73.73	21	16
Liaoning	40.34	62.76	26	84.78	107.44	9	4
Jilin	51.89	80.73	22	53.21	67.42	24	9
Heilongjiang	57.27	89.10	20	55.24	70.00	22	6
Shanghai	6.59	10.25	29	70.55	89.40	16	1
Jiangsu	42.12	65.53	24	85.09	107.32	8	10
Zhejiang	55.00	85.57	21	86.01	108.99	7	5
Anhui	41.97	65.29	25	66.43	84.18	19	29
Fujian	130.25	202.63	4	111.30	141.04	3	11
Jiangxi	75.08	116.80	15	80.95	102.58	12	27
Shandong	91.40	142.19	10	94.10	119.24	4	21
Henan	64.73	100.71	19	78.50	99.48	13	28
Hubei	44.06	68.54	23	62.30	78.95	20	18
Hunan	70.61	109.85	18	77.19	97.81	14	22
Guangdong	132.21	205.67	3	127.36	161.40	1	8
Guangxi	100.39	156.18	9	15.92	20.18	29	24
Hainan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25
Sichuan	86.34	134.32	12	82.16	104.11	10	26
Guizhou	119.45	185.83	6	91.87	116.41	5	23
Yunan	191.60	298.07	2	125.70	159.28	2	7
Tibet	2,825.00	4,394.86	1	81.93	103.82	11	30
Sha'anxi	80.80	125.70	13	72.63	92.03	15	19
Gansu	75.95	118.16	14	70.54	89.38	17	15
Qinghai	103.49	161.00	7	51.88	65.74	25	14
Ningxia	88.08	137.02	11	33.95	43.03	28	17
Xingjiang	125.13	194.66	5	66.49	84.25	18	13

more, arguably because urbanization reflects a greater capacity to raise and retain taxes. Again, less populous provinces would be expected to spend more on a per capita basis, if the effects on income level are controlled. The regression results, presented in the middle two panels of Table 4-8, confirm these expectations. About three-fourths of the interprovince variations in per capita expenditures can be explained by variations in per capita income and in population size. The income elasticities for expenditure variations are much less strong than in the case of collections, suggesting some degree of equalization in the system. In 1990, a 10 percent difference in per capita income was, on average, associated with a 4.8 percent difference in per capita expenditures.

One might also ask whether the share of expenditures accruing to each province has changed significantly during recent years. The answer is that it has, as is shown in Table 4-10 for the 1987-92 period. There is no apparent pattern to this change.[12]

EQUALIZATION. Evaluation of the equalization features of the present system is no straightforward matter. A central question is whether the system presents a significant potential for redistribution. That is, does the central government take back enough in transfers and give enough in earmarked grants to significantly alter the disparities in fiscal capacity among the provinces? There are three ways in which redistribution might take place:

- earmarked grants to the local governments, which augments their resources;
- an increased tax sharing rate for local governments, which augments their resources; and
- transfers to the center, which reduces the resources of each province.

The total of transfers and grants was equivalent in amount to about 30 percent of local government collections in 1990. This suggests a significant potential for redistribution. Whether or not redistribution occurs, however, depends on how the transfers are extracted and how the grants are allocated.

Bahl's (1994b) empirical analysis gives mixed results. A simple correlation analysis shows that per capita transfers to the center are significantly higher in provinces with higher per capita incomes. There is some equalization in the distribution of transfers. However, the same is not true of earmarked grants. On a per capita basis, higher income provinces receive significantly more in earmarked grants. The pattern is counter-equalizing. These results also show that less populous provinces receive significantly less in per capita grants.

Extrabudgetary Revenue

Another important source of revenue for local governments in China is extrabudgetary revenues. These are of two types. The first are the "fiscal extrabudgetary funds" of the government. They are earmarked for capital purposes and include a set of taxes and charges that are controlled by the local government finance department. The most im-

12. I correlated the changing share of total expenditures with per capita income and with population but could find no significant relationship.

Table 4-10. China: Changes in Expenditure Shares, 1987-92

Province	*Percentage shares of total budgetary expenditures* 1987	1992	*Change*
Beijing	3.49	2.83	-0.66
Tianjin	2.19	1.81	-0.38
Hebei	3.73	3.88	0.15
Shanxi	2.92	2.50	-0.42
Inner Mongolia	3.20	2.80	-0.40
Liaoning	5.65	5.77	0.12
Jilin	3.67	3.11	-0.56
Heilongjiang	4.64	3.98	-0.66
Shanghai	3.52	3.33	-0.19
Jiangsu	4.78	4.89	0.11
Zhejiang	3.60	3.71	0.11
Anhui	3.13	2.88	-0.25
Fujian	2.81	3.29	0.48
Jiangxi	2.65	2.66	0.01
Shandong	5.28	5.68	0.40
Henan	4.58	4.53	-0.05
Hubei	4.28	3.85	-0.43
Hunan	3.93	3.85	-0.08
Guangdong	6.79	8.54	1.75
Guangxi	4.76	3.05	-1.71
Hainan	0.00	0.99	n.c.
Sichuan	6.17	6.22	0.05
Guizhou	2.22	2.36	0.14
Yunan	3.78	4.73	0.95
Tibet	0.64	0.65	0.01
Sha'anxi	2.66	2.54	-0.12
Gansu	2.20	2.08	-0.12
Qinghai	0.86	0.72	-0.14
Ningxia	0.83	0.62	-0.21
Xinjiang	2.37	2.18	-0.19

Source: Computed from data provided by Ministry of Finance.

portant are the public utility surcharge—a 10 percent tax on the utility bills of consumers—and the urban construction and maintenance tax. There also are some minor revenues received from public housing and public property, and some institutional income that accrues to the various city enterprises. The latter include such items as fees and charges from hospitals, road maintenance charges, advertisement fees, and so on.

Fiscal extrabudgetary revenues are relatively small compared with other revenue sources. The World Bank (1986 p. 259) estimated that in 1986, these extrabudgetary reve-

nues of local governments accounted for less than 3 percent of total state budgetary revenue.

The other type of extrabudgetary revenues is the retained earnings and depreciation funds of locally owned enterprises. In principle, these funds should not be classified as part of the government budget because they are not resources over which the local governments have complete control. On the other hand, they are funds that may be used for social purposes and to support the economic development goals of the local government administration, and their growth may be heavily influenced by local taxing and contracting practices.

Extrabudgetary funds of the second type expanded very rapidly in the 1980s because of the objective of the reform program to give SOEs more flexibility in managing social funds and in revitalizing their operations (World Bank 1990, pp. 17-19). The enterprise contracting system that grew out of this economic reform allowed the local governments to shift funds from the budgetary to the extrabudgetary side.

Extrabudgetary funds are by their very nature sensitive to the business cycle, as is shown by the time series data in Table 4-11. In 1992, extrabudgetary revenues of local governments were equivalent to about 89 percent of local government budgetary collections. This share appears to have trended upward after 1986 when enterprise contracting began to grow significantly. The responsiveness of extrabudgetary revenues to GNP would appear to be greater than the responsiveness of budgetary revenues. I found a positive and significant relationship between the ratio of local government extrabudgetary revenues to budgetary collections, and GNP, over the 1983-92 period.[13]

Table 4-11. China: Extrabudgetary Revenues of Local Governments, 1984-92

Year	*Total (in billions of yuan)*	*Per capita (in yuan)*	*Percentage of budgetary revenue*	*Percentage of central government extrabudgetary revenues*
1984	71.8	69	74	151
1985	89.4	86	76	141
1986	102.0	97	77	143
1987	120.1	111	82	146
1988	145.3	133	92	161
1989	157.5	142	84	148
1990	163.5	143	83	152
1991	186.2	161	76	n.a.
1992	214.7	183	89	n.a.

13. The ratio of extrabudgetary to budgetary revenue increased with GNP over the 1983-92 period, as indicated by the following regression results:

$$EXB/B = 69.8 + 0.00093\ GNP \qquad R^2 = 0.43$$
$$(2.45)$$

Where: EXB = extrabudgetary revenue; B = budgetary revenue; and the figure in parenthesis is the t-statistic

Finally, it can be seen from Table 4-11 that local government extrabudgetary revenues are about 1.5 times greater than central government extrabudgetary revenues. This spread has remained approximately constant over the past decade.

Tax Sharing: 1988-92

The tax sharing system was changed beginning in 1988 to a much more negotiated approach. The basic idea is still to allow the local governments to retain an amount of revenues that will enable them to cover a basic level of expenditure needs. The base year chosen to define the expenditure amount was 1987. Local governments may retain this amount plus a share of any increase in revenues, according to a pre-determined negotiation. This agreement, originally planned to be in force for three years, led to the following six arrangements for tax sharing.[14]

1. Revenue growth up to a defined limit is divided between center and province according to a formula. Both the limit and the sharing ratio are negotiated. The province may retain all collections above the limit. Ten areas use this method of tax sharing.
2. The ratio of provincial revenue collections to provincial approved expenditures defines the local retention rate. In effect, the local government retains a fixed percent of total collections no matter what the increment (or lack of an increment). The share is determined from approved base figures for the previous two years. Three areas use this method.
3. The retained share of revenues is based on the ratio of revenues to approved expenditures in 1987. A retained share of all incremental revenues is negotiated separately. Three areas use this method.
4. The amount to be paid to the central government in the first year is determined by base year revenues and expenditures. This amount then increases at an agreed rate in later years. Two areas use this method.
5. Provincial governments retain an amount equivalent to (a) approved expenditures in the base year, and (b) a fixed amount of revenues raised that are in excess of this level. Thus, the central government receives a fixed payment each year. Three areas use this method.
6. The central government provides a fixed subsidy, of an amount equal to the difference between actual collections and expenditure needs in the base year. This method is used by sixteen areas.

Earmarked Grants

Local governments receive earmarked grants from the central government for a variety of purposes. These include appropriations for capital construction projects, price subsidies for urban grain consumption, social relief funds, and special subsidies for health and education of the poor, minority, and border provinces (Hofman 1993). There is no set formula to determine the amount of earmarked grants to distribute in any given year,

14. This description is elaborated in Qiang (1993).

and the distribution among the provinces appears to be ad hoc rather than formula-based.

Earmarked grants have grown significantly, as may be seen in Table 4-12, and they are now greater in magnitude than tax sharing transfers to the central government. In 1990, earmarked grants were equivalent in amount to 14.4 percent of local government budgetary expenditures, slightly less than in 1985.

Some would argue that a primary purpose of earmarked grants is equalization. As may be seen from the simple correlations in Table 4-13, however, per capita earmarked grants are distributed in significantly heavier amounts to higher income provinces. These are project rather than entitlement grants, and it is not unusual for more developed regions to absorb these because of their greater capability at project preparation and their greater ability to "buy in" on a matching basis.

Conclusions

There are great differences in the systems of intergovernmental fiscal relations in the United States, Russia, and China. The major difference is the degree of autonomy afforded to subnational governments in the United States, where taxing powers and expenditure discretion reside at the subnational level. In both Russia and China, all tax rates are set at the central level, and they are applied uniformly across the country.

Second, the tax administration machinery in the United States is three-leveled with independent federal, state, and local administrations. Each level collects its own revenue. In Russia and China, all revenues are collected by a central administration, but collection is at the bottom and shared up to the top.

Third, in the United States revenue sharing is by the assignment of taxes to the subnational level and a system of grants in aid to local governments. In both Russia and China, there is a combination of derivation tax sharing and grants to local governments.

Table 4-12. China: Estimated Net Redistribution, 1985–90
(in billions of yuan)

Year	*Local government budgetary revenue*	*Contracted transfers (local to central)*	*Earmarked grants (central to local)*	*Net transfer to central*
1985	1176.55	310.52	182.98	127.54
1986	1325.59	303.67	244.26	59.41
1987	1465.69	171.38	268.24	-96.86
1988	1582.48	254.41	263.71	-9.30
1989	1881.31	262.02	277.73	-15.71
1990	1976.83	267.83	285.13	-17.30

Source: Computed from data provided by Ministry of Finance.

Table 4-13. China: The Ratio of Expenditures to Collections, 1987 and 1992, by Province

Province	*Ratio* 1987	1992	*Change 1987-92*
Beijing	0.78	0.89	0.11
Tianjin	0.56	0.74	0.18
Hebei	0.92	1.00	0.08
Shanxi	1.24	1.11	-0.13
Inner Mongolia	2.34	1.84	-0.50
Liaoning	0.74	0.98	0.24
Jilin	1.39	1.40	0.01
Heilongjiang	1.23	1.21	-0.02
Shanghai	0.30	0.49	0.19
Jiangsu	0.63	0.83	0.20
Zhejiang	0.67	0.81	0.14
Anhui	1.15	1.34	0.19
Fujian	1.21	1.11	-0.10
Jiangxi	1.34	1.38	0.04
Shandong	1.03	1.05	0.02
Henan	1.03	1.12	0.09
Hubei	0.93	1.05	0.12
Hunan	1.03	1.07	0.04
Guangdong	1.01	0.99	-0.02
Guangxi	2.22	1.28	-0.94
Hainan	n.c.	1.69	n.c.
Sichuan	1.16	1.13	-0.03
Guizhou	1.47	1.28	-0.19
Yunan	1.44	1.11	-0.33
Tibet	n.c.	n.c.	n.c.
Sha'anxi	1.34	1.28	-0.06
Gansu	1.39	1.35	-0.04
Qinghai	3.06	2.28	-0.78
Ningxia	2.88	2.05	-0.83
Xinjiang	2.91	2.15	-0.76
Mean	0.97	1.06	0.09

Source: Computed from data provided by Ministry of Finance.

Because of these differences, it is not possible in Russia or China to separate the issues of tax policy, tax administration, and intergovernmental fiscal relations. In the United States, it is possible to treat reform in each of these areas independently of the other two.

There are also similarities in the systems of the three countries. In the United States and in Russia, about 40 percent of expenditures are made by subnational governments,

while in China, the share of local governments is over half. At least on the expenditure side, all are highly decentralized systems.

All three countries have intergovernmental transfer systems that to some extent are not transparent. Part of the U. S. grant system is distributed on an ad hoc basis, while all of the Chinese and Russian systems of grants are distributed on an ad hoc basis. In all three countries there are large disparities among subnational units in fiscal capacity, and in none of the three countries is there any evidence that the intergovernmental transfer system is equalizing.

In all three countries it is left to the middle level of government to decide how revenue and expenditure responsibility should be distributed among its local governments. In all three countries the middle level governments have made a variety of choices.

Finally, on the issue of trends, both China and Russia are still on a path toward increased fiscal decentralization, at least in terms of how much of their total resources is allocated to the subnational government level, while the United States apparently is recentralizing. This raises an interesting question in light of the conventional theory of fiscal federalism, which suggests that the efficiency objectives of decentralization should be much weaker in China and Russia.

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5

Russia's Dilemma of Fiscal Federalism

Christine I. Wallich

This paper, which explores the complex and conflictive questions of fiscal federalism in Russia, was prepared for a Chinese audience. It begins by comparing the two countries' intergovernmental systems before describing the Russian system in greater detail, with the challenges it faces.

Introduction

Fiscal Federalism in China and Russia: An Abstract of Common Issues

China's intergovernmental system shares many of the same features as Russia's. First, both are structured as three-tiered administrations. In each, fiscal decentralization has been an important dimension of reforms and has proceeded quickly, with far-reaching consequences. And, in both countries, regional interests are important, and provincial administrations are increasingly powerful, with all that this implies for the design of a system of fiscal federalism. China's and Russia's fiscal federalisms have many features in common. Indeed, China's system had Russian influence, owing to the postliberation technical cooperation programs. The Chinese and Russian systems thus have much in common, but they have evolved in different ways based on political exigencies, differing objectives, and changing circumstances. These differences are interesting to explore and contrast.

TAX ADMINISTRATION. Until recently, both Russia and China had the "bottom up" system of tax administration, common to many former socialist economies, in which lower level tax offices remitted tax revenues collected at the local level upward to the provincial and central government tax offices. This system of "bottom up" tax collection confers substantial vulnerability on the central government, which must rely on the compliance of provincial (or oblast) governments to remit the agreed amounts of revenue. In

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Russia, the refusal of a number of oblasts to remit their revenues has led to revenue shortfalls for the federal budget and complicated macroeconomic management. China has recently taken the vital step of reforming the State Tax Service, and it has established a unified tax administration responsible for collecting central government revenues. While it will take time for the State Tax Service to become effective, this is an important first step in regularizing the revenue flow to the central budget and modernizing China's tax administration.

CONTRACTING AND NEGOTIATED REVENUE SYSTEMS. In addition, both China and Russia have in common an intergovernmental revenue sharing system that has not been transparent. Negotiation between the provinces and the central government has determined the provincial shares of central taxes as well as the level of transfers to the provinces (if any). Tax shares were differentiated by tax and different for each province. Formula-based transfers have not been used in either country. This is changing now in China with the formal assignment of certain taxes to the central and the local levels and the plan to introduce a formula-based transfer system with equalization features. This reform now under way is an important step in the direction of making China's system more transparent, ensuring revenue adequacy and improving the equity dimensions of the system.

EQUALIZATION. In neither country has equalization been an explicit feature of the intergovernmental system, although both countries exhibit significant inter-regional disparities. In China, the richest province (Shanghai) has a per capita income more than seven times that of the poorest (Guizhou). In Russia, the ratio is 10:1. Is there a role for greater equalization, and if so, how should it be introduced? Russia had no growth from 1991 to 1994, and indeed, it has experienced a severe output decline. One could argue that it would be better not to push for too much equalization (taking away from the rich provinces to give to the poor provinces) but rather to leave the resources in the richer provinces, which could take advantage of their stronger fiscal base and invest in growth-promoting public services and investments. This is essentially what the contracting system has done in China. Others argue that with a decade and a half of rapid growth since 1979, but increasing regional disparities, China can now afford for the fiscal system to be more equalizing. A formula-based transfer system is the way to begin.

UNCODIFIED AND MURKY SPENDING ASSIGNMENTS. Both countries have rather murky expenditure assignments based on tradition and inertia; neither has codified explicit spending responsibilities in a law. In both, there has been growing decentralization of expenditures to the provincial level, with the subnational governments responsible for a growing share of total spending. This murkiness (and inability to quantify spending responsibilities) make it difficult to design an intergovernmental fiscal system and to ensure it provides for revenue adequacy at the central and local levels. In addition, both countries have put the cart before the horse by focusing first on the design of tax and transfer systems rather than on expenditure responsibilities. Thus, revenue availability is driving spending, rather than the other way around.

THE SOCIAL SAFETY NET. Both Russia and China put responsibility for the social safety net "downstairs" at the subnational level. In Russia, until recently, price subsidies were administered by oblast governments, but they were financed by central transfers. Then in 1992 responsibility for the social safety net was transferred to the oblasts, an outlay equivalent to some 6 percent of GDP. China and Russia may need to reconsider the financing of the safety net and whether it should be the responsibility of local governments alone or whether the national government should share in its financing. A strong safety net is in the *national* interest over the rocky reform period ahead.

UNIFIED NATIONAL TAX SYSTEMS AND LACK OF SUBNATIONAL REVENUE DISCRETION. The overall tax system in Russia and China is "unified," meaning that the central government sets the tax rates and defines the tax bases for all national-level and local-level taxes. In both countries, local governments have been assigned only minor, "nuisance" taxes of the sort that do not generate significant revenues. Local governments have no authority to determine tax rates, even of the taxes that are notionally assigned to them. This lack of fiscal discretion makes it difficult to modify local budgets to local needs and means that both the efficiency gains and the fiscal accountability that potentially should come from decentralization are being missed.

SCOPE OF THE INTERGOVERNMENTAL SYSTEM. Both countries must decide on the appropriate scope of the intergovernmental fiscal system: should the provinces be responsible for fiscal matters relating to towns and cities within their boundaries, or should the central government be responsible also for intraprovincial revenue sharing and transfers? Russia has yet to decide; the oblasts argue for full responsibility for "local affairs." The federal government, concerned that oblasts may not implement central policies, would prefer a system under which the center also allocates fiscal resources to the lowest level administrations. Arguably, in countries as large as Russia and China, assigning and monitoring spending responsibilities and designing and monitoring a revenue sharing and transfer system for up to 10,000 local communities would be very difficult. A federal structure, perhaps with some framework agreement, would work best.

ENTERPRISES AND THEIR SOCIAL ASSETS. In both countries, state-owned enterprises have been important providers of public services and infrastructure. As privatization occurs in Russia, and as commercialization and harder budget constraints are introduced in China, enterprises will no longer be able to afford these outlays, and many will have to be put onto the budget. And since many of the enterprise functions are in areas of traditionally local spending responsibility, it is the subnational budgets that will have to take them on. Both Russia and China will have to quantify these additional spending responsibilities and accommodate the additional budgetary outlays via the revenue sharing system.

INTERLINKAGE OF TAX, REFORM, REVENUE SHARING, AND ADMINISTRATION. To begin, policymakers and legislators must change their approach toward public finance reform. In Russia, certain fiscal issues and reforms have traditionally been viewed in isolation—expenditure assignment and spending mandates, tax sharing, subventions and norms, and tax policy and deficit-reduction macropolicies. They must now be considered as a whole and the effects of each incorporated into the intergovernmental system. More

generally, fiscal policy, tax administration, and intergovernmental fiscal relations are so interconnected in Russia that all must be reformed simultaneously.

CENTRALIZATION VS. DECENTRALIZATION. China's and Russia's intergovernmental systems have undergone substantial and rapid decentralization in recent years. Some argue that decentralization has been too rapid and has gone too far. There is concern that the emergence of such a major vertical imbalance will deprive the center of sufficient resources for macrostabilization and equalization. China's recent attempt to re-centralize and to increase the center's revenue share has been more successful than Russia's. China's premier, in his 1993 tour of the rich southern provinces, argued that "strengthening the center strengthens the locals." In Russia, the oblast/center relationship was likened to "a river with tributaries": stronger tributaries are needed to strengthen the center. As a result, Russia has had little success in re-centralizing the resource flow, and the central budget remains highly vulnerable.

Russia's System: An Overview

Russia's moment of truth is fast approaching. It is in the midst of an economic and political transition never attempted anywhere. Russia is trying not only to restructure its entire economic system but, at the same time, to protect the well-being of all citizens, stabilize prices and its external balance, and provide public services. It is also trying to establish a system of governance acceptable to far-flung regions whose cultural identity, natural resource endowments, and degree of economic development differ widely. It is a herculean task for the new Russian Federation.

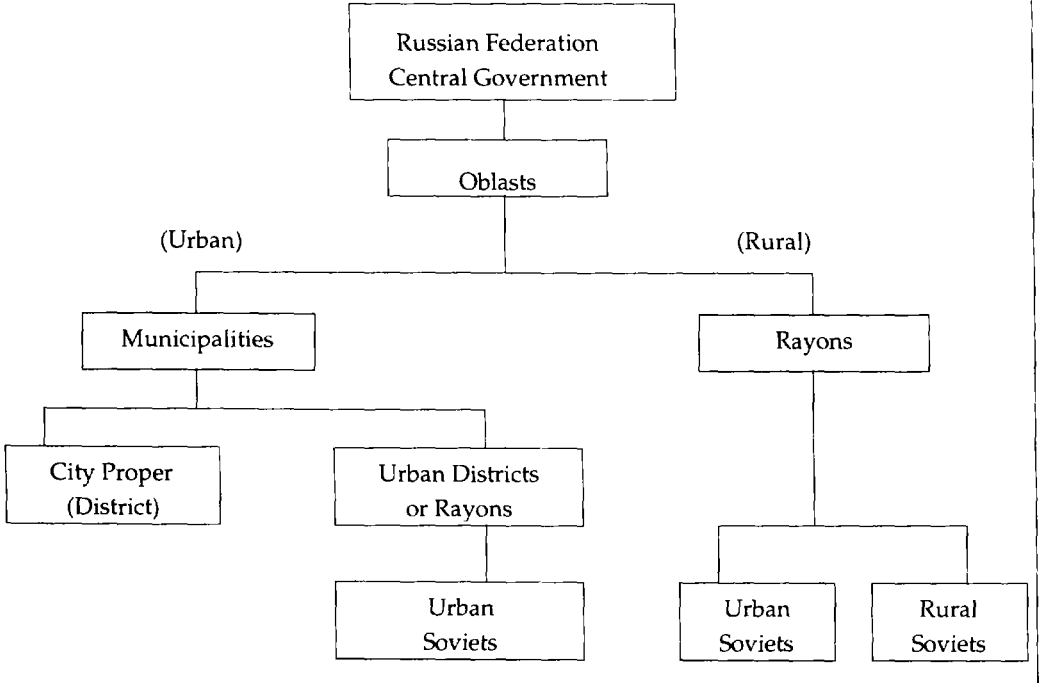
At the heart of all these challenges is one issue: intergovernmental finance; more specifically, the division of expenditure responsibilities and the assignment of revenues to different levels of government (see Figure 5-1). In a nutshell, it is about how the national revenue cake should be divided and which government (federal, oblast, rayon, or okrug) should be responsible for which spending. How Russia determines the division of expenditure responsibilities between the federal level, and how the national revenue pie is divided among Russia's three tiers—federal, oblast, rayon—will be key to Russia's economic growth, regional disparities, macroeconomic stabilization, and privatization.

What are some of the challenges to be addressed? First, in the present system there is no "correspondence" (or matching) of responsibilities and resources. Most subnational governments do not have enough revenue to meet their spending responsibilities. So, Russia must also design a system of transfers that will both meet the shortfall and support more efficient and equitable provision of services. These fiscal changes will determine the efficiency with which the economy performs and its future direction.

The new intergovernmental fiscal system now evolving gives subnational governments new spending responsibilities (especially in investment and the social sectors), as well as new budgetary rights and new financial resources. Many of the important changes proposed under laws passed since December 1991 have not yet been fully implemented, however, and subnational governments are operating under transitional rules. Some oblast governments also want special treatment or "channels" outside the laws.

Figure 5-1: Russia's Administrative and Federal Structure

The Russian Federation is the largest and one of the most diverse countries in the world, with regions whose cultures, politics, and resource endowments vary widely. This diversity represents a challenge to effective administration, to budgetary management, and to stabilization and structural policies. Russia is organized as a three-tiered federal state consisting of eighty nine provinces or states directly subordinate to the federal government. The eighty-nine states directly subordinate to the federal government comprise (1) the oblasts, okrugs, and krais, (2) metropolitan cities with "oblast" status (Moscow and St. Petersburg), (3) republics that until mid-1992 were called "autonomous republics," (4) autonomous regions, and (5) national regions. (Map 1). Below them are municipalities and rayons, subordinate to the oblast government. Each oblast supervises the rural and urban areas within its jurisdiction, and from a budgetary perspective, each has a so-called independent (that is separate and free standing) budgetary and administrative status. Although the oblast-level finance departments are officially autonomous according to the law, oblast finance officers are paid by the central government budget. Oblast finance departments therefore still have some allegiance to the federal government in Moscow and may respond to competing realms of authority or, in Russian parlance, be under "dual leadership."



Note: In some oblasts, and in some special cases, urban rayons may be directly subordinate to the oblast government.

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1. Arkhangel Oblast
2. Nenetz Autonomous Okrug
3. Republic of Karelia
4. Republic of Komi
5. Murmansk Oblast
6. Vologda Oblast
7. St. Petersburg City
8. Leningrad Oblast
9. Novgorod Oblast
10. Pskov Oblast
11. Bryansk Oblast
12. Ivanovo Oblast
13. Kaluga Oblast
14. Kostroma Oblast
15. Moscow Oblast
16. Moscow City
17. Orel Oblast
18. Ryazan Oblast
19. Smolensk Oblast
20. Tver Oblast
21. Tula Oblast
22. Vladimir Oblast
23. Yaroslavl Oblast
24. Republic of Chuvash
25. Kirov Oblast
26. Republic of Mariy El
27. Mordov Republic
28. Nizhniy Novgorod Oblast
29. Belgorod Oblast
30. Kursk Oblast
31. Lipetsk Oblast
32. Tambov Oblast
33. Voronezh Oblast
34. Astrakhan Oblast
35. Republic of Kalmykia-Khalmg Tangch
36. Penza Oblast
37. Samara Oblast
38. Saratov Oblast
39. Republic of Tatarstan
40. Ulyanovsk Oblast
41. Volgograd Oblast
42. Republic of Daghestan
43. Ingush Republic
44. Kabardina-Balkar Republic
45. Krasnodar Krai
46. Republic of Adygeya
47. North Ossetia Republic
48. Rostov Oblast
49. Stravropol Krai
50. Karachaevo-Cherkess Republic
51. Republic of Bashkortostan
52. Chelyabinsk Oblast
53. Kurgan Oblast
54. Orenburg Oblast
55. Perm Oblast
56. Komi-Permiak Autonomous Okrug
57. Sverdlovsk Oblast
58. Udmurt Republic
59. Altai Krai
60. Republic of Gorny Altai
61. Kemerovo Oblast
62. Novosibirsk Oblast
63. Omsk Oblast
64. Tomsk Oblast
65. Tymen Oblast
66. Khanty-Mansi Autonomous Okrug
67. Yamalo-Nenets Autonomous Okrug
68. Republic of Buryat
69. Chita Oblast
70. Agin Buryat Autonomous Okrug
71. Irkutsk Oblast
72. Ust-Ordyn Buryat Autonomous Okrug
73. Krasnoyarsk Krai
74. Republic of Khakas
75. Taimir Autonomous Okrug
76. Evenk Autonomous Okrug
77. Republic of Tuva
78. Amur Oblast
79. Kamchatka Oblast
80. Koryak Autonomous Okrug
81. Khabarovsk Krai
82. Jewish Autonomous Oblast
83. Magadan Oblast
84. Chukot Autonomous Okrug
85. Primorski Krai
86. Sakhalin Oblast
87. Republic of Sacha (Yakut)
88. Kaliningrad Oblast
89. Chechen Republic

12-15-1995

The new intergovernmental laws have some merits. They seek to move governance closer to the people, give subnational governments more budgetary discretion, make revenue sharing more transparent and less negotiable, and clarify and define the rights and responsibilities of subnational governments vis-à-vis the center. These are laudable goals, and they support the general economic reform under way. Much more, however, needs to be done.

The speed of change in Russia makes focusing on longer term issues, such as the establishment of an intergovernmental financing system, difficult. However, there is now a critical window of opportunity to introduce refinements to the intergovernmental financing system, because it is still in transition. Failing to seize the moment could weaken federal leadership and control, especially when strong forces for oblast autonomy are pulling at the center. Indeed, the future of the Russian Federation depends importantly on a transparent, fair, consensus-based intergovernmental financing framework that matches revenues and expenditures. This framework could offer a fiscal mechanism for containing these centrifugal forces.

Ideally, any system of subnational government financing would

- ensure correspondence between subnational expenditure responsibilities and resources;
- incorporate the power and incentives to mobilize subnational revenues;
- not compromise macroeconomic policies of the central government;
- give appropriate spending discretion to subnational governments, support public infrastructure development, and improve accountability of local officials;
- be transparent, based on objective, stable, non-negotiated criteria;
- be administratively simple; and
- be consistent with national income-distribution goals.

In Russia, any new system should also support the government's role consistent with market-oriented reform.

The Transition Challenge

The challenge for Russia's policymakers is to create an intergovernmental financing system that is compatible with short-term stabilization, combines "rules with discretion," and is flexible enough to accommodate the major structural shifts in the economy. At the same time, it must provide stability to subnational governments, and "buy" their cooperation, to build nationhood. How is all of this to be achieved?

Not surprisingly, in the absence of an integrated framework, the benefits envisioned in the new laws on intergovernmental relations and the revenue and revenue sharing system could not be realized. On the spending side, subnational governments still have less than full budgetary discretion. On the revenue side, the old tax sharing system has not yet been phased out. Although huge strides have been taken to improve the intergovernmental system, Russia is still unable to move away from negotiated revenue sharing. And the Ministry of Finance still effectively determines the resources to be transferred to individual oblasts. The present system of intergovernmental finance thus remains ad hoc and contentious, and it could increasingly lead to special regimes, bilater-

ally negotiated by separatist or disgruntled oblasts. As one Russian observer said: "This government has no regional (subnational) policy and it is killing itself."

This discretionary system gives the federal government great flexibility to determine the overall fiscal balance and, in principle, to pursue macroeconomic stabilization policies. It also gives the Ministry of Finance the flexibility to distribute resources among rich and poor oblasts to realize equalization or other objectives. For subnational governments, however, the system implies budgetary uncertainty and an inability to plan for service delivery. The lack of transparency is also perceived by oblasts as unfairness. They must compete with each other for shares in a revenue pie that cannot sustain all equally. In practice, that means negotiating and bargaining to improve their lot.

Any new comprehensive and integrated intergovernmental financing system must not only respond to the problems of the current transitional period, but it also must address some fundamental long-term issues. An important first step is to establish an institutional framework, including a special "Blue Ribbon Committee" to develop a strategy and plan its implementation. The committee could consist of informed leaders from the professions, academia, the Supreme Soviet and relevant ministries, oblasts, and cities, drawing on foreign advice where necessary. The committee should undertake a careful, empirical study of Russia's options.

What, precisely, would such a committee need to do? First, it would have to decide how to "assign" spending responsibilities to different levels of government and quantify expenditure responsibilities by function to assess the spending requirements of subnational governments. Then it must estimate relevant expenditure and revenue elasticities. It also would need to analyze options for revenue assignment, tax sharing, surcharges, formula grants, and natural resource revenue sharing, to name just a few. Finally, it would need to estimate, by simulation, the effects of the newly designed system on central and subnational fiscal balances and on distribution of the fiscal resources among subnational governments in the short and long term. With consensus on the most appropriate strategy, the committee would report to the Supreme Soviet, which would legislate its implementation.

This paper touches, in turn, on several critical areas of importance in moving ahead with a stronger system of intergovernmental finances in Russia. It examines the macroeconomic dimensions of the present system and discusses the role of local governments in the privatization process. The traditional areas of fiscal federalism—expenditure assignment, and tax assignment and transfers—are described as well as the special demands of Russia's ethnic and fiscally well endowed oblasts for greater fiscal autonomy and negotiated agreements that favor them. I then explore the thorny issue of taxing natural resources and sharing the revenues. A final section summarizes the choices facing Russia today and their effect on the Russia of tomorrow.

The Macroeconomic Dimensions of Intergovernmental Finances

Russia's stabilization program calls for reducing the state budget deficit substantially. How this reduction affects the different levels of government will depend on how governmental functions are reassigned among various levels. Beginning in the 1992 fiscal program, major budgetary cuts were made in central government spending—enterprise investment, producer and consumer subsidies, and defense. An important part of social expenditures (since 1992), and investment outlays, have been delegated to subnational

governments. The budget envisages a big increase in taxes, primarily on petroleum products and foreign trade. Thus, most extra revenue will accrue to the *federal* government, while most additional social spending will be by the *subnational* governments.

There is, it seems, a mismatch between expenditure assignments and revenue shares. This undermines the national stabilization effort and puts pressure on subnational budgets. The basic strategy has been to "push the deficit downward" by shifting unfunded spending responsibilities down and hoping that subnational governments will cut costs. Rather than cutting the social safety net during transition, however, subnational governments might seek greater central government subventions. Indeed, caught without enough revenue to cover their newly assigned mandates, oblasts have accumulated expenditure arrears and, in some cases, delayed federal tax remittances. In addition, they have borrowed from banks and from "their" enterprises, which have easier access to credit than do the oblast governments themselves, thus adding to pressure for credit creation. They have also developed extrabudgetary resources. Ironically, the stabilization policy's focus on the federal deficit has led to actions that will further destabilize the economy, reduce the transparency of budgetary accounts, and, if oblasts are "successful" in their ability to obtain credit, subvert monetary objectives. Since Russia's subnational governments account for almost half of total budgetary outlays (47 percent in 1993), sound intergovernmental fiscal policies are crucial to a successful stabilization effort.

Efforts to reduce the budget deficit by squeezing the subnational sector also harm privatization. An important aspect of fiscal decentralization in Russia has been the transfer of enterprise ownership from central to subnational governments. Oblasts derive significant funds from enterprises they own, and they benefit significantly from the expenditures they finance. Hard-pressed oblasts will therefore oppose privatization and seek to reinforce their revenue base by holding onto "their" enterprises, in an effort to ensure the continued provision of services increasingly unaffordable to oblast and rayon governments under current intergovernmental fiscal arrangements. At the same time, by encouraging enterprises to provide "social" services, these enterprises become harder still to privatize. Fiscal arrangements that address the needs of each level of government and match expenditures and revenues should thus be a high priority.

Macroeconomic management in Russia is potentially complicated by subnational borrowing and extrabudgetary funds. The budget laws had given subnational governments an unlimited right to borrow and to establish and own banks, but this authority was suspended by the Central Bank in 1992.[1] While the use of credit at the subnational level is currently limited by the absence of suitable financial markets, this aspect of intergovernmental finances could have major macroeconomic repercussions.

Borrowing at the subnational level is a critical issue in intergovernmental finances. In some industrialized countries (the United States, for example), local governments have substantial discretion to use debt financing, but in many countries subnational governments are not allowed to borrow at all. The federal government in Russia may want to limit or prohibit subnational government borrowing for macroeconomic reasons—controlling inflation, reducing spending at the subnational level, and addressing the fear that some oblast-level governments rush into heavy debts under the current influence of highly volatile revenue and expenditure developments. In the longer run, oblasts or large

1. The laws on the budget system and budgetary process gave subnational governments the right to receive loans from higher level governments or to receive commercial loans.

cities might be granted some discretion in using debt, in order to encourage the financing of long-lived capital investments with bonds.

Another source of financing for local governments is extrabudgetary revenues, including past unspent funds, voluntary contributions, loans, funds from commodity auctions, fines (including all tax penalties), and certain nontax revenues. At the level of the subnational governments, the use of extrabudgetary funds has been growing rapidly in response to the increased financial responsibilities that have been passed to them. Since these funds can be spent fully at the discretion of the oblast government—as distinct from budgetary funds, which are subject to some degree of approval by higher level governments—their attraction is great. Another major advantage is that the revenues need not be shared with higher levels, so oblast governments have a significant inducement to shift as much of their revenues as possible from the budgetary to the extrabudgetary category.

The proliferation of extrabudgetary funds presents serious problems for effective budgetary management by the federal government. The use of these funds reduces the transparency of budgetary operations. Therefore, the impact of fiscal policy cannot be fully assessed. Extrabudgetary funds are outside the strictures of conventional budgetary procedures and provide loopholes for public-sector operations not approved through the proper channels. The use of such funds is an inefficient budgetary practice from the point of view of the federal government, and it weakens fiscal policy as a macroeconomic instrument. On the other hand, subnational governments may operate more efficiently—with more discretion and more home rule—because of the availability of extrabudgetary funds.

The macroeconomic disadvantages of loose budgetary control and the informational complications implicit in this practice make a reasonable case for discontinuing the extrabudgetary accounts. However, the creation of these funds is within the law, and the practice is now well entrenched. A realistic transitional approach for the central fiscal authorities would be to require that subnational governments disclose full information about the sources and uses of extrabudgetary funds, and work toward a phasing out of this financial practice.

Government, Enterprises, and Privatization

The Role of Government vs. the Private Sector

Russia wants to move rapidly toward a market-oriented economy. However, many aspects of government go well beyond what is considered desirable in a market economy. Some government spending can no longer be justified—for example, oblasts and rayons producing and selling goods and services that are more appropriately the bailiwick of private enterprises. A major redefinition of the role of government vis-à-vis the private sector is in order.

However, subnational governments still see themselves as entrepreneurs and producers. Indeed, their involvement in economic ventures (using their land, commercial assets, or industrial resources in partnership with other investors) appears to be increasing. Apart from being *fundamentally inconsistent with privatization*, this carries several dangers. The most significant is that such businesses will (probably) compete unfairly with

emerging private competitors, thus undercutting the government's tax base. Moreover, pressures will be put on subnational governments to shore up their enterprises (and their employment) by subsidizing them. There are likely to be many poor investments. In market economies, the failure rate for small businesses is high. There is no reason to expect that Russia's experience will differ. There is a danger, too, that subnational governments will become involved in setting up banks and directing their credit or lending policies.

Enterprises and Their Social Assets

A serious and looming problem concerns the traditional role of public enterprises in providing social services. Historically, Russia's state enterprises have financed many expenditures that would be shouldered by the public sector in a market economy (for example, schools, hospitals, roads, and sanitation). With marketization of Russia's economy, such spending cannot continue to be an enterprise responsibility and is likely to be transferred to subnational governments. These outlays generally fall into "local" areas of spending responsibility. The transfer is already taking place *de facto* because of the financial problems of many government enterprises. However, it is essential that they be transferred in a programmed and orderly way. Public enterprises cannot continue to provide such services and successfully compete in an increasingly privatized and market-oriented economy. Who assumes what? The central government appears not to have quantified this problem or planned a solution. It needs to do both. In sum, this increase in subnational spending responsibilities must be accompanied by a corresponding increase in revenue shares to subnational governments.

Expenditures and Expenditure Assignment

Like many countries in Eastern Europe, Russia has focused on changing tax assignment and revenue sharing between federal and oblast governments. This, as noted earlier, puts the cart before the horse. Expenditures must be assigned to one level of government or another and the assignments quantified before resource requirements can be established. In Russia, the availability of revenue is dictating the distribution of spending responsibilities among different levels of government, rather than the other way around.

Consistency with "Assignment Principles"

Three principles underlie the assignment of expenditure responsibilities in the mainstream academic literature. First, public services whose benefits do not accrue beyond local boundaries should be provided by the local government. Second, services that benefit several communities should be provided by oblast governments. And, thirdly, benefits that accrue to the whole country should be provided by the federal government. In most countries, stabilization and incomes distribution policies are centralresponsibilities. These principles encourage the accountability of subnational governments and are among the rationales for fiscal decentralization. They also seem to be well understood in the Russian Federation (see Table 5-1). In Russia, while spending assignments have not been codified, tradition and inertia have created an implicit understanding of which level of government does what. Until recently, these traditional assignments seemed to be con-

sistent, overall, with the benefit area principle. However, permitted by the legal murkiness, there have been recent assignment changes that violate general principles.

Table 5-1: Expenditure Assignment in the Russian Federation

Expenditure	*Federal government*	*Oblasts*	*Rayons*	*Village Soviets*
Defense	100 percent (except military housing)	Military housing	—	—
Justice/internal security	100 percent	—	—	—
Foreign economic relations	100 percent	—	—	—
Education[a]	All university and research institute expenditures All technical and vocational schools	Several special vocational schools	Wages; and operation, construction, and maintenance of all primary and secondary schools	—
Culture and parks[b]	National museums National theater	Some museums with oblast significance	Some museums All recurrent expenditures for all sport and park facilities and all other cultural facilities	—
Health[c]	Medical research institutes	Tertiary hospitals, psychiatric hospitals, veterans' hospitals, diagnostic centers, and special service hospitals (cardiology, etc.)	Secondary hospitals Primary health clinics Medicines	Paramedics
Roads[d]	Construction of all roads Maintenance of federal roads	Maintenance of oblast roads	Maintenance of rayon and city roads	Maintenance of commercial roads
Public transportation	—	Most public transportation facilities; previously, interjurisdictional highways, air, and rail were assigned to federal government	Some transportation facilities, including subway systems	—
Fire protection[e]	—	Most fire protection services	Voluntary, military, and enterprise services possible at this level	—
Libraries	Special libraries (for example, the Lenin library)	Special library services	Most local library services	—
Police services	National militia	Road (traffic) police	Local security police (since 1991)	—
Sanitation[f] (garbage collection)	—	—	Part of garbage collection	Part of garbage collection
Sewage[g]	Infrastructure capital investment	—	Most of the operational expenditures	Some operational expenditures
Public utilities (gas, electricity, and water)	—	—	Subsidies to households (not enterprises)	—

Table 5-1. (continued)

Expenditure	*Federal government*	*Oblasts*	*Rayons*	*Village Soviets*
Housing[h]	Building and development	—	Maintenance and small-scale building	—
Price subsidies	—	—	Fuels; mass transport; food (bread, milk); medicines	—
Welfare compensation	Part central government responsibility	Part oblast government responsibility	Managing programs funded by upper-level governments	—
Public enterprises (productive sectors)	—	Permitted to invest in joint ventures (keeping 50 percent of privatization proceeds if enterprise is of rayon subordination)[i]	Permitted to invest in joint ventures (keeping 50 percent of privatization proceeds if enterprise is of rayon subordination, and 10 percent if any other subordination)[i]	—
Environment	National environmental issues	Local environmental problems (for example, the preservation of forests)		—
Enterprises	"Group A" enterprises (for example, transport and heavy industry) "Group B" enterprises (for example, light industry, transport, and agriculture)	"Group C" enterprises (for example, local light industry, housing construction, and food industry)	If transferred to local level	—

Source: Martinez-Vazquez (1994).

a. Public enterprises also build schools but typically do not operate them. They frequently operate kindergarten services.

b. Some enterprises build sport facilities.

c. Some enterprises build hospitals, and in some cases they also operate them. Social insurance, financed primarily by enterprises, pays for the health services of those covered.

d. A "Special Extrabudgetary Fund" is financed by an excise tax on oil consumption.

e. Special fire-protection services are provided by enterprises, but these services are on the decline.

f. Separate user charges do not normally apply for garbage collection.

g. Separate user charges apply for sewage.

h. Enterprises have been important builders of housing and own nearly half of the housing stock in Russia. The central government has transferred housing to local governments; maintenance is the responsibility of the level of government or enterprises owning them.

i. Subordination refers to the level of government responsible for the governance and ownership of the enterprise.

Capital expenditures are included unless otherwise noted.

Shifting Responsibility for the Safety Net

In early 1992, the central government—in an apparent effort to balance its budget—shifted responsibility for most subsidy and social welfare programs to oblast and rayon governments. They had been financed before by transfers from the center. While price subsidies will cease when prices are freed, the need for social protection for those most hurt by Russia's economic change will not. Apparently, the center has not estimated the cost of this social protection, nor how this cost might be matched with available oblast revenues.[2]

In addition, this safety-net policy contradicts the traditional approach of assigning expenditure responsibilities. If having an adequate social safety net is a national priority to smooth the difficult transition that lies ahead, should it be the responsibility of oblast and rayon governments alone?

Reassignment of Capital Spending

In mid-1992, all investment financing—even of nationally important or strategic areas such as highways, military housing, and airports—were shifted to subnational budgets. Before then the federal government had approved, financed, and implemented all subnational capital investment. Shifting these investments down to lower level governments may ease short-run federal budget pressures, but it is inconsistent with expenditure assignment principles and efficient service delivery. It is also provocative at a time when subnational discontent is growing. Subnational governments should be responsible only for capital investments that correspond to their assigned current expenditures—for example, for schools, roads, and other subnational infrastructure.

The Russian government is also using expenditure "mandates" to require subnational governments to undertake expenditures without adequate funding. These include across-the-board wage increases and pension adjustments regardless of the budgetary position of each government. There should, of course, be no mandates without funding.

The Dangers of Shifting Expenditures Down

There is a more general issue: responsibilities are assigned without any precision or consistency. Both subnational and central governments reap advantages from this. Subnational governments cite their broad responsibilities when bargaining with the center for a bigger share of revenue. The federal government has an extra instrument (jettisoning spending) to help balance its budget. This cannot continue much longer, if the intergovernmental relations in the new Federation are to move toward greater certainty and predictability. If spending responsibilities are not assigned specifically, determining the revenue sufficiency of alternative tax assignments or revenue shares will not be possible. And the desirability of alternative systems of sharing will be a moot point.

Moreover, if this trend persists, what important spending functions can the central government use to justify itself to skeptical regional governments and give meaning to the union? Russia's federal government may inadvertently be contributing to its worst nightmare—the disintegration of the Russian Federation.

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2 . This discussion, and later references to intergovernmental fiscal relations in Russia, draw from Chapter 1, Wallich, "Russia's Dilemma," in Wallich (1994).

Quantifying Expenditure Assignments

Quantifying expenditure responsibilities, function by function, is perhaps the most important first step in restructuring intergovernmental financing. Estimates of subnational expenditure requirements would include those functions that continue to be government responsibility, those assumed by the government as enterprises give them up, and those that should no longer be the responsibility of any level of government.

Tax Sharing and Transfers

Russia's revenue sharing system, inherited from the Union and in place at the end of 1992, had two distinct features. First, unlike most systems of intergovernmental finance, it shared revenue "upward" from the rayons and oblasts that collect it to the federal budget. This upward sharing contributed to the break-up of the Union, when the republics, beginning with Russia and Ukraine, stopped making their transfers to the Union budget. It likewise makes the Russian Federation vulnerable. Second, the intergovernmental system is not really a system. It is a series of ad hoc, bargained, nontransparent bilateral agreements, whose effects and incentives are not well understood.

A transition is now taking place toward a true "system" that assigns revenue sources to each level of government. The Basic Principles Law of 1991, which was only partially implemented, attempted to assign all taxes to one or another level of government: VAT to the federal government, and personal and corporate income taxes to subnational governments. In practice, most taxes remain shared, with allocations determined in the annual Budget Act, and most subnational revenues are derived from four shared national taxes. All taxes are shared on a derivation basis (that is, they are shared with the oblast in which they were collected) with the sharing rates set by the Parliament. Sharing rates vary by tax and by oblast. In theory, higher sharing rates are given to poorer oblasts, but in practice the effects have been unclear. Recently, there has been an attempt to make the sharing system more transparent and to make sharing rates uniform for all oblasts. In addition, twenty-one minor taxes accrue to rayon governments. All tax administration and collection remains a federal responsibility, but it is executed locally by local tax offices. Because Russia's tax system is "unitary," meaning that the central government sets all tax rates and determines the tax base, subnational governments have no fiscal discretion or autonomy—a major omission.

These recent changes improve intergovernmental financing and increase transparency by limiting ad hoc arrangements. They give subnational governments some prescribed revenues as well as incentives for increasing tax effort. But some flaws remain that call for adjustments and, probably, a new law.

Mismatch of Assigned Revenues and Expenditures

First, there is no correspondence (or matching) of current subnational tax assignments and expenditure responsibilities. There is no guarantee that the two taxes assigned to the oblast level will be sufficient to finance "normal" subnational expenditure responsibilities—either for the subnational sector in aggregate or for individual oblasts. If the personal and corporate taxes "overfinance" the subnational sector, there is no provision to claw back any surplus for the center; if oblasts are underfunded, there is no legal provision to grant subventions to make up the difference. A similar mismatch may emerge in

the longer run, since there is no guarantee that subnational-assigned taxes and subnational expenditures will grow at the same rate.

Tax Assignment vs. Tax Sharing

In an early attempt at reform, Russia introduced a law moving toward a system of pure tax assignment very different from the present system, where most taxes are shared. Although tax assignment has some appeal, there are several arguments against changing from tax sharing to tax assignment in Russia today. First, tax assignment leaves the budgets of subnational governments vulnerable to changes in central tax policy. A single tax rate change or tax policy change could reduce (or increase) subnational revenues and have widely different effects across oblasts. Thus, even though assignment appears to reduce the dependence of subnational governments on the center by giving each level of government its "own" taxes, this independence is illusory. Localities remain vulnerable to the revenue volatility of their assigned taxes, and they have no discretion over the setting of tax rates.

This assignment approach can also worsen resource allocation and growth. In an economy as regionalized as Russia's and with as few antimonopoly policies, oblasts' vested interests in enterprise revenues can encourage domestic protectionism and interoblast trade barriers to protect local monopolies. This will ultimately reduce economic growth, just as impeding trade between former CIS republics has done. The behavior of oblast governments plays a crucial role in determining the efficiency with which the Russian economy performs and its future growth.

Equalization

Finally, the new legislation does not adequately consider intergovernmental transfers or equalization. Assigning (or sharing most of) the personal and corporate taxes (or any other taxes) to the subnational governments where they are collected necessarily means that Russia's higher income territories—with a bigger tax base—will receive more revenue. In most countries, grants are provided for those territories whose economic base is too weak to support adequate public services, but in Russia such grants have not been provided for in the law.

Under the intergovernmental system inherited from the former Soviet Union, transfers played a minimal role, since the major emphasis was on shared taxes, with differential sharing rates across oblasts designed to provide for some equalization. Those subventions that existed were provided ex post and on a bargained basis to needy oblasts. In 1994, the bargained scheme was replaced with a more transparent arrangement: subventions were given to all oblasts whose per capita revenue was below the average, in an amount sufficient to bring the oblasts up to the average. Some 22 percent of federal VAT revenues were set aside for this formula-based pool, and it is anticipated that forty-three needy oblasts will receive these subventions. Additional resources were also set aside for especially needy oblasts, which could not meet their approved expenditure levels even after getting the subsidy.

Special Fiscal Treatment and Regimes

The design of fiscal federalism in Russia is complicated further by the demands of some territories for political autonomy, greater devolution of responsibility for expenditures, and special fiscal regimes. There are three broad oblast groups making these demands. First, some non-Russian *ethnic groups* (which form the majority of the population only in Tatarstan) claim greater autonomy because of their different history and culture. Second, some *natural resource rich areas* want special financial arrangements to derive greater benefits from natural-resource revenue. They note that resource development has not benefited them but rather has resulted in sustained and severe economic and ecological damage. The third group is *industrially well-endowed areas* with greater growth potential than others. These areas want more fiscal autonomy and special fiscal arrangements to benefit from their stronger local economies.

Without a transparent system, there is a perception that negotiated tax sharing works against the better-off oblasts and that the rich oblasts subsidize the poor. Not surprisingly, some regions are reportedly insisting on taking matters into their own hands through a "single channel system," similar to the one that sealed the Union's fate. Under this system all revenues flow initially to the oblast, and a single payment—determined unilaterally by the oblast—is sent to the federal government. Bashkyria has reached such an agreement with the Ministry of Finance, but it has not been approved by the Supreme Soviet. In other reported cases (Tatarstan and another twenty oblasts), this arrangement is being implemented *de facto*—and presumably illegally.

Options for a New Structure: Formula-Based Sharing

The Russian government can build on the direction suggested by new laws, but it should consider further restructuring of central-oblast financing, taking into account the need for macroeconomic stabilization, equalization, and greater subnational fiscal autonomy. Fixed and unchangeable solutions should be avoided given that Russia's economy will undergo continued change. Yet a structure is needed.

How can the arrangements be improved? A new framework might have four components. First, a common pool of revenue could be notionally divided between federal and subnational governments, based on quantified and assigned expenditure responsibilities. Second, a part of the subnational pool would be assigned to the oblasts in which the revenue is collected. (This is known as "derivation-based sharing" and is similar, in fact, to today's system.) Third, the remainder would be distributed to subnational budgets according to a fixed (and transparent) formula that is equalizing. Finally, there should be some subnational taxes and surcharges that oblasts can levy at their own discretion.

This four-dimensional structure is flexible. It supports a combination of strategies and permits them to change over time. It is also compatible with shifts in expenditure responsibilities between federal and subnational governments. If extra expenditures are shifted "downstairs," the subnational pool can be increased. It is also compatible with a changing emphasis on equalization: the larger the fraction of subnational revenues going to oblasts on a derivation basis, the more the oblasts that are well off will benefit from their stronger fiscal base. The larger the fraction of the subnational pool distributed by the equalizing formula, the more the poorer oblasts will benefit. However, equalization pe-

nalizes the better-off regions whose industrialization and growth potential is greatest. Like other countries, Russia must balance the tradeoff between growth and equalization.

Choosing the degree of equalization is a political judgment, made differently in different countries and at different times. How much equalization does Russia need at present? Arguably, there are vast differences among oblasts. However, the need for political unity may be greater than the need for equity: if the system is overequalizing, Russia's better-off oblasts may become disgruntled and opt out, pulling resources from the equalization pool. Ironically, imposing equalization at this stage could impel wealthier areas to withdraw unilaterally from the system, thus reducing the scope for any equalization. This would leave all the oblasts poorer. Emphasizing derivation-based sharing would give weight to the concerns of wealthier areas, making them more willing to participate.

Demands for Special Treatment

A flexible framework can help deal with those oblasts that are seeking special fiscal treatment within the federation. In principle, demands for special treatment can be addressed in three ways: on an ad hoc basis, through special fiscal regimes, or through an intergovernmental fiscal system with a comprehensive, equalizing formula.

In the past, Russia's central government dealt with disgruntled areas piecemeal, through intergovernmental negotiations. This will not work in the future. Such a system is not transparent, and it creates a sense of injustice among oblasts, some of which fear that others are striking better "deals" with the center. Transparency is crucial in Russia today, when sometimes skeptical regions are testing out democracy.

If disgruntled oblasts continue to decide unilaterally what revenues they will provide to the center, it could threaten the fiscal viability of the Russian Federation—just as it contributed to the fiscal bankruptcy of the Soviet Union. That experience raises the question whether special fiscal status should be granted to some territories within the Federation to appease them. Some countries (for example, Spain and Canada) provide special regimes within otherwise uniform systems.

A totally uniform fiscal treatment could threaten Russia's future if disgruntled groups opt out. That certain areas are demanding special treatment should not be taken lightly, but great care must be taken in granting any special fiscal regimes. Demands for special treatment will spread rapidly as soon as one is granted. If there are to be such regimes, eligibility must be narrowly defined and according to objective criteria. For example, areas where most of the population is an ethnic minority might be granted a special regime but only if there is potential for serious political conflict in those regions. Once granted, special treatment is nigh impossible to rescind.

Addressing Special Needs with a Formula-based Intergovernmental System

Demands for special treatment can also be addressed within a formula-based fiscal framework that makes special regimes unnecessary. The framework described here would give Russian policymakers flexibility in deciding the emphasis to be placed on equalization, on derivation-based tax sharing, or on other objective, formula-based characteristics. In India, for example, the formula provides the politically sensitive state of Punjab with extra government funding because of the difficulties of being a border state.

India's formula also assigns backward areas a special weight that gives them extra compensation. In Russia, too, areas with large ethnic minorities and resource rich areas (whose development needs have been ignored and where there has been environmental damage) could be assigned a weight in the formula-based pool.

Using formula-based sharing to meet diverse oblast needs is appealing for several reasons. Although the formula would be uniform across all oblasts, its components would permit policymakers to target special treatment for certain areas. Formula-based sharing would appease disgruntled groups, while maintaining transparency and preventing the sense of injustice; thus, it would encourage areas to stay with the system rather than opt out.

What should this formula-based system look like? First, it should be simple and easily understood, taking into account the oblasts' different expenditure needs and fiscal capacities. While Russia seeks to define itself as a nation, the immediate need for political unity may be greater than the need for equity. Rather than allowing oblasts to negotiate individually for special fiscal regimes or decide unilaterally to leave the federal system, the government should almost certainly seek to engender widespread participation by adopting a formula that does not overemphasize regional equalization yet is flexible enough to respond to special circumstances.

Consensus must be developed for a transparent and fair framework for intergovernmental finances with revenue-expenditure correspondence. The future cohesion of the Russian Federation is riding on it. It is, perhaps, the only fiscal mechanism that can contain those potentially damaging forces pulling at the seams of the new Federation.

Scope of the Intergovernmental System

It is unclear whether the central government should define tax and expenditure assignments for oblasts only or allocate fiscal resources to cities and rayons as well. This is the important unanswered question of the new legislation. Essentially, the issue is whether or not Russia sees itself as a federation. If Russia is truly a federation, the center should concentrate on establishing a proper relationship between itself and the oblasts and regions, and leave intraoblast matters to the oblasts themselves. Local affairs can be handled more efficiently by each oblast than by Moscow, especially in such a vast country with more than 2,000 rayon governments and many more districts and lower level soviets. It may be useful, however, to have some framework law requiring oblasts to pass through revenue to rayons or cities according to agreed guidelines.

Also, large cities in Russia, which have a greater taxable capacity and more complex and (arguably) bigger spending needs, could require special treatment. This may include special taxing rights, special support in implementing property or vehicle taxes, or special rights to set prices for municipal services.

Sharing Revenues from Natural Resources

As domestic energy prices rise to world levels, fiscal revenues from energy could be enormous. Russia's policymakers need to examine three issues: how taxes on the natural resource sector should be structured, how natural resource revenues should be shared between the center and the oblasts, and among oblasts, and how natural resource reve-

nues should be used. For Russia, the outcome is most important for oil and gas, where the money at stake is huge.

The Design of Resource Taxes

Proceeds from the sale of natural resources often greatly exceed the costs of exploitation. This creates "economic rents," part of which should be captured for the budget. Taxation based solely on output volume or value of output (as introduced in Russia's recent laws) can discourage economic production of marginal fields. Such production taxes also allow enterprises, instead of the government, to gain most of the rents from highly productive fields. Russia's resource taxes should be redesigned carefully to fall on economic rents, thereby avoiding both problems.

Dividing Resource Revenue

Exploitation of resources often generates significant social costs—the budgetary costs of public infrastructure, such as specialized transport facilities, and of environmental degradation, including clean-up costs. Oblasts should be compensated for these and other expenditures. This could be done through environmental charges and levies channeled to the subnational governments of producing regions.

When oblasts have been compensated for their financial, social, and environmental costs, the remaining revenue from resource taxes can be divided in several ways: natural resource revenues could go to the federal budget or to the subnational budget, or they could be shared between the two. The academic consensus is that revenue from resources should accrue to the federal budget. First, resource revenues are volatile, varying as output and prices change: subnational governments need a stable revenue base. Second is the equity argument. Natural resources are unevenly distributed geographically. Assigning resource revenues to the oblast level would benefit only a very few of Russia's oblasts, and it would create very large differentials in fiscal capacity between the resource-producing oblasts and others. Third, resource-rich oblast governments might lower local taxes, or even pay grants to local residents, creating tax driven, inefficient capital and labor flows that are not justified by factor productivity in the area. Although these principles are generally accepted, a wide range of international practice is not consistent with them. The sharing of resource revenues is as much a political question as an economic question.

Precisely how resource revenues will be divided in Russia depends on the nature of the Russian Federation. If people's primary allegiance is to the Federation (that is, if they see themselves as citizens of the Russian Federation) and resources are seen as common wealth that belongs to all, then resource taxes should flow to the federal budget. If, however, allegiance is to a smaller resource-producing jurisdiction (that is, if they see themselves as citizens of Khanti-Mansisk autonomous okrug), revenue should flow to the okrug budget.

In principle, revenue from Russia's oil and gas could be allocated in almost any way: to tribal groups, cities, and rayons; to Khanti-Mansisk and Yamal, Russia's largest oil and gas producing regions; to okrugs; to oblasts; or to the Federation. Given the weakness of the federal budget in Russia, a large share should almost certainly go to the federal government.

Will the oblasts agree to this? A more "equitable," transparent, formula- and rules-based intergovernmental arrangement may make it easier to reach consensus on the highly divisive political issue of natural-resource revenue sharing. If oblasts perceive that they are being treated fairly under a uniform system, they may cede demands for "asymmetrical federalism." Oil-rich regions would be less likely to adopt the attitude that "what is mine is mine, what is yours is negotiable."

Using Resource Revenues

Revenue from resource taxes can be used in three ways. It can cover current budgetary spending. It can be set aside in a "Heritage Fund" for future generations. Or it can be given away as grants to the local population (as in Alaska). Grants are tempting, especially if the oblast is poor. They are also inadvisable. Some incremental expenditure financing (especially to redress deficiencies in the subnational infrastructure) may be appropriate. Many countries place substantial revenue into a trust fund, whose earnings supplement general budgetary revenues and may be invested to help ease the transition to a "postoil" economy in the region.

Given Russia's budgetary difficulties, using the federal share of natural resource revenue to finance general spending may be appropriate. If the revenue flow to subnational governments is significant, trust funds are essential. Most oblasts could not absorb massive funds in any productive way. Local investments, under a policy of "resource-based industrialization," inevitably have a low rate of return.

What Then, To Do?

For Russia, the intergovernmental system established now will be key to "Whither Russia?" Russia either could transform itself into a market economy and shake off the shackles of state ownership, or it could remain dominated by the government's heavy hand. It could become a nationally integrated market, where enterprises compete on the basis of price and quality, or it could remain regionalized and localized with local fiefdoms circumscribing economic activity. Russia's oblasts could either see benefit from a close federation or see confederation and greater independence as being more economically beneficial. The incentives of the intergovernmental financial framework that is adopted will influence all three factors and determine what kind of country Russia becomes.

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6

China's Reform of Intergovernmental Fiscal Relations in the Light of European Experiences

Paul Bernd Spahn

In October 1992, the 14th Congress of the Communist Party of the People's Republic of China embarked on the course toward creating a socialist market economy. A revised Constitution was adopted by the 8th National People's in 1993, and significant economic and fiscal reforms were subsequently introduced.

A substantial part of the fiscal reforms was undertaken in the area of taxation. In view of a modern tax system conducive to the growth of the socialist market economy, various tax laws were unified and streamlined, and a value-added tax, excise taxes, and a business tax were inaugurated that conform with international rules. In addition, the income tax was reformed that merged the pre-existing three tax laws into one using a standard approach for the derivation of income. Income is taxed progressively, and the income tax law features itemized deductions in order to pursue horizontal equity. The fiscal reforms go hand in hand with the liberalization of the pricing system, with a rephrasing of rules that govern business investment (in particular foreign investment), and with reforms in the financial sector and in foreign exchange regulations.

As to further reforms in the fiscal area, intergovernmental fiscal relations are undergoing critical review, and basic principles for creating a fair system of burden sharing within the public sector are being discussed. Specifically, the reforms are expected to help promote initiatives of both the central and regional governments, and to enhance the capacity of the central government to manage the economy at the macro level. The authorities are eager to develop a scientifically based, nondistortionary system of transfers among government in order to "meet legitimate expenditure needs of the provinces, and to ensure sustainable growth in a way that is commensurate with increased own-tax collection efforts by the provinces" (Ahmad, Craig, and Searle 1994, p. 33). As a concrete measure, the State Council has introduced, on the 1st of January 1994, a tax sharing system in combination with the dismantling of the previously employed "contracting system" whereby transfers among governments were effected on the basis of negotiations. Furthermore, taxes are now more clearly assigned to different levels of government. However, some problems relating to a vertical fiscal imbalance between the tiers of government remain, and the crucial problem of how to deal with fiscal perequation or equalization between regions is unresolved.

At this important crossroad to the future of Chinese intergovernmental fiscal relations, it is appropriate and useful to study other models of organizing fiscal relations within the existing federations of the world. In addition to the Anglo-Saxon models of multilayer government (those of Australia, Canada, and the United States with their greatly varying solutions for intergovernmental financial relations), the European variants of federalism may be of interest to the Chinese authorities. This is because they rely more heavily on tax sharing and follow principles that are similar to those of the socialist market economy: homogeneity of national standards and similarity of public services with the aim of realizing the equality of chances for citizens.

The European Union is also moving toward a federal structure with nation states forming different provinces and more and more responsibilities being transferred to a nucleus "central government" (the Council and its administration, the Commission). Yet Europeans agree that priority is given to decentralized responsibilities and decision-making in order to preserve the cultural diversity of the continent, and equalization among regions is mainly left to the market. Public policy at the central level is confined to preserving "cohesion," which is a much looser equalization concept entailing only small-scale regional redistribution or public resources. It is obvious that this approach to federalism is inappropriate for China with its strong commitment to socialist values and to the equality of chances.

On the other hand, Austria, Germany, and Switzerland are European examples of federations at national levels. All are committed to concepts of regional fairness, and all employ revenue-sharing as one means to achieve greater harmony among the different regions of the nation. In this chapter, "European federalism" refers to these national models rather than to the supranational organization of the European Union.

The chapter dwells on the experiences of Switzerland and Germany while disregarding the Austrian model, which lies somewhere in between the two models discussed. Germany has a very strong commitment to the uniformity of living conditions within the nation, and tax sharing as well as specific perequation rules are used to achieve this goal. The Swiss Constitution is more heavily influenced by the U.S. model and, hence, the Swiss system is more decentralized. However, the strong reliance of Switzerland on consensus forming within the public sector corresponds with Chinese traditions, and the desire to protect regionally dispersed minority groups very much reflects China's problems *en miniature*. Both models, Swiss and German federalism, can be said to have achieved their goals of regional fairness in harmony with economic growth and general welfare of their nations.

The last part of the chapter offers—in a tentative and preliminary fashion—a European perspective on the Chinese options for reorganizing their intergovernmental fiscal relations. It is obvious that this perspective is limited since there are multiple other options for organizing the public sector. China will ultimately have to decide on its own whatever approach best suits a socialist market economy. It is hoped that the information provided in this chapter will be useful in making this choice.

The Swiss Experience

General

Switzerland is a land-locked country composed of twenty six cantons (and half-cantons) of unequal size, topography, and economic potentials. Its population exhibits great variety as to cultural background, language, religion, settlement characteristics, and economic activities. While some regions at the crossroads between Italy, France, and Germany have benefited from international trade for centuries, others have remained more secluded, facing unfavorable mountainous conditions and geographical isolation. This explains large regional disparities and imbalances within the Swiss economy. In recent times, some formerly remote areas have experienced dramatic change in their economies due to transalpine traffic and tourism, with a notable impact on the ecology. Swiss attitudes are thus characterized by the protection of minority groups, the preservation of cultural diversity, mutual consideration and assistance, and the care for the environment—which has constitutional rank. Such attitudes have also shaped institutional political arrangements.

Of all the federations in the world, Switzerland is by far the oldest, dating back to the famous Everlasting Alliance of 1291 when three cantons formed a union to resist Hapsburg rule. In 1815, Switzerland's independent political status was confirmed by the Congress of Vienna, and the Swiss Confederation was constituted in its present boundaries. In 1848, a formal federal Constitution was adopted for Switzerland, which had consisted of a loose confederacy of regions until then. The present arrangements are based on this first Constitution, which has been amended several times thence. The important overhaul of 1874 strongly influenced the U.S. model of federalism.

Structure of Government

The basic elements of Swiss federalism are described below.

- The cantons are legally sovereign states unless their sovereignty is explicitly limited by the Constitution.[1] Likewise, municipalities have considerable legal autonomy and political power, although they are not fully sovereign.
- The Confederation is based on the idea of equality between its constituents, the cantons, which is reflected in the role of the Council of States, the upper house of Parliament. The Council's voting procedure accords equal weight to each canton, big or small.[2]
- The Constitution provides for a vertical distribution of responsibilities among layers of government, yet, as in Germany, lower tiers of government also per-

1. There are twenty-three cantons, three of which are divided into half-cantons. In addition, there is a municipal substructure of about 3,000 communes that act under cantonal control. This layer of government is very important in Switzerland as it is in Germany but not in Australia. Since the cantons may delegate government functions to their communities at extremely varying degrees, it is best to treat the state level in Switzerland inclusive of communal services (and revenues).

2. Each of the twenty full cantons has two representatives in the Council of States; the six half-cantons send one representative each.

form functions that are delegated from above. For this reason, a neat vertical distribution of functions among authorities is difficult to discern. There are also elements of cooperative federalism—horizontal cooperation, through ministerial conferences, and expert-based discussions and consulting procedures (*Vernehmlassungsverfahren*) whereby government agencies of different levels, political parties, and economic and social groups are involved in preparing legislation. Formal collective decisionmaking bodies are lacking, however.

- Revenue as well as expenditure functions are distributed independently among the tiers of government. Each authority has its own budget, yet budgets are interrelated through a network of intergovernmental transfers.
- Constraints are imposed on both expenditures and revenues by the political system of "direct democracy." Voters are not only asked to elect representatives; they are frequently called to the polls to decide on all proposed constitutional changes and on specific pieces of legislation (including projects to amend federal tax financing). Federal referenda must be approved not only by a majority of voters, but also by a majority of the cantons.
- Regional diversity in combination with cantonal sovereignty and direct democracy have led to different levels in the provision of regional public goods and to variety in regional tax laws.[3] The communes—which have no independent tax sovereignty—may levy surcharges on cantonal taxes with varying annual coefficients.

The Swiss model of federalism is complex not only because of the complicated network of intergovernmental relations; it also interacts with the system of semidirect democracy and proportional representation of parties, which aims at maintaining close links between authorities and citizen-voters. Such arrangements reflect the importance accorded to the protection of minorities, and they entail specific forms of constitutional and legislative procedures (see below).

Current Arrangements

EXPENDITURE ASSIGNMENT. The Constitution attributes, to each layer of government, so-called "principal responsibilities." Article 49 of the Constitution empowers the Confederation to deal with foreign affairs, yet cantons are also allowed to enter into international agreements "on matters of neighborly relations."

The exclusive responsibilities of the Confederation are in defense, citizenship and the status of foreigners, political asylum, civil and penal law, social protection, policies on property, economic order, money and currency, energy policy, national transportation, and telecommunication (Article 50). Exclusive competences of cantons are in the maintenance of public order, public welfare, establishments of health care, schools and education, the relationship between state and church, regional and local land planning, highways as well as the use of water and other resources (Article 51). For all further domains—the Constitution mentions health, the protection of the environment, culture, the fostering of research, science and arts, universities and vocational education—there is a

3. For income tax, for instance, where sovereignty is shared by the Confederation and the cantons, there are 26+1 different tax codes with varying definitions for tax bases, for exemptions and deductible items, as well as for tax rates.

presumption in favor of canton responsibility unless federal law assigns functions otherwise.

This division of responsibilities is, however, not easily discernible from the budget or financial accounts and certainly is not fully reflected in the structure of government expenditures. As in the case of Germany, cooperation among authorities and the delegation of executive functions to lower levels of government—in combination with intergovernmental transfers of resources—render it difficult to assess the political significance of public authority from the vertical breakdown of public outlays as shown below in Table 6-1.[4]

The extensive network of payments, subsidies, incentives, joint financing, and delegation of competences that has evolved over the years tends to dissolve authentic public spending authorities and to blur accountability. Such complexities also may have elevated particular private interests over national or regional policy objectives in some instances (Bieri 1979, p. 48).

TAX ASSIGNMENT. The Swiss constitution is very explicit in separating taxing powers vertically. Originally, the center government collected all the indirect taxes (customs duties and excises); cantonal and municipal governments were ascribed direct taxes (income and wealth taxes). Over the years, the Confederation has acquired powers in the realm of income taxation as well. This was mainly dictated by vertical fiscal imbalances

Table 6-1. The Structure of Government Budgets in Switzerland, 1993

Budget item	*Confederation*	*Cantons*	*Communes*	*Total*[a]
		Percentage of consolidated total		
Outlays	37.5	48.5	35.0	100.0
Revenues	33.1	44.6	32.8	90.5
Deficit	4.4	4.0	2.3	9.5
		Percentage of GDP		
Outlays	11.6	15.0	10.8	30.9
Revenues	10.2	13.8	10.1	28.0
Deficit	1.4	1.2	0.7	2.9

a. Single items do not add up due to the elimination of double-accounting for the total. Budgeted figures may not coincide with financial accounts.

Source: Eidgenössische Finanzverwaltung, Öffentliche Finanzen der Schweiz 1993; and the author's own calculations.

4. The sum of outlays of each level of government exceeded the consolidated total by more than 20 percent in 1993.

and diverging revenue needs—not by stabilization policies. In the Swiss case, the federal income tax was introduced during World War I —in the disguise of a "defense tax." World War II saw the introduction of yet another important federal tax, the turnover tax (a wholesale sales tax). Both "emergency taxes" stayed on, and their introduction was later sanctioned by a constitutional amendment. However, the law fixes maximum rates for these federal taxes, and "sunset" or expiration dates were established.[5]

As to present arrangements, the following vertical assignment of taxes is found in Switzerland.

- Indirect taxation on expenditures, excises, and customs duties are exclusively federal.
- Tax bases of direct taxes on personal income and wealth, and on business income and wealth, are exploited concurrently by all levels of government, including municipalities—with priority given to the cantons.[6]
- As a matter of principle, "[e]ach tier of government is endowed with a full or partial tax authority for a number of taxes and not only one. Cantons and communes have also the right to levy user charges and fees for those services where this is appropriate" (Dafflon 1991).
- The cantons have an exclusive right to tax motor vehicles.

As to the contribution of taxes and grants to total revenue at each level of government, Table 6-2 (for 1988) may serve to illustrate its structure. The bestowal of independent taxing powers to each layer of responsibility enables the federal government as well as regional governments to discharge their functions effectively without being dependent on each other.

In Switzerland, unlike Australia, the dependence of cantons on grants is low, an average of 21 percent of their budgets. If revenue sharing is included, the amount is only 27 percent. It should be noted, however, that the figure for grants comprises $7^1/_2$ percent of municipal contributions to cantonal services—hence upward-oriented vertical grants. If these grants are deducted, the total dependency of cantons on the Confederation is below 20 percent of their budget receipts.

Competing taxing powers at the two levels of government and diversity in fiscal federal arrangements create enormous problems of tax coordination, tax competition, and harmonization in Switzerland (Dafflon 1986). Although the Constitution mandates the avoidance of cantonal double-taxation, legislation was slow to respond, and the principles governing horizontal tax coordination were largely developed by the Courts of Justice.

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5. The constitutional basis for the Confederation's direct tax and turnover tax ended in 1994. A proposal for a tax reform securing revenue for the Confederation was rejected in 1991, forcing the government to embark on an "emergency program" and, later, on a fourth referendum on introducing VAT in Switzerland. This referendum, finally accepted in November 1993, granted the adoption of VAT at the beginning of 1995. Again a "sunset" date was established (the year 2006), and the vote once again limits the rate by the Constitution at 6.5 percent, significantly lower than in neighboring countries and well below the minimum rate established for members of the European Union (15 percent).

6. There is opposition against the federal government exploiting direct taxes, however, and a conforming constitutional initiative was lodged in November 1993.

Table 6-2. Sources of Revenue for Each Level of Government in Switzerland, 1988 (percent)

Revenue source	*Confederation*	*Cantons*	*Communes*
Taxes on income and wealth	41	50	50
Taxes on consumption and expenditures	52	3	-
Monopolies, license revenue, revenue from property	4	5	6
Total own source revenue	97	59	57
Grants-in-aid and reimbursements	-	21	15
Revenue sharing	-	6	2
Indemnities and sales	3	14	26
Total revenue	100	100	100

Source: Spahn (1993, p. 48).

The variety and complexity of subnational tax systems in Switzerland are rivaled only by those in the United States, where tax competition as well as vertical and horizontal tax coordination have been a major concern for years. In Switzerland, however, case law has established a uniform practice as regards the determination of which canton is allowed to tax which part of the income of individuals and companies.[7] Some of the constitutional provisions attempting to cope with intercantonal double taxation or prohibiting special taxation of industries (Articles 46 (2) and 31 of the Swiss Constitution) evoke conforming instruments embodied in the U. S. federal arrangements (like the "immunity doctrine" or the "due process of law clause" of the Fifth Amendment).

EQUALIZATION, REVENUE SHARING, AND GRANTS. There is a strong tendency in Switzerland to equalize differences in taxable capacity through asymmetrical vertical grants provided by the central government. The objective is to enable the cantons to provide similar levels of services without forcing them to levy taxes that are significantly more onerous than in other cantons. This prescript is firmly entrenched in the federal law on equalization of 1959. The principle of "uniformity of living conditions"—typical of German equalization arrangements—is not adhered to in Switzerland, however (Bieri 1979, p. 12).

The redistributive aims are mainly achieved through three types of vertical financial adjustments: federal tax reimbursements, tax sharing, and specific-purpose grants (usually conditional grants-in-aid). Like Australia at the inception of the federation, the

7. For a further discussion, see Dafflon (1977, pp. 88ff).

Swiss Confederation reimburses part of the revenues collected from customs duties (yet only on fuel and petrol). This reflects the fact that the Confederation has delegated certain responsibilities (especially road building) to the cantons to be administered by them on behalf of the central government. The horizontal incidence of these payments is very complex since they are mainly related to cantonal expenditures on road construction and improvement. Although financial assistance is calculated in accordance with these functions (and on a fiscal capacity yardstick), these transfers are essentially unconditional.[8]

Tax sharing is often portrayed in Switzerland as a way to compensate the cantons for the loss of their tax sovereignties that were transferred to the Confederation (Higy 1973, p.8). Such means—which have recently become more important under pressure from cantonal governments—can also be interpreted to form unconditional general revenue grants. They are distributed in accordance with regional revenue collection, population, and with the canton's relative fiscal "needs"—measured in terms of a statistical yardstick. Tax-sharing revenues thus form part of an asymmetrical vertical perequation scheme that is closed-ended.

The scheme can be imagined to work in two steps: (i) the federal contribution may be thought of as a "closed pool"; (ii) horizontal perequation is then achieved through rules similar to those of German *Finanzausgleich.*[9]

In 1992, tax sharing encompassed three revenue sources. The cantons received 30 percent of the federal direct tax on income and profits, 10 percent of the withholding tax, and 20 percent of a tax on exemption from military service.[10] The latter tax share is distributed horizontally on a tax origin base—without equalization provisions. The direct tax share is allocated partly on a tax origin base, partly according to the fiscal capacity yardstick discussed below. Revenue sharing from the withholding tax is allocated to the cantons according to population for one half, according to fiscal capacity for the other.

Traditionally, vertical intergovernmental transfers have been dominated by conditional grants-in-aid to be applied in accordance with policy priorities of the donor government. Conditional grants given to cantons by the Confederation are usually closed-ended with strings attached in the form of matching requirements. Some grants are provided with "pass-through" obligations. In other words, they have to be handed down to municipalities, sometimes together with mandatory additional funding of the canton.

In addition to providing funds for specific state functions according to national priorities, federal conditional grants are intended to have some equalizing effect. As for tax reimbursement grants and for tax sharing, their horizontal allocation is partly based on a cantonal fiscal capacity measure.

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8. The formula apportions 34 percent of the grant according to cantonal expenditures on roads, 12 percent according to the length of roads, 43 percent according to the equalization yardstick (discussed later), and the rest in accordance with the canton's relative tax effort regarding the motor vehicle tax and its relative per capita expenditures on roads (Dafflon 1991).

9. The federal government's contribution to such a pool was zero in Germany before unification, hence the pool must be filled through contributions made by the richer states. As to its impact on horizontal fiscal incidence, the Swiss model is rather similar to that of German *Finanzausgleich.* In particular, if a canton's fiscal capacity falls, the compensating fiscal effect of the revenue-sharing grant is made up by other cantons, not by the Confederation.

10. This tax is paid by male Swiss citizens exempted from military service. It is essentially a "poll tax" proportional to income and inversely related to the days of military service accomplished.

FISCAL CAPACITY AND EQUALIZATION. Measurement of the cantons' fiscal capacity has been modified several times. The actual formula comprises four ingredients (Dafflon 1991):

- *The canton's (adjusted) fiscal revenue per capita.* This includes cantonal and local tax revenue from all sources (adjusted for differences in tax effort in order to obtain comparable figures).
- *The canton's GDP per capita.* Not only fiscal resources are stressed in the formula, but also private income (which seems to be a natural indicator of fiscal capacity); this is different from Germany or Australia, where only public revenue is considered in the formulae for horizontal perequation.
- *Regional (cantonal and local) tax effort.* In a federation that accords a large degree of tax discretion to regional governments, no canton can be allowed to benefit from higher grants by reducing its own fiscal effort below an acceptable level.[11]
- *The canton's specific expenditure requirements.* These enter the formula in a rather modest way—similar to expenditure needs in German *Finanzausgleich.* Differences in the costs of providing services in mountainous regions are expressed by an indicator measuring the relative importance of agricultural areas below 800 meters; another proxy for differences in costs is relative population density. These indicators may appear to be extremely crude when compared with the criteria developed by the Commonwealth Grants Commission in Australia.

Despite these provisions for horizontal perequation through asymmetrical vertical revenue sharing and grants, equalization is generally less important in Switzerland than in other Western federations—except the United States. The main outcome was to increase the amount of subsidies given to poor cantons, a virtually self-perpetuating category (Frey 1977, pp. 98-100). As one prominent writer on Swiss federalism has concluded: "... equalization in grant programs is of subsidiary interest only" in Switzerland (Dafflon 1989, p. 213).

BORROWING. In principle, each public constituency is autonomous and independent in its budgetary procedures in Switzerland, including borrowing. Yet this does not mean that there is no effective budget constraint on deficit spending. The idea of "sound financing" of public budgets is firmly entrenched in people's minds, and this consensus view governs fiscal federal arrangements in general. Moreover, direct democracy and obligatory finance referenda—or the mere threat of calling citizens to the polls in the case of facultative referenda—act as an effective constraint on loan finance—as it does on taxation. The "golden rule" is formally established that permits borrowing only for investment purposes on a pay-as-you-use basis. Article 42bis of the Constitution obliges the federal government to consolidate budget deficits with due "consideration for the state of the economy." Soft financing through the creation of money is prohibited by law. At the local level, borrowing is limited by law in most cantons. It is restricted to balancing current budgets (including interest payments and amortization of the debt), and the "golden rule" is also brought to bear.

11. A similar correction is made for horizontal perequation through special grants in Australia. In Germany—with its uniformity in taxation—such a criterion is not applied (and would not make much sense).

According to the Constitution, cantonal laws, or municipal decrees, the following can be subject to referenda: "engagement credits or project appropriations, the estimates (of the budget) as a whole, individual payment credits or annual appropriations, or loans" (Bieri 1979, p. 70). Despite the declining importance of finance referenda, the eventuality of such referenda and a broad consensus on the issue seem to have worked, in the past, as an effective constraint on public borrowing. During the eighties, Swiss governments produced even small financial surpluses. More recently, however, public budgets started to drift into deficits, which are estimated to have reached some 5 percent of GDP in 1993 (Gygi 1994).[12] This is attributable both to cyclical and structural problems affecting the Swiss constituency.

Administrative Structure

TAX ADMINISTRATION. As in Germany, the administration of taxes is highly decentralized in Switzerland. Each layer of government administers its own taxes, with some compensation for administrative costs incurred for shared taxes. This reflects independent taxing autonomy of subcentral governments and the multiplicity of cantonal tax laws that have sprung from it. Unlike in Germany, tax administration is not necessarily guided by uniform rules and procedures since tax legislation for one and the same tax might differ significantly among regions. The assessment of multicantonal companies is a burdensome task for the private sector as well as for tax administrators, since the rules to avoid double taxation among regions have become rather complex over the years. Significant cooperation and exchange of information among tax authorities are required, which renders the process of tax assessment and verification very cumbersome. The term "tax jungle" is often used to describe Swiss taxation and its administrative intricacies.

Attempts made in Switzerland in the mid-seventies to introduce a uniform federal income tax with cantonal participation, or to impose uniform cantonal direct taxes throughout the nation, were both defeated. Following a constitutional amendment in 1977, the Confederation chose some formal tax harmonization of income taxes, and, more recently, harmonization of direct cantonal and communal taxation was successful to some extent, following conforming legislation.[13] Furthermore, a referendum on the introduction of VAT held in November 1993 was positive. This illustrates the Swiss electorate's willingness to accept basic reforms and its mounting support for centralization and harmonization. Such change also might have been spurred by international tax competition developments in neighboring countries, notably in the European Union, as well as by recent tendencies in world capital markets.

BUDGET FORMULATION AND IMPLEMENTATION. Budgetary procedures in Switzerland differ significantly from those existing in other countries. Items to be included in the budget must be decided upon beforehand, and budget appropriations cannot be introduced in their own right. In other words, "public budgets are not material financial laws

12. This figure is higher than the budget figure of Table 6-1. The effective deficit of the federal government alone is expected to exceed the bugeted figure by about 5 billion francs, or $1\,^1/_2$ percent of GDP (Witschard 1994, p. 38).

13. Loi fédérale du 14 décembre 1990 sur l'harmonisation des impôts directs des cantons et des communes. The cantons and communes are accorded eight years to adapt their respective legislation. After this term, federal rules will apply automatically. At the same time, the federal law on direct taxation has been coordinated.

enacted by Parliament, but only documents or formal laws that are established by the government and discussed by Parliament. The power of the Legislature to decide priorities and the amounts of public outlays [are] limited" (Dafflon 1977, p. 72).

The budget as well as medium-term financial planning—a planning tool of the Federal Council—serve mainly to establish a coherent view on public finances and on its macroeconomic impact. Its classification is by government function and types of expenditure as well as by economic categories and modes of financing. The budget is established both on a cashflow and an accrual basis, and it allows monitoring of government commitments.

The peculiarity of Swiss public budgeting shifts political responsibilities onto legislative and constitutional procedures rather than Parliament and the budget itself. It is through these procedures that direct democracy comes into play. Although legislation is normally initiated by Parliament, the Constitution allows the electorate to challenge any proposition by constitutional initiatives, and the question must eventually be put to the nation in a referendum. Similarly, any cantonal government can compel the government to examine draft legislation by the Councils.

Examination typically leads to the appointment of a Select Committee, which opens consultation with public authorities, political parties, special interest groups, and organizations (*Vernehmlassungsverfahren*).[14] This process allows some particular interests to creep in, yet it also ensures that legislation is based on a broad social consensus.

Macroeconomic Implications

The traditional theory of federalism suggests that macroeconomic management rests on some centralization of government spending functions as well as on the power (and willingness) to use the budget as a fiscal policy instrument. In Switzerland, a highly decentralized public sector as well as complex budgeting procedures do not seem to be consistent with such a proposition. However, the Swiss Constitution obliges the federal government to make provisions for balanced economic growth, and all tiers of government must consider macroeconomic aspects when establishing their budgets (Article $31^{\text{quinquies}}$). Built-in stabilizers are weak, given a considerable time lag between the accrual of income and the collection of direct taxes. The gross turnover tax, which also taxes investment and intermediate inputs, is even procyclical, and Swiss taxation is sometimes characterized as an "automatic destabilizer" (OECD 1993, p. 55).

On the expenditure side, the government has also limited discretion. During the eighties, when revenues were buoyant entailing small budget surpluses, expenditure policies were equally procyclical (Gygi 1994, p. 16). The only significant self-acting stabilization derives from federal unemployment insurance that came into effect in 1984.

Nevertheless, Switzerland has experienced remarkable fiscal stability over the postwar period, with relative price stability, full employment, and a strong currency. In addition to monetary and wage policies, migration, transborder commuters and seasonal workers as well as fluctuating labor participation rates, especially before the introduction of federal unemployment insurance, seem to have cushioned cyclical shocks very effectively until more recently. However, unemployment—which stood at only half a percent

14. For a further discussion of constitutional and legislative procedures in Switzerland, see Laufenburger (1961) or a summary in Dafflon (1977, pp. 72ff.).

in 1990—has significantly risen since then (to about $4^1/_2$ percent in mid-1993). This is mainly attributed to the institutional change of unemployment insurance and the behavior of labor supply (OECD 1993, p. 98), apart from a recession and structural difficulties of the Swiss economy.

Recession and structural problems are also reflected in public budgets, which have deteriorated over the years. In the nineties, expenditure growth has strongly exceeded revenues, forcing governments of all tiers into debt. The federal government has responded by submitting to Parliament an extensive fiscal consolidation package, yet the very nature of the budgeting procedure renders its implementation difficult. The government is thus suggesting a constitutional amendment in order to limit parliamentary spending powers as they exceed the proposal of the Executive ("frein aux dépenses").

The introduction of a modern broad-based consumption tax on goods and services in 1995 strengthens the revenue side of the budget since it removes the procyclical conduct of the existing turnover tax. It also abolishes some of the structural handicaps of the old tax system, which discriminated against investment and exports—besides impeding effective decentralization and contracting-out. Yet the VAT rate is limited by the Constitution, and the medium-term financial plan foresees a continuing and widening structural budget deficit for 1996-97 (Gygi 1994, p. 15).

Conclusions

If a lesson can be learned from the Swiss experience it is that "systems based on a strong reliance on cantonal sovereignty can work, even though it will likely result in wildly different—though widely accepted—personal (and other) tax systems" (Bird 1986, p. 67). The picture of a "tax jungle" and lack of coordination is thus inappropriate.

One feature of Swiss federalism is particularly noteworthy: an inherent tendency toward consensus and compromise, and a strong commitment to the securing of minority interests. Political decisions are seldom reached without prior consensus among all parties, and it would not be acceptable to decide on policy issues that are likely to meet resistance by substantial minority groups. Helvetian cooperative federalism means effective coordination at the horizontal level and institutionalized vertical consulting among political parties, economic and social groups, and government bodies at all levels. Established coordinative bodies (as in Germany) are missing, however. The Helvetian brand of "cooperative" federalism more closely resembles Asian consensus-forming and collective choice. In the past, this philosophy brought about effective policy coordination within a highly diversified policy structure, since it fostered political and economic stability, growth, and general welfare, without much formal demand management.

Yet the constitutional and legislative procedures have recently come under strain mainly through the process of European integration and increased competition on international markets. The need for structural reform of the Swiss economy is obvious, and it is likely to corroborate central government involvement. Yet government authority at all levels remains subject to scrutiny by the Swiss electorate, and conservative trends have often impeded government action on issues sensitive to Switzerland's neighbors (like transalpine traffic). Thus, the Swiss model of political decisionmaking remains antagonistic to the approach taken by the European Union. It remains to be seen whether Helvetian federalism can survive in an environment that calls for greater coordination at

the supranational level, and whether the principle of subsidiarity is sufficient to protect the devolution of power and direct democracy in Switzerland.

The German Experience

General

A superficial glance at the German arrangements may detect many features of a unitary state. There is a strong central government with an extensive area of influence; there is uniformity in legislation on almost all important issues; and there is a uniform tax system. For the provision of public goods, the German Constitution emphasizes uniformity of living conditions for the whole nation (rather than minimum standards), and a further peculiarity of German federalism is the strong coordination of policies among different layers of government. Sure, there are distinct elements that vindicate the official title of federation, the existence of intermediate levels of governments, sixteen *Länder* or states (after unification), and a local government sector, the importance of which cannot be overemphasized. Yet the impression of a "unitary German federation" remains very strong.

Structure of Government

The Constitution of 1949, the *Grundgesetz*, confers primary state powers to the states. However, the lower tier of government has since experienced a continuous erosion of its original competences in favor of the federal government. This is the consequence of legislation being concurrent for a great number of responsibilities (according to Articles 72 and 74) and the principle of federal law overriding state law. Even in areas of genuine state responsibilities, the *Länder's* competences have been retrenched as a result of larger responsibility sharing and joint decisionmaking.

The German constitution makes some attempt to divide government functions among the tiers vertically (for example, exclusive competences are defined for the federal government), yet its approach to federalism differs significantly from the models of the Anglo-Saxon world. At the central level, emphasis is laid on legislative functions, the allocation of financial resources, and the formulation of policy guidelines. States and local governments are generally in charge of implementing and administering policies. Lower levels of government often "execute" policies on behalf of higher levels, where financing is sometimes tied to the function performed, with corresponding grants or cost restitution. Based on federal legislation, such functions may also have to be financed by the lower tiers from own resources and without compensation. Central administration is less developed in general, and the states bear the brunt of administrative responsibilities in Germany (including for tax administration). This particular division of functions—central decisionmaking with decentralized execution—has been labeled the "horizontal" approach to federalism in contrast to the "vertical" model of the Anglo-Saxon world.

At the level of financial arrangements, the horizontal distribution of functions is matched by the prevalence of revenue sharing. All major taxes (income, corporate income, value added taxes) accrue to federal and state governments jointly. Legislation on taxes is uniform and centralized. Parliaments of regional jurisdictions have no power to

legislate on taxes despite the fact that some smaller taxes continue to be assigned to state or local governments. All taxes are assessed according to the same national tax code—in particular as regards the tax base.[15]

Virtually every law affecting the interests of the states has to pass the *Bundesrat*, the states' legislative assembly. It is a true states' House, unlike the equivalent in other federations like the United States, Canada, or Australia, in the sense that its members are appointed by state governments, recalled by them, and strictly bound by the directives of their respective governments. The status of the *Bundesrat* in federal legislation has given the German states jointly a very strong position that counterbalances the loss of individual state sovereignty in specific areas.

General Arrangements

EXPENDITURE ASSIGNMENT. As to the vertical distribution of responsibilities, the Constitution assigns defense, foreign affairs, citizenship, immigration and emigration, international treaties, currency matters, federal transport, and postal and telecommunication services to the federal government. The states are responsible for culture, education, law and order, environmental and health policies, as well as regional economic policy. Municipalities act in fields such as communal services (sewerage and so on), health, sports and recreation, school building, housing, and road construction. Yet in light of the foregoing remarks, it would be wrong to expect this division of functions to be reflected in government outlays, given the high degree of horizontal integration of functions. For instance, social policy (including health and education) is exerted at all levels of government. The same is true for investment in infrastructure (roads, communication, structures) where responsibilities are shared. Since higher levels of government tend to delegate the execution of much of their functions to lower levels, outlays by level of government are a poor indicator of responsibilities. For instance, local governments disburse about two-thirds of all public capital expenditure, much of which is commissioned by higher levels of government.

The distribution of expenditure functions among layers of government is found in Table 6-3.

TAX ASSIGNMENT AND REVENUE SHARING. In Germany, the power to legislate on specific taxes has to be seen as totally distinct from the right of each layer of government to appropriate the proceeds from these taxes. Tax legislation is fully centralized. Tax assignment to specific levels of governments is secured by the Constitution, with only minor adjustments to be made through federal legislation. Major revisions of federal financial arrangements can be made only through an amendment of the Constitution requiring a two-thirds majority in both houses of the federal parliament.

The significance of taxes directly assigned to each layer of government is small in Germany. The main federal taxes (14 percent of total taxes in 1992) are excises, the most important of which are those on mineral oil, tobacco, and alcohol (except beer). The federal government has the right to levy a surcharge on income taxes.[16] The main state taxes

15. Some discretion as to the setting of tax rates is accorded to local governments, however.

16. Surcharges on income taxes were introduced toward the end of the sixties as a countercyclical device for demand management, but they soon became outmoded. After more than twenty years, such levy is now being used to finance the unification process.

(5 percent of total taxes) are the motor-vehicle tax and the net wealth tax—a rather unimportant levy in Germany. Apart from the local business tax, municipalities employ a property tax as well as communal levies on public services (utilities). Local governments collect about 8 percent of all taxes.

All of the most important revenue sources are exploited by shared taxes in Germany. The wage and assessed income taxes, the corporation tax, and VAT (which together yield about three-quarters of total tax revenue) are all jointly appropriated. In addition, the local business tax—although officially not a joint tax—is shared by all levels of government. From its share of VAT, the federal government has to finance the contributions to the budget of the European Union.

The vertical distribution of income taxes is fixed by the Constitution (see Table 6-4), and, except for grants, any adjustment of the vertical distribution of public funds is exclusively effected through the shares of turnover taxes (VAT) to be renegotiated between federal and state governments. The result of this bargaining is cast into a federal law requiring the consent of the *Bundesrat*.

Table 6-3. The Structure of Public Expenditures by Level of Government, 1992

Level of government	*Percentage of total expenditures of territorial authorities*
European Community share	3
Federal government	36
Länder	35
Local govenments	24
Total of territorial authorities	**100**
Social security funds	62
Special funds	5

Source: Statistisches Jahrbuch 1993 für die Bundesrepublik Deutschland, p. 533; and author's own calculations.

Table 6-4. Vertical Distribution of Joint Taxes Among Levels of Government in Germany (after Federal Consolidation Program)

	Percentage of revenue collected		
Joint tax	*Federal*	Länder	*Local*
Personal income tax	42 1/2	42 1/2	15
Corporate income tax	50	50	0
Value-added tax	56	44	0

Source: Grundgesetz; and Federal Consolidation Program.

The horizontal distribution of income taxes follows the regional pattern of tax yields according to the residence principle, with special rules for the apportionment of the corporation tax. The regional distribution of VAT is essentially on a per capita basis (which implies a strong implicit equalization effect).

VERTICAL GRANTS AND COOPERATIVE FEDERALISM. Before unification, the German federal machinery did not employ vertical general-revenue grants to any substantial degree. They would have made little sense within tax sharing arrangements that allow vertical adjustments through the share of VAT. However, the federal government used a small portion of its VAT for asymmetrical vertical equalization: so-called supplementary grants. These are unconditional, and they are designed to support the poorer states of the federation. After unification and with the implementation of the Federal Consolidation Program discussed below, asymmetrical vertical grants will become more important.

Furthermore, there were and are vertical specific grants that imply federal cofinancing of state projects. These grants are conditional, and they operate within a complex network of interstate cooperation. Such cooperation is governed by a great number of treaties and agreements among authorities and cannot be discussed here. Only two more important constitutional provisions for policy coordination are reviewed in some detail: "joint tasks," which imply joint decisionmaking and responsibility sharing in combination with joint planning and financing, as well as specific grants-in-aid. These are peculiar features of the German federal arrangements.[17]

These elements of cooperative federalism were introduced in 1969, when it had become clear that federal legislation alone was not sufficient to coordinate policies at the central level. The federal division of functions—with framework legislation assigned to the center and the implementation of policies to the lower tiers of government—was deficient in view of the (then important) objective of coordinated stabilization policies.[18] The model precluded the federal government from setting guidelines or prerogatives within those areas in which policies cannot be controlled by legislation—that is, the provision of public goods and services, especially public infrastructure. It was in these policy domains that the planning and spending functions attributed to the *Länder* proved to be more important than the legislative functions assigned to the federal government.

The two instruments created in 1969 were "joint tasks" (*Gemeinschaftsaufgaben*) according to Articles 91a and 91b, and grants-in-aid (*Finanzhilfen*) according to Article 104 a(4) of the Constitution. Joint tasks are determined for five policy areas.[19] Grants-in-aid are given to the states for regional and local investments within certain policy areas to be defined by federal law or by federal-state agreement. Again the uniformity-of-living-conditions principle is visible in these arrangements. The Constitution stipulates that such grants are to be used only for equalizing regional disparities, for stabilization, and for stimulating growth.

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17. For a fuller discussion see, for instance, Reissert (1978).

18. The centralization of competence as a consequence of policy coordination for stabilization purposes reached its peak at the end of the sixties, when Article 109 *Grundgesetz* was amended (1967), the *Stability and Growth Law* was enacted (1967), a Business Cycle Council (*Konjunkturrat*) and a Finance Planning Council (*Finanzplanungsrat*) were established, and the principles governing the budgets of federal and state governments were harmonized (1969).

19. These are *(i)* University construction, *(ii)* regional policy, *(iii)* agricultural structural policy and coast preservation, as well as *(iv)* the planning of education, and *(v)* the fostering of research to the extent that these are of supraregional importance.

The new provisions have legalized anterior practices by which the federal government had provided funds to the *Länder* on a bilateral basis. The new instruments instead stress multilateral agreement, at least for the joint tasks. Agreement is reached within so-called "planning committees" (*Planungsausschüsse*), wherein the federal government shares the votes with all of the states. All state projects adopted by the federal government and a majority of states are jointly planned and financed. These instruments have increased the scope for central government intervention in many ways, not only through their impact on the planning process (in particular on the selection of projects), but also through the potential threat to withdraw federal cofinancing, which usually covers half of the costs.[20]

The vertical distribution of resources according to source and transfer category including the effects of cooperative federalism are depicted in Table 6-5, which characterizes the *status quo* prior to the Federal Consolidation Program. The amendments by this program, which account for the situation after unification, are described below.

HORIZONTAL GRANTS AND EQUALIZATION. One particular feature of German federalism is the existence of interstate equalization, the *Finanzausgleich*. This equalization is achieved through a specific set of rules governing a "brotherly" second-round redistribution of means among the states. The following portrayal describes the status before unification when the federal government was not involved in this process (except for legislation); the amendments accommodating entry of the new *Länder* are described below.

The process starts from

- a definition of a state and local fiscal capacity measure for any one *Land* (*Steuerkraftmesszahl*), which is roughly the sum of state tax revenues corrected for special burdens and local tax revenues adjusted for population density, the degree of urbanization, and so on. This measure is then related to

Table 6-5. Sources of Revenue for Each Level of Government in Germany *(before Federal Consolidation Program)*

	Percentage of total revenue		
Revenue source	*Federal*	*State*	*Local*
Exclusive taxes	22	9	4
Shared taxes	70	64	30
Unconditional bloc grants	-	1	11
Specific purpose grants	-	14	11
Other	8	12	43
Total revenue	**100**	**100**	**100**

Source: Spahn (1993).

20. The federal contribution varies. It is 60 percent for agricultural policy measures, and 70 percent for coast preservation.

- an equalization yardstick for this particular *Land* (*Ausgleichsmesszahl*), which is derived from the average per capita fiscal capacity of all participating states multiplied by the population of that *Land*.

Any shortfall of fiscal capacity in relation to the yardstick is equalized in steps with graduated rates. A uniform average is not secured, yet there is a guarantee that fiscal capacity (including equalization payments) should reach at least 95 percent of the average for the states as a whole.

Equalization payments are made by those states, the fiscal capacity of which exceeds the yardstick, again in graduated contributions. The system works as a clearing mechanism, that is, payments made by the financially stronger states always equal the sum of receipts of the weaker states.

Financial settlement among states had a rather strong equalizing effect in the past.[21] In the beginning, the mechanism worked reasonably well. Yet the burden of the settlement was consistently shifted onto two states—Baden-Wuertemberg and Hesse—while all others either benefited or were exempt from contributing to the scheme. This had led to political tensions among the states even before unification. The Federal Consolidation Program has changed these provisions and complemented it by asymmetrical vertical grants, yet the philosophy of financial settlement remained virtually intact.

BORROWING. The institutional limits on deficit financing in Germany are twofold:

- Para. 20 of the Law on the *Bundesbank* restricts borrowing from the central bank by all tiers of government. (Local governments have no access to this form of financing at all.) There are ceilings for this type of borrowing fixed by legislation, and the amounts involved are rather small.
- The Constitution restricts federal government borrowing to the "amount of projected outlays for investment purposes in the budget" (golden rule). Similar rules apply to *Länder* budgeting in accordance with state Constitutions or legislation. Borrowing by local governments is tied to their cash flow and is subject to state control.

Budget constraints thus appear to be rather tough in Germany. Low inflation, a strong currency, and the financial stability of the German public sector are often attributed to the "quasi-constitutional" limits to central bank financing. In principle, this nexus cannot be denied—especially since legislation has rendered the *Bundesbank* legally independent from federal and state intervention. Yet one could argue that the system had not been put to any severe test and that it had worked largely because it was based on a consensus formed by all political parties and interest groups—in particular, trading partners. The test of German unification made it clear, however, that judicial control of budget deficits is difficult to achieve, even *with* constitutional constraints.

Even before unification, the budget constraint was "softened" in many respects:

- The meaning of "investment purposes" is far from clear. Without much difficulty in some instances, one could redefine current outlays to represent investment outlays.

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21. Compare the calculations made in Spahn (1977, pp. 222 ff.).

- A 1969 amendment to the Constitution permitted the federal government to raise loan money in order to combat "disturbances of general economic equilibrium." This rule is even more difficult to monitor in quantitative terms. The provision was introduced in the heydays of macroeconomic demand management. Application of this rule reached its climax only recently, however, when "disturbance of general economic equilibrium" was related to the consequences of unification.
- German unification with its massive needs to transfer resources from one part of the country to the other encouraged yet another strategy to dissimulate budget deficits and to soften legal budget constraint: "off-budget" funding. All such funds rely heavily on loan finance.

Central bank independence is, in fact, the cornerstone for budgetary discipline of the German public sector. Yet deficit financing is much "softer" than it may appear at first sight. Recently restrictive constitutional rules and monetary policies could not prevent the German public sector from running significant deficits. While, in 1990, the debt/GDP ratio was 43 percent (to which *Länder* contributed 14 percentage points and local governments only 6 percentage points), this ratio jumped to two-thirds of GDP by the end of 1994.

The repercussions of German unification on deficit financing and public debts are shown in Table 6-6, which illustrates government borrowing and accumulated debts by level of government at the passage to the new federal arrangements. The table also reveals the importance of off-budget financing in this context.

Table 6-6. Indebtedness of German Public Budgets by 1994

	End-of-year indebtedness		*Deficit*	
Category	*Billions of DM*	*Percentage of GDP*	*Billions of DM*	*Percentage of GDP*
Level of government				
Federal	750.5	23.2	71.0	2.2
States	467.0	14.4	42.0	1.3
Local	177.0	5.5	10.0	0.3
Off-budget funding				
European Recovery Program	43.0	1.3	7.0	0.2
German Unity Fund	95.0	2.9	5.0	0.2
Kreditabwicklungsfonds	140.0	4.3	-	-
Treuhandanstalt	250.0	7.7	-	-
Debts of local housing projects in East Germany	30.0	0.9	-	-
Federal railways (*Bundesbahn*)	79.5	2.5	9.5	0.3
Federal mail (*Bundespost*)	129.0	4.0	11.0	0.3
Total	2,161.0	67.0	155.5	4.8

Source: Deutsche Bundesbank (1993); DIW (1993); Gemeindefinanzbericht (1993); Institut der deutschen Wirtschaft (1993); Müller (1993); and the author's own calculations.

Administrative Structure

TAX ADMINISTRATION. As mentioned before, the structure of administration exhibits a great variety and complexity, and the central government plays only a modest role in direct administration. This is particularly true with regard to revenue raising, which is effected by tax offices that are part of state administrations. According to the Constitution (Art. 108), the federal government is to administer customs duties, fiscal monopolies, excises subject to federal legislation (including on imports), and charges imposed within the framework of the European Union. All other taxes, in particular income taxes and VAT, are administered by the *Länder*. To the extent that taxes accrue wholly or in part to the federal government, *Land* revenue authorities act as agents of the federation and are entitled to cost restitution for the services rendered. The organization of tax administration is, however, uniform, standardized, and highly coordinated by federal legislation or intergovernmental agreements, as is the ruling on fiscal courts and the training of tax administrators.

As to taxes, the revenue of which accrues exclusively to local governments, their administration is wholly or in part transferred, by the states, to communal revenue authorities.

BUDGET FORMULATION AND IMPLEMENTATION. The Constitution stipulates in Article 109 that the Federation and the *Länder* must be autonomous and independent from each other as to their fiscal administration and budgeting. However, the tiers of government are obliged to take due account of the requirements of overall equilibrium, which is achieved by federal legislation requiring the consent of the *Bundesrat*.

The Constitution (Article 110), as well as a federal law on budgetary principles for the Federation and the *Länder*,[22] coordinate the budget process and its performance through uniform principles to be observed by all authorities. Such principles extend from very general provisions (concerning gross estimates, comprehensiveness, unity, clarity, periodicity and antecedence, efficiency and cost effectiveness, and authorization to spend and to commit resources) to more specific rules (regarding the preparation of the budget; accounting and the rendering of accounts, including the classification of the budget; auditing and discharge), and to rules applying for special funds set up under federal or state legislation. Also, the budget process was rendered more transparent in order to assess the budget's effects on the general course of the economy. The second part of this legislation contains regulations that are generally and directly applicable to the Federation and the *Länder* (for example, multiyear financial planning and the exchange of budget related information).

The annual budgets (calendar year) must be embedded in a medium-term financial plan that is established jointly by the Financial Planning Council representing all three tiers of government. Its objective is to reach agreement on the coordination of general budgetary policy and to support the federal government in its statutory task to achieve a harmonized stability-oriented budgetary and fiscal policy. The Financial Planning Council is, however, bound by the Constitution to respect autonomous and independent fiscal administration of states and the right of self-governance of municipalities. It therefore

22. This law of 1969 was published in English, together with other relevant material, under the title *Federal German Budget Legislation*, by the Federal Ministry of Finance, Bonn, November 1988.

acts through recommendations that are nonbinding yet have a strong impact on budget estimates and budget execution (including the level of borrowing).

Macroeconomic Implications

Toward the end of the sixties, Germany pioneered legislation on macroeconomic management. A Stability and Growth Law committed the federal government to accomplish certain macroeconomic targets and provided a number of specific instruments enabling authorities to pursue demand management policies effectively. An intergovernmental Business-Cycle Council (*Konjunkturrat*) was established to guide governments in coordinating their budgets (apart from medium-term planning), and an attempt was made to influence trading partners through concerted action (*Konzertierte Aktion*). Yet formal coordination essentially failed—except for the very beginning. The crises of the early seventies were found to be structural in nature, and the arsenal of policy instruments provided by legislation was considered inappropriate for such purposes. Furthermore, macroeconomic demand management had rapidly become unfashionable in Germany, and the instruments provided by the Stability and Growth Law were out of vogue.

However, fiscal federal arrangements allowed the federal government to take a lead in reacting to economic shocks provoked by the oil crises, and it was possible to restore macroeconomic stability in conjunction with the central bank policy during the eighties. During the same period, the rapid expansion of social expenditures was curbed, and financial stability was maintained at all levels of government—despite weaknesses in the economy. Ironically, the instruments created for demand management a quarter of a century ago were revived to meet the greatest challenge to fiscal policy in recent years: German unification.

German Unification

BACKGROUND. On October 3rd, 1990, five new Eastern states, which had formerly been administered centrally by a socialist government, joined the Federal Republic of Germany.[23] The West German currency was adopted even before unification, and the tax system was introduced in rapid steps almost entirely.[24]

The effects on fiscal federal relations were and still are enormous. Productivity levels are significantly lower in the East. This—together with concomitant unemployment and short-time work—reduces taxable capacity. On the other hand, demands for government services are colossal. Without equalization payments from the West, large public sector deficits would have burdened Eastern German state and communal budgets. This called for a fundamental revision of fiscal federal arrangements in Germany.[25]

PRELIMINARY RESPONSE. Vertical tax assignment remained unaltered under the new conditions. In addition, the horizontal tax apportionment of shared income taxes did not

23. East Berlin merged with West Berlin, which had formerly existed as a West German state under special rule (still being controlled by the Western Allies of World War II). There are plans to merge Berlin with Brandenburg toward the end of the decade.

24. Some taxes—like the wealth tax—will not be introduced in East Germany since its administrative burden was considered too heavy for the new states. There are also some minor tax concessions given to the residents of Eastern states.

25. For further details on German unification, see Föttinger and Spahn (1994).

pose major problems since the residence (or tax yield) principle is applied. From an equity point of view, however, income taxes are distributed very unevenly. This problem is exacerbated by the progressivity of the tariff since income levels are much lower in the East.[26] On the other hand, the distribution of VAT became a major political controversy since it is apportioned on a per capita basis. This implies strong horizontal equalization effects at the expense of Western state budgets. Nevertheless, and in spite of initial resistance by Western *Länder*, the system now applies to Germany as a whole—letting the East benefit significantly from the higher taxable capacity of the West.

However, Western states would not allow their Eastern counterparts to participate in the horizontal equalization arrangements.[27] An immediate integration of the new *Länder* would have jeopardized the entire system of intergovernmental solidarity, and a new intergovernmental transfer scheme was needed. This led to the creation of the extrabudgetary German Unity Fund as a temporary device. Yet new rules on intergovernmental financial relations as stipulated by the Treaty on Unification were established from 1995 on.

The objective of the German Unity Fund, inaugurated in 1991, was to strengthen the inadequate revenue basis of the new *Länder* by unconditional grants. Originally, a sum of DM 115 billion was to be channeled through this Fund to the Eastern states for 1990-94, which turned out to be DM 160 billion at the end of 1994. Of the latter amount, DM 50 billion are contributions from the Federation, DM 16 billion derive from state budgets, and the remainder was borrowed from capital markets. The servicing of these loans is carried by the federal government as well as Western state and municipal authorities in equal proportions. The new *Länder* are apportioned resources from the Fund according to their population, and they are obliged to hand down to their municipalities 40 percent of payments received.

Further income transfers supporting Eastern governments and citizens included specific-purpose payments by the federal government; investment credits of the European Recovery Program (ERP); direct transfers from the West German unemployment insurance scheme and pension funds; and direct payments from the old *Länder*.

Table 6-7 illustrates the transfers and benefits appropriated by regional governments and private households of the new states, yet it does not picture the full scale of interregional support accorded to the East German economy. In order to facilitate transition from a socialist to a market-oriented economy, some additional extrabudgetary institutions were created that all affect interregional transfers and government finance.

EXTRABUDGETARY FUNDING. The more important federal institutions involved in the transition process are *Treuhandanstalt* (THA) and *Kreditabwicklungsfonds*.
Treuhandanstalt is a state agency or government trust in charge of privatizing East German businesses, the formerly state-owned corporations. It is controlled by the fed- eral Ministry of Finance. At the start, it was hoped that THA could eventually generate a surplus from selling off the formerly state-owned Eastern economy. However, the capital

26. This effect is accentuated by special deductions from the tax base accorded to residents of the former German Democratic Republic.

27. If the scheme had been extended to the new states without modification, all of the former beneficiaries of equalization payments in the West would have turned into contributors, and the total volume of clearing payments would have quintupled (from 5 to 25 billion DM).

Table 6-7. Net Public Transfers to East Germany
(billions of DM)

Category	*1991*	*1992*	*1993*	*1994*[a]
Transfers to new *Länder* and municipalities	108.3	113.5	125.9	130.0
German Unity Fund[b]	35.0	33.9	35.2	34.6
Outlays of federal government	59.2	65.1	72.2	76.0
VAT distribution of the *Länder*	10.8	11.5	12.0	12.5
Outlays of old *Länder*	2.0	2.5	3.0	3.0
Revenue losses[c]	1.3	3.0	3.5	3.9
Social insurance funds	20.9	32.1	37.0	35.5
Unemployment benefits	20.9	30.6	32.1	28.5
Pension scheme	-	1.5	4.9	7.0
Total transfers	129.2	148.1	162.9	165.5

a. Estimated.
b. In 1990, DM 22 billion.
c. Investment subsidies given as tax rebates.
Source: Joint Report of the leading economic research institutes and Federal Ministry of Finance (1993).

stock to be privatized was largely obsolete, and its real value was far below expectations. Massive subsidies had to be given to potential investors as incentives to buy firms and to sustain jobs, thus the value of the capital sold proved to be negative.

THA had a limited existence and was wound up at the end of 1994. However, it was still responsible for supervising the 40,000 sales contracts and for disposing of the remaining real estate. The organization leaves the central government with a net debt of about 250 billion DM, of which slightly more than 40 percent was incurred on restructuring and investment costs; the remainder reflects operating losses. It also handed over to the federal government the care for a number of unsold "industrial core" firms with about a quarter of a million employees requiring an estimated 45 billion DM for restructuring.

Kreditabwicklungsfonds is a fund created to service debt inherited from the former GDR government and from currency conversion. When the German economic, monetary, and social union was inaugurated in July 1990, private demand deposits and savings (up to a limit per East German citizen) were converted into deutschemark at parity. Savings above this limit, and other financial assets and liabilities, were converted at DM 1 = M 2. Since assets of most banks were transformed into deutschemark at a lower rate than liabilities, net assets of the banking system had to be topped up by claims against the Conversion Fund (*Fonds Währungsumstellung*). These obligations amount up to approximately DM 110 billion, liabilities not resulting from currency conversion to DM 30 billion (Deutsche Bundesbank 1993).

THE "NEW" SYSTEM OF FISCAL FEDERAL RELATIONS. Besides the intensive use of loans, an income tax surcharge of 7.5 percent on all income tax payments was applied

from July 1991 until June 1992. The proceeds of this surcharge accrued solely to the federal government. Furthermore, the VAT rate was raised from 14 to 15 percent at the beginning of 1993. Finally, the mineral oil tax and the insurance tax were increased.

As regards the interstate equalization scheme, it was temporarily effected for the two groups of states in isolation—waiting for a final solution. This form of redistributing public revenue is of minor interest to the Eastern states, which all command resources at an evenly low level.

The new system of fiscal federal relations introduced in 1995 had passed the federal parliament (*Bundestag*) in June 1993 as part of the so-called Federal Consolidation Program (FCP). This package of bills was to establish a solid and lasting basis for German fiscal federal arrangements.

The FCP made the following provisions concerning the financial equipment of *Länder* budgets:

- In order to compensate the old *Länder* for the extra burden imposed on them, VAT shares between the federal and the state level were changed from 63/37 percent to 56/44 percent, which increases the scope of implicit equalization significantly.
- The new *Länder* are fully integrated in the horizontal equalization scheme. The equalization formula was changed in some respects (for example, the progressivity of payments made by rich states was reduced).
- The formerly less important asymmetrical vertical grants have become more salient. The former federal supplementary grants were replaced by two types of unconditional grants. Type A grants are given to financially weak states in both the East and West. These funds make up for the shortfall of revenue, after interstate equalization, of 90 percent of average fiscal capacity per capita. Grants are also given to some of the Western states in order to countervail losses they suffer as a result of incorporating the Eastern states into interstate equalization (*Fehlbetrags-Bundesergänzungszuweisungen*). Type B grants, which are also unconditional, are given in response to the "special needs" of some of the states (*Sonderbedarf-Bundesergänzungszuweisungen*).[28] Additionally, the severely indebted states of Saarland and Bremen will receive financial aid for the amortization of outstanding debt. The Eastern states will obtain conditional grants-in-aid for a ten-year period in order to foster investment and economic growth.
- The federal government will be compensated by the reintroduction of an income tax surcharge of 7.5 percent on all personal and corporate income tax payments. Furthermore, savings are expected from the termination of transfers to the German Unity Fund as well as from other expenditure cuts (for example, the reduction of unemployment benefits).
- An important new financial institution to be created in this context is a sinking fund, the so-called Inherited Burden Fund (*Erblastenfonds*). The fund will take over all debt and liabilities inherited directly or indirectly from the vanished German Democratic Republic. It comprises the debts of the THA, of the

28. These needs result from the relatively high costs of political administration incurred by small states and the still enormous deficiencies of Eastern states with regard to public infrastructure.

Kreditabwicklungsfonds, and of East German local housing projects. More than DM 400 billion will have to be amortized within the next thirty years.

Table 6-8 shows estimations of the claims and obligations resulting from FCP in 1995. Compared with the interim solution of the period 1990-94, with the German Unity Fund as the main pillar, the Eastern *Länder* now receive an additional amount of DM 19.8 billion, the bigger part of which is borne by the federal budget (DM 17.7 billion). Only a small burden is heaped upon the Western *Länder* (DM 2.2 billion).

Table 6-8. The Effects of the Federal Consolidation Program on Federal and State Budgets in 1995 (billions of DM)

Category	*Federal government*	Länder *West*	Länder *East*
	Claims and obligations		
Inherited Burden Fund	*37.5		
VAT distribution and interstate equalization	*18.1	*16.8	+34.8
Unconditional grants Type A	*6.4	+2.3	+4.1
Unconditional grants Type B	*7.0		+7.0
Grants-in-aid	*10.0		+10.0
Special aid to Saarland, Bremen	*3.4	+3.4	
Other expenditures	*5.8	+1.4	*1.4
Total	*88.2	*9.7	+54.5
	Sources of refinancing		
Expenditure cuts	+4.4	+3.0	+1.2
Cuts of subsidies	+4.8	+1.8	+0.1
Income tax surcharge	+28.0		
Total	+37.2	+4.8	+1.3
	Winding up of former claims and obligations		
German Unity Fund	+17.6	+7.2	*29.8
Berlin support	+6.2		*6.2
Debt service *Kreditabwicklungsfonds*	+5.0		
Former federal supplementary grants	+4.5	-4.5	
Total	+33.3	+2.7	*36.0
Net redistribution effect for 1995	*17.7	*2.2	+19.8

* outlays
\+ revenue
Source: Ministry of Finance (1992, 1993); and *Institut der deutschen Wirtschaft* (1993).

Conclusions

German fiscal federal relations have created a high degree of homogeneity with regard to public infrastructure and government services. This is the basis on which the economy thrives. The financing of public services is mainly based on shared taxes and equalization arrangements stressing the uniformity of living conditions in the nation as a whole, and on horizontal cooperation among layers of government. This has not prevented regional authorities from exerting an influential role within the realm of their own jurisdiction and at the level of the Federation.

The spirit of these arrangements has survived the strain put onto the system by German unification. However, the experience of the FCP has revealed the solidarity among the *Länder* to have limitations. VAT sharing, with its implicit equalization effects, as well as asymmetrical vertical grants by the federal government were preferred to explicit horizontal redistribution as embodied in the *Finanzausgleich*. These developments, however, will strengthen over time the role of the federal government through its increased participation in intergovernmental finance.

A European's View on Fiscal Federal Relations in China

This final section must begin with a word of caution: any foreign scholar of federalism cannot do justice to the cultural heritage and traditions of China when commenting on its intergovernmental relations and options for reform. Intergovernmental relations are largely shaped by historical processes in all federations of the world. The models adopted vary widely, and all of them seem to work reasonably well within the country's political and constitutional framework. This does not preclude institutional change and innovation, yet the philosophy of federal arrangements in each country seems to be firmly rooted, and it is not abandoned very easily—as illustrated by the German case after unification.

There are a great number of studies relating to intergovernmental relations in the context of other federations, and conforming policy recommendations for China.[29] These studies will not be commented on here. Rather, the author wants to address some of the key problems relating to Chinese reforms from the standpoint of how a European would tackle these problems.

Expenditure Assignment

It is crucial for China's intergovernmental fiscal relations that expenditure functions be assigned clearly and unequivocally to avoid duplication, political conflict, and a waste of economic resources. The theory of federalism provides guidance in establishing such a division of functions. Also, international comparisons may help in many respects.

Outlay functions should be assigned to the provincial level whenever demand for public services differs among regions. Each region can then tailor its public services to local demand, an arrangement that is more efficient than a uniform provision of the service. This is the essence of the "decentralization theorem" of the theory of federalism. The European Union has even reversed the burden of proof by adopting the

29. See, in particular, Ahmad, Craig, and Searle (1994); Ahmad, Craig, and Mihaliek (1994); Ahmad, Lee, and Kennedy (1993); Anonymous (1994a, 1994b); and Gao Qiang (1993a, 1993b).

"subsidiarity principle" according to which public functions should be exercised at the lowest possible tier unless they are proven to be serviced more effectively at a higher level of government.

Moreover, political identities are primarily formed at the local level. National identities are more abstract and are acquired only at a later stage of political development. This is why education and support of cultural activities, for instance, are such important functions of regional government. Education and culture also serve as a powerful tool to protect and preserve regional minority groups. Other important regional functions are public order, public welfare, health care, regional and local land planning, roads, the use of water and other resources, the protection of the environment, the fostering of research, science and arts, universities and vocational training.

Decentralization of functions may be warranted on administrative grounds. Provinces are typically closer to citizens and their problems than is the central government, and they may administer certain functions more competently. Decentralization on these grounds is almost dictated by the sheer size of China: some provinces rival the biggest European nations (except Russia) in population size. This does not exclude the possibility that provinces operate within national framework legislation or perform delegated state functions on behalf of the central government.

The allocation of expenditure functions among the tiers of government will have a bearing on intergovernmental relations as well. For instance, autonomous provincial functions require the availability of unconditional revenue, which must be either own funds or closed-ended general grants but can be used at the discretion of the region. Provincial services provided within the realm of national policies may be consistent with special-purpose payments conditioned on observing national standards or framework legislation. Delegated functions, finally, would seem to require open-ended cost coverage grants (gap filling). In the latter case it is essential that the central government has full control over the expenditure side and that inefficient cost maximization by provinces be avoided.

Tax Assignment

Once a clear division of functions has been established, the next step is to solve the tax assignment problem. This problem is often exacerbated by constitutional or political constraints, and occasional adjustments are necessary in order to take new developments into account. The assignment of taxes is crucial for vertical fiscal balance as well as first-round horizontal equalization. A robust local tax system may mobilize additional resources for public services as well as enhance the efficiency and equity of the tax system as a whole.[30]

Europeans tend to assign customs duties and indirect taxes to the central government, and direct taxes to regions. This is true for the European Union as a whole, and it also applies—in principle—to Germany and Switzerland. The major taxes can be exploited conjointly between tiers of government. The value added tax is shared by the European Union and its member states, as it is shared between the federal and state governments in Germany. The sharing of income taxes is strictly applied only in Germany, whereas Switzerland uses income taxes concurrently at all levels of government.

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30. See Chapter 9 of this report.

China has adopted the sharing of VAT among central and provincial governments. However, the level of personal income tax is still low, and there is little scope for sharing the tax between levels of government at present. The corporate income tax—which is now assigned to governments according to the ownership principle—may become subject to tax sharing in the near future.[31]

Discretionary Tax Policy

Discretionary tax policy of lower level governments is very high at the European level. It is substantial for cantons of the Swiss Confederation, but nonexistent for the German states where national legislation, requiring the consent of the states, establishes uniform rules. However, even Germany accords some limited tax discretion to its local governments, albeit not for income taxes.[32] Where it exists, discretion is highest in the realm of income taxation. In Switzerland, where income tax bases are increasingly harmonized, cantonal sovereignty is reduced to the setting of tax rates. Regional taxes would then become similar to surcharges on a national income tax base. In Germany, the levying of a surcharge on income tax (not base) is a privilege of the central government. This is motivated by its responsibility for macroeconomic stabilization policies.

There is thus no uniform approach to tax sovereignty in Europe, yet there is wide agreement among economists that some tax discretion should be given to lower levels of governments—especially to municipalities. This discretion includes, of course, the right to borrow.

Readjusting Vertical Fiscal Imbalances

The first-round arrangements should ideally avoid total vertical financial balance if some scope for vertical equalizing grants is taken into account. The purpose of the first round is to provide all governments with sufficiently high levels of general finance to allow them to function at a minimum level. If a robust horizontal distribution criterion (like weighted population) is embedded in these arrangements for a major joint tax, like VAT, the achievement of this goal does not require complicated comparisons of standardized budgets. Also, adjustments to vertical fiscal imbalances can easily be effected within the realm of tax sharing—as illustrated by Germany for VAT.

It is not easy, however, to determine vertical financial imbalances (except in extreme cases like Australia). If all layers of government are allowed to incur debt, the problem of vertical fiscal balance might be severely blurred. One rule should be to look predominantly on current expenditures (including the servicing of outstanding debt) and regular revenue (including general revenue grants and tax sharing means that are available on a recurrent legal basis). These budgets should then approximately be balanced at vertical levels on average, and they also should allow some saving for the capital budget.[33] Capital budgets should ideally be financed by borrowing where the "golden rule" ap-

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31. Ibid.

32. The discretion is given for the land tax and the business tax (local tax on gross capital and gross profits of enterprises).

33. If current budgets cannot be balanced among the tiers of government, the only adjustment is through tax policy, not through institutional redesign.

plies.[34] Public borrowing at all levels should be subject to institutional constraints at the macroeconomic level, which requires some intergovernmental policy coordination.

In the long-term, tax assignment cannot avoid emerging vertical fiscal imbalances. Any assignment of taxes is arbitrary as to the development of outlay functions over the long run. Tax sharing allows a flexible response to such structural changes by adjusting the proportion each tier of government acquires from the common revenue pool. This is the solution adopted in Germany, where the share of VAT is continuously adjusted to expenditure developments; it is also the method used to adjust VAT sharing at the level of the European Union.

In China, a certain degree of fiscal imbalance in favor of the central government is desirable since it creates the potential for equalization through asymmetrical vertical grants. If no vertical fiscal imbalance, on average, existed, the central authority would have no room for equalization payments to the provinces. This is essentially the reason why explicit equalization provisions in Germany, where a vertical balance is aimed at, are established mainly at the horizontal level.[35] Since an exclusively horizontal equalization scheme seems to be out of the question for China, equalizing vertical transfer payments requires financial scope at the center level.

Some vertical imbalance in favor of *particular* regions may be tolerated for the sake of political stability. For instance, if a resource tax is fully pooled, a significant portion of the tax might be returned to the region where the resource is located. This portion may even be excluded from accounting for further equalization provisions. The resource-rich region may retain a bonus not only for reasons of political pacification, but also for reasons of extraordinary public services and infrastructure related to exploiting the taxed resource. This idea runs counter to the solution adopted in Germany, where special regional conditions leading to a higher tax potential through royalties are evened out during second-round equalization.

Regional Apportionment of Shared Taxes

The way shared taxes are apportioned among regions is of utmost importance. This is because they can incorporate a built-in first-round equalization mechanism.

If taxes are distributed according to the derivation principle, regional tax revenue will reflect regional taxable potentials (assuming a uniform tax law and identical administrative efforts). This renders strong provinces strong and leaves economically weaker provinces weak. Some would regard this as an appropriate strategy for economic development since tax money is redistributed to those provinces where the rates of return are highest. The argument is doubtful, however, mainly for three reasons:

- First, a national economy forms an integral market, and prosperity for one region hinges on economic development of other regions. Moreover, the strengthening of purchasing power in the nation as a whole may become a crucial factor for realizing economies of scale through mass production. Such philosophy was a de-

34. This means that borrowing should be used only for capital formation that exhibits financial returns to service the debt. Where there are "social returns" that cannot be realized through the market, the government budget must service the debt through current outlays.

35. It has to be recognized that equalization provisions are implicit in the first-round distribution of shared taxes, in particular of VAT, and that the federal government—in a "third round"—exerts some residual equalization in Germany, especially after unification.

cisive element in the success of Ludwig Ehrhard's "social market economy" (*Soziale Marktwirtschaft*) in Germany.

- Second, prosperous regions today may face structural difficulties tomorrow, and some regional diversification of infrastructure may thus be welfare enhancing over a long period. For instance, Germany has experienced a relative decline of the formerly prosperous North, while the previously "backward" South is now the engine of growth through its modern industries and services. The equalization scheme should flexibly respond to such structural change—as it has in Germany.
- Finally, in the context of the Chinese economy with its still largely administered pricing system, it is by no means clear whether the now buoyant sectors or regions of the economy can sustain their prosperity under fully liberalized market conditions. Administered prices may shift profits to fundamentally nonviable industries while artificially reducing profits in other economic sectors. The latter could then flourish once they are allowed to adopt competitive pricing and cost-cutting policies.

Whenever such conditions prevail, tax policy operates in a "second-best world," where equalization provisions can even be welfare enhancing. Of course, the main rationale for equalization is regional fairness and equity, but this argument hardly convinces the provinces that are currently prospering in China. The efficiency argument may be more convincing here.

Nevertheless, the derivation rule for shared taxes is strong and universal. It is used for personal income taxes in Switzerland and Germany where the residence principle applies. The rule is more difficult to apply to the corporate income tax if firms operate at the supraregional level. In these cases both European federations try to apportion the yield among regions according to indicators of regional economic activity.[36] The derivation principle applied to VAT, as in China, seems to exhibit undesirable and potentially disruptive consequences, however.

A value added tax is essentially a tax on consumption. It zero-rates exports as it exonerates the formation of capital. Exporting regions could lose under such a scheme (through the tax credit to exporters) while importing regions could benefit (through the collection of import tax). China has avoided such consequences by allowing the central government to collect the import tax while reimbursing exporters for their export tax from the central budget. This must impinge on the vertical fiscal balance of the Chinese tax system, however. To the extent that China's trade balance experiences fluctuations (swinging from surplus deficit and back again), such oscillations are reflected in the central government's budget and in a dynamically unstable vertical fiscal balance. Moreover, the Chinese VAT sharing system does not correct for the fact that most investing provinces collect relatively less revenue (through the tax credit to investors) than do consuming provinces. This also implies a bias against industrial regions with heavy investment requirements, since it favors provinces that supply chiefly the less capital-intensive services.

Germany avoids such consequences by distributing its VAT mainly according to population—which entails a significant redistribution effect in favor of poor regions. An-

36. For a more detailed discussion of such indicators, see Chapter 9 of this report.

other portion of VAT is used for explicit asymmetrical vertical general-revenue grants to be given to the poorest regions by the central government. Over the medium term, it might well be appropriate for China to consider some implicit equalization mechanism for the first-round tax distribution of VAT. At least one part of VAT could be distributed according to population (or some other indicator of fiscal need), while the remainder could continue to be distributed on the basis of local yield. Population figures also could be weighted in order to account for agglomeration effects when relating the big cities to rural areas. A two-stage distribution formula could be used: one part of VAT could go to the region as such, and another part—with or without pass-down obligations—to municipalities.

The Grants System

In principle, the grants system should be neutral as to the decisions of lower level governments. The accountability and responsiveness of provinces to regional demand patterns should ideally be unaffected by the financial system. This is, of course, not fully realistic, especially in a unitary country like China where the national government pursues policy goals that must affect provincial budgets and decisionmaking. Nevertheless, the general neutrality rule has a significant bearing even within unitary government. It implies, notably, the following recommendations:

- Gap-filling grants should be avoided under almost all circumstances. The unconstrained or negotiated coverage of budget costs, typical for the previous Chinese system of intergovernmental fiscal relations, encourages inefficient spending at lower levels of government. It is thus wasteful in economic terms. Moreover, it is opaque, and it is likely to exhibit regional inequities. Grant money typically flows to the politically strong provinces, not to where it is most efficient or most needed. The only rationale for gap-filling or cost-coverage grants exists for financing functions that are mandated to lower tiers of government. In these cases the province provides the national service on behalf of the central government (which may be warranted on administrative grounds). It is essential, however, that the central government be able to control the level of spending in these cases (for example, welfare payments through national legislation).
- Grants to the provinces should, in principle, be unconditional. They should be used at the discretion of the provinces, which strengthens their expenditure responsibilities and accountability, and enables them to respond flexibly to local demand for public services. Specific-purpose payments (SPPs), an alternative to unconditional grants, often fail to achieve their respective goals. If SPPs are given for a specific service that would have been supplied by the province anyway, the SPP is tantamount to an unconditional grant since it frees general resources of the budget. If the SPP is given for a service that would not be supplied otherwise, it may fail to meet the pattern of regional demand, and spending would then be wasteful. Moreover, *spending* is different from *output*. Provincial governments may find ways to spend the SPP and still fail to meet a given output goal. This is why general revenue is preferable to SPPs since provincial budgets remain responsive to local demand.

- For a few issues, SPPs seem to be in order, however. This is true whenever the strategic behavior of provinces can be excluded (for example, for disaster relief—the grant is given in response to events outside the control of government). It is also useful to employ SPPs whenever the central government aims at realizing policy goals with qualitative elements that are not directly related to spending as such. For instance, SPPs could be conditioned on the adoption of national quality standards in the provision of health care or education. In these cases, SPPs are a vehicle for realizing qualitative policy objectives. SPPs then become a "bribe"; the spending decision of the province to use the grant or unconditional revenue is secondary.
- As mentioned before, it is doubtful whether SPPs can impose central priorities on provinces—unless spending is confused with output. However, SPPs may still be in the interest of the central government if it wants to demonstrate the political will to support a specific service even if the province would supply it anyway. This is the political "signal function" of SPPs, an entirely respectable policy goal. Such type of SPPs is employed in the case of politically sensitive issues (like minorities) where the central government must have an interest to "signal" and document policy action. However, there is an inherent tendency to proliferate that type of grant. The number of signalizing SPPs should be restricted and periodically consolidated into unconditional "bloc grants" in order to clear the "jungle" of intergovernmental subsidies.
- If SPPs are provided, care must be taken in analyzing their potential disincentive effects. Not all politically sensitive issues warrant SPPs. Unemployment, for instance, is undoubtedly a sensitive issue, yet it should not lead to corresponding SPPs. This is because such grants could be interpreted as implicit insurance that would encourage strategic behavior of provinces. Insurance contracts suffer from a series of defects that may bear on intergovernmental fiscal relations. One such deficiency is related to "moral hazard," whereby a change in behavior is induced by the very nature of the insurance contract. At the level of intergovernmental finance, this might lead to self-inflicted shocks (for instance, surrender to unrealistic wage claims), or excessive consumption by provinces. Another problem is "adverse selection," which may tend to divide China into groups of provinces with different "risks." Automatic compensation also could encourage political inactivity in the area of structural adjustment policies. Criteria like regional employment should thus be excluded from determining the level of grants because of their potential negative incentive effects. If a national unemployment insurance scheme operates at the personal level—for the unemployed—the implicit regional redistribution effects should be wholly sufficient.

Horizontal Equalization

Second-round adjustments to the primary distribution of government revenue are usually concerned with equalization. Equalization arrangements can take very different forms, and they can be made under vertical fiscal balance (as in Switzerland and Germany) or imbalance (as in Australia). In the first case, a horizontal distribution formula may be used (Germany); in the latter case, the states have to agree with the central gov-

ernment on a vertically asymmetrical grants scheme. Obviously, the states are politically much stronger in the first case, they might be somewhat at the mercy of the central government in the latter.

China is unlikely to adopt a horizontal equalization scheme as in Germany. Thus, the following relates to asymmetrical vertical equalization grants from the central government to the provinces for which actual tax assignment and tax sharing seem to exhibit a sufficiently large scope.

Equalization should be based on a formula that is general and transparent. The formula should provide general revenue as in Australia, and it must be immune to strategic behavior at the provincial level. This requires some form of revenue and/or outlay standardization, and it excludes, of course, negotiated elements of the grant system. The formula should also be based on hard statistical data that cannot be controlled by provincial governments and are available at the same quality level for all provinces.

More generally, equalization schemes of all nations have to deal with horizontal redistribution in order to equalize (i) standard own taxable capacity; (ii) standard expenditure needs; and (iii) effects of population density and agglomeration on local expenditure needs.[37] Some countries have formally adopted this approach by equalizing the difference between standard own fiscal capacity and expenditure needs, correcting it by factors that account for density and agglomeration effects (Germany). Others, like Australia, attempt to incorporate population density and agglomeration into the definition of needs.[38]

The Swiss and German federations both emphasize revenue equalization. Revenue has to be standardized in order to define the fiscal capacity of each region. This standard must be independent from provincial policy in order to avoid strategic behavior. If provinces are allowed to vary the rates of their taxes, a standard (average) rate should be used. If they prefer not to exploit a tax source that is assigned to them, potential revenue from that source should be added into the capacity yardstick whether collected or not. Once standard revenue capacity is defined for all provinces, the variations from average standard capacity can be equalized to a predetermined degree. Revenue capacity equalization by itself is a very powerful tool, although it can be argued that it fails to account for differences in needs and agglomeration.

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37. Cost differentials for supplying specific public services could give rise to equalization provisions (as in Australia). Such differentials, however, are of minor importance in a fully integrated market economy. This is true even for Australia (except for the Northern Territory with its sparse population). Where cost differentials are important, they could be dealt with specifically and not within the generalized formula since the information requirements would be high. It is also not easy to standardize costs. A formula that fails to standardize costs could encourage inefficient spending and should be considered with great care.

38. The distinction between effects (ii) and (iii) is, of course, artificial. It is warranted, however, on grounds that agglomeration affects not only the level of public services, but also the composition of the "basket" of public services. For instance, a small town may not need a subway system, while a metropolitan area will. Agglomeration effects are more important at the level of municipalities and are somewhat "evened out" at the provincial level. However, China has important "city provinces" like Shanghai and Beijing that need special considerations. A two-stage approach to regional equalization may be commendable as in Germany, where the formula distinguishes between the state and the local level of government with according weights for population size and density. For a specific discussion of the German formula, see Spahn (1994).

Germany and Switzerland make some standard corrections to the fiscal capacity yardstick by including needs and agglomeration criteria in a condensed fashion. Needs and cost differentials are taken care of by simple weighting procedures (for population density, for farmland of a certain geographical altitude, and so on) rather than by effective statistical sampling methods. Some lump-sum adjustments for different levels and composition of outlays are also effected for city states (agglomerations). However, no attempt is made to standardize regional budgets explicitly—item by item—as in Australia. The simpler European approach can be regarded as a proxy to achieving the more ambitious goal of full budget equalization. It is viable as long as it is *politically* accepted by all participating governments.

To the question whether equalization requires the standardization of budgets (as in Australia), the answer of a European scholar of federalism would thus be negative. Although the Australian approach seems to offer a "scientific formula" that appeals to those in search of an objective basis for equalization, the approach is not without risks for China. These are mainly related to the immense information requirements for budget standardization. It is doubtful whether China will be in a position—at least in the short run—to supply all the data needed for all provinces at the same level of quality. Even a simpler set of parameters bears risks since statistical criteria tend to proliferate over time when selfish political pressure is exerted to "look into more detail."

It is also questionable whether Australia has indeed found the objective magic formula for equalization—even for herself. The approach remains essentially political as to key elements (like the share to be distributed and the degree of equalization), and many parameters must be based on "informed insights" that are judgmental. Equalization is essentially a political undertaking, and distributional questions cannot escape value judgments. Moreover, the Australian grants formula is used for distributing unconditional general revenue. It is doubtful whether such formula should be so explicit as to specify, for example, different needs of providing crocodile or shark protection. Such overly ambitious attempts to standardize even minor budget items overstresses the exactitude of distributional justice, which is likely obtained at much lower costs through simple indicators with a similar degree of "accuracy."

Whatever the equalization arrangements are, they must be based on firm statistical criteria. Overly complicated formulae are likely to blur the political issues, to meet statistical difficulties, and to involve conceptual measurement problems lacking a conclusive answer.

In the end, equalization is a matter of value judgment and political compromise. Europeans would prefer simple formulae that serve as proxies for the equalization problem. In practice, these simple methods have reached a high degree of equalization and are deemed to be largely successful in achieving their policy goals. The quest for a scientific formula for Chinese intergovernmental fiscal relations is probably a quest for a stable, transparent, and objective transfer system that is based on independent statistical information for all provinces. If this is the case, a less ambitious equalization project is preferable to one that requires full budget standardization. The simpler the formula is, the higher will be its transparency and political message.

The formula should stress the fact that what is gained by one province must be borne by other regions. In other words, the shared pool or the equalization means should be closed-ended and distribution is a fixed-sum game. This by itself ensures that the mechanism is deemed to be equitable by all participants.

Capital Expenditures

Capital expenditures might remain somewhat outside the normal arrangements for various reasons. In particular, their financing may be tied to borrowing and only indirectly to taxation. If regional governments are allowed to borrow (as in Switzerland and Germany), there must be policy coordination of borrowing at the national level in order to avoid disturbances in the capital markets. If lower levels of government are not allowed to borrow, as in China, their capital expenditures must be borne mainly by the central government through capital grants.[39]

European arrangements prefer tied (or conditional) grants for dealing with public investments at lower levels of government. Typically, grants by the central government have to be matched with own resources at the lower level. This is in order to unveil local preferences more clearly, and to enhance accountability.[40] This idea is firmly entrenched in the Swiss and the German arrangements, and it is also found at the level of the European Union.

Germany, and to some extent Switzerland, go beyond the idea of matching grants. Decisions on regional public investment projects are taken jointly by the regions and the central government. This is because of the large volume of some investment projects. Joint decisionmaking also avoids patronage of some regions and ensures a fair ordering of projects over time, given the limitation of resources at *all* levels of government. Germany has created various task-oriented institutions for coordinating intergovernmental decisionmaking on infrastructural investments. A more formal joint-decisionmaking machinery for provincial infrastructural investment and regional economic development may also be an option to be considered in China.

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39. Unfortunately, this conclusion is blurred by the fact that Chinese local governments and provinces often act as entrepreneurs through their holding of state enterprises. State firms, of course, can borrow, which gives regional governments access to capital markets indirectly since budgets are not strictly separated.

40. The idea of accountability is also blurred by "entrepreneurial government" (see Chapter 9 of this report).

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7

Intergovernmental Fiscal Relations: The Cases of India and Indonesia

Amaresh Bagchi

> "Federalism is a complex multi-dimensional phenomenon, whose specific features depend largely upon the particular context in question."
>
> Richard Bird (1994)

India and Indonesia are two large countries of South and Southeast Asia with sharp regional diversities and heterogenous populations. Efficient delivery of public services in countries of such dimension and diversity is not possible without decentralization of the powers and functions of government. Though they are constituted differently—India is federal, whereas Indonesia is unitary—governmental functions in both countries are performed at several levels: national, provincial (states in the case of India), and local (municipalities and rural governments).

Running a multilevel governmental system is not simple anywhere, involving as it does many conflicts and tradeoffs, especially in the area of fiscal relations, and every country has its own problems. The manner in which the two large heterogenous countries of the region have sought to address the fiscal problems of multitier governance should be of interest to China in its current endeavour to set up an enduring system of intergovernmental relations. The experience of India should be of special interest because of its relatively long history of federal finance. Decentralization of governmental functions in Indonesia, though of recent origin, also offers useful lessons, based as it is on almost a controlled experiment.

The two case studies presented in this chapter seek to highlight the lessons of experience from the two countries that can provide guidance for others and also for the countries themselves for the future. The first section is devoted to a review of the Indian system, while the second section deals with the case of Indonesia. The last part of the chapter seeks to draw together the important lessons.

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Federal Finance: The Indian Experience

History: Pre-independence

The division of functions and finances between the center and the subnational governments in India dates back to the days of British rule, especially the Montague-Chelmsford reforms of 1919. These reforms demarcated for the first time the subjects that were to be looked after by the central government and those that were to be transferred to the provinces. Government revenues were also divided between the two layers of government, with some of the substantial revenue sources going to the provinces, namely, land revenue, excise, and a share in income tax collections attributable to "incremental assessments." The finances of the provinces were then very much under the control of the center. Even so, the provinces were left with handsome surpluses. To feed the center, a system of "provincial contributions" had to be instituted similar to the "fiscal contracting system" that prevailed in China until recently.

The foundations of federalism in India in a real sense were laid by the Government of India (GOI) Act of 1935. The vertical imbalance in expenditure responsibilities and financial powers of the states (then called provinces) that has marked intergovernmental fiscal relations in India ever since had its origin in the scheme laid down in the 1935 act. Large revenue yielding taxheads (that is, personal income tax, corporation tax, and customs) were assigned to the center, while responsibilities for delivering public services over a wide area were assigned to the provinces. This created a patent imbalance between the revenues and expenditures of the provinces. To meet the gap, the 1935 act provided for sharing of certain central taxes and grants-in-aid. Determination of the principles and quantum of devolution under these provisions was left to an expert, Sir Otto Nieneyer. The "Nieneyer awards" took note of the need "to place the Provinces on a workable financial basis without affecting the stability and credit of the central government" and proceeded to allocate the revenues of the center by enunciating principles that have guided the federal transfers in the country for many years.

Center-State Financial Relations After Independence

DIVISION OF POWERS AND FUNCTIONS. Influenced by the events leading up to independence and by their desire to hold the country together, the constitution-makers of India opted for a federal structure but with a strong center—a polity often described as "quasi-federal." The division of functions and financial powers followed basically the pattern delineated in the 1935 act.

In order to protect the autonomy of the states in the spheres allotted to them and avoid conflicts, the Indian constitution, which came into operation in January 1950, enumerates the powers and responsibilities of the center and the states through two long Lists in the Seventh Schedule—the Union List and the States List. There is also a Concurrent List, but the center has overriding powers in all matters in the Concurrent List. The residuary powers also belong to the center.

Broadly speaking, matters of national interest are with the center, while those relating to the provision of public services (in areas like maintenance of law and order, justice, education, and health) are with the states. Thus, the Union List includes defense, armed forces, and foreign affairs as well as matters having all-India coverage in their operation

(for example, railways, posts and telecommunication, national highways, shipping and navigation on inland waterways, and air transport). To enable the center to maintain stability and ensure the development and smooth functioning of the economy, the following subjects are also enumerated in the Union List—currency, coinage, foreign exchange, foreign loans, Reserve Bank of India (the central bank of the country), external trade, interstate trade and commerce, matters relating to finance and trading companies and companies with objects not confined to one state; banking; insurance; bills of exchange, cheques, promissory notes, and so on; stock exchanges; industries the control of which is declared by Parliament to be expedient in the public interest; and regulations and development of oilfields and mines declared to be in the public interest. Subjects assigned to the states include public order, police, public health, agriculture, irrigation, land rights, fisheries, industries other than those on the Union List, and so on.

The revenue heads assigned to the states fell far short of what was needed to meet their responsibilities. Following the principle of "separation" rather than "concurrence," the Indian constitution assigns to the states exclusive powers regarding certain taxes. The important ones are taxes on sale and purchase of goods, land revenue and agricultural income tax, taxes on lands and buildings, excise duty on alcoholic liquor, taxes on vehicles and on goods and passengers carried by road or inland waterways, taxes on luxuries and entertainments, stamp duties, and taxes on trade, professions, and callings. All broad-based taxes (barring sales tax)—namely, customs, excises on goods other than alcoholic liquor, and taxes on personal and corporate incomes—are assigned to the center.

Although India had a long history of self-government at the local level (village panchayats and municipalities), the constitution of India made no separate provisions for the functioning of the local governments.[1] They were to derive their powers and functions from the states. Subsequently (1992), amendments were made in the constitution setting out the powers and functions that may be assigned to village and municipal governments. Necessary legislation to give effect to constitutional provisions must be passed by the states. Several states have already done so, but action to implement the legislation is still to follow.

Recognizing that the assignment of functions and finances to the two levels of government could create an imbalance in the revenues and expenditures of the states—a vertical gap—the constitution made several provisions to bridge the gap. These fall broadly under two categories: tax sharing and grants.

First, the Indian constitution, like the 1935 act, provides for compulsory sharing of personal income tax, and if the Parliament permits, also of Union excises. Second, certain taxes, though mentioned in the Union List, were to be collected and appropriated by the states (namely, stamp duties). Third, certain taxes in the Union List were to be levied and collected by the center, but the revenue was to be passed on to the states. These taxes are estate duty and succession duties on property other than agricultural land and terminal taxes on passengers and goods carried by railway, sea, or air; taxes on railway fares and freights; taxes on transactions in the stock exchanges and futures markets; taxes on the sale or purchase of newspapers and advertisements; and taxes on interstate sales.

1. The constitution only enjoined the states to "take steps to organise village 'panchayats' and endow them with such powers and authority as may be necessary to enable them to function as units of self-govenment" (Article 40).

Further, the constitution provides for transfer of funds from the center to the states in the form of grants. Article 275 empowers the center to make transfers as grants-in-aid to states in need of assistance. By virtue of another provision (Article 282), grants can be made by the union or, for that matter, by the states for any public purpose.

As for access to capital funds, the constitution puts limitations on the borrowing powers of the states. So long as they have any outstanding debt to the central government, the states cannot go to the market for borrowing without the consent of the center. Nor do the states have access to borrowing from the Reserve Bank beyond prescribed limits.

FINANCE COMMISSIONS. Given the fiscal gap inherent in the assignment of functions and financial powers and to assure the states of some certainty and objectivity in the determination of the amount and allocation of central taxes among the states, the Indian constitution requires the president of India to appoint a Finance Commission once every five years. Functions of the Commission as envisaged in the constitution are:

- the distribution between the center and the states of the proceeds of central taxes which must be or may be shared and determination of the share of each state;
- the principles which should govern the grants-in-aid of revenue of the states in need; and
- any other matter that may be referred by the President in the interest of sound finances.

The constitution also provides for transfer of federal (or state) funds for any public purpose. Since the creation of the Planning Commission early in the 1950s, sizable transfers have taken place from the center to the states in the form of "plan grants." Whether this was intended by constitution-makers remains a moot point, but these grants have had a profound impact on federal finance in India.

The transfer mechanism laid down in the constitution was designed not only to close the vertical gaps but also to help correct the horizontal imbalances, primarily the disparities in public services among the states resulting from their fiscal handicaps.

Salient Trends in Federal Finance

On the whole, the constitutional arrangements for the devolution of federal funds have served the country well and regulated the flow of funds from the center to the states with a measure of flexibility and fairness. Between 1950 and 1990, nine Finance Commissions served their terms, and the Tenth, constituted in 1992, submitted its report in 1994. (See entries for the Eighth, Ninth, and Tenth Finance commissions in the Reference List at the end of the chapter.) While the relative stability of the Indian polity testifies to its strength, the operation of the system in the past forty years has brought out several deficiencies. What follows is a brief appraisal of Indian federal finance, focusing on whether or to what extent it has helped to cope with the three basic problems that all federations face: vertical imbalance, equalization of level of basic public services, and tax harmonization.

VERTICAL IMBALANCE. On the face of it, federal transfers (comprising tax sharing and grants) have been a useful instrument for meeting the fiscal gap of the subnational governments in India. Although the states account for about 56 to 57 percent of the total current expenditures of the government (center and states combined), their revenue

sources do not meet more than 55 to 60 percent of their requirement. The balance comes from the center. It is, however, a matter for concern that while the states' share of total government expenditure has remained more or less steady, the gap between their expenditures and own revenue has widened. The proportion of states' current expenditures financed out of their own revenue has declined from 65.6 percent in the early sixties to 55.6 percent in 1993-94, evidencing their growing dependence on the center (Table 7-1).

The system of transfer has helped to ensure to a considerable extent that the states get a fair share of the total revenues of the government. From 1980-81 to 1993-94 the proportion of the center's revenue going to the states through various channels remained steady at about 40 percent. There was a slight drop in 1990-91, but the proportion subsequently went up to 41 percent in (Table 7-2).

Critics argue that the center often raises resources through instruments that do not come under any sharing (for example, through pricing of products of central government enterprises and deficit financing), but evidence in this regard is not all that clear. The proportion of the center's resources (including budgetary deficit) transferred to the states has remained more or less at the same level.

Contrary to the general impression, the states are now receiving a larger proportion of the government's tax revenue as well as total revenue (tax and nontax). Of the tax revenue of the government (center and states combined), 52 percent now accrues to the states compared with 46 percent in the early sixties, while the proportion of taxes collected by the states has gone up from 34 percent to barely 35 percent. Taking tax and nontax revenues together, as much as 64 percent now accrues to the states compared with 59 percent thirty years ago, while the revenue collected by the states has remained at 36 percent of the total (Table 7-3). The revenue collected by the states on their own as a percentage of total government revenues has not decreased, but their dependence on the center has increased. Evidently, their expenditure needs have multiplied faster than their revenues.

Table 7-1. States' Share in Total Current Expenditure of Indian Government (Center and States) and States' Own Revenue as a Proportion of Their Current Expenditure
(percent)

Period	*States' current expenditure/ Aggregate current expenditure*	*States' own revenue receipts/ States' current expenditure*
1960-65	55.56	65.57
1965-70	58.83	61.40
1970-75	59.46	58.62
1975-80	55.94	68.00
1980-85	57.90	67.72
1985-86	55.97	57.69
1985-90	54.87	56.16
1990-91	55.19	53.54
1991-92	58.25	54.76
1992-93 revised estimate	57.27	53.72
1993-94 budget estimate	58.26	55.61

Source: *Indian Economic Statistics*, Ministry of Finance, Government of India, various issues.

Table 7-2. Tax Devolution and Grants as Proportion of Center's Gross Revenues *(billions of rupees)*

Year	Center's gross revenue receipts	Center's gross tax receipts	Center's tax devolution to states	Central grants to states	Center's current transfers to states Col.(3)+(4)	Center's tax devolution to states as percentage of gross tax reciepts Col.(3)+(2)×100	Center's current transfers as percentage of center's gross revenue Col.(5)+(1)×100
	1	2	3	4	5	6	7
1980-81	162.75	131.79	37.91	27.56	65.47	28.77	40.23
1985-86	355.34	286.70	74.90	65.55	140.45	26.13	39.53
1990-91	695.30	575.77	145.35	123.84	269.19	25.24	38.72
1991-92	832.27	673.61	171.97	153.27	325.24	25.23	39.08
1992-93	947.21	746.37	205.24	184.76	390.00	27.50	41.17

Note: Includes additional excise duties in lieu of sales tax.
Source: Indian Economic Statistics, Ministry of Finance, Government of India.

Even with more revenue accrual, the states as a whole have not been able to balance their budgets. Whereas there were surpluses in the current account of the government budgets in the late 1970s, both the center and the states turned out deficits in their budgets year after year in the 1980s and early 1990s (Table 7-4).

Evidently, federal finance has not succeeded in keeping the center's or the state governments' budgets in balance, while the center also is facing acute budgetary problems. This has given rise to questions as to whether the assignment of expenditure functions and revenue powers is fundamentally flawed or whether there is something wrong with the system of transfers.

Table 7-3. Share of States in Combined Revenue of the Center and the States

Period	Taxes raised by states as percentage of total taxes	Taxes accruing to states as percentage of total taxes	States' own revenue as percentage of combined revenue of the center and states	States' revenue accrual as percentage of combined revenue of the center and states
1960-61	33.69	46.15	36.61	58.74
1974-75	31.46	44.78	33.66	54.37
1975-80	32.48	47.41	34.63	57.70
1980-85	34.39	51.38	35.94	61.53
1985-90	33.67	50.37	37.17	61.43
1990-91	34.36	50.37	36.59	63.71
1991-92	34.73	51.05	37.64	64.39
1992-93 revised estimate	33.75	50.97	35.28	62.83
1993-94 budget estimate	35.20	52.18	36.00	64.02

Source: *Indian Economic Statistics*, Ministry of Finance, Government of India.

Table 7-4. Budget Surpluses (+) and Deficits (-) of the Center and State Governments as Percentage of GDP

Period	*Center*	*States*	*Combined*
1975-80	0.32	1.20	1.52
1980-85	-0.83	0.34	-0.49
1985-90	-2.56	-0.27	-2.82
1990-91	-3.49	-0.96	-4.45
1991-92	-2.64	-0.92	-3.56
1992-93 revised estimate	-2.37	-0.58	-2.94

Source: *Indian Economic Statistics*, Ministry of Finance, Government of India.

One widely held view is that the revenue sources assigned to the states are grossly inadequate in relation to the states' expenditure needs. Others cite the weaknesses inherent in transfers in any scheme of federal finance that enables governments to spend more than they raise on their own. Many believe that the system of revenue transfer that had come to operate as a result of the recommendation of the Finance Commissions had aggravated these weaknesses.

Until recently, the Finance Commissions' approach toward correcting the vertical imbalance was "gap filling," virtually underwriting the deficits in the state budgets. There was no incentive or reward for greater revenue effort or economy or efficiency in expenditure management by governments. While own revenue (tax and nontax) as a proportion of the total revenue of the states has declined, the share of taxes and grants from the center taken together has correspondingly increased (Table 7-5).

Another factor that is believed to have aggravated the states' budget imbalance is the emergence of the Planning Commission as a major disperser of federal funds. The strategy of planned development adopted by India after independence, with the public sector in the vanguard, predicated large outlays by the government on projects approved under five-year plans. Plans were drawn up both for the center and the states. While a larger share of public investments was borne by the center, the states also had their plans supported partly by transfers (grants and loans) from the center. Since transfers were sometimes on a matching basis, this induced the states to expand their expenditures beyond what they could realistically afford. In addition, the maintenance of assets already created was neglected.

Proliferation of transfers outside the statutory framework of which the plan transfers are a major component has invited criticism as undesirable even though transfers for the plans are now formula based. Schemes sponsored by the center—specific-purpose transfers—have also multiplied. (There are over 200 of them at present.) While this is legally permissible, and in some areas may be in the national interest, it has also tended to distort the priorities of the states and added to their administrative burden.

The dependence of the states on the center might not have caused much concern had the federal transfers been governed entirely or primarily by the recommendations of the Finance Commission, a statutory body set up by the president periodically. This has not been the case. In the current transfers to the states, plan grants—that is, those decided by

Table 7-5. Composition of States' Revenues
(percent)

Years	*States' own source revenue*	*Devolution of taxes*	*Grants-in-aid*	*Total revenue*
1960-61	61.10	16.26	21.64	100.00
1974-75	61.66	20.59	17.75	100.00
1975-80	59.47	21.07	19.47	100.00
1980-85	57.94	23.71	18.35	100.00
1985-90	56.83	23.52	19.65	100.00
1990-91	57.44	22.61	19.95	100.00
1991-92	58.30	21.83	19.86	100.00
1992-93 revised estimate	55.65	23.32	21.04	100.00
1993-94 budget estimate	57.43	23.02	19.55	100.00

Source: *Indian Economic Statistics*, Ministry of Finance, Government of India.

the Planning Commission—have increased and "statutory transfers"—those under the Finance Commission's determination—have decreased. In 1974-75, statutory transfers constituted nearly 61 percent of the total current and capital transfers from the center. Since the mid-1980s the proportion has not exceeded 50 percent (Table 7-6).

The Planning Commission is a creature of the center and not a statutory body and so it is alleged that the increasing proportion of transfers being routed through plan grants reflects the center's domination and the vulnerability of the transfer system to political influence. Since 1969 the plan grants have been subject to an agreed rule known as the Gadgil formula, so the scope for subjective or political elements influencing the transfers is minimized. With the adoption of the Gadgil formula—a modified version of the original one is now in operation[2]—the criticism has lost its force, although the increasing pro-

2. Currently, the formula for allocating plan grants runs as follows: Thirty percent is kept apart for special category states (for whom the grant portion is 90 percent). For others, the grant portion constitutes 70 percent, and distribution is made with 60 percent weight for population, 25 percent for per capita state domestic product (SDP), 7.5 percent for fiscal management, and another 7.5 percent for special problems of states. Of the funds allocated on the basis of 25 percent weight attached to per capita SDP, 20 percent is given only to states with less than average per capita SDP on the basis of the inverse formula; and the remaining 5 percent according to the "distance formula." The inverse formula is given by:

$$\frac{P_i/Y_i}{\sum P_i/Y_i}$$

and the distance formula is expressed as:

$$\frac{(Y_h - Y_i)P_i}{\sum (Y_h - Y_i)P_i}$$

where Y_i and Y_h denote per capita SDP of the i-th and the richest state, P_i, the population of the i-th state $(Y_h - Y_i)$ in the case of the "h" state is computed as the difference between the highest and the next highest per capita SDP.

Table 7-6. Components of Central Tranfers to the States (percent)

Year	*Current transfers*									*Net loans from the center*	*Total current and capital transfers*
	Finance Commission transfers			*Plan grants*				*Other grants*	*Total current transfers*		
	Shared taxes	*Grants-in-aid*	*Total*	*State plan*	*Central pian scheme*	*Centrally sponsored scheme*	*Total*				
1974-75	43.56	17.30	60.87	9.73	2.46	4.13	16.32	2.61	79.79	20.21	100.00
1975-80	39.91	9.08	48.99	13.36	3.35	5.71	22.43	3.33	74.75	25.25	100.00
1980-85	43.57	2.69	46.26	14.66	4.03	7.62	26.31	3.54	76.11	23.89	100.00
1985-90	40.99	4.38	45.37	13.39	3.65	8.52	25.56	3.22	74.15	25.85	100.00
1990-91	38.63	6.04	44.68	13.01	2.21	10.21	25.43	2.83	72.93	27.07	100.00
1991-92	40.65	5.12	45.76	15.86	1.81	11.16	28.83	2.79	77.38	22.62	100.00
1992-93[a]	42.69	4.71	47.40	16.22	2.77	12.47	31.45	2.13	80.99	19.01	100.00
1993-94[b]	43.58	3.63	47.21	17.44	2.22	11.70	31.36	1.65	80.21	19.79	100.00

a. Revised estimate.

b. Budget estimate.

Source: *Indian Economic Statistics*, Ministry of Finance, Government of India.

portion of "Central and Centrally Sponsored Schemes" in the plan grants noted earlier points to an erosion of the states' autonomy in deciding the composition of their expenditures.

In sum, while the vertical fiscal gap in the Indian federal system has apparently been met, the manner in which the system has operated has not been conducive to a healthy fiscal environment. As just shown, both the center and the states have been running deficits in their budgets. Expenditures have tended to multiply more rapidly than revenue, and the federal financial arrangements may have something to do with it. There has also been a trend toward centralization in the sense that the states' dependence on the center is growing and the center's role in deciding the states' priorities has become more dominant.

EQUALIZATION. The transfer system, however, has helped to bring about an appreciable degree of equalization in the level of public services, thereby alleviating the horizontal imbalances, although the disparities persist. Table 7-7 provides an idea of the horizontal imbalances that continue, while the degree of equalization achieved through transfers is brought out in Table 7-8A.

As of 1990-91, leaving out the special category (relatively small) states, per capita SDP of the richest state exceeded that of the poorest by a factor of 3.1, and the spread between the highest and the lowest in terms of per capita own revenue was 5.2. In contrast, the ratio of maximum to minimum per capita current expenditure turns out to be no more than 2.3.

The ratio of own revenue to net SDP varies from 7 percent to 14 percent and that of own revenue to current expenditure varies from 41 percent to 82 percent. But the disparities get appreciably corrected when one looks at the per capita current expenditures.

Evidently, federal transfers have had a perceptible equalizing effect on the level of revenue and expenditure in the country. This is corroborated by the figures in Tables 7-8A and 7-8B. While per capita revenue of the states is significantly correlated to their per capita SDP, the correlation gets reduced, albeit slightly, in the case of total revenue (which includes transfers). The coefficient of variation (CV) is also less in total revenue than in own revenues, reflecting the equilibrating effect of the transfers. The variation in per capita expenditure is appreciably less than in state domestic product. Over the years, neither the CV nor Lorenz ratio of per capita current expenditures in the major states has registered any rise. Rather, there has been a declining trend. The equalizing effect of the transfers is visible particularly in expenditures on education and health. Both CV and Lorenz ratios with respect to expenditures under these heads show a decline since the mid-1970s (Rao 1994).

Disparities in income levels, however, seem to be increasing. One important reason could be the wide differences in plan expenditures among the states. Starting with the Fourth Plan (1969-74), the coefficient of variation and the spread between the maximum and minimum per capita expenditure under the plans among the large states are shown in Table 7-9.

Although they contain a substantial element of spending on current account, the plan expenditures are designed mainly to help strengthen infrastructure (irrigation, power, communications) and thereby accelerate growth through larger private investment and better use of existing capacities in agriculture and industry.

Table 7-7. Per Capita State Domestic Product, Revenue and Expenditure of the States, 1990-91
(rupees)

States	*Net SDP*	*Revenue expenditure*	*Own revenue*	*Total transfers from the center*	*Total revenue*	*Ratio of own revenue to net SDP (percent)*	*Ratio of own revenue to current expenditure (percent)*
Andhra Pradesh	4,728	850	531	385	826	11.2	62.5
Bihar	2,655	550	189	373	430	7.1	34.3
Gujarat	5,687	1,005	691	325	832	12.1	68.7
Haryana	7,502	1,205	986	340	1,193	13.1	81.8
Karnataka	4,696	903	649	307	931	13.8	71.9
Kerala	4,207	983	539	391	836	12.8	54.8
Maharashtra	7,316	1,131	893	362	1,124	12.2	79.0
Madhya Pradesh	4,149	730	400	343	700	9.6	54.7
Orissa	3,077	704	280	542	752	9.1	39.7
Punjab	8,373	1,265	777	748	992	9.3	61.4
Rajasthan	4,035	808	473	410	847	11.7	58.5
Tamil Nadu	4,619	1,038	650	375	938	14.1	62.6
Uttar Pradesh	3,516	698	288	433	608	8.2	41.3
West Bengal	4,753	767	352	396	614	7.4	45.9
Standard deviation	1,637	203	230	109	197		
Average	4,951	903	550	409	830		
Coefficient of variation	0.33	0.22	0.42	0.27	0.24		
Maximum/minimum	3.15	2.30	5.23	2.44	2.77		

Source: Government budget documents and *Indian Economic Statistics*, Ministry of Finance, Government of India.

Table 7-8A. Co-efficient of Variation in Revenue and Expenditure of Fourteen Major States

Item	*1974-75*	*1979-80*	*1984-85*	*1990-91*
Per capita current expenditure	0.25	0.24	0.23.	0.22
Own tax revenue	0.44	0.45	0.43	0.44
Own revenue	0.41	0.43	0.41	0.42
Total tax revenue (including devolution)	0.32	0.28	0.29	0.29
Total revenue	0.26	0.25	0.26	0.24
Shared taxes	0.05	0.07	0.11	0.23
Statutory grants	1.31	3.05	2.01	0.93
Plan grant	0.31	0.36	0.18	0.27
Per capita net SDP	0.26	0.36	0.31	0.33

Table 7-8B. Rank Correlation Co-efficient of Per Capita Revenue and Expenditure with State Domestic Product of Fourteen Major States

Item	*1974-75*	*1979-80*	*1984-85*	*1990-91*
Per capita current expenditure	.7373*	.8725**	.9341**	.8725**
Own revenue	.8242**	.8989**	.8989**	.8813**
Total revenue	.8110**	.8242**	.8857**	.7626**
Shared taxes	.1780	-.6264*	-.5341	-.8198**
Statutory grants	-.3802	-.5868	-.0154	-.4242
Plan grant	-.2044	-.4154	-.0637	-.4593
Total transfer	-.4637	-.4505	.3363	-.2659

The richer states, compared with those in the middle- and low-income categories, are the ones in a position to implement large plan programs year after year. They can generate large surpluses in their budgets without any tax devolution from the center, while some of the other states cannot balance their revenue budget even with central transfers.

With regard to statutory transfers (those flowing from the recommendations of the Finance Commissions), there has been a conscious attempt by the Commissions to redress the inequalities in public services among the states by allocating the transfers in favor of the poorer states. This is evidenced by the negative (rank) correlation of the statutory devolution per capita (shared taxes and grants-in-aid) with per capita SDP (Table 7-8B). However, the Commissions have been only partially successful in achieving their aims because of the following factors:

Table 7-9. Disparities in Per Capita Plan Expenditures of Major States

Per capita plan expenditure	*Fourth plan (1969-74)*	*Fifth plan (1974-79)*	*Sixth plan (1980-85)*	*Seventh plan (1985-90)*	*1991-92*	*1992-93*
Maximum/ minimum	4.40	3.30	3.00	2.60	4.40	4.8
Coefficient of variation (CV)	0.49	0.36	0.33	0.30	0.36	0.35

- The equalizing effect of tax sharing has been much weaker than that of grants, as may be seen from the rank correlation coefficients of the statutory grants and tax devolution with per capita SDP and their CVs (Table 7-8). While correlation with SDP is negative in both, the CV of the grants is larger than that of shared taxes. But grants constitute a relatively small component of statutory devolution, the dominant part being share of taxes. Thanks to the dispensation of successive commissions, the share-of-grants component in the devolution has come down over the years (Table 7-10). The Ninth Finance Commission (NFC) tried to reverse the trend, yet grants-in-aid constituted only 17 percent of the total even under its recommendation (Bagchi 1993).
- In the devolutions under the FC's formulae, with the tax component and the population factor dominating, even states having surpluses in their budgets without the statutory transfers get a substantial share in the transfers. As a result, they can mount a much larger plan than they could perhaps afford otherwise. In other words, the transfers seem to be helping the rich states get richer through large investment in infrastructure and basic services, while the poorer states trail behind (Lakdawala, 1993).
- Certainly, the Finance Commissions have endeavoured to tilt the transfers toward the poorer states by introducing an equity criterion into the formulae for allocating the divisible taxes, but, in the process, the economic objectives of the two components have become blurred. What is worse, the introduction of multiple and partly overlapping criteria have created complexities and have made it difficult to orient the transfers to any clearcut objective (Rao 1994).[3]

3. The criteria for tax devolution used by the Ninth Finance Commission are as follows:

	Income Tax	Union Excises
Contribution	10.0	–
Population	22.5	25.0
Per capita SDP		
Inverse formula	11.25	12.5
Distance formula	45.0	33.5
Composite index of backwardness	11.25	12.5
Pre-devolution deficits	–	16.5

For the inverse formula and distance formula, see footnote 2.

Table 7-10. Components of Devolution Under Finance Commissions' Recommendations *(billions of rupees)*

Finance Commission	*Tax devolution*	*Deficit devolution*	*Other grants*	*Total grants*	*Total devolution grants (Statutory)*
Fifth	45.62	7.13	1.46	8.59	54.21
	(84.15)	(14.15)	(2.69)	(15.85)	(100.00)
Sixth	82.75	26.83	0.90	27.73	110.48
	(74.90)	(24.28)	(0.81)	(25.10)	(100.00)
Seventh	211.77	16.27	0.84	17.11	228.88
	(92.52)	(7.11)	(0.37)	(7.48)	(100.00)
Eighth	331.25	9.68	14.21	23.89	355.14
	(93.27)	(2.73)	(4.00)	(6.73)	(100.00)
Ninth	878.82	150.17	31.37	181.54	1060.36
	(82.88)	(14.16)	(2.96)	(17.12)	(100.00)

Note: Figures in parentheses indicate percentage of the total.
Source: Reports of the Eighth and Ninth Finance Commissions.

- Federal grants to the states have two components other than those ordained by the Finance Commission: plan grants and others. These grants did not have the equalizing effect associated with the grants dispensed by the Finance Commission.

Thus, the scheme of intergovernmental fiscal transfers in India, while imparting a measure of stability and flexibility in the flow of funds from the center to the states, has not helped to narrow the gap in development between advanced and backward states but has significantly corrected the fiscal disabilities of less endowed and less developed states. With the economic reforms now going on, the disparities in income levels among the regions are likely to get accentuated. Whether and how far federal transfers can or should correct these disparities is going to be a major policy issue in the coming years.

DISHARMONY IN TAX JURISDICTIONS. Apart from creating a vertical fiscal gap, the distribution of tax powers between the center and the states has given rise to problems in the tax field that the constitution-makers could not possibly have anticipated. Following the principle of separation, the Indian constitution sought to demarcate the tax powers of the two levels of government in such a way that only one or the other level of government could levy a given tax exclusively. Presumably, the expectation was that there would be no overlap in the tax jurisdictions, and independent taxation by different levels of government would not give rise to any conflict. This expectation does not seem to have materialized. For quite a few taxes, the bases overlap, although they bear different nomenclatures, and arrangements for harmonization are lacking or ineffective.

For example, the tax the states can levy on trade, profession, and callings impinge on the income tax base (a central tax). The property tax (which is levied by local authorities in exercise of powers delegated by the states) overlaps with the tax on net wealth (which falls within the jurisdiction of the center), while stamp duties relate to transactions that

occasion capital gains and estate duty. The overlap has been particularly acute in indirect taxation (Chelliah 1983).

The constitution vested in the center the power to levy excises, the taxes on manufacturing and production of goods, while the states were empowered to levy the tax on sale and purchase of goods. On the face of it, the two taxes belong to different categories, their points of levy being different. In practice and effect, the two have come to overlap a good deal. First, both are levied on the gross value of production or sale. Second, for administrative convenience, the states have tended to move the point of levy of sales tax to the first point of sale, which means that the tax is collected mainly from manufacturers and/or importers of goods into a state. Several states levy a tax on subsequent stages in the form of a turnover tax. Moreover, the taxes or sales fall on the sale price inclusive of excise, and taxes are often levied on inputs too with only partial relief. Then there is an octroi or entry tax on goods entering a "local area" in several states. All this results in cumulation of taxes on the same base. The cumulation and overlap are aggravated by the levy of taxes on interstate sales.

Initially, taxation of interstate sale was not contemplated in the constitution. To regulate the taxation of goods moving out of one state to another, the Indian Parliament enacted a law—the Central Sales Tax Act (CST), which authorizes the center to levy a tax on interstate sales. The center, in turn, has authorized the states to levy the tax and retain the proceeds. At first, the CST was subject to a ceiling of 1 percent. The ceiling was subsequently raised to 4 percent.

In effect, the levy of CST constitutes taxation on the basis of origin. Given the disparities in levels of development, particularly industrialization, it has enabled the relatively advanced states to export their taxes to residents of consuming states, assuming that these taxes are shifted forward, as is likely in the prevailing market conditions for several products. In the absence of any arrangement for pooling (or "clearing" as was contemplated in the European Union before the "transitional regime" came into operation in January 1993), no rebate or relief is allowed for CST in the importing state. This has resulted in a concentration of revenue realized from the CST. Four states, accounting for less than 20 percent of the population, collect over 40 percent of the total CST revenue raised in the country.

Operation of the CST has been a major source of non-neutrality in the tax system and thus has fostered inefficiency in the allocation of resources. It has also induced traders and producers to look for ways to escape the tax—for example, by camouflaging interstate sales as transfer on consignment to depots or branches (thereby counteracting the non-neutrality of the tax to some extent!). The constitution has been amended to permit the levy of a tax on consignments, too. Legislation to implement a tax on consignments has not come about yet, although the states are pressing for it so they can secure more revenue from taxation of interstate movement of goods.

In the absence of any effective arrangement for harmonization, states have been undercutting each other in the matter of taxation in order to attract trade and industry to their territories. As a result, sales taxes on commodities like color televisions have in some states gone down to levels below that applied to cereals. Whether and to what extent welfare is enhanced as a result of the competition among the states is a fit subject for research. But the net result has been that sales taxation in the states has nearly reached an impasse. The growth of sales tax has decelerated, increasing the dependence of the states on the center. Horizontal competition has thus led to a weakening of "vertical competi-

tion," to use Breton's terminology (Breton 1987). Whether there has been a net gain in the welfare of citizens in the process is a moot point.

In order to impart a measure of uniformity to the domestic trade taxes, a tax rental arrangement was worked out between the center and the states in 1956. Under this arrangement, the states ceded to the center their powers of sales taxation with respect to three items of common consumption—namely, textiles, tobacco, and sugar. The center in turn agreed to levy an additional duty of excise on these commodities and pass on the revenue to the states. This arrangement is not working too well. The states are complaining of inadequate compensation, and they are trying to circumvent the agreement through various devices.

Overall, the domestic trade tax scene is chaotic. The separation of tax powers has not helped to foster the growth of a common market—one of the basic advantages of having a federal form of government in a large country with distinct regional identities, preferences, and aspirations. The assignment of tax powers in the constitution has not been conducive to harmonized operation of the tax system and stands in the way of any radical reform such as introduction of either a national value added tax or a concurrent VAT by the center and the states.

The situation on the direct taxes side is not so difficult since income taxes are assigned exclusively to the center and revenue from noncorporate incomes must be shared with the states. But the base of income tax is fragmented. The center has powers to tax only nonagricultural income, while the power to tax agricultural income belongs to the states. This has affected the horizontal equity of income tax and opened up loopholes by providing opportunities to pass off income taxable under the central income tax as agricultural, while taxation of agricultural incomes has virtually vanished (except the income of plantations growing tea, rubber, and so on). Indeed, the Indian constitution provides a classic example of how the assignment of tax powers though well intended can create tax disharmony in a multilevel system of governance.

Corrective Action and Outstanding Problems

To address the problems and correct the deficiencies of the system of federal finance that has evolved in the past four decades, several initiatives have been taken (six, if the preindependence experience is taken into account). Some of the initiatives are relatively recent and remain to be tested. Nevertheless, the experience gained has some lessons to offer.

The "gap filling" approach has been criticized for breeding fiscal indiscipline. Therefore, the guidelines accompanying the Presidential Orders appointing the Finance Commissions have mandated the "normative approach" in assessing the revenue capacity and expenditure needs of the states. Thus, the terms of reference (TOR) of the Ninth Financial Commission, which was appointed in 1987 with a reference period covering 1990-95, enjoined *inter alia*, that the Commission shall

> i. adopt a normative approach in assessing the receipts and expenditures on the revenue account of the States and the Center, and, in doing so, keep in view the special problems of each State, if any, and the special requirements of the Center such as defence, security, debt servicing and other committed expenditures or liabilities;

ii. have due regard to the need for providing adequate incentives for better resource mobilisation and financial discipline as well as closer linking of expenditure and revenue-raising decisions.

Following these guidelines, the NFC attempted to introduce the normative approach to assessing the revenue growth and expenditure needs of the states and the center. Two important choices had to be made for introducing the norms: determination of the revenue base for the year on which projections for the reference period were to be made and a judgment about the rate at which revenue growth was to be projected.

Regarding the base year, one could choose either the actuals of the base year or make a normative estimate based on average intensity of exploitation of the estimated potential. The NFC went by the actuals for the center and for the states as a whole, but for individual states it estimated the base from the average use of potential derived through a "modified representative tax system approach." The objective was to make allowance for deficiency in taxable capacity of the poorer states by adopting average effort as the norm.

For nontax revenues, actuals were adopted in the case of fees and user charges, while normative rates of return were applied in the case of dividends and interest. Normative rates of returns were used for the center's revenue from dividends and interest.

For nonplan revenue expenditure, the "average behavior" of the states was taken as the norm. For general services, the norms were defined as "the justifiable costs of providing an average standard of service." For "social and economic services," the justifiable costs of providing the existing level of services were taken to reflect the needs. For this purpose, justifiable costs were based on an average after allowing for cost disability factors (NFC 1989). For the center, taking the budget estimates for 1989-90 as the base, the NFC applied a slightly lower growth rate than that implicit in the base-year budget estimates over the previous year (9.75 percent as against 10.56 percent). The likely growth in major heads of expenditure was projected after taking into account the relevant factors.

The growth of revenue and expenditure of the center during 1991-92 to 1993-94 was not in accordance with the projections of the NFC. Deficits in the current account of the budget widened from 2.2 percent of GDP in 1989-90 to 4.3 percent in 1993-94, primarily because of a sharp deceleration in revenue growth. The deficits in the state budgets did not show any significant change and remained at a little less than 1 percent with no sign of disappearing. Deficits in the government budgets continue to cast their shadow on the Indian fiscal scene.

The terms of reference (TOR) of the Tenth Finance Commission (TFC), constituted in 1992, enjoin the Commission to keep in mind, among other considerations,

i. the objective of not only balancing the receipts and expenditure on revenue account of both the States and the Central govenrments, but also generating surplus for capital investment and reducing fiscal deficit; and

ii. the scope for better fiscal management consistent with efficiency and economy in expenditure.

With the institution of planning, all government outlays in the budget are divided into two broad heads: "plan" and "nonplan." "Plan" expenditures are supposed to reflect the development intent of the governments concerned and are politically appealing. Hence, there has been a tendency to overestimate the resources available for the plans by reducing expenditures on maintenance, etc., which do not come under the "plan" category. The TOR of the Tenth Finance Commission were designed to curb this tendency.

While one may hope that the TFC will take note of the dilemmas and difficulties, any lasting solution to the problems of federal finance in India must involve a radical restructuring of the center-state relations and a new approach to the tasks of the government at both levels. This is especially true in light of the economic policy initiated in 1991. A major plank of the new policy has been to open up the economy by removing the nontariff barriers and lowering the tariffs. This implies lessening of the weight of customs duty in the revenues of the Union government and a restructuring of the tax system toward greater reliance on taxes on income and domestic trade.

Major initiatives have been taken by the central government to reform the tax system. These have yielded dividends already in the form of a smart rise in the revenue from income taxes, but growth of revenue from excises, which constitute a major revenue source, has been sluggish. The extensive reforms announced in this year's budget should serve to improve the yield of excises, and with a pick-up in industrial production and imports, customs revenue may also show better buoyancy. Even so, if revenue deficits are to be phased out by the year 2000, the center's revenues must grow at least 20 percent per year, assuming its expenditures continue to grow at the trend rate. Alternatively, the expenditure growth must be reduced to 13.5 percent if revenues continue to grow at the trend rate. In the case of states, there also has to be either an appreciable step-up in revenue growth or a marked deceleration in expenditure increase if the revenue budgets are going to be balanced in the next five years (Chelliah, Rao, and Sen 1992). Balanced budgets will be difficult to achieve without a radical restructuring of the functions and responsibilities of the governments at the center and in the states and without a thorough reform of the revenue system.

India's fiscal management problems are compounded by a massive debt overhang at both levels of government. There has to be some way to ease this burden, if the problem of budget balancing is to be manageable. In the past, the problem was addressed by asking the Finance Commissions to reschedule the states' debts. And from time to time the center took over the outstanding overdrafts of the states. All these measures are palliative and do not constitute real remedy. Only a reappraisal of the role of public enterprises and contraction of public ownership—through divestiture of unproductive units—could provide a solution (Chelliah, Rao, and Sen 1992).

A new approach also is needed to correct the adverse effects of the transfers on the responses of the center and the states in the matter of tax raising and restraining expenditures. It has been suggested that a better system of tax devolution would be to fix the states' share as a fraction of the center's total tax revenue from all the taxes levied by the center instead of designating only some taxes as "shared taxes." This can be brought about if, say, 25 percent of the central taxes are earmarked for sharing (Tax Reforms Committee 1992). That, however, would require an amendment of the constitution. Many seem inclined to think that such a change is highly desirable.

While there have been no reliable studies on the income and substitution effects of the transfers, the formulae governing the transfers and their content leave much to be desired. To improve the efficiency and equity of the statutory transfers and orient them toward the needs of the states, it is necessary to redesign the transfer pattern and expand the grants component. Given the existing realities, it does not seem likely that the Finance Commissions would be able to alter the proportion of tax devolution and grants drastically. The formulae for the transfers, however, can be redesigned to make them less complex and more focused on a few objectives. Although substantial general- purpose grants

would be needed for most states to close their revenue gaps, the principle of accountability should be introduced, at least at the margin, by strictly following the normative basis in estimating the revenue gaps. More discretion could be allowed to the states in the use of specific-purpose grants.

Rethinking on these aspects of the transfers is needed if they are going to be used effectively. With liberalization, and free play for market forces, regional disparities are likely to be accentuated. In this situation, the role of the federal transfers should be primarily to correct revenue capacity and cost disadvantages of the weaker states. However, unlike in advanced countries, there would be a need for capital transfers for investment in infrastructure in less developed regions. The Planning Commission would therefore have a role even in the new environment, but it should concentrate on drawing up projects with national ramifications and those that would raise the growth potential of less developed states. The center can help the poorer states further by providing guarantees for borrowing from the market.

Reform of the tax system to orient it toward neutrality and simplicity consistent with equity also requires an overhaul of the domestic trade taxes. The best way to go about reform in this area is to introduce a value added tax to replace the Union excises and also the sales taxes. Going by the principles of tax assignment, a broad-based tax like VAT should be levied by the national government. However, in order not to aggravate the vertical imbalance, there may be no alternative but to allow the powers to levy the VAT in place of the sales tax to remain with the states (NIPFP 1994). How to operate a destination-based, consumption-type VAT when levied by the states is now an issue for consideration by the governments of the center and the states.

Judicial action striking down blatantly discriminatory taxation by the states to favor their own industry and trade has lessened the disharmony in the tax system to some extent, and there is a growing realization of the urgency of harmonization among the policymakers. The progress of efforts in this direction will be of interest to students of federal fiscal relations everywhere.

The question of vesting more tax powers in the states assumes further importance with the constitutional recognition of urban and rural local governments, and the elaborate preparations going on to make them operational and financially viable. Finance Commissions now being set up at the state level will face the same problem— though on a smaller scale—that the Commissions at the national level have been grappling with all these years.

Intergovernmental Fiscal Relations: The Case of Indonesia

Though not as large in land area as India, Indonesia also is a large sprawling country comprising 14,000 islands and an ethnically diverse population of 187 million. The governmental structure has three tiers of autonomous local governments: 27 provinces (Dati I), 296 districts, which include 55 urban municipalities and 241 regencies (Dati II), and 62,000 *desas* or rural villages. The character of the government is, however, unitary, with most of the expenditures and revenue raising powers highly centralized.

Levels of Government and Their Relative Share in Expenditure and Revenue

As of 1990-91, 84 percent of total governmental expenditures were incurred by the center, 8.8 percent by Dati I, and 7.2 percent by Dati II (World Bank 1994).[4] Of the total revenues of the government, 93 percent is raised by the center, and only about 7 percent by the subnational governments (4.3 percent at Dati I and 2.6 percent at Dati II), as shown in Table 7-11. About two-thirds of the expenditure of local governments are financed by central government transfers. As the table shows, the respective shares of the different levels of government in total revenue collection have remained practically unchanged since 1981-82, reflecting the high degree of fiscal centralization in the country. Even with transfers, the share of the center in the total revenue of the government remains at 83 percent of the total, and this is the position twenty years after the law of 1974, the law that laid the foundation of decentralization in the country.

Table 7-11. Tax and Nontax Revenues of Indonesian Government at Different Levels (billions of rupiah)

	1981-82			*1990-91*		
Level of government	*Tax revenues*	*Nontax revenues*	*Tax plus nontax revenues*	*Tax revenues*	*Nontax revenues*	*Tax plus nontax revenues*
Center	11,782	336	12,118	36,759	1,903	38,662
	(96.7)	(59.7)	(95.1)	(95)	(67.1)	(93.1)
Provinces	287	128	415	1,318	474	1,792
(Dati I)	(2.4)	(22.7)	(3.3)	(3.4)	(16.7)	(4.3)
Local governments	112	99	211	608	457	1,065
(Dati II)	(0.9)	(17.8)	(1.7)	(1.6)	(16.1)	(2.6)
Total	12,181	563	12,744	28,685	2,834	41,519
	(100)	(100)	(100)	(100)	(100)	(100)

Note: Figures in parentheses indicate percentage of the total.
Source: World Bank (1994).

Move Toward Decentralization

The need for decentralization has been recognized for many years. Rapid economic growth in recent years has lent urgency to the task of decentralization, but progress has been rather slow. The process of decentralization received a major boost in 1992 with the President's Budget Speech and promulgation of Regulation No. PP45 in August 1992, signifying the government's reaffirmed commitment to fiscal decentralization.

4. The review of the Indonesian case presented here draws heavily on this World Bank Discussion Paper.

The thrust of the regulation is to devolve more responsibilities to Dati II governments, both from the center and the provinces. Functions reserved for the center are defense and security, judicial affairs, foreign affairs, general administrative matters concerning heads of regions, and other affairs that can be handled more efficiently by the central government. The remaining functions are to be transferred to lower levels. With the exception of intermunicipal affairs and those that do not concern local governments or can be looked after better by the provinces, all other functions are to be the responsibility of Dati II. Associated budgetary resources also will be transferred to Dati II. Transfer of responsibilities to Dati II governments will depend, however, on their administrative capacity. Initially, there will be a trial period of four years when only some functions will be transferred. Completion of the process of decentralization will depend on the results.

Vertical and Horizontal Imbalances

A major problem will be the access of Dati II governments to resources. At present, the expenditures of local governments are financed largely by transfers from higher level governments. Even though they account for only about 16 percent of total government expenditure in the country, local governments can meet no more than one-third of their expenditures from their own revenues (including receipts from shared central revenues). The rest comes from the center through transfers.

The primary reason for the weak revenue base of local level governments is that the center has retained the power to levy the most productive taxes. The taxes on income, personal and corporate, and the principal indirect taxes (the VAT, excises, and customs duties) are the preserve of the center. Even property tax, which is commonly implemented by local governments, is centrally administered, although the proceeds are shared (16 percent goes to provinces and 65 percent to local governments). Revenue from natural resources realized through royalties on petroleum, minerals, and forests are also raised by the center, though shared with subnational governments. Tax base sharing or piggy backing on central taxes is not allowed.

Local (Dati II) governments can (and do) levy a number of taxes (around forty in number), but only two of them (motor vehicle registration taxes and transfer taxes) fetch 90 percent of the revenue to the provincial governments, and only six taxes (hotel and restaurant tax, street lights tax, entertainment tax, advertisement tax, business registration tax, and slaughterhouse tax) account for 85 percent of district level revenue.

Proposals for reform of the tax system at the local levels stress the need to do away with the multiplicity of taxes and to focus on a few with better administration. There is scope for improving the yield of some of the taxes by widening their base (for example, by extending the application of the business registration tax from factories to all businesses). Yield also could be improved by adjusting or restructuring some taxes (for example, taxes on motor vehicles). Greater discretion for local governments in base and rate determination of the taxes assigned to them (even within guidelines laid down by the center) would be helpful in inducing them to tap their tax sources more effectively and intensively.

There are also several important sources from which local governments can derive more revenue. The property tax can yield more revenue with a slight enhancement of the assessment ratio, more realistic valuation, and improvement of its average. Betterment levies also have a good revenue potential. The royalties and fees from forests can be

raised to capture a larger proportion of the revenue. A fuel tax on gasoline and diesel can also be a good source of revenue for local governments.

While these measures could help local governments to double their revenue from own sources, estimates show that their share in total government revenue would still not go beyond 13 percent. Similarly, there is considerable scope for augmenting lower level governments' revenue through more effective use of local user charges, better targeting of the subsidies, and improved accounting practices. Even so, the imbalance between the functions and finances of local governments will persist. In the foreseeable future, local governments will have to depend on transfers from above to finance the bulk of their expenditures. In Indonesia, as in India, the disparities in revenue capacity and cost disadvantages among regions underline the need for a system of intergovernmental transfers that would be both equitable and efficient.

Central Transfers: Grants and Loans

Grants from the central government that meet 65 percent of the expenditures of the provincial governments and 70 percent of the expenditures of the districts are of two types: block or general-purpose grants, and specific-purpose grants. Conditional grants of the second type are meant for spending on projects or purposes laid down by the center and are subject to close control from the center. General-purpose grants include "INPRES" transfer to each level of local government. As part of the move toward decentralization, the share of block grants in the total transfer has increased from 16 percent in 1986-87 to 20 percent in 1993-94. In addition, local governments have been allowed greater flexibility in the use of specific-purpose grants.

GENERAL-PURPOSE GRANTS. The general-purpose grants were introduced in the early 1970s through presidential instructions (INPRES). The objectives are to help the country's development and policy aims; to promote social welfare equally in all parts of the country; and to develop the capabilities of the people and the institutions at the local level. All levels of subnational governments are beneficiaries of these grants. The distribution of the grants is governed by formulae as indicated below:

- Provincial Development Grant (INPRES Dati I). Under this grant, 85 percent is given in equal share to each province and the rest in proportion to the area of each province. Although in recent vears the provinces have been allowed greater flexibility in the use of these grants, the central government wants high priority to be given to road maintenance. The center can also exercise control over the use of these funds through the process of planning and approval of provincial budgets.
- District Development Grant (INPRES Dati II). These grants are intended to create and improve employment and to improve population participation in development. They are governed by a formula and have two components: a minimum grant for each local government and a per capita grant (the latter accounting for the bulk). Moneys sanctioned under the grant are not transferred to local governments but are deposited in a bank to be drawn upon for paying contractors' bills.
- Village Development Grants (INPRES Desa). Under this scheme, all villages get an equal amount for developing their communities. Projects to be financed with

these grants have to be approved by the mayor or district chief. Only the expenditure on material is met out of this grant; the community must provide the labor. These grants go to finance village roads, bridges, and water supply projects.

- Less Developed Village Grant (INPRES Desa Tertinggal). Meant for helping particularly backward villages, this is a per capita grant to be operative from 1994-95. Nearly one-third of the villages were likely to get this support. Village governments were to be given full discretion in the use of funds subject to guidelines.

Table 7-12 shows the population, per capita GDP, and general-purpose transfers for the year 1992-93 for each of the twenty-seven provinces.

SPECIFIC-PURPOSE TRANSFERS TO PROVINCES. Specific-purpose transfers to provinces are of three main kinds: subsidies for autonomous regions (SDO), provincial road improvement grants, and reforestation or conservation grants.

SDO transfers were instituted primarily to create "financial balance" in the autonomous regions by meeting staff expenditure of the provincial governments. The SDO grant has four components: subsidy for "financial balance," support grant, subsidy for primary school operation, and village staff support. Of these, the most important is the subsidy for "financial balance," constituting 88 percent of the total SDO grant.

Provincial road improvement grants are based on a formula with fixed account of the length and condition of the road and the unit cost of construction and maintenance.

Reforestation and conservation grants are given on a project-by-project basis. They take account of land, area to be reforested, area to be conserved, and field staff requirements. These grants are meant to provide counterpart funds to enable the provinces and local governments to meet the matching requirements for externally aided projects.

SPECIFIC-PURPOSE TRANSFERS TO LOCAL GOVERNMENTS. There are six types of specific-purpose transfers to local governments:

- Subsidy for Autonomous Regions (SDO). This subsidy contributes over 90 percent of the total operating expenditures of local level governments.
- District/Town Road Improvement Grant. This grant is for upgrading and maintaining district roads. The criteria are length and condition of district/town roads, road density, and unit cost of roads.
- Primary School Grant. The purpose of this grant is to meet the needs of primary schooling, especially in transmigration areas and thinly occupied or isolated peripheral areas. About 90 percent of the local government expenditures on primary education are financed through these grants.
- Health Grant. This grant is intended to provide health services equitably to rural and low-income urban populations and to improve health standards (for example, by providing access drinking water and sanitation). Nearly two-thirds of health expenditure of subnational governments are financed through this grant. The criteria of allocation of this grant include draft needs/requirements for health centers, subcenters, and mobile centers; for medical personnel; and for safe water.

Table 7-12. Per Capita Central Government Transfers in Indonesia by Type and Province, 1992-93
(in thousands of rupiah)

Province	*1991 population (000s)*	*Per capita 1990 provincial GDP*	*General purpose transfers*			
			Village	*Dati II*	*Dati I*	*Total*
1 D.I. Aceh	3,514	824	7.2	4.4	7.3	19
2 Sumatera Utara	10,474	998	2.5	4.2	2.5	9
3 Sumatera Barat	4,065	811	4.0	5.6	6.1	16
4 Riau	3,422	781	1.6	4.5	8.1	14
5 Jambi	2,084	668	3.1	4.2	12.2	19
6 Sumatera Selatan	6,471	982	1.8	4.5	4.4	11
7 Bengulu	1,235	644	4.1	4.0	19.1	27
8 Lampung	6,191	520	1.3	4.1	3.9	9
9 DKI Jakarta	8,432	2,711	0.2	4.2	2.7	7
10 Jawa Barat	36,335	769	0.9	4.3	0.7	6
11 Jawa Tengah	28,861	677	1.4	4.4	0.8	7
12 DI Yogyakarta	2,930	649	0.9	4.3	7.7	13
13 Jawa Timur	32,849	887	1.2	4.6	0.8	7
14 Bali	2,812	1,073	1.1	5.3	8.1	15
15 Nusa Tenggara Barat	3,442	375	0.8	4.2	6.9	12
16 Nusa Tenggara Timur	3,227	352	2.5	4.4	7.5	14
17 Timor Timur	789	342	5.2	12.9	29.5	48
18 Kalimantan Barat	3,325	825	6.0	4.0	9.2	19
19 Kalimantan Tengah	1,494	921	3.7	4.4	20.7	29
20 Kalimantan Selatan	2,659	860	4.3	4.2	9.2	19
21 Kalimantan Timur	1,962	2,247	2.7	4.4	17.4	25
22 Sulawesi Utara	2,519	598	2.6	4.9	9.5	17
23 Sulawesi Tengah	1,751	561	3.5	4.4	15.0	23
24 Sulawesi Selatan	7,156	593	1.1	4.7	3.6	9
25 Sulawesi Tenggara	1,400	587	2.8	4.3	17.6	25
26 Maluku	1,976	741	3.7	4.0	13.8	22
27 Irian Jaya	1,684	948	6.1	6.0	27.1	39
Total: All provinces	183,159	872	1.8	4.5	3.9	10
Total: All provinces excluding DKI Jakarta	174,727	783	1.9	4.5	4.0	10

Source: World Bank (1994).

- Reforestation and Conservation Grant. These are similar to grants for the same purpose given to the provinces.
- Development of Market Facilities and Shopping Centers. Given on a project basis, these grants help local governments in building market facilities and small shopping centers. These programs have been terminated.

Evaluation

Viewed against the objectives of intergovernmental transfers in a multitier system of government (namely, meeting vertical and horizontal imbalances without impairing accountability in public spending), Indonesia scores well on several counts. The distribution of grants is transparent. It is formula based according to stated objectives, and on the whole the grants have an equalizing effect on regional revenue levels. The system is simple since the number of grants and the criteria used for distribution are not too many.

However, the system can be improved by continuing the trend toward greater reliance on block grants and by including a "fiscal capacity equalization" factor in the distribution formulae for block grants (World Bank 1994). In this way the formulae would recognize regional disparities in fiscal capacity. Fiscal capacities and needs must be assessed, taking account of revenue potential and the reasonable spending revenues to provide basic services at a standard level—with the help of workable norms. This is not an easy task, but it needs to be addressed. SDO grants can be merged with the general-purpose block grants to avoid the incentives for inflating the wage bill at the local levels. At present, the central government tries to restrict such inflation by retaining control over government employment. This goes against the principle of autonomy of local governments. The specific-purpose sectoral grants can be improved with guidelines on the pattern of spending and their planning instead of rigid controls. The use of the grants should also be monitored. Some of the grants to local governments could be routed through the provinces to give them a role in the devolution process.

There is a case for assigning more revenue heads to provincial and local governments (for example, a surcharge on fuel tax) and giving them greater discretion in fixing the rates of tax within their domain. It might also be beneficial to involve the local governments in the administration of the property tax.

Borrowing at present seems to constitute only a small part of the financial requirements of regional governments in Indonesia (only 5 percent and the bulk of the borrowing comes from the center). This is largely because of local governments' weak revenue base. Increasing the proportion of central support to be given in the form of loans might enhance accountability (World Bank 1994). The institutional framework for the allocation of central government loans to local governments has improved with the establishment of a revolving loan account known as the Regional Development Account.

Decentralization in the real sense connotes active and free participation of the people. Otherwise, there is little force to the argument that decentralization promotes efficiency because local governments can respond better to the preferences and tastes of the local citizenry. Progress toward decentralized governance in Indonesia crucially depends on the extent to which the center relaxes its hold on subnational governments. There is every indication that the ground is being prepared. For understandable reasons, the country is

moving cautiously, feeling its way and making experiments to ascertain what works and what does not.

Lessons from India and Indonesia

The experience of India and Indonesia offers valuable lessons for developing countries seeking to reap the benefits of multilevel governance while steering clear of problems commonly associated with decentralization. These lessons can be grouped under three broad heads: the assignment of powers and functions, the design of transfers, and the design of supporting institutions.

Assignment of Powers and Functions

For the most efficient delivery of public services, government activies should be located at the level of government closest to the people that can efficiently perform those services; this is the principle of "subsidiarity" (McLure 1993). Efficiency in the use of resources again requires governments to raise the funds that they spend since otherwise accountability is lost and there is a tendency to overspend. Thus, as far as possible, functions and finances should match for all levels of government.

Taxation based on the benefit principle promotes accountability and thereby efficiency in the allocation of resources in the economy. Benefit taxes also do not give rise to interjurisdictional conflicts. There is thus a strong case for assigning to subnational governments the taxes that facilitate recovery of the cost of public services from the beneficiaries. Examples include the automobile tax and entertainment tax. Residence-based income tax also falls in the same category. Taxes with immobile bases also may conveniently be assigned to subnational governments. Therefore, property tax is almost universally assigned to local governments. As the Indonesian experience shows, it may be advantageous to have a central agency do the valuations, although the revenue is passed on largely to local governments.

An exception to the immobile base principle must be made in the case of natural resource taxation. Otherwise, the allocation of resources and the distribution of government revenue in the country could be seriously distorted. It is interesting to note that attempts by some states in India to realize more revenue out of cesses on mineral royalty have been struck down by the courts as unconstitutional.

Broad-based taxes that are difficult to link to any specific beneficiaries in an identifiable area are better levied by the center. Usually these taxes are also collected more efficiently by the national government. Taxes on income and capital and the value added tax are appropriately assigned to the center. India's experience with "provincial contributions" and China's experience with "fiscal contracting systems" suggest that taxes should be assigned so that the national government has access to adequate funds and revenue instruments for effective macromanagement of the economy. Tax assignment should also facilitate efficient allocation of resources by taking care of spillovers and externalities, and it should equalize the level of public services across regions. Regional and local governments may be allowed to levy surcharges on the tax imposed by the national government where this is possible without giving rise to distortions or interjurisdictional conflicts. Thus, piggybacking by subnational governments may be permitted on personal income tax but not on the corporation tax. Taxes like octroi or entry taxes should not be

assigned or even imposed unless they are confined to goods consumed locally. India's experience underlines the need to guard against fragmenting tax bases while assigning them to different levels of govenment. For certain taxes, like the personal income tax (but not business tax), concurrent jurisdiction may be advisable.

Assignment of significant (nonbenefit) tax powers to subnational governments often has interjurisdictional ramifications. Hence, taxes that can give rise to such conflicts should be given to the central government. Where this is not possible, arrangements for harmonization could be set up through tax rental agreements, whereby the provincial taxes are administered by the center.

China seems to have been well advised to move over to a national VAT in January 1994, although the wisdom of sharing a portion of the proceeds of the tax on an origin basis seems questionable. Similarly, the levy of business enterprise taxes at the provincial level may give rise to problems of attribution when private enterprises spread their activities across more than one province.

Design of Transfers

With the assignment of significant revenue-yielding taxes to the center, the transfer of federal funds becomes unavoidable, even if the subnational governments have independent powers of taxation in the fields assigned to them. The scheme of transfers should be designed to (a) link the expenditure and revenue-raising decisions at least at the margin; (b) avoid causing any adverse incentive effect on the recipient governments in revenue effort or economy in expenditure; and (c) interfere least with the preferences of the citizens regarding the public services to be provided by their local governments. These requirements, in turn, suggest that the transfers should be made up of several components.

First, there has to be a general-purpose or revenue equalization grant. It should be based on a normative assessment of fiscal disabilities (revenue handicap and cost differentials) quantified by using scientific techniques.

Specific-purpose grants play a useful role in ensuring a minimum level of basic services and in achieving certain national goals. There should be some arrangement for monitoring specific-purpose transfers, even though it might imply an encroachment on the autonomy of the federating units. Such encroachment should be acceptable in the national interest.

For correcting the horizontal imbalances, the grant component of the transfers when they include tax sharing, as in India, should be larger, since tax sharing may not achieve its intended purpose, especially when the distribution is made on an origin basis. However, to make sure the federating units have some certainty regarding devolution, a share of the central taxes as a whole should be fixed. This is preferable to putting only selected taxes in the divisible pool. Otherwise, there may be a disincentive for the center to exploit the potential of shared taxes wholeheartedly. The Indian experience underlines the need for care in defining the shared pool and in determining the content of the grants even when formulae based.

In developing countries, federal or central assistance to lower level governments must contain a large "capital" component. The better placed states or provinces may be encouraged to go to the market to obtain funds for investment purposes, but the needs of the less developed states have to be looked after by the federal or central government.

One way the center can do this is to offer these states guarantees for borrowing from the market.

The role of agencies to determine the amount of transfers (like the Finance Commissions in India and planning agencies) should be defined with some clarity. The planning authority should be primarily concerned with devising loans for developing the backward regions and with transfers to improve economic services. Equalization of social and administrative services should be left to the Finance Commission. By and large, capital transfers—that is, those for purposes of investment (such as infrastructure) and for maintenance of assets—should be looked after by the planning agencies. Transfers for raising the level of public services (for example, in the areas of health, education, and general administration), and for reducing the regional disparities in those services, should go to the Finance Commission for determination.[5]

The transfer system should be transparent, simple, and based on well-designed formulae. The Indonesian system, though overloaded with specific-purpose grants, has much to be commended in this regard, especially because of the clarity of objectives and the flexibility it allows to the recipient governments.

Institutional Requirements

Every structure, if it is to endure, must have strong pillars. Institutions are the pillars of a federal structure, and more than one may be required to facilitate any form of multilevel governance. Some of the essential institutions are described below.

COMMISSION TO ADJUDICATE THE TRANSFERS. Vertical fiscal gaps are inherent in any system of government that works on the federal principle, and therefore transfers from higher to lower level governments are unavoidable in most situations. Institutions are needed that can decide how much of the available resources should be transferred and how these resources are to be divided among the constituents. It is necessary to entrust the task of designing federal transfers to an impartial body whose recommendations would command respect and acceptance by all the parties involved. The Finance Commission contemplated in the Indian constitution provides an attractive model of such an institution. Options that can be considered in the Chinese context are as follows:

- a unit, consisting of experts and representatives of the governments concerned, in the Ministry of Finance at the center;
- a committee outside the State Council consisting of governors and ministers of provinces;
- an independent grants commission as in Australia; and
- an intergovernmental committee to report to the national government and the provinces, as in Canada.

Each of these options has its advantages and drawbacks. Considering that the task of such an institution is to adjudicate the flow of public funds among government entities with unequal strength, it is desirable to set up this body outside the central finance ministry. An independent authority like the Grants Commission of Australia would seem to

5. For suggestions to this effect and discussion of these issues, see Bagchi (1977) and Rao and Chelliah (1991).

be the best choice. Unlike the Indian Finance Commissions, it is a permanent body and thus can build up the requisite expertise and data base. The task of this institution is difficult. It must decide the quantum and form of transfers that can meet the vertical and horizontal imbalances while avoiding the undesirable effects associated with transfers—namely, weakening of fiscal accountability on the part of recipient governments and their tendency to overspend.

For deciding the transfers from second to third level governments (that is, from provinces or states to rural and urban local bodies), the states in India have set up State Finance Commissions of their own. More than a dozen such commissions have come into being. This may prove to be an expensive exercise. It would perhaps be more helpful to set up a unit within the finance or planning departments in the provinces. Representatives from the local bodies could assess the amount of transfers required and set up a system of monitoring. With the local bodies coming into full play, the tendency to create separate agencies or boards for specific functions—for example, for water supply, sewerage and so on—should be abjured. The scope for using private sector agencies to perform some of the functions of local government (or for that matter high level governmental functions) should be explored by such units.

PLANNING UNIT. Creation of the Planning Commission in India as a parallel dispenser of federal funds has been a source of confusion and has led to wasteful use of resources in the public sector (for example, by channeling funds to create new assets without maintaining existing ones). It is useful, however, to have a planning agency or unit with clearly defined functions to plan infrastructure across the nation (as in Germany), help local governments to prepare projects, and decide the scale of assistance needed to finance them. Capital for investment in local or regional projects is better provided by a regional development fund as in Indonesia. A funding agency like this can itself help draw up projects for provincial as well as local governments.

MONITORING AGENCY. India's experience underlines the need for a monitoring agency to see that the intergovernmental transfers that are conditional or are for specific purposes are used to serve their underlying objectives. While this might look like an intrusion into the autonomy of subnational governments, it should be acceptable in the interest of efficient use of public funds. The appropriate agency to perform this task would be the Comptroller and Auditor General with constitutionally protected status.

TAX COORDINATING AUTHORITY. Tax coordination is another important function that must be performed by an independent agency with representation from all the players. The exchange of information among different levels of government is one activity that would have to be undertaken by the agency that oversees the proper enforcement of tax laws. Training of tax department staff can be another responsibility of the tax coordinating agency.

COUNCIL TO ADJUDICATE IN DISPUTES. Disputes over the interpretation and implementation of agreements to harmonize tax systems are common in federal systems. In the European Union, the European Council performs this task. Experience shows that such an agency is a potent instrument of harmonization.

Lastly, there should be an intergovernmental consultative body—like the Interstate Council or the National Development Council in India—to provide a forum for sorting out differences and problems so that the federal system functions harmoniously.

Admittedly, federal fiscal relations are conditioned by each country context, and it is not possible to replicate one country system in another. There is, however, much to be gained from looking at each other's experience and comparing notes. The lessons put forward above are offered purely in that spirit.

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8

Decentralization and the Government Deficit in China

Rajiv Lall and Bert Hofman

This chapter examines the fiscal origins of macroeconomic instability in China. It shows how the actual deficit of the government is much higher than the budget deficit. The excessive devolution of decisionmaking responsibility to lower levels of government has combined with insufficient enterprise and bank autonomy to impair central government control over the size of the deficit. Some recentralization of administrative authority is necessary to stem the decline of government revenue, to bolster central government control over the scale of local government investment expenditures, and to restore budgetary discipline. On the other hand, deeper enterprise and financial sector reform is required to help compress direct and indirect government assistance for state-owned enterprises (SOEs), and to mitigate the problem of local-government-led "investment hunger."

The Size of the Government Deficit

Prior to reforms in China, there was no meaningful distinction between the public sector and government, and the bulk of government expenditures fell under the budget. With reforms, enterprise accounts have been progressively separated from central and local government accounts, and, as a result, budgetary revenues and expenditures have declined sharply as a share of GDP. However, an important part of SOE activity continues to be directed by government. Therefore, budgetary expenditures no longer provide an accurate guide to the extent of government activity, nor do total public sector expenditures. To get an appropriate picture of the government's financing needs, what is needed is a definition of the government deficit that covers more than just the budget deficit, but less than the overall public sector borrowing requirement. The most relevant concept is that of the consolidated government deficit (CGD). The consolidated government deficit comprises the budget deficit.[1] In other words, it is the deficit of government at all levels and that part of central bank lending to the financial system that finances the nonautonomous activities of SOEs. The CGD reflects the financing needed to cover not

1. It also can be termed the fiscal deficit.

just government expenditures, but also the government-directed expenditures of the public sector.[2]

The Budget Deficit

China's incomplete fiscal data and its practice in budget presentation have posed problems for measurement of its budget deficits. In the Chinese budget presentation, domestic and foreign borrowing are treated as ordinary revenues instead of financing items below the line, as recommended by the Government Financial Statistics Manual (GFSM) of the International Monetary Fund (IMF). Certain categories of spending, such as subsidies for SOEs, are recorded as a reduction in revenue rather than an addition to total expenditure. As a result, the Chinese definition of the budget deficit systematically underreports its actual size. For purposes of this report, the adjusted budget presentation is used to arrive at categories consistent with GFSM. China's budget deficit (GFSM definition) averaged only 2.3 percent of GDP between 1987 and 1993, falling from 2.5 percent in 1992 to 2.1 percent in 1993 (Table 8-1).

Central Bank Lending for Government Activity

A significant proportion of the assets of the People's Bank of China (PBC) are loans provided to banks, nonbanks, enterprises, and government institutions to finance expenditures, both current and capital, mandated by the government. Such loans are conceptually the equivalent of nonbudgetary government expenditures. Thus, for example, a part of SOE subsidies is financed through PBC loans, channeled through the state-owned banking system, and does not show up in the government budget at all. Likewise, a portion of PBC loans is used to finance fixed investment in "key projects" and "priority sectors," and it is not recorded as part of budgetary expenditures on fixed capital investment. In order to get a more accurate picture of the government deficit, therefore, PBC net lending that is used for "policy purposes" must be included as net government lending, or as an above-the-line expenditure item.[3]

There is no uniform definition of policy lending offered by the Chinese authorities. Recent research and the mission's investigations suggest that policy loans have two characteristics.[4] First, they are made in support of government economic and industrial policies and to assure funding for activities considered a priority by government. Second, they may or may not meet commercial criteria for lending (that is, rates of return, debt service coverage, and so on). Policy-based loans include the following five categories of loans:

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2. The concepts are drawn essentially from Robinson and Stella, "Amalgamating Central Bank and Fiscal Deficits," and Leviatan, "Impact of Public Financial Institutions on Fiscal Stance," in Blejer and Cheasty (1993, pp. 250, 269-70). The CGD is not to be confused with the quasi-fiscal deficit of the government. The former is a flow concept, while the latter reflects changes to the net worth of the government assets and would require establishing the proportion of government-directed lending of the financial system that is nonrecoverable. The flow concept is the more relevant one for analyzing the macroeconomic implications of the size of the government's overall financing requirements and of the ways of meeting these requirements.

3. Equivalently, PBC policy lending must also be included as a below the line financing item, as indirect central bank lending to government.

4. For recent research, see Xu and Xiao (1993).

Table 8-1. Components of the Consolidated Government Deficit, 1987-93
(percentage of GDP)

Components of the deficit	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*Seven-year average*
1. Budget deficit (GFSM)	2.2	2.4	2.3	2.1	2.4	2.5	2.1	2.3
2. PBC lending to financial system	1.6	5.0	5.2	5.3	4.2	4.1	8.5	4.8
of which: Policy loans:								
(a) Lower bound[a]	0.9	3.0	3.1	3.2	2.5	2.5	5.1	2.9
(b) Upper bound[b]	1.3	4.0	4.2	4.3	3.3	3.3	6.8	3.9
3. Consolidated government deficit								
(a) Lower bound (1+2a)	3.1	5.4	5.5	5.3	4.9	5.0	7.2	5.2
(b) Upper bound (1+2b)	3.5	6.4	6.5	6.3	5.7	5.8	8.9	6.2
Memo items:								
Budgetary revenues	22.8	19.9	20.4	20.1	18.1	16.3	15.4	
Budgetary expenditures	25.4	22.3	22.7	22.1	20.5	18.9	17.5	
GDP at current prices (Yen million)	1,130.1	1,406.8	1,599.8	1,768.0	2,018.0	2,402.0	3,138.0	

a. 60 percent of PBC lending to financial system.
b. 80 percent of PBC lending to financial system.
Source: Ministry of Finance, PBC, IMF and mission interviews.

- loans for financially viable ventures such as power and transport infrastructure investment loans. Loans in this category are generally large scale with long payback periods.
- fixed asset loans for the technological renovation of selected enterprises;
- loans to fund rural development and food security oriented programs that consist of purchase of agricultural commodities (short-term), and poverty alleviation and rural economic development credits (long-term);
- subsidized working capital loans to "priority" enterprises that are subdivided into three classes: strategic industries of national importance (the "pillar industries"), export-oriented enterprises, and structurally loss-making SOEs of significant national or regional importance; and
- subsidized loans for social sector development, such as for health and education.

Estimates of PBC policy loans as defined above vary.[5] In general, they range from 60 to 80 percent of annual PBC lending to the financial system.[6] The bulk of this lending has

5. Not all "policy loans" are financed by PBC; some are financed by the state banks from their own resources. However, only the policy loans of the central bank can be regarded as part of the CGD. Policy loans financed from the resources of the state banks themselves would normally be included in the wider concept of the consolidated public sector deficit (see Leviatan in Blejer and

maturities of one to two years; the rest is short-term lending mostly for working capital loans to loss-making SOEs.[7] All PBC loans are subsidized to different degrees below the base administered interest rate for bank loans, and it is estimated that more than half are not paid back.[8] Over 1987-93, average annual PBC policy lending is estimated to lie between 2.9 percent and 3.9 percent of GDP (Table 8-1).

The Consolidated Government Deficit

The CGD is arrived at by consolidating the budgetary accounts with those of the central bank. It is in effect the sum of the budget deficit and PBC net lending for policy purposes. On average, the deficit defined in this manner is estimated to have been between 5.5 and 6.2 percent of GDP in the years 1987 to 1993 (Table 8-1). Although the budget deficit as a share of GDP has been relatively modest, the actual financing needs of the government have been much greater. Not only has the CGD been persistent, but it has also seen sharp increases in recent years. Driven by a sharp escalation in central bank policy loans, the CGD almost doubled in 1988 to between 5.4 and 6.4 percent of GDP, and it jumped again in 1993 to reach an estimated 7 to 9 percent of GDP.

The Revenue System and Causes of the Consolidated Government Deficit

The Declining Share of Government Revenues in GDP

BUDGETARY REVENUES AND THE IMPACT OF ENTERPRISE REFORM. The share of budgetary revenues in GDP has seen a continuous decline since 1978 (Table 8-2). This ratio went from 34.4 percent of GDP in 1978 to 15.4 percent in 1993. The main cause for this declining trend has been the fall in the budgetary contributions from SOEs, comprising direct tax payments and profit remittances. The budgetary contributions of SOEs dropped 16 percentage points, from 20 percent of GDP in 1978 to less than 4 percent in 1992, accounting for over 80 percent of the total decline in the GDP share of budgetary revenues over the period (Figure 8-1). The diminishing share of SOE budgetary contributions in turn has been essentially the result of enterprise reform and the associated separation of enterprise from government accounts.[9] The intention of the profit retention and enterprise contracting schemes introduced during the 1980s was precisely to have

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Cheasty, 1993). In 1991, for example, total policy loans from the banks were estimated by Chinese researchers to account for 7.1 percent of GNP (Xu and Xiao 1993). Although this number needs to be treated with caution, it does suggest, given that PBC policy loans amounted to an estimated maximum of 6.8 percent of GNP in that year (Table 8.1), that policy loans financed from the resources of the state banks may not be negligible.

6. These estimates are based on mission interviews with PBC and other government agencies.

7. This information came from interviews with PBC. The balance of PBC lending to the financial system comprises lending for normal "monetary" purposes (that is, for managing the liquidity position of the banks and in the PBC's function of lender of last resort). This type of lending is quite large in China given the poorly developed payments system.

8. PBC loans of one to two years' maturity bear a rate of 10.6 percent compared with the normal administered rate of 12.24 percent.

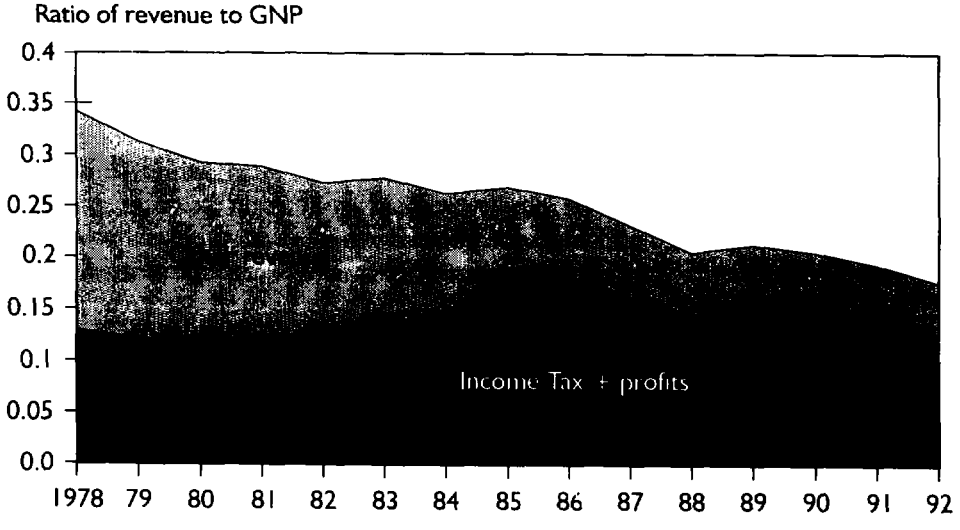
9. Increasing competition has reduced the monopoly profits of SOEs, and this too has contributed to the fall in SOE budgetary contributions.

Table 8-2. China: Key Budget Data, 1978, 1988, 1993

Budget data	*1978*	*1988*	*1993*
		(Percentage of GNP)	
Budgetary revenues	34.4	19.9	15.4
Budgetary expenditures	34.1	22.3	17.5
	1978		*1992*
		(Percentage of total)	
Central government revenues	59	n.a.	41
Central government expenditures	46	n.a.	41
Memo items:	*1978*	*1988*	*1993*
		(Percentage of GNP)	
Budget deficit	0.3	2.4	2.1
Consolidated government deficit	n.a.	6.4	8.9

Source: Ministry of Finance data.

Figure 8-1. Trends in Budgetary Revenues, 1978-92



Note: Other revenues = all revenue except enterprise income tax and profits.

enterprises control a larger share of their resources. Thus, the fall in the ratio of budgetary revenues to GDP has in part been a necessary and desirable consequence of enterprise reform.

DECENTRALIZATION AND TAX EFFORT. However, enterprise reform does not explain the entire decline in the share of budgetary revenues in GDP. A second explanation lies in the impact that decentralization has had on the mobilization of budgetary revenues. Progressive devolution of administrative authority to lower levels of government has been the hallmark of China's reform experience since 1978. Although this process has bolstered local initiative, and has thereby helped China maintain a high GDP growth rate, it has also led to reduced central government control over macroeconomic policy. In particular, decentralization has accentuated the problem of "dual subordination" in government administration (Box 8-1). The divided loyalties of local government officials have contributed to the subordination of the interests of the central government to those of local governments, and this has affected revenue mobilization.

Unlike most countries, China has not had a national tax service. Although the central government determines tax rates and the tax base, all taxes, with the exception of excise taxes, have been collected by local tax authorities, and revenues have been shared with the central government through a complex system of revenue sharing. This has allowed local governments to enjoy de facto control over tax policy. Regardless of statutory tax rates, local administrations have been able to negotiate contracts with local enterprises to provide these enterprises tax relief and grant them tax incentives not authorized by the center. Local governments have also been able to urge the local tax bureaus to be less vigorous in their collection of taxes to be shared with, or remitted to, the central government. As decentralization has progressed, growth-oriented local governments have used the flexibility accorded to them by China's system of tax administration to reduce their tax effort at the margin and thereby avoid sharing local resources with the central government.

Increasing local autonomy on revenue mobilization had a significant effect on revenues from indirect taxes. Under normal circumstances, tax revenues from sales and business taxes are expected to be buoyant. However, in China the share of these taxes in GDP has remained stagnant (Figure 8-1). Ad hoc exemptions provided by local governments are a plausible explanation for the lack of buoyancy of China's turnover taxes.[10] Although official estimates of illegal tax exemptions have been fairly low (estimated at Y 10 to 15 billion for 1992), it is clear that these practices have been much more widespread. Illegal tax exemptions granted by local governments are estimated to have cost the center the equivalent of about 1.5 to 2.0 percent of GDP in foregone tax revenues in 1993 alone.[11]

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10. This incentive to grant ad hoc exemptions may have become stronger in view of the extremely high marginal statutory tax rates on SOEs. For some SOEs, the statutory marginal rate on income exceeded 70 percent of pretax profits, compounding an enterprise income tax (EIT) of 55 percent with an Energy and Transportation Tax of 15 percent, and a Budget Adjustment Levy of 10 percent over parts of retained earnings.

11. The estimate is based on the surge in tax revenues that occurred in the second half of 1993 following the announcement of the design of the new tax-sharing system. Under the new arrangements, each province is to be guaranteed a minimum share from the new VAT, equivalent to their 1993 collections from the indirect taxes that the VAT would replace. Local governments thus had a strong incentive to increase their collection efforts. As a result, revenues from indirect taxes

Box 8-1. Decentralization and the Problem of Dual Subordination

Since 1978, decentralization has been critical to China's ability to pursue market reforms. In fact, the essential strategy underlying the reform proposals that emerged from the 11th Congress of the Communist Party was "devolving powers and yielding benefits" (fan-chuan jiangli). As a result of a process of administrative decentralization, or devolution of administrative powers, lower levels of government have acquired much greater independent control over resources and progressively greater autonomy in developing the regions under their respective jurisdictions.

Even before the launching of its reform program in 1978, the locus of decisionmaking in China was considerably more diffuse than in the Soviet Union. China's administrative structure is multilayered and multiregional. Each level of government (province down to the village and township) is organizationally and hierarchically a mirror image of higher levels—the same functional departments are replicated at each level of government. An important feature of China's mode of government organization is the principle of "dual subordination" (*shuangchong lingdao*) whereby public administration is organized along the lines of both vertical and horizontal accountability. Any given organizational unit at any given level of government is answerable not only to superior authority within its own vertical hierarchy (along the *tiao* branch of administration), but also to higher authority at the same level of government (along *kuai* branch of administration). This has divided the loyalties of local government officials. Decentralization has greatly accentuated this phenomenon, and its impact in two areas—namely, revenue mobilization and investment planning—has impaired the central government's ability to contain the size of the CGD.

EXTRABUDGETARY FUNDS. The period since 1978 has seen a rapid increase in funds recorded as "extrabudgetary." This suggests that a good part of the decline in the budgetary resources of government has been made up by the rise in extrabudgetary resources. Such an interpretation, however, is misleading. Data on extrabudgetary funds include two types: fiscal extrabudgetary and enterprise extrabudgetary. Fiscal extrabudgetary funds comprise a set of nonbudgetary levies and charges of government and administrative units.[12] These funds have grown rapidly from 2.6 percent of GDP in 1978 to 4.2 percent of GDP in 1993, and they now account for 25 percent of total budgetary funds (Figure 8-2). These funds are under the direct control of governments at various levels and have indeed served to make up for part of the decline in budgetary resources. In fact, fiscal extrabudgetary funds have largely been used by local governments to avoid sharing revenues with the central government. Local governments have used off-budget

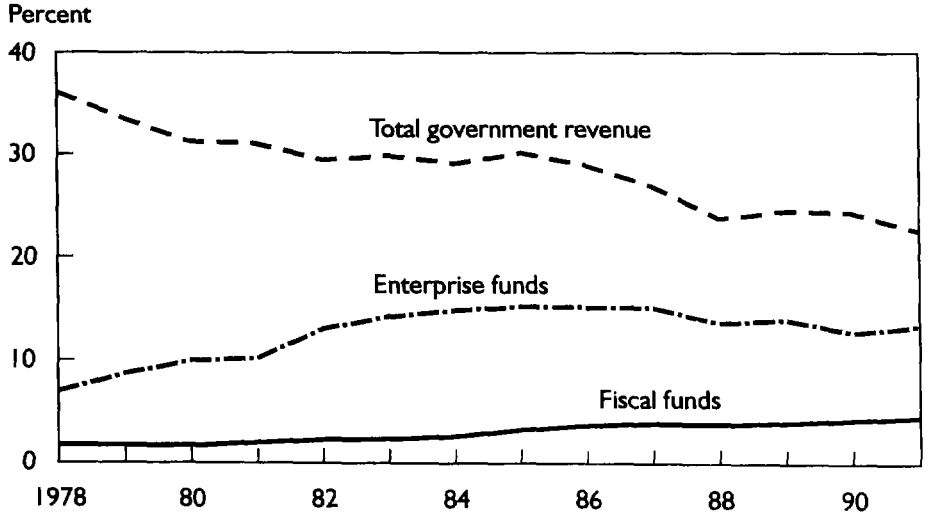
showed a remarkable increase over 1993, with much of the expansion coming in the second half of the year, immediately following disclosure of the ground rules for the new tax-sharing system.

12. Some of these levies, such as the Urban Construction and Maintenance Tax, are, in fact, legal; others are ad hoc.

levies to recoup much of the budgetary revenues foregone through the grant of illegal exemptions on shared taxes.

Funds recorded as enterprise extrabudgetary, on the other hand, comprise essentially the retained earnings and the depreciation funds of enterprises. During the early 1980s, the supervising level of government could exercise extensive control over the use of such funds, and it could even effectively block the bank accounts in which these funds were mandatorily held. However, with increased enterprise independence, particularly since 1987, government control over the retained earnings and the depreciation funds of SOEs has diminished. Even though enterprise extrabudgetary funds still account for the equivalent of about 12 percent of GDP, these funds can no longer be legitimately regarded as part of government revenue. Thus, on the whole, it is not the case that extrabudgetary resources have compensated for the trend decline in budgetary revenues. Since 1978, the share in GDP of overall government revenues (budgetary and extrabudgetary revenues accruing directly to government) has indeed declined (Figure 8-2). To the extent that overall government expenditures have not declined commensurately, the result has been a large and persistent CGD.

Figure 8-2. Trends in Government Revenue and Extrabudgetary Funds *(percentage of GNP)*



Note: Governmemt revenues = budgetary revenues + extrabudgetary fiscal funds.
Source: China Statistical Yearbook, 1993.

The Dwindling Share of Central Government Revenue

Fiscal decentralization, through the practice of revenue sharing, has affected the relationship between central and local governments in important ways. Although the form of revenue sharing arrangements has varied, the basic objectives have remained unchanged. Local governments have been allowed to retain enough revenue to cover a basic level of services and turn the remainder over to the central government. By 1988, this system had evolved into the fiscal contracting system that provided for three types of taxes: taxes whose revenues accrue to the central government, taxes whose revenues accrue to local governments, and taxes with shared revenues. Each province was allowed to retain a share of the revenues from shared taxes to enable it to cover "base number" expenditures, fixed on the basis of 1987 actual expenditures, with the remaining revenues from such taxes being remitted to the central government. In practice, these sharing arrangements led to the progressive reduction in the share of budgetary revenues going to the central government.

The share of central government in total revenues (after tax sharing) has seen a progressive decline over the reform period, from 59 percent in 1978 to 41 percent in 1993 (Table 8-2).[13] The collections disparity in favor of local governments seems to have accelerated with the enactment of the present contracting system in 1988. During the 1985-87 period when the previous system was in force, the ratio of local government to total government budgetary collections averaged 54.2 percent. During the 1988-92 period, the average had risen to 59.5 percent. The shift in the locus of revenues to local governments has contributed to the CGD for two reasons. First, local governments, being concerned primarily about local growth, have had a higher propensity to spend than the central government. Second, the central government's share in total revenues has become increasingly insufficient for it to cover its own expenditure responsibilities. In consequence, the central government has turned to lending through the financial system to meet expenditures it considers priority.[14]

Declining Control Over Government Expenditures and the Deficit

Although the share of budgetary expenditures in GDP has fallen in line with the decline in budgetary revenues, the persistence of the CGD indicates that overall government expenditures have not fallen in line with the decline in government revenues. In fact, weak control over government expenditures has been an equally important, if not more important, cause of the CGD than the declining revenue-to-GDP ratio. Three factors have been at play. First, as decentralization has progressed, the effectiveness of the investment planning system of the State Planning Commission (SPC) has diminished, while the incentives for local governments and their enterprises to invest have become stronger. Second, insufficient progress with enterprise reform has made it difficult to compress operating subsidies to SOEs. Third, budgetary systems have been plagued by numerous deficiencies in terms of coverage and procedures.

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13. This is using the Chinese definition of revenues but excluding debt issues. The Chinese definition of budgetary revenues is (GFSM revenues + debt issue - operating losses of SOEs).

14. There is evidence that the central government, in the face of declining revenues, has been less able to use the fiscal system to effect crossregional equalization (World Bank forthcoming). The central government has turned, therefore, to the financial system, and indirectly to the central bank, to try and achieve this objective.

Rising Government Investment Expenditures

The State Planning Commission's investment planning system is the chief instrument for managing government investment expenditures in China. The mainstay of this system has been an elaborate procedure for investment approval, complemented with central allocation of raw materials and foreign exchange. With decentralization, control rights over SOEs have been progressively transferred to local governments, and by 1988, 80 percent of the industrial output of SOEs was under local government control. At the same time, local governments have become less dependent on central government budgetary contributions and on centrally allocated raw materials and foreign exchange. As a result, local governments have had little incentive to subject the investment projects of their SOEs to central government approval, and local government officials, vulnerable to the pressures of dual subordination, have found ways to bypass SPC. Over time, an increasing share of government-directed SOE fixed investments has been undertaken without SPC scrutiny.

Although the overall trend has been in the direction of greater decentralization, there have been temporary episodes of recentralization during which central government control over the investment approval system has been restored somewhat (for example, in 1984/85 and again in 1989-91). Veteran leader Deng Xiaoping's tour of the southern provinces in the spring of 1992,[15] however, re-invigorated the trend toward decentralization. During this latest round of decentralization, the declining ability of the investment planning system to restrain local-government-led "investment hunger" is clearly reflected in the sharp growth of SOE fixed investments in "priority sectors," or sectors in which governments at all levels have a stated interest.[16] These sectors include social infrastructure (schools, hospitals), other physical infrastructure (energy, transportation, telecommunications), "basic" industries (key raw materials sectors such as steel and coal), and "pillar" industries (sectors, such as automobiles and electronics, considered strategic). Together, investments in these sectors can be regarded as constituting China's "priority public investment program" (PPIP), the size of which expanded from 8.4 percent to 11.3 percent of GDP between 1989 and 1992 (Table 8-3).[17]

Not only has decentralization weakened control over the size of the PPIP, but it has also accentuated the conflict between the investment priorities of the central versus local governments. National consensus over what constitutes priority government expenditure has been breaking down, and the state investment plan has become a mere aggregation of the investment priorities of all levels of government. The rapid growth in overall SOE fixed investments—from 16.7 percent in 1991 to 22.9 percent of GDP in 1993—is at least in part due to the accommodation of local-government-directed investments in sectors that the central government would regard as low priority.[18] In effect, therefore,

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15. See World Bank (1993b).

16. This observation is based on various budget speeches by key officials.

17. This number has been arrived at by adding SOE capital construction and technical transformation in the "priority" sectors.

18. Low priority investment projects sponsored by local governments have been accommodated partly because of the diversion of funds from their intended uses under the credit plan. Local governments acting in collusion with the banks and enterprises within their jurisdiction have directed funds into projects of local interest, forcing PBC to fill the resulting gap in the financing of central government sponsored projects through incremental policy lending. See World Bank (forthcoming, Chapter 3).

Table 8-3. China's "Priority Public Investment Program" and Its Financing, 1988–93 *(percentage of GDP)*

PPIP and source of financing	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*
Priority Public Investment Program (PPIP)[a]	-	8.4	-	-	11.3	-
Source of financing						
Budgetary contribution[b]	-	2.2	-	-	1.4	-
Retained earnings and self-raised funds of SOEs	-	4.7	-	-	6.2	-
Foreign funds	-	0.8	-	-	0.9	-
Estimated PBC policy loans for fixed investment[c]	-	0.7	-	-	2.8	-
Memo items:						
Total policy loans from PBC[d]	4.0	4.2	4.3	3.3	3.3	6.8
Estimated PBC policy loans for working capital financing[e]	-	3.5	-	-	0.5	-
Total SOE fixed investment (state investment plan)	19.6	15.9	17.1	16.7	19.9	22.9

a. Comprises those sectors in which the government has had a stated interest. These include the social sectors, basic raw materials, transportation, communications, infrastructure, and energy.

b. Contribution of budgetary funds is assumed to be the total of state appropriations reported for all SOE fixed investment in Table 5.1 of the *China Statistical Yearbook, 1993*. The implicit assumption is that budgetary contributions to SOE fixed investment are channeled to the PPIP.

c. Obtained as a residual (that is, PPIP minus nonbank financing). It is assumed that all bank financing of the PPIP is in the form of policy loans from the central bank onlent to SOEs through the state banks.

d. As per higher-band estimate shown in Table 2.1 of the *China Statistical Yearbook, 1993* (that is, 80 percent of all PBC annual lending to financial institutions).

e. Estimated as residual, that is, total policy loans minus estimated policy loans for fixed investment.

Source: *China Statistical Yearbook 1993*, and PBC and Bank staff estimates.

China's "national public investment program" (NPIP) has become considerably larger than even the PPIP.

An important cause of persistent local-government-led "investment hunger" is the fact that neither local governments nor their SOEs bear any significant investment risk. The risks of poor or excessive investment are in effect socialized through a noncommercial banking system, whereas the potential benefits from investment are captured by local governments and the SOEs that invest under their direction. The problem of excess investment demand has been exacerbated by low, or sometimes negative, real interest rates. In the absence of sufficient enterprise and financial sector reforms, there remains a strong incentive for local governments to invest through SOEs within their jurisdiction.

Continuing Burden of Subsidies for the Operating Expenses of SOEs

Despite numerous initiatives in enterprise reform, SOEs are still obligated by government policy to keep redundant workers on their payroll. Thus, they continue to bear the social

burden of supporting an excessive work force. In addition, SOEs provide a number of services (including housing, health care, child care, and schooling) regarded as public goods in most other countries. Since SOEs are called upon to incur expenditures that they might not otherwise undertake, they continue to be entitled to government assistance. In practice, a portion of government assistance to SOEs ends up being used to cover for the operational inefficiencies of these enterprises.

It is difficult to assess the extent to which the government provides direct and indirect assistance to SOEs. Explicit budgetary subsidies to loss-making SOEs have been declining, and in 1993 they accounted for only 1.3 percent of GDP (Table 8-4). However, a significant proportion of budgetary allocations are still made for SOE fixed investments that are implicit subsidies to cover the operating expenses of SOEs. Such implicit budgetary subsidies are estimated to account for another 2 percent of GDP in 1992. This adds up to a total of 3.5 percent of GDP, which is equivalent to about 1.5 times the budget deficit. But even this masks the true extent of government support for SOEs. PBC channels some short-term policy loans through the banks to finance the working capital needs of SOEs. In addition, there is some unknown proportion of the working capital loans of the state banks made from their own resources that are, in fact, nonperforming because they have been extended essentially as subsidies upon the direction of the central and local governments.[19]

Table 8-4. Composition of Budgetary Expenditures and Net Lending, 1993
(percentage of GDP)

Total current expenditure	12.8
Explicit subsidies for loss-making SOEs	1.3
Capital expenditure[a]	4.3
Estimated implicit subsidies for SOEs[b]	2.2
Total estimated budget expenditures on subsidies to SOEs	3.5
Memo item:	
Budget deficit	2.1

a. Spending for capital construction accounts for the bulk of these expenditures. About half of these are channeled through the People's Construction Bank of China as interest rate subsidies and the rest of them, through SPC for special development projects. In addition, some expenditures (mostly concessional loans) are designated for developing the capacity of existing enterprises.

b. This represents the difference between what is reported in the budget as capital expenditures and what is reported in the *China Statistical Yearbook* as state appropriations for financing SOE-fixed capital investment.

Sources: Ministry of Finance, *China Statistical Yearbook*; and Bank staff estimates.

19. This contributes to the deterioration of the portfolios of the banks and represents a potentially significant liability for the government.

Problems with Budgetary Coverage and Procedure

EXTRABUDGETARY EXPENDITURES. Fiscal extrabudgetary funds are for all practical purposes government funds. Their growth has undermined control over the scale of total government expenditures because it has enabled growth-oriented local governments to spend more freely outside the purview of centralized budgetary control. Local governments have tended to spend virtually all the revenues generated from ad hoc off-budget fiscal levies.[20]

POOR MONITORING OF BUDGETARY INVESTMENT EXPENDITURES. Quite apart from difficulties with containing the scale of extrabudgetary expenditures, procedures for monitoring the use of within-budget expenditures have also been deficient. Budgetary funds for capital investment are allocated partly through SPC and partly through the investment department of the People's Construction Bank of China (PCBC). Present budgetary procedures do not require the Ministry of Finance (the ministry responsible for implementing the budget) to monitor the use of funds allocated through either of these channels. In the case of funds allocated by SPC, no systematic controls exist to match the disbursement of budgetary funds with the physical progress of project implementation. For budgetary funds allocated through PCBC, PCBC acts as the financial agent of the government, but it does not bear any credit risk for the projects financed.[21] PCBC is therefore not concerned with cost overruns or the repayments of loans. As a result, there is likely to be significant waste, and opportunities for cost cutting cannot easily be identified.

LACK OF DISCIPLINE IN THE USE OF RESERVES. Budgetary regulations require each level of government to maintain reserves for use in contingencies such as natural disasters. Unspent budgetary funds can be accumulated in reserves as well. At present, these reserves are at the free disposal of local governments and can be used at any time without being subject to any control from the central government. The use of such reserves, however, amounts to a monetary expansion equal to the financing of the government budget deficit by PBC.[22] Although the international practice is to register such drawdowns of government deposits as deficit finance, the Chinese budgetary system does not take account of it.

ARREARS. When the settlement of payments and wages lags behind the delivery of goods and services to government, the monetary effects are the same as credit to government. Arrears are a regular feature in China. A good example is the issue of IOUs to pay for agricultural procurement. However, arrears go largely unnoticed in the Chinese budget accounts, which are cash based, without additional accrual accounting. In practice, what this means is that China's system of budgetary management fails to take full account of the government's expenditure obligations and therefore masks the true size of the budget deficit.

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20. The central government has attempted to bring such funds at least partly under the purview of the budget by obligating local governments to pay a surcharge on their extrabudgetary funds. The Energy and Transportation surcharge is an example.

21. This risk is passed on to PBC, or to the Ministry of Finance, if it concerns budgetary loans.

22. Government deposits are not counted as part of the money supply.

Reducing the Consolidated Government Deficit

The foregoing analysis showed that the challenge of fiscal reform in China is not merely to reduce the budget deficit but, more importantly, to reduce the CGD. For this, the authorities need to (a) reverse the declining revenue-to-GDP ratio, (b) contain government and government-directed investment expenditures, (c) reduce nonbudgetary current expenditures, (d) ensure that the share of central government revenues is commensurate with its expenditure responsibilities, and (e) improve budgetary procedures and coverage.

China has embarked on a fundamental reform of its fiscal institutions and practices, in order to make its fiscal system better suited to a market-based economy and to improve macroeconomic control. The scale of the program is of historic proportions. The reform program covers three broad areas: tax structure, revenue sharing, and tax administration. In addition, efforts are ongoing to reform the system of investment planning. The extent to which the reform package will serve to achieve the goal of reducing China's CGD is discussed below.

Raising the Revenue-to-GDP Ratio

REFORM OF THE TAX STRUCTURE AND TAX ADMINISTRATION. The tax reforms provide for a major restructuring of the tax system, which will reduce the number of taxes from more than thirty to eighteen. The main features of these changes are a broadening and restructuring of the value-added tax (VAT), a unification and restructuring of the enterprise income tax (EIT), and a restructuring of the personal income tax. Various minor taxes will be merged or abolished, and the resource tax will be expanded and applied more consistently. (See Box 8-2 for a summary of changes.) At the same time, the tax administration is reorganized into a National Tax Service (NTS) and a Local Tax Service (LTS). Beginning July 1, 1994, the NTS began collecting all central taxes and shared taxes—the bulk of tax revenues. These changes will significantly simplify the tax system and make it more transparent. First, they will eliminate all major sources of nonuniformity.[23] Second, they will reduce the currently heavy de jure income tax burden on enterprises.[24] Both factors should enhance the incentives for productivity increases and profit seeking. The reform package is certain, therefore, to improve allocative efficiency.

UNCERTAIN IMPACT ON REVENUE MOBILIZATION. On the other hand, the short- and long-run implications of the reform package for revenues are uncertain. Although

23. Under the previous system, enterprises were treated differently, depending on their ownership and on the nature of their contracting arrangement. The result was widely disparate tax burdens. Abolition of the enterprise contracting system and unification of the enterprise income tax into a single tax for all domestic firms will significantly improve the fairness of the system. The reduction of rates and the merger of the product tax and much of the business tax into the VAT will also contribute to greater uniformity. And equally important, there will be a much greater chance of realizing uniform treatment under a truly national tax service than under the decentralized service.

24. Elimination of the adjustment tax, the energy and transportation fund contribution, and the budgetary adjustment tax, and lowering the general rate to 33 percent, will increase the after-tax earnings of enterprises. Likewise, the increase in deductibility of labor costs and the increase in depreciation rates will reduce the overstatement of profits and therefore the tax burden.

Box 8-2. Changes in the Tax Structure in China, 1994

1. Product Tax. Eliminated and merged with the value added tax (VAT).
2. VAT. Broadened to absorb a part of the existing business tax and most of the product tax.
3. Business Tax. The business tax on the wholesale and retail sectors to be merged with the VAT, and the rest remains.
4. SOE Income Tax. Part of the new income tax on enterprises.
5. Collective Income Tax. Part of the new income tax on domestic enterprises.
6. Income Tax on Private Firms. Part of the new income tax domestic enterprises.
7. Income Tax on Self-Employed Individuals. Part of the new personal income tax.
8. Personal Income Adjustment Tax. Part of the new personal income tax.
9. Wage Bonus Tax. Abolished.
10. Salary Adjustment Tax. Abolished.
11. Adjustment Tax on SOEs. Abolished.
12. Urban Construction and Maintenance Tax. Remains but with a new rate and base structure. This is a nonbudgetary tax.
13. Investment Orientation Tax on Fixed Assets. Remains as at present.
14. Banquet Tax. Abolished.
15. Market Trading Tax. Merged into the VAT structure.
16. Animal Husbandry Tax. Merged into the VAT structure.
17. Slaughter Tax. Remains, but the choice of whether to levy this tax is given to the provinces.
18. Urban Land Use Tax. Remains but with higher rates.
19. Resources Tax. This presently covers mostly crude oil, natural gas, and iron ore. To be extended to cover a wider range of metal and nonmetal resources.
20. Salt Tax. Merged with the resource tax.
21. Real Estate Tax (domestic). Merged with 24 into a general tax on real estate.
22. Vehicles/ships (domestic). Merged with 25 into a general tax on vehicles and ships.
23. Commercial Industrial Sector. Abolished.
24. Urban Real Estate Tax. Merged with 21 into a general tax on real estate.
25. License for Vehicles and Ships. Remains.
26. Income Tax on Joint Ventures and Foreign-owned Companies. Remains for now but will be merged eventually with income tax on domestic enterprises.
27. Personal Income Tax on Foreigners. Merged into new personal income tax along with 7 and 8.
28. Tax on Burning Oil. Abolished.
29. Special Excise Tax. Abolished.
30. Securities Trading Tax. New tax to be introduced.

Source: Interviews with State Administrators for Taxation.

tax revenues showed an encouraging increase over the first five months of 1994, the risk of a temporary decline in revenues remains. First, enterprise reaction to the new tax structure is still unknown. Temporary revenue declines are likely to stem from special treatment for hard hit enterprises. For example, foreign enterprises and joint ventures subject to higher tax burdens are to be grandfathered for five years as far as their sales taxes are concerned. Enterprises that were established before December 31, 1993, have also been allowed to apply for tax reductions in the coming five years, if the indirect tax reform increases their tax burden. Should difficulties in adjusting to the new tax structure become severe, such special treatment could end up being extended to an even larger pool of enterprises. Second, making the NTS operational is a monumental task. The NTS needs new management techniques, payments structures, equipment and training, as well as time before it can become fully effective.

Over the longer run, tightening of the tax administration by means of the NTS should bring in additional revenue. Although official estimates of illegal tax exemptions have been low (2 to 3 percent of tax collection), the surge in tax revenues that occurred in anticipation of the new revenue sharing mechanism suggests that elimination of these exemptions could bring up to an additional 1.5 to 2 percent of GDP in revenues. Beyond this, however, it is unclear what incremental revenues would be generated from the tax reform package.

As concerns indirect taxes, although the new rates for the VAT are higher than those for the business tax that they replace, the business tax was a cascading tax, and so it is not obvious that the new VAT will generate more revenue. Further, the switch to the credit invoice method from the presumptive method for collecting the VAT could lead to revenue shortfalls. As concerns direct taxes, eliminating the contracts for enterprise income taxes and abolishing the loan repayment deduction should, in principle, raise revenues.[25] However, lowering the top enterprise income tax rate from 55 to 33 percent; eliminating the income adjustment, budgetary adjustment, and energy and transportation tax; and correcting part of the understatement of labor and capital costs in calculating enterprise profits would reduce the tax yield. Thus, even if the reforms were implemented fully as intended, it is unclear to what degree they would raise the share of taxes in GDP. In fact, given the risk of adjustment difficulties for enterprises, it is unlikely that the current tax reform package alone would be sufficient to significantly reduce the CGD.

Although the tax reform package moves in the right direction, it poses tremendous challenges with regard to implementation because of its scale and breadth.

MAKING THE NTS OPERATIONAL. The decision to move rapidly to a new tax collection system has left only little time for preparation, and the local tax bureaus seem less than ready. Top priority must be given to training and equipping the new NTS and LTS. The staff need to be familiarized with new operational procedures, new tax laws, and new collection methods. Equally important is the installation of modern office techno logy to facilitate the collection of the VAT, enterprise income tax, and personal income

25. The revenue loss associated with the loan repayment deduction was estimated to be equivalent to about 3 percent of total revenue in 1986. If enterprise income tax revenues were restored to 1987 (precontracting) levels, relative to GDP, total government tax revenues would have been about 22 percent higher in 1992. However, this might exaggerate the potential revenue gain because profitability of enterprises has been lackluster, dropping for industrial enterprises from 13.4 percent of GNP in 1987 to 8.4 percent in 1991.

tax, in an environment where the flow of goods, services, and income is becoming increasingly complex and crossprovincial in nature.

DEALING WITH THE ENTERPRISES. It is certain that the reform process will be drawn out and will have to keep evolving. During such a period of transition, the reforms must be continuously and rigorously monitored. The authorities must have adequate capacity to undertake tax policy analysis that can provide accurate information on the impact of reforms on tax revenues, on the tax burden, on the central-local division of revenues, the investment and hiring behavior of firms, and other variables. Only then can the authorities make future adjustments responsive to the evolving situation. At present, the State Tax Bureau (STB) has a limited sample of enterprises, with which some tax analysis can be done. *Investing in analytical capacity now would be essential for dealing with the transitional problems of enterprises and for minimizing the risk of temporary revenue shortfalls.*

MOBILIZING ADDITIONAL REVENUES. While the present tax reforms are unlikely to raise the revenue-to-GDP ratio very significantly, the government could be faced with additional expenditure responsibilities in the future. SOEs will start shifting their social obligations toward government; and international experience shows that the demand for government services and redistribution grows with income. At the same time, government services are likely to become more expensive, since the general wage level will likely rise faster than GDP. If the authorities wish to reduce the size of the CGD, therefore, an *increase in tax revenues should be an important objective for future fiscal reforms. Prime candidates for raising future revenues are environmental taxes, the personal income tax, revenues from divestiture, and property taxes.*

The new excise tax on gasoline and kerosene replaces the former product tax on these goods. However, the Yen 0.2 per liter on the former and the Y 0.1 on the latter are very moderate by international standards. Other fuels, such as diesel and coal, carry no excise tax at all, and some fuels for heating and cooking have a reduced VAT rate. Moreover, domestically produced vehicles carry only small excise taxes. The low taxation on the use of fossil fuels in combination with sharply rising incomes may put undue pressure on China's environment in the near future. For financial as well as environmental reasons, excise taxes on fossil fuels could make sense. They could be an important money spinner for China's government.[26]

The personal income tax (PIT) now only plays a limited role in China's tax structure. The share of labor in value added has risen over the reform period, increasing the wage bill from 18.8 percent of National Income in 1978 to 20.9 in 1991. This trend is likely to persist in the future, as the economy becomes more open, and more resources are channeled into relatively labor-intensive activities. Moreover, SOE reforms are likely to result in the monetization of benefits such as health care, housing, and education, and this should further increase the share of wages in GDP.[27] Thus, the PIT could develop into a significant source of revenue. Over time, the authorities should exploit every opportunity for expanding the base of the PIT.

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26. To illustrate, total use of gasoline and diesel oil amounted to 90 million tons in 1991, an amount that is sharply rising.

27. An estimate for services not captured by the present National Accounts would put the value of these services at 5 percent of GNP.

Although not as prominent as in other countries in transition, privatization of government property in China has taken off recently. Outright selling of state assets is still rare, but the economic use of state assets by nonstate enterprises has become commonplace. Most of the arrangements, so far, have been ad hoc, and the government seems to gain little revenue from such *de facto* privatization. The amounts involved are, however, substantial and could provide a useful supplement to budgetary resources.[28] Although not a permanent source of income, revenues from divestiture of state assets should be explicitly treated as capital income. The depletion of the state's productive assets is akin to borrowing, and revenues from divestiture could be used for investment in more traditional government functions, such as infrastructure, schools and hospitals, or for debt reduction.

Finally, the introduction of property taxes, for both users and owners of real estate, should receive serious consideration. As reforms drive the prices of land, housing, and housing services closer to market levels, the revenue generating potential of property taxes will rise significantly. Property taxes could become a crucial source of income, especially for local governments.

Controlling Government and Government-Directed Investment Expenditures

The authorities are introducing measures to improve control over investment expenditures. Reform of the investment planning system will involve the categorization of SOE-fixed investment proposals into three groups. Projects with social benefits are to be funded through the budget; key infrastructure projects and projects from "basic" and "pillar" industries are to be funded, subject to an approval process, by the newly created "policy banks"; and commercial projects are to be financed by the state banks based on commercial criteria. These guidelines are still preliminary. Criteria for determining what projects are to be regarded as "commercial" are still unclear. Also unclear is who would enforce these criteria, and what would be the respective responsibilities of local governments and the central government in the execution of projects considered to be "noncommercial."

THE NEED FOR A NATIONAL FINANCIAL PROGRAM. Criteria for determining what kind of investment projects should be eligible for government financing—that is, for inclusion into a national public investment program (NPIP)—must be strict and finalized on the basis of consensus between all levels of government. *Not only must the size of the NPIP be fixed in a credible manner at the national level, but limits to the financing responsibilities of all levels of government must also be clearly identified by source, be it budgetary or nonbudgetary*. This could be achieved by capping the size of the NPIP (not its composition) and by identifying the sources of its financing. Such a National Financial Program (NFP), like the national budget, should be subject to annual legislation and approval by the National People's Congress.[29] The selection of individual projects for the NPIP could be left,

28. Estimates on the losses from "spontaneous privatization" run as high as Y 36 billion per year (*Guanming Ribao*, January 20, 1994, p. 4).

29. The size of such an NPIP determined on the basis of national consensus would presumably lie somewhere between the current priority public investment program (11.3 percent of GDP) and the state investment plan (22.1 percent of GDP in 1992).

within the constraints of the nationally determined eligi bility criteria and expenditure limits, to the concerned agencies at various levels of government.

In effect, the National Financial Program would be a budgeting and financing framework that would extend beyond the government budget to government-directed activity partly or wholly financed from the nonbudgetary sources available to various levels of government.[30] Useful insight could be gained from the experience of other countries employing similar programs. The authorities should explore the Fiscal Investment and Loan Program (FILP) used in Japan (see Box 8-3), and the program used for the *Kreshtanstalt fuer Wiederanfban* in Germany to determine their relevance to China's needs.

Controlling Current Expenditures on SOE Subsidies

An important challenge for the authorities is to contain nonbudgetary current expenditures in the form of implicit subsidies channeled to SOEs through the financial system. In principle, the government ought to be responsible only for that part of the operating deficits of SOEs that is due to the burden of expenditures mandated by government policy (either for the provision of public goods or for employing redundant workers). In practice, it is not feasible to isolate this part of SOE operating losses from the part resulting from other factors such as bad management and/or competition. Over the first five months of 1994, the authorities rightly urged the state banks to take greater responsibility for their lending to SOEs. As a result, the banks appear to have become more cautious in extending short-term credit, but meanwhile the enterprises have begun to suffer from severe working capital shortages.

There are no satisfactory short-term solutions. One option that should be considered is to quantify the operating subsidies provided through banks to the most "strategic" enterprises (defined using appropriate criteria) and to fix these subsidies in the budget as an explicit expenditure item. For the remainder of working capital loans that would still be in the portfolios of the state banks, the banks themselves should be urged to take greater responsibility in exchange for limited access to a PBC rediscounting facility. Access to this facility would be restricted for purposes of funding debt workouts of "strategic" enterprises.[31] Alternatively, access to this facility could be made subject to strict criteria based on industry and/or region-specific norms for maximum lending for working capital purposes. From the point of view of improving macroeconomic control, priority ought to be given to mechanisms for containing the use of PBC policy lending forfinancing SOE operating losses. Arguably, such lending is a good indicator of nonbudge-tary government support for the most vulnerable SOEs or enterprises regarded as strategic. The equivalent of this amount could therefore be fixed explicitly in the National Financial Program of the type proposed above as the maximum annual allocation for nonbudgetary support to loss-making SOEs.

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30. Although the NPIP is by definition government directed, the government need not have responsibility for financing all of it. Government contributions could be limited to some budgetary funding and some policy lending through the central bank, the rest being financed through foreign direct investment or the own resources or borrowing of the SOEs themselves. *Government expenditure*, therefore, would be a subset of *government-directed expenditures*.

31. The authorities should review the recent experience of Eastern European countries, especially Poland, in this regard.

Box 8-3. Japan's Fiscal Investment System

Japan's Fiscal Investment and Loan Program (FILP) is drawn up each year in close coordination with the General Account Budget and monetary policies. The FILP is about half the size of the government's General Account and about 8 percent of GNP. The FILP draws funds from a variety of sources (postal savings, pension insurance funds, government guaranteed bonds), and it distributes those funds in line with national priorities over a number of executing agents. Policy-based financial institutions, such as the Japan Development Bank and the Export-Import Bank, accounted for about half of the FILP funds. Other executing agents are public corporations for housing, and transport infrastructure, and local governments. The allocation of FILP funds over uses during the period 1955 to 1990 shifted gradually from industry and technology, and agriculture toward housing, infrastructure, and small businesses. Individual project implementors can apply for FILP funds through the executing agents, which will scrutinize them and aggregate them for submission to the Ministry of Finance. The MOF then submits the overall program to the Diet (parliament). The FILP funds are directed under the Long Term Funds Operations Law of 1973, which requires Diet (Parliament) deliberation and approval.

The postal savings and insurance premiums, constituting about 80 percent of the FILP funding, are guided through the Trust Fund Bureau under the Ministry of Finance. The deposits of these funds are based on contracts between the postal savings institutions and the Trust Fund Bureau, and they are market based. The FILP has been primarily used for revenue generating projects through public investment corporations. Local government investments in government functions were financed through the FILP by means of acquisition of local government bonds. This returns orientation of the FILP explains in part why (especially before the 1980s) virtually no subsidies from the government budget were needed for the FILP. Another reason was the relatively cheap funding for the FILP as a consequence of the restrictions on the financial sector that long prevailed in Japan.

The budgets of the policy-based financial institutions (two banks and eight government finance cooperations) are scrutinized and approved by the Diet before the start of the business years of the institutions, which coincide with the fiscal year. The government finance cooperations, moreover, need ministerial approval for their quarterly projects and funding programs. However, the political approval extends only to overall budgets. Individual projects are selected by the institutions themselves and are provided for information as annexes to the budgets. The budgets for the policy institutions, like the budget for the FILP, can only be adjusted in-year if a clear need for stabilization measures of government arises. This decision, however, lies outside the authority of the policy banks. The process of aggregating public investments in FILP, and the limiting of the FILP to the approved budgets, limit the overall size of the public investment program, facilitate coordination with budgetary policy, and protect the integrity of monetary policy, since the demands of the public sector on the capital market are known in advance of the fiscal year.

Ultimately, the only way to contain direct and indirect government assistance to SOEs is through deeper enterprise and financial sector reform. The SOEs must be relieved of the burden of government-directed current expenditures through continued price reform and through social security and housing reform. In order to fully commercialize the state banks, the problem of the outstanding stock of bad debts will have to be tackled. Before any strategy can be formulated in this regard, systematic portfolio audits of the state banks must be carried out.

Improving Budgetary Coverage and Procedures

A new budget law defining principles of budgetary management was approved by the National People's Congress (NPC) in March 1994. The law calls for the implementation of a "dual budget" system that would bring China closer to international practice.[32] The law prohibits government borrowing from the central bank and lays down principles for improving accountability in the budgetary process, and for strengthening monitoring and control over budgetary expenditures. However, the Ministry of Finance still has to develop the institutional capacity and the systems necessary for implementing the new budget law. Moreover, the question of budgetary coverage has not been tackled. Extrabudgetary fiscal funds still remain outside the purview of budgetary control.

The Ministry of Finance now faces the challenge of making the budget law operational. It must start by assigning responsibilities to units and institutions concerning rights and obligations on expenditure budgeting, approval, authorization, disbursement, and audits. Four areas deserve special attention: *(a) budgetary reporting systems need to be overhauled to facilitate the matching of allocations with expenditures; (b) abuse of the budgetary adjustment procedures needs to be discouraged through stronger sanctions; (c) cash management systems must be improved; and (d) the scope of the audit function must be expanded.* Over the medium term, the coverage of the budget should be expanded to include fiscal extrabudgetary funds.

Assigning Roles to Different Levels of Government

REFORMS AND REVENUE SHARING. The reform of intergovernmental fiscal relations concentrates on the revenue side. It provides for a new system of three types of taxes: those assigned only to the central government; those assigned only to local governments; and those shared between central and local governments according to a nationally uniform formula. Of indirect taxes, the VAT, the securities trading tax (to be introduced), and the resource tax are to be subject to sharing. Customs duties and the new excise tax are to be assigned solely to the central government. The business and product taxes not merged into the expanded VAT are the only indirect taxes that are to be assigned to local governments. As concerns direct taxes, revenues from the enterprise income tax are to continue to be subordinated to either the central or local governments according to the ownership of the enterprise. The new system of revenue sharing is a compromise that would leave no province worse off than in 1993, but it will favor surplus and fast-growing provinces over deficit and slow-growing ones (Box 8-4).

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32. See World Bank (1993a).

Box 8-4. The New Revenue Sharing System

The proposed formula for revenue sharing has the objective of stopping the erosion of the central government share of total revenue. The sharing formula for the VAT favors the central government, and the central government will take responsibility for collection of all shared taxes. There are five steps necessary to determine the respective shares of the central and provincial governments. Provincial government revenues in 1994 are determined as follows:

Step 1: The benchmark provincial revenues from the VAT and the Excise Tax are determined by mapping the 1993 revenues from the old taxes into the new ones.

Step 2: Provincial governments retain all revenues raised in 1994 from taxes assigned as local taxes.

Step 3: Provinces are to retain an amount equivalent to 25 percent of the 1994 VAT collections. The rest of the VAT collections and all revenue from the Excise Tax is assigned to the center.

Step 4: If, based on steps 2 and 3, a province has less revenues less than it retained in 1993 after tax sharing, the central government will transfer back the difference to that province. Thus, no province is to be left worse off than in 1993.

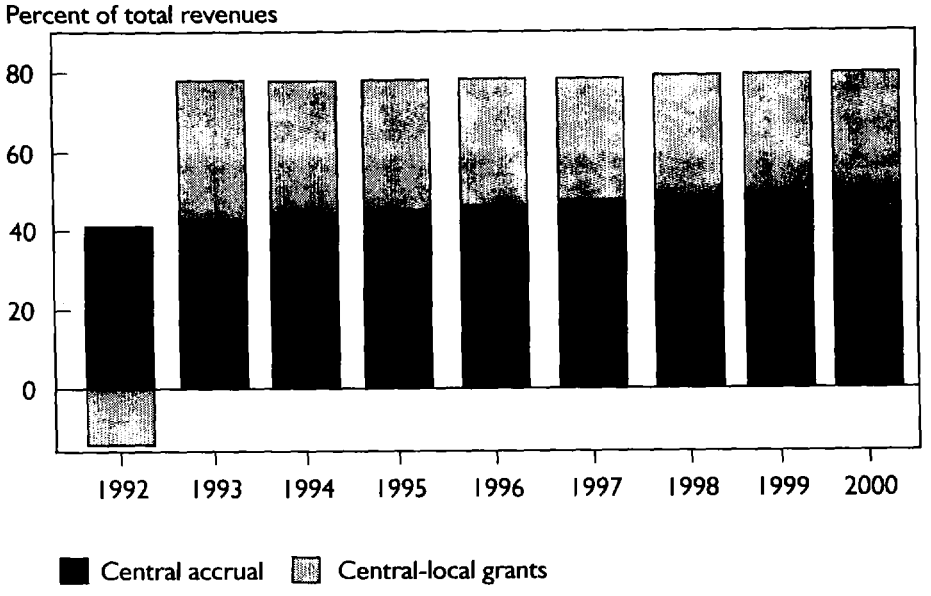
Step 5: If, based on step 3, the center's share of the revenues collected in aprovince exceeds that province's 1993 actual remittances to the center, the center will transfer back to that province the equivalent of 30 percent of the 1993/94 provincial increment in VAT and Excise Tax collections.

In effect, the new revenue sharing system caps the share of increased indirect tax revenue that a local government can receive, and it penalizes the deficit provinces relative to the surplus ones.

The new arrangements for intergovernmental fiscal relations will lead to greater centralization of revenue collection and a gradual centralization of revenue accrual. Estimates of the change in central-local revenue shares resulting from the proposed new system indicate that (a) central revenue collection would jump from 27 percent of total taxes in 1992 to 78 percent upon introduction of the new system, and would then gradually rise to 82 percent by the year 2000, primarily due to the reassignment of collection responsibility for the VAT and excise taxes to the NTS; (b) central government revenue accrual would gradually increase from about 40 percent in 1992 to 52 percent in the year 2000; and (c) the net transfer to local governments would jump from a negative transfer of 14 percent in 1992 to a positive transfer of over 35 percent of tax collection upon introduction of the new system, then gradually dropping to about 30 percent by 2000 (see Figure 8-3).[33]

33. Based on historical trends, it is assumed for purposes of this estimate, that the new VAT will grow at the rate of 15 percent, the excise tax at 10 percent, the other central fixed taxes at 13 percent, and local taxes at 10 percent annually between 1993 and 2000. Due to lack of data on 1993, 1992 was taken as the base year, and projections were made starting in 1993 as if the new system were already in place.

Figure 8-3. Intergovernmental Fiscal Relations Changes in Central Collection, Transfers, Accrual
(percentage of total revenues)



Note: Transfers exclude earmarked grants. Central collection = accrual + grants.
Source: Ministry of Finance.

The reforms will, therefore, undoubtedly increase central government control over fiscal policy. However, since the scheme has been introduced without any systematic assignment of expenditure responsibility between the central and local governments, it is unlikely that the new scheme will provide lasting control over government expenditures. The current scheme places too much strain on a grants mechanism (still to be implemented) for aligning the revenues accruing to local governments with their expenditure needs. Given the wide divergence in the needs of local governments and in their ideas about the level and mix of services to be provided, there is a risk that local governments might revert to ad hoc measures to finance off-budget expenditures.[34]

GRANTS SCHEME. During the next few years, the new assignment of taxes will generate substantial surpluses of revenues over expenditures at the central government level.

34. The new sharing arrangements may give rise to some additional distortions compared with the old system. The local assignment of local enterprise income tax will become increasingly problematic as multiplant firms operating in different provinces grow in number. To some extent these problems could be mitigated by developing formulas based on sales, employment, or other indicators to "allocate" the profits of multiplan firms across provinces, but there are no clean solutions. Moreover, tax assignment based on levels of ownership will accentuate incentives for local protectionism. Likewise, the province-specific deductibility for labor costs may induce transfer pricing problems among provinces, and it is unclear how such practices would be detected by a decentralized local tax service.

Implementation of a transparent grants mechanism to recycle funds back to the provinces is therefore a matter of urgency. Ideally, an intergovernmental fiscal system takes care of vertical imbalances by means of tax sharing, and deals with horizontal imbalances by means of a grants system. In the absence of clearly defined expenditure responsibilities, the current tax reform package would have a grants mechanism that deals with both imbalances. This could place too much pressure on the grants mecha-nism. Until such time as expenditure responsibilities can be sorted out, efforts must be made to mitigate the potential efficiency consequences of an excessive reliance on a grants mechanism. The present system of earmarked grants is cumbersome. Increasing its scope not only would accentuate local governments' uncertainty with respect to their resource envelope, but also would place too heavy a burden on the central government in terms of monitoring. Thus, *the authorities should consider making greater use of general purpose grants, rather than earmarked grants.*

EXPENDITURE ASSIGNMENT. The authorities must pursue the systematic assignment of expenditure responsibilities between various levels of government in order to arrive at a lasting system of revenue assignment. Clarification of expenditure responsibilities is not a trivial matter. The authorities should start by identifying the best practice, least cost provision of government functions, both by comparing the costs of provision among provinces in China and by comparing China with international best practices. *National consensus will have to be built on the division of responsibilities across various levels of government, and it should be codified in a new law on intergovernmental fiscal relations. Such a law would also cover provisions for greater revenue autonomy.*

REVENUE AUTONOMY. The present reforms give little autonomy to local governments on the revenue side of the budget. Only a few relatively minor taxes would be left to the discretion of local governments. International experience shows that some revenue autonomy within centrally set limits enhances the accountability of local governments, and therefore improves efficiency of public service delivery. In China, this could reduce the temptation for local governments to raise revenues in ad hoc ways.

One option that could be explored for according local governments greater revenue autonomy is restructuring of the enterprise income tax. The authorities might consider abandoning the current system of allocating revenues from the EIT according to the ownership of the enterprise in favor of a centrally determined EIT for all enterprises, but with a locally determined surcharge.[35] Such tax base sharing would also be highly efficient from a collection point of view. A second option that should be considered is broader use of property taxes, both for users and owners of real estate.

BORROWING BY LOCAL GOVERNMENTS. Although in principle prohibited, indirect borrowing by local governments already does take place through enterprises, and it goes largely unmonitored by the central government. The absence of explicit provisions for local government borrowing unnecessarily maintains a fiction. Besides, it leaves opportunities for intertemporal efficiency gains unexploited. Given this reality, the authorities

35. Bahl and Wallich (1993). A potential drawback of this scheme is that highly differentiated surcharges across provinces could lead to tax-driven location decisions. Even so, the proposed scheme would be superior to the current practice of assigning EIT revenues according to the level of government that owns the enterprise.

could explore options for permitting local borrowing in ways that do not undermine overall macroeconomic control. Such borrowing would have to be strictly regulated and subject to annual ceilings as in the majority of OECD countries (see Box 8-5).

Box 8-5. Local Borrowing and Stabilization Policy

Within a decentralized fiscal system, there is the danger that subnational governments will overissue debt in the hope that the central government will bail them out if they are unable to meet their debt payment obligations. However, forbidding subnational deficits altogether leaves possible efficiency gains unexploited, since government investments that create long-term benefits and future tax revenue can best be financed by debt issue. Moreover, regulations forbidding local borrowing can sometimes be circumvented, as in China where borrowing for government tasks is sometimes shifted to SOEs. In order to maintain macroeconomic stability while allowing at least some local government borrowing, several schemes have proven effective. In the majority of OECD countries, borrowing is restricted to capital investment purposes. Additional regulations usually require interest and amortization to be paid from current income, and sometimes they restrict borrowing to specific purposes (such as energy projects), or to a certain percentage of current revenue. The aggregate borrowing of subnational governments is often preset by the central government and regularly administered by a special bank for subnational governments.

Conclusions

During the period 1987 to 1993, the consolidated government deficit averaged between two to three times the size of the budget deficit. The fall in the ratio of government revenues-to-GDP in large part has been the inevitable consequence of enterprise reform. However, fiscal decentralization has contributed to the lack of buoyancy in the tax system, and local governments eager to promote local growth have accelerated the revenue decline through the award of ad hoc tax exemptions. In the absence of a national tax service, the central government has had only limited control over the tax exemptions given by local governments.

The more important issue is that as the share of government revenues in GDP has declined, that of government expenditures has not declined commensurately. In fact, as decentralization has eroded the effectiveness of China's investment planning system, controls over the scale of total government and government-directed investment expenditures have weakened. At the same time, the lack of sufficient enterprise and financial sector reform remains an important cause of the "investment hunger" of local governments and their enterprises, and the authorities have had difficulty compressing current expenditures on explicit and implicit subsidies to state-owned enterprises. Finally, continuing weaknesses with budgetary coverage and procedures have contributed to wasteful government expenditures and unnecessary arrears.

Reducing the size of the CGD will require strengthening of central government authority over tax administration to stem the decline of the tax-to-GDP ratio, and to establish a better balance between the share of revenues accruing to central government relative to its expenditure responsibilities. Likewise, the reimposition of central government control over investment expenditures and the extension of budgetary control over extrabudgetary funds are warranted. On the other hand, deeper enterprise reform is needed to relieve SOEs of their "social burden," and deeper financial sector reform is needed to get the banks to take responsibility for their lending to enterprises. The authorities recognize these challenges and have launched a number of reform initiatives that go in the right direction but that need to be complemented with additional measures.

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9

Local Taxation: Principles and Scope

Paul Bernd Spahn

There is broad agreement among economists as well as political scientists that many public services should be provided at the lowest level of government in order to enhance efficiency of the public sector and to increase its responsiveness to voters' preferences and demand for collective services. The European Union in its intergovernmental relations has explicitly recognized the principle of "subsidiarity" by which public functions should be exercised at the lowest possible tier of government unless these functions are positively provided more effectively at a higher level.

The theory of federalism has established an operational framework for assigning expenditure functions to the various levels of government—central, state, and local.[1] In practice, expenditure assignment follows the theoretical guidelines rather closely. There is little variety, in principle, in the assignment of functions such as defense, foreign policy, and international trade to the central government, and education, health, or housing to lower levels of responsibility.

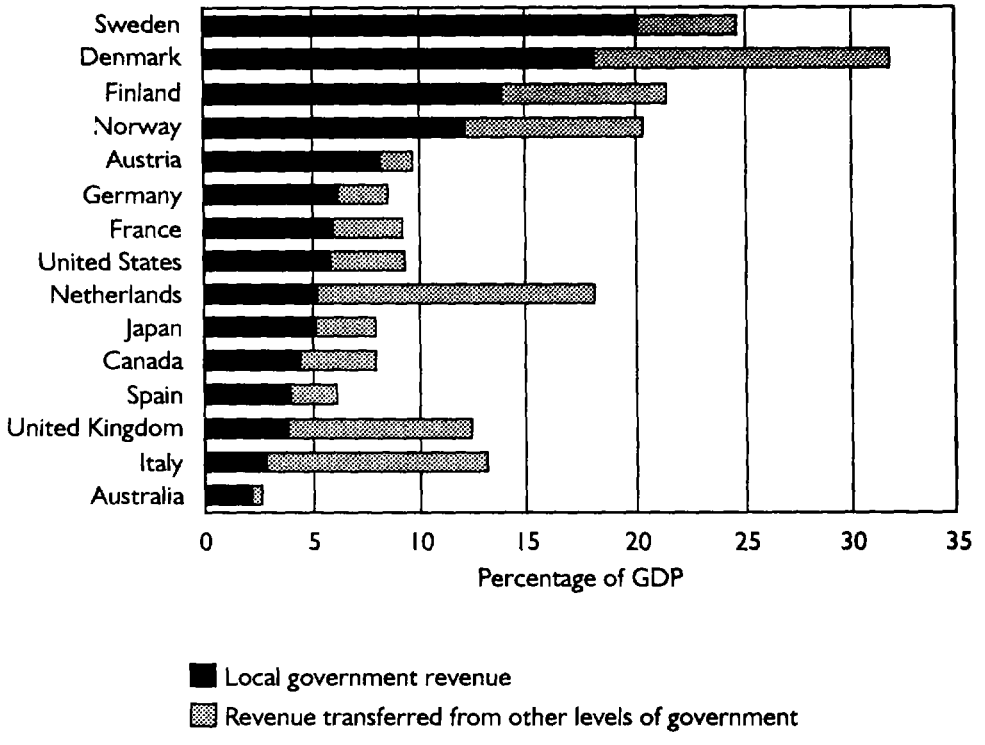
However, the decentralization of public functions raises the question of local finance and taxation in particular. Although guidelines to local taxation can be found in the theory of federalism, their impact on actual arrangements is remarkably weak. The way local services are financed in different countries varies widely. Scandinavian countries typically raise significant local revenue from local government taxes (on average as high as 15 percent of GDP). Local budgets in Austria, Germany, France, Japan, and the United States also rely heavily on local taxation albeit at a lower level (see Figure 9-1). Many countries (in particular, Italy, the Netherlands, and the United Kingdom) finance local budgets mainly through grants, and the Scandinavian countries also use grants intensively.[2] Most scholars agree, however, that local taxation is an important part of local autonomy, which is so cherished by economists and political scientists alike.

This chapter summarizes the main principles that govern local taxation in particular, and it discusses their implications. While some of the principles are in agreement, others are sharply contradictory. It has to be acknowledged that the various principles discussed must conjointly determine the scope for local taxation. One criterion may be

1. See the "classical" contribution of Oates (1972), and a more recent review of the literature in Walsh (1993).

2. When comparing local governments internationally, it has to be recognized that the federal countries (Austria, Germany, the United States, Canada, and Australia) have an important middle tier that performs many of the functions assigned to local governments in unitary states.

Figure 9-1. Local Government Revenue and Revenue Transferred from Other Levels of Government



Note: Data are for 1991 except for Spain, Norway, and Finland (1990), Japan and the United States (1989).
Source: International Monetary Fund (1993).

binding, while all other criteria rank a particular tax favorably as a local revenue source. If local taxation is to be strengthened, the binding constraint must be eased whenever this is feasible through tax policy and administrative or organizational measures.

Principles of Local Taxation

The chapter discusses the following principles for local finance and taxation: local accountability, the benefit-tax link, the nondistortion principle, regional equity and long-term efficiency, reliability and stability of tax bases, tax sharing as implicit insurance, and administrative simplicity.

Local Accountability

Local politicians should be responsive to the expressed preferences of their local citizens or expect to encounter defeat in local elections. This is the basic principle of accountabil-

ity of local policymakers, and it is essential both for economic efficiency and democratic representation. The principle calls for local governments to have their own tax bases, and it works against financing through grants or tax sharing with higher levels of government. General revenue raised by and transferred from other levels of government tends to blur the issue of local responsibility and accountability. The local accountability principle also supports the quest for policy discretion of local politicians and parliaments, and it entails the right to determine their own tax rates.[3]

Discretion in local tax policy is a necessary but not sufficient condition for accountability. Accountability also implies that local taxes be borne by local citizens. There must be an equivalence between the provision of local public goods and the tax carried by local voter-citizens. If taxes can be exported to taxpayers of other jurisdictions, accountability is reduced. Local voters thus shift the burden of financing the local budget onto others. Local incidence or nonexportability of the tax must be valid, at least at the margin, for incremental or higher quality services, while standard local services might be financed through transfers from other jurisdictions. However, standard local services must be defined in a way to avoid strategic behavior. In other words, they must be outside the control of local government.

The accountability criterion favors a local personal income tax or a property tax. Tourist taxes or local business taxes rank poorly under this principle because these taxes can usually be "exported" to other jurisdictions.

Accountability also calls for a strict separation of local public budgets and entrepreneurial activities of local government. While the local budget is subject to voters' control and is ultimately financed through taxation, companies—although public—operate outside the electoral process and should exclusively be subject to market discipline. This does not preclude public ownership of such firms or the use of profits for financing public budgets; neither does it preclude subsidies to local firms if the subsidies are related to public benefits and subject to political control.

The Benefit-Tax Link

The benefit-tax-link principle emphasizes efficient provision of public goods. If a link can be established between a tax and the willingness to pay for a public service, the tax plays a role similar to a price in a quid-pro-quo market transaction. This would enhance individual (and/or collective) welfare in the provision of public goods. While market prices will automatically emerge in functioning markets for private goods, a tax price for public goods is more difficult to establish. Yet for many local services, fees and user charges as well as contributions of beneficiaries to the financing of local investment projects can be defined and employed successfully.

A tourist tax—although in conflict with the accountability criterion—can be defended under the benefit-tax principle as long as it is more or less equivalent to a payment for local services received. Furthermore, the principle works in favor of local business taxes whenever local services are perceived as factor inputs by local firms and hence "purchased" through the tax. Although one may object to the business tax on grounds that it can be "exported" to other jurisdictions and thus fails to strengthen accountability

3. The accountability principle also calls for autonomy in local public borrowing.

at the local level, the argument is weak when taking an integral view of the tax. Moreover, the objection rests on very narrow assumptions as to the shifting of the tax.

It is not certain, for instance, that a local business tax is shifted onto producer prices and thus is "exportable," as held by its opponents. The tax may represent payment for local inputs that would otherwise appear in private costs of the firm. This is true whenever the benefit-tax link prevails. Local business taxes may thus be used to finance local infrastructure for business, to lower the firm's operating costs via communal services, and so forth. Cost-reducing effects might show up indirectly, for instance in labor productivity when the quality of the local labor force improves through education, recreational facilities, or health care.

The benefit-tax principle may also call for an intermediate level of government whenever local benefits exhibit spillovers that accrue to a region rather than to a locality. In this case, benefits can be "internalized" for the beneficiaries of a region, and the tax can be seen as a market equivalent for the service consumed. Such equivalence eventually could be achieved through negotiated payments among groups of municipalities that share the costs of a supraregional local service; it also could be achieved by the establishment of functional regional bodies or districts (for example, utilities for water and energy supply, or waste disposal).[4]

Nondistortion Principle

Taxes should not affect allocation decisions in the private sector; ideally, they should be nondistortive or "neutral" in that sense. Most of the existing taxes fail on this criterion, but market choice is typically limited within the nation as a whole, which works as a barrier against non-neutrality at that level. At the municipal stratum, however, the criterion has a particular importance since taxpayers can always avoid a high level of local tax by shifting the tax base to low-tax jurisdictions. This leads to horizontal tax competition among local governments with potentially ruinous consequences for the municipalities' ability to raise tax revenue at all.

Horizontal tax competition among jurisdictions has two dimensions: it imposes discipline on the variability of tax rates; and it restricts taxation to tax bases that cannot easily be transferred to other municipalities.

The first issue vanishes if all municipalities impose the same tax rate. This could be achieved either through national legislation or through horizontal cooperation. Yet uniform rates conflict with the accountability principle and should be avoided under this criterion. Furthermore, some regional variation in tax rates is likely to be tolerated by taxpayers. This is in view of the benefit-tax principle as long as these variations reflect the regional pattern of demand for public services. Thus, tax-rate variability is desirable and—within the limits imposed by the benefit-tax principle—also feasible. Ruinous competition—by which local governments underbid each other through lowering taxes mu-

4. In the United States, even education is organized through school districts. While education is, of course, a service, it involves substantial "externalities" (benefits) for society as a whole, which renders it intrinsically different from a quasi-private service like water and electricity supply. This difference must affect the financing of the service. In particular, it calls for equalizing grants in order to establish regional equity of educational opportunities, and/or to compensate for regional spillover effects. Financing education according to a pure benefit-tax principle is thus inappropriate.

tually until they reach a zero-level—can be avoided by national legislation that imposes a floor on local tax rates.[5]

The second issue is usually addressed by selecting an immovable local tax base. As long as the tax base cannot be shifted to other jurisdictions, taxation is neutral and efficient (in the sense that it does not create "excess burden"). The nondistortion guideline strongly supports a local property tax and a local income tax based on the residence principle. It also favors a local business tax. In particular, a local land tax seems to be an ideal candidate under this guideline.

Although land is physically immobile, the tax base of a land tax may not be. This is the case whenever municipalities have the right to define their own valuation rules or to determine tax preferences and exemptions at their discretion. Under these circumstances, the tax base might be eroded, although the physical base remains untouched and is, of course, immobile.

National legislation is needed to define the local tax bases. Valuation rules, tax preferences, and exemptions relating to local tax bases should be uniform throughout the nation in order to avoid the de facto erosion of a base that is physically immobile. With standard rules for the tax base, no tax benefits can be reaped by the inefficient transfer of tax bases from one municipality to another. The only incentive to reallocate resources from one jurisdiction to another should result from different tax rates.

Standard rules for local tax bases also promote regional fairness. Horizontal tax competition among municipalities must be allowed under the principles of accountability and public service efficiency (the benefit-tax link). However, this competition should be restricted to the setting of tax rates.[6]

Regional Equity and Long-term Efficiency

Local taxation should ideally reflect a regionally equitable revenue pattern for reasons of distributional justice among jurisdictions. This is, of course, a pure value judgment, yet it may be warranted on political grounds if social fairness and cohesion of the nation are felt to enhance political stability. On these grounds, taxes on bases that are unevenly distributed across jurisdictions (for example, natural resources) are not suited for local use because they usually entail large regional inequities. The regional fairness principle is difficult to realize in practice since the distribution of most tax bases is regionally inequitable to some degree. A local turnover tax, however, is closely linked to local economic activity, and it would rank higher, on this scale, than most other taxes.

The principle of regional equity contradicts the aforementioned neutrality argument, which views the local immobility of the tax base as efficiency-improving. Indeed, natural resources—such as land—are locationally immobile and should rank high as local tax bases on neutrality grounds. But natual resource taxation is often perceived as unfair by those regions that are devoid of such resources. Moreover, the neutrality argument takes a narrow view on efficiency since it dwells on the noninterference of taxation with the

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5. The European Union adopted this approach with regard to its member countries in the case of VAT and excise taxation.

6. Such a restriction has the further advantage of reducing the information costs of taxpayers. If tax base competition were allowed, the information requirements for location-specific decisions—in particular of businesses—might become formidable. Undesirable transaction costs pertaining to the nontransparency of the tax system would result.

allocation of private goods; it disregards the benefit-tax-link criterion that stresses efficient use of public goods.

Under the benefit-tax-link argument, taxation of natural resources at the local level should be avoided. This is because it is most unlikely that local public services and infrastructure financed through local resource taxation would enhance collective welfare or be sustainable in the long run.[7] Economic history is full of examples where a temporary resource boom has financed local investments that failed to produce the expected returns over the long term. More generally, the long-term rates of return of natural resources seem to be higher when invested nationwide (or even worldwide) rather than confined to the region of origin. It is preferable to tax natural resources at the national level not only for reasons of regional fairness, but also for reasons of long-term efficiency.

In practice, a balance must be struck between the local government's interest in having its citizens benefit from the wealth of local resources, and the nation's interest in avoiding large regional inequities and in making efficient use of resources in the long term. Some revenue-sharing arrangement between the local and the national governments is usually needed to achieve such a balance. The arrangement can take various forms and rests ultimately on political negotiation. It must be stressed, however, that this type of tax sharing may be not only more equitable than exclusive tax assignment rules but also more efficient, a fact that is not always realized by scholars of fiscal federalism.

Reliability and Stability of Tax Bases

Local governments must provide services on a continuous and reliable basis; local infrastructure should be constantly expanding, with large, bulky investments being financed through borrowing or with the assistance of higher level governments.

Although borrowing must, in principle, be available for local governments to bridge emerging revenue gaps, it should not be done on a recurrent basis or used for macroeconomic stabilization purposes. However, steady outlay performance calls for a reliable and sustainable revenue base, a base that remains largely sheltered from the cyclical variations of economic activity. It is therefore questionable whether municipalities should levy progressive personal income taxes because these taxes tend to exhibit greater fluctuations over the business cycle than other taxes. This explains why local income taxes are typically proportional.[8] Where local governments are allowed to piggy-back local income taxes on a national income tax, a proportional surcharge on the tax base is often preferred to a surcharge on national taxes due or paid.

A local business tax would rank low on the criterion of revenue stability because local business activities might be subject to large fluctuations over the cycle; a local business tax also may be an unreliable revenue source if local businesses face a long-lasting structural crisis. However, the conclusion is not as straightforward as that. The wisdom of using a local business tax hinges on the type of business tax employed, which varies significantly among countries.

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7. Moreover, natural resources evaluated at world market prices might prove to be a very volatile and unreliable revenue source. Consequently, the ranking on the next criterion for local taxation would be low.

8. Sometimes the local income tax base is subject to a maximum, as implicitly in the German local income-tax-sharing arrangements.

The various forms of business taxation employ very different tax bases. Business activities are taxed on the basis of local (gross or net) turnover, local value-added, the local wage bill, local business capital, or local profits. Sometimes effective cash or accrual accounting figures are used; sometimes the tax base is determined by criteria independent from business decisions (for instance, standard valuation rules). In some cases the business tax is similar to a minimum tax on notional capital or notional returns.[9] And often the business tax appears in the form of a schedular tax with different combinations of tax bases.

Where firms operate at a supraregional level, it is not always clear what the local tax base is. In these cases the distribution of a compound national tax base (for instance, national profits) to municipalities is effected by a standard procedure based on obvious local variables (such as local turnover or the wage bill), or a combination of such criteria.

Obviously, no general conclusion can be drawn on the reliability and stability of a local business tax under these circumstances. A minimum tax on local capital is certainly less volatile than a local profits tax. A local tax on gross turnover or on the wage bill would rank somewhere in between. Furthermore, it has been argued that a local minimum tax on capital must lead to perilous erosion of the local capital stock when firms do not make profits yet still have to pay tax. Under these circumstances, a local minimum tax on capital could undermine the long-term reliability of the tax base itself. These problems encountered within the realm of local business taxation lead us to our next point—local tax sharing as an insurance device.

Tax Sharing as Implicit Insurance

It is well known that individuals may prefer a reliable and stable certainty-equivalent to volatile and unstable revenue. For this certainty-equivalent they are willing to sacrifice resources and pay an insurance premium.[10] Where risks can be pooled and defined empirically, corresponding insurance contracts will be supplied by private companies—provided the government establishes rules for orderly market operations.

Similarly, local governments have an interest in stabilizing their revenue basis, and they may be willing to trade volatile sources of revenue for more reliable and steady elements. Take, for instance, the case where local budgets depend largely on a local business profits tax. This tax can be highly volatile in response to the business cycle and produce little or no tax revenue during a recession. In cases where the municipality depends on a large local employer, the situation could even become critical if the company is forced to go out of business or incurs bankruptcy. This will strain the local budget just at a time when revenues are most needed to cope with a local unemployment problem.

Revenue risks and structural uncertainty form yet another rationale for tax sharing between the lower tier and higher level governments. Again, tax sharing could be welfare enhancing and could improve efficiency. In Germany, for instance, local governments at one point handed over a share of their genuine business tax to the state and

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9. The German "Gewerbesteuer" has elements of a minimum tax. Business capital defined by standard valuation rules (that incorporate parts of long-term debt) is taxed. In addition, the business profit tax base includes part of interests paid on long-term debt. This is more reliable and stable than a profit tax base on its own.

10. The analysis was first provided by von Neuman-Morgenstern and is found in any textbook on risky decisionmaking.

central governments in exchange for a share of personal income tax. This swap of revenue bases through mutual tax sharing represents an implicit insurance device for the local sector since resources of the business tax are pooled and handed back in the form of a more reliable revenue source that hinges on overall macroeconomic performance.[11]

This form of tax sharing may become an interesting model for China, where the corporation tax is assigned, at present, to regional jurisdictions according to the principle of ownership. Although regional governments may be reluctant to share this revenue source in periods of rapid growth and buoyancy, they may be inclined to reconsider their attitude in periods of normal activity or even recession.

Local tax sharing again poses the problem of devising a horizontal regional apportionment formula for the shared taxes. Again, various criteria can be employed, although the most prominent feature is the derivation principle. When this leads to regional inequities, other criteria are used. Local turnover, local value-added, the local wage bill, or local capital installed have already been mentioned when discussing the business tax before. Moreover, local tax sharing arrangements may include equalization provisions: an equal per-capita component or standardized needs criteria based on statistical information outside the control of municipalities. It is questionable, however, whether the central government should engage in local horizontal equalization. The central level ideally should concentrate on equalizing revenue among states or provinces, and it should leave local redistribution to the middle tier. Provincial equalization of local government finance, however, should be subject to some general principles for the whole nation and can be achieved through framework legislation at the central level.

Administrative Simplicity

Local taxes have to be administered by all municipalities alike, large or small. Small jurisdictions face potentially higher administrative costs per unit of revenue raised than large ones. Therefore, the local tax system as a whole is constrained by the ability of the small jurisdictions to administer taxes. Otherwise, regional inequities would result from the effective variance in taxes collected. This calls for a simple local tax system.

Administrative simplicity works against many of the taxes that rank high according to other criteria of local taxation. A local income tax, a local value added tax, a local business tax may all be commendable under most criteria, yet they are cumbersome to administer at the local level. Even a property tax, the ideal local tax candidate for most scholars of federalism, rates poorly under the administrative criterion since it requires sophisticated valuation rules in order to be efficient.[12]

In many instances there are solutions to administrative problems, however. First, the design of local taxes can be tailored to administrative conditions. For instance, a local business tax can operate under a nationally standardized tax base that is broad, based on simple cash flow accounting, and focused on easily identifiable criteria such as turnover

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11. In a strict sense, pooling the risks was not the only reason for the sharing arrangements, which could have been effected without bringing in the personal income tax. The fact that personal income tax has a stronger buoyancy than the local business tax led to a strengthening of local revenue over the long term.

12. Valuation can, of course, be avoided if the tax base is a simple physical measure, such as square meters for land, yet this fails to take the economic aspects of land use into account and cannot be considered to be efficient.

or wages paid. Since the tax is payable only by a small number of business firms, all local governments should be in a position to levy such a tax.

Second, local tax policy can make use of existing administrative procedures and governmental or nongovernmental institutions. For example, a local income tax could be tagged on the centrally levied income tax in the form of a surcharge on the base of a piggy-back tax on the central tax. More complicated valuation procedures, such as those required under a local property tax, could be administered at the county level rather than the local level. Some taxes can take the form of surcharges on services rendered by private or semipublic companies and utilities (for example, surcharges on electricity or telephone bills, or on the cost of water supplied).[13] All such levies can easily be administered at low costs by the companies that provide the service, and the rates of the surcharges can be tailored to the local preferences of the municipality. Local governments, however, should pay for administrative services rendered by other governmental or nongovernmental institutions in order to avoid inefficiencies. A zero-cost tax administration would undoubtedly lead to excessively bureaucratic procedures over the long run, and it repudiates the principle of accountability.

Summary and Conclusions

Not all of the criteria for local taxation are consistent with each other or could be realized fully at the same time. And it is clear that they jointly limit the scope for local taxation. As can be seen from Figure 9-1, only the Scandinavian countries are able to raise a significant proportion of GDP from local taxes, mainly through a local income tax or an income tax surcharge. The other countries depicted in the figure raise from local taxes less than 5 percent of GDP on average, with a high of 8 percent for Austria and a low of 2 percent for Australia (2.5 percent for Italy). All countries make substantial use of complementary grants to the local sector, albeit at varying degrees. It is thus an illusion to believe that local services could exclusively be financed through local taxes. This is true even for the high-tax Scandinavian countries.

Furthermore, the choice of taxes for local governments is limited. Disregarding smaller taxes—such as gambling taxes—the possibilities are local turnover or sales taxes, a local VAT, a local personal income tax, a local business tax, and a local property tax. A local turnover tax and—*a fortiori*—a local VAT have a number of drawbacks since they interfere with similar taxes levied at the national level. Even as a piggy-back tax, a local VAT poses problems through the tax credit mechanism. It is not clear whether a local tax credit should be accorded to inventories or the purchase of investment goods, for instance, or which jurisdiction should ultimately bear the cost of the tax credit. A similar question arises as to the redemption of tax for exports (or the zero-rating of exports). This is why all countries (except Brazil) that employ a VAT have refrained from allowing the local sector to penetrate that tax area.[14]

A local turnover tax—unless levied as a single-stage retail sales tax—may face the problem of "cascading" (the cumulating of tax as goods are transacted among taxable

13. A surcharge on the water bill would be closely related to the cost of sewerage. It can thus be considered a user charge in accordance with the benefit-tax principle. It would enhance local service efficiency and finance the protection of the environment.

14. Brazil operates a sales tax/VAT at all three levels of government. The administrative and conceptual problems are formidable.

units in the process of production and distribution). For high local tax rates, cascading exhibits significant allocative distortions, and even exports may bear the tax unless provisions are made to redeem traders.[15] A cascading sales tax will have a limited scope as tax rates must remain low in order to check emerging distortions.[16]

A local retail sales tax could become operational, could be consistent with accountability, and could even work as a benefit tax. It is, however, more difficult to administer because of the greater number of taxpayers and the bookkeeping difficulty. Such a tax is thus susceptible to large *de facto* inequities through the negative distributional impact of effective tax collection.

More promising are the local personal income tax and local business taxes. The former should take the form of a surcharge or piggy-back tax on the national income tax for reasons of administrative simplicity. Yet under the conditions prevailing in China, where personal income levels are still very low, a local income tax will raise little revenue, whatever form may be chosen. This condition will improve, it is hoped, in the not too distant future. A local personal income tax will then become an interesting option for China. A local business tax is, however, feasible in the short run if care is taken to keep the tax base simple.

Alas, not much can be expected from the local property tax either. While it is the ideal local tax in theory, the tax seems to raise little revenue in practice. Only the Anglo-Saxon world appears to raise a more substantial portion of public revenue from this tax. The reasons for the poor performance of the property tax in most countries are found in political impediments at the local level, more than in administrative complexities in determining the base. After all, people prefer to avoid the local tax burden, and local politicians often have no other choice than to collude with local citizens if they want to stay in power. Nevertheless, a local property tax—albeit fraught with administrative and political problems—is an important component of any system of local finance both for reasons of efficiency and equity.

Whatever kind of local tax system is established in a country, there will be a need for grants, and there should be local discretion as to borrowing. However, the tax-grants system must be designed in a way that allows the aforementioned criteria to operate. Keys to a successful system of local finance are the free working of accountability and the local sector's responsiveness to local demand. This requires a local tax system that responds to demand for local public services—at least at the margin. As to the benefit-tax link, user charges must play an ever increasing role in the context of local finance.

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15. A redemption scheme for local tax on exports raises the question of how and who should finance the scheme. A redemption scheme also could raise suspicion abroad and face countervailing action of foreign trading partners under the General Agreement on Tariffs and Trade (GATT).

16. Hungary operates a local net turnover tax as a business tax with relatively low rates (maximum 0.8 percent).

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10

Intergovernmental Fiscal Relations in Canada: An Overview

Anwar Shah

This chapter provides an introductory review of the Canadian federal system. Such a review is intended as a background for further analytical work on federalism issues in Canada and elsewhere.

Canada, with a 1994 population of 28.1 million and a total area of 9.9 million square kilometers, represents the second largest country but one with the lowest population density in the world. Canada is a federation of ten provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland) and two territories (Northwest Territories and Yukon). Figure 10-1 provides data on provincial populations and per capita GDP in 1988, and Figure 10-2 shows the relative composition of provincial ouput. The division of powers in Canada was guided by the British North America Act of 1867 until 1982, when the Canadian Constitution Act resulted in repatriation of the act and vested the power to amend the Constitution with the Canadian Parliament. Under the Constitution Act of 1982, the queen of England remains the sovereign and is represented by her appointee (appointed on the advice of the prime minister of Canada), the governor general of Canada. The Parliament has two houses: a Senate of 104 members appointed for life and a House of Commons of 295 members apportioned by provincial population and elected at least every five years. The leader of the majority party, or one having a trust of a majority of members in the house, assumes the office of the prime minister. Laws must be passed by both houses of Parliament and signed by the governor general in the queen's name.

The ten provincial governments are nominally headed by lieutenant governors appointed by the governor general, but the executive powers are vested in the provincial cabinet headed by the premier. Members of provincial legislative assemblies are elected for a four-year term.

The judicial system consists of the Supreme Court of Canada, provincial supreme courts, and county courts. The governor general in Council appoints judges to these courts.

Figure 10.1 Population and Per Capita GDP of Canada's Provinces and Territories 1993

IBRD 27017

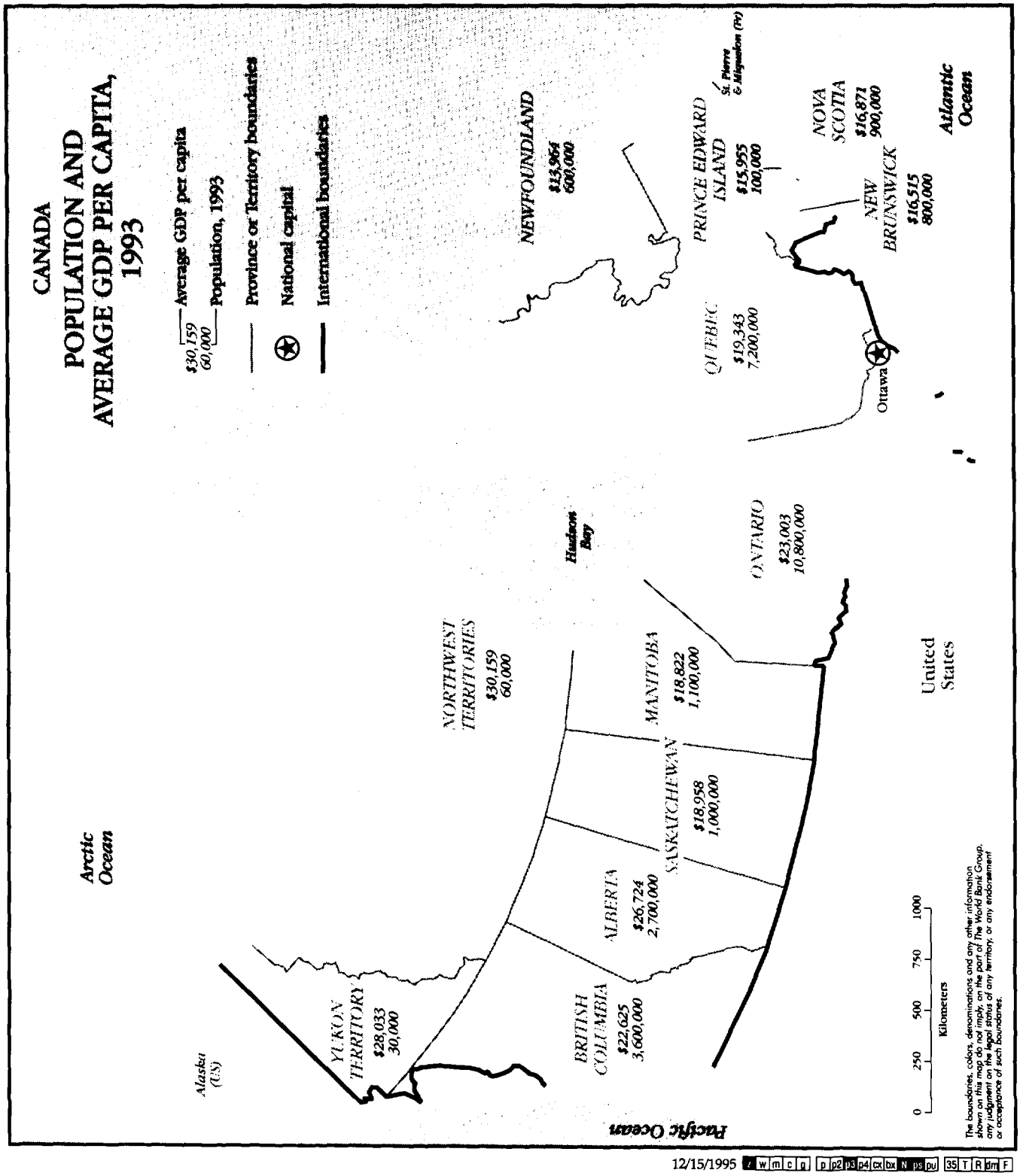

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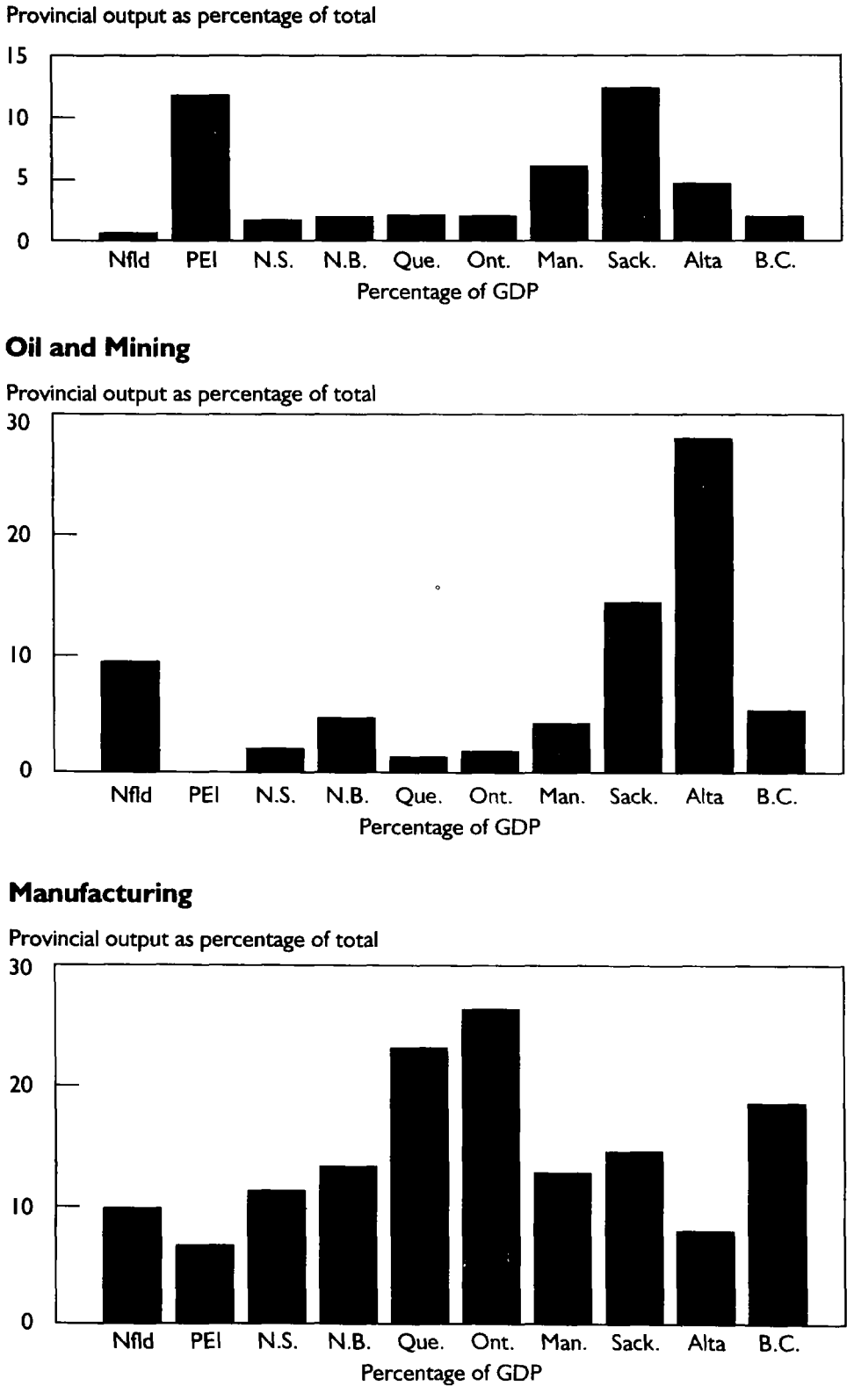
Figure 10-2. Sectoral Output by Province



Division of Powers in Canada

Canada has a two-tiered, highly decentralized system. It can be characterized as a model of dual federalism with coordinate authority. Whereas federal and provinical governments are co-equal partners in the federation, local governments do not enjoy independent constitutional status and are simply the handmaidens of the provinces.

Expenditure Assignment

Expenditure assignment is transparent (see Table 10-1). Money, banking, trade, airlines, railways, foreign affairs, defense, and unemployment insurance are federal responsibilities. Pensions, immigration, agriculture, and industry are shared by federal and provincial governments. Education, health, social welfare, police, natural resources, and highways are provincial matters. Provincial-local governments account for 50 percent of consolidated public expenditures, including debt charges, and 59 percent of direct program spending (see Table 10-2).

Table 10-1. Constitutional Assignment of Spending Functions in Canada by Level of Government

Spending function	*Federal*	*Provincial*
Money and banking	✓	
International trade	✓	
Airlines	✓	
Railways	✓	
Foreign affairs	✓	
Defense	✓	
Unemployment insurance	✓	
Pensions	✓	✓
Immigration	✓	✓
Agriculture	✓	✓
Industry	✓	✓
Education		✓
Health		✓
Social welfare		✓
Police		✓
Natural resources		✓
Highways		✓

Source: Parliament of Canada, the Canadian Constitution Act, 1982.

Table 10-2. Direct Program Spending by Level of Government, 1988

	Percentage of total	
Program	*Provincial*	*Federal*
Protection	38	62
Transport	73	27
Health	97	3
Social services	35	65
Education	97	3
Debt service	42	58
Other	57	43
Total	59	41

Source: Department of Finance, Government of Canada, Ottawa. Unpublished data.

Tax Assignment

The British North America Act of 1867 restricted provincial access to "direct" taxes and charges only. The Supreme Court of Canada broadened this jurisdiction considerably by interpreting sales taxes as "direct" taxes. The Constitution Act of 1982 further extended provincial powers to include resource taxes as well. Thus, provincial governments today enjoy overlapping taxing responsibilities with the federal government in all areas except customs, unemployment insurance premiums, and contributions to the Canada Pension Plan. Table 10-3 presents the existing tax assignment in Canada, and Table 10-4 presents data on tax rates and changes that occurred during the past decade. It is interesting to note that while federal and provincial governments have overlapping taxing jurisdictions, the tax system in Canada is harmonized. This has made possible federal initiatives to enter into tax collection agreements with the provinces where the federal government would agree to collect taxes at no cost to the provinces provided they agree to use the federal base for levying their supplementary rates. Tax harmonization has been further advanced by federal-provincial agreements on income allocation rules and reciprocal taxation of crown properties. Nine provinces have agreed to federal collection and administration of their personal income taxes. For corporate income taxation, seven provinces have agreed to federal collection and administration. The remaining provinces that administer their own income taxes also follow the federal tax base.

Canada presents an interesting case study in implementing a VAT in a federal country. The Canadian Constitution restricts provincial government access only to "direct" taxes, but Canadian courts have interpreted a retail sales tax to be a direct tax. Before 1991, Canada had a manufacturer sales tax at the federal level and a retail sales taxes in nine of the ten provinces. The federal government tried but failed to win support for a combined federal-provincial VAT. It then acted alone and introduced a VAT, the "goods and services tax" (GST) at 7 percent in 1991. Under this tax, basic groceries, prescription drugs, and medical devices are rated zero, and residental rents, health services, aid services, legal aid, educational services, and financial institutions are exempt from taxation. The GST at the present time is not harmonized with provincial retail sales taxes except in the province of Quebec. Quebec has announced that its sales tax would be "substantially

Table 10-3. Tax Assignment in Canada

Assignment category	*Base*	*Rate*	*Administration and collection*
Customs	F	F	F
Corporate income (7)	F	F+P	F
Corporate income (3)	P	P	P
Personal income (9)	F	F+P	F
Personal income (1)	P	P	P
Wealth	F,P	F,P	F,P
Corporate capital	P	P	P
Resource royalties	P	P	P
Unemployment Insurance Plan and Canadian Pension Plan premiums	F	F	F
Other payroll	P	P	P
Health care premiums	P	P	P
Taxation of "bads" and "sins"			
Fuel	F,P	F,P	F,P
Tobacco	F,P	F,P	F,P
Liquor	F,P	F,P	F,P
Other sins	P	P	P
Motor vehicle registration	P	P	P
Business regulation	P,L	P,L	P,L
Property	P,L	P	P
Land	P,L	P	P
Frontage	L	L	L
User charges	F,P,L	F,P,L	F,P,L
Value added tax (9)	F	F	F
Value added tax (1)	F,P	F+P	P
Retail sales tax (8)	P	P	P
Total (100%): F(49%) P-L (51%)			

Note: The number in parentheses indicates the number of provinces with the specified assignment.
F - Federal government
P - Provincial governments
L - Local governments
Source: Interviews with officials.

harmonized with the GST, subject to certain Quebec characteristics." A substantially harmonized multistage sales tax (QST) was introduced by Quebec in July 1992 at 8 percent. Exports are zero rated. The most notable exception of GST is that financial institutions are zero rated by Quebec. Quebec has also sought to administer the GST within its boundaries, and discussions are under way to formalize Quebec administration of GST and QST.

Newfoundland and Prince Edward Island began a process of full harmonization with GST in 1992 but later halted this process. Pressure from business groups for harmonization of federal and provincial taxes continue to mount. In the long run, the federal tax should be fully harmonized with provincial sales taxes in some provinces, but the retail stage of the tax will be fully harmonized in all the provinces. Zero rating of provincial exports adopted by Quebec appears to offer a simple alternative for such harmonization.

Federal-provincial fiscal arrangements in Canada encompass three broad areas: (a) tax harmonization, (b) fiscal transfers, (c) fiscal and economic policy coordination through periodic First Ministers' Conferences, meetings of finance ministers, and various intergovernmental committees of officials (see Figure 10-3).

Intergovernmental Transfers

The federal government in Canada pursues a number of national objectives through the use of its spending power. In 1994-95 it provided $41.9 billion in transfer of revenues to provincial and territorial governments. An overriding objective of these transfers is to secure economic union by maintaining minimum national standards in provincial-local public services across the nation. The three major programs of federal transfers to the provinces are: (a) the Established Programs Financing (EPF): conditional block (per capita) transfers for health and education with federal conditions on accessibility and standards of service; (b) the Canada Assistance Plan (CAP): conditional matching transfers for welfare assistance; and (c) the Canadian Fiscal Equalization Program: a constitutionally mandated unconditional block transfer program to support reasonably comparable levels of services at reasonably comparable levels of taxation. Figure 10-4 shows the relative importance of these three programs historically, in dollars per capita by province and as a share of provincial revenues. These programs are outlined below. For further details, see Canada, Department of Finance (1994).

Major Conditional Transfers

EPF and CAP account for a majority of federal conditional transfers.

Established Programs Financing

Under the EPF arrangements that were initiated on April 1, 1977, the federal governments provides conditional and equal per capita financial support to all provinces for health insurance and higher education. Although these areas are under the exclusive jurisdiction of the provinces, the federal government has traditionally used its powers of the purse to ensure minimum standards of access and service. Prior to 1971, such assistance was in the form of a more intrusive 50:50 matching program with attendant difficulties in fuller participation by fiscally disadvantaged provinces and federal monitoring of provincial expenditures. Figure 10-5 explains how EPF entitlements are calculated. This assistance totaled $21 billion or 51 percent of total federal transfers in 1994-95.

While there are no formal national conditions applying to provincial postsecondary education specified under the Federal Provincial Fiscal Arrangements Act, it is presumed that equal access to provincial education by all Canadian residents (citizens and perma-

nent residents) is to be ensured. National conditions with respect to provincial health care programs are specified in the 1984 Canada Health Act.

- *Universality:* All residents of Canada must be entitled to services.
- *Comprehensiveness:* All medically necessary services must be covered.
- *Accessibility:* Services must be provided on uniform terms and conditions, and reasonable access to services must not be impeded. As a penalty, this provision requires that transfers must be reduced by the amount collected by a province through extra-billing and/or user fees for medical and hospital services.

Table 10-4. Fiscal Changes, 1984-85 and 1993-94

Federal Taxes	*1984-85*	*1993-94*
1. Personal Income Tax		
Basic Rate (%)	6-34 (ten brackets)	17-29 (three brackets)
Surtaxes	General surtax of 1.5%; also high income surtaxes of 5% plus 5%.	General surtax of 3%; also 5% high income surtax.
Tax Reduction	$100 per tax filer (employment expense deduction).	—
Deductions and Exemptions	Reduced taxable income.	Transferred to nonrefundable tax credits at rate of lowest bracket.
Indexing	Tax brackets and personal exemptions indexed at 5% in 1984 and indexed to CPI inflation in 1985.	Tax brackets and amounts for nonrefundable tax credits indexed at rate of CPI inflation in excess of 3%.
Special Taxes		Clawback on Organization of American States.
2. Corporate Income Tax		
General Rate (%)	36	28.84
Small Business Rate (%)	15	12.84
3. General Sales Tax		
Base	Narrow-based manufacturers sales tax	Broad-based goods and services tax.
General Rate (%)	10	7
4. Fuel Taxes		
Sales Tax Rate (%)	10	7
Excise Tax (¢/gasoline)	1.5	8.5
5.Tobacco Taxes		
Sales Tax Rate (%)	13	7
Excise Tax (¢/cigarette)	0.939	5.1776
Excise Duty (¢/cigarette)	1.127	2.9374
6. Liquor Taxes		
Sales Tax Rate (%)	13	7
Excise Tax (wines) (cents/litre)	42.16	51.22
Excise Duty (distilled spirits) (cents/litre of alcohol)	10.12	11.066
Excise Duty (beer) (cents/litre)	18.21	27.985
7. Unemployment insurance premiums (% of employment income to maximum)	2.35% (employees) 3.29% (employers)	3% (employees) 4.2% (employers)
8. Contributions to CPP (% of employment income to maximum)	1.8% (employees) 1.8% (employers)	2.4% (employees) 2.4% (employers)

Table 10-4. (continued)

Provincial taxes	*1984-85*	*1993-94*
1. Personal Income Tax		
Basic Tax (%)	43.5-60.0	45.5-69.0
Flat Tax (%)	—	0.5-2.0 (3 provinces)
Surtaxes (%)	10-20 (3 provinces)	2-30 (9 provinces)
2. Corporate Income Tax		
General Rate (%)	10-16	8.9-17
Small Business Rate (%)	0-10	5-10
3. Retail Sales Tax (general rate)	5-12% (9 provinces)	7-12% (9 provinces)
4. Fuel Taxes		
Gasoline (cents/litre)	7.5-13.35 (8 provinces)	9.0-15.7
5.Tobacco Tax	1.48-4.8 ¢/cigarette	6.52-11 ¢/cigarette
6. Corporate Capital Tax		
General Rate (%)	0.2-0.45 (5 provinces)	0.3-0.6 (5 provinces)
7. Payroll Tax	1.5-3% (2 provinces)	1 95-3.75% (4 provinces)
8. Health Care Premiums		
Individual ($/yr)	168-357 (3 provinces)	360-432 (2 provinces)

Federal transfers	*1984-85*	*1993-94*
1. To Persons		
Family Allowance	Universal and taxable	Replaced by income-tested, nontaxable child benefit.
Child Tax Credit	Income-tested, nontaxable	Replaced by income-tested, nontaxable child benefit.
Sales Tax Credit	Small amount, income tested	Enriched, income tested.
OAS	Universal	Universal, subject to clawback.
Unemployment Insurance		Restrictions for those quitting jobs.
2. To Provinces		
CAP		Annual growth rate limited to 5% for Ontario, B.C., Alberta.
EPF		Cash payments frozen until 1995-96.
Equalization		Growth rate limited to growth of GDP over 5-year period.

Source: Ruggeri, Howard, Robertson, and Wart (1993).

Figure 10.3. Federal Provincial Fiscal Arrangements

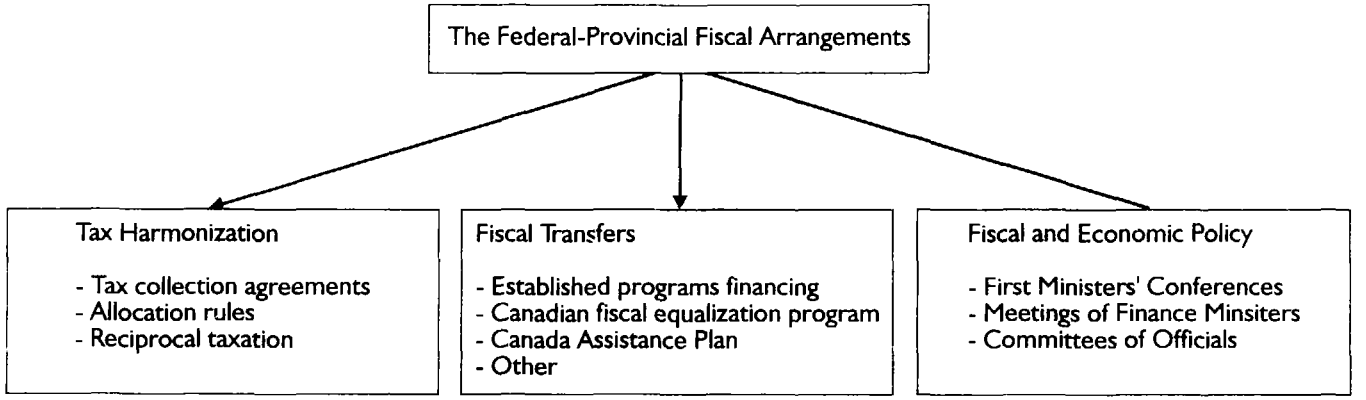
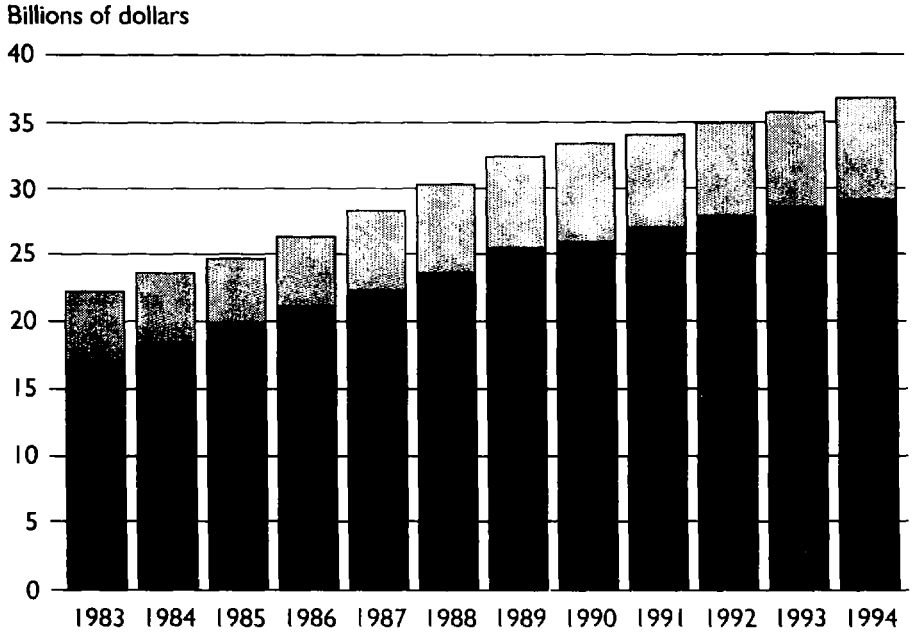


Figure 10.4 Federal Transfers

4a. Major Federal Transfers, 1983-84 to 1994-95



4b. Major Federal Transfers, 1994-95

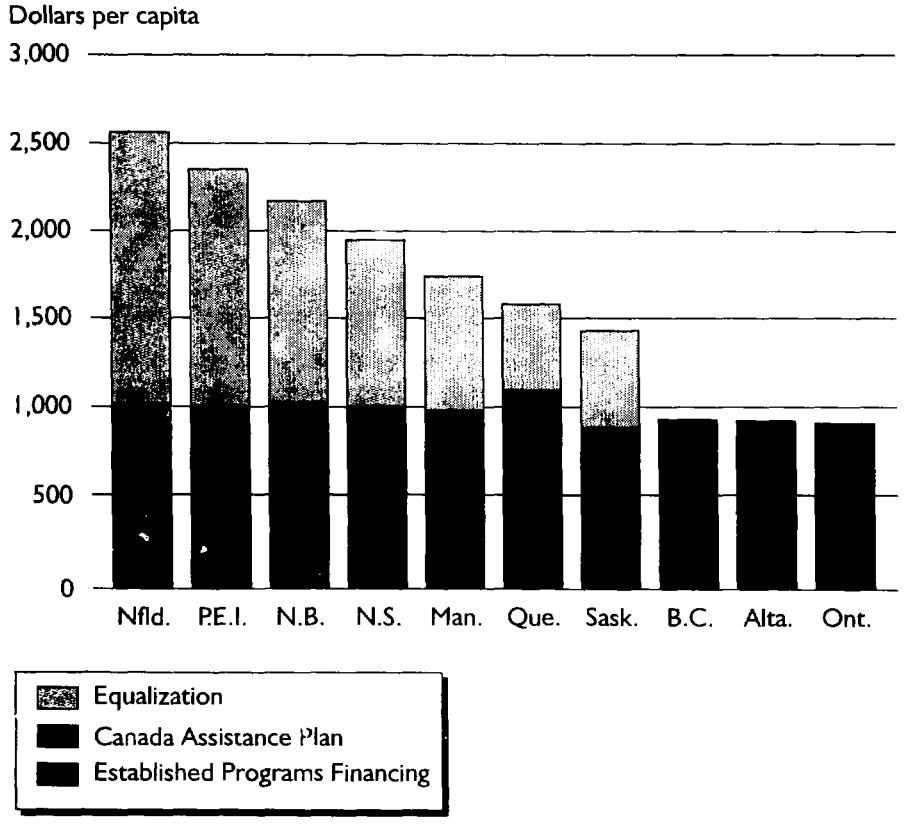
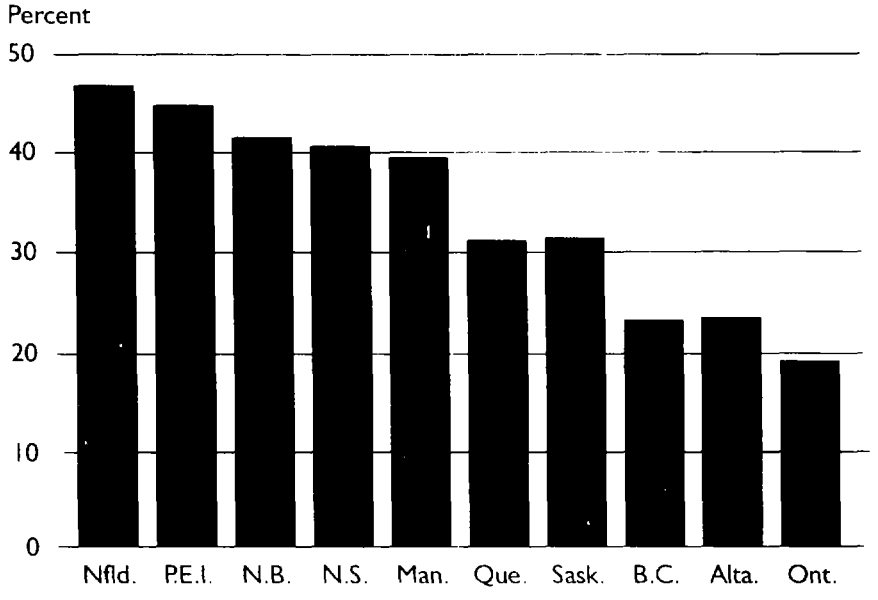
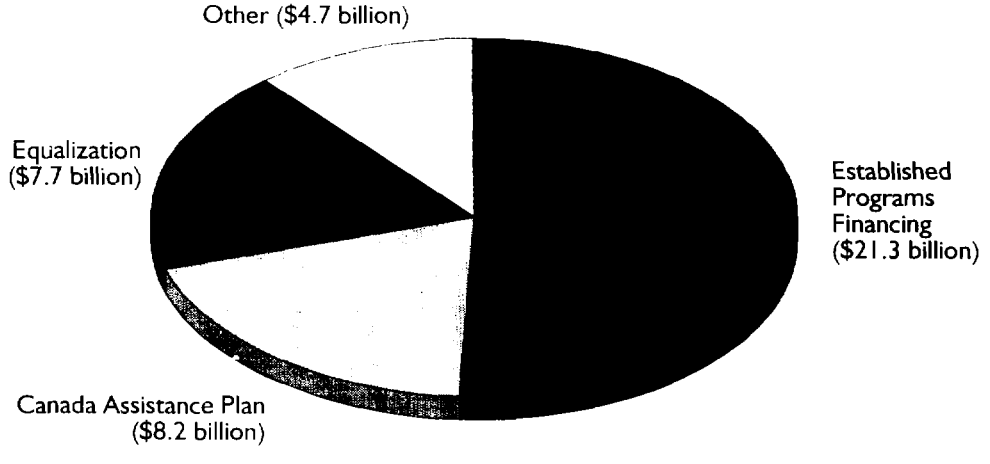


Figure 10.4 (continued)

4c. Major Federal Transfers as a Share of Provincial Revenues, 1994-95

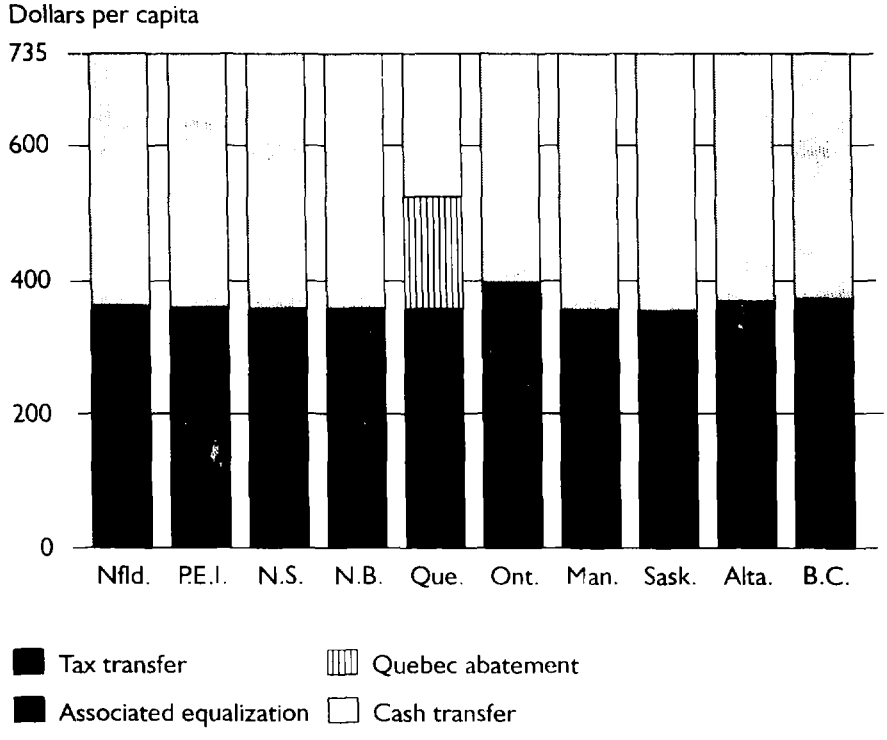


4d. Total Federal Transfers, 1994-95



Note: Total federal transfers $41.9 billion. Equalization associated with tax transfers under EPF is included under EPF and excluded from equalization.

Figure 10-5. How Established Programs Financing Works, 1994-95



Note: The calculation starts with each province's total per capita entitlement, which is the same for all provinces. It equals the national average per capita federal contribution to shared-cost programs in 1975 plus $20 per capita for Extended Health Care Services (starting in 1977), escalated to the current year by the growth in the Canadian economy, as measured by GNP per capita. Beginning in 1986, the rate of escalation was reduced to two percentage points below the GNP escalator. The 1989 federal budget reduced the rate of escalation to three percentage points below the GNP escalator. However, this was superseded by the Expenditure Control Plan. As part of the Expenditure Control Plan, from 1990-91 to 1994-95, the per capita entitlement is frozen at its 1989-90 level.

Next, the current per capita values to provinces of the tax transfer (13.5 points of personal income tax and one point of corporate income tax) is calculated, along with the equalization associated with it. This amount is paid to provinces under the equalization program.

Finally, the equalized tax transfer for each province is subtracted from the total entitlement per capita and the remainder (times population) is paid to each province in cash.

Under an arrangement offered to all provinces in 1964, Quebec chose to receive an additional tax transfer (8.5 points of personal income tax) in respect of hospital insurance. As shown above, the current value of this amount is deducted from Quebec's total entitlement to determine its cash payment.

Source: Canada (1994).

Table 10-5. Relevant Data on Equalization by Revenue Source, 1994-95 Preliminary

	Revenue source	*Revenues subject to equalization* ($000'000)	Equalization entitlement ($000'000)											Payout ratio (total equalization per $100 of revenues)
			Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total receiving provinces	
1.	Personal income taxes	39,811	349.0	65.1	297.2	327.9	1,603.3	-2,053.0	361.4	427.9	-46.5	-339.5	3,431.7	8.62
2.	Business income taxes	5,517	65.7	11.2	103.4	72.7	-105.4	-80.6	83.8	45.2	-206.7	57.1	278.6	5.05
3.	Capital tax revenues	3,211	32.1	9.6	39.3	28.6	102.6	-211.0	23.6	30.3	-133.6	54.6	266.0	8.28
4.	General and miscellaneous sales taxes	21,027	96.4	17.4	57.8	79.3	437.6	-273.8	107.2	104.3	-423.7	-375.4	900.1	4.28
5.	Tobacco taxes	1,696	11.5	-0.2	-18.8	-0.7	-65.6	-12.8	12.3	8.3	-8.9	57.8	-53.2	-3.14
6.	Gasoline taxes	4,506	4.7	-3.7	-14.2	15.9	128.3	-81.8	-12.1	-22.7	-138.2	-11.7	64.5	1.43
7.	Diesel fuel taxes	1,371	10.6	2.8	6.3	-3.8	69.1	1.3	-13.6	-46.8	-72.0	-10.2	24.8	1.81
8.	Noncommercial vehicle licenses	1,687	7.3	-0.3	-0.1	3.3	33.5	0.1	-5.0	2.6	-32.9	-31.3	41.5	2.46
9.	Commercial vehicle licenses	712	2.2	0.8	2.9	-2.2	30.0	-17.1	-1.3	-2.7	-34.4	-9.0	29.8	4.18
10.	Sales of spirits, wine and beer	3,065	-4.1	0.8	-1.0	19.0	118.7	-40.5	-0.3	7.6	-36.0	-85.6	140.8	4.59
11.	Health insurance premiums	1,268	2.8	-1.5	-0.6	0	2.9	-0.6	-2.7	2.7	-1.1	-2.3	3.6	0.28
12.	Race track taxes	138	2.9	0.2	3.8	3.3	15.0	-25.0	2.3	4.3	-3.3	3.4	31.8	23.01
13.	Forestry revenues	1,216	15.1	5.6	34.6	-4.7	126.7	308.9	36.9	17.7	5.1	-490.3	232.1	19.08
14.	New oil revenues	441	2.0	0.5	3.2	2.6	24.8	35.0	1.6	-57.3	-350.2	-4.1	-22.7	-5.14
15.	Old oil revenues	278	0.9	0.2	1.5	1.2	11.5	16.3	0	-22.4	-235.8	-5.3	-7.1	-2.57
16.	Heavy oil revenues	57	0.9	0.2	1.5	1.2	11.6	17.4	1.8	-36.6	-14.4	5.7	-19.3	-33.98
17.	Mined oil revenues	51	0	0	0	0	0	0	0	0	-50.6	0	0	—
18.	Natural gas revenues - domestic sales	770	4.2	1.0	6.7	5.5	52.6	75.1	8.1	-57.9	-577.7	-77.9	20.1	2.61
19.	Natural gas revenues - export sales	769	1.9	0.4	3.0	2.4	23.5	35.4	3.6	3.2	-683.1	-65.8	38.2	4.96
20.	Sale of mineral rights on oil and gas lands	343	1.5	0.3	2.4	2.0	18.9	27.4	2.6	-25.0	-273.2	-23.9	2.7	-0.80
21.	Other oil and gas revenues	253	1.1	0.2	1.7	1.4	13.1	19.1	1.3	-20.5	-204.8	-13.0	-1.7	-0.66
22.	Minerals other than potash	255	-8.9	1.1	3.8	-5.2	16.5	21.9	-5.7	-14.4	3.8	-18.3	-13.3	-5.24
23.	Potash	44	0.9	0.2	1.4	-5.3	11.3	17.0	1.7	-35.6	4.2	5.6	-25.3	-58.04
24.	Water power rentals	484	-9.4	2.5	16.3	9.7	-114.9	145.6	-19.6	14.3	49.1	-25.4	-101.1	-20.89
25.	Insurance premium revenues	949	8.0	1.1	7.4	2.5	20.9	-27.3	6.8	5.5	1.2	-6.0	52.3	5.51
26.	Payroll taxes	6,077	42.3	8.3	35.7	36.0	157.9	-253.3	35.6	54.3	-26.1	5.5	370.1	6.09
27.	Property taxes	29,629	225.9	40.4	229.6	248.1	823.7	-832.5	218.7	182.4	-431.1	-392.3	1,968.9	6.65
28.	Lottery revenues	2,035	-4.9	3.5	14.6	17.9	-84.7	113.0	19.9	20.8	35.8	-69.1	-12.9	-0.63
29.	Miscellaneous own-service revenues	14,088	97.7	17.9	88.0	93.9	377.5	-436.7	95.9	94.8	-178.8	-131.5	865.7	6.14
30.	Federal shared revenues	127	-0.5	0.2	2.2	2.5	3.7	-12.4	-0.9	2.2	-1.6	7.3	9.3	7.36
	Total	141,874	959.9	185.9	931.0	923.3	3,864.9	-3,524.9	964.0	686.0	-4,065.7	-1,990.7	8,515.8	6.00

Note: Totals may not add because of rounding. The above revenue sources include subsources in the case of spirits, wine and beer (line 10), minerals other than potash (line 22) and federal shared revenues (line 30). Where there are subsources, separate tax bases are used for each subsource. Negative payout ratios occur for a revenue source where the equalization receiving provinces as a whole have a higher per capita tax base than the five provinces making up the program standard.

Source: Canada, Department of Finance (1994).

- *Portability:* Persons must remain covered while temporarily absent from their province and for three months by original province while relocating to a new province in Canada.
- *Public insurance:* Health plans must be insured by a nonprofit public agency.

The act requires the federal government to withold funds if any of the above conditions are not met.

Canada Assistance Plan

Provincial governments in Canada provide social assistance to the needy as a "last resort" when benefits from other programs such as Unemployment Insurance, Old Age Security, and public and private pensions are either exhausted or not available. Through the Canada Assistance Plan established in 1966, the Government of Canada shares on a 50:50 basis all eligible provincial expenses for social welfare. Figure 10-6 shows the historical growth of these transfers as well as 1994-95 per capita transfers by province. The primary objectives of this program are to provide federal support for the provision by provinces of (a) adequate rates of social assistance and institutional care for persons in need; and (b) welfare services that have as their object the lessening, removal, or prevention of the causes and effects of poverty, child neglect, or dependence on public assistance.

Federal-provincial agreements under the CAP bind the provinces to provide assistance to needy Canadians on the basis of the fact of need rather than its cause. The provinces also agreed not to restrict the access to CAP assistance by nonresidents.

The CAP beneficiaries include the disabled, single mothers, children, the aged, and the unemployed. In addition, child care, rehabilitation, and home-making services are provided. The provinces enjoy complete autonomy in design and administration of these cost-shared programs within their jurisdiction. The federal government simply reimburses its share of the eligible expenses.

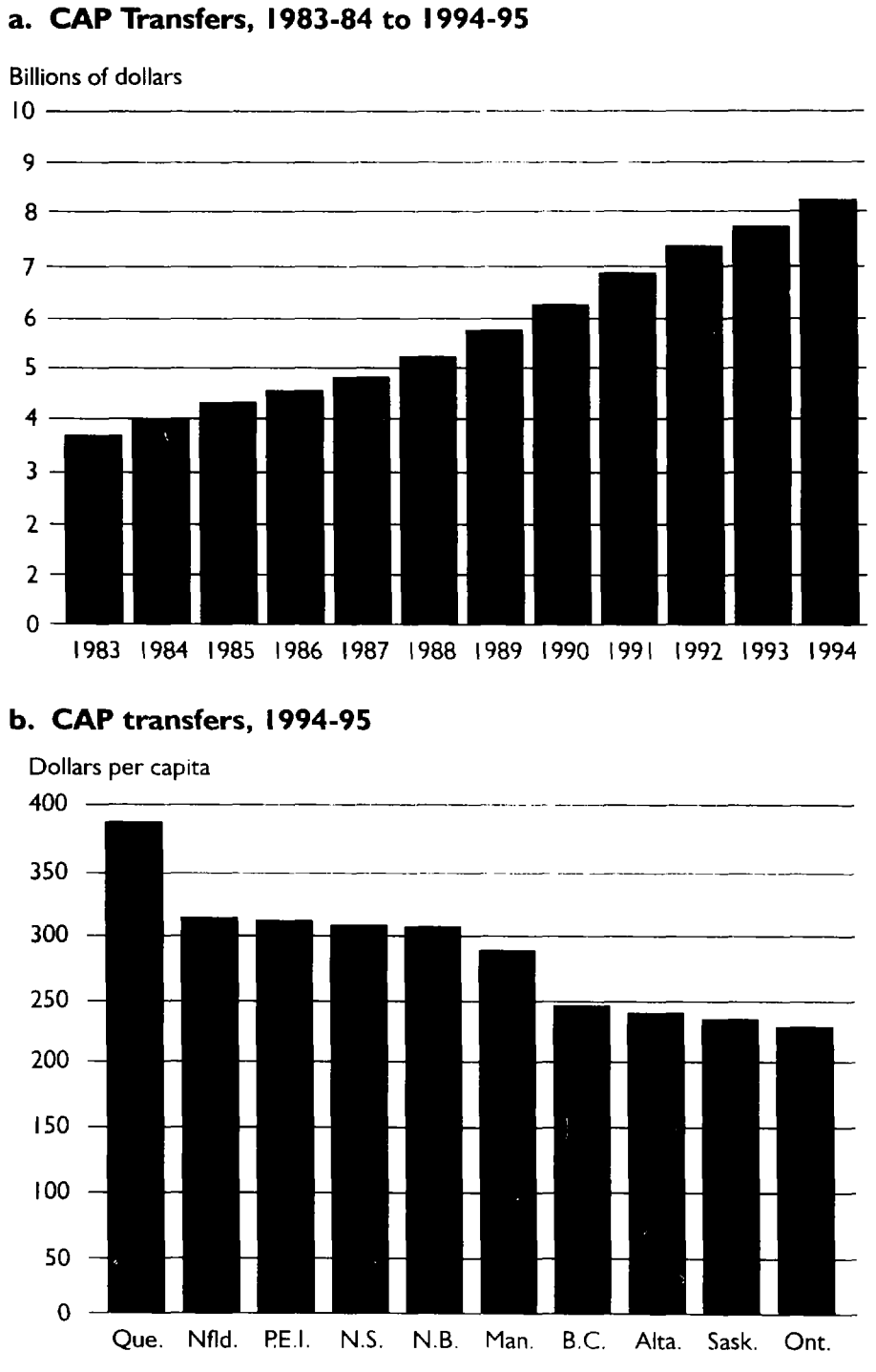
Major Unconditional Transfers

Equalization transfers to have-not provinces and formula financing of territorial governments represent two important federal unconditional transfer programs to subnational governments.

The Canadian Fiscal Equalization Program

Fiscal equalization is a federal program of annual, unconditional payments to provinces with a substandard capacity to finance public services for their citizens. This program was implemented in 1957 upon the recommendations of the Rowell-Sirois Commission of 1941. Successive governments have stated that the purpose of equalization is to make it possible for all provinces to provide reasonably comparable levels of public services at reasonably comparable levels of taxation. A commitment to a federal program with this goal is set out in the Canadian Constitution. Specifically, subsection 36(2) of the Constitution Act of 1982 states:

Figure 10-6. Transfers Under the Canada Assistance Plan



> Parliament and the Government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation.

The present system of fiscal equalization in Canada has the following characteristics:

- Use of the representative tax system approach to the measurement of fiscal capacity.
- Comprehensive coverge of provincial-local revenues from own sources extending to virtually the whole range of provincial-local revenues from own sources plus federal revenues from taxation shared with provinces on a point-of-origin basis.
- Use of a "five-province standard" consisting of British Columbia, Saskatchewan, Ontario, Manitoba, and Quebec.
- Application of national average rates of taxation to revenue bases.
- Use of total provincial population as a means for comparing provinces of different size, and as a proxy for the relative needs for and costs of public services in each province.

The Equalization Program also has two special features. First, it has *a sliding scale floor* to protect individual provinces against large year-over-year decreases in their equalization entitlements. Second, the program has a *ceiling provision* whereby total equalization entitlements may not increase more rapidly from a base year than GNP increases from the same base year.

Mathematically,

$$E_a = ((R_{10}/B_{10} \times B_5/P_5) - (R_{10}/B_{10} \times B_a/P_a)) \times P_a$$

where E_a = Equalization entitlement of *Province a* from revenue source I (i =1 to 30).
R_{10} = Total revenues obtained by ten provinces
B_{10} = Tax base in ten provinces
B_5 = Tax base in five provinces (standard)
P_5 = Population of five provinces
B_a = Tax base in *Province a*
P_a = Population in *Province a*

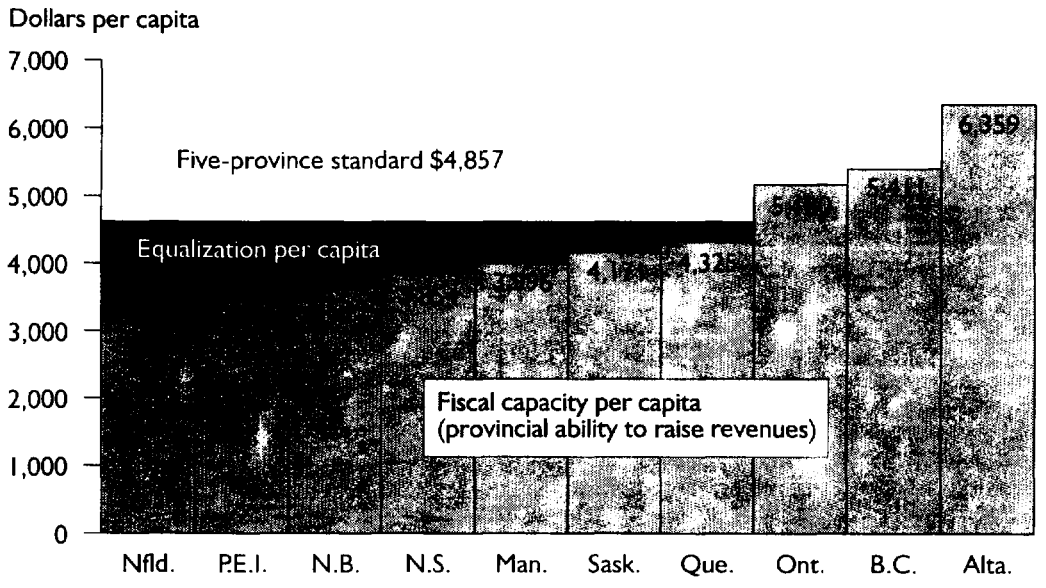
Equalization per capita for revenue source (i):

= (National average tax rate)$_i$ [(Per capita base in 5 provinces)$_i$ — (Province's own base per capita)$_i$]

= (Per capita potential revenue in 5 province s) — (Per capita standardized revenue in *Province a*)

A province may have equalization entitlements that are positive from some revenue sources and negative from other revenue sources. These are added from all sources, and if the overall sum is positive, the province receives a transfer from the federal government of the equivalent amount. A negative sum is simply ignored. Table 10-6 and Figure 10-7 illustrate how this program worked for the fiscal year 1994-95. Figure 10-8 shows

Figure 10-7. Equalization Standard 1994-95



Note: By levying average rates of tax, any province, together with its local governments, will be able to derive revenues of at least *$4,857 per capita* (equal to $19,428 for a family of four) with which to finance public services.

Table 10-6. How Equalization Works: Summary of Calculation, 1994-95

	(1)	(2)		(3)	(4)	(5)
		Estimated revenues of province from applying the Representative Tax System		*Province's per capita shortfall from formula standard of $4,874*	*Province's equalization entitlement* (Col 3, if positive, X Col. 1)	*Province's per capita revenue-raising capacity after equalization* (Col. 2(b)+ Col 3 if positive)
		(a) Total	(b) Per capita			
Province	*Population*	($000,000)	($)	($)	($000,000)	($)
Newfoundland	582,600	1,870	3,209	1,647	960	4,857
Prince Edward	132,200	456	3,451	1,406	186	4,857
New Brunswick	755,500	2,746	3,635	1,222	923	4,857
Nova Scotia	928,200	3,577	3,854	1,003	931	4,857
Manitoba	1,119,300	4,472	3,996	861	964	4,857
Saskatchewan	1,001,900	4,179	4,171	685	687	4,857
Quebec	7,262,500	31,408	4,325	532	3,865	4,857
Ontario	10,907,700	56,503	5,180	(-323)	0	5,180
British Columbia	3,594,100	19,447	5,411	(-554)	0	5,411
Alberta	2,707,400	17,215	6,359	(-1,502)	0	6,359
Five-province standard			4,857		8,516	

Note: Provinces are listed in ascending order of per capita revenue-raising capacity as shown in col. 2(b).

Source: Canada, Department of Finance (1994).

Table 10-7. Calculation of Equalization Entitlement of Newfoundland for General Sales Tax Revenue Source, 1993-94

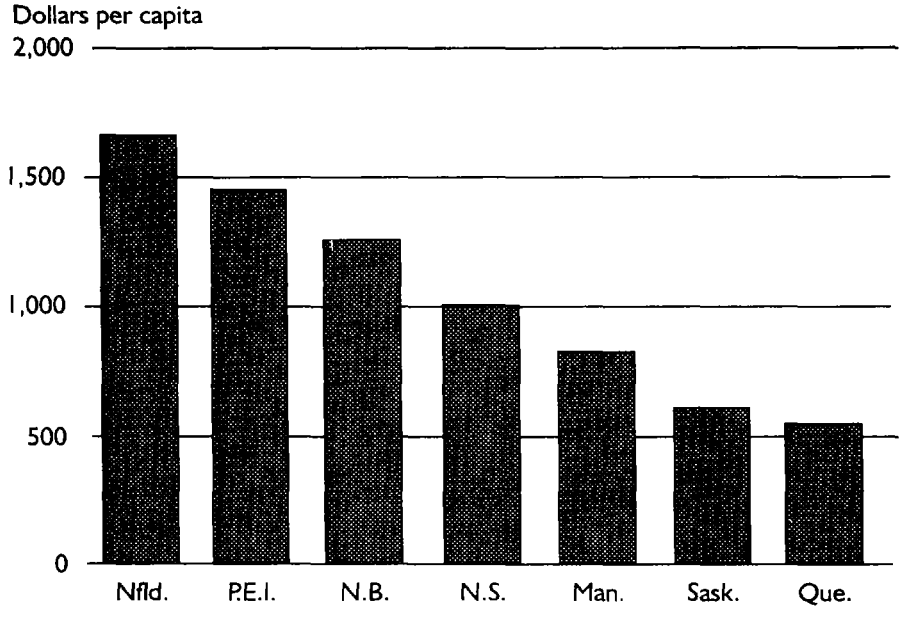
Step 1: Revenues to be equalized	
1. Total revenues of 10 provinces from general sales taxes, 1993-94	$19,880 million
Step 2: Newfoundland standardized revenues from general sales taxes at national average tax rate	
2. Newfoundland standardized tax base for general sales tax revenue source (sales of goods and services in province which are typically subject to general sales tax, 1993-94)	$3,643.3 million
3. National average tax rate for general sales tax	
= total revenues of all provinces from general sales tax / total standardized tax base of all provinces for general sales taxes	
= $19,880 million / $236,175 million	8.4175 percent
4. Newfoundland standardized revenues from applying national average tax rate to its standardized tax base	
= line 2 x line 3 =$3,643.3 million x 0.084175	$306,677,000
Step 3: Comparison of Newfoundland's standardized revenues from the general sales tax base with revenues it would derive if it had a tax base as productive as the average for the 5 standard provinces	
5. Newfoundland population	581,100
6. Newfoundland standardized sales tax revenues per capita	
= line 4 = $306,677,000 / line 5 = 581,100 =	$527.75
7. Standardized tax base of the 5 standard provinces for general sales tax =	$192,976 million
8. Standardized revenues of the 5 standard provinces for general sales tax	
= line 7 x line 3 = $192,976 million x 0.084175 =	$16,244 million
9. Population of the 5 standard provinces	23,583,700
10. Standardized sales tax revenues per capita of 5 standard provinces	
= line 8 = $16,244 million / line 9 = 23,583,700 =	$688.77
11. Newfoundland's equalization for general sales tax	
= Newfoundland population x per capita shortfall from 5 province standard	
= line 5 x (line 10 - line 6)	
= 581,100 x ($688.77 - 527.75)	
= 581,100 x $161.02 =	$93,568,000

Note: The general sales tax revenue source in equalization also includes miscellaneous sales taxes (levied by some provinces on hotel accommodation, meals, cable TV, amusements, and telecommunications). These are reflected in both the revenues and the tax base and, because they tend to be levied at higher rates than general sales taxes, have the effect of slightly raising the national average tax rate shown on line 3 from what it would be in respect of general sales taxes only. This table does not show a ceiling impact (although a ceiling did apply in 1993-94) as this potentially final step in the determination of equalization entitlements is applied in respect of overall entitlements and not on a tax-by-tax basis. However, in any year when the ceiling applies, it could be pro-rated over the various taxes subject to equalization. Thus, if general sales taxes accounted for, say, 11 percent of total pre-ceiling equalization as of 1993-94, then 11 percent of any ceiling impact in that year could be apportioned to the general sales tax.

Source: Canada, Department of Finance (1994).

Figure 10-8. Equalization Transfers, by Province in 1994 and over time

8a. Equalization Transfers, 1994-95



8b. Provincial Shares of Equalization, 1994-95

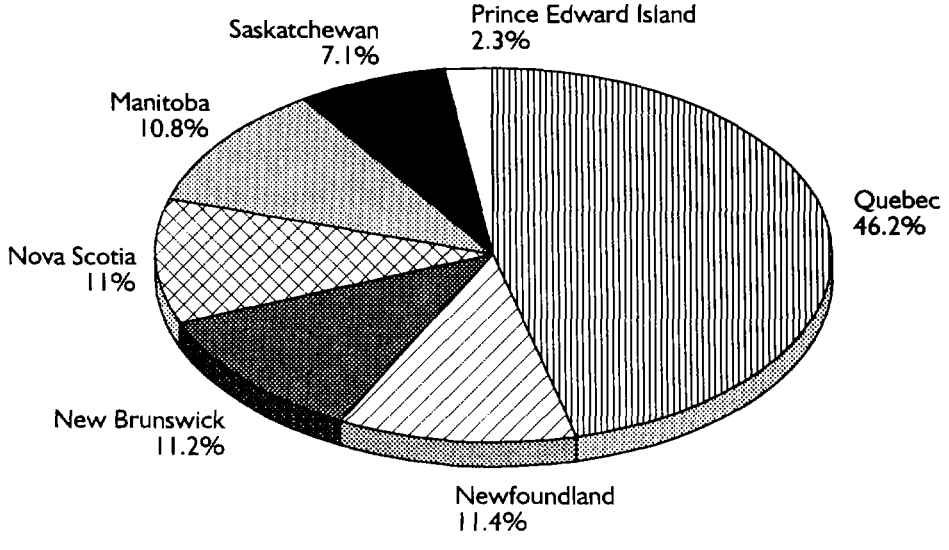


Figure 10-8. (continued)

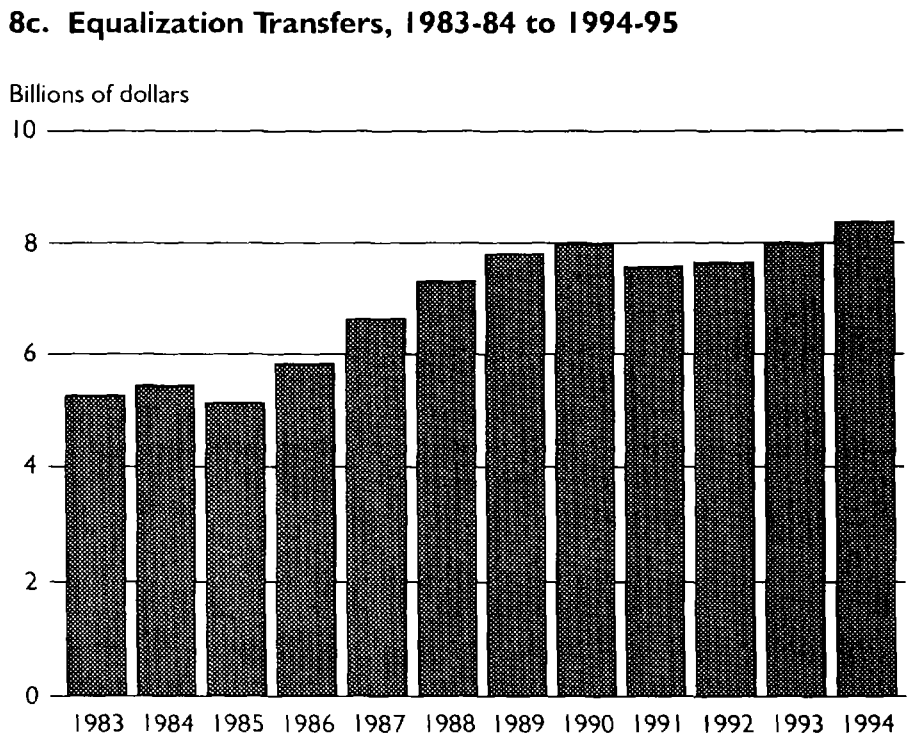


Table 10-8. Other Federal-Provincial Transfers, 1994-95

Transfers	*Millions of dollars*
Territorial financing	1,193
Infrastructure	687
Gross revenue insurance plan	487
Grants in lieu of property taxes	435
Other	351
Miscellaneous health and welfare	310
Transportation	260
Official languages in education	255
Public utilities income tax transfer	237
Young offenders	158
Preferred share dividend taxes	150
Justice	93
Statutory subsidies	40
Total	4,656

Source: Canada, Department of Finance (1994).

equalization payments by province as well as the historical record of such transfers. Table 10-7 provides an illustrative example of steps involved in calculating equalization payments for a specific revenue category.

The Canadian Fiscal Equalization Program has endured and is often referred to as the "glue that holds the federation together" (Courchene 1984). It is a comprehensive per capita fiscal capacity equalization program, and it considers all provincial-local revenues. Since the program uses fiscal capacity as a criterion, it allows the federal government to monitor fiscal positions of subnational governments on a timely basis. The program is largely free of grantsmanship and strategy, and both the size of the pool and allocations are determined objectively. The program, however, implicitly assumes that per capita expenditure needs are the same across all provinces. It is a federal program, and therefore it constrains the federal government's fiscal position. The program also neglects other federal transfers in calculating equalization transfers. Finally, it separates taxing and spending decisions in a major way in Atlantic Canada resulting in reduced accountability for provincial-local governments in that region. See Shah (1994a) for a critique of this program and the effect on provincial allocations under a comprehensive equalization program. See Shah (1994b) for a discussion of the design of equalization programs; see also Boadway and Hobson (1993).

Formula Financing of Territorial Governments

The governments of the Northwest Territories and Yukon are not eligible to receive equalization payments. Instead, they receive formula-based federal assistance. This grant program was initiated in 1985-86. The federal grant is based on a measure of the difference between expenditure needs of the territories and their revenue means—a fiscal-gap-filling approach. Expenditure needs are based on 1982-83 expenditures escalated annually, and reveneue means are based upon fiscal capacity and other federal transfers received. In 1994-95, $1.2 billion in federal assistance was provided under this program (see Table 10-8).

Conclusion

In this chapter, I have provided a brief overview of the Canadian federal system to serve as a study guide for comparative federal systems. While I have not presented an analytical review of this system, it is quite obvious that the Canadian system would receive plaudits for its simplicity and design, objectivity of the criteria used, and consistency of the design with objectives sought. Thus, a familiarity with this system should be of benefit to any one engaged in serious deliberations on institutions and mechanisms to secure constitutional objectives under a federal system of government.

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