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World Development Report

Office of the Vice President
Development Economics
The World Bank
September 1988
WPS 38

Background Paper for the 1988 World Development Report

Intergovernmental Grants in Developing Countries

Larry Schroeder

The method a central government uses to transfer funds to local jurisdictions can greatly affect a country's development efforts. But the effects of the transfers are seldom analyzed, resulting in intergovernmental grant systems that fail to achieve their desired objectives.

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A country's grant system is the product of its political environment. Such systems tend to develop over time in response to current political needs and then become institutionalized. Since they have developed in a haphazard fashion over time, grant "systems" commonly are not systems at all. Hard-pressed government ministries seldom undertake any thorough analysis of these arrangements, hence their overall impact is unknown in spite of the importance of this use of resources.

Grants from central governments become more important sources of local revenue as local governments are expected to play larger roles in the provision of public services.

Grants are used in hopes of achieving a wide variety of goals. One common rationale for intergovernmental grants is to redistribute national income or equalize living standards by helping governments deliver public services in economically depressed areas.

Since transfers may be seen locally as "costless" gifts from the higher level of government, there is little pressure on localities to mobilize resources of their own or to spend the funds efficiently. Few developing countries have the resources to conduct audits to ensure the accountability of local government spending.

The goal of assisting decentralized decision-making by transferring funds to local units can also conflict with the objective that central government revenues be spent efficiently. Decentralization implies local control over the use of funds; the desire for effective use of centrally collected funds calls for considerable oversight of local spending.

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Intergovernmental Grants in Developing Countries

by
Larry Schroeder

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INTERGOVERNMENTAL GRANTS IN DEVELOPING COUNTRIES

Larry Schroeder

Intergovernmental fiscal relations encompass a wide variety of issues including service responsibilities, revenue schedules, budget procedures, employment conditions, electoral processes and conduct of local officials. Yet, consideration of the transfer of financial resources between levels of government probably dominates both positive and normative analyses of intergovernmental affairs. Seldom are lower level governments fully self-financing and the flow of funds from higher levels can have significant effects on the spatial allocation and use of public sector resources as well as determine the fiscal viability of local jurisdictions.[1] Since economic development efforts are always dispersed spatially throughout a nation and oftentimes include a role for local government institutions, intergovernmental grant policies are commonly of considerable importance to the development efforts of higher levels of government; and since transfers may be one of the most important revenues of local jurisdictions, their financial health can be dramatically affected by these policies. The topic is, therefore, of considerable concern in all countries that rely upon multiple tiers of public sector institutions.

[1] Throughout this paper the terms higher level of government will refer generally to the central government in unitary states and either the central or second tier governments, i.e., provinces or states, in federal systems; likewise, lower level governments will generally refer to local governments or to provinces or states in federal systems.

This paper has several objectives. One simply is to review the size and trends in intergovernmental grant programs in a fairly large group of developing countries. In attempting to carry out such a review, however, it is necessary first to discuss what is meant by intergovernmental grants--a task complicated by the assortment of institutional arrangements used in developing countries for providing public services. The concepts and empirical importance of grants are considered in the following section.

A second purpose is to review the objectives of intergovernmental grant schemes and evaluate the instruments that might be used to accomplish these objectives. But just as there is a variety of institutional arrangements across countries, there is also a multiplicity of objectives commonly sought for intergovernmental grants. Furthermore, these objectives are not necessarily identical when viewed by the recipient and granting governments. The second section of the paper reviews the different transfer mechanisms available to granting governments and indicates how each may promote or may detract from these alternative objectives.

There can be considerable differences between the theoretical design of a grant system and the way it is actually administered. Not only are grant systems seldom designed in the way a public finance theorist might prescribe, actual practices often differ substantially from the statutory basis of the system. Finally, while the data are scanty, there have been several attempts to assess the effects of specific intergovernmental grant schemes on localities. The third section reviews these studies as well as those that describe the current intergovernmental transfer practices in specific countries.

The concluding section attempts to draw lessons from this review of intergovernmental grant theory and practice in the developing world. While some recommendations can be made, additional research on this important topic is in order.

Concepts of and Empirical Evidence on Intergovernmental Grants

Although much of this paper is concerned with the impact of grants on lower level governments, the ultimate purpose of such monetary transfers is to finance local public services. The issue facing these sub-national governments is obtaining the resources necessary to meet the many expenditure needs that the citizenry of the locality demand or that are mandated by the higher level of government. As the service needs of local areas expand due to increased population, rising prices or increased demands for public services, there are even greater pressures on the sub-national governments to increase spending.

There is only a finite number of sources from which lower level governments can derive funds. The locality may mobilize resources internally, primarily through the use of tax instruments or user charges, or it may derive revenues from external sources, especially via transfers from other levels of government or from loans. With increased spending needs, local governments must attempt to obtain greater yields from these several sources.

It is commonly anticipated that grants are likely to take on increased importance in the revenue structures of local governments over time.[2] Whether this has or will occur depends upon the income, population and inflation elasticities of grants vis-a-vis local taxes and user charges. Revenues from taxes which are most commonly reserved for local governments, e.g., property and local business taxes, generally are not found to grow automatically. Instead the structure of these levies often require discretionary changes in tax rates to realize revenue growth.[3] The same is generally true for user charges. Rather than attempt to impose politically unpopular tax increases, local leaders are likely to turn to higher level authorities and urge an increased flow of intergovernmental grants.

Whether or not such please are successful will depend upon political decisions made by the granting government. While there is little doubt that the fiscs of most developing countries are strapped for funds, it is also argued that higher level governments commonly retain broader-based, more elastic revenue sources for themselves.[4] If revenues do, in fact,

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[2]See, for example, Kenneth J. Davey, Financing Regional Government: International Practices and Their Relevance to the Third World (Chichester: John Wiley and Sons, 1983), p. 131.

[3]For a review of local revenue elasticity in developing countries, see Larry Schroeder and Elizabeth Dalton, "Local Government Tax Revenue Buoyancy and Stability in Developing Countries," Regional Development Dialogue, Vol. 7 (Autumn 1986), pp. 32-33.

[4]Davey, Financing Regional Government: International Practices and Their Relevance to the Third World. See, however, Edward B. Prantilla, "Financing Local and Regional Development: A Preliminary Survey of Comparative Performance of Selected Countries" (Nagoya: United Nations Centre for Regional Development, 1984), p. 52, who reports higher tax buoyancy coefficients for local than for central governments. The results probably reflect tax rate and base policy changes made by local governments rather than inherently more elastic revenue sources used by lower-level jurisdictions.

grow more rapidly at the center and if growing local spending requirements are to be met, there will be the need for increased flows of funds from higher to lower levels of government.

Whether or not grants have been taking on a more prominent role in developing countries during the recent past is an empirical; unfortunately, as is so often the case with financial information on local governments in developing countries, the data necessary to examine these trends are scarce. Furthermore, there are some important conceptual issues surrounding the definition of intergovernmental grants.

Measurement Issues

Since different revenue administration arrangements are utilized in developing countries, issues arise concerning what is, in fact, an intergovernmental transfer. Taxes imposed and collected by a local jurisdiction are most reasonably considered own source revenues even though it is often the case that lower level governments have no autonomy in determining the tax rates imposed or in defining the tax base. The issue is less clear cut when one level of government collects the tax and then distributes the proceeds to another governmental body. The International Monetary Fund, which probably provides the most extensive and complete set of data on public sector finances throughout the world, uses the following guideline:

> "...it may be useful to attribute tax revenues to noncollecting beneficiary governments (1) when they have exercised some influence or discretion over the setting of

> the tax or distribution of its proceeds; or (2) when under provisions of the tax law they automatically receive a given percentage of the tax collected or arising in their territory; or (3) when they receive tax revenue under a tax law leaving no discretion to the collecting government."[5]

Under this definition, revenues collected by the central government but transferred directly to the local government in which the revenues were collected are classified as tax revenues of the beneficiary (local) government rather than as an intergovernmental grant. Such tax sharing arrangements are quite common in developing countries, particularly because higher levels of government may be able to collect the tax more economically than can local governments. Such arrangements are in essence intergovernmental transfers since, most commonly, it is the higher level of government which unilaterally determines this tax sharing arrangement. Because of this definitional issue, comparisons of the role of grants across countries and even across time within a single country must be made cautiously.

Another conceptual issue that arises when making intercountry comparisons in intergovernmental transfers concerns the discretion which the local government has in spending the proceeds of the transfer. In some countries organizations called local governments are little more than agencies of the central government with all or nearly all public employees of these organizations being employees of the central government, with spending decisions made with little direct influence by locally-elected

[5] International Monetary Fund, A Manual on Government Finance Statistics, (Washington, DC: IMF, 1986), p.53.

officials and with little or no local discretion allowed in determining revenues. Again, the issue is not well-defined. While the most telling feature to distinguish regional and local governments from agencies of the central government is "autonomy", the various degrees of autonomy observed in different countries does not lead to a clear demarcation between subnational governments and deconcentrated agencies of the central government. Defining the flows of funds as intergovernmental transfers is, therefore, equally difficult.

These definitional issues are particularly troublesome in those countries with a francophone administrative tradition. While local jurisdictions exist, they are little more than administrative units. Tax revenues of the locality are collected by the central government, additional direct expenditures are made by the central government through these local governments and all or nearly all "local" employees are directly under the authority of the center. Still, there are instances where the local jurisdiction is expected to take on additional public service provision responsibility.[6]

Importance of Grants to Granting Governments

The role of grants can be measured in at least two different ways--with respect to the revenues of the recipient government and relative to total spending activity of the granting jurisdiction. While the former

[6] See, for example, Local Revenue Administration Project, Local Revenue Administration in Burkina Faso. Phase II. Final Report, Metropolitan Studies Program Monograph No. 17, The Maxwell School (Syracuse, NY: Syracuse University, August 1985 [revised January 1986]).

approach (discussed below) can provide a better perspective on the degree to which lower levels of government are fiscally dependent upon the actions of the granting government, the latter indicator suggests the willingness of the granting government to give up at least some control over the actual utilization of funds. The changing role of grants over time and in response to changing external economic and financial conditions can also provide some indication of the importance accorded to lower levels of government by the higher level.

While there are obviously weaknesses in the data due to nonuniformity in the meaning of grants across countries and due to the previously-noted problems associated with tax sharing arrangements, one reasonably consistent source of data is the Government Finance Statistics Yearbook of the International Monetary Fund. Table 1 displays the relative size of transfers (current plus capital) in total central government expenditures for both 1974 and 1984 in a nonrandom sample of 15 Third World countries. Shown also are the median percentages for each year and an indication of whether the percentages rose or fell during the period.

Drawing broad-based generalizable conclusions from such data is unwarranted due to the arbitrary choice of this small sample; it is also difficult because of the variability in the entries shown. The ratios range from 0.8-24.0 percent in 1974 and from 1.3-28.7 percent in 1984. Although the median percentages declined slightly, six of the individual countries reveal some increase in the relative importance of transfer programs.

TABLE 1

TRANSFERS TO OTHER LEVELS OF GOVERNMENT IN SELECTED COUNTRIES, 1974 AND 1984

Country	Transfers as Percent of Total Expenditures of Granting Government[a]			GDP Buoyancy Coefficients[b]
	1974	1984	Increase (+) or Decrease (-)	
Argentina	10.5	6.6	-	1.09
Bolivia	5.7	1.3	-	0.74
Botswana	6.9	8.4	+	1.49
Brazil	13.7	11.1	-	0.98
Chile	9.5	3.0	-	0.30
Indonesia	18.6	17.8	-	1.32
Kenya	7.0[c]	3.2	-	0.27
Korea	24.0	28.7	+	1.57
Malawi	6.5	6.5	o	1.37
Mauritius	3.8	4.1	+	1.96
Pakistan	8.3	9.8	+	1.52
Philippines	5.6	5.3	-	0.73
Thailand	13.3	3.5	-	0.16
Uruguay	0.8	1.7	+	2.03
Venezuela	12.8	13.2	+	1.37
Median	7.0	5.3		

[a]Central government transfers only; data exclude shared taxes.

[b]Computed as percentage change in transfers between 1974-1984 relative to percentage change in GDP.

[c]1975 data.

SOURCE: International Monetary Fund, Government Finance Statistics Yearbook, 1984 and 1986 (Washington, DC: IMF, 1984 and 1986).

One set of entries highlights the problem associated with the macro approach utilized here. By far the largest change in the relative importance of transfers was in Thailand where the percent of central government expenditures being allocated as transfers declined from over 13 percent to less than 4 percent. This large change was due to the fact that in FY 1981 the Government of Thailand shifted the responsibility for primary education from the local government to the center with an off-setting reduction in central-to-local government transfers.[7] Summary data as shown here mask such policy changes.

Another way to measure the relative importance of grants is to consider their importance within the context of the economy as a whole. Such a measure depends upon two factors--the relative importance of the granting government within the economy and the willingness of the granting government to allocate money through the grant system. The final column of Table 1 summarizes changes in these factors by displaying the buoyancy of transfers (as measured by the IMF) relative to GDP. The entries are buoyancies since they do not necessarily reflect <u>automatic</u> changes in transfer programs in response to changes in GDP; instead, <u>discretionary</u> choices regarding both the size of government and the relative importance of grants each partially caused the changes. Entries greater than unity indicate that grant programs were growing more rapidly than GDP while

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[7] The World Bank, <u>Thailand: Managing Public Resources for Structural Adjustment</u> (Washington, DC: The World Bank, 1984), p. 73.

entries less than one suggest a lessening importance of grants in these economies.

The results again are mixed and, as would be expected, the bulk of the entries correspond to the changes in the relative importance of grants as indicated in the third column of the table. Yet, the 1.09 buoyancy coefficient in Argentina, in spite of the decline in relative importance of transfers, indicates that government expenditures, as a whole, were increasing sufficiently faster than GDP such that the smaller proportion of government spending devoted to grants could still result in an increase in the relative importance of grants in the economy. A similar result is found for Indonesia. Still, the range of coefficients from Thailand's 0.16 to the 2.03 of Uruguay, illustrate the considerable variability in the flow of transfer revenues over time.

Importance of Grants to Recipient Governments

Perhaps the more common way of thinking about the importance of intergovernmental transfers in a developing country is to measure the proportion of grants relative to total revenues or expenditures of recipient governments. Such proportions indicate the extent to which the lower governments are at risk to unilateral decisions made by the granting government to alter the flow of revenues. It is sometimes also argued that the relative importance of grants to local governments are indicative of the degree of autonomy which the lower level governments have and, hence, constitute indicators of decentralization.[8] The underlying assumption in

[8] See, for example, W.S. Kee, "Fiscal Decentralization and Economic Development," Public Finance Quarterly (January 1977), pp. 79-97; Roy Bahl and Shyam Nath, "Public Expenditure Decentralization in Developing

such an argument is that when a recipient government depends heavily upon transfers, greater control can be maintained over local governments' decisions. While there is little doubt that grants provide the potential for considerable fiscal control by the granting government, simple proportions ignore the types of grants used, some of which provide more control than others (see below). The assumption also ignores the fact that other factors, such as expenditure mandates and control over personnel decisions, also can play especially important roles in local government decision making.

So as to provide some comparative perspective across several countries, Table 2 has been constructed from the IMF Government Finance Statistics data for both 1974 and 1984. Since shared taxes are not included in the transfers, the data do not fully reflect the flow of revenues under considerable direct control of the central government. Because lower level governments can include both local jurisdictions and intermediate level jurisdictions such as states or provinces in federal systems, we distinguish between them wherever available. Again, the sample was chosen arbitrarily based primarily upon data availability.

Again, the results do not suggest overwhelming evidence that there have been significant increases or decreases in the role of intergovernmental transfers in developing nations nor that there is any

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Countries," Environment and Planning, Vol. IV (1986), pp. 405-418; or Michael Wasylenko, "Fiscal Decentralization and Economic Development," Public Budgeting & Finance, Vol. 7, No. 4 (Winter 1987).

TABLE 2

TRANSFERS AS A PERCENT OF RECIPIENT GOVERNMENT EXPENDITURES, SELECTED COUNTRIES 1974 AND 1984

Country and Level of Government[a]		1974	1984	Increase (+) or Decrease (-)
Bolivia	State	na	8.9	na
	Local	na	43.3	na
Brazil	State	19.6	16.5	-
	Local	60.5	62.8	+
India	State	32.7	33.0[b]	+
Indonesia	State	81.3[c]	95.9	+
Kenya	Local	22.6	46.3[b]	+
Korea	State	50.0	na	na
	Local	81.7	na	na
Malawi	Local	45.0	26.8[d]	-
Mauritius	Local	67.2	84.8	+
Philippines	Local	na	41.7	na
Thailand	Local	71.8	43.2	-
Tunesia	Local	33.9	42.1	+
Uruguay	Local	12.3	8.5	-
Venezuela	Local	55.9	na	na

[a]The term "state" is used to refer to an intermediate level of government, e.g., province or state.

[b]1983 data.

[c]1975 data.

[d]1981 data.

SOURCE: International Monetary Fund, Government Finance Statistics Yearbook, 1984 and 1986 (Washington, DC: IMF, 1984 and 1986).

uniform reliance upon higher levels of government to finance lower level spending. The majority (six) of the ten entries show increases in proportions with the large decline in the Thailand percentage attributable to the previously noted change in education finance.

Greater information, albeit less convenient for comparative purposes, can be obtained in studies of local government finance within individual countries. Using such data sources does, of course, produce a potential bias since the very fact that transfers are sufficiently important to study will likely mean that the role of grants is greater than would be found in a random sample of countries. Nevertheless, some interesting trends can be observed from such a nonrandom sample.

A variety of data that indicate the relative fiscal importance of grants and shared taxes in ten selected countries for different years and different levels of government are displayed in Table 3. The data for India reveal increased reliance upon shared taxes at the state level during the last half of the 1970s with approximately constant reliance upon grants. At the city level in India, grants and shared taxes are observed to constitute only slightly more than one-quarter of total revenues; however, this reliance upon transfers is greater in the smaller urban jurisdictions. Furthermore, during the 1974/75 - 1979/80 period, real per capita grants to metropolitan local governments in India grew at an average rate of 9.3 percent whereas in the smaller cities the growth rate was 19.0 percent suggesting either a lack of local revenue buoyancy in smaller

TABLE 3

INDICATORS OF IMPORTANCE OF INTERGOVERNMENTAL TRANSFERS TO RECIPIENT GOVERNMENTS, SELECTED COUNTRIES, VARIOUS YEARS

Country	Years	Indicators	Source
India			
States	1974/75	Shared taxes = 19 percent revenues (excluding borrowing); Grants = 16 percent revenues (excluding borrowing)	Gandhi
	1981/82	Shared Taxes = 24 percent revenues (excluding borrowing); Grants = 14 percent revenues (excluding borrowing)	
Cities	1979/80	Grants or shared taxes = 27 percent of recurrent revenues; 16 percent in large (> 1 million) cities; 31 percent in other cities.	World Bank (1984)
Nepal Rural Districts (n=8)	1985/86	Shared taxes = 22.3 percent of total revenues Grants = 71.1 percent of total revenues	Schroeder and Wozny
Pakistan			
Rural Districts	1983/84	Grants as Percent of District Revenues Baluchistan: 40.6 NWFP: 25.6 Punjab: 1.2 Sind: 14.1	Schroeder (1987)
Provinces	1984/85	Federal tax assignments and grants as percent of current Provincial receipts Baluchistan: 93.4 NWFP: 85.2 Punjab: 71.8 Sind: 69.9	World Bank (1986)
Bangladesh			
Districts	1980/81	Shared taxes = 49.4 percent of total revenues Grants = 34.1 percent of total revenues	Bahl
Cities	1982/83	Shared taxes = 3.7 percent of total revenues Grants = 32.3 of total revenues.	Schroeder (1985)
Malaysia			
States	1981	Federal grants = 28 percent of total revenues	Gandhi
Municipalities	1980	Grants = 36 percent of total revenues	Rashid
Districts	1980	Grants = 54 percent of total revenues	Rashid

TABLE 3 (CONT.), Page 2

Country	Years	Indicators	Source
Indonesia			
Provinces	1982/83	Transfers = 74.8 percent of total routine revenues	Schroeder (1987)
		Transfers = 65.5 percent of total development revenues (excluding loans)	
Regency and Municipal	1982/83	Transfers = 66.8 percent of total routine revenues	
		Transfers = 53.4 percent of total development revenues (excluding loans)	
Kc. a			
All Local Government	1982	Local shared taxes = 20.8 percent of total revenues	Ahn
		Subsidies = 21.4 percent of total revenues	
Mexico			
States	1975	Revenue Sharing = 17.5 percent of total revenue	World Bank (1987)
	1984	Revenue Sharing = 62.8 percent of total revenues	
Municipalities	1975	Revenue Sharing = 18.1 percent of total revenues	
	1984	Revenue Sharing = 62.9 percent of total revenues	
Ecuador			
All Local Government	1971	Transfers = 33.3 percent of expenditures	Greytak and Mendez
	1975	Transfers = 53.4 percent of expenditures	
	1980	Transfers = 76.6 percent of expenditures	
	1984	Transfers = 72.1 percent of expenditures	
Nigeria			
States	1976/77	Shared taxes = 47 percent of total revenues	Gandhi
		Grants = 40 percent of total revenues	
	1981	Shared taxes = 68 percent of total revenues	
		Grants = 24 percent of total revenues	

TABLE 3 (CONT.), Page 3

SOURCES: Choong Yong Ahn, "Financing Local and Regional Development: The Case of the Republic of Korea," Paper presented to the Workshop on Financing Local and Regional Development (Nagoya: UNCRD, 1984).

Roy Bahl, "Intergovernmental Grants in Bangladesh," Metropolitan Studies Program Occasional Paper No. 87, The Maxwell School (Syracuse, NY: Syracuse University, May 1984).

Ved P. Gandhi, "Tax Assignment and Revenue Sharing in Brazil, India, Malaysia and Nigeria," in Tax Assignments in Federal Countries, ed. by Charles McLure, Centre for Research on Federal Financial Relations (Canberra: Australian National University, 1983), pp. 328-359.

David Greytak and Victor Mendez, "The Impact of Intergovernmental Grants on Local Governments in Ecuador: A Study of FONAPAR," Metropolitan Studies Program Occasional Paper No. 106, The Maxwell School (Syracuse, NY: Syracuse University, September 1986).

Mohamed Zakri bin Abdul Rashid, "Structure and Utilization of Intergovernmental Fiscal Transfers in Malaysia," Paper presented to Meeting on Financing Local and Regional Development (Nagoya: UNCRD, 1986).

Larry Schroeder, Rural Development Grants to Local Governments in Asia, Metropolitan Studies Program Monograph No. 19, The Maxwell School (Syracuse, NY: Syracuse University, March 1987).

Larry Schroeder, "Bangladesh: Urban Government Finance and Management Issues and Opportunities," Report No. 5790-BD, Urban and Water Supply Division, South Asia Projects Department (Washington, DC: The World Bank, June 1985).

Larry Schroeder and James Wozny, "Financing Rural Local Panchayats in Nepal," Metropolitan Studies Program Occasional Paper No. 109, The Maxwell School (Syracuse, NY: Syracuse University, August 1987).

World Bank, "Financing Urban Services in India," South Asia Urban and Water Supply Department (mimeo) (1984).

World Bank, "Financing Pakistan's Provincial Services: Trends and Issues," South Asia Programs Department (mimeo) (1986).

World Bank, "Mexico: Financing States and Municipalities, Trends, Issues and Recommendations," Mexico Programs Division, Urban Projects Division, Latin America and the Caribbean Regional Office (mimeo) (1987).

cities or a policy commitment by the overlying state governments to support these smaller jurisdictions.[9]

The Nepal data are drawn from a small sample of eight rural district panchayats. The sum of grants and shared (land-based) taxes constituted over 90 percent of the total revenues in these rural districts that represent both terai and hill areas. Obviously, very little reliance is placed on own-source revenue mobilization in these jurisdictions.

The Pakistan data are shown for both rural local governments (districts) and provinces. The district-level data emphasize the fact that under a federal system each individual province determines its own intergovernmental relations. Districts in the two less developed provinces--Buluchistan and the North West Frontier Province (NWFP)--rely considerably more on the provincial level of government than is the case in the more highly developed provinces. Similar differences are observed when the importance to provinces of federal tax shares and grants from the federal to provincial levels of government are considered. Again, subnational governments in the less developed areas of the country are not required to mobilize as much of their own revenues as are higher income and more urbanized regions.

Districts in Bangladesh are shown to rely upon the shared property transfer tax to provide them with nearly one-half of total revenues with grants providing an additional one-third. Reliance upon grants,

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[9]The World Bank, "Financing Urban Services in India," South Asia Urban and Water Supply Department (mimeo), 1984.

particularly shared taxes, in a sample of Bangladesh cities is seen to be relatively less. The overall patterns suggested from these data obtained from South Asia suggest an inverse relationship between development or economic base and reliance upon the financial support from higher levels of government. Larger cities in India rely less heavily upon such transfers; poorer localities in Pakistan are supported more heavily by the overlying province; and rural districts in Bangladesh are provided a greater proportion of their total revenues than are their urban counterparts.

A similar pattern is found in Malaysia. States are shown to derive 28 percent of their revenues from grants; transfers provided 36 percent of municipal revenues and over half of rural district revenues.

Of all the country data reviewed in the table, those for Indonesia show both the provinces and regencies (districts) and municipalities to rely most heavily upon grants. Grants are provided for both development spending and recurrent expenditures, including all personnel spending. Hence, if reliance upon transfers from higher levels of government is used as an indicator of centralization, Indonesia must be concluded to be one of the most centralized states represented here.

The data for Korea suggest that local governments in that country are relatively more self-reliant than many of the other countries represented here. The degree of fiscal independence is, however, greatly affected by the fact that both Seoul and Busan are reported to raise over 90 percent of their revenues from own-sources compared with only approximately 30 percent in other provinces and counties.[10] Furthermore, the central government retains considerable control over the activities of local governments, including personnel appointments and monitoring of the budgetary process.[11] This is a good example of the potential misleading conclusions that can be reached if simple proportions of total revenues derived locally are used as the sole measure of the amount of fiscal autonomy enjoyed by local jurisdictions.

Data from both Mexico and Ecuador reveal extremely large increases in the reliance of local governments on transfer revenues. The proportion of total revenues derived from transfers to both states and municipalities in Mexico increased from less than one-fifth to over three-fifths during the ten years from the mid-1970s through the mid-1980s. These changes resulted from the 1980 Law of Fiscal Coordination which provided additional shared revenues in exchange for changes or even elimination of certain previously-used local revenue sources. Since the shared revenues were tied to relatively elastic revenue sources, they provided subnational governments with a more buoyant revenue base. The growth in shared revenues has, however, also resulted in a decline in the fiscal autonomy of local

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[10]See Choong Yong Ahn, "Financing Local and Regional Development: The Case of the Republic of Korea," Paper present to the Workshop on Financing Local and Regional Development (Nagoya: United Nations Centre for Regional Development, 1984), p. 38.

[11]Dong Hoon Chun, Hyung-Hwan Kim and Kyu Sik Lee, "Fiscal Performance of Local Governments in the Seoul Region: Implications for Urban Deconcentration Policies," Discussion Paper, Report No. UDD-88, Water Supply and Urban Development Department, Operations Policy Staff (Washington, DC: The World Bank, 1985).

jurisdictions and has put them at greater financial risk to financial problems at the central government level.[12]

The Ecuador data also show extremely large increases in the reliance upon grants. In the Ecuador case, however, the growth occurred primarily during the 1970s with the proportions leveling off since then. While not necessarily tied to macro economic conditions, it is interesting to note that both Mexico and Ecuador benefited from the petroleum boom during the late 1970s. The fiscal condition of the granting government is certain to have some impact on its willingness to transfer revenues to subsidiary jurisdictions.

Nigeria, another oil-producing nation, similarly increased the reliance of states on revenue transfers in the form of shared taxes. The role of grants, however, declined during the late 1970s. As in the case of Mexico, the changes observed were primarily due to legislative changes introduced during the latter half of the 1970s. As of 1975 revenue sharing on the basis of derivation of tax revenues was diminished in importance; in return, the national government increased contributions to the Distributable Pool Account (DPA).[13] Subsequently, a new 1979 constitution

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[12] See The World Bank, "Mexico: Financing State and Municipalities, Trends, Issues and Recommendations," Mexico Programs Division, Urban Projects Division, Latin America and the Caribbean Regional Office (mimeo), 1987.

[13] Wilfred A. Ndongko, "Revenue Allocation and the Stability of the Nigerian Federation," Public Administration and Finance (April-June 1981), pp. 151-164.

gave additional taxing powers to the national government which left the state governments with only residual tax opportunities.[14]

While the evidence is not overwhelming, this review of country-level data regarding reliance of subnational governments on intergovernmental transfers reveal the following: no conclusion can be reached concerning trends in the relative importance of grants in the revenue structure of local governments; in some countries grant shares have risen whereas in others they have fallen;[15] grants do not command an extremely important role in the overall spending decisions of most developing countries, public expenditure allocations are still principally determined through direct expenditures; and there appears to be a concern on the part of granting governments to provide greater proportions of revenues to those governments which may be believed to have smaller revenues bases.

While grant allocations measured as a proportion of total revenues may suggest that granting governments favor jurisdictions that have difficulties mobilizing resources of their own, it does not follow that the flow of funds to such jurisdictions is necessarily larger. For example, the primary general revenue grant provided to local governments in the Philippines, the Bureau of Internal Revenue Allotment, constituted 24.2

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[14]Margaret T. Okorodudu, "Nigeria: Analysis of Federal and State Taxing Powers," International Tax Journal, Vol. XI (Fall 1985), pp. 305-326.

[15]A similar lack of uniformity in trends concerning the relative fiscal roles of central and subnational governments in industrialized countries is documented by Roy Bahl, "The Design of Intergovernmental Transfers in Industrialized Countries," Public Budgeting and Finance, Vol. 6, No. 4 (Winter 1986), p. 5.

percent of revenues in Philippine cities (exclusive of those in Metropolitan Manila) in 1977 and 35.2 percent of revenues in a sample of 98 municipalities. But since total revenues were considerably greater in the cities, the per capita allocations amounted to an average of 13.45 pesos to city dwellers and only 6.24 pesos to rural residents. This was in spite of the fact that per capita personal incomes in cities was generally greater than in rural areas.[16] One implication from this variety of findings is that grant systems are designed with several objectives in mind. It is to that topic we now turn.

Objectives and Types of Grants

There is a variety of criteria against which grants schemes can be evaluated. There is also a variety of different grant instruments used. Each is considered here.

Objectives

The criteria of revenue adequacy and growth, allocative efficiency, equity, administrative costs and political acceptability are commonly used to evaluate tax instruments.[17] Grants, too, can be evaluated according to these objectives, although, as is noted in several instances, the degree to which these objectives are fulfilled will depend greatly upon whether the recipient or granting government is conducting the evaluation.

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[16] See Roy Bahl and Larry Schroeder, "Local Government Structure, Financial Management and Fiscal Conditions," in Local Government in the Third World: A Case Study of the Philippines, ed. by Roy Bahl and Barbara D. Miller (New York: Praeger Publishers, 1983), pp. 1-45.

[17] Davey, Financing Regional Government.

Revenue Adequacy and Growth. In the previous section data regarding the relative size and growth rates in revenues from grant programs were shown. Whether or not the allocations are, somehow, adequate is, of course, nearly impossible to ascertain. One approach would be to allow recipient governments to put forward requests for funds and observe if these requests are granted; however, the resulting allocations will likely depend more on the ability of the local government to present its argument and on its political clout at the granting government level than on any real level of need. Another approach is determination of needs based upon objective criteria.[18] While such allocation mechanisms may be based on a complex basis using a large set of criteria, data restrictions in most developing countries generally limit the use of this approach.[19] It is, however, common to base allocations at least partially upon "need" when it is approximated by the size of the population residing in the regional government or by one or two additional factors such as miles of

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[18]This approach to developing grant allocations is discussed in R.J. Bennett, Central Grants to Local Governments (Cambridge: Cambridge University Press, 1982), Chapter 9; Richard Jackman, "Estimating Expenditure Need: The Use of Regression Analysis in England and Wales," in Measuring Local Government Expenditure Needs, ed. Cameron and Lotz, pp. 21-38 and Joegen Lotz, "Social Needs Equalization: The Distribution of General Grants to Local Governments in Denmark," in Measuring Local Government Expenditure Needs, pp. 39-56.

[19]One attempt at designing a "needs" based allocation mechanism was carried out by West Bengal Municipal Finance Commission. For a discussion of the recommendations of that Commission see, Abhijit Datta, State-Municipal Fiscal Relations: A Comparative Study of Australia and India, Research Monograph No. 37 (Canberra: Centre for Research on Federal Financial Relations, The Australian National University, 1982).

road or area covered by the local jurisdiction. This still does not, however, insure that the resulting allocations are "adequate."

It is also desirable for grant allocations to grow over time so as to permit local spending to respond to increased demands due to larger populations, higher prices and increased needs. Closely related to the growth criteria is the corollary that these increases in revenues be regular and not fluctuate wildly from year-to-year.[20] As most observers of intergovernmental relations have emphasized, grant allocations are ultimately a political decision.[21] While all public sector fiscal decisions, e.g., changes in local tax rates, or user fees, are political in nature, intergovernmental grants decisions are seemingly much less controllable at the local level. As such, ad hoc changes in allocation mechanisms may occur on what seems at the local level to be a random basis. This has led Bird to argue that "fiscal transfers in many developing countries probably constitute one of the least reliable sources of local revenues."[22] Observations documented in the following section tend to confirm this statement.

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[20]The issue of revenue instability in developing countries is considered in more detail in William Duncombe and Larry Schroeder, "Tax Instability in Developing Countries and its Effect on Budgeting and Financial Management," International Journal of Public Administration Vol. 11, No. 3 (1988): 271-309.

[21]See, for example, Richard Bird, Intergovernmental Fiscal Relations in Developing Countries, Staff Working Paper No. 304 (Washington, DC: The World Bank, 1978); and B.C. Smith, Decentralization: The Territorial Dimension of the State (London: George Allen and Unwin Publishers, Ltd., 1985).

[22]Bird, Intergovernmental Fiscal Relations in Developing Countries, p. 75.

Allocative Efficiency. One principle economic justification for intergovernmental grants is to help overcome "spillover" effects associated with governmental services. Just as the normative competitive market model calls for governmental intervention to produce allocative efficiency in the face of externalities, the extension of this model to the governmental sphere requires intervention in the determination of local government services that produce interjurisdictional externalities. For example, intergovernmental transfers to localities to treat effluents that would otherwise be dumped directly into a stream and negatively affect downstream communities is an example of using the grant system to overcome spillover effects. Similarly, rural development grants that encourage specific types of spending which are expected to increase overall productivity and, hence, the country's economic growth have effects beyond the localities themselves.

This general desire for allocative efficiency raises corollary issues concerning the effects of grants on local government behavior. While the goal of altering local government spending to overcome spillover effects is easily stated, ensuring that it works requires further investigation into the reactions of localities to such transfers. Several responses to grant programs are possible and are likely to differ depending upon the structure of the transfer scheme. An increased flow of grants may simply result in an equal decline in own source revenue effort on the part of local jurisdictions without any reallocative efficiency achieved. The nature of the grant programs may be such that, to the extent that local taxpayer/citizens see the transfers essentially as "costless", there will be little pressure on local officials to spend the funds efficiently. While mandates, rules and audits may be used to avoid these potential undesirable effects of grants, few developing countries have the resources to insure local government accountability. Finally, the hoped-for effect of grants to achieve allocative efficiency also alters budgetary choices that otherwise would have been made locally. Where revenues are fungible, such outcomes are not guaranteed. On the other hand, it may be the case that the spillover effects of aided functions are not significant; altering budget choices away from their locally optimal allocations can, in such instances, result in a welfare loss to the locality that is greater than the increase in welfare enjoyed by the rest of the nation.

Distributional Equity. Perhaps the most commonly stated rationale for intergovernmental grants in low income countries is to achieve some sort of redistribution. Economically depressed localities are often seen as being unable to raise revenues sufficient to meet the many spending demands placed upon them (ironically, demands often mandated by the higher level of government). In such instances some form of "equalizing" grant is in order.

A question that immediately arises concerns what is to be "equalized." One view would be that the capacity of local governments to finance some level of services ought to be similar across jurisdictions. A second view is that spending "needs" should be the focus of the grant distribution objective with those communities experiencing greater need, somehow defined, receiving larger allocations of funds. The first of these views concentrates on revenue mobilization ability; the second emphasizes service provision. These two views may result in rather different sectoral allocations of grant monies--specifically differential treatment of rural and urban communities. Revenues may more easily be mobilized in urban areas due to the availability of more convenient tax "handles", e.g., business transactions and a more monetized economy. The capacity criterion might then lead to greater allocations of grants to rural communities which are less capable of raising their own revenues. Urbanization, on the other hand, may be argued to produce major public sector spending needs, e.g., for water, sewer, drainage, and transportation services, not as pressing in rural areas. Under the needs criterion greater allocations would be diverted to urban areas.

In spite of the often-stated concern for redistributional equity, neither approach is commonly implemented in any systematic way in developing countries due to the paucity of data available to measure either fiscal capacity or the even more elusive measures of "need". While income may be the most general indicator of a local government's capacity to raise revenues, seldom are such data available on a reasonably current basis. Similarly, only the relatively crude indicators of "need" mentioned above in the discussion of revenue adequacy, e.g., population, miles of road or area, are commonly available in developing countries. To supplement these measures, even more subjective indicators of "backwardness" or "special circumstances" are sometimes used (or purportedly are used) to achieve the equity objective.

Two additional factors regarding redistributional equity should also be recognized. Whereas the equity goal commonly sought in intergovernmental grant programs suggests that, if attained, low income persons will be benefited, that result is not necessary even if a well-defined and workable allocation mechanism is devised. Local government services may be highly biased towards the wealthier, politically more powerful segments of the population. Hence, expecting grants to achieve broad-based income redistributional goals is not realistic. Furthermore, redistribution implies some knowledge of the sources of funds used in the grant schemes. Seldom, if ever, are such broad incidence considerations factored into the pursuit of equity

Administrative Ease. Just as all taxes cannot be effectively administered at low cost, alternative kinds of grants require differential amounts of administrative oversight and compliance costs. Administrative complexity, and therefore administrative costs, are likely to be greater when the grant programs are designed to achieve other kinds of goals or to avoid particular undesirable effects. For example, a lump sum transfer of money without any strings attached to its use (other than, perhaps, normal auditing to insure avoidance of fraud and abuse) requires few administrative inputs on either the part of the granting or recipient governments. Such schemes, however, are much less likely to achieve particular reallocation objectives than are the more expensive to administer grants that are mandated to be spent for particular purposes; even greater are the administrative costs of capital spending grants that are allocated only after the project has been approved by the granting agency in an attempt to insure effective use of the funds. Similarly, a flat equal allocation of money to all jurisdictions, as was used for at least two years in the rural development grant program in Bangladesh, requires much less administrative input than do formula grants involving several needs or capacity indicators; these administrative savings were achieved, however, only at the cost of distributional equity.

Political Feasibility. Intergovernmental grant programs are, ultimately, always political instruments. They are also perhaps more politically sensitive than any other budgetary decision made at the granting jurisdiction level since they are seen to most directly affect local taxpayer/service beneficiaries. While spatial and sectoral allocations of central ministry budgets can greatly affect individual service levels, they can be much more easily "hidden" in the detail of a complex central government budget. This is not the case for allocations to individual jurisdictions. They are explicit; furthermore, in a decentralized governmental environment, individuals may feel they can have a greater say in the use of these funds. Hence, an attempt to restructure the transfer system is very likely to face strong political opposition unless many jurisdictions can be shown to gain or at least not to lose from the reform. In fact, developed countries face similar political constraints--witness the common use of "hold-harmless" provisions (provisions insuring that no jurisdiction will lose revenues) in state-level grant programs in the United States.

Because of the sensitive political nature of grant programs, seldom are the systems designed exactly as an apolitical analyst might. Instead, the "systems" tend to be built up over the years in response to particular political pressures so that commonly they do not resemble systems at all but, instead, become a hodge-podge of transfer schemes with no apparent set of explicit goals.[23] Furthermore, in some countries, e.g., Nepal and Pakistan, national level politicians, e.g., members of parliament, are provided with "grants" which can be used for pet projects within the districts they represent. Even though these projects may not differ substantially from projects undertaken by local governments, there is often no attempt to coordinate projects undertaken with these funds with ordinary local government projects nor is there any concern for longer term maintenance needs associated with these schemes.

Other Goals. Sometimes grant programs have explicit goals other than those noted above. For example, grants to certain rural local governments in the Punjab Province of Pakistan are justified on the grounds that by improving the infrastructure of these areas, there will be less rural-to-urban migration.[24] Although this rationale may lie behind other grant schemes biased in favor of rural areas, the Pakistan case is one instance where this goal has been made explicit. Since it has been in effect for only a short period of time, it is too early to tell whether it has been effective; nevertheless, unless these grants are accompanied by significant increases in employment opportunities, such infrastructure development is unlikely to be effective at stemming urban migration.

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[23]The non-systematic nature of grant programs in many developing countries is emphasized in Bird, Intergovernmental Fiscal Relations in Developing Countries.

[24]Larry Schroeder, Rural Development Grants to Local Governments in Asia, Metropolitan Studies Program Monograph No. 19, Local Revenue Administration Project, The Maxwell School (Syracuse, NY: Syracuse University, March 1987).

Rural employment is also commonly stated as a goal of rural development grant programs, e.g. in both Bangladesh and Indonesia. The employment goal provides a bias in favor of infrastructure projects that are labor intensive and, therefore, may result in a set of projects that do not yield the most efficient use of funds when viewed locally. It is also questionable whether such activities are effective at redistributing income to low income unemployed persons or have a significant effect on national unemployment.

A final issue that sometimes is raised with regards to grant financing is its effect on efforts to decentralize decision-making power. While this goal is generally associated with the allocative efficiency criterion mentioned previously, it deserves special attention due to the emphasis which decentralization is often given in developing countries and the potential conflicts between central government financing of local government activity and decentralization. The issue centers on the degree of local autonomy that is possible when a significant portion of funds are being provided from higher levels of government. While certain types of grants (discussed below) provide greater local autonomy than do others, fiscal responsibility by granting governments requires that some concern be given to how grant proceeds are spent by recipient jurisdictions. The issue then is one of finding a balance between maintenance of fiscal responsibility over the use of central government revenues and allowing recipient governments to use the revenues so as to maximize local economic welfare. Unfortunately, there is neither a single nor simple solution to this issue.

Types of Grants

At least three interrelated decisions are required when a government decides to transfer funds to lower-level jurisdictions. One addresses how the overall size of the amounts to be distributed are to be determined. A second concerns how the amounts are to be allocated among the several eligible recipient governments. The third regards the choice of transfer instrument which, in turn, affects the amount of autonomy the recipient government has in determining how the funds can be spent. The first of these issues concerns the "vertical" fiscal balance between levels of government; the second has to do with "horizontal" balance; the third directly affects the degree of direct fiscal control exerted by the higher level jurisdiction. Answers to each of these questions will have considerable influence on the achievement of the several, often conflicting, goals noted above.

Several different methods to determine the size of the grant pool are possible. One is to tie the amount to be allocated to one or more sources of revenue collected by the granting jurisdiction. Such an approach can result in a growing resource pool but, if followed, is likely to decrease the fiscal flexibility of the granting jurisdiction. For this reason, many granting governments prefer to allocate funds on an ad hoc basis as a part of the annual budget process or as specified under a multi-year central plan. A third determination of the grant pool would be to base it on the amount of spending planned and undertaken by the recipient government but approved by the granting jurisdiction.

Allocation among recipient governments can also either be carried out in a systematic, well-defined basis or be conducted in an ad hoc manner. One technique, applicable when grant pools are tied to specific revenue sources, is to allocate the amounts on the basis of where the revenues were derived. This is the case when tax sharing arrangements are used to transfer funds to lower level governments. Other systematic allocation methods can be based on formulas which either reflect general needs and resources of the recipient jurisdictions or which are used to reimburse localities for a portion or all of the expenditures undertaken for specific activities.

Finally, the degree of autonomy permitted in spending grants will likely be of considerable interest to both the granting and recipient jurisdictions. General-purpose, lump-sum allocations, often termed block grants, can provide the local jurisdictions with considerable latitude in spending the transferred money. Categorical grants, on the other hand, are restricted to particular uses sometimes with prior approval of the expenditures necessary before the transfer takes place. Such grants permit the granting government much more power in determining the sectoral allocation of funds. While categorical grants may stipulate the use to which they can be put, they can also be designed to cover only some portion of the total amount spent locally. Such matching arrangements can be used to insure that the locality puts forth some effort on its own to undertake the spending activity. Finally, such matching or cost-sharing grants can be open- or closed-ended. The former permits the recipient government to spend whatever amount it wishes on the supported activity, whereas under a closed-ended matching arrangement, only local spending up to some maximum amount will be matched through transfer.

The matrix shown in Table 4 provides a convenient way to differentiate among the types of transfer policy choices and evaluate the outcomes of a grant system.[25] The columns of the table represent the three principal ways in which the grant pool is determined; the rows indicate the four primary allocation techniques. Not all of the 12 cells in the table are filled since certain combinations of these policy choices are not feasible; however, within the feasible cells the most likely type of grant scheme--general purpose versus categorical--are noted where one form is the more likely (though not absolutely necessary).

Type A grants are simply shared taxes with the higher level of government collecting and transferring some proportion of locally collected revenues to the local government. While the IMF Government Finance Statistics do not term shared taxes as grants, when the higher level of government unilaterally sets the tax rates, defines the tax base, collects the tax and simply distributes the proceeds thereof to the local government in which the taxes were collected, the results are no different than if a grant program was established in which the same revenues were distributed on a formula basis to local governments with the only factor in the formula being the location of the collection of the tax. Obviously, there are instances where somewhat greater discretion is allowed to the local

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[25]The matrix is derived from that developed by Roy Bahl and Johannes Linn, Urban Public Finance and Administration in Less Developed Countries (Washington, DC: The World Bank, forthcoming).

TABLE 4

ALTERNATIVE FORMS OF INTERGOVERNMENTAL GRANT PROGRAMS

Method of Allocating the Divisible Pool among Eligible Units	Method of Determining the Total Divisible Pool: Specified Share of a Granting Government Tax	Ad Hoc Decision	Reimbursement of Approved Expenditure
Origin of Tax Collection	A (general-purpose)	--	--
Formula	B (??)	F (??)	--
Cost Reimbursement	C (categorical)	G (categorical)	K (categorical)
Ad Hoc Decision	D (??)	H (??)	--

SOURCE: Adapted from Roy Bahl and Johannes Linn, Urban Public Finance and Administration in Less Developed Countries (Washington, DC: The World Bank, forthcoming).

government in the collection of such taxes. For example, localities may be given the option of "piggy-backing" a local tax onto a tax already being collected by the higher level of government. Since the locality has the option here, the tax is more akin to a local levy than to a grant.

Formula-based allocations (Types B and F) force the granting government to decide on the factors which are to be used in determining grant shares. These factors may be indicators of need, e.g., population or miles of road, or may attempt to account for local revenue capacity, e.g., some measure of local income or taxable economic activity. The grants may be general-purpose in nature with the proceeds available to be spent however the locality sees fit, as in the case of formula block allocations made in the Philippines, or their uses may be limited as is the case in Bangladesh where recipients of the upazila (sub-district) development grant must allocate prespecified portions of the transfer to different sectors.

Cost reimbursement allocation schemes (Types C, G and K) are most commonly categorical in nature with the recipient government restricted in its use of the funds. While matching grants may be used, it is also possible for the granting government to cover all of the spending. This is particularly the case for salary grants such as used in Indonesia. If the size of the cost reimbursable grant pool (Types C and G) is predetermined, any matching funds will likely be closed-ended; type K grants, however, can be open-ended although the fiscal difficulties that face most central governments in developing nations make such arrangements unlikely.

When ad hoc decisions are made concerning the allocation of funds, it is difficult to generalize regarding the type of grant mechanism that is used. Nevertheless, given the political nature of transfer programs and the desire to maintain political control, these mechanisms, particularly Type H grants, are likely to be the choice of most higher level governments.

When evaluated against the criteria discussed above, each of the grant instruments has different strengths and weaknesses; furthermore, what is seen as an advantage to the granting government may be considered a disadvantage by the recipient government. Revenue adequacy and growth will, of course, depend upon the manner in which the grant pool is determined. Grant pools tied explicitly to an elastic revenue source are much more likely to result in revenue growth and revenue certainty than are grants determined annually on an ad hoc basis. Therefore, grant types A, B, C and D may be preferred over the other type grants by recipient governments; however, since such explicit tying of revenue usage reduces the budgetary control of the granting government, determining the grant pool through ad hoc techniques may be preferred by higher levels of government.

The allocative efficiency of grant instruments has been considered extensively by economists using traditional economic theory. One concern in such analyses is the extent to which block and categorical grants differentially affect budgetary allocations. If the objective of a grant is to increase a particular type of spending, e.g., expenditures that have positive spillover effects, categorical grants for such activities would be preferred to general block grant allocations. General purpose governments may, however, react to such categorical grants by decreasing the amounts they would have otherwise spent on the activity. These decreases can occur either through a budgetary reallocation by recipient governments to increase other types of spending or through a diminished level of own-source revenue effort.

The own-source revenue response by recipient governments is of particular interest to analysts and granting governments. If an objective of a grant program in a developing country is to increase local government spending, this objective can not be achieved if the recipient government simply diminishes its own taxing effort.

The issue has been most extensively considered in developed countries using traditional economic analysis.[26] The common formal approach to these analyses relies on the assumption that local communities have a well-defined preference function for government (G) and private goods (X) as exhibited in the indifference curve shown in Figure 1. At equilibrium E, the community consumes OX private goods and OG government goods. These public expenditures are financed through local tax and nontax revenues amounting to XX', or a tax rate of XX'/OX.

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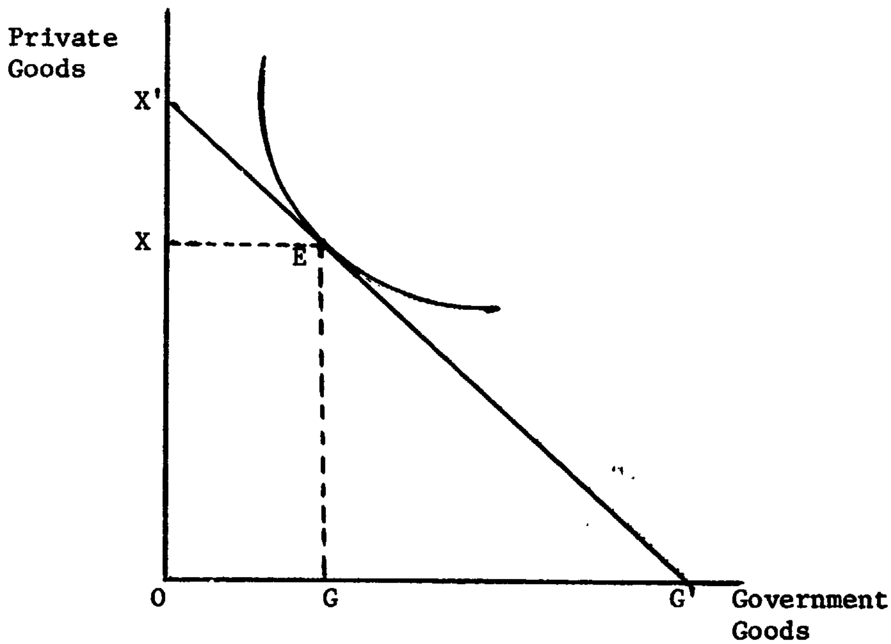
[26] See, for example, Edward M. Gramlich, "State and Local Governments and Their Budget Constraint," International Economic Review, Vol. 10 (June 1969), pp. 168-182; Edward M. Gramlich and Harvey Galper, "State and Local Fiscal Behavior and Federal Grant Policy, Brookings Papers on Economic Activity, Vol. 1 (1973), pp. 15-54; James Henderson, "Local Government Expenditures: A Social Welfare Analysis," The Review of Economics and Statistics, Vol. 50 (May 1968), pp. 156-163; Enid Slack, "Local Fiscal Response to Intergovernmental Transfers," The Review of Economics and Statistics, Vol. 62 (1980), pp. 364-370; David L. Smith, "The Response of State and Local Governments to Federal Grants," National Tax Journal, Vol. 21 (September 1968).

FIGURE 1

CHOICE OF PRIVATE-PUBLIC GOODS COMBINATION

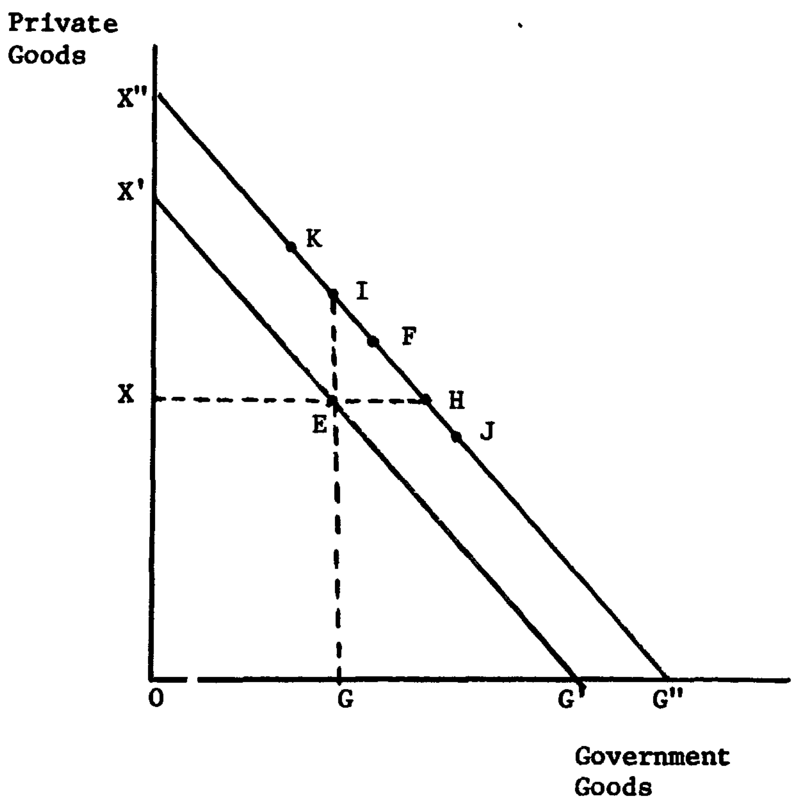


A lump-sum grant is equivalent to an increase in income available to the locality and, in the context of the graphical analysis, results in a parallel shift in the budget constraint to the right by the amount of the grant, G'G" (Figure 2). Conceptually, there is no limitation regarding where the new equilibrium might occur. Point F in Figure 2 suggests an increase in public spending but by less than the amount of the grant; point H shows public expenditures increasing by exactly the same amount of the grant; at point I the locality has cut back its own spending so as to result in only an increase in private sector spending. It is also conceivable that the transfer results in an increase in public expenditures by an amount greater than the initial grant (point J) or even a decrease in spending (point K).

Local revenue or tax effort will change depending upon the income elasticity of demand for public spending. A unitary income elasticity means that the percentage increase in public expenditures is exactly equal to the percentage increase in income and will result in no change in the ratio of taxes to total income. For example, if at point F the ratio of public spending to total income is equal to that at point E, the tax rate X_1X''/OX'' is unchanged from XX'/OX'. If the income elasticity for public spending is greater than one, the proportion of expenditures to income available will increase and will require an increase in local taxes; in such an instance, the grant can be said to be <u>stimulative</u> of local revenue effort. If the income elasticity is less than one, the grant is said to be <u>substitutive</u>; localities can reduce their resource mobilization efforts.

FIGURE 2

LUMP-SUM GRANT

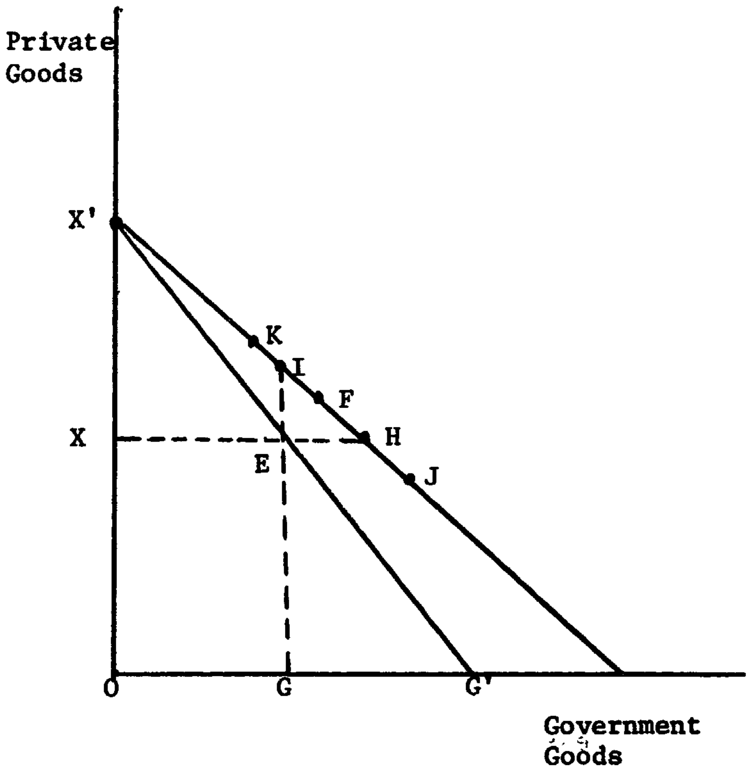


While there is some evidence that lump-sum grants to local governments in developed countries stimulate local tax effort, in many developing nations there are likely to be constraints to such a response even if the demand for public expenditures is income elastic. If local revenue effort is limited due to statutory tax rate and tax base restrictions or by administrative problems or if the ability of the local government to deliver services is somehow limited, local governments are likely to lower their own-source revenue effort. One possible approach to stimulating local tax effort in the case of formula-based lump sum grants is to include in that formula some measure of revenue effort. There are, however, difficulties in implementing such formulae in developing countries due to the lack of data necessary to measure this effort.

Categorical, cost-reimbursement grants have the effect of lowering the "price" of local public expenditures. Figure 3 shows this as a rotation of the budget constraint with the extent of the rotation depending upon the percent of the cost reimbursed and the importance of the aided function in the local budget. Again, there is no a priori limitation concerning where a new locally-desired equilibrium might occur. If one assumes that the granting government uses a categorical grant with the expectation that the proceeds will yield an equal increase in local spending, point H would be deemed most desirable from the standpoint of the higher level of government. To insure this outcome the granting government may attempt to require some "maintenance of tax effort" in the grant design, i.e., that the ratio of local revenue to total income must remain at XX'/OX'. If

FIGURE 3

COST SHARING GRANT



local community preferences are such that point F is actually most desired, the result is a decrease in community welfare.

Since partial cost reimbursement grants have both income and substitution effects whereas lump sum grants involve only income effects, the former are expected to be less likely to lead to lowered local revenue efforts. Yet, such categorical grants are more likely to interfere with local preferences and result in a lower level of welfare than equal sized block grants.

The distributive implications of formula-based transfers will depend primarily upon the factors used in the formula; however, unlike ad hoc allocations, they do require that the granting government make explicit its redistributive preferences. Tax sharing arrangements are likely to favor more economically advanced localities and will fail to achieve equalizing objectives. Cost reimbursement grants, particularly if they require a relatively high local match, can also result in greater flows of funds to wealthier localities which have the ability to raise the necessary local revenues. Similarly, if categorical transfers are made only to jurisdictions which successfully apply for such funds, localities with better planning capabilities are likely to be favored in the allocation of funds. Hence, traditional redistributional objectives of grants are most likely to be served via formula grants that include explicit measures of economic backwardness in the formula or by ad hoc allocation that implicitly favor less developed areas.

In terms of administrative costs, shared taxes may be most desirable since the higher level of government that collects the tax may be able to do so more economically than can a large number of lower levels of government. Categorical grants, on the other hand, are likely to be more costly to administer than are block, lump-sum allocations. Complex applications may be required for specific-use grants with a time-consuming approval process also necessary; furthermore, there is likely to be a more detailed auditing procedure established to insure that the categorical grants were used as designed.

In sum, cost reimbursable categorical grants have the advantages of allowing the higher level of government to force recipient governments to allocate resources in the manner they see most desirable with less lowering of local revenue effort; however, they are more likely to result in local welfare losses and require greater administrative oversight and compliance costs. Formula-based lump sum grants can be designed to achieve redistributional objectives through inclusion of measures of need or local revenue base. Finally, from the standpoint of political acceptability, grant schemes which give greater control to the granting government are likely to be preferred at the higher level and least desirable when viewed from below.

Current Practices and Results of Grant Systems

As has been emphasized above, intergovernmental grants are the products of political decisions. With numerous grant instruments available and objectives which may change as the political environment is altered, it is not particularly surprising to find that grant allocation practices often differ greatly from the existing statutes. In this section we first review cases where the transfer schemes differ from those dictated in the statutes. We then turn to examples of how grant programs create outcomes that differ substantially from the objectives commonly sought from such schemes. Finally, we review some analyses of the empirical effects of grant programs.

Practices Vis-a-Vis Statutes

When evaluating a grant system, the following scenario is quite common.

> Step 1: Granting government officials suggest that the existing grant program is implemented exactly as stated in the statutes and rules.
>
> Step 2: Discussions with recipient government officials indicate that, in fact, there are certain discrepancies between the statutes and practice.
>
> Step 3: Subsequent discussions at the higher level of government leads to admission that it is not always possible to conduct the grant scheme as suggested in the underlying legislation.
>
> Step 4: Analysis of data obtained at the central government level indicates that, in fact, revenues are not being allocated in the manner shown in the laws.
>
> Step 5: Further analysis at the local level may show even further discrepancies between actual practice and what had been statutorily mandated.

There can be numerous reasons (some good) for such discrepancies. In part, the political nature of grants within a changing political environment can produce such behavior on the part of the granting government. Anticipation of elections may yield grant flows that differ greatly from what the statutes imply; likewise, severe economic or fiscal problems faced by the granting government may result in extra-legal cutbacks in grant flows. The discrepancies are sometimes traceable to a lack of understanding by recipient government officials of the practices that are supposed to occur at the higher level of government. Officials in some localities do not know how their allocations are determined; they simply know that some amount is likely to be transferred without any idea of how that amount was set. In such instances, the granting government has little incentive to shed light on the process since ignorance of the procedures (on the part of the local government) puts it in an even more powerful position to alter allocations purely on an ad hoc basis.

In what follows several examples are given where statutory grant programs have been altered in a manner to subvert the original intent of the legislation. The conflicting objectives that helped lead to these results are also noted, wherever possible.

Grant Revenue Shortfalls. When granting governments face pressing financial difficulties, transfers to lower level governments are likely to be among the expenditure items cut back to reduce deficits regardless of the statutory basis of the grant programs. One good example of such a phenomenon is the Philippines where the revenue pool of one of the primary intergovernmental grant programs, the Bureau of Internal Revenue (BIR) Allotment, is to equal 20 percent of total BIR collections two years previous to the distribution. Since the mid-1970s, however, this statutory basis of the BIR has not been distributed. Table 5 shows the proportions of the statutory amounts that were actually distributed during the period

TABLE 5

ACTUAL DISTRIBUTION OF PHILIPPINE BIR GRANTS
TO LOCAL GOVERNMENTS, 1975 TO 1980

	Bureau of Internal Revenue Allotment		
Year	Actual Distribution	As Percent of Amount Due	Percentage Increase/ Decrease
1975	505.4	84.26	---
1976	547.8	62.38	8.39
1976[a]	315.1	74.56	-42.48
1977	658.9	57.77	109.11
1978	658.9	58.97	0.00
1979	658.9	49.44	0.00
1980	658.9	35.56	0.00

[a]Six month transition.

SOURCE: Accounting Divisions, BIR, MOF and NEDA.

1975-1980.[27] While such shortfalls can be justified on the basis of macroeconomic problems, they do have the effect of negating the advantages that tying a grant pool to specific revenue sources have on local government fiscal planning and grant revenue growth.

Subverting Distributional Formulae. Allocations of intergovernmental transfers among recipient governments are often supposedly based upon a well-defined formula. Such objective factors as population, land area, miles of road, etc. are commonly stated to be the sole determinants of grant distributions. It is, however, also the case that when an analyst attempts to replicate the allocations to individual jurisdictions based upon the purportedly-used formula, such a replication is not possible. This suggests that other, more subjective factors, have been used to supplement the formula-based allocations. Such discrepancies have, for example, been observed in the Philippines,[28] Nepal[29] and Pakistan.[30] Most commonly the grant agency admits that "other factors" have been used to adjust the formula-based allocations with political considerations probably one of these variables.

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[27] Roy Bahl and Larry Schroeder, "Intergovernmental Fiscal Relations," in Local Government Finance in the Third World: A Case Study of the Philippines, ed. by Roy Bahl and Barbara D. Miller (New York: Praeger Publishers, 1983), pp. 119-122.

[28] Bahl and Schroeder, "Intergovernmental Fiscal Relations."

[29] Larry Schroeder and James Wozny, "Financing Rural Local Panchayats in Nepal," Metropolitan Studies Program Occasional Paper No. 108, The Maxwell School (Syracuse, NY: Syracuse University, July 1987).

[30] Schroeder, Rural Development Grants to Local Governments in Asia.

Decentralization. Policy statements in developing nations often advocate decentralized decision-making and, sometimes, the statutes are even altered to foster decentralization. Some countries have accompanied decentralization policy initiatives with expanded use of grant flows in spite of the obvious conflicts which such financing can create. For example, when the Government of Bangladesh upgraded the thana level of government as the focal point of its decentralization program in 1983, grants to rural governments were increased from Tk 1.82 per capita to Tk 10.12.[31] While block grants were used to carry out this transfer of resources, considerable power was maintained by the central government. Furthermore, the large absolute sizes of these block grants provided little incentive for the local governments to mobilize resources using even the few local revenue instruments provided to them. While the large flow of funds was likely used to strengthen the political backing of the decentralization policy, observers are skeptical that the policy has truly resulted in a transfer of power to the local bodies.[32]

Another example of practices which differs from the underlying policy of decentralized autonomy provided to subnational governments has been observed in Nigeria. As stated by Ndongko, "The allocation of revenues by the federal to the state governments since the 1960s has taken place on the basis of two fundamental principles--the principle of derivation and the

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[31]See Schroeder, Rural Development Grants to Local Governments in Asia, p.28.

[32]See Ahmed Shafiqul Huque, "The Illusion of Decentralization: Local Administration in Bangladesh," International Review of Administrative Sciences, Vol. 52, No. 1 (1986), pp. 79-95.

principle of need."[33] Obviously, these two criteria are likely to conflict with wealthier regions obtaining relatively larger grants when derivation of national government revenues is used the principle of grant allocation. This apparently led the Nigerian federal government to institute additional specific grants to the less wealthy states to allow them to undertake projects they could otherwise not afford in spite of the fact that such categorical grants greatly eroded the financial autonomy of the recipient states.[34] Smith reaches a similar conclusion in his review of the reorganizational reforms completed in 1976 and notes that the large dependency of local governments on financial resources from a higher level of government in Nigeria is partially explained by the fact that, "...throughout its history local government has been organized by central authorities which, despite the rhetoric of democratic decentralizations, have been more concerned to strengthen control than local autonomy."[35]

Political Factors. The highly-charged political environment in which grant allocations are made can have considerable effects on the conduct of a statute-based grant system. Unless the grant pool is somehow increased, changes in the determinants of allocations will result in revenue "losses" for some jurisdictions if other recipient governments gain

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[33]Ndongko, "Revenue Allocation and the Stability of the Nigerian Federation 1960-1980," p. 160.

[34]Ibid, p. 161.

[35]B.C. Smith, "The Revenue Position of Local Government in Nigeria," Public Administration and Development (January-March 1982), p. 12.

from the change. Obviously, such changes will face considerable political opposition from the losing governments.

In Pakistan, the 1973 constitution calls for a National Finance Commission to meet every five years to reconsider how provinces are to share federal government tax revenues. The current sharing allocation is based upon recommendations made by the Commission in 1974. Although another Commission was appointed in 1979, its recommendations were never made public, possibly because of the political repercussions which changes in the sharing formula might create.

Practices Vis-a-Vis Principles

The discussion in the previous section suggested that there are a number of objectives that can be attained through grant systems. Again, there is often a considerable difference between actual practices and these principles. Here we review several of these differences.

Revenue Growth. Ideally grant revenues will grow to allow recipient governments to meet increasing spending needs caused by increased input prices and expanding demands for public sector services. The data discussed above regarding GDP elasticities of government transfer suggest, however, that grant programs do not always result in such revenue growth.

An example of such a grant program that has created considerable fiscal pressure at the local level can be observed in Bangladesh. In 1981 the Government of Bangladesh abolished one of the more productive and buoyant local revenue sources then used by urban governments--the octroi--on the reasonable economic grounds that the tax on imports into a city inefficiently restrained trade. To help offset the revenue losses associated with this mandate the Government established an "octroi compensation grant." For fiscal year 1982 each city was provided a grant approximately equal to 75 percent of the total revenue they had mobilized from the octroi in FY 1981. While this resulted in some revenue loss, more critical to the fiscal situation in city governments was the fact that the grant was not increased at all during the subsequent three years in spite of the fact that prior to its abolition the octroi had been growing rapidly and was one of the few local resource instruments to yield increasing real per capita revenues.[36]

Efficiency. Both technical and allocative efficiency can be affected by grant programs. Technical efficiency is hindered when grant programs impose additional costs on the service provision process. One example of such costs arises when categorical grants require complex centralized approval processes that may significantly delay project completion. For example, Bhattacharya reported that, due to the approval process required by states, simple municipal sewer systems required 2 to 3 years to complete.[37] Similar cumbersome grant disbursement procedures

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[36] Larry Schroeder, "Bangladesh: Urban Government Finance and Management Issues and Opportunities," Report No. 5790-BD, Urban and Water Supply Division, South Asia Projects Department (Washington, DC: The World Bank, June 1985).

[37] M. Bhattacharya, State-Municipal Relations (Delhi: Indian Institute of Public Administration, 1972) as cited in Richard Bird, Intergovernmental Fiscal Relations in Developing Countries, Staff Working Paper No. 304 (Washington, DC: The World Bank, 1978), p. 64.

were found in Indonesia.[38]

It is quite common for grant programs to encourage recipient governments to alter their behavior in a manner that results in local or national welfare losses, or both. The grant system in Indonesia provides several such examples.[39] One example is provided by the subsidi daerah otonom (SDO) which pays the salaries and allowances of essentially all local government employees, including primary school teachers. While this cost reimbursement grant guarantees a uniform pay schedule for local government employees without regard for the financial health of any single locality, the lack of any cost sharing can encourage local governments to attempt to employ inefficiently large amounts of labor. To prevent this possibility, the system requires central approval of local staffing decisions; however, there is no objective system used to ascertain local manpower needs.

Another potential economic inefficiency of the Indonesian system is tied to the budget process. While block grants are allocated to provinces as well as to municipalities in urban areas (kotamadya) and regencies or

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[38]Brian Binder, Financial Management in Local Government, Development Administration Group, Institute of Local Government (Birmingham: University of Birmingham, 1982).

[39]For discussions of the Indonesian grant system that all reach similar evaluative conclusions see Kenneth Davey, Central-Local Financial Relations," Development Administration Group, Institute of Local Government (Birmingham: University of Birmingham, 1979); Schroeder, Rural Development Grants to Local Governments in Asia; and The World Bank, "Indonesia: Public Resource Management Study, Local Government Finance Sector Report," Urban and Water Supply Division, Projects Department, East Asia and Pacific Regional Office, mimeo (Washington, DC: The World Bank, 1987).

districts (kabupaten) in the rural areas, prior approval of the projects to be undertaken must be obtained from higher levels of government. Even though disapproval is not common, the process does permit local choices to be subverted.

As is the case in many developing countries, the Government of Indonesia is concerned that localities do not allocate optimal amounts of funds to maintenance of capital facilities and have attempted to use the grant program to overcome these perceived misallocations. The approach used has been to mandate that a portion of the block grant be allocated to maintain facilities. One kabupatan official admitted to this author, however, that the "maintenance" project in its 1987 budget did not differ substantially from any of the other projects which were predominately designed to reconstruct poorly maintained rural roads. Hence, the mandate is essentially ineffective. Again, one might suspect that the considerable reliance upon grant funding and the expectation that it will continue into the future does not encourage local officials to take a longer term perspective on development project operation and maintenance.

Equalization. In spite of the considerable rhetoric regarding the use of grants for equalization purposes, actual practices do not always produce the apparent goals. In part, this is probably due to the difficulties in defining the meaning of equalization mentioned previously; it can also be attributable to the lack of appropriate data for measuring such redistributional criteria; finally, it may also be traceable to political factors that interfere with systematic allocations of transfers.

One such example of seemingly unintended redistributional consequences of grant allocations has been cited in India. Two different groups play important roles in the distribution of resources from the center to state governments--the Finance Commission and the Planning Commission. The former group recommends the method by which central government taxes are to be shared with the states as well as how grants-in-aid as specified under Article 275 of the Constitution are to be allocated across states. The Planning Commission decides on the state-wise allocation of loans and grants carried out under the national plan and for central-government sponsored projects. A recent analysis considered the per capita allocations across states made by each group in 1960-61, 1970-71 and 1980-81 and compared them with per capita incomes.[40] While none of the comparisons revealed an exact correspondence of higher per capita grants flowing to higher income states, there were numerous instances where obviously wealthier jurisdictions were treated much more favorably than were low income areas. In part this was attributed to the long-standing concern by the Finance Commission that one primary determinant of the allocation of tax shares be based upon the site of collection of the tax. This, as was noted in the Nigerian example above, results in higher income jurisdictions receiving above average shares.

Empirical Evidence

The previously noted examples of differences between actual practices

[40]P.K. Bhargava, "Transfers from the Center to the States in India," Asian Survey, Vol. XXIV (June 1984), pp. 665-687.

regarding intergovernmental grants and the principles underlying their usage are based primarily upon impressionistic evidence. Because of the scarcity of empirical data, there are relatively few quantitative analyses of the effects of grant systems on local government behavior or on the equalization effects of grants. The balance of this section considers the findings of several recent studies that have provided some empirical evidence of these effects.

Distributional Characteristics of Grants. Formula-based grant schemes commonly include population as one determinant of the allocation of the grant monies. Yet other variables in the formula or other nonspecified characteristics in nonformula based allocation methods may result in distributions which provide relatively greater amounts of grant flows to larger or smaller jurisdictions. Several studies have included analyses of whether per capita grants are positively or negatively correlated with population size. A zero correlation would result if equal per capita grants were provided to all jurisdictions; a positive correlation might indicate the desire on the part of the granting government to compensate larger jurisdictions for greater public sector needs; a negative correlation could suggest the perception that smaller jurisdictions require greater assistance to compensate for a scarcity of local revenue sources.

Rural grants to three levels of government in Bangladesh in 1980/81 were analyzed by Bahl[41] and were found to be allocated such that generally

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[41] Roy Bahl, "Intergovernmental Grants in Bangladesh," Metropolitan Studies Program Occasional Paper No. 87, The Maxwell School (Syracuse, NY: Syracuse University, May 1984).

larger per capita grants were provided to smaller jurisdictions. For districts (zilla parishads), both capital (rural works program) grants and current (normal) grants revealed a negative correlation between per capita allocations and jurisdictional population. At the lowest level of government, the union, capital grants were found in a small sample of jurisdictions to be positively (but nonsignificantly) related to population size; however, current expenditure grants were allocated such that larger jurisdictions received generally lower per capita amounts. The intermediate (thana) level of government received only capital grants in 1980/81; they were strongly and negatively (a correlation coefficient of -0.68) associated with population.

Generally similar findings were obtained in an analysis of the allocation of per capita grants to union (lowest level) and district (higher level) councils in two provinces of Pakistan.[42] In the North West Frontier Province per capita budgeted grants for 1986/87 were found to be strongly, but inversely related (a correlation coefficient of -0.78) with district populations; the relationship was less strong (a correlation of -0.43) at the union level. Actual 1983/84 allocations of grants in Baluchistan Province were also negatively associated with population at the district level (a correlation of -0.64) but were positively related to population at the union level (r = 0.28).

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[42] Schroeder, Rural Development Grants to Local Governments in Asia, p. 65.

In the Philippines, both of the major intergovernmental grant schemes in 1977 were observed to be allocated in a way such that larger per capita grants were provided to smaller jurisdictions.[43] A coefficient of -0.34 was obtained when per capita Bureau of Internal Revenue grants were correlated with the populations of 96 municipalities in four provinces. A slightly smaller correlation of -0.26 was found for the capital spending-oriented Specific Tax Allotment grant program.

If one assumes that these allocations were made with some redistributional objective in mind, the findings from Bangladesh, Pakistan and the Philippines would suggest that granting governments do feel that smaller jurisdictions need to be treated preferentially, probably because of the perception that less populated areas are less able to mobilize resources of their own. Unfortunately, there is little evidence regarding the empirical relationship between actual local tax bases and grant allocations. One exception is the previously cited analysis of grants in the Philippines.[44] Interestingly, the data there suggest that, at least for the BIR Allotment program, allocations of grants per capita were positively related, i.e., counter-equalizing, to property tax assessments per capita (a correlation of +0.27). The Specific Tax Allotment grant scheme did yield a negative (equalizing) correlation coefficient, but the coefficient was not significantly different from zero.

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[43]Bahl and Schroeder, "Intergovernmental Fiscal Relations."

[44]Ibid.

Interjurisdictional equalization of personal incomes may be deemed even more important by higher level policy makers than equalization of tax bases if much of the public rhetoric concerning grant objectives can be believed. The lack of adequate local income data in many countries greatly hinders analyses of these outcomes; however, there are a few instances of such research. The 1977 allocations of grants in the Philippines revealed no statistically significant relationship between grant allocations and local per capita incomes, suggesting that the systems there were neither income equalizing nor counterequalizing.[45]

In their analysis of grants in Columbia, Slack and Bird used multiple regression analysis rather than simple correlation techniques to relate tax allowance grant allocations to a variety of local government (department) characteristics, including income.[46] When total real tax allowance allocations were regressed (using pooled cross sectional data) on population shares, number of primary students, mortality rates and real incomes in 22 departments over the period 1974-1977, the results indicated that there was a significant, albeit small, negative relationship between income and grant size. This suggests a slight tendency for the Columbian system to redistribute in favor of lower income areas, even after accounting for the other variables. The two more explicit measures of

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[45] Ibid.

[46] N., Enid Slack and Richard M. Bird, "Local Response to Intergovernmental Fiscal Transfers: The Case of Columbia," Public Finance/Finances Publiques, Vol. XXXVIII, No. 3 (1983), pp. 429-439.

"need", number of students and mortality rates, were also both positively related to real tax allowance grants.

Another developing country for which sufficient data are available to conduct analyses of the income, and other, distributional impacts of grants is India. As was noted above, transfers of money from the center to the states are actualized through transfers and shared taxes as guided by the Finance Commission and through grants and other transfers made under the auspices of the Planning Commission. A study team at the National Institute of Public Finance and Policy estimated the per capita income elasticities of per capita transfers for five different transfer and grant programs (shared taxes, Finance Commission transfers, Plan grants, Plan transfers and discretionary grants) as well as total grants and total transfers for each of seven different combinations of plans and income estimates.[47] None of the resulting 49 income elasticities was significantly different from zero implying that the transfer schemes were neither systematically equalizing nor counter-equalizing. Instead, the evidence suggests an almost random treatment of lower and higher income states. While one may have expected that outcome for the sum of all types of transfers, the results are surprising for the shared taxes which, a priori, might be expected to be counter-equalizing and for discretionary grants which would seem most likely to be used to equalize incomes.

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[47] National Institute of Public Finance and Policy, Trends and Issues in Indian Federal Finance (New Delhi: Allied Publishers Private Ltd., 1981).

Hemlata Rao reached generally similar conclusions, although using different analytical techniques, in his study of fiscal transfers in India.[48] He developed a composite index of state economic development in order to identify "backward" states; this index was then used to analyze the degree to which various transfers from the center were related to development. Transfers through the Finance Commission under the Second, Third, Fourth and Fifth national plans were analyzed using regression techniques with the conclusion reached that, although the Finance Commission stated that the main purpose of the allocations was to augment state resources in an equitable manner, "they miserably failed to achieve this."[49] Similar conclusions were reached from the regression analysis of Planning Commission transfers.

Spending and Local Revenue Effects of Grants. Of equal interest to the distributional characteristics of grants are their impacts on local government behavior, particularly the expenditure responses and local government revenue effort effects. Two issues are salient. Do grants result in an increase in spending greater than the amount of the grant, i.e., is the grant stimulative of expenditures, or are the grant revenues simply substituted for locally-raised revenues with no net increase in expenditures? Second, do the grants encourage certain types of spending, e.g., investment expenditures and/or discourage other types? Again there

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[48]Hemlata Rao, Centre-State Finantial Relations (New Delhi: Allied Publishers Private Ltd., 1981).

[49]Ibid, p. 148.

are but a few studies that consider these questions more than impressionistically.

The pooled, cross-sectional analysis of department spending in Columbia by Slack and Bird showed that "An increase in the real per capita grant by 1 peso results in increased per capita real expenditures of less than 1 centavo, indicating a strong substitution effect. Since expenditures increase only very slightly in response to this transfer payment and by less than the amount of the transfer, taxes presumably fell."[50] Similar results were obtained for other grant revenues that flow to these Columbian local governments (departments).

The opposite result was obtained by Dillinger in his analysis of the relationship between local tax receipts and intergovernmental transfers in Sao Paulo State of Brazil.[51] When 1978 per capita local taxes in 82 municipios were regressed on per capita transfers the results indicated that "local tax revenues per capita rise by Cr$99 for every Cr$1000 increase in per capita transfers."[52]

Another analysis which shows that grants can stimulate recipient

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[50]Slack and Bird, "Local Response to Intergovernmental Fiscal Transfers: The Case of Columbia," p. 436.

[51]William Dillinger, "Implicit Spatial Policies: The Case of Fiscal System in Sao Paulo State," Urban and Regional Report No. 81-27, Urban and Regional Economics Division, Development Economics Department, Development Policy Staff (Washington, DC: The World Bank, 1981).

[52]Ibid, p. 48.

government spending is that by Bahl and Pillai.[53] Using data for 17 Indian states in a cross-sectional analysis of 1970-71 expenditures they concluded that after accounting for stage of development factors, "A one rupee higher level of per capita aid is associated with a more than four rupee higher level of per capita expenditures."[54] That analysis, therefore, indicates that grants can be stimulative.

At least two analyses of transfers in developing countries have considered both the stimulative/substitutive effects of grants as well as whether different grant schemes differentially affect investment (capital) and recurrent expenditures of localities. Spending impacts of the two major grant programs in the Philippines--the Bureau of Internal Revenue Allotment (BIR) and the Specific Tax Allotment (STA)--have been considered by Bahl, Schroeder and Wasylenko.[55] Their model reflects the fact that flows from the two grants are channeled into two different local funds--the BIR into the General Fund and the STA into the Infrastructure Fund. The former is primarily a recurrent spending fund while the latter is generally, but not exclusively, devoted to capital spending. The model encompasses the fact that interfund transfers occur such that each grant scheme has both a direct effect on the fund into which it flows and also an

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[53]Roy W. Bahl and Velayudhan Pillai, "The Allocative Effects of Intergovernmental Flows in Less Developed Countries: A Case Study of India," Public Finance/Finances Publiques, Vol. XXXI, No. 1 (1976), pp. 73-89.

[54]Ibid, p. 83.

[55]Roy Bahl, Larry Schroeder and Michael Wasylenko, "The Stimulative Effects of Intergovernmental Grants in Developing Countries: The Case of the Philippines," unpublished manuscript (1987).

indirect effect on spending in the other fund. The results suggest that the general purpose BIR grants are stimulative of local spending in spite of no-cost-sharing requirements nor use of local tax effort in the allocation mechanism. One peso additional grant was found to be associated with 1.34 peso additional spending in the General Fund and 0.22 indirect increase in Infrastructure Fund expenditures. Interestingly, the STA which is earmarked to the Infrastructure Fund is found to be substitutive.

Results obtained by Greytak and Mendez, using a somewhat similar model for municipalities in Ecuador, differ from those found in the Philippines.[56] When including both the direct and indirect effects of grants, the automatic flow of grants are found to be substitutive in small Ecuador cities but stimulative in large cities. The categorical investment grant portion of the FONAPAR flow was found to be stimulative in both the smaller and larger municipalities.

The primary conclusion that can be reached from this review of the few studies of grant impacts that have been made in developing countries is that the results are nearly as diverse as the predictions from the underlying theoretical model on which the empirical analyses are based. The diversity of findings suggests that general conclusions, applicable to a wide range of countries and circumstances, may be impossible to reach. Instead, each case must be considered on its own.

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[56] David Greytak and Victor Mendez, "The Impact of Intergovernmental Grants on Local Governments in Ecuador: A Study of FONAPAR," Metropolitan Studies Program Occasional Paper No. 106, The Maxwell School (Syracuse, NY: Syracuse University, September 1986).

Conclusions: Lessons and Recommendations

Given the variety of transfer schemes used, the multiplicity of objectives and the paucity of hard data-based analyses, drawing strong conclusions and supportable recommendations from this review is not easy. There are, however, several lessons that seem to emerge that deserve special attention in this concluding section.

1. Transfers between levels of government in multi-tier political systems will and should continue to play important roles in financing lower-level government services. If local governments are to be an integral part of the public service delivery system, grants will have to be used to insure that the levels of services are somewhat similar across space and that local services providing significant benefit spillovers are subsidized.

2. Although the recent evidence does not provide strong support for this generalization, there are good reasons to expect that, if local governments are expected to play increasing roles in the provision of public services, transfers will grow in importance. The revenue sources reserved by higher level governments in developing countries are broader and are likely to be more buoyant than those assigned to lower levels. In part, this reflects the desire of national governments to reserve for themselves the more productive sources. Elected leaders of local governments may also, however, contribute to this trend by preferring grants to the politically less attractive alternative of imposing additional taxes or cutting back services in the face of fiscal constraints.

3. Grant systems cannot be separated from the political environment; indeed, monetary transfers constitute an extremely visible political instrument. Reviews of the history of all intergovernmental grant schemes would probably always find that the most significant factor explaining major changes in transfer programs can be traced to perceived political gains from the new policies. While analysts may urge alterations in such programs so as to achieve greater equity or efficiency, political feasibility will remain an overriding constraint to the implementation of such policies.

4. Grants are often expected to accomplish a long list of sometimes conflicting objectives. This is, of course, unreasonable if not impossible; grants may be designed to do some things well, but not everything. Matching categorical grants provide a good example of these conflicts. On the one hand, if a granting government is particularly interested in encouraging spending in one area it may decide to use a categorical grant with a low matching requirement on the part of the recipient jurisdiction. Matching grants may also be used to encourage increased local revenue effort to raise the matching funds; however, larger local matches are called for in order to achieve this objective. Furthermore, grants are likely to prove to be extremely crude instruments for achieving some desired ends. For example, if redistribution of personal incomes is desired, monetary transfers to local governments are unlikely to prove very effective at accomplishing the objective.

5. No tradeoff is more obvious than in the case of the desire for greater local autonomy to achieve the efficiency gains from decentralized

decision-making versus the objective of spending resources in a responsible manner. Fiscal responsibility over the utilization of scarce higher government resources requires some fiscal controls; furthermore, the previously-mentioned highly political nature of grant policies makes it unrealistic to expect unencumbered transfers of funds from higher to lower level jurisdictions.

6. In great part due to their political nature, grant "systems" generally develop over time in response to particular needs that arise and are met through transfers programs that then become institutionalized. For example, "deficit" grants may be used to cover local government revenue shortfalls arising due to special circumstances in one year but are soon expected by local jurisdictions. At the same time, hard-pressed central government ministries often do not undertake any systematic analysis of the overall effects of the grant system as it evolves. It is, therefore, useful for the overall system to be evaluated periodically and some explicit consideration be given to whether the system is achieving the sort of redistributional goals sought by the granting government and overall incentives and disincentives which the system places on lower level jurisdictions. Only through such analysis can there be any expectation that the transfer schemes used are reinforcing rather than offsetting in their attempts to achieve desired ends.

7. While the tone of these comments is, admittedly, not particularly positive, the few analyses that do exist demonstrate that systematic evaluation of grant systems is possible and that grants can be used to help achieve the objectives of equity and efficiency. Although the evidence is

not overwhelming, some studies have found that distributions of funds can be equalizing and that grants can be used to stimulate local fiscal effort. For such stimulation to occur, however, the local fiscal system must be capable of reacting to the incentives the grant system supplies; firm central control of local fiscal affairs will limit the efficacy of transfers in strengthening local governments. Hence, the final conclusion must be that concern for intergovernmental grants must be only one element in efforts designed to increase the role of local governments in the development process.

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