

Introduction:

Principles of Fiscal Federalism

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A large and growing number of countries are re-examining the roles of various orders of government and their partnerships with the private sector and civil society in order to improve their ability to serve their people more effectively and efficiently. This rethinking has led to a resurgence of interest in the principles and practices of fiscal federalism. Federal systems are seen to provide safeguards against the threat of centralized exploitation as well as decentralized opportunistic behaviour while bringing decision makers closer to the people. The principles of fiscal federalism are concerned with the design of fiscal constitutions – that is, how taxing, spending, and regulatory functions are allocated among governments and how intergovernmental transfers are structured. These arrangements are of fundamental importance to the efficient and equitable provision of public services.

This chapter begins by reviewing basic concepts in federalism. This is followed by a discussion of the conceptual underpinnings of federal fiscal constitutions. The principles of fiscal federalism outlined in this chapter are primarily based on economic premises; hence, they are limited in their application to economic criteria. Some nations may well consider political, sociological, and historical criteria of greater relevance in their circumstances.

A discussion of the conceptual basis of expenditure assignment is followed by a review of the theory of tax assignment. Tax-base and revenue-sharing concepts and transfer mechanisms are then introduced briefly. A concluding section brings together the main themes of the fiscal federalism literature.

BASIC CONCEPTS OF FEDERALISM

Constitutional divisions of powers among various orders of government fall into three categories: unitary, federal, and confederal.

Unitary Government

A unitary country has a single or multi-tiered government in which effective control of all government functions rests with the central government. A unitary form of government facilitates centralized decision making to further national unity. It places a greater premium on uniformity and equal access to public services than it does on diversity. An overwhelming majority of countries (148 of 193 countries in 2006) have a unitary form of government. The city-states of Singapore and Monaco are single-tiered unitary governments. China, Egypt, France, Indonesia, Italy, Japan, Korea, New Zealand, Norway, the Philippines, Portugal, Sweden, Turkey, and the United Kingdom have multi-tiered governments based on unitary constitutions. As a result, some unitary countries (e.g., China, Denmark, Norway, and Sweden) are more fiscally decentralized than are some federal countries, such as Australia and India.

Federal Government

A federal form of government has a multi-order structure, with all orders of government having some independent as well as shared decision-making responsibilities. Federalism represents either a “coming together” or a “holding together” of constituent geographic units to take advantage of the greatness and smallness of nations in a flat (globalized) world in which many nation-states are too large to address the small things in life and too small to address large tasks.¹ Subscribing to the “coming together” view of federalism, Daniel J. Elazar pointed out and elaborated that the word “federalism” has its roots in the Latin *foedus*, meaning “league,” “treaty,” or “compact.”² More recently, Robert Inman noted that “the word ‘federal’ has come to represent any form of government that brings together, in an alliance, constituent governments each of which recognizes the legitimacy of an overarching central government to make decisions on some matters once exclusively the responsibility of individual member states.”³ “Coming together” has been the guiding framework for mature federations such as the United States, Canada, and, more recently, the European Union. The alternative “holding together” view of federalism, also called “new federalism,” represents an attempt to decentralize responsibilities to state-local orders of government with a view to overcoming regional and local discontent with central policies. This view is the driving force behind the current interest in principles of federalism in unitary countries and in relatively newer federations such as Brazil and India and emerging federations such as Iraq, Spain, and South Africa.

A federal form of government promotes decentralized decision making and, therefore, is conducive to greater freedom of choice, diversity of

preferences in public services, political participation, innovation, and accountability.⁴ It is also better adapted to handle regional conflicts. Such a system, however, is open to a great deal of duplication and confusion in areas of shared rule and requires special institutional arrangements to secure national unity, ensure regional equity, and preserve an internal common market.

Federal countries broadly conform to one of two models: *dual federalism* or *cooperative federalism*. Under dual federalism, the responsibilities of the federal and state governments are separate and distinct. According to William H. Riker, under such a system, “two levels of government rule the same land and the people, (2) each level has at least one area of action in which it is autonomous, and (3) there is some guarantee ... of the autonomy of each government in its own sphere.”⁵ Under cooperative federalism, the responsibilities of various orders are mostly interlinked. Under both these models, fiscal tiers are organized so that the national and state governments have independent authority in their areas of responsibility and act as equal partners. National and state governments often assume competitive, non-cooperative roles under such an arrangement. Dual federalism takes either the *layer cake* or *coordinate-authority* approach. Under the layer-cake model, practised in Mexico, Malaysia, and Russia, there is a hierarchical (unitary) type of relationship among the various orders of government. The national government is at the apex, and it has the option to deal with local governments either through state governments or more directly. Local governments do not have any constitutional status: they are simply extensions of state governments and derive their authority from state governments. In the coordinate-authority model of dual federalism, states enjoy significant autonomy from the federal government, and local governments are simply handmaidens of the states and have little or no direct relationship with the federal government. The working of the federations of Australia, Canada, India, Pakistan, and the United States resembles the coordinate-authority model of dual federalism.

The *cooperative federalism* model has, in practice, taken three forms: interdependent spheres, marble cake, and independent spheres. In the interdependent spheres variety as practised in Germany and South Africa (a unitary country with federal features), the federal government determines policy, and the state and local governments act as implementation agents for federally determined policies. In view of federal domination of policy making, in this model, state/provincial governments have a voice in federal policy making through a second chamber (the upper house of the Parliament). In Germany and South Africa, the second-order (state) governments are represented in the upper house of the national parliament (the *Bundesrat* and the Council of the Provinces, respectively). In the marble cake model of cooperative federalism, various orders of government

have overlapping and shared responsibilities, and all constituent governments are treated as equal partners in the federation. Belgium, with its three territorial and four linguistic jurisdictions, has a strong affinity with this approach. Finally, in a model of cooperative federalism with independent spheres of government, all orders of government enjoy autonomous and equal status and coordinate their policies horizontally and vertically. Brazil is the only federation practising this form of federalism.

The *competitive federalism* model is a theoretical construct advanced by the fiscal federalism literature and not yet practised anywhere in its pure form. According to this construct, all orders of government should have overlapping responsibilities, and they should compete both vertically and horizontally to establish their clientele of services.⁶ Some analysts argue that such a competitive framework would create leaner and more efficient governments that would be more responsive and accountable to people.

Countries with a federal form of government vary considerably in terms of federal influence on subnational governments. Such influence is very strong in Australia, Germany, India, Malaysia, Mexico, and Pakistan; moderately strong in Nigeria and the United States; and weak in Brazil, Canada, and Switzerland. In the last group of countries, national control over subnational expenditures is quite limited, and subnational governments have considerable authority to determine their own tax bases and tax rates. In centralized federations, conditional grants by the federal government play a large role in influencing the priorities of the state and local governments. In Australia, a centralized federation, the federal government is constitutionally required to follow regionally differentiated policies.

Federal countries also vary according to subnational influence on national policies. In some countries, there is a clear separation of national and subnational institutions (“executive” or “interstate” federalism), and the two orders interact through meetings of officials and ministers, as in Australia and Canada. In Germany and South Africa, state/provincial governments have a direct voice in national institutions (“interstate” federalism). In the United States, regional and local coalitions play an important role in the Congress. In some federal countries, constitutional provisions require that all legislation recognize that ultimate power rests with the people. For example, all legislation in Canada must conform to the Canadian Charter of Rights. In Switzerland, a confederation by law but a federal country in practice, major legislative changes require approval by referendum. Such direct-democracy provisions indirectly reinforce the decentralized provisions of public services. In all federal countries, local government influences on the federal and state governments remain uninstitutionalized and weak.

Asymmetric Federalism Countries with a federal form of governance do not necessarily treat second orders of government in a uniform manner. They

often offer flexibility in accommodating the special needs or demands of constituent units or impose a federal will in certain jurisdictions. This may take the form of treating some members as less equal than others. For example, Chechnya in Russia and Kashmir in India enjoy lesser autonomy than do other oblasts and states. Or the federation may treat some members as more equal than others by giving them wider powers, as is the case with Sabah and Sarawak in Malaysia and Quebec in Canada. Some federations offer constituent units freedom of choice to be unequal or more equal than others through opting-in or opting-out of federal arrangements. Such options are part of the arrangements offered by Canada, Spanish agreements, and the European Union's treaty exceptions for the United Kingdom and Denmark.⁷

Market Preserving Federalism Barry Weingast has advanced a theoretical concept for comparative analyses of federal systems.⁸ Market-preserving federalism is put forth as an ideal form of federal system in which (1) multiple governments have clearly delineated responsibilities; (2) subnational governments have primary authority over public goods and services for local autonomy; (3) the federal government preserves the internal common market; (4) all governments face the financial consequences of their decisions (hard budget constraints); and (5) political authority is institutionalized.

Confederal Government

In a confederal system, the general government serves as the agent of the member units, usually without independent taxing and spending powers. The United States had a confederal system from 1781 to 1787. The United Nations, the European Union, and the Commonwealth of Independent States (CIS), which now consists of 11 of the former republics of the Union of Soviet Socialist Republics (USSR), approximate the confederal form of government. A confederal system suits communities that are internally homogeneous but, as a group, completely heterogeneous. The European Union, however, over time has consistently moved to assume a federal role.

THE GENESIS OF FISCAL FEDERALISM

Several accepted theories provide a strong rationale for decentralized fiscal constitutions on the grounds of efficiency, accountability, manageability, and autonomy.⁹

Home Rule

George Stigler identifies two principles of jurisdictional design:¹⁰ (1) a representative government works best the closer it is to the people,

and (2) people should have the right to vote for the kind and amount of public services they want.

These principles suggest that decision making should occur at the order of government closest to the people consistent with the goals of allocational efficiency. Thus the optimal size of a jurisdiction would vary with specific instances of economies of scale and benefit-cost spill-outs.

Fiscal Equivalency

A related idea on the design of jurisdictions has emerged from the public choice literature. Mancur Olson argues that, if a political jurisdiction and benefit area overlap, the free-rider problem is overcome and the marginal benefit equals the marginal cost of production, thereby ensuring the optimal provision of public services.¹¹ Equating the political jurisdiction with the benefit area is called the “principle of fiscal equivalency” and requires a separate jurisdiction for each public service. Wallace Oates proposes a related idea, the so-called “correspondence principle.”¹² According to this principle, the jurisdiction determining the order of provision of each public good should include precisely the set of individuals that consume it. This generally requires a large number of overlapping jurisdictions.

The Decentralization Theorem

According to the “decentralization theorem” advanced by Oates, “each public service should be provided by the jurisdiction having control over the minimum geographic area that would internalize the benefits and costs of such provision.”¹³ The practical implications of this theorem require a large number of overlapping jurisdictions. Bruno Frey and Reiner Eichenberger have extended this idea to define the concept of functional, overlapping, and competing jurisdictions (FOCJ). They argue that jurisdictions can be organized along functional lines while overlapping geographically and that individuals and communities could be free to choose among competing jurisdictions. Revenues are raised from members in return for delivery of services to them. The school communities of the Swiss canton of Zurich and special districts in North America follow the FOCJ concept.¹⁴

The Subsidiarity Principle

According to the subsidiarity principle advanced by the European Union, taxing, spending, and regulatory functions should be exercised by the lowest order of government (the government closest to the people) unless a convincing case can be made for assigning these to higher orders of government.

ALLOCATION OF RESPONSIBILITIES

The “assignment problem,” or the allocation of expenditure, regulatory, and tax functions to various orders of government, is the most fundamental issue in a federation. The literature on fiscal federalism argues that finance should follow function. In other words, assigning responsibilities for spending, including the exercise of regulatory functions, must precede the assignment of responsibilities for taxation because tax assignment is generally guided by the spending requirements of the different orders of government and cannot be determined in advance. It may be desirable to decentralize taxation at the same time as decentralizing spending, so that subnational governments will not have to rely exclusively on grants from the national government. If subnational governments are not responsible for raising at least some level of their own revenues, they may have too little incentive to provide local public services in a cost-effective way. If subnational governments are assigned more revenues than their spending requires, they may have an incentive to reduce taxes or increase public-sector wages.

Principles of Expenditure Assignment

The fiscal federalism literature provides broad guidance in delineating expenditure and regulatory responsibilities among member units in a federation. The basic principles enunciated by this literature are relevant even for unitary states in which subnational governments are simply extensions of higher-order governments. By following these principles, the central government’s agents face just the right incentives for an efficient and equitable delivery of public services. These principles are discussed below, and, where appropriate, qualifications for unitary governments are stated.

Efficient Provision of Public Services Public services are provided most efficiently “by the jurisdiction having control over the minimum geographic area that would internalize benefits and costs of such provision,” because:¹⁵

- Local governments understand the concerns of local residents.
- Local decision making is responsive to the people for whom the services are intended, encouraging fiscal responsibility and efficiency, especially if financing of services is also decentralized.
- Unnecessary layers of jurisdiction are eliminated.
- Interjurisdictional competition and innovation are enhanced.

A decentralized system ideally ensures an order and combination of public services consistent with voters’ preferences, while providing incentives for efficient provision of such services. Nevertheless, some degree of

central control or compensatory grants may be warranted in the provision of services when the following considerations apply:

- *Spatial externalities.* Spatial externalities arise when the benefits and costs of public services are realized by non-residents. In the case of benefit spill-outs, the jurisdiction providing the service does not consider the proportion of benefits of a public service accruing to non-residents and therefore underprovides such a service. The reverse result is obtained in the case of cost spill-outs, where the public service could not be financed by exporting taxes to other jurisdictions. There are also public services whose benefits are considered national in scope, such as defence and foreign affairs. As a corollary, these services would be best provided by the federal government.
- *Economies of scale.* Certain services require areas larger than a local jurisdiction for cost-effective provision, for example, public transportation and sewerage in metropolitan areas.
- *Administrative and compliance costs.* Centralized administration generally leads to lower administrative costs associated with financing public services.

Fiscal Efficiency Decentralized decision making in a federation results in differential net fiscal benefits (imputed benefits from public services minus tax burden) being realized by citizens depending on the fiscal capacity of their place of residence. A richer jurisdiction can provide a higher level of public services at a lower tax rate than can a poorer jurisdiction. It is argued that such differential net benefits (NFBs) would encourage people to move to a resource-rich area, although appropriate economic opportunities may not exist there. Thus, resource allocation would be inefficient because people in their relocation decisions would compare gross income (private income plus net fiscal benefits minus cost of moving) at new locations, whereas economic efficiency considerations warrant comparing private income minus moving cost. It is argued that the national government should have a role in correcting such a “fiscal inefficiency.”¹⁶

Regional (Horizontal) Equity Differential net fiscal benefits across jurisdictions also lead to unequal treatment of citizens with identical private incomes depending on their place of residence. This is because their after-tax income inclusive of NFB would be different depending on their residence. This calls for the national government to play a role in dealing with these fiscal inequities.

The Redistributive Role of the Public Sector It is commonly argued that effective redistribution is possible only through national programs (i.e., progressive income taxes and transfers to persons), suggesting that local jurisdictions attempting to carry out redistributive policies are likely to drive out the rich.

While such arguments have merit, they leave a number of questions unanswered. National governments often prefer to strengthen their own power bases rather than to benefit citizens at large. In such situations, the national government may not redistribute from the rich to the poor in a symmetric fashion in the nation as a whole. Furthermore, views on standards for equity and methods to achieve such standards are likely to vary across a nation, making subnational government involvement critical to determining policies appropriate for each area. While the centre may assume a dominant role in pursuit of vertical equity, the involvement of subnational governments in implementing specific programs can be tailored to meet the circumstances of individual jurisdictions.¹⁷

Provision of Quasi-Private Goods Modern governments provide many services that, by virtue of their technologies, are essentially private goods – for example, health, education, and social insurance. Public provision of these private services is justified on equity grounds. Given that benefits accrue mainly to residents of separate jurisdictions, such services would be better provided by subnational governments. The national government’s involvement is nevertheless justified to ensure horizontal and minimum standards of service in all jurisdictions. Except for minimum standards in environmental protection – the absence of which would not adversely affect inter-regional trade – such standards for most services encourage the free flow of goods and services throughout the nation as a whole.

Preservation of the Internal Common Market Preservation of an internal common market remains an important area of concern to most nations undertaking decentralization. Subnational governments, in their pursuit of labour and capital, may indulge in beggar-thy-neighbor policies and, in the process, erect barriers to goods and factor mobility. Thus, decentralization of government regulatory functions creates the potential for disharmonious economic relations among subnational units. Accordingly, the regulation of economic activity such as trade and investment is generally best left to national governments. It should be noted, however, that national governments themselves may pursue policies detrimental to the internal common market. Therefore, as suggested by Robin Boadway, constitutional guarantees for the free domestic flow of goods and services may be the best alternative to assigning regulatory responsibilities solely to the national government.¹⁸

Economic Stabilization It is customary to argue that the federal government should be responsible for stabilization policies because such policies cannot be carried out effectively by local jurisdictions. Local pursuit of such fiscal policies leads to much of the gains being lost to outside jurisdictions. Monetary policy has little scope for being carried out by the local

governments. Guidelines for centralized fiscal policy have, however, only limited relevance for a country with a decentralized constitution.

Decentralized fiscal policies have worked well in highly decentralized federations such as Canada, Switzerland, and the United States, but the concept of a decentralized monetary policy does not exist. The proposition that monetary authority should be independent of any order of government conflicts with a parliamentary system of government. In both Canada and Switzerland, the monetary policy function is delegated by the federal government to an independent central bank, while fiscal policy is a responsibility shared by all orders of government. The federal governments in these countries use their powers of the purse (transfers) and moral suasion through joint meetings to induce a coordinated approach. The Swiss practice of allocating a portion of the profits of the central bank (seigniorage) to cantons promotes a wider sense of ownership of the monetary authority and could be a useful policy for other countries. An independent central bank should have exclusive jurisdiction in monetary policy. The national government should ensure fiscal policy flexibility by appropriately structuring tax assignments and by coordinating fiscal policy through regular meetings of officials of the national and subnational governments.

Monetary policy plays a critical role in ensuring a stable macroeconomic environment for growth. Empirical evidence supports the view that an independent central bank with a singular focus on price stability is essential for keeping inflation in check. Evidence on this practice confirms that such independence is more likely granted in federal systems in view of the presence of multiple orders of government with diverse and conflicting interests. The politics of federalism dictates such an independence. There are no such political imperatives in a unitary country unless there is an unstable coalition in power. Thus, while monetary policy issues are mainly governed by central bank behaviour, central bank governance is influenced by the fiscal constitution of the country.

Federal fiscal constitutions appear to exert positive influence in this regard. Fiscal policy coordination represents an important challenge for federal systems. In this context, fiscal rules and institutions provide a useful framework for, but not necessarily a solution to, this challenge. Fiscal rules binding on all orders can help sustain political commitment in countries having coalitions or fragmented regimes in power. Coordinating institutions help in the use of moral suasion to encourage a coordinated response.

The experiences of industrialized countries also show that, typically, unilaterally imposed federal controls and constraints on subnational governments do not work; instead, societal norms based on fiscal conservatism, such as the Swiss referenda and political activism of the electorate, play important roles. Ultimately, capital markets and bond-rating agencies provide more effective discipline on fiscal policy. In this context, it is important for

the national government not to backstop state and local debt and not to allow ownership of the banks by any order of government. Transparency of the budgetary process and institutions, accountability to the electorate, and general availability of comparative data encourage fiscal discipline.

Fiscal federalism poses significant challenges for macroeconomic management. These challenges require careful design of monetary and fiscal institutions to overcome the adverse incentives associated with “common property” resource-management problems or with rent-seeking behaviours. The experiences of federal countries indicate significant learning and adaptation of fiscal systems to create incentives compatible with fair play and to overcome incomplete contracts. This explains why decentralized fiscal systems appear to do better than centralized fiscal systems on most aspects of monetary and fiscal policy management and transparent and accountable governance.¹⁹

Spending Power In a federation, there is always some degree of conflict among the priorities established by the various orders of government. One way to induce state and local governments to follow the priorities established by the national government is for the latter to use its powers of the purse, its so-called spending power. Matching transfers are often used to influence state and local priorities. Both national and state governments could legitimately pursue such policies; that is, state governments can also pursue such policies with respect to their local government.

Besides having exclusive authority to carry out monetary policy and to provide public services that are national in scope, the federal government has a role in correcting the fiscal inefficiencies and regional inequities arising from the differential fiscal capacities of various jurisdictions. It also exercises a redistributive role through a tax and transfer system or through the joint provision of such public services as education and health, which are “transfers in kind.”²⁰ The federal government may also provide compensatory grants to cover the spillovers from provincial services.

Both the national and provincial governments could provide matching transfers to influence state and local priorities to further their own objectives. All other services are best provided by local governments, with the national and provincial governments defining minimum standards. Table 1 presents a representative assignment of major public services based on the theoretical considerations discussed above. It shows that a significant number of major services would be suitable for concurrent assignment to two or more orders of government. For such services, in order to avoid duplication and confusion and to ensure accountability to the electorate, it is important to specify as clearly and as precisely as possible the roles of the various orders of government. Such precise specification is critical for infrastructure and social services in most developing countries.

Table 1
Representative assignment of expenditure responsibilities

<i>Function</i>	<i>Policy, standards, and oversight</i>	<i>Provision and administration</i>	<i>Production and distribution</i>	<i>Comments</i>
Interregional and international conflicts resolution	U	U	N,P	Benefits and costs international in scope
Protection of fundamental rights	U,N	N	N,P	Has national and global dimensions
External trade	U	U,N,S	P	Benefits and costs international in scope
Telecommunications	U, N	P	P	Has national and global dimensions
Financial transactions	U,N	P	P	Has national and global dimensions
Environment	U,N,S,L	U,N,S,L	N,S,L,P	Externalities of global, national, state, and local scope
Foreign direct investment	N,L	L	P	Local infrastructure critical
Defence	N	N	N,P	Benefits and costs national in scope
Foreign affairs	N	N	N	Benefits and costs national in scope
Monetary policy, currency, and banking	U, ICB	ICB	ICB, P	Independence from all orders essential; some international role for common discipline
Interstate commerce	Constitution, N	N	P	Constitutional safeguards important for factors and goods mobility
Immigration	U,N	N	N	U because of forced exit
Transfer payments	N	N	N	Redistribution
Criminal and civil law	N,S	N,S	N,S	Rule of law, a national concern but states may have special concerns such as the French Civil Law in Quebec
Industrial policy	N	N	P	Intended to prevent "beggar thy neighbor" policies

Table 1
Representative assignment of expenditure responsibilities (*Continued*)

<i>Function</i>	<i>Policy, standards, and oversight</i>	<i>Provision and administration</i>	<i>Production and distribution</i>	<i>Comments</i>
Regulation	N,S,L	N,S,L	N,S,L,P	N for Internal common market, S,L for regional and local concerns
Fiscal policy	N	N,S,L	N,S,L,P	Coordination possible
Natural resources	N	N,S,L	N,S,L,P	Promotes regional equity and internal common market
Education, health, and social welfare	N,S,L	S,L	S,L,P	Transfers in kind
Highways	N,S,L	N,S,L	S,L,P	Benefits and costs vary in scope
Parks and recreation	N,S,L	N,S,L	N,S,L,P	Benefits and costs vary in scope
Police	S, L	S,L	S,L	Primarily local benefits
Water, sewer, refuse, and fire protection	L	L	L,P	Primarily local benefits

Sources: Anwar Shah, *The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies* (Washington, DC: World Bank, 1994); Anwar Shah, "Fiscal Decentralization in Transition Economies and Developing Countries," in *Federalism in a Changing World: Learning from Each Other*, ed. R. Blindenbacher and A. Koller, 432–60 (Montreal and Kingston: McGill-Queen's University Press, 2003).

Note: U = supranational responsibility, ICB = independent central bank, N = national government, S = state or provincial government, L = local government, and P = nongovernmental sectors or civil society.

Roles and Responsibilities of Local Governments

The fiscal federalism approach treats local government as a subordinate order in a multi-tiered system and outlines principles for defining the roles and responsibilities of the orders of government. Hence, in most federations, as in Canada and the United States (*dual federalism*), local governments are extensions of the state governments. In a few isolated instances, as in Brazil (*cooperative federalism*), they are equal partners with the national and state governments. And, in an exceptional case, Switzerland, communes are the main source of sovereignty and have greater constitutional significance than does the federal government. Thus, depending on the constitutional and legal status of local governments, state governments in federal countries assume varying degrees of oversight

with regard to the provision of local public services. That is why there is an insignificant role for local governments in Australia but an expansive role in Brazil and Switzerland.

The fiscal federalism literature, however, does provide a normative framework for assigning responsibilities to local governments. The assignment of public services to local governments or to metropolitan or regional governments can be based on considerations such as economies of scale, economies of scope (appropriate bundling of local public services to improve efficiency through information and coordination economies, and enhanced accountability through voter participation and cost recovery), cost-benefit spillovers, proximity to beneficiaries, consumer preferences, and budgetary choices about the composition of spending. The particular order of government to which a service is assigned determines the public or private production of the service in accordance with considerations of efficiency and equity.

Large metropolitan areas with populations in excess of one million could be considered for subdivision into a first tier of municipal government of smaller size responsible for neighbourhood-type services and a second tier of metropolitan-wide government responsible for area-wide services. The first-tier governments could be directly elected, and elected mayors of these governments could form the metropolitan council at the second tier. Two-tier structures for metropolitan governance have been practised in Melbourne, Australia; Vancouver, Canada; Allegheny County, Pennsylvania, United States; and Stockholm, Sweden.

In mature federations, special-purpose agencies or bodies deliver a wide range of metropolitan and regional public services, including education, health, planning, recreation, and environmental protection. Such bodies can include education and library boards; transit and police commissions; and utilities providing water, gas, and electricity. These agencies deal with public services whose delivery areas transcend political jurisdictions and that are better financed by loans, user charges, and earmarked benefit taxes, such as a supplementary mill rate on a property tax base to finance a local school board. If kept to a minimum, such agencies help fully exploit economies of scale in the delivery of services where political boundaries are not consistent with service areas. A proliferation of these agencies can undermine accountability and budgetary flexibility in the local arena. Accountability and responsiveness to voters are weakened if members of special-purpose bodies are appointed rather than elected. Budgetary flexibility is diminished if a majority of local expenditures fall outside the control of local councils.

Table 2 provides a subjective assessment of how various allocation criteria favour local or metropolitan assignment and whether public or private production is favoured for efficiency or equity. The criteria and the assessment

Table 2
Assignment of local public services to municipal and regional/metropolitan governments

<i>Public service</i>	<i>Allocation criteria for provision</i>						<i>Allocation criteria for public vs. private production</i>			
	<i>Economies of scale</i>	<i>Economies of scope</i>	<i>Benefit-cost spillout</i>	<i>Political proximity</i>	<i>Consumer sovereignty</i>	<i>Economic evaluation of sectoral choices</i>	<i>Composite</i>	<i>Efficiency</i>	<i>Equity</i>	<i>Composite</i>
Fire fighting	L	L	L	L	L	M	L	P	G	P
Police protection	L	L	L	L	L	M	L	P	G	G
Refuse collection	L	L	L	L	L	M	L	P	P	P
Neighbourhood parks	L	L	L	L	L	M	L	P	G	G
Street maintenance	L	L	L	L	L	M	L	P	P	P
Traffic management	L	M	L	L	L	M	L	P	P	P
Local transit service	L	M	L	L	L	M	L	P	P	P
Local libraries	L	L	L	L	L	M	L	G	G	G
Primary education	L	L	M	M	L	M	M	P	G	P,G
Secondary education	L	L	M	M	L	M	M	P	G	P,G
Public transport	M	M	M	L,M	M	M	M	P,G	G	P,G
Water supply	M	M	M	L,M	M	M	M	P	G	P,G

Table 2
Assignment of local public services to municipal and regional/metropolitan governments (Continued)

<i>Public service</i>	<i>Allocation criteria for provision</i>					<i>Allocation criteria for public vs. private production</i>				
	<i>Economies of scale</i>	<i>Economies of scope</i>	<i>Benefit-cost spillout</i>	<i>Political proximity</i>	<i>Consumer sovereignty</i>	<i>Economic evaluation of sectoral choices</i>	<i>Composite</i>	<i>Efficiency</i>	<i>Equity</i>	<i>Composite</i>
Sewage disposal	M	M	M	M	M	M	M	P,G	P,G	P,G
Refuse disposal	M	M	M	M	M	M	M	P	P	P
Public health	M	M	M	M	M	M	M	G	G	G
Hospitals	M	M	M	M	M	M	M	P,G	G	P,G
Electric power	M	M	M	M	M	M	M	P	P	P
Air and water pollution	M	M	M	M	M	M	M	G	G	G
Special police	M	M	M	M	M	M	M	G	G	G
Regional parks	M	M	M	L,M	M	M	M	G	G	G
Regional planning	M	M	M	L,M	M	M	M	G	G	G

Note: L = local government, M = regional/metropolitan government, and G = sector.

presented in this table are arbitrary; practical and institutional considerations should be applied to this analysis, and the reader may well reach different conclusions using the same criteria. Further, in recent years, globalization and the information revolution appear to place a premium on the role of local government as facilitator of a broad network of service providers in a local area to further local economic development goals and to improve economic and social outcomes for local residents.²¹

Private-sector participation can also take a variety of forms, including contracting through competitive biddings, franchise operations (local government acting as a regulatory agency), grants (usually for recreational and cultural activities), vouchers (redeemable by local government with private providers), volunteers (mostly in fire stations and hospitals), community self-help activities (for crime prevention), and private nonprofit organizations (for social services). Thus, a mix of delivery systems is appropriate for local public services, with local government acting as a purchaser, regulator, or financier but not necessarily as a provider of local public services. In most developing countries, the financial capacities of local governments are quite limited. Fostering private-sector participation in the delivery of local public services thus assumes greater significance. Such participation enhances accountability and choice in the local public sector. However, assigning responsibility for the provision of a service to a specific order of government does not imply that government should be directly engaged in its production. It may simply finance, purchase, or regulate such a service. Limited empirical evidence suggests that public-private competition and/or private production of some services promotes efficiency and equity.

Principles of Tax Assignment

The division of revenue sources among federal and subnational governments constitutes the tax assignment problem. Once expenditure and regulatory assignments have been agreed on, tax assignment and the design of transfers become critical elements in matching expenditure needs with revenue means at various orders of government. Although tax assignment can be undertaken independently of expenditure assignment – a common practice in developing countries – the advantages of a centralized tax administration and a decentralized provision of public services become apparent when tax assignment reflects anticipated spending. Such arrangements prevent an overdependence by state and local governments on intergovernmental transfers, which can otherwise distort local spending priorities. Where theoretical guidance on tax assignment is unclear, expenditure assignment can provide a powerful argument for assigning responsibility to the government with the greatest need for more money. Efficiency

and equity arguments have to be tempered by administrative considerations, and the exact assignment depends on informed judgment. We can, however, outline the economic principles that come into play in deciding which taxes to assign to what order of government.

Four general principles require consideration in assigning taxing powers to various governments. First, the *economic efficiency* criterion dictates that taxes on mobile factors and tradable goods that have a bearing on the efficiency of the internal common market should be assigned to the national government. Subnational assignment of taxes on mobile factors may facilitate the use of socially wasteful beggar-thy-neighbour policies to attract resources to own areas by regional and local governments. In a globalized world, even the national assignment of taxes on mobile capital may not be very effective in the presence of foreign tax havens and the difficulty of tracing and attributing incomes from virtual transactions to various physical spaces.

Second, *national equity* considerations warrant that progressive redistributive taxes should be assigned to the national government. This assignment limits the possibility of regional and local governments' following perverse redistribution policies using both taxes and transfers to attract high-income people and to repel low-income ones. Doing so, however, leaves open the possibility of supplementary, flat-rate, local charges on residence-based national income taxes.

Third, the *administrative feasibility* criterion (lowering compliance and administration costs) suggests that taxes should be assigned to the jurisdiction with the best ability to monitor relevant assessments. This criterion minimizes administrative costs as well as the potential for tax evasion. For example, property, land, and betterment taxes are good candidates for local assignment because local governments are in a good position to assess the market values of such assets.

Fourth, the *fiscal need*, or *revenue adequacy*, criterion suggests that, to ensure accountability, revenue means (the ability to raise revenues from own sources) should be matched as closely as possible to expenditure needs. The literature also argues that long-lived assets should primarily be financed by raising debt so as to ensure equitable burden-sharing across generations.²² Furthermore, such large and lumpy investments typically cannot be financed by current revenues and reserves alone.

These four principles suggest that user charges are suitable for use by all orders of government, but the case for decentralizing taxing powers is not as compelling as is that for decentralizing public service delivery. This is because regional (province/state) and local taxation can introduce inefficiencies into the allocation of resources across the federation and cause inequities among people in different jurisdictions. In addition, collection and compliance costs can increase significantly. These problems are more severe for some taxes than for others, so the selection of which taxes to

decentralize must be made with care, balancing the need to achieve and sustain fiscal and political autonomy and accountability at regional and local orders of government against the disadvantages of having a fragmented tax system. The trade-off between increased accountability and increased economic costs from decentralizing taxing responsibilities can be mitigated by fiscal arrangements that permit joint occupation and harmonization of taxes to overcome fragmentation. In addition, fiscal equalization transfers can reduce the fiscal inefficiencies and inequities that arise from different fiscal capacities across regional and local governments.

Table 3 shows the assignment of major taxation instruments to various orders of government based on the criteria discussed earlier. Box 1 presents guidance on local finances.

INSTRUMENTS OF INTERGOVERNMENTAL FINANCE

Instruments of intergovernmental finance have an important bearing on efficiency, equity, and accountability in federal systems.

Tax-Base and Revenue-Sharing Mechanisms

Tax-base and revenue-sharing mechanisms are customarily used to address fiscal imbalances or mismatched revenue means and expenditure needs arising from the constitutional assignment of taxes and expenditures to different orders of government. Tax-base sharing means that two or more orders of government levy rates on a common base. Tax-base determination usually rests with the national or state government, with the state and local governments levying supplementary rates on the same base. Tax collection is by one order of government, generally the national government in market economies and the local government in centrally planned economies, with proceeds shared downward or upward depending on revenue yields. Tax-base sharing is quite common in mature federations and almost nonexistent in newer federations in developing countries.

A second method of addressing vertical fiscal imbalances is revenue sharing, whereby one order of government has unconditional access to a specified share of revenues collected by another order. Revenue-sharing agreements typically specify how revenues are to be shared among the federal government and the state and local governments, with complex criteria for allocation and for the eligibility and use of funds. Such limitations run counter to the underlying rationale of unconditionality. Revenue-sharing mechanisms are quite common in developing countries. They often address multiple objectives, such as bridging the fiscal gap, promoting fiscal equalization and regional development, and stimulating tax efforts by state and local governments.

Table 3
Representative assignment of taxing powers

<i>Type of tax</i>	<i>Determination of</i>		<i>Collection and administration</i>	<i>Comments</i>
	<i>Base</i>	<i>Rate</i>		
Customs	N	N	N,P	International trade taxes
Corporate income	N,U	N,U	N,U	Mobile factor, stabilization tool
Resource taxes				
Resource rent tax (profits, income)	N	N	N	Highly unequally distributed tax bases
Royalties, fees, charges, severance taxes;	S,L	S,L	S,L,P	Benefit taxes/charges for state-local services
Conservation charges	S,L	S,L	S,L,P	To preserve local environment
Personal income	N	N,S,L	N	Redistributive, mobile factor; stabilization tool
Wealth taxes (taxes on capital, wealth, Wealth transfers, inheritances, and bequests)	N	N,S	N	Redistributive
Payroll	N,S	N,S	N,S	Benefit charge, e.g., social security coverage
Multistage sales taxes (value-aided tax [VAT])	N	N,S	N,S	Border tax adjustments possible under federal assignment; potential stabilization tool
Single-stage sales taxes				
(manufacturer, whole-sale, retail)				
Option A	S	S,L	S,L	Higher compliance cost
Option B	N	S	N	Harmonized, lower compliance cost
"Sin" taxes				
Excises on alcohol and tobacco	N,S	N,S	N,S,P	Health care a shared responsibility
Betting, gambling	S,L	S,L	S,L,P	State and local responsibility
Lotteries	S,L	S,L	S,L,P	State and local responsibility
Race tracks	S,L	S,L	S,L,P	State and local responsibility

Table 3
Representative assignment of taxing powers (Continued)

Type of tax	Determination of		Collection and administration	Comments
	Base	Rate		
Taxation of “bads”				
Carbon	N,U	N,U	N,U	To combat global/national pollution
BTU taxes	N,S,L	N,S,L	N,S,L,P	Pollution impact may be national, regional, or local
Motor fuels	N,S,L	N,S,L	N,S,L,P	Tolls on federal/provincial/local roads
Effluent charges	N,S,L	N,S,L	N,S,L,P	To deal with interstate, inter-municipal or local taxes
Congestion tolls	N,S,L	N,S,L	N,S,L,P	Tolls on federal/provincial/local roads
Parking fees	L	L	L,P	To control local congestion
Motor vehicles				
Registration, transfer taxes, and annual fees	S	S	S	State responsibility
Driver’s kitchen and fees	S	S	S	State responsibility
Business taxes	S	S	S	Benefit tax
Excises	S,L	S,L	S,L	Residence-based taxes
Property	S	L	L	Completely immobile factor, benefit tax
Land	S	L	L	Completely immobile factor, benefit tax
Frontage, betterment	S,L	L	L	Cost recovery
Poll	N,S,L	N,S,L	N,S,L	Payment for services
User charges	N,S,L	N,S,L	N,S,L,P	Payment for services received

Note: U = supranational agency, N = national/federal, S = state or province, L = municipal or local, and P = private.

Box 1

Key considerations and tools for local government finances

KEY CONSIDERATIONS

The overall objective of local governments is to maximize social outcomes for residents and to provide an enabling environment for private-sector development through efficient provision of public services. This requires that local financing should take into account the following considerations:

- Local government should limit self-financing of redistributive services.
- Business should be taxed only for services to businesses and not for redistributive purposes.
- Current period services should be financed out of current year operating revenues, and future period services should be financed by future period taxes, user charges/fees, and borrowing.
- Residential services should be financed by taxes and fees on residents.
- Business services should be financed on site/land value taxes and user charges. Profit, output, sales, and moveable asset taxes may drive business out of the jurisdiction.

TOOLS FOR LOCAL FINANCE

- *Local taxes* for services with public goods characteristics – streets, roads, street lighting
- *User charges* for services with private goods characteristics – water, sewerage, solid waste
- *Conditional, non-matching, output-based grants* from national/state-order governments for merit goods: education and health
- *Conditional matching grants* for spillovers in some services
- *Unconditional grants* for fiscal gap and equalization purposes
- *Capital grants* for infrastructure if fiscal capacity is low
- *Capital market finance* for infrastructure if fiscal capacity is high
- *Development charges* for financing growth with higher charges for developing land on local government boundaries
- *Public-private partnerships* for infrastructure finance but keeping public ownership and control of strategic assets
- *Tax increment financing districts* to deal with urban blight. For this purpose, the area should be designated for redevelopment and annual property tax revenues frozen at pre-vitalization levels. For a specified period, say fifteen to thirty-five years, all tax revenues above base are used for redevelopment. Capacity improvements are undertaken through municipal borrowing/bonds against expected tax increments.

Source: Robert P. Inman, "Financing Cities," NBER Working Paper 11203, National Bureau of Economic Research, Cambridge, MA, 2005; and Anwar Shah, ed., *Local Governance in Developing Countries* (Washington, DC: World Bank, 2006).

Intergovernmental Transfers

Intergovernmental transfers, or grants, can be broadly classified into two categories: general-purpose (unconditional) and specific-purpose (conditional or earmarked).

General-Purpose Transfers General-purpose transfers are provided as general budget support, with no strings attached. These transfers are typically mandated by law, but occasionally they may be ad hoc or discretionary. Such transfers are intended to preserve local autonomy and to enhance interjurisdictional equity. That is why Article 9 of the European Charter of Local Self-Government advocates such transfers: “As far as possible, grants to local authorities shall not be earmarked for the financing of specific projects. The provision of grants shall not remove the basic freedom of local authorities to exercise policy discretion within their own jurisdiction.”²³

General-purpose transfers are termed block (also “bloc”) transfers when they are used to provide broad support in a general area of subnational expenditures (such as education), while allowing recipients discretion in allocating the funds among specific uses. Block grants are a vaguely defined concept. They fall in the grey area between general-purpose and specific-purpose transfers as they provide budget support with few strings attached in a broad but specific area of subnational expenditures. The Community Development Block Grant for poor municipalities in the United States is one example.

General-purpose transfers simply augment the recipient’s resources. Because the grant can be spent on any combination of public goods or services or can be used to provide tax relief to residents, general non-matching assistance does not affect relative prices. Formula-based general-purpose transfers are very common. The federal and state transfers to municipalities in Brazil are examples of grants of this kind. Evidence suggests that such transfers induce municipalities to underutilize their own tax bases.²⁴

Specific-Purpose Transfers Specific-purpose, or conditional, transfers are intended to provide incentives for governments to undertake specific programs or activities. These grants may be regular or mandatory in nature or they may be discretionary or ad hoc.

Conditional transfers typically specify the type of expenditures that can be financed (input-based conditionality). These may be capital expenditures, operating expenditures, or both. Conditional transfers may also require attainment of certain results in service delivery (output-based conditionality). Input-based conditionality is often intrusive and unproductive, whereas output-based conditionality can advance grantors’ objectives while preserving local autonomy.

Conditional non-matching transfers provide a given level of funds without local matching as long the funds are spent for a particular purpose. Conditional non-matching grants are best suited for subsidizing activities considered high priority by a national or state government but low priority by local governments.

Conditional transfers may incorporate matching provisions, requiring grant recipients to finance a specified percentage of expenditures using their own resources. Matching requirements can be either open-ended (meaning that the grantor matches whatever level of resources the recipient provides) or closed-ended (meaning that the grantor matches recipient funds only up to a pre-specified limit).

Matching requirements encourage greater scrutiny and local ownership of grant-financed expenditures; closed-ended matching is helpful in ensuring that the grantor has some control over the costs of the transfer program. Matching requirements, however, represent a greater burden for a recipient jurisdiction with limited fiscal capacity. In view of this, it may be desirable to set matching rates in inverse proportion to the per capita fiscal capacity of the jurisdiction in order to allow poorer jurisdictions to participate in grant-financed programs.

Conditional open-ended matching grants are the most suitable vehicles through which to induce state and local governments to increase spending on the assisted function. If the objective is simply to enhance the welfare of local residents, general-purpose non-matching transfers are preferable as they preserve local autonomy. To ensure accountability for results, conditional non-matching output-based transfers are preferable to other types of transfers. Output-based transfers respect local autonomy and budgetary flexibility while providing incentives and accountability mechanisms to improve service-delivery performance.

*Designing Fiscal Transfers: Dividing the Spoils or Creating a Framework
for Accountable and Equitable Governance?*

The design of fiscal transfers is critical to ensuring the efficiency and equity of local service provision and the fiscal health of subnational governments.²⁵ A few simple considerations can be helpful in designing these transfers:

Guidelines for Grant Design

- 1 *Clarity in grant objectives.* Grant objectives should be specified clearly and precisely.
- 2 *Autonomy.* Subnational governments should have complete independence and flexibility in setting priorities. They should not be constrained

by the categorical structure of programs and uncertainty associated with decision making by national officials. Tax-base sharing – allowing subnational governments to introduce their own tax rates on national bases, formula-based revenue sharing, or block grants – is consistent with this objective.

- 3 *Revenue adequacy.* Subnational governments should have adequate revenues to discharge designated responsibilities.
- 4 *Responsiveness.* The grant program should be flexible enough to accommodate unforeseen changes in the fiscal situation of the recipients.
- 5 *Equity (fairness).* Allocated funds should vary directly with fiscal-need factors and inversely with the tax capacity of each jurisdiction.
- 6 *Predictability.* The grant mechanism should ensure predictability of subnational governments' shares by publishing five-year projections of funding availability. The grant formula should specify ceilings and floors for yearly fluctuations. Any major changes in the formula should be accompanied by hold harmless or grandfathering provisions.
- 7 *Transparency.* Both the formula and the allocations should be disseminated widely in order to achieve as broad a consensus as possible on the objectives and operation of the program.
- 8 *Efficiency.* The grant design should be neutral with respect to subnational governments' choices of resource allocation to different sectors or types of activity.
- 9 *Simplicity.* Grant allocation should be based on objective factors over which individual units have little control. The formula should be easy to understand so as not to reward grantsmanship.
- 10 *Incentive.* The design should provide incentives for sound fiscal management and should discourage inefficient practices. Specific transfers should not be made to finance subnational government deficits.
- 11 *Reach.* All grant-financed programs create winners and losers. Consideration must be given to identifying beneficiaries and those who will be adversely affected in order to determine the overall usefulness and sustainability of the program.
- 12 *Safeguarding the grantor's objectives.* The grantor's objectives are best safeguarded by having grant conditions specify the results to be achieved (output-based grants) and by giving the recipient flexibility in the use of funds.
- 13 *Affordability.* The grant program must recognize donors' budget constraints. This suggests that matching programs should be closed ended.
- 14 *Singular focus.* Each grant program should focus on a single objective.
- 15 *Accountability for results.* The grantor must be accountable for the design and operation of the program. The recipient must be accountable to the grantor and its citizens for financial integrity and results

(i.e., improvements in service delivery performance). Citizens' voice and exit options in grant design can help advance bottom-up accountability objectives.

Some of these criteria may be in conflict with others. Grantors may therefore have to assign priorities to various factors in comparing design alternatives.²⁶

As noted earlier, for enhancing government accountability to voters, it is desirable to match revenue means (the ability to raise revenues from own sources) as closely as possible with expenditure needs at all orders of government. However, the national and state governments must be allowed greater access to revenues than is needed to fulfill their own direct service responsibilities. This is so that they are able to use their spending power through fiscal transfers to fulfill national and regional efficiency and equity objectives.

Six broad objectives for national fiscal transfers can be identified. Each of these objectives may apply to varying degrees in different countries, and each calls for a specific design of fiscal transfers. Lack of attention in these designs to specific objectives leads to negative perceptions of these grants.

Bridging Vertical Fiscal Gaps The terms *vertical fiscal gap* and *vertical fiscal imbalance* have been mistakenly used interchangeably in recent literature on fiscal decentralization. A vertical fiscal gap is defined as the revenue deficiency arising from a mismatch between revenue means and expenditure needs, typically of state and local orders of government. A national government may have more revenues than warranted by its direct and indirect spending responsibilities, while regional and local governments may have less revenues than their expenditure responsibilities.

A vertical fiscal imbalance occurs when the vertical fiscal gap is not adequately addressed by the reassignment of responsibilities or by fiscal transfers and other means. Boadway argues that vertical fiscal imbalance incorporates an ideal or optimum view of expenditures by different orders of government and is therefore difficult to measure.²⁷

A vertical fiscal gap may arise due to (1) inappropriate assignment of responsibilities; (2) centralization of taxing powers; (3) pursuit of beggarthy-neighbour tax policies (wasteful tax competition) by subnational governments; or (4) lack of tax room at the subnational orders due to heavier tax burdens imposed by the national government. To deal with the vertical fiscal gap, it is important to deal with its sources through a combination of policies such as the reassignment of responsibilities, tax decentralization or tax abatement by the centre, and tax-base sharing (by allowing subnational governments to levy supplementary rates on a national tax base). Only as a last resort should revenue sharing, or

unconditional formula-based transfers, all of which weaken accountability to local taxpayers, be considered in order to deal with this gap.

Bridging the Fiscal Divide through Fiscal Equalization Transfers Fiscal equalization transfers are advocated to deal with regional fiscal equity concerns. These transfers are justified on political and economic considerations. Large regional fiscal disparities can be politically divisive and may even create threats of secession.²⁸ This threat is quite real. Since 1975, about forty new countries have been created by the break-up of existing political unions. Fiscal equalization transfers could forestall such threats and create a sense of political participation, as is demonstrated by the impact of such transfers on the separatist movement in Quebec, Canada.

Decentralized decision making results in differential net fiscal benefits (imputed benefits from public spending minus tax burden) for citizens depending on the fiscal capacities of their place of residence. This leads to both fiscal inequity and fiscal inefficiency in resource allocation. Fiscal inequity arises as citizens with identical incomes are treated differently depending on their place of residence. Fiscal inefficiency in resource allocation results from people in their relocation decisions comparing gross income (private income plus net public-sector benefits minus cost of moving) at new locations; economic efficiency considerations warrant comparing private income minus moving costs, only without any regard to public-sector benefits. A nation that values horizontal equity (the equal treatment of all citizens nationwide) and fiscal efficiency needs to correct the fiscal inequity and inefficiency that naturally arise in a decentralized government. Grants from the national government to states and/or local governments can eliminate these differences in net fiscal benefits if the transfers depend on the tax capacity of each state relative to others and on the relative need for and cost of providing public services. The more decentralized the tax system is, the greater the need for equalizing transfers.

The elimination of net fiscal benefits requires a comprehensive fiscal equalization program that equalizes fiscal capacity (the ability to raise revenues from own basis using national average tax rates) to a national average standard, and it provides compensation for differential expenditure needs and costs due to inherent cost disabilities rather than differences that reflect different policies.

Fiscal equalization programs, especially if they are too generous, can have some adverse unintended consequences for interjurisdictional factor mobility and the economic well-being of disadvantaged regions. To the extent such programs discourage factor mobility and dampen market adjustment mechanisms, they can create “transfer dependencies”; that is, incentives and magnitudes of transfers serve to counteract the natural forces of adjustment or lead to decisions that are not in the economic interests of

fiscally disadvantaged regions. Transfer dependency symptoms include a persistent interregional trade deficit, a regional unemployment rate persistently higher than the national average, wages in the depressed regions greater than productivity, and personal income in a depressed region higher than its GDP. Such symptoms create a widow's curse for the depressed regions, whereby the generosity of fiscal transfers and regionally differentiated expenditure policies retard natural adjustment processes and prevent regional economic convergence. Some economists also argue that, if public-sector tax burdens and service benefits are fully capitalized in property values, then the case for fiscal equalization transfers is weaker as residents in rich states pay more for private services and less for public services (and vice versa in poorer states). According to this view, as argued by Oates, fiscal equalization is a matter of political taste.²⁹ This view has gained currency in the federal government in the United States and helps to explain why there is no federal fiscal equalization program there. In contrast, local fiscal equalization drives most state assistance to local governments in the United States, especially school finance.

Setting National Minimum Standards Setting national minimum standards for regional and local services may be important for two reasons. First, there is an advantage to the nation as a whole from such standards, which contribute to the free flow of goods, services, labour, and capital; reduce wasteful interjurisdictional expenditure competition; and improve the gains from trade from the internal common market. Second, these standards serve national equity objectives. Many public services provided by the subnational governments, such as education, health, and social welfare, are redistributive in their intent, providing in-kind redistribution to residents. In a federal system, state and/or local provision of such services – while desirable for efficiency, preference matching, and accountability – creates difficulty fulfilling federal equity objectives. Factor mobility and tax competition create strong incentives for state and local governments to underprovide such services and to restrict access to those most in need, such as the poor and the old. Attempts to exclude those most in need are justified by their greater susceptibility to disease and potentially greater risks for cost curtailment.

Such perverse incentives can be alleviated by conditional non-matching grants, in which the conditions reflect national efficiency and equity concerns and there is a financial penalty associated with failure to comply with any of the conditions. Conditions are thus imposed not on the specific use of grant funds but on attainment of standards in quality, access, and level of services. Such output-based grants do not affect local government incentives for cost efficiency, but they do encourage compliance with nationally specified standards for access and level of services. Properly designed conditional non-matching output-based transfers can create incentives for

innovative and competitive approaches to improved service delivery. Input-based grants fail to create such an accountability environment.

In conclusion, while output-based (performance-oriented) grants are best suited to the grantor's objectives and are simpler to administer than are traditional input-based conditional transfers, they are rarely practised. The reasons have to do with the incentives faced by politicians and bureaucrats. Such grants empower clients while weakening the sphere for opportunism and pork-barrel politics. The incentives they create strengthen the accountability of political and bureaucratic elites to citizens and weaken their ability to peddle influence and build bureaucratic empires. Their focus on value for money exposes corruption, inefficiency, and waste. Not surprisingly, this type of grant is blocked by potential losers.

Compensating for Benefit Spillovers Compensating for benefit spillovers is the traditional argument for providing matching conditional grants. Regional and local governments will not face the proper incentives to provide the correct levels of services that yield spillover benefits to residents of other jurisdictions. A system of open-ended matching grants based on expenditures giving rise to spillovers will provide the incentive to increase expenditures. Because the extent of the spillover is usually difficult to measure, the matching rate will be somewhat arbitrary.

Influencing Local Priorities In a federation, there is always some degree of conflict among priorities established by various orders of government. One way to induce state and local governments to follow priorities established by the national or state government is for the national or state government to use its spending power by providing matching transfers. The national or state government can provide open-ended matching transfers with a matching rate that varies inversely with the recipient's fiscal capacity. The use of ad hoc grants or open-ended matching transfers is inadvisable. Ad hoc grants are unlikely to result in behavioural responses that are consistent with the grantor's objectives. Open-ended grants may create budgetary difficulties for the grantor.

Dealing with Infrastructure Deficiencies and Creating Macroeconomic Stability in Depressed Regions Fiscal transfers can be used to serve national government objectives in regional stabilization. Capital grants are appropriate for this purpose, provided funds for future upkeep of facilities are available. Capital grants are also justified to deal with infrastructure deficiencies in poorer jurisdictions in order to strengthen the common economic union.

Capital grants are typically determined on a project-by-project basis. Indonesia took a planning view of such grants in setting a national minimum standard of access to primary school (within walking distance of the community served) for the nation as a whole. The national government

provided for school construction, while local governments provided land for the schools. Experience with capital grants shows that they often create facilities that are not maintained by subnational governments, which either remain unconvinced of their utility or lack the means to provide regular upkeep.

Special Issues in Transfers from States/Provinces to Local Governments

General-purpose transfers to local governments require special considerations as local governments vary in population, size, area served, and type of services offered. In view of this, it is advisable to classify local governments by population size, municipality type, and urban/rural character, creating separate formulas for each class of municipality. The national or state government could adopt a representative tax system-based fiscal capacity equalization system and set minimum standards grants for each class and type of municipality. Where the application of a representative tax system is not feasible due to a lack of significant tax decentralization or poor local tax administration, a more pragmatic but less scientific approach to general-purpose grants could be used. Some useful components in these grant formulas are an equal per municipality component, an equal per capita component, a service-area component, and a fiscal capacity component. Grant funds should vary directly with the service area and inversely with fiscal capacity.³⁰ South Africa has applied a variant of this approach in central-local transfers.

Having a formal, open, contestable, and deliberative process for municipal incorporation, amalgamation, and annexation should be a prerequisite for introducing an equal per municipality component in grant finance. The lack of such a process can create a perverse incentive for the break-up of existing jurisdictions so as to qualify for additional assistance, as is demonstrated by the experience in Brazil.³¹

Lessons from International Practice in Intergovernmental Fiscal Transfers

Review of international practice yields a set of practices to avoid and a set of practices to emulate. A number of important lessons also emerge (Table 4).

Negative Lessons: Types of Transfers to Avoid Policy makers should avoid designing the following types of intergovernmental grants:

- 1 Grants with vaguely specified objectives.
- 2 General revenue-sharing programs with multiple factors that work at cross purposes, undermine accountability, and do not advance fiscal efficiency or fiscal equity objectives. Tax decentralization or tax-base sharing offer better alternatives to a general revenue-sharing program because they enhance accountability while preserving subnational autonomy.

Table 4
Principles and better practices in grant design

<i>Grant objective</i>	<i>Grant design</i>	<i>Examples of better practices</i>	<i>Examples of practices to avoid</i>
Bridge fiscal gap	Reassignment of responsibilities, tax abatement, tax-base sharing	Tax abatement and tax-base sharing (Canada)	Deficit grants, wage grants (China), tax by tax sharing (China)
Reduce regional fiscal disparities	General non-matching fiscal capacity equalization transfers	Fiscal equalization with explicit standard that determines total pool as well as allocation (Canada, Denmark, and Germany)	General revenue sharing with multiple factors (Brazil and India); fiscal equalization with a fixed pool (Australia, China)
Compensate for benefit spillovers	Open-ended matching transfers with matching rate consistent with spill-out of benefits	Grant for teaching hospitals (South Africa)	Closed-ended matching grants
Set national minimum standards	Conditional non-matching output-based block transfers with conditions on standards of service and access	Road maintenance and primary education grants (Indonesia before 2000) Education transfers (Brazil, Chile, Colombia), Health transfers (Brazil, Canada)	Conditional transfers with conditions on spending alone (most countries), pork barrel transfers (USA e.g., \$200 million earmark in 2006 for a “bridge to nowhere” in Alaska), ad hoc grants
	Conditional capital grants with matching rate that varies inversely with local fiscal capacity	Capital grant for school construction (Indonesia before 2000), highway construction matching grants to states (United States)	Capital grants with no matching and no future upkeep requirements
Influence local priorities in areas of high national but low local priority	Open-ended matching transfers (preferably with matching rate varying inversely with fiscal capacity)	Matching transfers for social assistance (Canada before 2004)	Ad hoc grants
Provide stabilization and overcome infrastructure deficiencies	Capital grants, provided maintenance possible	Capital grants with matching rates that vary inversely with local fiscal capacity	Stabilization grants with no future upkeep requirements

Source: Anwar Shah, “A Practitioner’s Guide to Intergovernmental Fiscal Transfers,” in *Intergovernmental Fiscal Transfers*, ed. Robin Boadway and Anwar Shah, 1–53 (Washington, DC: World Bank, 2007).

- 3 Grants to finance subnational deficits, which create incentives for running higher deficits in the future.
- 4 Unconditional grants that include incentives for fiscal effort. Improving service delivery while lowering tax costs should be public-sector objectives.
- 5 Input- (or process-) based or ad hoc conditional grant programs, which undermine local autonomy, flexibility, fiscal efficiency, and fiscal equity objectives.
- 6 Capital grants without assurance of funds for future upkeep, which have the potential to create white elephants.
- 7 Negotiated or discretionary grants in a federal system, which may create dissention and disunity.
- 8 One-size-fits-all grants to local governments, which create huge inequities.
- 9 Grants that involve abrupt changes in the total pool and its allocation.

Positive Lessons: Principles to Adopt

Policy makers should strive to respect the following principles in designing and implementing intergovernmental transfers:

- 1 Keep it simple. In the design of fiscal transfers, rough justice may be better than full justice if it achieves wider acceptability and sustainability.
- 2 Focus on a single objective in a grant program and make the design consistent with that objective. Setting multiple objectives in a single grant program runs the risk of failing to achieve any of them.
- 3 Introduce ceilings linked with macro indicators and floors in order to ensure stability and predictability in grant funds.
- 4 Introduce sunset clauses. It is desirable to have the grant program reviewed periodically – say, every five years – and renewed (if appropriate). In the intervening years, in order to provide certainty in budgetary programming for all governments, no changes should be made to the grant program.
- 5 Equalize per capita fiscal capacity to a specified standard in order to achieve fiscal equalization. Such a standard would determine the total pool and allocations among recipient units. Calculations required for fiscal capacity equalization using a representative tax system for major tax bases are possible for most countries. In contrast, expenditure-need equalization requires difficult and complex analysis, inviting much controversy and debate; as desirable as it is, it may, therefore, not be worth doing. In view of this practical difficulty, it would be best to deal with fiscal-need equalization through output-based sectoral grants that also enhance results-based accountability. A national consensus on the standard of equalization is critically important for the sustainability of any equalization program. The equalization program must not be looked at

in isolation from the broader fiscal system, especially conditional transfers. The equalization program must have a sunset clause and provision for formal review and renewal. For local fiscal equalization, one size does not fit all.

- 6 For specific-purpose grants, impose conditionality on outputs or standards of access and quality of services rather than on inputs and processes. This allows grantors to achieve their objectives without undermining local choices on how best to deliver such services. Most countries need to establish national minimum standards of basic services in order to strengthen the internal common market and economic union.
- 7 Recognize the population size, class, area served, and the urban/rural nature of services in making grants to local governments. Establish separate formula allocations for each type of municipal or local government.
- 8 Establish hold harmless or grandfathering provisions that ensure that all recipient governments receive at least what they received as general-purpose transfers in the pre-reform period. Over time, as the economy grows, such a provision would not delay the phase-in of the full package of reforms.
- 9 Make sure that all stakeholders are heard and that an appropriate political compact on equalization principles and the standard of equalization is struck. Politics must be internalized in these institutional arrangements. Arm's-length institutions, such as independent grant commissions, are not helpful as they do not allow for political input and therefore tend to opt for complex and nontransparent solutions.

Moving from a public-sector governance culture of dividing the spoils to an environment that enables responsive, responsible, equitable, and accountable governance is critical. Doing so requires exploring all feasible tax decentralization options, instituting output-based operating and capital fiscal transfers, establishing a formal fiscal equalization program with an explicit standard of equalization, and ensuring responsible access to borrowing.

Institutional Arrangements for Fiscal Relations

Who should be responsible for designing the system of federal-state-local fiscal relations? There are various alternatives.³² The first and most commonly used practice involves the national government deciding on it alone. The most obvious practice is to make the federal government solely responsible, on the grounds that it is responsible for the national objectives that are to be delivered through the fiscal arrangements. In many countries, this is the norm, and one or more federal government agencies assume exclusive responsibility for the design and allocation of fiscal

transfers. A potential problem with this approach is the natural tendency of the federal government to be overly involved with state decision making and not to allow the full benefits of decentralization to occur. This biases the system towards a centralized outcome, despite the fact that the grants are intended to facilitate decentralized decision making. To some extent, this problem can be overcome by imposing constitutional restrictions on the ability of the federal government to override state and local decisions. In India, the Union government is solely responsible for Planning Commission transfers and centrally sponsored schemes. These transfers have strong input conditionality with the potential to undermine state and local autonomy. The 1988 Brazilian Constitution provides strong safeguards against federal intrusion by enshrining the transfers' formula factors in the Constitution. These safeguards represent an extreme step as they undermine the flexibility of fiscal arrangements to respond to changing economic circumstances.

Alternatively, a separate body could be involved in the design and ongoing reform and enforcement of fiscal arrangements. This could be an impartial body or a body made up of both federal and state representatives. It could have true decision-making authority or be purely advisory. Whatever body is responsible, in order to be effective it needs to be able to coordinate decision making by the two orders of government. Three commonly practised options are (1) an independent grants commission, (2) an intergovernmental forum, or (3) an intergovernmental-cum-civil-society forum.

Some countries set up a quasi-independent body, such as a grants commission, to design and reform the fiscal system. Such commissions can have a permanent presence, as in Australia or South Africa, or they can be brought into existence periodically to make recommendations for the next five years, as in India. India has also instituted independent grants commissions in the states as advisory bodies for state-local fiscal transfers. These commissions have proven ineffective in some countries, largely because many of their recommendations have been ignored by the government and not implemented, as in South Africa. In other cases, the government may have accepted and implemented the commission's recommendations but been ineffective in reforming the system due to self-imposed constraints, as in India. In some cases, these commissions become too rigorous and academic in their approaches, contributing to the creation of an overly complex system of intergovernmental transfers. This has been the case with the Commonwealth Grants Commission in Australia.

A few countries use intergovernmental forums or executive federalism or federal-provincial committees to negotiate the terms of the system, as do Canada and Germany. In Germany, this system is enhanced by having state governments (*Länder*) represented in the *Bundesrat*, the upper house

of the Parliament. This system allows for explicit political input from the jurisdictions involved and attempts to develop a common consensus. Typically, such forums opt for simplicity in design so as to make the system transparent and politically acceptable.

Finally, a variant of the above involves using an intergovernmental cum legislative cum civil society committee with equal representation from all constituent units, chaired by the federal government, to negotiate changes in federal-provincial fiscal arrangements. The Finance Commission in Pakistan is an example of this model, which is constituted periodically to determine allocations for the next five years. Pakistan also follows the same approach by having provincial finance commissions for designing and allocating provincial-local fiscal transfers. An advantage of this approach is that all stakeholders – donors, recipients, civil society, and experts – are represented on the commission. Such an approach keeps the system simple and transparent. An important disadvantage of this approach is that, due to the unanimity rule, such bodies may be permanently deadlocked, as has recently been witnessed at the federal order in Pakistan.

SELECTED ISSUES IN FISCAL FEDERALISM

This section addresses three topical issues in fiscal federalism: regional equity, horizontal competition, and corruption.

Federalism and Regional Equity

Regional inequalities represent an ever-present development challenge in most countries, especially those with large geographic areas under their jurisdiction. Globalization heightens these challenges as it places a premium on skills. With globalization, skills rather than the resource base of regions determine their competitiveness. Skilled workers gain at the expense of unskilled ones. As typically rich regions also have better educated and better skilled labour than do poor regions, the gulf between the former and the latter widens. Large regional disparities represent serious threats in federal countries as the inability of the government to deal with such inequities creates a potential for disunity and, in extreme cases, for disintegration. Although the policy challenges in reducing regional disparities are large, federal flexibility in the choice of instruments is curtailed by the division of powers in a federation. In contrast, central governments in unitary states are relatively unconstrained in their choice of policies and instruments.

Under these circumstances, there is a presumption in development economics that a decentralized fiscal constitution leads to ever-widening

regional inequalities. However, empirical evidence refutes this presumption. Raja Shankar and Anwar Shah show that regional development policies have failed in almost all countries – federal and unitary alike – as regional convergence is largely attributable to removing barriers to goods and factor mobility and securing a common economic union, as demonstrated by the successful experience of the United States in reducing regional income inequalities.³³ Federal countries do better in restraining regional inequalities because widening regional disparities pose a greater political risk. In such countries, inequalities beyond a threshold might lead to calls for separation by both the richest and the poorest regions. While the poorest regions might consider such inequalities a manifestation of regional injustice, the richest regions might view a union with the poorest regions as, in the long run, possibly holding them back in their drive for prosperity.

Federalism and Horizontal Competition

Preserving interjurisdictional competition and decentralized decision making are important for responsive and accountable governance in federal countries. Beggar-thy-neighbour policies have the potential to undermine these gains from decentralized decision making. Short of federal intervention, a number of solutions are possible. Competing jurisdictions could reach mutual agreements on the rules of the game and a coordination strategy. There might be high coordination costs for reaching such agreement and developing enforcement mechanisms. In the end, such agreements could prove ineffective on issues with higher stakes for the competing jurisdictions. Alternately, constitutional prohibitions against local impediments to factor mobility may be helpful. But interpretations of these provisions by the courts may not serve federalism well because they may unduly restrain the powers of subnational governments.

There is no consensus as to the federal role in preserving horizontal competition while overcoming some of the negative side effects associated with this competition. Federal government oversight of horizontal competition may prove too obtrusive to respect local autonomy. However, a federal government role in using its spending power to secure a common economic union appears promising.

This leads us to conclude that a partnership approach that facilitates an economic union through free mobility of factors by ensuring common minimum standards of public services and dismantling barriers to trade, plus wider information and technological access, offers the best policy alternative for regional integration and internal cohesion within federal nations. The question is not how to compete or how to cooperate but, rather, how to make sure that all parties compete but do not cheat.³⁴

Federalism and Corruption

Power corrupts and absolute power corrupts absolutely. Federalism helps to break the monopoly of power in the national order by bringing decision making closer to people through localizing it. Localization strengthens government accountability to citizens by involving them in monitoring government performance and demanding corrective actions. Localization, as a means of making government responsive and accountable to people, can help to reduce corruption and to improve service delivery. Efforts to improve service delivery usually force the authorities to address corruption and its causes. However, one must pay attention to the institutional environment and the risk of local capture by elites. In the institutional environments typical of some developing countries – when, in a geographical area, feudal and industrial interests dominate, institutions of participation and accountability are weak or ineffective, and political interference in local affairs is rampant – localization may increase opportunities for corruption. This suggests a pecking order of anti-corruption policies and programs. Thus the rule of law and citizen empowerment should be the first priority in any reform. Localization in the absence of the rule of law may not be a potent remedy for combating corruption.³⁵

WHY FISCAL FEDERALISM? SOME CONCLUSIONS

Federal fiscal constitutions have been recommended for large and diverse countries because they create incentives for multiple orders of government to provide services to their citizens in a competitive, efficient, equitable, and responsible manner. This is accomplished while respecting diversity in local identities and preferences. Federal fiscal constitutions pay special attention to regional economic and digital divides to ensure a level playing field and to strengthen the economic union. A review of comparative practices shows that federal countries do better than unitary countries on all aspects of public governance – citizen participation, political freedom, political stability, rule of law, bureaucratic efficiency, absence of corruption, human development, egalitarian income distribution, and fiscal and economic management.³⁶ This is because, as elaborated in this chapter, federal fiscal constitutions pay a great deal of attention to clarifying the roles, responsibilities, and accountabilities of various orders of governments and designing fiscal institutions compatible with responsive, responsible, and accountable results-based governance. The synthesis of the principles of fiscal federalism documented in this chapter will, I hope, assist policy makers and practitioners in reforming their fiscal systems.

NOTES

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- 1 Anwar Shah, "Fiscal Decentralization and Macroeconomic Management," *International Tax and Public Finance* 13, 4 (2006): 437–62.
- 2 Daniel J. Elazar, "The Political Theory of Covenant: Biblical Origins and Modern Developments," *Publius: The Journal of Federalism* 10 (1980): 3–30.
- 3 Robert Inman, "Why Federalism?" unpublished paper, Wharton School, University of Pennsylvania, Philadelphia, September 2006.
- 4 Not all federal countries are decentralized and not all unitary countries are centralized. For example, Canada is highly decentralized, but Australia and Germany are centralized federations, as is indicated by the share of subnational expenditures in consolidated public expenditures. Nordic unitary countries are more decentralized than are Australia and Germany.
- 5 William H. Riker, *Federalism: Origin, Operation, Significance* (Boston, MA: Little-Brown, 1964), 11.
- 6 See Pierre Salmon, "Horizontal Competition among Governments," in *Handbook of Fiscal Federalism*, ed. Ehtisham Ahmad and Giorgio Brosio, 61–85 (Cheltenham, UK: Edward Elgar, 2006); and Albert Breton, "Modeling Vertical Competition," in *Handbook of Fiscal Federalism*, ed. Ehtisham Ahmad and Giorgio Brosio, 86–105 (Cheltenham, UK: Edward Elgar, 2006). See also Daphne A. Kenyon and John Kincaid, eds., *Competition among States and Local Governments: Efficiency and Equity in American Federalism* (Washington, DC: Urban Institute Press, 1991).
- 7 See Ronald L. Watts, *Comparing Federal Systems* (Montreal and Kingston: McGill-Queen's University Press, 1999).
- 8 Barry Weingast, "Second Generation Fiscal Federalism: Implications for Decentralized Democratic Governance and Economic Development," discussion draft, Hoover Institution, Stanford University, 2006, 6.
- 9 This refers to civic republics as termed by John Kincaid, "Municipal Perspectives in Federalism," unpublished paper, cited in Ann O. Bowman and Robert C. Kearney, *State and Local Government* (Boston, MA: Houghton Mifflin Company, 1990).
- 10 George Stigler, "The Tenable Range of Functions of Local Government," in *The Economics of Fiscal Federalism and Local Finance*, ed. Wallace E. Oates, 3–9 (Cheltenham, UK: Edward Elgar, 1998).
- 11 Mancur Olson, "The Principle of Fiscal Equivalence: The Division of Responsibilities among Different Levels of Government," *American Economic Review* 59, 2 (1969): 479–87.
- 12 Wallace Oates, *Fiscal Federalism* (New York: Harcourt Brace Jovanovich, 1972).
- 13 *Ibid.*, 55.
- 14 Bruno Frey and Reiner Eichenberger, *The New Democratic Federalism for Europe: Functional Overlapping and Competing Jurisdictions* (Cheltenham, UK: Edward Elgar, 1999).

- 15 Ibid., 55.
- 16 Robin Boadway and Anwar Shah, "Fiscal Federalism in Developing/Transition Economies: Some Lessons from Industrialized Countries," paper presented at the National Tax Association Meetings, St. Paul, Minnesota, November 1994; *National Tax Journal*, proceedings issue, April 1994, 64–71; Robin Boadway, Sandra Roberts, and Anwar Shah, "The Reform of Fiscal Systems in Developing and Emerging Market Economies: A Federalism Perspective," Policy Research Working Paper 1259, World Bank, Washington, DC, 1994; Robin Boadway, Sandra Roberts, and Anwar Shah, "Fiscal Federalism Dimension of Tax Reform in Developing Countries." in *Fiscal Reform and Structural Change in Developing Countries*, vol. 1, ed. G. Perry, J. Whalley, and G. McMahon, 171–200 (London: Macmillan, 2000).
- 17 Robin Boadway, *The Constitutional Division of Powers: An Economic Perspective* (Ottawa: Economic Council of Canada, 1992).
- 18 Ibid.
- 19 Anwar Shah, "Fiscal Decentralization and Macroeconomic Management," *International Tax and Public Finance* 13, 4 (2006): 437–62; and Anwar Shah, "Corruption and Decentralized Public Governance," in *Handbook of Fiscal Federalism*, ed. Ehtisham Ahmad and Giorgio Brosio, 478–98 (Cheltenham, UK: Edward Elgar, 2006).
- 20 Robin Boadway, *The Constitutional Division of Powers: An Economic Perspective* (Ottawa: Economic Council of Canada, 1992).
- 21 See Anwar Shah with Sana Shah, "The New Vision of Local Governance and the Evolving Roles of Local Governments." In *Local Governance in Developing Countries*, ed. Anwar Shah, 1–46 (Washington, DC: World Bank, 2006), 1–46.
- 22 Robert P. Inman, "Financing Cities," NBER Working Paper 11203, National Bureau of Economic Research, Cambridge, MA, 2005.
- 23 Izabella Barati and Akos Szalai, "Fiscal Decentralization in Hungary" (Center for Public Affairs Studies, Budapest University of Economic Sciences, 2000), p. 21.
- 24 Anwar Shah, "The New Fiscal Federalism in Brazil," Discussion Paper 124, World Bank, Washington, DC, 1991.
- 25 For a comprehensive treatment of the economic rationale for intergovernmental fiscal transfers, see Robin Boadway and Anwar Shah, eds., *Intergovernmental Fiscal Transfers* (Washington, DC: World Bank, 2007); and Anwar Shah, "A Practitioner's Guide to Intergovernmental Fiscal Transfers," in *Intergovernmental Fiscal Transfers*, ed. Robin Boadway and Anwar Shah, 1–53 (Washington, DC: World Bank, 2007).
- 26 Anwar Shah, *The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies* (Washington, DC: World Bank, 1994); Government of Canada, *Achieving a National Purpose: Putting Equalization Back on Track* (Ottawa: Department of Finance, 2006); Government of Canada, *Restoring Fiscal Balance in Canada* (Ottawa: Department of Finance, 2006); and Anwar Shah, "A Practitioner's Guide to Intergovernmental Fiscal Transfers," in *Intergovernmental Fiscal Transfers*, ed. Robin Boadway and Anwar Shah, 1–53 (Washington, DC: World Bank, 2007).

- 27 Robin Boadway, "The Vertical Fiscal Gap: Conceptions and Misconceptions," paper presented at Canadian Fiscal Arrangements: What Works, What Might Work Better, Winnipeg, Manitoba, 16–17 May 2002.
- 28 Raja Shankar and Anwar Shah, "Bridging the Economic Divide within Nations: A Scorecard on the Performance of Regional Development Policies in Reducing Regional Income Disparities," *World Development* 31, 8 (2003): 1421–41.
- 29 Wallace Oates, *Fiscal Federalism* (New York: Harcourt Brace Jovanovich, 1972). For a more elaborate discussion of absence of fiscal equalization in the United States, see Daphne A. Kenyon and John Kincaid, "Fiscal Federalism in the United States: The Reluctance to Equalize Jurisdictions," in *Finanzverfassung im Spannungsfeld zwischen Zentralstaat und Gliedstaaten*, ed. Werner W. Pommerehne and George Ress, 34–56 (Baden-Baden: Nomos Verlagsgesellschaft, 1996).
- 30 On examples of state-local transfers from Australia, Brazil, and Canada, see Anwar Shah, *The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies* (Washington, DC: World Bank, 1994).
- 31 Anwar Shah, *The New Fiscal Federalism in Brazil* (Washington, DC: WORLD BANK, 1991).
- 32 For an evaluation framework and comparative reflections on alternate institutional arrangements, see Anwar Shah, "Institutional Arrangements for Intergovernmental Fiscal Transfers and a Framework for Evaluation," in *Intergovernmental Fiscal Transfers*, ed. Robin Boadway and Anwar Shah, 293–317 (Washington, DC: World Bank, 2007).
- 33 Raja Shankar and Anwar Shah, "Bridging the Economic Divide within Nations: A Scorecard on the Performance of Regional Development Policies in Reducing Regional Income Disparities," *World Development* 31, 8 (2003): 1421–41.
- 34 See Anwar Shah, "Interregional Competition and Federal Cooperation: To Compete or to Cooperate – That Is Not the Question," paper presented at the International Forum on Federalism in Mexico: Local and Global Challenges, held in Veracruz, Mexico, 14–17 November 2001.
- 35 Anwar Shah, "Corruption and Decentralized Public Governance," in *Handbook of Fiscal Federalism*, ed. Ehtisham Ahmad and Giorgio Brosio, 478–98, (Cheltham, UK: Edward Elgar, 2006).
- 36 Anwar Shah, "Balance, Accountability, and Responsiveness: Lessons about Decentralizations," Policy Research Working Paper Number 2021, World Bank, Washington, DC, 1998; Anwar Shah, "Fiscal Decentralization and Macroeconomic Management," *International Tax and Public Finance* 13, 4 (2006): 437–62; and Robert Inman, "Why Federalism?" unpublished paper, Wharton School, University of Pennsylvania, Philadelphia, 2006.