Georgia State University

ScholarWorks @ Georgia State University

ECON Publications

Department of Economics

1987

Local Government Revenues and Expenditures

Roy W. Bahl Georgia State University, rbahl@gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/econ_facpub



Part of the Economics Commons

Recommended Citation

Bahl, Roy W. "Local Government Revenues and Expenditures" in Aronson, J. R., Schwartz, E., & Aronson, J. R. (Jay R.) (1996). Management policies in local government finance (4th ed.). Published for the ICMA Training Institute by the International City/County Management.

This Book Chapter is brought to you for free and open access by the Department of Economics at ScholarWorks @ Georgia State University. It has been accepted for inclusion in ECON Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

Management Policies in Local Government Finance

Fourth Edition

Edited by

Published for the ICMA University

J. Richard Aronson Lehigh University

By the International
City/County
Management Association

Eli Schwartz Lehigh University





Municipal Management Series

Management Policies in Local Government Finance

Advanced Supervisory Practices

Effective Communication

The Effective Local Government Manager

Effective Supervisory Practices

Emergency Management

Housing and Local Government

Local Government Police Management

Management of Local Planning

Management of Local Public works

Managing Fire Services

Managing Human Services

Managing Local Government: Cases in Decision Making

Managing Local Government Finance: Cases in Decision

Managing Municipal Leisure Services

Managing Small Cities and Counties

The Practice of Local Government Planning

The Practice of State and Regional Planning

Service Contracting

Library of Congress Cataloging-in-Publication Data

Management policies in local government finance / edited by J. Richard Aronson, Eli Schwartz. - 4th ed.

 p. cm. — (Municipal management series) ISBN 0-87326-108-9

1. Local finance. 2. Municipal finance. I. Aronson, J. Richard (Jay Richard). II. Schwartz, Eli. IV. Series. HJ9105 M3 1996

352.1 - dc20

96-13387

CIP

Copyright © 1996 by the International City/County Management Association (ICMA), 777 N. Capitol Street NE, Suite 500, Washington, DC 20002-4201. All rights reserved, including rights of reproduction and use in any form or by any means, including the making of copies by any photographic process, or by any electronic or mechanical device, printed or written or oral, or recording for sound or visual reproduction, or for use in any knowledge or retrieval system or device, unless permission in writing is obtained from the copyright proprietor.

Printed in the United States of America 0099989796 7654321

Contents

Part one:
The local
government
setting

1 The finance function in local government /

Leonard I. Ruchelman **3**Patterns of urban development 7
The legal and institutional context 14
Organizing for financial administration 23
Financial decision making 27

2 Fiscal problems of the evolving metropolis /

Leonard I. Ruchelman 35

Evolving structures of metropolitan development 35 Fiscal implications of metropolitan development 38 Policy implications 47

Policy implications 47 Conclusion 53

Conclusion 32

3 Fiscal structure in the federal system / Wallace E. Oates 58

The division of functions 58
Intergovernmental transfers 60
Historical trends in federal fiscal structure 70
Fiscal federalism: Problems and prospects 73
Summary 74

4 Local government expenditures and revenues / Roy Bahl 77

The fiscal roles of government 77 Expenditures 81

Revenues 87

Local government revenue structures 90

The outlook for local finances 92

Larry D. Schroeder 99

Part two: Management tools

5 Forecasting local revenues and expenditures /

Long-range forecasting 99

Medium-range forecasting 102

Revenue and expenditure forecasting: Data requirements 110

Managing projected shortfalls 118

Implementing a forecast 119

Administrative and political issues in forecasting 119

Conclusion 121



Local government expenditures and revenues

This chapter lays out a framework that local officials may find useful in setting budget priorities. The first section applies economic theory to resource allocation, resource distribution, and decisions about stabilization and growth—which can be characterized as government's three principal fiscal roles. The second and third sections focus on expenditures and revenues, at both a prescriptive level (how *should* governments make expenditure and revenue decisions?) and a descriptive level (how *do* they actually spend and tax?). The chapter then considers local government finances in practice and concludes with a look at future trends and influences, from national economic performance and demographics to federal policy.

The fiscal roles of government

Richard Musgrave, in his classic book *The Theory of Public Finance*, provides a useful simplification of the fiscal functions of government.¹ Setting the public budget, according to Musgrave, involves an allocation decision (what services will be provided?), a distribution decision (who will get the benefits and bear the burdens?), and a stabilization/growth decision (what levels of growth in income and prices are acceptable?). Local government financial planners—finance officers, budget officers, and chief administrators—might begin their evaluation of alternative fiscal actions by considering each of these possible objectives.

Allocation

The most important fiscal role in local government is to decide on the level and mix of taxes and expenditures that best match the needs and preferences of the local population. That local governments take this allocation function seriously is evidenced by the wide variety of choices they actually make.

For example, the share of current expenditures devoted to education is 24 percent in Nashville but 37 percent in Reading; the share of local expenditures for police is 2 percent in Reading and 6 percent in Las Vegas. Average effective property tax rates also vary widely: for example, the rate is 0.6 percent in Dothan, Alabama, and 3.8 percent in Milwaukee.² Underlying such variations are a number of other important choices: for example, whether to hire more firefighters or pay current firefighters a higher wage; whether to provide refuse collection or to contract out the service; whether to purchase a CAT scanner or a school bus. In making choices about levels of service, local government officials and managers can be guided by three general criteria: economic efficiency, technical efficiency, and net social benefit when jurisdictions or interests overlap.

Economic efficiency Economic efficiency requires that government fiscal decisions match local preferences for public services. In other words, the government should try to deliver the package of government services and taxes that the population wants. This "preferred" package can be affected by a number of factors. Syracuse requires more snow removal than does St. Petersburg, which requires

more services for elderly residents. Cleveland and Buffalo must maintain an aging stock of public capital, whereas growing cities in the South and West must allocate more to new infrastructure development. Large cities must address a mass transit problem that small cities may not have.

Public service packages also vary with the preferences of the local population. New York and California residents have historically preferred a relatively large government sector, a progressive tax system, and substantial support for public education; Texas and Florida residents seem to prefer smaller public sectors, no income taxes, and a smaller allocation for public education. In some states, these differences are actually legislated: examples are the greater fiscal dominance of the state government over localities in North Carolina and Hawaii and the relatively greater fiscal dominance of local government in Ohio and Pennsylvania.

In order to meet the criterion of economic efficiency, local government decision makers need to recognize citizens' preferences. This may look easy, since voters make their wishes known through school budget votes, bond referendum votes, and general elections. Yet local officials can easily misread a community's complex preferences. Voters may have mixed views on what they want, and they may not be able to reveal preferences on every issue (e.g., there is no separate vote on the police budget). Furthermore, preferences may change: an interesting example comes from two surveys of public opinions on taxes by the Advisory Commission on Intergovernmental Relations (ACIR). The 1972 survey showed that 45 percent of respondents thought the property tax was the least fair tax and only 19 percent thought the federal income tax was the least fair. In the 1993 survey, 26 percent of respondents thought the property tax was least fair, but 36 percent graded the federal income tax as the least fair. Finally, reading preferences is difficult because voters may be "unreasonable" in their expectations: they often demand both lower taxes and better public services.

Technical efficiency Technical efficiency refers to the provision of services at least cost. Local officials can take a number of actions to lower the cost of operations:

- 1. Increase the productivity of workers (through training, by recasting job rules, or by initiating new management and work procedures)
- 2. Improve long-range planning
- 3. Substitute capital for labor
- 4. Reduce interest costs on local debt
- 5. Capture economies of scale in service delivery
- 6. Contract with private organizations for service delivery

However attractive each option may be, none is without its social or economic price. Productivity improvement, for example, is especially appealing because it arouses little political opposition (who could oppose a more productive public sector labor force?). But improved productivity may result in the elimination of "excess" public workers. Whereas this may help the budget, it may harm the local employment situation and may prove to be a politically unattractive policy.

Examples of improved planning include establishing a schedule for maintenance of the capital stock and instituting a multiyear fiscal planning model. In the long run, such actions can significantly improve the efficiency of government operations and probably reduce the unit cost of output, but a large outlay may be necessary to establish and maintain the planning effort.

Examples of substituting capital for labor are computerization, newer police cars and fire trucks, less labor-intensive refuse collection systems, and even relocation of certain public facilities, such as fire stations. Although all these actions may be cost savers, they imply a substantial initial capital outlay.

Actions that would lead to a higher bond rating or improve the marketability of an issue can reduce interest costs. A local government can increase the attractiveness of an issue by dedicating a portion of general revenue to debt repayment, purchasing bond insurance, or installing put options.⁴ However, these actions also entail costs: a dedicated revenue stream weakens the general fiscal base available for other purposes; bond insurance is purchased for a fee; and put options increase the uncertainty of future local budgets.

Local decisions may impose costs or confer benefits on other sectors of society; thus, when "externalities," or spillover effects, are involved, local officials should consider net social benefit, not just the needs and interests of their particular constituency.

Economies of scale can be realized by expanding the geographic area over which a public service is delivered.⁵ These economies—particularly for services such as public utilities—are a principal reason that regionwide and consolidated service districts are common, particularly water and sewer districts, health and hospital districts, park districts, and physical planning districts. However, even though regionwide provision of service usually lowers unit costs, it also entails some loss of local control and, consequently, more difficulty in satisfying local preferences.

Finally, privatization of public services can improve technical efficiency. Refuse collection is the most commonly mentioned example, but numerous other services are amenable to private delivery. On the one hand, turning a service over to the private sector can relieve the local government of some responsibility, and competition among contractors may increase the overall quality of services. On the other hand, in the case of services that have a broad social purpose, privatization may impose a substantial social cost if it reduces the level of output. Moreover, it is by no means certain that the private sector can deliver all services less expensively. In addition to payment of contractors' fees, private contracting involves extensive government administration and monitoring.

Net social benefit Local decisions may impose costs or confer benefits on other sectors of society; thus, when "externalities," or spillover effects, are involved, local officials should consider net social benefit, not just the needs and interests of their particular constituency. For example, a community may overuse water from the local river, depriving adjacent communities of an adequate supply; unbridled growth in a suburban community may increase the number of commuters to the central city, placing an undue burden on central city services; and one community's failure or inability to provide adequate primary and vocational education may lead to another community's crime problem.

Policy makers typically respond in one of three ways to the spillover problem: (1) the federal or state government may either coerce or induce local governments to provide the "right" amount of a public service; (2) local governments may engage in some form of intergovernmental contract to compensate one another for external social costs incurred or benefits received; (3) a local government may expand its service boundaries so as to "internalize the externalities."

Trade-offs Local government officials—even if guided by sound economic reasoning—face some difficult choices in allocating services. Economic efficiency is best served by units of government that are small enough to allow preferences to be taken into account. In fact, one economist has suggested that a theoretically ideal arrangement for metropolitan governance would consist of many different local governments offering different packages of public services and taxes. In this consumer-sovereign world, consumer-residents could "vote with their feet" by choosing a community whose tax and public service package best matched their own preferences.

In contrast, considerations of technical efficiency and net social benefit seem to argue for less emphasis on local preferences and greater emphasis on the larger

governmental unit. Thus, technical efficiency and net social benefit become arguments for areawide consolidation of some services, for metropolitan governance, and for regional tax sharing. The trade-off is that in exchange for reduced unit costs and equitable handling of spillover effects, residents may be required to relinquish some local control over their service package.

Distribution

Distribution is another major fiscal role of local government. How should the benefits and burdens of local budgets be divided among residents? Economics and history have shown that local governments cannot successfully use transfer payments to redistribute income because people are relatively free to move across local boundaries. This does not mean, however, that local government officials should abandon any role in income redistribution. After all, local governments collect 18 percent of all taxes and make 26 percent of all expenditures.

Most local governments have enough discretion to choose among programs that benefit different economic groups: low-income residents benefit from social services; all residents benefit from environmental protection programs; and middle- and upper-income residents are likely to benefit from programs that reduce traffic congestion or improve airports.

One of the three major ways local governments can affect the distribution of real income is through their choice of where to deliver services. Many public services are delivered to locations rather than to persons. For example, a city might decide to increase the frequency of refuse collection in lower-income areas, to local special park facilities in those areas, to increase police protection services in highcrime areas, or to establish neighborhood health clinics. Such decisions can provide, in effect, a subsidy to low-income neighborhoods. (Note that such decisions can be made even after the overall size of the budget has been settled.) A second way that local governments affect real income distribution is in their choice of services to be delivered. Most local governments have enough discretion to choose among programs that benefit different economic groups; low-income residents benefit from social services; all residents benefit from environmental protection programs; and middle- and upper-income residents are likely to benefit from programs that reduce traffic congestion or improve airports. In some cases, it is possible to predict which choices will primarily benefit the low-income population. In other cases—such as choosing between spending more for social services (subsidized housing and welfare) and devoting the funds to economic development programs that may produce more jobs—the final distributional effects are not as clear. The debate on such issues is endless, and there are no easy guidelines.

Finally, although income distribution can also be affected by decisions about what kinds of taxes to levy and how to structure those taxes, such decisions are generally made at the state level. For example, the decision to allow a "circuit breaker" in the property tax to provide relief to elderly residents and low-income families is a state government decision, as are decisions to permit local sales or income taxes or to include food, medicine, and clothing in the sales tax base. However, local governments can affect income distribution through their system of user charges. They can decide, for example, what proportion of local transit system expenditures will be financed by fares and what proportion by general local revenues.

Stabilization and growth

Budget planners often ask whether their local government can do much to stabilize local economic fluctuations and to promote economic development. On the surface,

it would appear that the local government sector is large enough to significantly influence the national economy. After all, local government expenditures account for more than 10 percent of the gross national product (GNP). Yet the answer to the *stabilization* question is a clear no. Local governments can do little to affect interest rates, consumer prices, or—except for very brief periods—the unemployment rate. Whereas the federal government can use deficit financing or its control of the money supply to affect the general economy (i.e., the level of unemployment or the rate of inflation), local governments do not have the same control over fiscal or monetary policy. The resources local governments control are limited; their economies are too open to permit the use of deficit spending to increase employment within the local area; and the benefits of any actions they take independently will not remain in the area but will "leak out" beyond their borders.

When it comes to *development*, however, local governments have considerable ability to stimulate the local economy through autonomous actions. Virtually every local government has some sort of development agency dedicated to promoting local job growth. Whereas study after study has shown that factors such as location, energy costs, and the availability of a skilled labor supply are far more important in industry location decisions than are local tax and expenditure policies, the level and types of taxes in a locality may be important to the location decisions of both large and small businesses within the metropolitan area. 10 Local governments may also offer nontax incentives such as subsidized construction costs, land assembly, and special education programs, but these may impose a strain on local budgets. Whatever the effect on the fiscal environment, local officials usually try to do what they are most capable of—to tailor an economic development program that best fits local circumstances. It is difficult to develop a prescriptive guideline for action in this area. Even if in the final analysis, for example, tax concessions are deemed unimportant, local government officials are very aware that other communities offer such incentives. Because failing to do so signals that the climate is "hostile" to development, tax concessions may be a necessary defensive action.

What this comes down to is another choice. How much is local government willing to charge its current citizens—in the form of higher taxes or lower levels of public services—to provide tax incentives for economic development? The answer to this question depends on local officials' evaluation of a number of factors: the probability that the fiscal incentive will work; the need for jobs in the local area; the likelihood that the new jobs will go to local residents; and the potential effect of any new industry on local government costs and revenues.

Expenditures

How do governments actually spend their funds? What patterns are "average" or "normal"? To what extent are allocation, distribution, and growth objectives served? Local government expenditures can be examined in three ways:

- 1. By looking at the functions or purposes for which local governments expend funds—police, fire, education, and so on
- 2. By classifying expenditures in terms of object—wages and salaries, materials and supplies, and interest payments, for example
- By considering how much of the expenditures are for current items (such as wages and supplies) versus longer-lived capital projects (such as roads or buildings).

In examining these patterns, a word of caution is in order about the comparability of data among different localities: municipalities, counties, and special districts have different expenditure responsibilities in different states, and these are reflected in the "norms" described below.

The magnitude of local expenditures

Table 4–1 shows the relative size of local government expenditures. Local governments account for about 26 percent of *total* government expenditures; however, within this amount, they account for nearly 70 percent of all education expenditures. These data confirm that the major single function of local government is primary and secondary education (administered mainly through semi-independent school districts). The data also emphasize the labor-intensive nature of local services: local governments account for about half of all government employee wages and salaries. Finally, the data confirm local government's limited role in income redistribution: local government accounts for less than 10 percent of assistance and subsidies and for only 2 percent of insurance benefits and repayments.

Table 4–2 shows the distribution of expenditures by type of local government. The first column shows how local governments as a whole spend their resources; e.g., 13.4 percent for capital outlay and 6.6 percent for transportation services. The remaining columns show how these totals are divided among municipalities, counties, and special districts. The table shows that over 40 percent of local government resources are allocated to education services, with no other function coming close. It is not surprising, therefore, that special districts—which include school districts—also account for over 40 percent of local government spending—more than the percentage accounted for by either municipalities or counties.

Table 4-3 shows selected indicators of trends in local government expenditures between 1964 and 1991. The rate of growth in real per capita expenditures by local governments was slower between 1974 and 1984 than it had been during the previous decade, but has picked up since 1984. (This pattern holds whether local expenditures are measured exclusive or inclusive of intergovernmental transfers.) The table also shows that the local government sector has increased in importance relative to GNP since 1984, whether measured in terms of revenues raised or direct

Table 4-1
Government
expenditures by object
and function, 1991.

Expenditure category	Total federal, state, and local expenditures (in billions of dollars)	Local expenditures as percentage of total
Total by object ^a Current operation (wages and salaries) Capital outlay Assistance and subsidies Interest on debt Insurance benefits and repayments	2,379 1,282 (520) 227 118 256	26.2 37.0 (49.7) 36.8 9.8 14.5
Total by function Education and libraries Transportation Social service and income maintenance Public safety Environment and housing Government administrative Interest on general debt Other (including defense)	1,804 334 84 295 88 139 64 247 548	30.0 68.5 41.1 24.7 60.9 43.2 46.1 11.6 5.1

Source: Bureau of the Census, *Governmental Finances*: 1990–91, Series GF91, no. 5 (Washington, DC: GPO, 1993) Table 2

Note: Because of rounding, detail may not add to totals.

a Includes expenditures on utilities, liquor stores, and insurance trusts

Table 4-2 Distribution of local government expenditures by function, object, and spending unit, 1991.

	Distribution of local expenditures (%)	Distribution by type of government (%)		
Expenditure category		Municipalities ^a	Counties	Special districts ^b
Total by object ^c	100.0	37.3	23.1	41.1
Current operation	76.2	34.5	21.5	44.0
Capital outlay	13.4	43.8	22.2	35.7
Assistance and subsidies	1.9	22.1	77.9	0.0
Interest on debt Insurance benefits and	6.0	41.6	22.9	35.5
repayments	1.6	77.4	16.8	5.7
Total by function ^c	100.0	33.9	25.7	42.2
Education services	43.1	11.4	9.1	80.4
Transportation	6.6	57.3	35.2	14.2
Social services	13.4	26.5	60.2	13.7
Public safety	9.9	67.0	31.9	2.2
Environment and housing	11.1	62.1	17.0	23.1
Administration	5.4	53.7	46.3	
Interest on general debt	5.3	41.8	28.5	29.7
Other and unallocable	11.5	64.9	37.5	_

Source: Bureau of the Census, *Government Finances*: 1990-91, Series GF91, no. 5 (Washington, DC: GPO, 1993), Table 2.

Note: Because of rounding, detail may not add to 100%. $^{\rm a}$ Including townships.

b Including school districts.

Table 4-3 Trends in local government revenues, expenditures, and employment.

Item	1965	1975	1985	1991
Local government revenues from own sources				
1. Per capita in 1982-84 dollars	530.9	727.7	844.0	989.7
2. As a percentage of GNP	4.6	5.3	5.3	6.0
3. As a percentage of state government				
revenues ^a	105.7	87.2	78.4	83.3
As a percentage of total government				
revenues ^a	19.1	20.9	20.6	21.8
Local government direct expenditures				
5. Per capita in 1982-84 dollars	794.0	1,237.2	1,283.7	1,562.5
6. As a percentage of GNP	6.9	9.0	8.1	9.5
7. As a percentage of state direct expenditures ^b	184.2	166.1	147.0	145.7
As a percentage of total governmental				
expenditures ^b	27.9	33.2	27.6	29.7
Total local government employment				
9. Per 10,000 population	309.0	409.0	407.0	433.0
10. As a percentage of total government				
employment ^c	45.1	51.5	51.4	53.2

Source: ACIR, Significant Features of Fiscal Federalism, 1993 Edition (Washington, DC: ACIR, 1993), Tables 1, 2, 82.

^c The allocations across local governments by object and function are not the same, because some expenditures could not be allocated by function.

^b After intergovernmental transfers. ^c Including military

^a From own sources.

84

expenditures. Since 1984, increases in local government expenditures have almost kept pace with increases in state government expenditures, and the rate of growth in own-source revenue has increased, owing in part to a resurgence in local property tax revenue since the mid-1980s. The long-standing trend of increasing state government fiscal dominance has not continued. The data in row 10 show that local governments continue to account for more than half of all public employment in the United States.

Each year's budget is an attempt by local officials to balance demand (the quantity and quality of public services local residents would like to have) and supply (the quantity and quality of services the local government can provide at given levels of revenue, or "tax prices").

Determinants of local expenditures

The level and mix of local government expenditures are determined by economic and demographic factors and by federal and state policies that are largely beyond local government control. But this still leaves local government officials with a great degree of choice: depending on their preferences and those of the voters, they can raise taxes or lower service levels; they can alter the service mix; or they can change the compensation program for local government employees.

The job of local fiscal planners is to identify the determinants of public spending, estimate their potential effects on local budgets, and somehow present the available fiscal choices to the public. This can be done most effectively if the local finance officer has a framework within which to consider the factors that determine the level and mix of items in the government budget.

The determinants of local government spending can be thought of in a demandsupply framework. After all, each year's budget is an attempt by local officials to balance demand (the quantity and quality of public services local residents would like to have) and supply (the quantity and quality of services the local government can provide at given levels of revenue, or "tax prices").

Demand factors The demand for public services, as expressed in community preferences, is affected by four major factors:

- 1. Population shifts
- 2. National economic performance
- 3. The relative price of services
- 4. Changes in income level.

Population shifts A community's preferences for public service may shift with a change in the composition of the population. Rapid in-migration has brought new populations with new demands to booming areas in the South and Southwest. In general, growing cities face changes in public service demands that can cause budgets to escalate rapidly. The arrival of new industries and the annexation of adjoining areas create pressure to expand the infrastructure, thus creating a heavier debt burden. Newly arrived companies and in-migrants with higher incomes often demand improvements in the educational system and other public services; the cost of managing and maintaining the local government thus increases at a faster rate than the population. 11

National economic performance Although state government expenditures are more sensitive to the business cycle than local government expenditures, the performance of the national economy can have a significant effect on the level and mix of local

public services. In times of recession, local government expenditures related to unemployment and poverty may automatically rise, but general expenditures may be dampened by tighter budget constraints. In times of inflation, local government expenditures are driven up, principally because of local government employees' demands for increased rates of compensation.

Some observers have argued that the prolonged period of slow economic growth and high inflation that characterized the 1970s and early 1980s shifted the interest of citizens toward tax limitations and away from programs that tended to redistribute income. The 1991 recession had a similar effect. However, lest one conclude that income redistribution is an acceptable goal whenever there is economic growth and a substantial surplus to redistribute, it should be noted that the growth years of the 1980s did *not* bring a significant increase in programs for lower-income citizens.

Relative price A change in the relative price of a public service will cause a change in the quantity demanded. It stands to reason that if the price of government-provided services increases relative to the price of privately provided services, citizens will reduce their demand for the higher-priced services. Changes in the relative price of publicly supplied goods is only half the story, however. The other half is the extent to which local governments respond to changes in relative prices. A great deal of research on public sector behavior indicates that the governmental response to increased prices of inputs is not very great. For instance, when wages of public employees increase, local governments do not appear to cut back public employment in proportion to those increases.¹²

The relative price of public goods can also increase if the price of government services outpaces the growth of the local tax base. For example, the fact that the local property tax base does not usually increase at the same rate as inflation effectively reduces the purchasing power of local government revenues. Thus, higher rates of inflation can slow the growth of real local government expenditures, especially in older cities where property values are relatively stable and little new construction is underway.¹³

Community income As their incomes increase, citizens want more and better services from local governments, such as better schools, better parks, and better road maintenance. Research has shown, however, that many public services are "income elastic": that is, demand increases with growth in income, but at a disproportionate rate. 14

While it is clear that local officials must plan a budgetary response to anticipated increases or decreases in community income, the appropriate response will vary with local circumstances. For example, certain types of income growth are less powerful than others in influencing growth in public expenditures. Substantial increases in welfare-related transfer payments and Social Security benefits, for example, do not yield the same amounts of local tax revenue as other sources of income and therefore may not provide the same stimulus to local public expenditure growth. In addition, the budgetary response will vary with the source of the income change; some changes in local income are brought on by federal government action such as reductions or infusions of federal grants, changes in federal income tax rates, and the elimination of deductibility of state and local government taxes under the federal income tax. Each of the factors discussed in this section—population shifts, national economic performance, relative price, and community income will affect the demand for public services and ultimately the growth of local government expenditures. However, because the precise effect of these and other factors varies from one locality to another, it is impossible to make an unambiguous statement about the effect of these variables on the growth of public expenditures. Much depends, for example, on local preferences, the persuasiveness of local politicians, and the ability of local officials to inform citizens of the choices available

to them. What local government fiscal planners must do is to try to anticipate changes in "tastes" for local public goods, then to take them into account in multiyear budgeting of expenditures.

Supply factors The level of local government expenditures is also determined by supply factors, which affect the cost of providing a given level of public service and determine whether the relative price of a service will rise or fall:

- 1. Costs of labor and capital
- 2. Economies of scale
- 3. Indexation
- 4. Long-term costs associated with capital investments
- 5. Employee productivity.

The long-term, recurrent cost commitments that grow out of capital projects are an important and often neglected source of expenditure growth. Building an auditorium today will lead to debt-servicing requirements tomorrow—as well as to maintenance and operating costs for the new capital facility.

All five of these supply factors raise or lower the relative cost of local government services over time. Although some are uncontrollable, others can be affected by policy actions. As with demand factors, the most important thing local officials can do is to anticipate and plan for cost changes in their long-range fiscal planning.

Costs of labor and capital The relative price of local government goods can be driven up if the wages paid to local government workers increase more rapidly than the wages paid to workers in general. Similarly, expenditures can grow if the cost of capital to local governments rises more quickly than the cost to other users. Between 1983 and 1991, the average compensation paid to a state or local government worker increased at a faster rate than the average compensation paid to a private sector worker and outpaced increases in the consumer price index.¹⁵

Economies of scale Economies of scale can enable local governments to reduce the unit cost of producing increased levels of service. But the means of capturing economies of scale—city-county consolidation, annexation, metropolitan government, areawide special districts—are very difficult to sell to voters. Politically feasible opportunities to capture such economies are generally limited: public utilities and other hardware-type services are the most likely candidates; planning efforts can also sometimes be consolidated to realize economies.

Indexation Some welfare and medical services—and even some collective bargaining contracts—are indexed, which means that the unit expenditures rise automatically with the rate of inflation. Local expenditures in these areas rise accordingly. Although most social services are largely state responsibilities and affect the state budget, state budget constraints can affect state allocations to local governments.

Long-term capital commitments The long-term, recurrent cost commitments that grow out of capital projects are an important and often neglected source of expenditure growth. Building an auditorium today will lead to debt-servicing requirements tomorrow—as well as to maintenance and operating costs for the new capital facility. Planning includes debt service but often underestimates maintenance costs. As local governments respond to the need for infrastructure improvements, these long-term expenditure commitments will become even more important.

Employee productivity Local government activities are labor-intensive, and for many services there is relatively little opportunity to increase productivity by substituting capital for labor. Public workers may nevertheless receive increases in salary and benefits that parallel those received in the goods-producing private sector, where such increases are often related to real productivity gains. The result, it has been argued, is that government claims an increasing share of private sector income. Though it may be an oversimplification, this basic concept is useful. If local government remains labor-intensive and oriented more toward people than toward products, and if technological improvements and productivity gains are tied to capital, then the relative cost of delivering a given quantity and quality of a service-oriented output will tend to increase over time.

External factors In addition to demand and supply, certain external factors can influence expenditure levels. A national or regional recession, for example, or a local plant closing can have a major effect on both the level of fiscal resources available to the local government and the level of expenditures for programs such as unemployment compensation and public assistance. Such changes can also create uncertainty—and therefore more caution—on the part of state and local government officials, which can lead in turn to much lower spending levels. A good case in point is the nationwide financial conservatism that arose after New York City's 1975 financial collapse; another is the zeal for fiscal limitation, which arose after California's passage of Proposition 13 and continues to be influential.

Other external factors influencing the level and growth rate of local government expenditures are higher-level government policies such as state-legislated mandates, federally mandated education or health services requirements, and court-imposed school financing requirements. Federal fiscal policy is another significant influence. The retrenchment in federal grants and the elimination of federal revenue sharing influenced local government budgetary decisions either directly or through their effect on the flow of state aid to local governments. More recently, changes in the federal marginal tax rate and the elimination of the sales tax as a federal income tax deduction lowered the value of deductions to itemizers, thus increasing the "price" of state and local government expenditures. In the short run, local officials can do little more than plan to absorb the effects of these external changes.

Revenues

Local governments receive revenues from user charges, taxation, intergovernmental transfers, and borrowing. This section of the chapter outlines some general principles that can guide the fiscal planner in designing the right mix of taxes and other revenue sources for financing local government services.

One might start by noting that the appropriate assignment of revenue sources depends on the expenditure responsibilities of the local government.

- User charges are the most efficient revenue instrument for services whose benefits accrue primarily to those who consume the service. User charges are appropriate, for example, for financing public utilities, public transit, and certain roads and bridges.
- 2. Local taxes are the best source of revenue for local services when benefits accrue to the entire local population and individual pricing cannot be applied. Examples are general administration, traffic control, street lighting, and police and fire services.
- 3. State or federal intergovernmental transfers should contribute to financing such functions as public assistance, health, and education, where substantial spillovers of benefits into neighboring jurisdictions occur. Purely local financing—user charges or taxes—would lead provision of these services to fall short from a regional or national perspective.

4. Borrowing is an appropriate source of financing for long-lived capital investments.

These guidelines are based on economic efficiency, which is not the only value that may influence a local financing system: there are also equity, political, legal, and administrative concerns. For example, although user charges may be an efficient way to finance most of local transit system costs, a larger general-revenue subsidy may be justified on the grounds of reducing the burden on low-income families, who are most dependent on public transit. Higher local taxes may be the most appropriate way to finance a recurrent budgetary shortfall, but short-term borrowing or a drawdown from local asset balances often turns out to be more politically acceptable.

Not every tax will be equitable, yield adequate revenues, and be free of heavy administrative costs. When designing a tax system, policy makers should focus on the whole rather than on the individual parts, consider the trade-offs involved, and select a tax structure that will in the aggregate meet the desired criteria.

Designing a local tax system

Five criteria are typically considered in structuring a revenue system: yield, equity, neutrality, administrative ease, and political feasibility. (Only the first three of these criteria will be discussed here.) Although each of these criteria is important in evaluating every tax, policy makers must recognize that there is no perfect tax. Not every tax will be equitable, yield adequate revenues, and be free of heavy administrative costs. When designing a tax system, policy makers should focus on the whole rather than on the individual parts, consider the trade-offs involved, and select a tax structure that will in the aggregate meet the desired criteria.

Yield The most important goal in structuring a tax is to raise adequate *revenue*. Generally, this means that the tax base must be broad enough to allow rates to be set at feasible levels. One can think of any number of "desirable" objects of taxation whose base is simply too small to generate an adequate revenue flow—industrial polluters, or luxury jewelry, or gourmet food purchases. To raise significant funds from such bases, the nominal tax rates would have to be unrealistically high. The alternative is to search for broader bases, such as aggregate consumption, earnings, and property wealth.

In addition to having a broad base, a tax should have adequate income elasticity: 17 that is, tax revenues should grow sufficiently to cover expenditures and should not require annual discretionary rate or base adjustments. What is the right level of elasticity? It depends on the anticipated growth rate of expenditures. If expenditures respond proportionately to income growth, revenues should as well. If elasticity is too low, then local officials will be forced to return to the voters the following year to seek a rate increase; this is commonly the case with school budgets in areas where the growth in the property value base has not kept pace with expenditure needs. However, if elasticity is too high, then the tax burden will automatically rise each year and could conceivably generate voter dissatisfaction; some observers think that the high elasticity of the local property tax in California helped precipitate Proposition 13, which set stringent limits on the use of the property tax. Moreover, higher elasticity also implies that revenues will be less stable over the course of the business cycle.

The local property tax has long been held to offer an adequately elastic base, but this may no longer be the case. For a number of years, for example, property values in central cities were not growing rapidly enough, and rate increases were

necessary to keep pace with revenue needs. In the suburbs, in contrast, property values were growing relatively rapidly, but local officials were reluctant to revalue properties more often, in order to bring more of the potential tax base onto the rolls. More recently, however, the concern is that property values in both the central cities and the suburbs are growing slowly. Property values in the central cities nevertheless continue to lag behind those in the suburbs, and central cities are at a particular disadvantage because much of their potential tax base consists of governmental, charitable, or nonprofit organizations, which are tax exempt. (Some localities negotiate in lieu payments from such institutions as a contribution to the cost of direct services such as police and fire protection.)

One way to increase elasticity is to introduce a progressive rate structure in the tax system; that is, to build in the possibility of "bracket creep." (Bracket creep occurs where an increase in a taxpayer's taxable base—e.g., income—causes the taxpayer to be bumped into a higher marginal tax bracket.) Although some state governments have structured progressive income tax rates, local governments find it very difficult to do so. Of the eleven states that do have local income taxes, three use state surcharges and a graduated tax, but the remainder levy flat rate taxes.

Equity Equity or fairness in taxation can mean several things. User charges are fair according to the benefits-received principle: they charge the beneficiaries for services received (a bus fare and a water meter charge are examples). However, these charges might be viewed as unfair in that they do not take into account the user's ability to pay: everyone riding the bus pays the same fare regardless of income. An alternative to the benefits-received principle is to tax citizens according to their ability to pay, but this raises the issue of vertical equity: do those with a greater ability to pay bear a greater tax burden?

The neutrality principle in tax design holds that the tax structure should distort economic choices as little as possible: in other words, the tax system should not severely affect decisions about location, employment, or consumption.

Most concerns about local tax systems have centered on two issues: vertical equity and regressivity. If lower-income people pay a greater percentage of their incomes in taxes, the taxes are considered regressive. As later chapters of this book will point out, however, conclusions about the vertical equity of local taxes are not easily reached. For example, the property tax on rented residential units—often viewed as regressive—is probably divided between renters (in the form of higher rents) and landlords (in the form of a lower return on their investment). However, to the extent that landlords bear part of this burden—and the evidence suggests that they do—the property tax may actually be *progressive*: higher-income tax-payers pay a higher percentage of their income in property taxes.¹⁹

Yet another aspect of fairness in taxation is horizontal equity: are equals treated alike? Variations in assessments on homes of similar value are a form of horizontal inequity that draw particularly strong objections. Many communities attempt to measure the fairness of their assessment practices by estimating ratios of assessment dispersion, and in many states there have been challenges to the classification practices associated with the property tax—the differential treatment of residential and nonresidential properties.²⁰

What are the equity goals that local governments can realistically attain through their revenue structures? Because the base of local income taxes is not sufficiently broad nor the rate structure sufficiently progressive, it is unlikely that local governments can achieve a great amount of progressivity through their income tax systems. Since the local government tax structure (property and sales taxes) is approximately proportional—that is, the effective rate remains constant across all

income classes—local governments might concentrate on making these taxes as horizontally fair as possible by, for example, striving for maximum equality in property tax assessment ratios and exempting necessities from the sales tax. In general, however, redistributional objectives must be left largely to the state and federal tax systems.

Neutrality The neutrality principle in tax design holds that the tax structure should distort economic choices as little as possible: in other words, the tax system should not severely affect decisions about location, employment, or consumption. In theory, there are some taxes—such as lump sum or land value taxes—that do not affect economic choices; but in practice, taxes do affect economic behavior. Sales taxes affect the choice between taxable consumption and other forms of consumption and between savings and consumption; income taxes distort the choice between work and leisure; and property taxes distort the choice between holding wealth in the form of real property and holding it in some other form.

Local government fiscal planners should design their tax systems with neutrality in mind. The general rules are: (1) avoid those distortions that seem most harmful, and (2) pass up the temptation to try to fine-tune the local tax structure to achieve non-revenue-related goals.

Local government officials are likely to face three important tax neutrality issues. The first is differential tax rates among neighboring or competing jurisdictions. People and businesses will travel short distances to save on their tax bills. The New York/Connecticut disparity in income tax rates in the 1970s and early 1980s (New York's was the highest in the nation, while Connecticut had no income tax) undoubtedly contributed to the movement of jobs and people away from New York City. Research has also shown that differences between sales tax rates in contiguous communities will cause consumers to shop across jurisdictional lines.²¹

A second, related issue is the use of tax incentives to attract industry. In fact, this is a deliberate violation of the tax neutrality principle in that one community lowers its tax burdens to attempt to influence the location choices of industry. Research suggests that industrial location choices within metropolitan areas are significantly influenced by variations in the level and types of taxation, but there is considerable debate about whether tax incentives are an effective way to compete with states or communities in other regions.²² Even if tax subsidies do not make much of a difference overall, they may still have to be granted for defensive purposes; that is, as a competitive measure. Tax incentives do introduce distortions, however, and fiscal planners should recognize these. Preferential tax treatment for incoming firms effectively pushes the burden of financing the incremental expenditures onto the remainder of the tax base.

A third important neutrality issue concerns the practice of assessing both land and capital improvements for property tax purposes, which penalizes investment in structures. A land value tax, in contrast, yields equal revenue without rewarding or penalizing structural investments. The desire to remove some of the disincentives to property improvements has led many countries and a handful of U.S. cities to tax structures at a lower rate than land.

Local government revenue structures

How do local governments structure their finances? As Table 4–4 shows, local governments raised, from their own sources, nearly 22 percent of all government revenues in the United States and nearly all property tax revenues. They also raised approximately 13 percent of general sales tax revenues and nearly one-third of all user charges. Income taxes, however, were not a major local revenue source. The data in Table 4–5, which shows the distribution of local government revenues by source, indicate that local governments depend on intergovernmental assistance—

primarily from state governments—for about one-third of their current revenues. They depend on property taxes for about one-fourth of their total revenues.

These averages, however, reflect a wide variation in practice. States grant local governments varying degrees of control over sales and income taxes, and local governments vary in their rate and base structures and in the mix of taxes levied. The ACIR reports that local sales taxes are levied in thirty-one states, but eighteen of these have a state-imposed rate ceiling.²³ Over six thousand local governments (of which about 40 percent are in Texas and Illinois) levy a local sales tax, but local government use of income taxes is more limited. Only eleven states permit local income taxation, and if Pennsylvania's 2,758 levying jurisdictions are excluded, only 707 local governments levy local income taxes.²⁴

Because of the degree of variation in practice, it is difficult to construct a general

Table 4-4 Local government revenues by source, 1991.

Revenue category	Total federal, state, local (in billions)	Local revenues as a percentage of total revenues
	(III DIIIIO113)	
Total ^a	\$2,124	28.8
Own source	1,557	21.8
Taxes	1,167	18.4
Property	168	96.3
General sales	244	13.1
Individual income	577	1.7
Corporate income	120	1.6
Other	58	15.6
User charges ^b	390	32.1

Source: Bureau of the Census, *Government Finances:* 1990–91, Series GF90, no. 5 (Washington, DC: GP0, 1993); computed from Table 2.

Table 4–5 Distribution of local government revenues by source, 1991.

	As a percentage of:		
	Total revenues	Current revenues	Taxes
Total revenues	100.0		
Current revenues Intergovernmental Federal State Own source ^a Taxes Property Income Sales User charges ^b	93.1 30.7 2.9 27.7 51.6 32.7 24.6 1.7 4.9	100.0 33.0 (3.1) (29.8) 55.5 35.1 (26.4) (1.9) (5.2) 20.4	100.0 75.3 5.6 14.9
Capital revenues ^c Long-term Short-term	6.9 4.2 2.8		

Source: Bureau of the Census, *Government Finances:* 1990–91, Series GF91, no. 5 (Washington, DC: GPO, 1993); computed from Table 2.

^a Including intergovernmental transfers, utility revenue, insurance trust revenue, and liquor store revenue.

b Including miscellaneous general revenue

^a Own-source totals do not add up. Minor categories omitted.

blncluding miscellaneous general revenue.

^cEstimated as total short-term debt issued and the net change in total long-term debt issued.

profile of local government tax structures. One can, however, make some generalizations. Local sales taxes tend to follow their respective state structures—flat rates and a base that usually excludes housing, services, and food. Local income taxes tend to be flat rate. Finally, the property tax, the major local revenue source, dominates the local tax structure.

The outlook for local finances

As the end of the century approaches, local governments face a number of opportunities and uncertainties. Because many of the important influences on local budgets will be "uncontrollables," there will be a premium on efficient fiscal planning. The following are some of the important factors that will shape local government budgets:

- 1. National economic performance
- 2. Regional shifts in population and economic activity
- 3. Demographic changes, such as the changing age structure of the population
- 4. Voter resistance to higher taxes and government regulation
- 5. Backlogs in the financing of infrastructure and poverty programs.
- 6. Changes in the federal budget and in federal grant policy.

National economic performance

The performance of the national economy is a major determinant of the fiscal health of state and local governments. If national economic growth is strong, revenues go up, and there is less pressure to reduce federal aid and less need for welfare-related expenditures. Many forecasters, however, predict slower national economic growth and continued growth in the federal deficit.²⁵ It is also likely that local governments will have to contend with cutbacks and threatened cutbacks in federal grant programs. On the positive side of the ledger, the rate of inflation will likely remain low, and interest rates will not rise significantly.

How might prospects of unstable economic growth and fewer grants affect the fiscal decisions of state and local governments? One could expect local governments to hold larger precautionary financial balances, to spend less, and to levy higher taxes than they would in a more stable economic environment. State and local governments may well shy away from commitments to long-term programs or new activities, and they may attempt to reduce the proportion of uncontrollable expenditures in their budgets.

Uncertainty has a greater effect on the finances of some local governments than of others. Local governments operating with the smallest margin of revenue coverage of their obligations and perhaps those whose credit ratings are lowest would have to take the most conservative fiscal stance. Growing cities can afford to gamble somewhat more, because their errors are partially made up for by natural economic growth and because they are likely to have a greater reserve surplus on which to draw. However, as the 1980s and 1990s taught many local governments in the South and West, continued growth is not a certainty.

Regional shifts

Although the shift of population and jobs to the Sun Belt slowed in the early 1980s, states continue to vary widely in their economic performance. This implies that many of the formerly rich states will have to increase their efforts to bring their budgets into line with their new, relatively lower levels of economic growth. In many states, particularly those in the older industrial regions, this retrenchment will probably mean continued reduction of government-provided services. For example, in New York per capita personal income is 18 percent above the national average,

but per capita expenditures are 35 percent above the national average. Given that the state's income growth between 1991 and 1994 was lower than the national average, retrenchment would seem inevitable.²⁶

The growing regions, where the less developed public sectors are located, will need to make fiscal adjustments of a different type. Local governments in the South will face more pressure to deal with rural poverty; and, in response to the pressures of a growing population, to expand infrastructure, to improve school and health systems, to deal with water shortages, and to ameliorate environmental problems. For example, per capita income in Georgia is 9 percent below the national average, but per capita expenditures are 16 percent below the national average. Nevertheless, Georgia's income growth was above the national average between 1991 and 1994, putting pressure on state and local governments to increase spending.²⁷

Demographic changes

Overall national population growth will be modest in the 1990s, but some areas will grow and others will lose population. More consistent across all regions is the increasing proportion of population in the 45- to 64-year-old and in the 65-and-over age groups.

Although slower population growth usually implies less pressure for the expansion of public services and therefore less pressure on public budgets overall, a growing elderly and retired population could have a contrary effect by increasing the demand for retirement-related services and health care. An important additional pressure on local government budgets may come from the problems of financing government employee pension plans.

Demographic trends also affect the revenue side of the budget. On the one hand, the increasing rate of household formation among the baby boom generation suggests a possible increase in property wealth, and the population increase in the productive 45- to 64-year-old age group may suggest some increase in taxable capacity. On the other hand, growth in the retirement-age population may dampen revenue growth, since retirees earn less taxable income and spend less on housing and taxable consumer goods. In addition, many states have given older residents preferential treatment under the property tax and individual income tax. Fiscal planners developing medium-term budget projections must take all these demographic factors into account.

Tax limitations

The late 1970s saw the beginning of a series of legal actions to roll back property tax rates and limit future tax increases. Formal measures such as Proposition 13 (California), Proposition 2-1/2 (Massachusetts), and the Headlee Amendment (Michigan) were the most notable examples of a movement that was focused on certain features of local financing systems that many citizens found objectionable: too much property tax, too much welfare expenditure, and perhaps too little work on the part of the public sector. State and local government expenditures have grown since passage of Proposition 13—from 19.1 percent of GNP in 1978 to 22.1 in 1991, which is about the same as the rate of growth that applied between 1970 and 1980.²⁹ Although sentiment in favor of tax limitation has continued into the 1990s, formal limitation measures have not proliferated.

Infrastructure and poverty backlogs

The 1980s were a period of national income growth in the United States, but they were not a period in which state and local governments redressed their serious backlogs in public service needs—particularly in the areas of capital infrastructure and poverty. Many have argued that the plight of distressed cities—and distressed

families—worsened over this period.³⁰ Meeting the needs of the poor will impose a substantial cost on many local governments, but increased tax rates to finance services for lower-income residents have proven difficult to sell to voters. In many areas, local governments have failed to properly maintain or replace older capital stock: the repair and replacement of capital infrastructure—roads, sewers, and public buildings—is one of the major financing problems facing local governments in the 1990s.

Federal policy

A final consideration, and perhaps the most important of all, is federal policy. After peaking in the late 1970s, federal grants to state and local governments began to decline. In 1976, federal grants were 18 percent of total state and local government expenditures; by 1991, this proportion had dropped to 14 percent.³¹ There is every indication that this decline will continue, and that more pressure will therefore be put on local governments to raise revenues from their own sources or to obtain additional state assistance. Federal tax policy has also affected the financial position of state and local governments. The elimination of deductibility for sales taxes under the federal income tax has increased the "true" tax rate in the states, and lower federal marginal tax rates introduced with the tax reform act of 1986 lowered the value of the deductibility provisions for property taxes and individual income taxes. Moreover, the federal government has encroached on the gasoline tax base traditionally reserved to state and local governments. All of these measures increase the difficulty of raising local government revenues.

- Richard A. Musgrave, The Theory of Public Finance: A Study in Public Economy (New York: McGraw-Hill. 1959).
- 2 Bureau of the Census, Census of Governments, Compendium of Local Government Finance, Series GC87(4), no. 5 (Washington, DC: GPO, 1988).
- 3 ACIR, 1985 Changing Public Attitudes on Governments and Taxes, S-14 (Washington, DC: GPO, 1985), 1; and 1993 Changing Public Attitudes on Governments and Taxes, S-22 (Washington, DC: GPO, 1993), 1.
- 4 A put option allows bondholders the choice of holding or redeeming at par their investments at specified future intervals. For a discussion, see John Petersen and Dennis Strachota, eds., Local Government Finance (Chicago: Government Finance Officers Association, 1991), 306-307.
- 5 Economies of scale show up in a lower unit cost as output is expanded. A review of the literature on this subject is in William F. Fox, Economies of Size in Local Government: An Annotated Bibliography, Rural Development Research Report 9 (U.S. Department of Agriculture, Economic Statistics Cooperative Service, 1979).
- 6 Donald Fisk et al., Private Provision of Public Services: An Overview (Washington, DC: Urban Institute, 1978).
- 7 Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64 (October 1956): 416-424.
- 8 Bureau of the Census, Government Finances: 1991– 92, Series GF92, no. 5 (Washington, DC: GPO, 1994)
- 9 Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, vol. 75, no. 3 (April 1995).
- 10 Michael J. Wasylenko, "Business Climate, Industry Location and Employment Growth" (paper presented

- at the annual conference of the National Tax Association Tax Institute of America, Denver, CO, 1985).
- 11 For a discussion of this issue, see Susan A. Mac-Manus, Federal Aid to Houston (Washington, DC: Brookings Institution, 1983), chapter 1.
- 12 Roy Bahl, Marvin Johnson, and Michael J. Wasylenko, "State and Local Government Expenditure Determinants: The Traditional View and a New Approach," in *Public Employment and State and Local Government Finance*, ed. Roy Bahl, Jesse Burkhead, and Bernard Jump (Cambridge, MA: Ballinger Publishing, 1980), chapter 3.
- 13 This is discussed in Roy Bahl, Financing State and Local Government in the 1980s (New York: Oxford Univ. Press, 1984), chapter 4.
- 14 Bahl et al., "Expenditure Determinants."
- 15 Computed from data reported in Department of Commerce, National Income and Product Accounts, 1959-88; and Department of Commerce, Survey of Current Business (July 1994): Table 6.
- 16 This thesis was developed by William Baumol in "The Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis," American Economic Review 57 (1967): 415-426.
- 17 The revenue-income elasticity of a tax is the percent increase in revenues (net of any discretionary changes) associated with each 1 percent increase in personal income.
- 18 John Peterson and Kimberly Edwards, The Impact of Declining Property Values on Local Government Finances, Urban Land Institute Working Paper Series 626 (Washington, DC: Urban Land Institute, 1993).
- 19 See Henry J. Aaron, Who Pays the Property Tax? A New View (Washington, DC: Brookings Institution, 1975).
- 20 The common measure is the coefficient of intra-area dispersion; that is, the mean of the absolute values of the deviations of assessment-sales ratios about their median divided by the median.

- 21 William F. Fox, "Tax Structure and the Location of Economic Activity along State Borders," *National Tax Journal* 39, no. 4 (December 1986): 387-402.
- 22 Keith Ihlanfeldt, "Ten Principles for State Tax Incentives," Economic Development Quarterly (forthcoming).
- 23 ACIR, Significant Features of Fiscal Federalism: 1985-86 Edition, M-146 (Washington, DC: ACIR, 1986), Tables 63 and 64; pp. 94-98.
- 24 ACIR, Significant Features of Fiscal Federalism, vol. 1, Budget Processes and Tax Systems (Washington, DC: ACIR, 1993), Tables 23 and 32.
- 25 Congressional Budget Office, The Economic and Budget Outlook: Fiscal Years 1984-1998 (Washington, DC: GPO, January 1993).

- 26 Bureau of the Census, Government Finances, various years.
- 27 Ibid.
- 28 James Follain, "The Outlook for Owner-Occupied Housing in the Year 2000," in *Urban Finance Under Siege*, ed. Thomas Swartz and Frank Bonello (New York: M.E. Sharpe, 1993), 79-106.
- 29 Bureau of the Census, Government Finances: 1977– 78 (Washington, DC: GPO, 1980); and Government Finances: 1990–91 (Washington, DC: GPO, 1993).
- 30 Helen F. Ladd and John Yinger, America's Ailing Cities (Baltimore: Johns Hopkins Press, 1989)
- 31 Bureau of the Census, Government Finances: 1991-92 (Washington, DC: GPO, 1994).