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8 THE ASSIGNMENT OF LOCAL GOVERNMENT REVENUES IN DEVELOPING COUNTRIES

Roy W. Bahl and Johannes F. Linn*

I. Introduction

Local governments play an important role in the public sector of many developing countries. They are frequently responsible for a wide range of public services, many of which are financed by resources raised locally. Particularly in rapidly growing urban areas, local authorities have been faced with ever increasing responsibilities, poorly matched by limited and often stagnant resources with which to meet the expanding expenditure requirements.[1] The resulting 'fiscal gap' between expenditure requirements and resource availability for local government can be addressed by reducing public service levels, by increasing nominal tax levels, by increasing tax effort, or by reassigning fiscal responsibility, i.e., shifting responsibility for some expenditure functions away from local governments, increasing local revenue authority, and increasing transfers from higher level governments. This paper explores the question of which revenue sources should be allocated to local governments in developing countries. In doing this, extensive reference is made to actual experience in these countries by providing descriptive evidence and an assessment of the revenue assignments to local governments, particularly in urban areas. (For a full discussion of the principle of the assignment problems see the earlier chapters in this volume.)

The approach taken here emphasizes four important features of the assignment issue in federal systems:

First, we view the 'assignment problem' broadly, by considering the interrelationships between revenue and expenditure assignment, in addition to the more traditional question of the division of revenue raising powers among levels of government. Moreover, we consider the choice among financing instruments - taxes, user charges, borrowings, grants - as a part of the assignment problem. The reasons for choosing this broad scope are that the 'appropriate' delegation of revenue authority to local governments will depend on the assignment of expenditure responsibilities, and that there is in practice a continuum of revenue sources which may appropriately substitute for one another under various circumstances.

Secondly, the paper attributes particular importance to the many dimensions of the assignment problem. The assignment of expenditure responsibility and revenue authority is not a matter of a simple yes or no decision for each expenditure function or revenue source. In fact, there are many different dimensions to expenditure responsibility, e.g., responsibility for current as against capital expenditure, responsibility for setting service standards, etc. Similarly, for any revenue source there are many dimensions for which local government may, or may not be given authority (e.g., authority to set rates, stipulate exemptions, control collections, etc.).

Thirdly, we highlight the institutional context of the assignment problem by focusing attention on the often conflicting objectives of the various layers of government involved in the assignment of expenditure responsibility and revenue authority. In assessing the 'appropriate' assignment, it is necessary to bear in mind the vantage point from which one considers the problem. For example, the central government finance minister is likely to have quite a different set of objectives from those of the mayor of a local authority. As a result there is in practice no 'optimal' assignment of expenditure responsibility and revenue authority but, rather, a range of appropriate assignments depending on the objectives stipulated or the vantage point selected for analysis.

Finally, in assessing actual assignment practices in developing countries the paper takes a disaggregated approach to local government. Rather than presenting information on the aggregate expenditure and revenue flows for local government in any particular country, data are presented and assignment practices described for individual jurisdictions. This permits us to highlight intra-country variations in assignment practices, including the different state rules applied to local governments in federal systems, the different requirement for rural or small versus urban or large communities, and the special treatment of capital cities.

II. Local Revenue Assignment and Local Expenditure Responsibility

The appropriate assignment of revenue sources to local authorities depends on the expenditure responsibilities assigned to local government. For a given set of expenditure responsibilities, an appropriate revenue mix may be chosen largely on efficiency grounds. For publicly provided goods and services, where the benefits accrue to individuals within a jurisdiction and where the exclusion principle can be applied in pricing, user charges are most efficient. This is the case particularly for public utilities such as water supply, sewerage, power, and telephones, but also for public transit and housing.[2] These services may involve externalities, but most of them are likely to be local in nature and can therefore appropriately be handled either by cross-subsidies among service users or by subsidies from other locally raised revenue sources.

Other local services, such as general local administration, traffic control, street lighting and security, are local public goods whose primary benefits accrue to the local population but where the exclusion principle in pricing cannot be applied. These are most appropriately financed by taxes whose burden is local so that 'the electorate is confronted with the true opportunity cost involved' (R.A. Musgrave and P.B. Musgrave, 1976, p. 665). For services for which substantial spillovers into neighboring jurisdictions occur, such as health and education, state or national intergovernmental transfers should contribute to their financing. Purely local financing would lead to underprovision of these services from a regional or national perspective. In the face of interjurisdictional inequalities of incomes, there is also likely to be need for equalization of service levels across jurisdictions requiring the use of intergovernmental transfers.

Finally, borrowing is an appropriate source of financing capital outlays for those services which involve investment in long-lasting infrastructure, which is the case particularly for public utilities and road infrastructure. Table 8.1 provides a summary of the appropriate financing of major common local expenditure categories according to the four main types of revenue sources which have so far been distinguished.[3]

A review of the allocation of expenditure responsibility to local authorities in developing countries is necessary to assess whether the actual allocation of revenue sources matches this normative framework. Annex Tables A-1, A-2 and A-3 indicate the allocation of expenditure responsibility to local government in selected cities in a number of developing countries.[4] Virtually all local governments provide at least a minimal range of basic public services, i.e., markets, abattoirs, fire protection, street cleaning and lighting, garbage collection, cemeteries, libraries, and minor public disease prevention services. Beyond these common functions, local expenditure responsibilities vary markedly.

Table 8.1

EFFICIENT ASSIGNMENT OF LOCAL REVENUE AUTHORITY CLASSIFIED BY TYPE OF EXPENDITURE RESPONSIBILITY

	Sources of Finance[a]			
Services	Local Taxes	User Charges	Transfers	Borrowings[b]
Public Utilities				
Water supply	S	P		A
Sewerage	S	P		A
Drainage	P	P[c]		A
Electricity		P		A
Telephones		P		A
Markets and abattoirs	S	P		(A)
Housing	S	P		A
Land development		P		A
Transportation				
Highways and streets	P	P[c]		A
Public transit	S	P		(A)
General Urban Services				
Refuse collection	P			(A)
Parks and recreation	P			(A)
Fire protection	P			(A)
Law enforcement	P		S	
General administration	P			
Social Services				
Education	P	S	P	(A)
Health	P	S	P	(A)
Welfare	S		P	

Notes: (a) P = Primary source
S = Secondary source
(b) A = Borrowing is appropriate for major capital expenditures
(A) = Borrowing is appropriate for capital spending, but likely to account for small share of total spending
(c) Development charges (i.e., special assessments, valorization charges, etc.) are appropriate for drainage, highways and streets especially where their benefits are spatially well defined within a jurisdiction.

Many local governments have full or partial responsibility for the maintenance of streets, potable water supply, sewerage systems, and drainage. In contrast, telephone and electricity services are typically (but not always) the responsibility of higher level government agencies. Primary education is frequently under local control, but higher education, public health and welfare are rarely local government functions. Local housing programs are of importance in a few cities, particularly in the former British colonies. Urban mass transportation is sometimes a local function, but is more often left to the private sector. Police protection is almost universally a responsibility of national authorities. Within developing countries, local governments in larger cities tend to have a greater range of responsibilities than do their counterparts in smaller cities or rural small towns. Capital cities are usually given most autonomy and frequently have a special administrative status which grants them local and state functions.

Annex Table A-4 describes the financing of expenditures by major types of revenue for a number of local governments. The share of locally raised revenues in financing total expenditures ranges from over 100 percent in Francistown and Mexico City[5] to an exceptionally low share of 30 percent in Kingston. Typically, between 60 and 90 percent of local expenditures are financed from local sources, with a median of about 79 percent. Local taxes provide more than half of locally raised revenues, while self-financing revenues (i.e., user charges and development charges) contribute about a third, and other local revenues the remainder. Overall, external financing (defined here to include borrowing and transfers) finances less than a quarter of total expenditures of local authorities in the cities shown, with grants and shared taxes accounting for about two thirds of this portion. The extent to which local governments in developing countries are financed by transfers thus appears to be quite low on average, and in fact lower than is typically the case in the industrialized countries (Marshall, 1969; Prud'homme, 1980).

One may go beyond these general patterns by relating the shares of major expenditures and revenue categories directly to each other (see Table 8.2). In line with the schematic categorization in Table 8.1, services are grouped under three headings: general urban services, with the presumption that these would be efficiently financed by local taxes; public utilities, largely to be financed from user charges;[6] and social services, largely to be supported by transfers. The results presented in Table 8.2 suggest that cities can be grouped into four broad categories. In Bogota and Cali actual revenue and expenditure patterns roughly match the norm set out in Table 8.1: general urban services are financed largely by local taxes, public utilities by user charges, and social services by transfers. There are seven cities (Bombay, Calcutta, Madras, Seoul, Jakarta, Lusaka and Karachi) where local tax revenues exceed general urban services expenditures, user charges fall short of public utility spending, and transfers do not match social services expenditure. Within this group, Bombay and Karachi are notable for a high share of social services in total spending, not nearly matched by transfers. In two cities (Cartagena and Kingston) taxes fall short of covering general urban services, user charges do not cover public utility spending, and transfers exceed social service spending. This pattern is particularly pronounced in Kingston. For Cartagena user charges are roughly in line with public utility spending, but transfers are utilized to finance general urban services. Finally, Ahmedabad's taxes exceed general services expenditures, and user charges exceed spending on utilities, but transfers fall considerably short of covering social services expenditures.[7]

Intra-country differences of financing patterns are notable for Colombia and India. For the case of Colombia this can be explained by the fact that Bogota as a capital city has a special status combining provincial (state) and municipal functions and therefore benefiting more than other Colombian cities from central government transfers especially designed to finance social services. In Cartagena, a special share in the national income tax is allocated to this municipality (but not to others in Colombia) as a matter of historical convention; this helps to explain the relatively high share of transfers in total revenues. Cali, on balance, probably represents the 'typical' large Colombian municipality; for the smaller and more rural municipalities the shares of public utility spending and user charge revenues would tend to be substantially lower, with commensurately higher shares for general services and local taxes (Linn, 1980a). For India, the inter-municipal differences are largely due to different state regimes governing state transfers to local authorities, as well as differing systems of charging for public utilities (general property taxation versus earmarked surcharges for serviced properties) (Datta, 1981).

In sum, few of the local governments surveyed exhibit a revenue pattern which matches the efficient assignment of revenues suggested above. A number

Table 8.2

COMPARISON OF EXPENDITURE SHARES AND SHARES OF SELECTED MAJOR REVENUE CATEGORIES IN SELECTED CITIES OF DEVELOPING COUNTRIES
(All figures are percentages of total revenues or spending, respectively)

	Colombia			India				Korea	Indonesia	Jamaica	Zambia	Pakistan
Expenditure and Revenue Categories	Bogota 1972	Cali 1974	Cartagena 1972	Ahmedabad 1970-71	Bombay 1970-71	Calcutta 1974-75	Madras 1975-76	Seoul 1971	Jakarta 1972-73	Kingston 1971-72	Lusaka 1972	Karachi 1974-75
General Urban Services												
Spending	17.3	22.6	37.2	33.6	13.6	20.4	23.3	14.4	44.1	45.5	27.4	21.8
Local tax revenues	14.0	16.9	27.1	44.5	45.9	73.8	65.5	43.7	63.6	27.3	41.3	81.9
Public Utilities												
Spending	54.8	58.2	47.1	31.1	52.1	65.4	42.7	61.1	42.4	32.3	44.0	45.5
(plus debt service)	(69.1)	(74.5)	(61.2)	(41.8)	(66.3)	(65.4)	(42.7)	(61.3)	(42.4)	(38.2)	(68.7)	(45.5)
User charge revenues	48.5	57.5	43.3	41.8	38.7	-	3.7	36.3	15.2	2.7	36.9	2.2
(plus borrowing)	(72.0)	(80.4)	(60.1)	(51.3)	(53.1)	(6.8)	(9.4)	(40.4)	(15.2)	(5.4)	(52.7)	(15.3)
Social Services												
Spending	13.7	2.9	1.6	24.7	20.2	14.1	34.0	24.3	13.4	16.4	4.0	32.6
Transfer revenues	14.0	2.8	12.8	4.2	1.0	19.4	25.1	15.8	21.1	67.2	6.0	2.8

Notes: For each city, all expenditure shares (including debt service) add to 100 percent (except for rounding error); all revenue shares (including borrowing) add to 100 percent (except for rounding error)

General Urban Services: Refuse collection, parks and recreation, industries, fire protection, law enforcement, general administration, employee pensions and health care, grants and transfers, other miscellaneous services

Public Utilities: Water supply, sewerage and drainage, electricity, telephones, housing, markets and abattoirs, highways and roads, and public transportation

Social Services: Education, health, social welfare (including 'milk scheme' in Ahmedabad)

Local Taxes: Includes other miscellaneous revenues

User Charges: Includes revenues from development charges, housing schemes, etc.

Source: Annex Table A-4; and Bahl and Linn (forthcoming).

of factors may be highlighted in explaining the observed divergence. The first is historical precedent (e.g., property tax financing of public utility services in former British colonies). The second is that in most cities there exists a pervasive overlap of local, state, and national responsibilities for many of the important public service functions.[8] This can result in two types of difficulties: Where capital works are funded by higher level authorities and then handed over to local government for operation, there generally exists little scope or incentive at the local level to recover the capital costs for users. This has been observed, for example, for water supply investments in Jakarta (Linn, Smith and Wignjowijoto, 1976). Moreover, where there is a lack of clarity as to the division of responsibilities between higher level and local government, local authorities lack the incentive to mobilize local resources. This has been observed in the case of the Brazilian municipalities (Dillinger, 1982).

Third, the institutional framework of local government can have a major impact on financing patterns. For the Colombian municipalities, public utility services are often provided by municipal public enterprises which rely on user and beneficiary charges. In contrast, the local authorities on the Indian subcontinent tend to be less fragmented along functional lines, providing *prima facie* less of an institutional barrier to tax or grant financing of public utility services.

Finally, some of the discrepancies between the norm suggested in Table 8.1 and actual practice shown in Table 8.2 may not be due so much to differential assignments of revenue authority as to a greater or lesser revenue effort by the local governments. However, the extent of higher level government involvement in the local revenue mobilization process makes it virtually impossible to separate the extent to which a particular revenue performance is due to poor local effort or to the incentives, disincentives or impediments of various sorts provided by higher level governments.

In analyzing the revenue mobilization pattern of a particular local authority the broad normative framework postulated above can be helpful in determining whether or not revenues are raised in a fashion broadly commensurate with the efficiency criterion of local revenue assignment. One important area of application of this normative framework is in the evaluation of the differential assignment of local revenue authority for different types of local authorities within a particular country. It is frequently observed that (a) urban municipalities, and in particular the large cities, have more access to productive revenue bases than do rural jurisdictions; (b) even where revenue authority is identical across jurisdictions, many of the local revenue instruments are inherently 'urban' in that the revenue bases tend to be concentrated in urban areas (e.g., the property tax, the business and commerce tax, sales taxes); (c) grant systems, particularly where based on the derivation principle, are biased in the direction of the more urbanized jurisdictions (see, for example, Dillinger, 1982 for Brazil); and (d) local borrowing often is limited *de facto* to the larger urban local governments and to local public enterprises in the big cities. In many cases these patterns are commensurate with differences in local expenditure responsibility between large and small, urban and rural jurisdictions. Higher level authorities often carry direct responsibility for service provision in small towns and rural areas (see, for example, Linn, 1980a for the case of Colombia), while the same services are provided by local government in the larger towns and cities.

Of course, for any particular case there may be overriding reasons (related to equity concerns, externalities, institutional and political constraints) for deviating from the broad norm indicated in Table 8.1, and in devising specific financing instruments for particular services considerable refinement in criteria and design are possible. Some of the relevant considerations are discussed next.[9]

III. The Assignment of Particular Local Revenue Instruments

The discussion above concentrates on the match between expenditure and revenue assignment. This section focuses on the appropriate assignment of revenue bases to local government, with an emphasis on local taxes.

A. Taxes

In judging which taxes should be allocated to local authorities, a number of objectives are usually employed. The use of these criteria, however, depends on the perspective of the decision maker. From the central government perspective the chief criteria are likely to be: (a) limit local competition for the important national tax bases (especially broad-based wealth, income and expenditure taxes); (b) limit the local use of taxes whose burdens can be exported to other jurisdictions; (c) provide local authorities with buoyant revenues so as to forestall their claims on central resources; (d) avoid local reliance on regressive taxes; (e) encourage the use of taxes that are most easily administered at the local level; and (f) encourage the use of taxes which closely reflect urban infrastructure and congestion costs. From the local perspective, criteria (c) through to (f) are likely to be relevant, but local government is likely to place greater stress than higher level government on buoyancy and administrative ease, and more or less emphasis on equity and efficiency aspects, depending on the particular circumstances. However, for criteria (a) and (b) - competition with national tax bases and non-exporting - local authorities are very likely to have priorities exactly the opposite from those of higher level governments.

Given these sometimes contradictory criteria it would appear that the property tax and motor vehicle taxation are the most desirable and least objectionable among the major tax instruments that can be delegated to local jurisdictions. From the central perspective, they do not compete substantially with national taxes, tax exporting may be limited, and they tend to have the desired revenue, efficiency and equity characteristics. From the local perspective, too, these taxes are largely appropriate. There are few other acceptable alternatives. Local access to broad-based consumption, income, and wealth taxes is generally not acceptable to national government, given the common central government objectives and administrative difficulties of local implementation. Exportable taxes, such as selective excise taxes, business taxes, *octroi*,[10] tourism and hotel taxes, and the like, are popular among local authorities, and are tolerated by the central authorities partly because they tend to reduce local government's claims on national tax resources.

The empirical evidence on the actual use of taxes by local authorities in developing countries indicates that in general terms the above considerations are borne out by practice (see Annex Table A-5). For 21 cities in the developing world, the percentage distribution of local tax sources is shown, with cities grouped according to their dependence on the more common types of local taxes. Two striking features emerge from Annex Table A-5.

First, local governments make use of a variety of taxes but secondly, only the property tax is near universally applied as a single major source of local tax revenues. The only other taxes which are levied in a majority of cities are taxes on motor vehicles and on entertainment. However, neither contributes a substantial share of local taxes in any of the cities, except for Jakarta. A tax on industry and commerce is levied by many local governments and has many different variants: in some jurisdictions it is levied as a cascading sales tax, in others it is a business rental (or property) tax, and in others a tax on business assets. In all these cases, but especially under the first variant, some tax exporting may occur.

Other taxes are levied only in a few of the jurisdictions surveyed but are of major importance in particular cases (e.g., the local sales tax in Managua, the octroi in India and Pakistan, and local income taxes in some African countries). Finally, the category labelled 'all other taxes' contributes a sizeable share of local taxes in some jurisdictions. Usually the taxes falling under this heading are a motley collection of nuisance taxes which are often costly to collect and to comply with, and which frequently provide little additional revenue. The existence of these taxes attests to two factors: first, the antiquated nature of local government tax structures in many developing countries, where many minor taxes have been kept on the books even when the original motivation for levying them may no longer apply; and secondly, the fact that in the absence of adequate access to the major buoyant tax bases, local governments are forced to resort to minor, and often ill-conceived tax measures to fill annual budget gaps.

B. User Charges

From the national or state perspective, an effectively administered set of user charges (including development charges) should in principle represent an appropriate source of local revenues for many locally provided services. User charges are not directly competitive with higher level government revenue bases, they have desirable revenue, efficiency and equity characteristics (if properly structured), and they are, within certain limits, administratively feasible at the local level. It is therefore not surprising that higher level governments in developing countries have tended to give considerable freedom of action to local governments in charging directly for local services. What is surprising, however, is that in practice, besides reserving the general right to set guidelines, review and approve local service charges,[11] higher level authorities have often counteracted local governments' intentions to raise user charges in line with costs, or to impose charges where these were previously not levied.[12] One reason for this intervention is that national governments are concerned about the pace of inflation and want to limit the contribution which rising local service charges make to increases in the consumer price index. Moreover, national governments fear the political repercussions of price increases for urban services, since urban consumers are often well organized and quite emphatic in their opposition to such increases, at times even endangering the political stability of a country through riots and the like.

Local authorities also tend to have mixed attitudes towards increasing user charges, partly for the same political reasons as the higher level governments, and partly because they may have come to rely on national or state transfers to finance part of their public service expenditures. On balance, however, it appears that user charges have become increasingly important sources of additional local revenues in developing countries, particularly in jurisdictions where local authorities provide many of the services that lend themselves to financing through user charges (Bahl and Linn, forthcoming). It is in the area of user charges where judicious support by central authorities for local revenue raising efforts may be most productive in assisting local revenue efforts.

C. Borrowing

Borrowing is usually the smallest source of financing local government spending in developing countries (see Annex Table A-4). In the sample of local governments surveyed here, those in Colombia and on the Indian subcontinent appear to have relied relatively heavily on borrowing. The variation may be due in part to differences in the assignment of expenditure responsibility, e.g., local public utility operations in the Colombian cities and in Bombay have required loan financing for their large investments. Also of importance in the case of Colombia, India and Pakistan is that higher levels of government are relatively flexible in permitting loan financing.

In general, however, local government borrowing in developing countries is highly regulated and centralized. The central government usually establishes the total amount of credit available, eligible projects, terms of the loan, and the distribution among local governments. Techniques for the distribution of access to credit, and for the determination of the total amount of credit to be made available, vary widely, as might be illustrated by the following approaches. Loan approval in the Philippines is on a project-by-project basis, with the Ministry of Finance deciding on the total credit pool and the allocations (Hubbell, 1983). Plan loans in India are apportioned among states on a formula basis, and some of this credit is used to finance urban projects. However, this does not show up in the local government budget. Kenya and Tunisia distribute credit from a local government loan fund (capitalized from grants and market loans), largely on an *ad hoc* basis and with a very stringent approval process (Prud'homme, 1980). Brazil, Venezuela and Nicaragua distribute credit on various bases through a specialized local government credit institution (Lordello de Mello, 1977). The latter approach requires a more stringent analysis of creditworthiness, and therefore would be more biased toward larger cities. In sum, the institutional framework established by the central government plays a major role in determining the extent to which a city government borrows to finance public services. In fact, the line between higher level grants and loans becomes frequently blurred, since public loans are often provided at highly subsidized rates and sometimes jointly with grants (e.g., in India, Pakistan and Jamaica).

These universal restrictions on borrowing by local governments are not surprising in countries where capital markets are poorly developed, and where national governments are generally concerned about the nationwide allocation of public and private savings, and therefore try to channel public investments, including those by local authorities, in such a manner as to conform with the objectives and directions of the overall national plan. One particular problem, however, with extensive central control over local borrowing is the often excessive paper work and bureaucratic delays which local governments encounter when applying for permission to borrow even relatively minor amounts. This in itself has helped to discourage borrowing by local authorities (see for example, Bird, 1980 for a description of the case of Cali, Colombia; and Hubbell, 1983, for a discussion on the Philippines). The pervasive constraints on borrowing are especially troublesome where major investment projects need to be financed by local authorities, particularly in the area of public utilities, but also for slum improvement, public housing, school construction projects, and the like. When borrowing is ruled out in principle or practice, then investments have to be financed by capital grants, have to be carried out directly by central government agencies, or more frequently yet will not be made at all. Improved, albeit supervised, access to capital markets by local authorities could go a long way towards freeing central authorities from direct responsibility for design, construction and operation of public service facilities, and would likely provide an incentive for greater resource mobilization at the local level, particularly through user charges designed to service the local debt.

D. Intergovernmental Transfers

Intergovernmental transfers are an integral part of the local government revenue structure. They can provide important incentives or disincentives to local revenue effort and represent an appropriate way of financing those local government functions for which regional or national spillovers of benefits are important. Not surprisingly, local authorities rarely, if ever, have any say in the design of higher level government grant systems, but are generally at the mercy of the decisions of national and state governments. In fact, the higher level governments often treat these transfers as a residual in their own budgeting process, even where elaborate allocation systems have been devised to assign and distribute grant resources to local governments. For example, only about 50 percent of grant entitlements of local governments in the Philippines were actually distributed in 1979 (Bahl and Schroeder, 1983). Given the commonly severe constraint on public sector resources in developing countries, this fact alone explains to a significant extent why, on balance, transfers were found to contribute a relatively small share of local government finances in these countries. This small share can also be justified on grounds that in developing countries local public service provision tends to have fewer spillover effects onto adjoining jurisdictions than is the case in many industrialized countries. This is because (a) in the developing countries those public service functions which tend to have the most important spillovers, i.e., education, health, and welfare, are to a much lesser extent carried out by local authorities; (b) even where these functions are a local responsibility, the spillovers tend to be less extensive, in part because of the lower automobile ownership and thus lesser mobility of rural inhabitants resulting in lesser access to urban facilities than is typically the case for the hinterland of cities in industrialized countries; and (c) there is generally less jurisdictional fragmentation within the metropolitan areas of developing countries, particularly when compared with the United States, thus resulting in fewer intra-metropolitan spillover effects.

A fully-fledged exploration of grant systems in developing countries is beyond the scope of this paper (see Bahl and Linn, forthcoming). A few salient characteristics are, however, especially pertinent in this context. First, one should not expect transfers to make significant contributions to resolving the fiscal problems of local authorities in developing countries, either on grounds of principle or practice. Secondly, however, to the extent that grant systems are already in existence, substantial improvements can be made in the interest of both national (state) and local authorities. These include structuring grants more effectively to serve national objectives (e.g., to stimulate local revenue efforts or to equalize interjurisdictional revenue capacity), rationalizing the grant structure where it consists of a multiplicity of small, *ad hoc* transfers as has been the case, e.g., in Jamaica, and by providing them on a more predictable basis permitting more effective fiscal planning at the local level.

IV. The Multiple Dimensions of Local Tax Assignment

From textbook discussions of the assignment problem, it would appear that the decision to confer or not to confer the authority to levy a particular tax to a local government is basically a one-dimensional yes-no decision. But since the administration of any tax involves multiple dimensions of decision making, central or state governments may decide to delegate only certain aspects of tax authority to local government while retaining others under their own authority. A simple equation can illustrate the major dimensions of the tax assignment problem using the property tax as an example:

$$TR = \frac{TR}{TL} \times \frac{TL}{TB} \times \frac{TB}{AB} \times \frac{AB}{B} \times \frac{B}{Y} \times Y$$

[Tax revenue] = [Collection ratio] x [Tax rate] x [Taxable base ratio] x [Assessment ratio] x [Base income ratio] x [Income] where TR = tax revenue collected

TL = legal tax liability

TB = legally taxable base

AB = assessed value of total tax base

B = market value of total tax base

Y = income (product) in jurisdiction.

The terms in this equation isolate the six major determinants of revenues collected for a given local tax: the income level in the jurisdiction, the relationship of the tax base to the income generated in the jurisdiction, the assessment ratio (i.e., relationship between assessed base value and market base value), the taxable base ratio (i.e., the relationship between non-exempted assessed base value and total assessed base value), the tax rate (i.e., the legal tax liability in relation to taxable base value), and, finally, the collection ratio (i.e., the ratio of tax revenue actually collected to legal tax liability).

Even where the revenue from a particular tax accrues directly to a local authority, higher level government may fully or partially control all or some of the six factors determining the revenues. In principle, the format of the above equation can be used to trace quantitatively the effects of particular higher level government intervention in any of these six major dimensions, provided its direct impact on any of the six components can be quantified.[13] Here, however, we will merely qualitatively review the evidence of shared responsibility between local and higher level government in what are, ostensibly, local taxes, by drawing explicitly on the six factors identified in the equation.

A. Local Income

Even where all administrative or legal aspects of a tax are under full local control, central (state) governments can exert an indirect influence over revenue collections by measures affecting the economic base of the community. Sectoral policy biases, for example, may harm the rural-agricultural jurisdictions as compared with the urban-industrial communities. Special incentive policies for regional industrial or rural development, support for regional or subregional development of mineral resources (e.g., in the oil region of Mexico), or special investments or regulation for road access and communication may strengthen the local income base in those jurisdictions particularly affected. Most typically local tax bases are in some way related to the local income base either on the demand or the supply side. Many national and provincial authorities in developing countries have active programs along these lines (see, for example, Renaud, 1981) and can thus exert a strong influence over local tax revenues even where not directly involved in local tax administration.

B. Tax Base

Higher level governments can also influence directly the size or value of the base of a tax, even where the administration of the tax is fully under local control. One intervention is via the definition of the tax base. For example, in Brazil the local property tax excludes, by definition, all rural property (Dillinger, 1982); in Peru, it excludes all commercial property (Greytak, 1982). In most developing countries, national or state legislation specifies whether the local property tax is to be based on capital, rental or site value, with the attendant potential implications for tax revenue levels and buoyancy, as well as equity, and efficiency (see Bahl, 1979).

Somewhat more indirectly, higher level government action may affect the value of a given tax base. For example, national (state) investments, incentives, or regulations directly can raise (or lower) the market values of residential or industrial property in any particular jurisdiction. Rent control affects the market value of the property tax base. For India, where rent control is imposed by the states, 'it is estimated that due to the freezing of rents as a result of the rent control acts, the revenue loss to the municipal authorities amounts to a third of their total revenue in the larger cities and somewhat less in other towns' (Datta, 1981, p. 79). For Bombay, Mohan (1974) estimated that property tax revenue could be increased by as much as 50 percent in the absence of controlled rents.

C. Assessment of the Base

Identification and assessment of local tax bases are often under the control of national or state authorities in developing countries. Real estate and automobile registration is usually carried out by national or regional authorities. Property valuation or assessment is also often centralized at the national or state level, ostensibly in the interest of greater administrative efficiency and fairness. In practice, however, it has been observed that for the larger cities in India and Colombia, where local and higher level property valuation practices exist side by side, there is no clear advantage to national (state) over local assessment (Datta, 1981; Linn, 1980a). For smaller towns and rural communities, however, some centralized assessment approach either involving direct assessment or technical assistance is likely to be the only reasonably effective way of valuing property for tax purposes. In Brazil, an effective program of technical assistance appears to have been carried out by the federal Treasury Ministry to 'assist smaller municipios in preparing and updating property cadasters, revising municipal tax codes, and training municipal tax assessors. The project, launched in 1974/75, had reached one-quarter of all municipios by 1981. Increases in tax yields of several hundred percent are reported by the project.' (Dillinger, 1982, p. 19.)

Even where assessment is a local responsibility, national or state regulation and tax practices may intervene in various ways. In India, for example, state laws in some states stipulate the frequency of reassessment of property values for tax purposes and may require favorable assessment of owner-occupied, as compared with rental property (Schroeder, 1980). In many countries, national or state regulations limit local government hiring practices and salary scales, thereby limiting the number and quality of property assessors which a local government can hope to attract. National or state property transfer taxes may contribute to the pervasive understatement of real estate sales values for registration purposes, thus removing an important base for effective property valuation. This, for example, has been found to be a factor in Colombia (Linn, 1980b).

D. Exemptions

National or state legislation in many developing countries stipulate extensive exemptions for certain local taxes, e.g., most countries exempt church property from local property taxation. National and state government property, often including that of public enterprises, is also generally exempt from local property taxes, although in some cases transfers *in lieu* of property taxes are made by higher level governments - rarely sufficient, however, to offset the full amount of tax loss (Bahl, 1979). For Bogota in 1972 a conservative estimate put the property tax loss due to exemption of higher level government property at about 5 percent of actual property tax receipts (Linn, 1980b). If allowance is made for the likely underestimation of the value of this property relative to other property the tax loss is likely to have been substantially higher.

More generally, national and state governments often dictate deductions or exemptions from local taxes. For example, in India, states often stipulate the permissible deductions for the local tax on professionals (Datta, 1981). Similarly, new industrial investors are often granted exemptions from local taxes (along with national taxes) for promotional purposes. This is the practice specifically in the Philippines and in Thailand.

E. Tax Rates

The level and structure of local tax rates are often fixed by state or national legislation, or at least a maximum level is set (e.g., in India and Colombia for the property tax). Even where such absolute limits are not applied to rates, higher level approval of rate changes is often required, either as part of the local budget review and approval by higher level authorities (Kenya) or in separate rate approval proceedings.

Where these restrictions have led to inflexible tax rates, as has often been the case for property taxes, the local government's ability to manage its tax structure effectively can be seriously impaired. The property tax is a good case in point. Practical considerations tend to limit the frequency of property reassessments to discrete intervals usually on the order of five to seven years. In principle, it would then be desirable to adjust the property tax rate upward on an annual basis to keep the effective tax burdens roughly unchanged or growing gradually over the years between valuations. Upon reassessment the rate could then be dropped to avoid drastic increases in the tax burden. In contrast, where the property tax rates are fixed by higher level authority, such flexible rate management is ruled out. The typical pattern, then, is one where between the periodic reassessments the effective property tax rate drops off, followed by a sudden upward shift upon reassessment. Apart from the revenue losses incurred between reassessments, this practice tends to result in a secular decline in assessment ratios and effective property tax rates, because between reassessments property owners become accustomed to lower effective tax rates and burdens, and then tend to react with great vigor to the sudden increases upon reassessment. This political pressure is often too much for local or national authorities to resist in preparing the reassessment, resulting in an increasing erosion in the property tax base. This phenomenon may account for much of the lack of buoyancy in local property tax revenues in developing countries (see Bahl, 1979; and Bahl and Linn, forthcoming). Central government control over local tax rates can thus have very significant implications which must be considered in imposing or perpetuating such control.

F. Tax Collection

The collection of local taxes *prima facie* would appear not to be amenable to significant interventions from higher level authorities, but local governments in developing countries are in fact often highly dependent on national or state authorities in their ability to collect local taxes. Interest and penalty rates for late payment are often stipulated by higher level authorities and rarely adjusted to reflect changing circumstances, especially higher rates of inflation. Mohan (1974) found in India that it was important whether state regulations permitted taxpayers to withhold payment of local tax during appeal (in Calcutta); or forced them to pay before appeal, with a later refund in case the appeal is upheld (in Delhi). Higher level legislation also generally governs expropriation procedures for failure to pay taxes and often involves very cumbersome hurdles for local governments. Tax courts through which local authorities have to proceed are often over-burdened, understaffed and underfunded, but generally operate under higher level government legislation and budgetary provision. Another problem is that penalties for failure to pay local taxes are often set by the central government at levels too low to induce taxpayer compliance. One obvious solution to local tax collection problems - the 'piggybacking' of local taxes on to state or national taxes - appears to be virtually nonexistent in developing countries, presumably because of the fear of higher level authorities that local tax competition would cut into their own tax capacity.

V. Conclusion

A proper consideration of the assignment of revenue to local governments in developing countries must emphasize the relationship between expenditure and revenue assignment, take a broad view of local revenues, including taxes, user charges, borrowing and transfers, and highlight the many dimensions of tax revenue mobilization. Particular attention must be given to the different perspectives and objectives of policy makers at the local as against the higher levels of government.

This paper presents a simple normative framework for assessing the relationship between revenue and expenditure assignment. In practice, it was found that the assignment of revenue authority to local governments in many developing countries deviates substantially from this norm. Commonly, local taxes have financed substantial shares of services that should have been financed from user chargers, and/or transfers have been used to finance services which could have been appropriately financed from local taxes or user charges. In considering fiscal reform for local government, say in the context of decentralization efforts in developing countries, reference to the normative framework here presented provides a useful guideline.

Local government in developing countries commonly confront a 'fiscal gap' between expenditure requirements and revenue capacity. This paper concludes that, given the constraints on fiscal resources at higher levels of government there is likely to be limited scope for closing this gap through increased tax authority or transfers for local governments. More promising avenues appear to lie in strengthening local authorities' ability to raise revenues from user charges and to finance lumpy investments through improved access to capital markets. Fewer interventions on the part of higher level governments and reduced bureaucratic barriers to local initiatives in these areas could provide useful support to local governments in many developing countries.

Local tax capacity and effort could also be strengthened by more careful design and application of higher level government intervention than has frequently been the case. Often, such intervention has been restrictive on local government in the definition, size and valuation of the tax base, in dictating exemptions and the level and structure of tax rates and in limiting local tax collection capacity. In all these areas, simple neglect or, at times, deliberate design by higher level government have contributed to weakening local tax capacity and effort. It is not sufficient to assign to a local government the authority to tax. The local capabilities to use the authority must also be strengthened by higher level government, and deliberate steps must be taken to minimize unnecessary and harmful interventions limiting local efforts.

Table A-1

LOCAL PUBLIC SECTOR RESPONSIBILITY FOR URBAN SERVICES: CITIES WITH EXTENSIVE LOCAL RESPONSIBILITY

	India				Colombia		Botswana	Indonesia	Korea		Kenya
Function/City	Ahmedabad	Bombay	Calcutta[(a)]	Delhi	Bogota	Cali	Francistown	Jakarta	Seoul	Daegu, Gwangju, Daejeon, Jeonju	Nairobi
Public Utilities											
Water supply	P	P	P	P	P	P	P	P	P	P	P
Sewerage & drainage	P	P	P	P	P	P	P	P	P	P	P
Electricity	-	P	-	P	P	P	P	-	-	-	-
Telephones	-	-	-	-	P	P	P	-	-	-	-
Social Services											
Primary education	P	P	P	P	P	S	S	P	P	P	P
Health	P	S	S	S	S	S	S	S	P	P	P
Social welfare	P	S	P	S	S	-	-	S	S	S	S
Housing	S	P	S	S	S	S	S	P	S	S	P
Transportation											
Highways & roads	P	P	P	P	P	P	P	P	P	P	P
Street lighting	P	P	P	P	P	P	P	P	-	-	P
Mass transportation	P	P	-	P	S	-	-	S	P	-	-
General Urban Services											
Refuse collection	P	P	P	P	P	P	P	P	P	P	P
Parks & recreation	P	S	P	P	P	P	P	P	P	P	P
Markets & abattoirs	P	P	P	P	P	P	P	P	-	-	P
Cemeteries	P	P	P	P	P	P	P	P	-	-	P
Fire protection	P	P	P	P	P	-	-	P	P	P	P
Law enforcement	-	-	-	-	S	-	-	S	-	-	-

Notes: P = primary responsibility
S = secondary responsibility
- = no responsibility
(a) Refers to Calcutta Corporation, which is the major local government authority in metropolitan Calcutta.

Source: Bahl and Linn (forthcoming).

Table A-2

LOCAL PUBLIC SECTOR RESPONSIBILITY FOR URBAN SERVICES: CITIES WITH MODERATE LOCAL RESPONSIBILITY

	Thailand	Pakistan	India	Philippines	Morocco	Zambia		Colombia	Mexico
Function/City	Bangkok	Karachi	Madras	Manila	Casablanca	Lusaka	Kitwe, Ndola	Cartagena	Mexico City
Public Utilities									
Water supply	P	P	P	P	P	P	P	P	P
Sewerage & drainage	P	P	P	P	P	P	P	P	P
Electricity	–	–	–	–	–	–	–	–	–
Telephones	–	–	–	–	–	–	–	P	–
Social Services									
Primary education	P	S	P	S	–	–	–	S	–
Health	P	P	S	S	S	S	S	–	S
Social welfare	–	S	S	S	S	S	S	–	S
Housing	–	–	S	S	–	P	P	–	–
Transportation									
Highways & roads	–	P	P	S	P	P	S	P	P
Street lighting	–	P	P	S	P	P	P	P	P
Mass transportation	S	–	–	–	P	–	–	–	–
General Urban Services									
Refuse collection	P	P	P	P	P	P	P	P	P
Parks & recreation	P	P	P	S	P	P	P	P	P
Markets & abattoirs	P	P	P	P	P	P	P	P	P
Cemeteries	P	P	P	P	P	P	P	P	P
Fire protection	P	P	P	P	S	P	P	P	n.a.
Law enforcement	–	–	–	–	S	–	–	–	S

Notes: P = primary responsibility
S = secondary responsibility
– = no responsibility

Source: Bahl and Linn (forthcoming).

Table A-3

LOCAL PUBLIC SECTOR RESPONSIBILITY FOR URBAN SERVICES: CITIES WITH LOW LOCAL RESPONSIBILITY

	Philippines	Pakistan	Iran	Zaire		Nigeria	Tunisia	Jamaica	Peru	Venezuela
Function/City	Davao	Gujranwala	Tehran	Kinshasa	Lumbumbashi, Bukaru, Mbuji-Mai	Lagos	Tunis	Kingston	Lima	Valencia
Public Utilities										
Water supply	–	S	S	–	–	S	–	S	P	–
Sewerage & drainage	P	S	S	–	–	S	P	–	P	–
Electricity	–	–	–	–	–	–	–	–	–	–
Telephones	–	–	–	–	–	–	–	–	–	–
Social Services										
Primary education	S	P	–	–	–	P	S	–	–	S
Health	S	S	S	S	–	S	S	S	S	S
Social welfare	–	S	S	S	S	–	–	S	–	–
Housing	–	–	S	–	–	–	S	–	–	–
Transportation										
Highways & roads	P	S	P	P	S	P	P	P	S	S
Street lighting	P	P	P	P	P	P	–	–	P	P
Mass transportation	–	–	–	–	–	S	–	–	S	S
General Urban Services										
Refuse collection	P	P	P	P	P	P	P	P	P	P
Parks & recreation	P	P	P	P	P	P	P	P	P	P
Markets & abbatoirs	P	P	P	P	P	P	P	P	P	P
Cemeteries	P	P	P	P	P	P	P	P	P	P
Fire protection	P	n.a.	P	P	P	–	P	P	–	P
Law enforcement	S	–	–	–	–	S	–	–	S	–

Notes: P = primary responsibility
S = secondary responsibility
– = no responsibility

Source: Bahl and Linn (forthcoming).

Table A-4

FINANCING OF LOCAL PUBLIC EXPENDITURES IN SELECTED CITIES: PERCENTAGE DISTRIBUTION BY TYPE OF REVENUE

		Locally Raised Revenue				Revenue from External Sources			
City	Year	Total Local Revenue	Local Taxes	Self financing Services	Other Local Revenue	Total External Revenue	Grants and Shared Taxes	Net Borrowing[a]	Total
Francistown (Botswana)	1972	102.9	46.8	56.1	-	-2.9	1.9	- 4.8	100.0
Mexico City (Mexico)	1968	101.9	70.9	5.2	25.8	-1.9	8.9	-10.8	100.0
La Paz (Bolivia)	1975	97.0	61.9	3.6	31.5	3.0	9.0	- 6.0	100.0
Tunis (Tunisia)	1972	93.9	36.8	7.1	50.0	6.1	0.7	5.4	100.0
Kitwe (Zambia)	1975	92.7	35.0	53.1	4.6	7.3	2.2	5.1	100.0
Valencia (Venezuela)	1968	90.8	44.8	13.4	32.6	9.2	9.2	-	100.0
Lumbumbashi (Zaire)	1972	90.5	72.8	-	17.7	9.5	9.5	-	100.0
Rio de Janeiro (Brazil)[b]	1967	88.4	74.5	7.2	6.7	11.6	1.7	9.9	100.0
Ahmedabad (India)	1970/1	86.3	38.6	41.8	5.9	13.7	4.2	9.5	100.0
Bombay (India)	1970/1	84.6	37.9	38.7	8.0	15.4	1.0	14.4	100.0
Karachi (Pakistan)	1974/5	84.1	67.6	2.2	14.3	15.9	2.8	13.1	100.0
Seoul (Korea)	1971	80.0	30.3	36.3	13.4	19.9	15.8	4.1	100.0
Jakarta (Indonesia)[c]	1972/3	78.8	40.6	15.2	23.0	21.1	21.1	-	100.0
		(81.9)	(43.7)	(15.2)	(23.0)	(18.1)	(18.1)	(-)	(100.0)
Lusaka (Zambia)	1972	78.2	39.3	36.9	2.0	21.8	6.0	15.8	100.0
Cali (Colombia)	1974	74.4	15.6	57.5	1.3	25.7	2.8	22.9	100.0
Calcutta Corporation (India)	1974/5	73.8	64.4	-	9.4	26.2	19.4	6.8	100.0
Cartagena (Colombia)	1972	70.4	23.3	43.3	3.8	29.6	12.8	16.8	100.0
Mbuji-Mayi (Zaire)	1971	70.2	66.5	-	2.7	29.8	29.8	-	100.0
Manila (Philippines)[d]	1970	70.0	55.0	10.0	5.0	30.0	30.0	-	100.0
Bukaru (Zaire)	1971	69.9	67.4	-	2.5	30.1	30.1	-	100.0
Madras (India)	1975/6	69.2	54.5	3.7	11.0	30.8	25.1	5.7	100.0
Bogota (Colombia)[c]	1972	62.5	13.7	48.5	0.3	37.5	14.0	23.5	100.0
		(72.4)	(23.6)	(48.5)	(0.3)	(27.6)	(4.1)	(23.5)	(100.0)
Tehran (Iran)	1974	46.9	42.8	-	4.1	53.1	45.2	7.9	100.0
Kingston (Jamacia)	1971/2	30.1	23.9	2.7	3.4	69.9	67.2	2.7	100.0
Kinshasa (Zaire)	1971	26.9	25.4	-	1.5	73.1	73.1	-	100.0
Median		78.8	42.8	7.2	6.7	21.1	9.5	5.1	100.0
(Average)		(76.6)	(46.0)	(19.3)	(11.2)	(23.4)	(17.7)	(5.7)	(100.0)

Notes: (a) Net borrowing consists of loan financing minus net changes in financial assets or reserves.
(b) Due to exclusion of autonomous agencies the contribution of self financing service revenues and that of all locally raised revenues are probably understated, while the remaining entries are overstated.

(c) Figures not in brackets include shared taxes under grants; figures in brackets include shared taxes under local taxes.
(d) Total revenues are used instead of total expenditures.

Source: Linn (1981).

Table A-5

PERCENTAGE DISTRIBUTION OF LOCAL TAX REVENUES BY SOURCE FOR SELECTED CITIES

City	Year	Local Taxes as percent of Total Local Expenditure	Percent of Local Tax Revenue Derived from												
			Property Tax	Property Transfer Tax	Income Tax	General Sales Tax	Octroi	Beer Tax	Gasoline Tax	Entertain-ment Tax	Industry and Commerce Tax	Motor Vehicle Tax	Gambling Tax	All Other Taxes	Total
Managua (Nicaragua)	1974	84.3	-	-	-	69.4	-	-	-	2.3	21.1	3.1	-	4.1	100.0
Mexico City (Mexico)	1968	70.9	33.5	2.8	-	-	-	-	1.1	2.6	44.2	-	-	15.8	100.0
Valencia (Venezuela)	1968	44.8	21.4	-	-	-	-	-	-	-	66.7	11.8	-	-	100.0
Bogota (Colombia)	1972	13.7	58.4	-(a)	-	-	-	-(a)	1.8	7.0	18.2	5.1	-	9.5	100.0
Cali (Colombia)	1974	23.2	54.0	-	-	-	-	-	-	6.1	27.8	4.3	-	7.8	100.0
Cartagena (Colombia)	1972	23.3	61.2	-	-	-	-	-	-	4.4	12.2	2.1	5.8	14.2	99.9
La Paz (Bolivia)	1975	61.9	5.2	-	-	-	-	7.1	-	1.5	73.8	-	-	12.4	100.0
Manila (Philippines)	1970	55.0	61.9	-	-	-	-	-	2.2	-	32.1	-	-	3.8	100.0
(Group Average)											(37.0)				
Karachi (Pakistan)	1974/5	67.6	46.0	-	-	-	49.9	-	-	-	-	3.0	-	1.0	100.0
Ahmedabad (India)	1971/2	38.6	43.0	-	-	-	52.0	-	-	-	-	2.0	-	3.0	100.0
Bombay (India)	1971/2	37.9	55.6	-	-	-	37.7	-	-	0.3	-	3.7	-	2.7	100.0
Calcutta Corporation (India)	1974/5	64.4	64.8	-	-	-	27.1(b)	-	-	-	-	-	-	8.2	100.0
(Group Average)							(41.7)								
Francistown (Botswana)	1972	46.8	12.9	-	61.1	-	-	-	-	-	-	-	-	26.0	100.0
Lusaka (Zambia)	1972	39.3	74.6	-	25.4	-	-	-	-	-	-	-	-	-	100.0
Ndola (Zambia)	1972	n.a.	75.6	-	24.4	-	-	-	-	-	-	-	-	-	100.0
Kitwe (Zambia)	1972	n.a.	80.0	-	20.0	-	-	-	-	-	-	-	-	-	100.0
Kinshasa (Zaire)	1971	25.4	-	-	14.4	-	-	62.5	-	-	-	-	-	23.1	100.0
Bukaru (Zaire)	1971	67.4	-	-	3.7	-	-	87.0	-	-	-	-	-	9.3	100.0
Mbuji-Mayi (Zaire)	1971	66.5	-	-	62.7	-	-	-	-	-	-	-	-	37.3	100.0
Daegu (Korea)	1976	n.a.	49.5	22.2	9.1	-	-	-	-	10.4	-	5.4	-	3.5	100.0
Gwangju (Korea)	1976	n.a.	50.3	23.1	13.2	-	-	-	-	6.4	-	4.1	-	2.9	100.0
Daejeon (Korea)	1976	n.a.	51.0	20.1	9.7	-	-	-	-	10.7	-	5.5	-	3.0	100.0
Jeonju (Korea)	1976	n.a.	52.0	24.4	8.9	-	-	-	-	7.5	-	4.9	-	2.1	99.8
(Group Average)					(23.0)										
Seoul (Korea)	1971	30.3	20.6	34.8	-	-	-	-	-	16.4	-	22.2	-	6.0	100.0
Madras (India)	1975/6	54.5	68.9	5.1	-	-	-	-	-	16.0	-	-	-	10.0	100.0
Tehran (Iran)	1974	42.8	55.3	-	-	-	-	-	-	9.1	-	10.1	-	25.6	100.1
Tunis (Tunisia)	1973	36.8	82.6	12.8	-	-	-	-	-	4.6	-	-	-	-	100.0
Jakarta (Indonesia)	1972/3	43.7	-(a)	-	-	-	-	-	-	16.9	-	50.2	26.9	6.0	100.0
Lagos (Nigeria)	1962/3	50.9	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0
Kingston (Jamaica)	1972	23.9	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0
Rio de Janeiro (Brazil)	1967	84.4	3.9	1.0	-	89.2	-	-	-	-	-	-	-	5.9	100.0
Overall Median			51.0												
(Overall Average)			(44.6)												

Notes: (a) Shared tax receipts not shown under local tax revenues
(b) Share of octroi receipts collected by the Calcutta Metropolitan Development Authority.

Source: Linn (1981).

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1 For an overview of local finances in developing countries, with particular reference to urban areas, see Linn (1981); also Bahl and Linn (forthcoming).

2 A particularly interesting phenomenon has been the success of 'valorization' charges in Colombian cities, a development charge assessed on the beneficiaries of urban street, highway and sewerage facilities (see Doebele, Grimes and Linn, 1979).

3 Some of the activities listed in Table 8.1, especially social services, are more appropriately provided at higher levels of government. Other services, including housing and public transit, may be more appropriately left to the private sector. Table 8.1 therefore does not as such address the question of what is the appropriate assignment of expenditure responsibility, but focuses on what are appropriate financing mechanisms given that particular expenditure functions have been allocated to local government. For a detailed discussion of criteria and practices regarding the assignment of expenditure responsibility in the developing countries the reader is referred to Bird (1980); also Bahl and Linn (forthcoming).

4 Local government is here defined to include autonomous, or semi-autonomous local public enterprises. The selection of cities was made entirely on the basis of availability of information. However, given the wide range of countries and city sizes some general conclusions may be drawn about urban local governments.

5 This percentage in excess of 100 percent is explained by the existence of surpluses, with a resulting accumulation of resources in the form of either liquid funds or financial assets shown here as negative borrowing.

6 Borrowing is lumped together with user charges, and debt service with public utility spending in Table 8.2 (figures shown in parentheses) on the grounds that debt and debt service largely are in support of services falling under the category of public utilities (see Table 8.1).

7 The high share of user charges in Ahmedabad, however, is in part due to the classification under user charges of special surcharges on the property tax for properties receiving selected urban services, such as water supply. This represents a borderline case between tax and user charges.

8 For example, various national, state and local agencies in Cali, Colombia, have been involved in providing public housing, public health services and education (Bird, 1980). In Jakarta, the national government and the city government share to varying degrees in the provision of water supply, public health, education and transportation (Linn, Smith and Wignjowijoto, 1976). See Bird (1980); and Bahl and Linn (forthcoming) for a discussion of why this overlap in expenditure responsibility has occurred.

9 For a detailed discussion of tax, user charge and grant design for local governments in developing countries, see Bahl and Linn (forthcoming).

10 Octroi is a sales tax levied on goods as they pass into a jurisdiction and is collected at road check points and other ports of entry.

11 In Colombia, for example, the National Tariff Board has set broad guidelines setting out financial and economic criteria for public utility pricing, and reviews and approves all changes in utility pricing after submission of detailed proposals by the public utility companies. In Thailand, utility and other user charges of public enterprises are subject to reviews by the Ministry of Finance and approval by the national government's cabinet.

12 In Korea some municipalities were in recent years prevented by the central government from raising user fees (Smith and Kim, 1979). In Colombia, similar injunctions were placed by presidential order on all public utilities in 1980. In Bangkok, Thailand, user fees for such services as water supply and bus transport were limited by the national government despite pleas by the metropolitan public enterprises requesting larger adjustments.

13 This framework has been used to identify and measure the determinants of poor property tax revenue performance in Bogota, Colombia (Linn, 1980b), and for the analysis of property tax incidence in Cali, Colombia (Linn, 1979). In each of these cases, one or more of the major factors determining tax revenues or incidence were identified as being under higher level government control.

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