



FINANCING METROPOLITAN GOVERNMENTS *in* DEVELOPING COUNTRIES

Edited by

ROY W. BAHL, JOHANNES F. LINN, AND DEBORAH L. WETZEL



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GRANT FINANCING OF METROPOLITAN AREAS

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A Review of Principles and Worldwide Practices

ANWAR M. SHAH

The allure of metropolitan areas is irresistible for many people: the promise of good jobs, good homes, a good life, good times for the young and the young at heart, and dreams of a prosperous future for all. In an information age with a borderless world economy where economic success is more closely tied to competitive advantage than to hackneyed notions of comparative advantage, metropolitan governments are at the core of the future prosperity of a nation. And they can serve as a tool to overcome a lack of trust and restore confidence in government through their commitment to improve social and economic outcomes.

These great expectations, however, are critically linked to the fiscal health of metropolitan areas. Fiscal health is closely tied to the fiscal regimes available, in particular, taxing powers and other financing options, such as grant and bond financing (Bahl 2011; Bahl and Linn 1992; Bird and Slack 2004; Slack 2010; Chernik and Reschovsky 2006; Peterson and Annez 2007). This chapter is concerned with a critical aspect of this financing: higher-level fiscal transfers. While these transfers may not be the dominant source of revenues for a large number of metropolitan areas, they have a significant bearing on incentives and accountabilities and the associated impacts on fiscal health of metropolitan areas. The design of these transfers requires careful thought on special features of metropolitan areas that distinguish them from smaller local government entities.

Most metropolitan areas have large populations, typically in excess of 1 million. Mumbai, India, has a population of 21 million, and Istanbul, Turkey, has a population of 13 million. Metropolitan areas are larger and more compact areas with higher population densities than the rest of the nation. This compactness facilitates agglomeration economies, as well as making metropolitan areas centers of arts,

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culture, and learning and sources of innovation, growth, and productivity. They also afford better transportation and communication facilities and an overall better quality of life. This leads to a larger concentration of specialized skills and wealth and, on the downside, higher incidences of crime and poverty.

Metro areas typically have much broader responsibilities than do smaller local governments. Beyond municipal services, these encompass health, welfare, and hub functions for national and international finance, trade, and economic links. Because of this, in some countries metro areas are treated as provinces/states. Examples include Canberra in Australia; Bangkok in Thailand; Beijing and Shanghai in China; Tokyo in Japan; Seoul and Busan in South Korea (KRILA 2009); Berlin, Bremen, and Hamburg in Germany; and Helsinki in Finland. Typically, metro areas have multiple local jurisdictions, and some have multiple tiers of local jurisdictions. Metropolitan areas also typically have a larger revenue base and greater tax autonomy and therefore greater potential for self-finance.

In view of this, the grant-financing needs of metro areas are very different from other local governments. If taxing powers are adequately decentralized, there may in fact be no need for grant financing of operating expenditures of metro areas, as demonstrated by Tokyo and Seoul. This, however, is not the case for most metropolitan areas: they lack autonomy in taxing powers and have limited access to dynamic, productive tax bases. Existing tax bases, especially property tax bases, are overtaxed to finance municipal and education services, for example, in the United States and Canada, leaving little room to grow. In the United States, this problem is compounded by limits on local revenues and unfunded mandates in environmental and social spending. In most developing countries, metro governments lack administrative and fiscal autonomy and act as wards of the state, which hampers their efforts to play a leadership role in local economic development. In these circumstances, grant financing can play an important role. However, grants must be tailored to specific circumstances of metro areas, especially their broader role in local, national, and international governance. Grants must also reflect an expanded array of responsibilities that come with serving as nodes of national and international connectivity, as well as the special needs of a knowledge-based local economy. Grant design also must incorporate incentives and accountability mechanisms to ensure responsible and accountable local governance.

This chapter provides a synthesis on conceptual underpinnings of this literature and a brief overview of practices based on a review of 41 metropolitan areas across the world. It must be noted at the outset that the assignment of responsibilities must underpin any design of a grant program (see McMillan 2008). With appropriate assignments or reassignments, it is possible to minimize the need for higher-level assistance for metropolitan areas. However, this chapter takes these assignments (or misassignments) in practice as a given and examines options in grant design to facilitate better functioning of metropolitan governance. An overall theme of this chapter is that grants can (and should) be properly designed in almost any institutional/organizational setting, even those that may not seem ideal.

This chapter is organized as follows. A typology of grant instruments and their rationale and relevance for metro areas are discussed first, followed by conceptual guidance on grant financing of metropolitan services. The chapter then outlines

models of metropolitan governance in practice and draws implications for the design of higher-level transfers. It also discusses implications of existing institutional arrangements for developing a grant strategy for metropolitan financing. A review of worldwide practices in grant financing of metro areas follows, by type of metropolitan governance and by type of country, highlighting the divergence of practice from theory. The concluding section draws lessons from grant financing of metropolitan areas and develops an agenda for reform.

GRANT INSTRUMENTS, RATIONALE, AND RELEVANCE FOR METROPOLITAN AREAS

Instruments of intergovernmental finance have important bearings on efficiency, equity, and accountability in governance.

Tax Base Sharing, Tax Yield Sharing, and Revenue Sharing

Mechanisms to share the tax base (metropolitan areas levy supplementary taxes on national bases), tax yield, and revenue are customarily used to address fiscal gaps or mismatched revenue means and expenditure needs arising from constitutional assignment of taxes and expenditures to different levels of governments. Tax base sharing means that two or more levels of government levy rates on a common base. Tax base determination usually rests with the higher-level government, with lower orders of government levying supplementary rates on the same base. Typically, taxes are collected by just one level of government, in most countries the central government, with proceeds shared downward or upward depending on revenue collection arrangements. Metropolitan Bangkok levies a surcharge on central value added taxes (VATs); excise taxes; business taxes; and liquor, gambling, and horse racing license fees and taxes. Tax base sharing is quite common in Eastern Europe and East Asia but almost nonexistent in most developing countries in Asia and Africa.

A second method of addressing the vertical fiscal gap is tax yield sharing. Typically, the central government collects shared taxes and apportions prespecified shares on a tax-by-tax basis to jurisdictions of origin. Tax sharing contributes to collection efficiency but may introduce incentives for the government level that collects the taxes to give relatively less effort to those taxes that it has to share. Tax-by-tax sharing is quite common in developing countries. Metropolitan Jakarta receives a fixed share of personal income taxes (PITs), property taxes, and natural resource revenues collected by the central government in its jurisdiction.

A third method of addressing vertical fiscal gaps is revenue sharing, whereby one level of government has unconditional access to a specified share of revenues collected by another level. Typically, not all revenues of the higher-level government but only a specified set of revenue sources are subject to pooling, based on a formula. Revenue-sharing agreements typically specify how revenues are to be shared among national and lower-level governments, with complex criteria for allocation among lower-level governments, sometimes imposing conditions for the eligibility and use of funds. The latter 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 fiscal gaps, promoting fiscal equalization and regional development, and stimulating tax effort at lower levels. Metropolitan cities in India receive funds both from central and from state revenue-sharing mechanisms. Metropolitan areas in Brazil receive transfers from state revenue-sharing mechanisms for municipal governments, the so-called municipal participation funds.

Intergovernmental Grants

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

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 of an ad hoc or discretionary nature. Such transfers are intended to preserve local autonomy and enhance interjurisdictional equity (equalization grants). General-purpose transfers are called *bloc transfers* when they are used to provide broad support in a general area of subnational expenditures (e.g., education) while allowing recipients discretion in allocating the funds among specific uses. General-purpose transfers simply augment the recipient's resources. Since the grant can be spent on any combination of public goods or services or used to provide tax relief to residents, general nonmatching assistance does not affect relative prices (Boadway and Shah 2007; 2009). Formula-based general-purpose transfers are very common in developing countries. For the purpose of allocating these grants, metropolitan areas are typically treated as any other local government, as is done by states in Brazil, India, and Pakistan and by the central government in Indonesia. In some countries, general-purpose transfers are provided as equalization grants that are intended to enable different local jurisdictions to achieve reasonably comparable levels of public services at reasonably comparable levels of local taxation. Metropolitan areas in Indonesia, Russia, Poland, and most Eastern European countries receive such transfers along with smaller local governments. Grouping metropolitan areas with smaller local governments leads to an understatement of fiscal needs and overstatement of fiscal capacity in metropolitan areas. For example, the Jakarta metropolitan area is rated as a "fiscal surplus" area according to the existing formula for local autonomy (equalization) grants. Of course, it is possible to design measurement criteria that would overcome this antimetro bias and at the same time make the allocation criteria simpler and more transparent (see Shah 2012a; Shah, Qibthiyah, and Dita 2012).

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 and can be either discretionary or ad hoc. Conditional transfers typically specify the type of expenditures that can be financed (input-based

conditionality): 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 (Shah, 2007; 2009; 2010a).

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

Conditional matching transfers require 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 prespecified 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. If an equalization program is in vogue, it should recognize the equalization element of the conditional grant program to ensure there is no "double" equalization.

Conditional open-ended matching grants are the most suitable vehicles to induce lower-level governments to increase spending on the assisted function. If the objective is simply to enhance the welfare of local residents, general-purpose nonmatching transfers are preferable, because they preserve local autonomy. To ensure accountability for results, conditional nonmatching 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.

Output-based grants create an incentive regime to promote the results-based accountability culture. Consider the case where the national government aims to improve access to education for the needy and poor, as well as enhance the quality of such education. A commonly practiced approach is to provide grants to government schools through conditional grants. These grants specify the type of expenditures eligible for grant financing, for example, books, computers, and teacher aids, and also financial reporting and audit requirements. Such input conditionality undermines budgetary autonomy and flexibility without providing any assurance regarding the achievement of results. Such input conditionality, in practice, is difficult to enforce because there may be significant opportunities for fungibility of funds. Experience has also demonstrated that there is no one-to-one link between increase in public spending and improvement in service delivery performance (see Huther, Roberts, and Shah 1997).

To bring about accountability for results, consider an alternate, output-based design of such grants. Under the alternate approach, national government allocates

funds to local governments based on the school-age population. The local governments in turn pass these funds to both government and nongovernment providers based on school enrollments. Conditions for receipt of these grant funds for nongovernment providers are that they must admit students on merit and provide a tuition subsidy to students whose parents do not have sufficient means to afford such fees. Conditions for the continuation of funds for all providers will be to improve or, at the minimum, maintain baseline achievement scores on standardized tests, improve graduation rates, and reduce dropout rates. Lack of compliance with these conditions will invite public censure and, in the extreme case, a threat of discontinuation of funds with perpetual noncompliance. Meanwhile, reputation risks associated with poor performance may lead to reduced enrollments and associated reduction in grant funds. There are no conditions on the use of funds, and schools have full autonomy in the use of grant funds and retention of unused funds. Such grant financing would create an incentive environment for both government and nongovernment schools to compete and excel to retain students and establish reputations for quality education (Shah 2009).

In the final analysis, it is parental choice that determines available grant financing to each school. Such an environment is particularly important for government schools, where staff typically have lifelong appointments and financing is assured regardless of school performance. Budgetary flexibility and retention of savings would encourage innovation to deliver quality education. Thus, output-based grants preserve autonomy and encourage competition and innovation while bringing strict accountability for results to residents. This accountability regime is self-enforcing through consumer choice (parental choice in this example). Such a school financing regime is especially helpful in developing countries and poorer jurisdictions in industrial countries plagued with poor quality of teaching and worse teacher absenteeism or lack of access to education in rural areas. The incentive regime provided by results-based financing will create market mechanisms to overcome these deficiencies over time (Shah 2010a).

A similar example of such a grant in health care would allocate funds to local governments based on weighted population by age class, with higher weights for senior citizens (>65 years of age) and children (<5 years of age). The distribution by local government to providers would be based on patient use. Minimum standards of service and access to health care would be specified for the eligibility to receive such transfers. Specific-purpose transfers can also be used to promote interjurisdictional competition, public-private partnership, or other collaborative or competitive approaches to enhance public services delivery and access. To achieve these ends, grant payments can be made on the basis of achieving either preset benchmarks ("certification") or higher ranks in relative quantitatively measured performance ("tournaments") (see Zinnes 2009).

For metropolitan areas, output-based transfers are useful candidates for financing operating expenditures for education, health, public transit, and infrastructure. Capital grants would be useful financing tools for overcoming infrastructure deficiencies or setting national minimum standards in quality and access of infrastructure. Tournament-based grants would be useful tools to create a competition among metropolitan areas in improving slums or overcoming congestion and pollution.

Grant Objectives and the Choice of Grant Instruments: A Conceptual View

In concluding this section, it is useful to summarize the choice of grant instrument in meeting specific objectives. This taxonomy of grants by objective is not specific to grant financing of metropolitan areas but is broadly applicable (Boadway and Shah 2009; Shah 2007; 2009).

- Bridging vertical fiscal gaps: reassignment of responsibilities, tax decentralization, and tax abatement accompanied by tax base sharing would be preferred instruments. Tax-by-tax sharing and deficit grants are less desirable alternatives.
- Setting national minimum standards: output-based grants with conditions on service standards would be desirable. Conditional input-based grants are less desirable.
- Overcoming infrastructure deficiencies in establishing national minimum standards: conditional capital grants based on a planning view with matching rates that vary inversely with local fiscal capacity.
- Compensating benefit spillovers: matching grant with matching rate consistent with the spillover of benefits.
- Influencing local priorities that are in conflict with national priorities: open-ended matching grants.
- Promoting competition among local governments: project- or output-based grants using certification to meet prespecified standards or tournament-based approach to reward top performers.
- Interlocal equalization: fiscal capacity equalization with explicit standard using the Robin Hood approach where richer jurisdictions contribute to the pool and poorer jurisdictions receive financing from the pool.

FINANCING METROPOLITAN SERVICES AND THE ROLE OF GRANT FINANCE

The role of grant financing is closely linked to the service delivery responsibilities of each metropolitan area, because several metropolitan services are better financed through other tools, as discussed below. For the purpose of our discussion, metropolitan services are grouped together either as people-oriented services or as services to both people and property.

People-Oriented Services

- Primary and secondary education and public health: These are merit services that are redistributive in nature, and as a result, higher-level grant financing would be important to ensure national minimum standards. Operating expenditures for these services are best financed by surcharges on PITs and fees supplemented by output-based nonmatching grants. Capital expenditures could be financed by borrowing and/or matching capital grants.
- Welfare assistance: This service is again a strong candidate for grant finance if it is a local responsibility, because of the redistributive nature of this service. Local

governments that provide a generous package of welfare assistance from own-source revenues are likely to lose tax base, as happened in the early 1970s in New York City and more lately in St. Louis, Missouri (see Inman 2005).

- Parks, recreation, and libraries: These services are weak candidates for grant finance but good candidates for finance through residential property taxes, surcharges on PITs, and fees.
- Museums, sports and fitness facilities, and concert halls: These facilities are poor candidates for grant finance and instead are better financed locally perhaps through reserves, revenue bonds, or other forms of capital finance that ultimately are funded by fees, and surcharges on local real property taxes and PITs. However, if some of these facilities in metro areas are intended for preserving national heritage, holding global events (e.g., the Olympics), and developing national-caliber athletes and performers, then such facilities should receive at least some national funding.

Mixed People- and Property-Oriented Services

- Water, sewer, airports, and ports: Capital costs could be covered by borrowing financed by reserves, real property taxes, surcharges on PITs and corporate income taxes, frontage taxes, matching grants, and public-private partnerships. Operating costs could be recovered by user fees and franchises.
- Arterial roads and regional public transit: Higher-level grant assistance would be important to finance partially both capital and operating costs. Capital costs could be financed by matching capital grants, borrowing, frontage taxes, and reserves. Operating costs could be financed by fuel taxes, tolls, fines, general revenues, transit fees, congestion charges, and benefit spillover compensation by conditional matching grants.
- Local streets and roads, public transit, street lighting, and parking: These are purely local services and are not appropriate for grant finance.
- Fire protection and ambulance service: These services are best financed from general revenues.
- Police, courts, and prisons: To the extent that these services may have some national externality, these could be partially financed by grants.
- Garbage and solid waste disposal: These services are best financed by user charges/fees and franchises.
- Local environmental protection and discouraging “sins” and “bads”: These services are best financed by environmental charges, congestion tolls, and taxes on gambling, alcohol, and tobacco.
- General services: Grant financing is not appropriate; instead, these services should be financed by local general revenues.

The above list highlights the relevance of service delivery responsibilities in determining relevant grant structures. The following section looks at the relevance of the governance structure and taxing powers of the metropolitan area for grant finance.

MODELS OF METROPOLITAN GOVERNANCE AND IMPLICATIONS FOR HIGHER-LEVEL FISCAL TRANSFERS

Metropolitan areas could be broadly grouped into six areas based on the level of coordination or centralization of metropolitan governance.

Unitary Governance

Under this model, the metropolitan area has single unified (“unicity”) or single-tier coordinated governance. Examples of this governance include Addis Ababa, Bern, London, Melbourne, Prague, Pretoria, Toronto, and Yogyakarta. Yogyakarta has a joint secretariat comprising heads of the municipality of Yogyakarta and the districts of Slemen and Bantul for harmonization of infrastructure development, with special emphasis on solid waste and waste water management. Such governance arrangements offer the potential for the metropolitan area to be largely self-financed if it is given adequate fiscal autonomy. Canberra, Australia, is unique in that it is a city-state with single-tier governance. It has an elected assembly based on proportional party representation. The assembly chooses the chief minister.

City States or Integrated State and Metropolitan Governance

These are typically provincial (state) cities having the status of both a state or province and a metropolitan city. Governance structure usually comprises two tiers, with the lower tier either (1) serving as a deconcentrated arm of the upper tier, although having a directly elected council to provide oversight on central administration at the district or ward level, as in Bangkok; or (2) having autonomy for some local/neighborhood services, as in Beijing, Tokyo, and Madrid. These jurisdictions, by virtue of having city-state status, have the potential to be largely self-financing. In addition, such governance arrangements internalize intrametropolitan spillovers. Examples of metropolitan areas having city-state status include Bangkok, Beijing, Berlin, Brussels, Busan, Istanbul, Madrid, Montreal, Seoul, Shanghai, Tirana, Tokyo, Warsaw, and Zagreb. Istanbul has a two-tier unified structure, with 73 lower-tier municipalities and the upper tier having the power to override or approve lower-tier decisions. Tirana, Albania, has two-tier coordinated governance, with the upper tier governed by the municipal council and directly elected mayor and 11 submunicipal units having directly elected councils and executive heads. Warsaw is treated as an urban county with 18 districts. Each district has a directly elected district council and district executive. The Warsaw capital region is governed by a directly elected Warsaw council and is responsible for metropolitan tasks. It coordinates these tasks through district offices. Zagreb, Croatia, has a two-tier governance structure, with the top tier comprising a joint council of the city and Zagreb County. The city and the county assembly elect two members each to the joint council, and the joint council is chaired on a rotating basis between the city mayor and the county governor.

Bangkok, Thailand, is a single-tier provincial city covering the entire Bangkok metro area. The Bangkok metropolitan area council comprises 57 councilors: one

for each 100,000 people. The metropolitan area is divided into 18 districts, each with its own directly elected council to supervise metropolitan offices. The metropolitan chief executive is elected at large for a four-year term. The governor is assisted in executive functions by a centrally appointed civil servant: a permanent secretary. In Belgium, the Brussels capital region has a higher-tier region with an elected parliament and a centrally appointed government responsible for municipal laws and supervision and regional infrastructure, housing, and environment. The lower tier has directly elected councils responsible for education, health, police, and municipal services. Madrid, Spain, comprises the community of Madrid, which includes 179 municipalities, including the city of Madrid. The community of Madrid is responsible for regional infrastructure, education, and health, and at the lower tier, Madrid city and municipalities have elected councils, and mayors (with dual role as council chair and chief executive) are responsible for all municipal services. Montreal, Canada, comprises metropolitan cities of Montreal, Longueuil, and Laval and 63 municipalities. It has a two-tier governance structure with the upper tier, the so-called Montreal metropolitan community, responsible for coordination of a few select services. Seoul metropolitan area has an upper tier: Seoul metropolitan government with provincial status and 25 autonomous lower-tier municipalities (Rhee 2010). Tokyo metropolitan government has a prefecture or regional government status with twenty-three special wards, twenty-six cities, five towns, and eight villages performing lower-tier functions.

Horizontally Coordinated Mandatory Two-Tier Governance

Under this structure, both upper and lower tiers have well-defined independent responsibilities. Examples include Belgrade, Copenhagen, Macedonia, Serbia, and Skopje. Belgrade has a directly elected city mayor and assembly as the first/upper tier and 17 municipalities with a directly elected municipal assembly and municipal chair elected by each assembly as the second/lower tier. Skopje, Macedonia, has a similar governance structure, with the city as the first tier and 10 municipalities as the second tier. The Copenhagen metropolitan region has a directly elected regional council as the first tier responsible for intermunicipal coordination and health services and 45 municipalities delivering all local-municipal services, including education, at the second tier. Grant-financing needs of such governments would be limited to mass transit, social services financing, benefit-spillover compensation, and intrametropolitan equalization.

Horizontally Coordinated Voluntary Two-Tier Governance

Under this governance structure, metropolitan areas comprise multiple local jurisdictions that voluntarily cooperate with one another on select metrowide functions and deliver some services jointly through partnership agreements. Examples include Helsinki (24 municipalities) and Vancouver. In both cases, the upper tier represents a partnership arrangement among municipalities in the metropolitan area. Grant-financing needs of such areas are primarily for mass transit and social services and for intrametropolitan equalization.

Uncoordinated Two-Tier Governance

Under this governance structure, regional and local governments coexist with little formal coordination mechanisms either horizontally or vertically. Examples include Bucharest in Romania and Chisinau in Moldova. Bucharest has a directly elected autonomous but uncoordinated two-tier system, with the city's council and mayor serving as the top tier and six sectors (districts) serving as second-tier municipalities. Metropolitan Chisinau comprises the capital city of Chisinau and 18 territorial local government units, with each having independent legislative and administrative organs. The upper-tier municipality has a directly elected municipal council and general mayor and is responsible for metrowide regulation of land and residential property, coordination of social and economic development, civil and social protection, public order, and emergency regime and response. All other local functions are performed by the city and municipalities. These governance arrangements require separate and substantive needs for intergovernmental finance, including intrametropolitan equalization.

Uncoordinated/Fragmented Single-Tier Governance

Under this structure, several independent local jurisdictions sometimes belonging to different states and provinces deliver services in subareas with little coordination. Examples include Abuja, Cape Town, Chennai, Delhi, Hyderabad, Jakarta, Kolkata, Mexico City, Milan, Mumbai, Puna, and Washington, DC. The Mexico City metropolitan area comprises the capital Federal District, with sixteen districts (*delegaciones*), fifty-eight municipalities of the state of Mexico, and one municipality of the state of Hidalgo. These jurisdictions are uncoordinated, although a plethora of coordinating agencies/commissions and planning bodies exist. The Chennai metropolitan area in India comprises one municipal corporation (Chennai), eight municipalities, twenty-six town *panchayats*, and one cantonment board. These 36 governments are uncoordinated. Similarly, Delhi has three uncoordinated local governments: the Municipal Corporation of Delhi, New Delhi Municipal Corporation, and Delhi Cantonment Board (Sridhar et al. 2008b). The Jakarta metropolitan area comprises the city of Jakarta, three urban municipalities, and three rural municipalities (districts) belonging to three provinces: Jakarta, Banten, and West Java. Governance in the metropolitan area is a single-tier uncoordinated structure, although a central coordinating agency, the Badan Kerja Sama Pembangunan (BKSP), has been established that brings together all heads of provincial and local governments to promote task coordination. The Washington, DC, metropolitan area includes the District of Columbia, municipalities in the northern part of the state of Virginia, and parts of the state of Maryland (Boyd and Fauntroy 2002). Milan represents a special case: according to the 1990 law, it is supposed to have a two-tier structure, with the higher-tier metropolitan city having a provincial status and performing regional functions and lower-tier municipalities within the metro region performing municipal functions. However, it still operates as a single-tier uncoordinated metropolitan area with multiple jurisdictions, with little coordination among multiple local jurisdictions in the metro area. Such fragmented governance maximizes the need for higher-level financing.

The above descriptions suggest a stylized view of grant financing, taking into account the governance and finance models adopted for metropolitan areas. If the “finance follows functions” principle is adopted, then metropolitan areas should have significant taxing powers, such that their revenue means would be largely consistent with their expenditure needs, and the needs for higher-level transfers to metropolitan areas will be minimized. They would still need transfers or other compensatory arrangements to compensate for benefit spillovers to nonresidents for use of metro services. It would also be desirable to provide them with assistance in financing redistributive services, because local financing of such services erode their tax bases. For horizontally coordinated or fragmented metro governance, in addition, some grant mechanisms for intrametropolitan equalization would also have to be examined.

In the event that taxing powers are not commensurate with metropolitan responsibilities and a large vertical gap persists, a menu of tax decentralization and grant-financing options would have to be explored regardless of the governance structure. In addition, for horizontally coordinated or fragmented governance models, intrametropolitan equalization alternatives would have to be examined. Competitive grants also are important for improving metrowide performance through incentives for performance excellence.

ADDITIONAL CONSIDERATIONS IN DEVELOPING A GRANT STRATEGY FOR METRO AREAS

The implications of the metropolitan governance and finance models for grant design are critical elements for developing a grant strategy for metropolitan areas. Several additional issues in developing such a strategy also require discussion.

Autonomous Public Agencies for Service Delivery

Some metrowide services are delivered by autonomous public agencies run on commercial principles rather than by general government. Such practice is quite widespread for water, sanitation, gas, electricity, and toll roads. These arrangements should have no bearing on grant design, because the case for grant finance should be based on the objectives and results sought and should not be linked to the management paradigm for such services.

Functional, Overlapping, and Competing Jurisdictions

Under such arrangements jurisdictions are organized along functional lines but overlap geographically within the metropolitan areas. Individuals and communities express their preferences directly through initiatives and referenda (see Frey and Eichenberger 1995). The jurisdictions could have authority over their members and the power to raise taxes and fees to fulfill their tasks. The school communities of Zurich metropolitan areas and special districts and boards in North America follow this concept in practice. Output-based grants are a suitable tool to finance such jurisdictions (Boadway and Shah 2007; 2009; Shah 2009; 2010a).

Fragmentation of Metropolitan Governance Through Proliferation of Single-Purpose Jurisdictions

Special-purpose jurisdictions with access to tax finance are quite common in metropolitan areas in industrial countries. The most common example of such jurisdictions is school boards with access to supplementary rates on residential property tax base. Proliferation of these agencies leaves municipal services with inadequate finance because existing tax bases, especially property taxes, are over-taxed, with little or no room for revenue growth. These problems are sometimes further compounded by limits on raising local revenues and unfunded higher-level mandates in environmental and social spending, as has been the case for the U.S. metropolitan areas of San Francisco and Los Angeles. Declines in general-purpose or equalization transfers exasperate this problem. Matching conditions for specific-purpose transfers do not help, either. In designing a metropolitan grant strategy, these issues must be considered to ensure that metropolitan governments have adequate resources to deliver municipal services.

Contracting Out Metropolitan Services

Metropolitan governments may choose to deliver some services through contractual arrangements or through concessions or franchises. For some services, they could use multiple providers to achieve more efficient provision outcomes. In such circumstances, grant design must ensure that service quality and access to the poor are not compromised. Output-based grants are an ideal tool to have this assurance.

GRANT FINANCING OF METROPOLITAN AREAS: THE PRACTICE

A review of international practices on grant financing of metropolitan areas is constrained by the scant details available even for metro areas in industrial countries. The data limitations restricted our sample to 41 metropolitan areas worldwide. To capture the diversity of experiences, the sample was organized using two alternative classifications: by type of metropolitan governance and by the use of a four-tier typology of countries.

Type of Metropolitan Governance

UNITARY GOVERNANCE

Nine sample areas fall in this category, also referred to as single unified (“unicity”) or single-tier coordinated governance. Contrary to expectations, grant financing is an important source of finance for most such metro areas, with the notable exception of Addis Ababa, Melbourne, and Pretoria, which are largely self-financed. Close behind these leaders are Toronto and Bern. London is an outlier, receiving more than 80 percent of funds from central grant finance. Tax sharing is dominant in this sample only for Prague. For the sample as a whole, 9.4 percent of financing comes from tax sharing, 16.4 percent from general-purpose or equalization transfers, and 13.7 percent from specific-purpose transfers, with the remaining 60.9 percent self-financed (see table 9.1). In this cluster, Prague relies significantly on

TABLE 9.1

Grant financing of unified and city-state metro areas (percentage of total revenues)

Metro area	Population (millions, most recent year)	Tax sharing (may include tax base sharing)	General-purpose transfers	Specific-purpose transfers	Total grants*	Total transfers**	Own-source revenues
Unitary metro areas (n = 9)							
Addis Ababa	3.1				3.1	3.1	96.9
Bern	0.3				24.4	24.4	75.6
Canberra	0.3		27.8	14.6	42.4	42.4	57.6
London	7.2		25.6	53.0	80.6	80.6	19.4
Melbourne	3.5				14.2	14.2	85.8
Prague	2.3	40.4	NA	NA	19.3	59.7	40.3
Pretoria	2.0				9.9	9.9	90.1
Toronto	5.1			24.0	24.0	24.0	76.0
Yogyakarta	2.0		66.5	7.2	73.7	73.7	26.2
Average	2.9	4.5	16.4	13.7	32.4	36.9	63.1
Unified two-tier governance: city-state metro areas (n = 14)							
Bangkok	2.5	24.0	7.0	20.0	27.0	51.0	49.0
Beijing	15.0	29.2	16.6	5.2	21.8	51.0	49.0
Berlin	3.4	39.1	18.3	21.9	40.2	79.3	20.7
Brussels	1.0	36.0	3.0		3.0	39.0	61.0
Busan	3.7	3.0	2.0	13.0	15.0	18.0	82.0
Istanbul	13.4	65.0	10.0	0.0	10.0	75.0	25.0
Madrid community (city)	6.0 (3.1)	64.0		5.0	5.0 (39.0)	69.0 (39.0)	31.0 (71.0)
Montreal	3.4				24.0	24.0	76.0
Seoul	10.4	0.8			8.3	9.1	90.9
Shanghai	17.4	32.9	24.7	1.5	26.2	59.1	40.9
Tirana	0.6		8.5	17.9	26.4	26.4	73.6
Tokyo	13.0				5.7	5.7	94.3
Warsaw	1.7	40.0	NA	NA	14.0	54.0	46.0
Zagreb	0.8	67.7	0	0.1	0.1	67.8	32.2
Average	5.4	28.7	6.4	12.2	18.6	47.3	53.7

NA, not available or not applicable. *Total grants refers to general-purpose plus specific-purpose transfers. **Total transfers refers to tax sharing plus total grants.

SOURCES: Compiled by authors from various sources listed in the references, especially OECD (2001; 2003a; 2003b; 2004a; 2004b; 2005a; 2005b; 2006a; 2006b; 2006c; 2007; 2008a; 2008b; 2009; 2010).

revenue sharing from PITs and VATs. Revenue sharing in the Czech Republic is by the number of inhabitants multiplied by the coefficient of the size category of municipality. Prague has the highest coefficient: 2.7611 (Kubatova and Pavel 2009). In this sample, Prague is the only metropolitan area receiving special treatment because of its size class. All other metro areas are treated similarly to other municipalities. Metropolitan London is an outlier in view of its predominant reliance on central transfers and having the most constrained access to own-source finances. It receives 25.6 percent from revenue-sharing transfers (the so-called revenue support plus redistributed nondomestic rate grant) and 55 percent as specific-purpose transfers, of which the police grant amounts to 5.3 percent and the area-based grant contributes 2.4 percent (Department for Communities and Local Government 2010).

UNIFIED OR INTEGRATED TWO-TIER GOVERNANCE: CITY-STATE METRO AREAS

Fourteen sample areas have this type of governance, with great diversity in central financing. Metro Istanbul is treated just like any other local government, with revenue sharing based on population and 5 percent of centrally collected revenues returned by origin (OECD 2008b). Tirana, Albania, receives central general-purpose transfers based on population (70 percent), area (15 percent), and urban services (15 percent for other local governments, 0 percent weight for Tirana). Corporate income tax sharing is mandated by law but not implemented because 80 percent of national revenues are collected in Tirana. Thus, in general, the general-purpose transfers discriminate against Tirana. It should be noted that Albania is among the handful of countries (Russia being another) that operates a competitive grant program. The program was initiated in 2006 with a pool as large as the general-purpose transfers and finances local capacity investment in education, health, water supply, and general municipal infrastructure. The criteria for allocation include expected impact on economic and social development and compliance with local/regional development priorities; impact on poverty reduction and improved access to basic services; projects promoting cooperation among local governments; projects with community participation and funding; funding for the local counterpart of foreign funding; and ongoing projects that have contractual obligations (Dhimitri, Ikonimi, and Dhuka 2009).

In Warsaw, the most prominent central transfer is for financing the metro subway system (Jefremienko and Wolksa 2007). Zagreb receives financing from a share of taxes on income (PIT and corporate), real estate transfers, and specific-purpose grants. Income tax proceeds are allocated to local government using the following criteria: by origin municipality or town share, 52 percent; county share, 15 percent; share of decentralized functions, 12 percent; share of decentralized function realignment. In addition, local government receives a supplementary allocation for decentralized functions: primary education, 3.1 percent; secondary education, 2.2 percent; social welfare centers, 0.5 percent; nursing homes, 1.7 percent; health care, 3.2 percent; and fire protection, 1.3 percent. The metro region also receives 60 percent of the proceeds of the real estate transfer tax derived from the region. General-purpose transfers are available to local governments with below-average fiscal capacity based on PIT. Zagreb is not eligible for these transfers.

The decentralized functions are financed through specific grants based on standard costs (Kopric et al. 2007).

In Bangkok, the metropolitan area receives tax sharing amounting to 5 percent of PIT, and 40 percent of revenues from natural resources and fisheries and teak wood are shared with provinces. One hundred percent of the metropolitan-area surcharges on central taxes, such as VAT, specific business tax, liquor tax, excise tax, liquor and gambling license fees, and gambling tax on horse races, are returned by origin. General-purpose transfers have two components: the VAT transfer and the general duty transfer. According to the Decentralization Act (1999), 18.5 percent of VAT revenues are allocated to local governments based on a formula that includes population, area, revenue, and budget needs. The metropolitan area received 5.8 percent of the total pool in 2008. With the general duty transfer, 5 percent of the total pool is set aside as deficit/expenditure need grants. Of the remaining 95 percent, 10 percent is allocated to the provinces, with 65 percent of that allocated on a per capita basis, and the remaining 35 percent is allocated on an equal per jurisdiction basis. Specific-purpose transfers mostly fulfill central mandates for health; education; public transit; school lunch; support for elderly care, AIDS patients, and disabled persons; social services; and water and environmental services (Shah et al. 2012).

The Brussels metropolitan region receives tax shares proportional to the yield of income taxes in the region. The region also receives equalization payments under the National Solidarity Intervention (INS) program, when income tax receipts per capita are below the national average (Wynsberghe 2009).

In the Madrid metro region, two regimes exist for central transfers for small versus large municipalities. For large municipalities with populations in excess of 75,000, the general grant consists of two parts: a tax share of central government taxes and a grant from the complementary fund. Tax shares are 1.7 percent of PIT, 1.8 percent of VAT, and 2 percent of excise revenues. PIT is allocated among municipalities based on taxes collected locally, and VAT and excise shares are distributed by consumption and population shares (OECD 2007).

Washington, DC, receives federal grant funds for Medicaid, community development, education, public welfare, and public safety (Gandhi et al., as cited in Slack and Chattopadhyay 2009).

For this sample, tax sharing is the most significant if not the predominant source of revenues for metros in European and East Asian countries. For the sample as a whole, tax sharing contributes 28.7 percent to metro revenues; general-purpose transfers, 6.4 percent; specific-purpose transfers, 12.2 percent; and 53.7 percent of financing is raised from own-source revenues. As provincial cities, most of the metros in this group benefit from greater access to self-finance, but given their greater responsibilities, only about half of their expenditures are self-financed. It is interesting that, in the sample countries, there is no special recognition of their metropolitan character. Only Spain accords limited recognition to this nature by grouping large urban municipalities together for grant financing. Competitive grant finance is practiced only in Tirana.

HORIZONTALLY COORDINATED MANDATORY TWO-TIER GOVERNANCE

Three sample jurisdictions fall into this category and vary significantly in their dependence on grant finance (see table 9.2). For Belgrade, Serbia, tax sharing from PITs by origin is the dominant source of revenue. In addition, it receives financing from formula-based general-purpose transfers. Equalization transfers are distributed to local governments with shared revenues per capita below the national average, so Belgrade does not qualify (Gliorijevic et al. 2007).

Tax sharing from PIT and VAT is the dominant source of revenues for Skopje, Macedonia. Three percent of the revenues from PIT and VAT are transferred to municipalities. Of the PIT pool, the city and its municipalities receive 10 percent. Of the VAT pool for municipalities, 12 percent goes to the city of Skopje (40 percent share) and its 10 municipalities (60 percent share) (Veljanovski 2009).

Copenhagen is primarily self-financed. Denmark has a separate horizontal equalization program for metropolitan areas, requiring richer jurisdictions to contribute to the pool, from which poorer jurisdictions receive assistance.

For this subgroup, tax sharing is the predominant source of central transfers, financing 30.5 percent of metro expenditures; general-purpose transfers, 7.2 percent; and specific-purpose transfers, 4.6 percent; 57.7 percent of financing is raised from local taxes and charges (see table 9.2). Copenhagen is unique in this subgroup for its participation in horizontal equalization among metro areas.

HORIZONTALLY COORDINATED VOLUNTARY TWO-TIER GOVERNANCE

Of the sample metro areas, only Helsinki falls into this category. Helsinki is primarily self-financed, and like Copenhagen, it contributes to a horizontal equalization program.

UNCOORDINATED TWO-TIER GOVERNANCE

Of the sample jurisdictions, Bucharest and Chisinau have uncoordinated two-tier governance structure. In Chisinau, own-source finance dominates, with some financing from PIT sharing and formula-based general-purpose transfers (Roscovan and Melnic 2009). Bucharest is primarily transfer financed, with the PIT and VAT as shared taxes. Metro districts receive 23.5 percent of PIT, and the general council receives 47.5 percent and an additional 11 percent for district equalization. VAT sharing is discretionary (past allocation indexed by inflation) and given as lump sum grants earmarked for salaries and social benefits. Specific-purpose grants are mostly capital grants for streets, rural infrastructure, and school rehabilitation (Lonita 2009).

For the subgroup, two-thirds of financing is received from transfers, mostly in the form of proceeds from shared taxes, and one-third from own-source revenues. There is no special treatment of metro areas in this group.

UNCOORDINATED/FRAGMENTED SINGLE-TIER GOVERNANCE

Twelve sample jurisdictions have a fragmented single-tier metro jurisdiction; that is, several local governments operate in a metro area without any formal coordination arrangements. There is wide variation in the role of central/state

TABLE 9.2

Grant financing under horizontally coordinated or fragmented metro governance (percentage of total revenues)

Metro area	Population (millions, most recent year)	Tax sharing (may include tax base sharing)	General-purpose transfers	Specific-purpose transfers	Total grants*	Total transfers**	Own-source revenues
Horizontally coordinated mandatory two-tier governance (n=3)							
Belgrade	1.7	41.5	9.0	0.1	9.1	50.6	49.4
Copenhagen	2.4		7.0	10.0	17.0	17.0	83.0
Skopje	0.5	50.0	5.5	3.7	9.2	59.2	40.8
Average	1.5	30.5	7.2	4.6	11.8	42.3	57.7
Horizontally coordinated voluntary two-tier governance (n=1)							
Helsinki	1.2				10.3	10.3	89.7
Uncoordinated two-tier governance (n=2)							
Bucharest	2.0	60.0	7.6	15.4	23.0	83.0	17.0
Chisinau	0.7	24.0	15.0	5.0	20.0	44.0	56.0
Average	1.3	42.0	11.3	10.2	21.5	63.5	36.5
Uncoordinated/Fragmented single-tier governance (n=12)							
Abuja	1.4		60.0		60.0	60.0	40.0
Cape Town	3.0		20.0		20.0	20.0	80.0
Chennai	6.3	24.0			10.0	34.0	66.0
Delhi	13.9	17.9			9.0	26.9	73.1
Hyderabad	4.1	25.0			15.0	40.0	60.0
Jakarta	18.9	46.3			0.0	46.3	53.7
Kolkata	15.0				58.4	58.4	41.6
Mexico	18.4		38.0	32.0	70.0	70.0	30.0
Milan	7.4				33.0	33.0	67.0
Mumbai	21.0				20.0	20.0	80.0
Pune	3.8				9.0	9.0	91.0
Washington, DC	5.0		12.0	14.0	26.0	26.0	74.0
Average	9.8	9.4			23.1	32.5	67.5

*Total grants refers to general-purpose plus specific-purpose transfers. **Total transfers refers to tax sharing plus total grants.

sources: Compiled by authors from various sources listed in the references, especially OECD (2001; 2003a; 2003b; 2004a; 2004b; 2004c; 2005a; 2005b; 2006a; 2006b; 2006c; 2007; 2008a; 2008b; 2009; 2010).

transfers in financing metro expenditures, with the Mexico City metropolitan region having the highest dependency on these transfers, and Pune, India, the least. It should be noted, however, that Mexico delivers a wider range of local services than does Pune. Jakarta is noteworthy for receiving only financing from shared taxes.

In the Mexico City metropolitan region, there are wide variations in the sources of finance of various jurisdictions. The Mexico Federal District finances 37 percent of expenditures from general-purpose transfers and an additional 19 percent from specific-purpose transfers; 44 percent of expenditures are self-financed. The municipality from the state of Hidalgo receives 27 percent of financing from general-purpose transfers, and 67 percent from specific-purpose and other transfers, financing 6 percent from own-source revenues. The Mexico state municipality receives 39 percent of financing as general-purpose transfers and 35 percent as specific-purpose or other transfers; the remaining 26 percent is raised from own-source revenues (OECD 2004b).

Chennai, India, has access to state tax sharing from entertainment tax, motor vehicle tax, and stamp duty surcharge. In addition, it receives general-purpose transfers based on formula allocation using a population and deprivation index. It also receives specific-purpose transfers for education and road maintenance (Sridhar et al. 2008a; Bandyopadhyay and Rao 2009).

Hyderabad, India, receives a state per capita grant that varies from Rs4 (10 cents) in the metropolitan city of Hyderabad to Rs202 (US\$5) for Alwal (Sridhar et al. 2008c).

Jakarta is a provincial city. It receives both the provincial and city share from central taxes. Provinces receive by origin 8 percent of PIT and 16 percent of property taxes, property transfer taxes, mining land rent, mining royalties, forestry license fees, and forestry royalties. Local governments receive by origin 12 percent of PIT, 64 percent of other taxes, and 32 percent of forestry royalties. Provinces receive by origin 3 percent of oil and 6 percent of natural gas revenues. Local governments receive by origin 6 percent of oil and 12 percent of natural gas revenues. It also receives compensation for public-sector wages. Just like any other small or large local government, it is also eligible to receive financing for its fiscal gap based on the difference in its revenues and fiscal needs, using population, per capita gross domestic product, a human development index, and a construction price index as need factors. However, Jakarta is considered to have a fiscal surplus and therefore receives no funds from the general-purpose gap-filling transfer. Local governments with below-average fiscal capacity are also eligible to receive specific-purpose transfers to meet education, health, infrastructure, and agriculture development needs. Again, Jakarta does not qualify (Shah 2012a).

Abuja, Nigeria, receives revenues from formula-based revenue-sharing transfers from a federal excess crude oil account, VAT, and sale of government properties (Elaiwu 2009).

Cape Town receives general-purpose formula-based transfers that incorporate such factors as proportion of relatively poor households, infrastructure deficiencies, and needs for a limited range of services (OECD 2008a; Steytler 2005).

Washington, DC, receives federal grant funds for Medicaid, community development, education, public welfare, and public safety (Gandhi et al. 2009).

No sample area receives special treatment for being a metropolitan area in this subgroup. For the subgroup as a whole, tax sharing finances about 10 percent of expenditures and grants, 23 percent; financing from the remaining 67 percent of expenditures comes from own-source revenues.

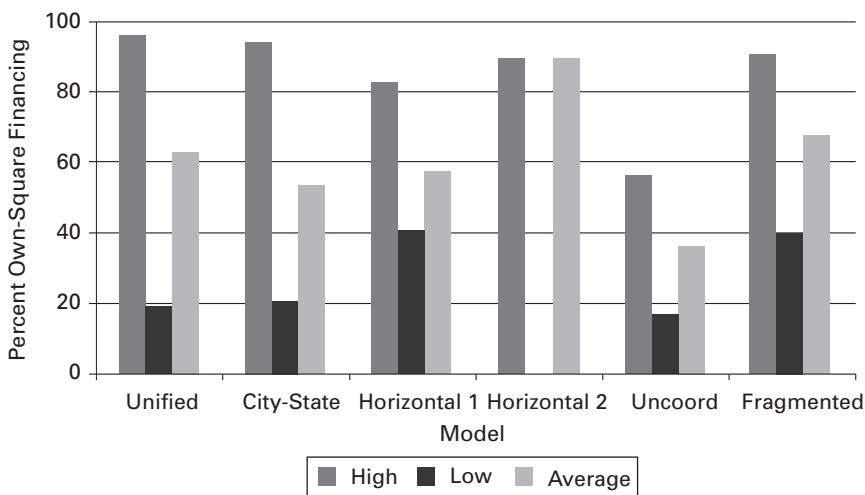
ALL METRO AREAS

There are significant across-group variations in own-source financing of metropolitan expenditures by type of metropolitan governance, with horizontally coordinated two-tier metro areas least dependent on higher-level transfers and metro areas with uncoordinated single-tier governance most dependent (see figure 9.1).

While this review has unearthed isolated examples of better practices in grant design (see box 9.1), an overall conclusion is that in designing transfers to finance metropolitan expenditures, almost all countries, industrial and developing alike, do not recognize the governance structure of metropolitan areas, their responsibilities, and their unique roles in national and global connectivity. The only exceptions are Denmark, Finland, and the Czech Republic. Although the composition of metropolitan finance differs significantly across different models of metropolitan governance, these differences could not be explained by the nature of the underlying governance structure.

FIGURE 9.1

Own-source financing of metropolitan expenditures by type of metro governance



Models: Unified and city-state: vertically coordinated governance; Horizontal 1, horizontally coordinated mandatory two-tier governance; Horizontal 2, horizontally coordinated voluntary two-tier governance; Uncoord, uncoordinated two-tier governance; Fragmented, uncoordinated/fragmented single-tier governance.

BOX 9.1

Better practices in grant financing of metropolitan areas

Better practices in grant financing of metropolitan areas are hard to find. A few exceptions are noted below.

One Size Does Not Fit All

One size fit all approaches to grant allocation lead to much complexity in allocation criteria and yield inequitable results, for example in Indonesia (Shah 2012a). Most countries adopt a one size fits all approach in grant allocation to local governments. Prague is the only metropolitan area receiving special treatment due to its size class in a general purpose transfer (revenue sharing) program. The formula used for revenue sharing from PIT and VAT in the Czech Republic assigns a differential coefficient for redistribution depending upon the size class of the municipality with the highest weight assigned to Prague (Kubatova and Pavel 2009). Denmark, Sweden, and Finland represent even better examples as they adopt a “one size does not fit all” principle in their central transfers to local governments and group local governments by size class and type of municipality in grant determination (Shah 2012b). Under such an allocation system, metropolitan areas receive more equitable access to central finances.

Grants to Promote Competition Among Local Jurisdictions

These grants create incentives for greater cost efficiency and access in public service provision through inter-jurisdictional competition. Only in two countries, Albania and Russia, do grant programs have incentive provisions for greater inter-jurisdictional competition. Albania provides capital grants for social and physical infrastructure to municipalities that can demonstrate that their proposed projects would have greater potential impact on economic and social development and poverty reduction with improved access to basic services. Projects with higher level of own or external financing and inter-municipal cooperation are given priority in grant allocation (Dhimitri, Ikonomi, and Dhuka 2009). Russia through its Regional Fiscal Reform Fund established in 2007 provides competitive grants to local governments for achieving pre-specified reform objectives (see Zinnes 2009).

Output-Based Grant for School Finance

Output based grants provide incentives for results based accountability while preserving local autonomy. Output based grants are not practiced anywhere but grant design in a few countries does create incentives for competitive service provision by public and private providers and albeit indirectly for better performance. Bangkok metropolitan area public and private schools receive central grant financing based on school enrollments. Somewhat similar practices prevail in Brazil (also for health finance), Canada (also for health finance), Chile (through a voucher program), and Australia (Shah 2010a; 2010b). In none of these countries are grant allocations directly linked to service delivery performance, yet parental choices on school enrollments reward better performing schools in all these countries thereby introducing competition and bottom-up accountability for results as schools experiencing higher enrollments receive higher grant financing.

Intermetropolitan and Intrametropolitan Equalization

Interjurisdictional equalization serves to equalize per capita fiscal capacity and compensate for differential fiscal needs arising from inherent disabilities so that there is reasonably comparable access to public services at reasonably comparable tax burdens across local jurisdictions. For an equalization program based on the solidarity principle, rich jurisdictions contribute to the pool and poorer jurisdictions receive financing from the pool. It is desirable that there should be a separate such program by size class and type of local jurisdictions. Only Denmark and Finland have such programs for metropolitan areas as a class (Shah 2010b; 2012b).

Tax Rebates by Origin of Collection

Tax rebates by origin provide incentives for local economic development. China returns 25 percent of VAT by origin to its local governments, including Shanghai and Beijing (Shah and Shen 2007).

Typology of Countries

The sample of 41 metro areas were divided into four country groupings, as discussed below (see table 9.3).

METRO AREAS IN TYPE I COUNTRIES

These are highly urbanized middle-income countries with low to medium rates of expansion of metropolitan areas in a context of slow to medium economic growth performance (mostly Latin America, Europe and Central Asia, and Middle East and North Africa). A review of 10 metro areas was conducted: Belgrade, Bucharest, Chisinau, Istanbul, Mexico City, Prague, Skopje, Tirana, Warsaw, and Zagreb. The population range for this sample is from 600,000 in Tirana to 18.4 million in Mexico City. Metro areas in this sample, with the exception of Mexico City, have extensive local and metropolitan service responsibilities.

Tax-by-tax sharing, especially for income and value-added taxes, with prespecified central-local shares, dominates central-local transfers. General-purpose central-transfers are formula based, transparent, and predictable, typically embodying one-size-fits-all formulas that do not recognize special needs of metropolitan areas. Metro areas are at a disadvantage for general-purpose transfers but are assured reasonable financing due to return of a fixed proportion of tax yields from major taxes by origin. Overall central-transfers inclusive of tax sharing finance 59 percent of metro expenditures (see table 9.3).

METRO AREAS IN TYPE II COUNTRIES

These are low- to medium-urbanized middle-income countries with rapidly growing metropolises in the context of high economic growth (mostly Asia). A review of 12 sample metro areas was conducted: Bangkok, Beijing, Brazil metro areas as a group (Rezende and Garson 2006), Chennai, Delhi, Hyderabad, Jakarta, Kolkata, Mumbai, Pune, Shanghai, and Yogyakarta. This represents a diverse sample, with Yogyakarta, population 2 million, as the smallest metro area and Mumbai, population 21 million, as the largest. There is also great diversity in the metropolitan service responsibilities, with Beijing and Shanghai having the status of provincial governments and having responsibilities for a wide range of metropolitan services; Chennai, Delhi, Hyderabad, Kolkata, Mumbai, and Pune being responsible primarily for municipal services; and Bangkok (provincial status), Brazil metro areas, Jakarta, and Yogyakarta having an intermediate range of metropolitan responsibilities.

Tax sharing and tax base sharing dominate for metro areas with wider powers, such as Shanghai and Beijing, and also those with an intermediate range of powers, such as Bangkok, Jakarta, and Yogyakarta. Specific-purpose transfers have greater prominence in financing Brazil metro areas that have intermediate range of local service responsibilities. Formula-based, one-size-fits-all, general-purpose transfers dominate for metro areas with constrained powers such as Indian metro areas. On average, transfers finance 43.2 percent of expenditures in sample metro areas.

TABLE 9.3

Summary statistics on grant financing of metropolitan areas, by country typology

Country grouping	Sample metro areas	Range of local government responsibilities	Population range	Tax sharing (%)	General-purpose grants (%)	Specific-purpose grants (%)	Total grants (%)*	Total transfers (%)**	Own-source revenues (%)
Type I: highly urbanized middle-income countries with low- to medium-metro and economic growth rates	10	Wide	600,000 (Tirana) to 18,400,000 (Mexico city)	38.6	14.0	13.9	27.9	59.0	41.0
Type II: low- to medium-urbanized middle-income countries with high metro and economic growth rates	12	Narrow to wider	2,000,000 (Yogyakarta) to 21,000,000 (Mumbai)	25.2	19.7	9.7	29.4	43.2	56.8
Type III: low- to medium-urbanized low-income countries with high metro but low- to medium-economic growth rates	4	Narrow	1.4 m, 1,400,000, (Abuja) to 3,100,000 (Addis Ababa)	0	NA	NA	23.2	23.2	76.8
Type IV: industrial countries	15	Wider	340,000 (Canberra) to 13,000,000 (Tokyo)	8.9	13.2	21.4	25.4	34.3	65.7
ALL	41		340,000 (Canberra) to 21,000,000 (Mumbai)	18.2	15.6	15.0	26.5	39.9	60.1

NA, not available or not applicable. All transfer figures are simple averages of sample metro areas expressed as percentages of total revenues.

*Total grants refers to general-purpose plus specific-purpose transfers.

**Total transfers refers to tax sharing plus total grants.

SOURCES: Compiled by authors from various sources listed in the references, especially OECD (2001; 2003a; 2003b; 2004a; 2004b; 2004c; 2005a; 2005b; 2006a; 2006b; 2006c; 2007; 2008a; 2008b; 2009; 2010).

METRO AREAS IN TYPE III COUNTRIES

This grouping of countries includes low- to medium-urbanized low-income countries with high rates of metropolitan growth but low to medium rates of economic growth (mostly Africa) and comprises the four metro areas of Abuja, Addis Ababa, Cape Town, and Pretoria/Tshwane. Population for sample areas ranges from 1.4 million in Abuja to 3.1 million in Addis Ababa. These metro areas have a narrow range of metropolitan responsibilities. Formula-based revenue-sharing general-purpose transfers, with a uniform formula for all local governments, dominate. These formulas work to the disadvantage of metro areas. Grants on average finance 23.2 percent of metro expenditures. While local taxes finance most of the expenditures, taxing powers of local governments are highly constrained.

METRO AREAS IN TYPE IV COUNTRIES

This grouping includes industrial countries. The sample includes 16 metro areas: Berlin, Bern, Brussels, Busan, Canberra, Copenhagen, Helsinki, London, Madrid, Melbourne, Milan, Montreal, Seoul, Toronto, Tokyo, and Washington, DC. Population range for this sample is from a low of 340,000 in Canberra to 13 million in Tokyo.

There is also wide diversity in the range of metropolitan responsibilities, with Busan, Helsinki, Seoul, and Tokyo (all with provincial status) at the high end of the spectrum and London and Melbourne at the lower end, with the rest of the sample in between these ranges. Metro areas at the upper end of the spectrum are largely self-financing and at the lower end are primarily grant financed. An extreme example is London, which had central transfers finance 81 percent of its expenditures during 2008–2009. For the sample as a whole, specific-purpose transfers with input conditionality dominate higher-level financing. On average, central and state transfers finance 34.3 percent of metro expenditures.

ALL COUNTRIES

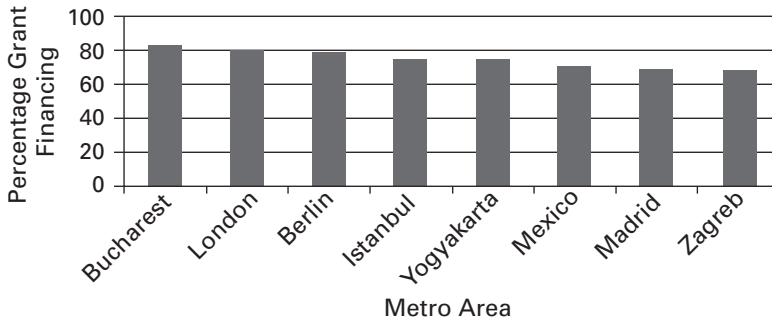
For the sample as a whole, there is great diversity in the range of metropolitan responsibilities shared by the metro areas, with Beijing, Busan, Copenhagen, Helsinki, Seoul, Shanghai, and Tokyo at the top of the totem pole and Melbourne and Indian metro areas such as Mumbai at the bottom end. For the sample average, tax sharing has a slight edge over general- and specific-purpose transfers. Nearly 40 percent of metro finances are from central transfers. Eight well-known metropolitan areas in our sample finance two-thirds of their expenditures from higher-level transfers, with Berlin, Bucharest, and London receiving about 80 percent of financing from such transfers (see figure 9.2).

CONCEPTUAL GUIDANCE VERSUS PRACTICE: NOTABLE POINTS OF DEPARTURE

Earlier sections highlighted conceptual considerations in the use of grant instruments. This was followed by a review of worldwide practices in grant financing of metropolitan areas. This section distills main points of departure of practice from the conceptual guidance.

FIGURE 9.2

Metro areas with more than 66 percent grant financing



SOURCE: OECD (various years).

One Size Does Not Fit All. The practice contradicts this and most countries treat metro governments in generic formula used for grant allocation to all local governments. But this introduces inequities and inefficiencies, as metro government fiscal needs are measured on a yardstick that includes small towns with widely divergent fiscal capacities and needs. This introduces injustice for metro areas, as they have both above-average fiscal capacities and above-average needs, yet they are treated as if they have above-average fiscal capacity and average need. Fair treatment of metro areas requires a metro grant strategy that considers governance, finance, and special needs of metro areas.

The Nature of Metropolitan Services Considered in Designing Grants and Other Instruments of Finance. The practice provides no evidence of this. In fact, the practice even in industrial countries often contradicts this. For example, metropolitan areas in Canada, the United States, the United Kingdom, and a number of developing countries, including India, use property taxes and input-based conditional grants for school finance, whereas, as noted earlier, surcharges on PITs and output-based grants are more suitable for school finance. The United Kingdom and the United States also use specific-purpose grants for financing police protection in metro areas, yet general revenues are a more suitable instrument of police finance. Grant financing is relevant for financing a fraction of police expenditures that have externality for national security. Matching capital grants with matching rates that vary inversely with fiscal capacity for financing school, health, and transportation facilities are rarely practiced. Museums, sports and fitness facilities, and concert halls are poor candidates for grant finance unless they serve national objectives, yet grant financing of such facilities is widely practiced. Benefit spillover compensation is rarely available to metro areas.

Model of Metropolitan Governance and Finance Matters for Grant Finance. An earlier section highlighted how the models of metropolitan governance and finance matter for type and tools of grant financing. No new evidence was discovered that such considerations entered into designing grant financing of metro areas in practice. This neglect is unfortunate, because a holistic view of metropolitan financing and the tools required for grant financing is not possible without explicit consideration of governance and finance arrangements. For example, in horizontally coordinated and uncoordinated metro governance, there is a need for intrametro equalization and use of competitive grants for enhancing competition, the two tools that are rarely practiced. Output-based grants could also be used to facilitate functional, overlapping, and competing single-purpose jurisdictions giving residents greater voice, choice, and exit options. If metro governance is fragmented due to monopoly single-purpose jurisdictions with preferred access to tax finance, then more funds have to be directed to municipal finance through equalization grants. Output-based grants would also serve important tools in ensuring equitable access in the event services are contracted out.

Keep it simple. This principle is frequently ignored in practice, especially in designing revenue-sharing and equalization grants. Multiple factors that work at cross purposes are introduced, leading to lower transparency, equity, and efficiency of allocations.

Keep a singular focus. Most general-purpose grant programs have multiple objectives and, as a result, are unlikely to achieve any of the specified objectives. Having each grant instrument focus on a single objective would enhance chances of success.

Avoid input-based (or process-based) or ad hoc conditional grant programs. These types of programs undermine metropolitan autonomy, flexibility, fiscal efficiency, and fiscal equity objectives. Specific-purpose transfers available to metro areas are mostly input-control conditional grants. The only exceptions are school transfers available to metro areas in Brazil, Canada, Chile, Colombia, Denmark, Finland, Sweden, and Thailand and health transfers in Brazil, Denmark, Finland, and Canada (see box 9.1).

Introduce results-based finance to incentivize excellence in service delivery performance. Output-based transfers are rarely practiced but hold great promise for improving metropolitan government performance and accountability while preserving local autonomy (see box 9.1).

Introduce sunset clauses and review provisions. This is not practiced anywhere in grants to metropolitan areas.

LESSONS FROM INTERNATIONAL PRACTICE AND AN AGENDA FOR REFORM

A review of worldwide practices leads to the following summary of grant financing of metro areas. Metro areas have large economic bases and therefore little a priori need for grant financing, yet they have strong dependence on central transfers. This is because highly constrained fiscal autonomy is given to these areas in most countries, especially developing countries, with the notable exception of metro areas in China. Such a strong reliance on transfers undermines local autonomy and local accountability. Only Busan, Cape Town, Copenhagen, Helsinki, Melbourne, Mumbai, Pune, Seoul, and Tokyo stand out as being largely self-financed metro areas. Tax base sharing is practiced in only a few metro areas such as Bangkok, Seoul, and Tokyo. Tax-by-tax sharing is widely practiced. Such a practice is helpful in ensuring transparency and predictability of transfers, yet it creates incentives for central tax administrators to give less effort to those taxes that it has to share with metro areas.

General-purpose transfers are formula based, transparent, and predictable, yet they discriminate against metropolitan areas because they utilize a one-size-fits-all (common) formula for all local governments, large or small. Such formulas typically incorporate equal per jurisdiction components that discriminate against large metropolitan areas. Compactness is rarely rewarded, and higher needs of metro areas for transportation, education, health, culture, and welfare go unrecognized. Specific-purpose transfers are typically ad hoc project-based transfers with input conditionality. Such transfers typically address higher-level mandates with inadequate financing. In general, specific-purpose transfers are intrusive, reward grantsmanship, and distort local priorities. Egregious examples of specific-purpose capital transfers can be seen in Bangkok, where central financing for a section of above-ground metro was withdrawn, leaving poles that support no rails, and in Jakarta, where external financing of the metro was blocked by the central government after the local government had already initiated construction, leaving an eyesore in its wake.

Only a handful of examples of results-based intergovernmental finance and of tournament-based approaches to encourage interjurisdictional competition were discovered in grant financing of sample metropolitan areas (see box 9.1). Grants to compensate metro areas for benefit spillovers are also not practiced. Overall emphasis in grant financing of metro areas remains in dealing with vertical fiscal gaps or project-based specific-purpose grants.

To ensure that metropolitan areas can play their dual roles in improving economic and social outcomes for residents, it is important to strengthen their fiscal autonomy while enhancing their accountability to local residents. This would be possible if metro areas have access to a wide array of productive tax bases, including income, sales, and environmental taxes and charges. Given the special needs of metro areas, it would be best to give a separate and distinct treatment of these areas in grant financing. Results-based grant financing of social and transportation services and tournament-based approaches to encourage interjurisdictional competition need to be given serious consideration to ensure metropolitan autonomy while

strengthening their citizen-based accountability. Incidentally, these reforms have less demanding data requirements than needed for traditional input-based conditional grants.

Overall, the practice of grant financing of metropolitan areas is at variance with the conceptual guidance in both industrial and developing countries. Such divergences represent important opportunities to reform metropolitan finances to enhance quality and access of metro services, as well as making metro governments more responsive and accountable to local residents in both developing and industrial countries.

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