



Proceedings of the 2006 Land Policy Conference

**LAND POLICIES
AND THEIR OUTCOMES**

Edited by Gregory K. Ingram and Yu-Hung Hong

Land Policies and Their Outcomes

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Library of Congress Cataloging-in-Publication Data

Land policies and their outcomes /
edited by Gregory K. Ingram and Yu-Hung Hong.
p. cm.

Includes index.

ISBN-13: 978-1-55844-172-9

ISBN-10: 1-55844-172-7

1. Land use, Urban—Congresses. 2. City planning—
Congresses. I. Ingram, Gregory K. II. Hong, Yu-Hung.

HD1319.L37 2007

333.77—dc22 2007008649

Designed by Vern Associates

Composed in Sabon by Achorn International in Bolton, Massachusetts.
Printed and bound by Webcom Limited in Toronto, Ontario, Canada.
The paper is Legacy Trade Book White, an acid-free, recycled sheet.

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8

Land Value Taxation as a Method of Financing Municipal Expenditures in U.S. Cities

Richard W. England

Paying for municipal infrastructure and public services in large cities has always been a financial challenge, occasionally one of even epic proportions. Thirty years ago, for example, the “New York City fiscal crisis . . . had all the elements of a first class drama” (Gramlich 1976, 415). Since that time, municipal governments in the United States have adopted a variety of revenue sources with which to fund their expenditures.

In fiscal year (FY) 2002, municipal government revenue totaled almost \$338 billion in the United States (see table 8.1). Of that total, roughly a quarter flowed as intergovernmental transfers from federal and state agencies into local budgets. Another 15.5 percent of municipal revenue consisted of current charges paid by users of municipal services.¹ Public enterprises such as water and electric utilities contributed still another 16.3 percent to municipal revenue.

Taxes are the primary revenue source for city governments, or 35.5 percent of the total flow in FY2002 (table 8.1). Whereas taxation of real property once raised most municipal tax revenue in the United States, some cities have moved aggressively to tax various transactions and income sources. Taxes on gross receipts, retail sales, and individual incomes now comprise almost 40 percent of municipal

This author would like to thank Gregory K. Ingram, Robert Schwab, Yu-Hung Hong, and other participants at the June 2006 Lincoln Institute of Land Policy conference for their helpful comments.

1. Within this total of \$52.3 billion, charges for sewage and solid waste disposal alone equaled \$23.4 billion.

Table 8.1
U.S. Municipal Government Revenue, FY2002

	Amount (\$ billions)	Percentage of Total
Tax revenue	\$120.1	35.5
Property	58.3	17.3
Sales and gross receipts	35.5	10.5
Individual income	12.2	3.6
Miscellaneous	14.1	4.1
Intergovernmental transfers	85.3	25.2
Current charges	52.3	15.5
Misc. general revenue	28.3	8.4
Utility and liquor revenue	55.2	16.3
Insurance trust revenue	-3.3	-1.0
Total municipal revenue	337.9	100.0

Source: U.S. Census Bureau, 2002 Census of Governments, <http://www.census.gov/govs/www/cog2002.html>, table 2.

tax receipts in this country. An important issue facing city officials is whether this tax structure will suffice in the years to come.

Climbing on Revenue Hills

There is growing evidence that some U.S. cities have nearly exhausted their capacity to boost revenue by raising rates applied to their existing tax bases. Washington, DC, is one example. The District of Columbia is an example of an urban economy that has struggled during recent decades. Although its poor performance no doubt reflects a variety of interacting causes, the DC tax system has apparently played a significant role. Mark, McGuire, and Papke (2000, 119) report that hikes in the rates of two business taxes have been associated with much slower private employment growth in the District: “[A] 1 percentage point higher tax rate on [business] personal property reduces annual employment growth by 2.44 percentage points. . . . [A] 1 percentage point increase in the sales tax rate reduces the annual growth rate in employment by 2.08 percentage points.” Thus, the particular set of taxes used to finance public expenditures in Washington has probably contributed to the slower growth of private employment and thus to the slower growth of various tax bases.

A similar story can be told for the cities of Houston, New York, and Philadelphia. Haughwout et al. (2004) find that these cities are near the peaks of their respective “revenue hills.” Thus, the revenue potential of a higher city tax rate will be largely or even totally dissipated by the shrinkage of one or more tax bases. After noting that higher property tax rates are especially prone to reducing revenue in these three cities, Haughwout et al. (2004, 575, 582) reach a sobering conclusion: “City officials must learn the reality of their local revenue constraints. A city’s revenue capacity is limited by the mobility of its residents and firms. . . . Houston, New York City, and Philadelphia . . . seem to have nearly exhausted that capacity.”

Local Fiscal Futures

Nearly a decade ago, Gramlich (1997, 282) optimistically observed that there are “clear opportunities to have user fees finance much infrastructure investment. . . . States [and presumably cities, for example,] could be allowed to finance their road maintenance and new construction projects by tolls [and] airports could be allowed to use ticket taxes . . . and landing charges.” When potential users of municipal services are excludable and when use of those services is rivalrous or generates congestion externalities, a strong economic case can be made for enacting user fees. Thus, U.S. cities will likely begin to employ highway congestion tolls, as London and Singapore have already done.²

However, the authors of the *World Development Report 1994* correctly point out that not all services of municipal governments are private goods (World Bank 1994, 25). For example, urban parks are local public goods, and public schools generate positive externalities, because they endow individual students with human capital. Although the use of local public infrastructure can often be priced, a decreasing average cost of service provision sometimes indicates that use should be subsidized. User fees should therefore not be expected to finance all municipal outlays.

What, then, are the prospects for financing municipal expenditures through taxes in the coming years? Poterba (2005/2006, 7) recently warned that local officials need to be aware that their tax policies can drive some residents, enterprises, tourists, and shoppers to other cities and regions, thereby generating deadweight losses and limiting municipal revenue.³ Bird (2005, 686) has argued that because business capital is especially mobile within a national economy, “it makes economic sense in most circumstances to keep local and regional taxes on business . . . capital investment [as low as possible].” This point becomes all the more compelling once one recognizes that most member nations of the Organisation for Economic Co-operation and Development (OECD) enacted significant cuts in personal income and corporate profits taxes over the past 20 years (Owens 2006, 131–132).

Tannenwald (2004) points out that factors other than labor and capital mobility also limit the ability of city governments to raise tax revenue. A shift in the mix of personal consumption from tangible goods to services has constrained the growth of sales tax revenues. Likewise, the growing importance of intangible business assets (such as patents and databases) relative to tangible assets owned by business firms has constrained the growth of property tax revenues.

As if these constraints were not already serious enough, ominous fiscal clouds are on the horizon. City governments are heavy borrowers in financial markets: During FY2002 alone, they borrowed \$6.6 billion short term and accumulated an

2. For an assessment of the use of road pricing in Singapore to control traffic congestion, see Olszewski and Xie (2005).

3. For a panel of 331 U.S. metropolitan areas over the period 1960–1990, Hettler (2002) finds that higher real per capita taxes in central cities are associated with a higher proportion of metropolitan population living in suburban communities.

Table 8.2
U.S. Real Interest Rates, 1979–2006 (average annual percentage)

	1979–1989	2000–2006
10-year Treasury bills	5.38	2.99
30-year Treasury bills (bonds)	5.82	3.44

Source: Office of Management and Budget (appendix C, 2006).

additional \$26.4 billion in long-term debt.⁴ A recent cut in the top marginal income tax rate and preferential taxation of dividends at the federal level have already compromised the ability of city governments to sell tax-free municipal bonds. As table 8.2 suggests, a flood of fiscal problems will lap at the steps of city halls across the United States if foreign investors lose their appetites for U.S. Treasury securities and, as a result, real interest rates return to their averages of the 1980s.⁵

Thinking Outside the Fiscal Box

In view of these sobering fiscal prospects, city governments need to consider adopting unconventional revenue sources if they wish to attract and serve residents, commuters, and visitors. A prime candidate for a new revenue source at the local level is *land value taxation*. As Brueckner (1986) demonstrated two decades ago, a city government can induce private investment within its borders by cutting the tax rate on real estate improvements and raising the tax rate on land values.⁶ Ladd (1998, 36–37) describes this possibility as follows: “Almost all analysts agree that restructuring the property tax towards land will . . . increase investment in structures. . . . If the tax on improvements is reduced in only one city, new investment in the city could be extensive as firms choose to invest in that city rather than elsewhere.” In brief, there is a firm theoretical foundation for advocating adoption of land value taxation at the municipal level of government.⁷

Taxing land values at a higher rate than improvement values (a two-rate property tax) would require city or county assessors to assess those twin values accurately. Because vacant land is seldom for sale in cities with mostly developed landscapes, assessment of land values poses an administrative challenge. However, as Gloudemans (2001) argues, hedonic models of real estate prices might be used to separate statistically the site and structure values of developed parcels. In addition,

4. See table 2 of the U.S. Census Bureau’s 2002 Census of Governments for details (<http://www.census.gov/govs/www/cog2002.html>).

5. See Edwards (2006) and Obstfeld and Rogoff (2006) for a discussion of the precarious international financial position of the United States and its implications for domestic economic performance.

6. In the process, the rate of land development within the city and its metropolitan region would be affected. See Anderson (1999) and McGuire and Sjoquist (2003, 318) for discussions of land value taxation and land development.

7. Cohen and Coughlin (2005) provide a readable survey of this theoretical case.

the growing frequency of teardowns in some cities can provide useful information on urban land values. Dye and McMillen (2007) find in a recent study of metropolitan Chicago that the sales price of a teardown property is approximately equal to its land value. Thus, recent sales of teardown properties can be used to assess the site values of properties that have not been demolished. In summary, it seems both administratively feasible and economically desirable to adopt two-rate property taxes at the local level of government.

Land Value Taxation: Some Empirical Evidence _____

This theoretical argument in favor of two-rate property taxation has empirical support. Some of that support consists of tax policy simulations using computable general equilibrium models and other empirically calibrated models of urban economies. In a model of metropolitan Boston in 1980, for example, DiMasi (1987) finds that a revenue-neutral shift toward taxing land values relatively heavily would result in higher population density, a higher wage rate, and lower housing prices.⁸ In a model of New Hampshire's largest city, England (2002) finds that doubling the land value tax rate and cutting the tax rate on improvements to keep tax revenue constant would boost residential and nonresidential construction, employment, population, and gross output. Finally, in a set of tax policy simulations for New York City in 1997, Haughwout (2004) discovers that replacing the city's sales, income, property, and general corporation taxes with a land tax would boost employment, output, population, and capital improvements per acre. Haughwout (2004, 89) concludes that the "benefits to be had from eliminating the distortions introduced by capital and labor taxation, particularly in cities in which rates . . . are high, appear to be enormous."

Not all of the evidence favoring land value taxation consists of policy simulations of hypothetical tax reforms. Because the Commonwealth of Pennsylvania has permitted heavier taxation of site values for nearly a century, it is possible to compare the actual historical experiences of those cities with and without two-rate property tax systems. In a study comparing Pittsburgh to other midwestern industrial cities during the 1980s, Oates and Schwab (1997) find that two-rate property taxation probably helped to spur commercial construction in downtown Pittsburgh. In another analysis of historical experience, Plassmann and Tideman (2000) document that smaller Pennsylvania cities with split-rate property taxation enjoy more construction activity than those with a traditional property tax. But even if reliance on land value taxation helps to stimulate economic activity, can such a tax provide enough revenue to finance municipal expenditure?

Land Tax and Revenue Adequacy _____

Ever since Henry George (1956) claimed in the late nineteenth century that a land value tax could substitute for all other forms of taxation, skeptics and critics have

8. These simulation results hinge partly on the unrealistic assumption of a fixed population, a limitation of the analysis acknowledged by the author.

raised the issue of its revenue adequacy. Their message is that even a virtuous tax might have too small a tax base to generate adequate revenue for public purposes. Anyone eager to advocate land value taxation must first, then, address this question of revenue adequacy.

Several decades ago, some researchers made progress identifying the economic factors that favor the revenue adequacy of site value taxation. Stone (1975, 475–476) reasons that

for a tax on site rent to be considered adequate, the growth rate of the tax base must equal or exceed the growth rate of the public sector. . . . [R]ents must rise at least as rapidly as expenditures. . . . If the elasticity of substitution between land and capital is small, an increase in the supply of capital will cause a large decline in the profits per unit of capital and a large increase in the rent per unit of land. . . . [T]he more difficult it is to substitute capital and/or labor for land, the more viable is a tax on site rent.

Douglas (1980) finds that localities with initially lower property tax rates or property tax bases with a high proportion of land values could more easily shift to two-rate property taxation. He also reasons that a high demand elasticity for a city's exports and low elasticity of factor substitution would favor revenue adequacy.⁹

The upshot of this theoretical research is that the revenue adequacy of land value taxation depends very much on the characteristics of the city adopting this form of property taxation. As table 8.3 suggests, U.S. cities vary significantly in population density and in land area, both of which affect their revenue needs. Because of differences in historical development patterns and assessment practices, cities also have substantially different assessed ratios of building to land values (value ratios, for short). Finally, effective uniform property tax rates also differ substantially among cities. Thus, before adopting two-rate property taxation a city government should analyze its own local situation with some care.

Table 8.4 reports on a preliminary analysis of revenue adequacy for five U.S. cities. This exercise imagines that a city's property tax has been replaced by a pure land value tax.¹⁰ The tax rate applied to assessed land values is set sufficiently high to yield the same revenue flow as the erstwhile property tax. This revenue-neutral land value tax rate is then compared with the tax rate that would confiscate all of the annual land rents accruing to property owners.¹¹ (Note that the two tax rates

9. After correcting for specification errors in earlier studies, Stover (1990) estimates the elasticity of substitution between land and capital in U.S. residential construction to be roughly 0.3.

10. Under a pure land value tax, building values would be totally exempt from taxation. This particular tax is therefore a special case of two-rate property taxation.

11. Table 8.4 assumes that the assessment ratio for land values equals the reported assessment ratio for total property values in a city. It also assumes that annual gross rents are 6 percent of the market value of land and that land assessments do not adjust immediately to reflect changes in the market value of land.

Table 8.3
Property Taxation in Selected U.S. Cities, Various Recent Years

	Chicago	Philadelphia	Phoenix	Milwaukee	Washington
Total 2004 population (thousands)	2,862	1,470	1,418	584	554
Total land area (sq. mi.)	227	135	475	96	61
Population density (per sq. mi.)	12,608	10,889	2,985	6,083	9,082
Assessed land values ^a	4,888	2,443	3,509	3,333	32,939
Assessed building values ^a	20,850	8,254	8,340	21,053	46,746
Value ratio	4.2653	3.3780	2.3766	6.3165	1.4192
Assessment ratio	0.1294	0.3200	0.1157 ^c	0.9602	1.0000
Municipal tax rate ^b	13.06	11.12	2.11	8.40	Res.: 9.60 Com.: 18.50
Number of taxable parcels (thousands)	772.7	535.4	449.4	151.3	159.0

^a \$ millions.

^b Metropolitan, special district, and public school property taxes excluded; in \$ per \$1,000 market value.

^c It is assumed that fair cash value equals 80 percent of market value.

Sources: U.S. Census Bureau; various city and county assessors.

for Chicago are very high when applied to assessed land values, because the assessment ratio in Chicago is so low.)

The table reveals that Chicago and Milwaukee would be unable to substitute a pure land value tax for their existing property taxes without suffering an immediate reduction in tax revenue. In Philadelphia and Washington, revenue-neutral property tax reform would be feasible, but would come uncomfortably close to being confiscatory.

Table 8.4
Land Value Tax Rates in Selected U.S. Cities (annual amount per \$1,000 of assessed land value)

	Revenue-Neutral Pure Land Value Tax Rate	Confiscatory Land Value Tax Rate
Chicago	\$531.43	\$463.68
Milwaukee	64.02	62.49
Philadelphia	152.09	187.50
Phoenix	61.45	518.58
Washington	44.76 ^a	60.00

^a Nonresidential parcels only.

Source: Calculations based on data in table 8.3 and author's assumptions.

One could expect a pure land value tax in this latter pair of cities to result in sharply lower land prices, at least in the short run (the longer-term effects are covered later in this chapter). Of the five cities studied, only Phoenix could easily shift to a pure land value tax. In four of these five cities, then, a limited shift to two-rate property taxation seems to be the politically feasible path to municipal tax reform.

Dynamic Scoring at City Hall

A major limitation of the analysis summarized in table 8.4 is that it utilizes static, not dynamic, scoring of property tax reform—that is, the previous section assumes that a shift to land value taxation would have no impact on assessed values within a city. However, as economic researchers have already learned by studying tax reform at the national level, changes in tax rates lead to various behavioral responses by businesses, households, and even government itself (Auerbach 2002). As a result, to estimate the longer-term impact of tax reform on revenue streams one must take into account how changes in rates affect economic activity, asset values, and the bases of various taxes.¹² Sound theoretical reasons exist for believing that the difference between static and dynamic revenue estimates will be much greater at the municipal level than at the national level of government. Mankiw and Weinzierl (2006), for example, calculate that the greater the elasticity of labor supply, the higher will be the proportion of revenue loss eventually recouped by the faster economic growth that will follow a federal tax cut on labor earnings.¹³

At the geographic scale of a major city, however, labor supply is far more elastic than at the national scale, because workers are free to move within the metropolitan region and among sections of the country in search of better job opportunities. Hence, if one uses the dynamic scoring equation found in Mankiw and Weinzierl (2004) and makes the conservative assumption that long-run elasticity of labor supply equals five at an urban scale, then one predicts that an acceleration of economic growth will eventually recoup at least 42 percent of the immediate revenue loss from cutting the rate of a municipal wage tax.

This distinction between the static and dynamic scoring of tax reforms is very useful, because it implies a political strategy for boosting municipal revenue in U.S. cities in the long run. Instead of raising tax *rates* on wages, retail sales, and property values in a possibly futile effort to increase tax receipts, city halls could use a revenue-neutral shift to two-rate property taxation in order to cut tax rates on labor, capital, or retail sales with no immediate loss in municipal revenue.¹⁴

12. Examples of dynamic scoring at the state or local level are rare. See, however, Ghaus (1995); Berck, Golan, and Smith (1997); and Lackman and Bryan (1997). For a critical discussion of dynamic scoring at the federal level, see Mauskopf and Reifschneider (1997).

13. Chang and Kim (2005) estimate that unitary elasticity of labor supply is a reasonable guess for the U.S. economy as a whole.

14. Convincing those property owners whose properties have a low value ratio (for example, vacant land parcels) to support this sort of tax reform will not be easy. However, as England and Zhao (2005) argue, the redistributive effects of a revenue-neutral shift toward land value taxation can be reduced by introducing a credit provision into the property tax as dual tax rates are implemented.

In the short run, heavier taxation of assessed land values is likely to depress land prices because after-tax rents accruing to landowners are now lower. However, because lighter taxation of capital, labor, and sales induces additional economic activity within the city's boundaries, its tax *base* will grow, thereby improving its longer-term tax revenue potential. The retention and attraction of residents, commuters, and businesses is even likely to increase urban land prices (despite a higher tax rate applied to assessed land values) because of the growing demand for developed and vacant land parcels.¹⁵

This line of argument can be formalized in a straightforward manner. Let R_0 be the original pretax land rents accruing to property owners and τ be the land rent tax rate paid by those owners. Assume that agents in the real estate market expect rents to grow exponentially at the constant rate g and the level of the tax rate to remain constant indefinitely. In that case, one would expect the price of land, P , to equal the present value of anticipated after-tax rents, where r is the constant rate of interest, so that

$$(1) \quad P = [(1 - \tau) R_0] / [r - g] .$$

(To guarantee a positive land price, one would have to assume that $r > g > 0$.)

If agents suddenly expect a higher tax rate on land rents, the price of land will tend to fall as higher tax payments are capitalized in the real estate market, so that

$$(2) \quad \partial P / \partial \tau = -[R_0 / (r - g)] < 0 .$$

However, if the extra revenue from heavier taxation of land rents is used to reduce tax rates on capital and labor incomes, capital investment and immigration will accelerate. And if agents now believe that the level of land rents will be higher or that rents will grow faster than previously expected because of faster economic and population growth, the price of land will rebound, so that

$$(3) \quad \begin{aligned} \partial P / \partial g &= [(1 - \tau) R_0] / (r - g)^2 > 0, \text{ or} \\ \partial P / \partial R_0 &= (1 - \tau) / (r - g) > 0. \end{aligned}$$

If cities enjoy agglomeration economies, then the positive impacts of two-rate property taxation could be even larger than one might first expect.¹⁶ Garcia-Mila and McGuire (2002, 114) have shown theoretically that, if the location of a new firm in a city raises the input productivities of existing firms, then "the optimal policy is

15. See Nechyba (2001) for state-level tax policy simulations that indicate that higher land prices would eventually emerge in most states from taxing land rents instead of capital or labor incomes. If Nechyba's general equilibrium model is calibrated to simulate tax reform at a municipal scale, it demonstrates that substituting a land rent tax for the property tax would boost incomes, employment, and land prices in the long run.

16. Nechyba (2001) and Haghwout (2004) assume constant returns to scale in production, not increasing returns. Thus, these simulation studies might underestimate the potentially positive effects of state and local tax reform on economic activity.

to impose a tax on capital that is lower than a benefit tax in order to attract new capital and experience this positive externality . . . of agglomeration economies.”

A growing body of empirical literature confirms that cities do indeed enjoy agglomeration economies of various types. In a study of 200 U.S. metropolitan areas over the period 1980–2000, Wheeler (2006) finds that metropolitan areas with larger populations tend to attract college graduates at a faster rate. Carlino, Chatterjee, and Hunt (2005) explore patent activity in 280 U.S. metropolitan areas during the 1990s. They find a significant and positive association between annual patents per capita and employment density in the highly urbanized portions of metropolitan areas.¹⁷ In a study of new-establishment births and employment levels, Rosenthal and Strange (2003) find that ZIP codes with high existing employment levels in some industries are more likely to attract new establishments in those same industries.¹⁸

From a municipal tax policy perspective, the significance of these findings is that if a struggling city were to cut discretionary taxes on wages and profits, capital values, and retail sales and simultaneously maintain its level of municipal services by taxing land values more heavily, it could experience a true economic renaissance. The reason is that this tax reform strategy would not only attract and retain workers and capital stock, but also increase the productivities of those factors of production by encouraging innovation, entrepreneurship, and clustering of educated labor. A prime candidate for local tax reform and economic renaissance is the city of Philadelphia.

The Philadelphia Story

Although Philadelphia once competed with New York City for economic leadership of the United States, it has been a city in relative and absolute decline for at least 50 years. In 1950 its population peaked at slightly more than 2 million residents. By 2004 its population had dropped to fewer than 1.5 million. Philadelphia’s precipitous decline as a leading urban center has had several causes, but its system of municipal finance has certainly played a major role. As Gyourko (2005, 3, 34) observes, “The city has not been able to provide essential infrastructure and public services at low cost for nearly half a century. . . . Taxes are very high and are not offset by the provision of high-quality services. . . . Compounding this is a poorly conceived local tax system that relies heavily on wage taxes. . . . The local business privilege tax . . . provides an even starker example of a poorly designed tax for a municipality in an age when firm mobility is high.”

A closer look at Philadelphia’s sources of tax revenue confirms that its tax system is likely to drive residents and jobs to the suburbs and beyond (see table 8.5).

17. There appears, however, to be diminishing returns to higher employment density in urbanized centers of metropolitan regions: “Based on the criterion of maximizing patent intensity, we find evidence of an optimal city size—about the *size* of Austin, TX, and optimal employment *density*—about the density of Baltimore or Philadelphia” (Carlino, Chatterjee, and Hunt 2005, 2).

18. For other evidence of urban agglomeration economies in the United States, see Adsera (2000); Malpezzi, Seah, and Shilling (2004); and Orlando and Verba (2005). Dekle and Eaton (1999) have found evidence of agglomeration economies in Japanese manufacturing and financial services.

Table 8.5
Major City Taxes: Philadelphia, FY2005

Tax	Base	Rate (percent)
Wages	Salaries, wages, and commissions; and net profits of self-employed	Residents: 3.82 Nonresidents: 4.33
Sales	Retail purchases except food and clothing	1.00
Real property	Taxable assessed value of sites and improvements	3.47
Business privilege	Gross receipts and taxable net income of incorporated and unincorporated businesses	0.21 (receipts) 6.50 (income)
Real estate transfer	Sales price or fair market value of property or certain long-term leases	3.00

Sources: Pennsylvania Department of Community and Economic Development; Philadelphia Department of Revenue.

For example, its wage tax of roughly 4 percent falls on the earnings of resident employees, commuters, and proprietors alike. And the sales tax collected at city retail outlets is a percentage point higher than that levied at suburban malls. Even unprofitable firms pay a tax equal to 0.2 percent of their gross receipts for the privilege of doing business in the city. Once profitable, businesses also pay 6.5 percent of their taxable net income to the municipal treasury. Because of this fiscal situation, it is hardly surprising that Haughwout and Inman (2001, 177) find that “Philadelphia’s current rate structure has moved the city very close to the top of its total revenue hill—in fact, it is slightly over the top of the hill for its discretionary taxes. The city can raise at most 1.3 percent additional revenues through adjustments in local tax rates—by lowering property, gross receipts, and non-resident wage tax rates.”

Although the local property tax is still a major revenue source, Philadelphia has become highly dependent on intergovernmental transfers and taxes on wages, sales, and profits to pay its bills (see table 8.6). This revenue structure makes the city highly vulnerable to budget cuts at the state and federal levels of government. It also drives residents, employers, and shoppers to other locations in the regional and global economies.¹⁹

The dysfunctional aspects of Philadelphia’s revenue structure have been noted by city officials and civic leaders alike. In his 2005 economic and financial report to the citizens of Philadelphia, the city controller concluded that the “city’s dependence on its three largest taxes is problematic” (Saidel 2005, 24). In its final report to the city’s electorate, the Philadelphia Tax Reform Commission (2003) advocated a phase-out of the business privilege tax by 2015 and acceleration of scheduled cuts in the wage tax. It also called for accurate assessment of land and

19. Haughwout et al. (2004, 579) estimate that Philadelphia lost nearly 173,000 jobs between 1971 and 2001 because of higher wage tax rates levied on residents and commuters. Those job losses would have been even higher without rate cuts after 1983.

Table 8.6
Municipal Revenue Sources: Philadelphia, FY2005

	Amount (\$ millions)	Percentage of Total
Wage tax	1,059	31.7
City sales tax	108	3.2
Business privilege tax	292	8.7
Real property tax	385	11.5
Real estate transfer tax	127	3.8
Other taxes	71	2.1
State and federal transfers	739	22.1
Other nontax revenue	559	16.7
Total revenue	3,340	100.0 ^a

^a The column does not add up to 100 percent because of rounding.

Source: <http://www.philadelphiacontroller.org/publications/fpau/budget05.pdf>.

structure values for all real properties and a phase-in of two-rate property taxation over 10 years.

Some good news for the Philadelphia economy is that limited reform of the city tax structure is already under way. As table 8.7 reports, the tax rates on wages of residents and commuters peaked in 1983 and are already slated to decline to 3.25 percent by 2015. The bad news for Philadelphia is that this tax reform is too limited and too slow to stem the emigration of jobs and residents.

This author proposes a more decisive and rapid approach to tax reform in order to foster economic development in Philadelphia. One approach would be to adopt two-rate property taxation promptly after the present revaluation of the city's building and land values has been completed. Suppose that the city government had cut the tax rate on building values in 2005 by half, to 1.737 percent of assessed value. Without a credit provision to provide tax relief to many homeowners, this reform would have required that a tax rate of 9.34 percent be applied to assessed land values to maintain total revenue from the property tax. If a \$500 per parcel tax credit had been enacted to attract political support from homeowners and other small property owners, a tax rate of 20.30 percent applied to land

Table 8.7
Wage Tax Rates: Philadelphia, Selected Years

	Resident/Nonresident (percent)
1939 (first year)	1.5/1.5
1983 (peak year)	4.96/4.31
2006	4.30/3.77
2015 (current law)	3.25/3.25

Sources: Gyourko (2005, 34); <http://www.philadelphiacontroller.org/publications/fpau/budget05.pdf> for FY2005 data; Saidel (2005, 26).

Table 8.8

Financing Business Tax Cuts by Taxing Nonresidential Land Values More Heavily: Philadelphia, 2005

Tax Reform	Static Loss of Revenue (\$ millions)	Increase in Tax Rate (\$/year/\$1,000 of assessed nonresidential land values)
50 percent cut in business privilege tax revenues	\$146	\$109.30
25 percent cut in wage tax revenues	265	198.20
Elimination of city retail sales tax	108	80.90

values would have been needed to preserve total revenue and halve the tax rate on building values.

If this reform of property taxation appears to be too much of “shock treatment” for Philadelphia voters, then other tax reform options might pose fewer political risks for the city’s elected officials and political candidates. An alternative approach would be to levy a surcharge on the assessed land values of nonresidential properties in order to finance cuts in the taxes that discourage employment and retail sales. As summarized in table 8.8, in 2005 the city could have enacted major cuts in the wage tax or business privilege tax or eliminated the city sales tax altogether without raising the tax rate on nonresidential land values to confiscatory levels.²⁰ For example, Philadelphia could repeal its city retail sales tax and recoup the static revenue loss of \$108 million by increasing its tax rate on the assessed land values of nonresidential parcels by roughly eight percentage points.

But it remains to be seen whether the political, business, and financial leaders of Philadelphia have the courage and foresight to spark an economic renaissance by agreeing to raise taxes on nonresidential land values in order to cut the taxes that discourage business activity in their city. If those leaders can forge such a fiscal compact today, then Philadelphia’s city government will face fewer revenue problems in the years to come.

Conclusions

This chapter has addressed the adequacy of the revenue systems on which U.S. cities presently depend. In general, city governments have become vulnerable to budget cutting at the state and federal levels of government because of their reliance on intergovernmental grants to help pay for municipal services. At times, heavy taxation of wages, profits, and retail sales at the local level drives residents, shoppers, and employers to suburban locations and beyond.

20. In 2005 the tax rate on assessed land values was 3.474 percent. With a reported assessment ratio of 0.32 and an assumption that gross annual rents of landowners are 8 percent of market value per year, the tax rate on land values would have had to increase by fewer than 21.526 percentage points in order to avoid confiscation of land rents.

Because of the increased mobility of capital and people, city governments will have to consider alternative revenue sources if they are to continue providing adequate public services. Although user fees are likely to play an even more important role in the future, city halls in urban America must consider land value taxation as a potentially valuable source of municipal revenue. Land, after all, is the supremely immobile asset.

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