

# Rethinking Property Tax Incentives for Business



DAPHNE A. KENYON, ADAM H. LANGLEY, AND BETHANY P. PAQUIN

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## **Policy Focus Report Series**

The policy focus report series is published by the Lincoln Institute of Land Policy to address timely public policy issues relating to land use, land markets, and property taxation. Each report is designed to bridge the gap between theory and practice by combining research findings, case studies, and contributions from scholars in a variety of academic disciplines and from professional practitioners, local officials, and citizens in diverse communities.

## **About This Report**

State and local governments across the United States use several types of property tax incentives for business, including property tax abatement programs, firm-specific property tax incentives, tax increment financing, enterprise zones, and industrial development bonds combined with property tax exemptions. The escalating use of property tax incentives over the last 50 years has resulted in local governments spending billions of dollars with little evidence of economic benefits.

This report provides an overview of use of property tax incentives for business and offers several recommendations. State and local governments should consider forgoing these often wasteful incentive programs in favor of other, more cost-effective policies, such as customized job training, labor market intermediaries, and the provision of business services. If ending property tax incentives is not feasible, state governments should consider a range of policy options, such as placing limits on their use, requiring approval by all affected governments, improving transparency and accountability, and ending state reimbursement for local property taxes forgone because of incentives. Local governments can avoid some of the pitfalls of business property tax incentives by setting objective criteria for the types of projects eligible for incentives, targeting incentives to mobile firms that export goods or services out of the region, limiting total spending on incentives, opening the process for decision making on incentives, and forging regional cooperative agreements.

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113 Brattle Street  
Cambridge, MA 02138-3400 USA  
Phone: 617-661-3016 or 800-526-3873  
Fax: 617-661-7235 or 800-526-3944  
Email: [help@lincolninst.edu](mailto:help@lincolninst.edu)  
Web: [www.lincolninst.edu](http://www.lincolninst.edu)

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## Executive Summary



**T**he use of property tax incentives for business by local governments throughout the United States has escalated over the last 50 years.

While there is little evidence that these tax incentives are an effective instrument to promote economic development, they cost state and local governments \$5 to \$10 billion each year in forgone revenue.

Three major obstacles can impede the success of property tax incentives as an economic development tool. First, incentives are unlikely to have a significant impact on a firm's profitability since property taxes are a small part of the total costs for most businesses—averaging much less than

1 percent of total costs for the U.S. manufacturing sector. Second, tax breaks are sometimes given to businesses that would have chosen the same location even without the incentives. When this happens, property tax incentives merely deplete the tax base without promoting economic development. Third, widespread use of incentives within a metropolitan area reduces their effectiveness, because when firms can obtain similar tax breaks in most jurisdictions, incentives are less likely to affect business location decisions.

This report reviews five types of property tax incentives and examines their characteristics, costs, and effectiveness.



- The best evidence on property tax abatement programs indicates they are effective initially for the first jurisdictions that use such incentives, but once they proliferate across a metropolitan area they no longer promote economic growth.
- Evidence on the impact of tax increment finance on economic activity is more mixed, but this mechanism may be overused and finance less beneficial projects when one local government is able to divert revenue from another local government without its approval, such as a city diverting a school district's revenue.
- Enterprise zones, which typically include property tax incentives as part of a larger incentive package and are usually targeted to distressed areas, have limited effectiveness.
- Very little information is available regarding either firm-specific property tax incentives or property tax exemptions in connection with issuance of industrial development bonds.

Despite a generally poor record in promoting economic development, incentives can be helpful in some cases. When these incentives attract new businesses to a jurisdiction they can increase income or employment, expand the tax base, and revitalize distressed urban areas. In a best case scenario, attracting a large facility can increase worker productivity and draw related firms to the area, creating a positive feedback loop. This report offers recommendations to improve the odds of achieving these economic development goals.

*Alternatives to tax incentives* should be considered by policy makers seeking more cost-effective approaches, such as customized job training, labor market intermediaries, and business support services. State and local governments also can pursue a policy of broad-based taxes with low tax rates or adopt split-rate property taxation with lower taxes on buildings than land.

*State policy makers* are in a good position to increase the effectiveness of property tax incentives since they control how local governments use them. For example, states can restrict the use of incentives to certain geographic areas or certain types of facilities; publish information on the use of property tax incentives; conduct studies on their effectiveness; and reduce destructive local tax competition by not reimbursing local governments for revenue they forgo when they award property tax incentives.

*Local government officials* can make wiser use of property tax incentives for business and avoid such incentives when their costs exceed their benefits. Localities should set clear criteria for the types of projects eligible for incentives; limit tax breaks to mobile facilities that export goods or services out of the region; involve tax administrators and other stakeholders in decisions to grant incentives; cooperate on economic development with other jurisdictions in the area; and be clear from the outset that not all businesses that ask for an incentive will receive one.



## CHAPTER 1

# Overview of Property Tax Incentives for Business



The United States is emerging from the worst economic downturn since the Great Depression. The country must create jobs to tackle a major unemployment problem, while also addressing significant fiscal challenges at all levels of government. Many local governments have attempted to deal with these dual challenges by using property tax incentives for business, hoping they can spur economic development and expand their tax base.

But whether tax breaks can achieve these goals or not is an open question at best. Some leaders believe that incentives can be an effective tie-breaker that governments

can use to tip business location decisions in their favor. For example, the vice president of marketing for the Chattanooga Area Chamber of Commerce argues:

Businesses look at a lot of factors in deciding where to locate. But if they think they can get the labor, transportation, and their other needs in more than one community, then they are going to look at the incentives to decide where to go. (*Chattanooga Times Free Press* 2010)

Yet many economists and policy analysts who have studied tax incentives argue that

they are often given to firms that would have chosen the same location regardless of tax breaks, in which case they are a costly tool with no significant effect on economic development.

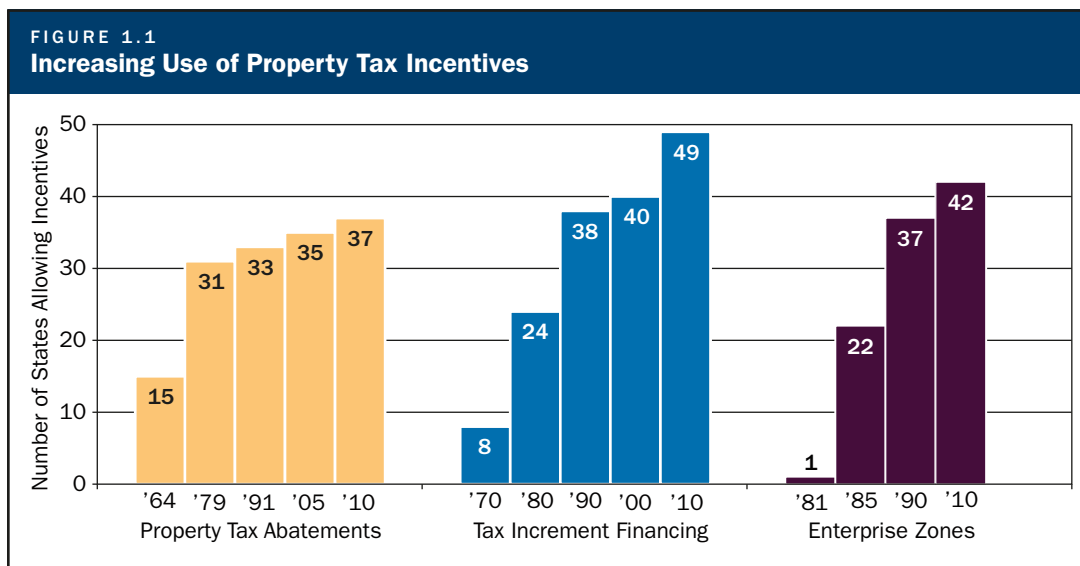
Tax incentives have the potential to achieve a variety of economic development goals, but overuse and poorly designed programs can leave localities with smaller tax bases and no improvement in their local economies. The dramatic growth in their use over the past 30 to 40 years and the long-term fiscal challenges facing many state and local governments suggest that policy makers need to rethink how they are using incentives. This report offers recommendations for how to increase the odds of realizing development goals with property tax incentives while minimizing the common pitfalls.

### INCREASED USE OF PROPERTY TAX INCENTIVES

Like many other economic development tools, the use of property tax incentives has grown dramatically in recent decades, with the most rapid growth occurring in the

1970s and 1980s (figure 1.1). There are several reasons for this growth. At the root is the increased mobility of business over recent decades. Transportation and communications costs have declined dramatically, supply chain management has improved, and previously closed economies have opened up in Asia and other areas. As a result, firms are more sensitive to costs that vary by location, such as labor and taxes, and increased competition means that businesses ignoring these cost differences may risk bankruptcy (Davidson 2012). With greater mobility, the potential for incentives to alter firm location decisions has grown.

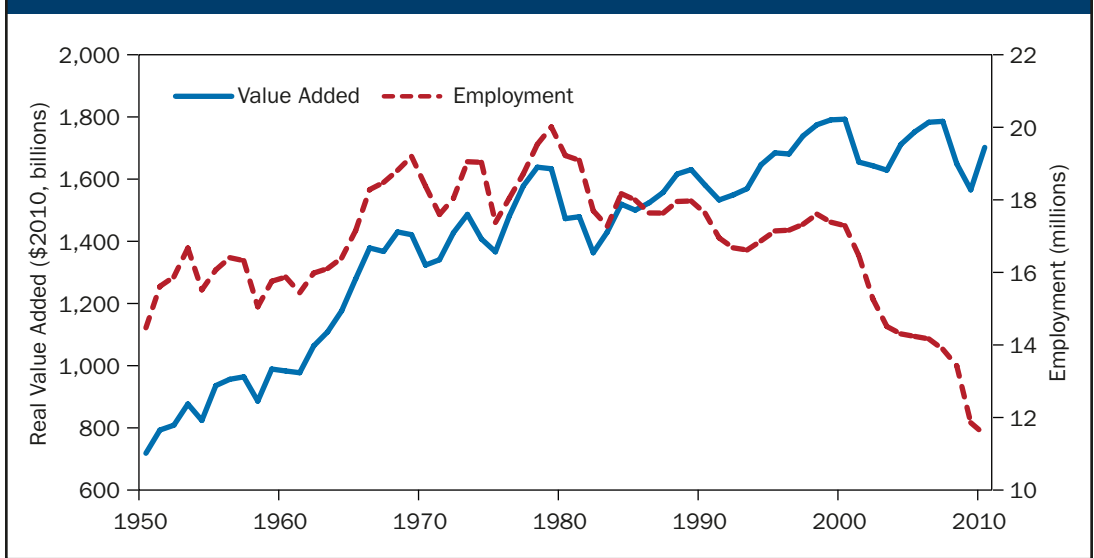
Competition to attract a smaller number of industrial facilities has placed pressure on state and local government officials to use all the tools at their disposal, including property tax incentives. Figure 1.2 shows that over the past three decades, the value of U.S. manufacturing output has been stagnant, growing only 4 percent since its 1978 peak compared to 89 percent growth for the economy as a whole. Manufacturing employment has declined 41 percent over this period.



Note: Property tax abatements are stand-alone programs that are not part of broader economic development programs.

Sources: Appendix Tables A.1, A.2, and A.3; Kerth and Baxandall (2011); U.S. Department of Housing and Urban Development (1991); Wassmer (2009, 223–224).

**FIGURE 1.2**  
**Activity in the U.S. Manufacturing Sector, 1950–2010**



Sources: U.S. Bureau of Economic Analysis (2006; 2011).

Central cities have borne the negative effects of these economic changes most heavily, which has led some states to adopt enterprise zones, tax increment financing, and other types of geographically targeted incentives meant to help distressed areas. Among the 100 largest cities in 1960, 44 had lower populations by 2010, which is particularly striking since over this period the U.S. population grew 72 percent and many central cities annexed large amounts of land (Gibson 1998; U.S. Census Bureau 2012). In contrast, the percentage of Americans living in the suburbs grew steadily from 15 percent in 1940 to 45 percent in 1980, and reached 50 percent in 2000 (Hobbs and Stoops 2002).

Tax incentives are politically appealing to local officials. Because their cost is less transparent and they are not subject to annual appropriations, tax expenditures can be more attractive than direct expenditures on economic development, even if the effect on tax rates and the ability to fund other services is similar. Policy makers also may

argue that they are not really forgoing tax revenues because without the incentives the firm would have located elsewhere and thus paid no taxes to the jurisdiction. However, this is not always the case (box 1.1). Since attracting large facilities is a highly visible sign of success, local officials may face considerable pressure to offer incentives.

A self-perpetuating cycle can also drive up the use of tax incentives over time. Their use in one locality puts pressure on neighboring jurisdictions to offer incentives as well. Localities may feel they have no choice but to offer incentives if tax breaks are actively used in surrounding jurisdictions; instead of using incentives to gain an advantage to attract firms, they are used just to remain on a level playing field with their neighbors.

Some evidence also indicates that once a municipality starts using property tax incentives it is unlikely to stop offering them (Sands and Reese 2012). Offering tax breaks to one firm makes it more likely that other firms considering locating or expanding in that jurisdiction will also lobby for incen-



tives. This self-perpetuating cycle means that tax incentives can move from being the exception to the norm, and will be expected by all firms rather than serve as a targeted tax break.

## ECONOMIC DEVELOPMENT GOALS

Local governments use property tax incentives to pursue a variety of economic development goals. Policy makers must set clear goals, think hard about the methods by which tax incentives can help achieve those goals, and consider obstacles that could prevent success (table 1.1).

### *Increase Income or Employment*

Business facilities that export goods or services to national or international markets provide an important economic base for a local government or metropolitan area. These facilities include manufacturing plants, corporate headquarters, R&D centers, warehouses, back-office support, and services for people living outside the region, such as finance and insurance.

Such firms increase an area's aggregate income in direct and indirect ways. The

#### BOX 1.1

### Do Tax Incentives Really Tip Firm Location Decisions?

Perhaps the greatest dilemma for policy makers considering incentives is the limited information about the true importance of property taxes in an individual firm's location decision. Firms consider dozens of factors during site selection, but government officials rarely know which factors are most important. They may feel compelled to offer tax incentives since it is one of the few location factors they can influence directly.

Policy makers may think that tax cuts and incentive offers are decisive, but this assumption is often wrong. When businesses lobby for tax breaks, they have a clear motive to exaggerate the importance of incentives, because otherwise they are unlikely to receive any breaks. In fact, evidence shows that in some cases businesses negotiate for tax incentives after they have already chosen a location (Fisher 2007, 65).

firm spends money directly on its payroll, inputs from local suppliers, and services from local businesses. The indirect effects occur when these workers and companies then spend a large share of their incomes on locally provided goods and services, and those firms and their workers in turn spend this money at other local establishments. This chain of events is often measured by

TABLE 1.1  
Property Tax Incentives and Economic Development Goals

Goal	Goal May be Reached if Incentives:	Goal May Not be Reached if Incentives:
<b>Increase Income or Employment</b>	<ul style="list-style-type: none"> <li>Attract facilities that export goods or services out of the area</li> <li>Promote industry clusters that increase productivity in the area</li> </ul>	<ul style="list-style-type: none"> <li>Have little impact because property taxes account for a small share of total business costs</li> <li>Create jobs that largely go to in-migrants or commuters</li> <li>Create jobs that are low-wage or part-time</li> <li>Require government to effectively "pick winners"</li> </ul>
<b>Improve Fiscal Health</b>	<ul style="list-style-type: none"> <li>Obtain partial property taxes from firms that would have located elsewhere without tax breaks</li> <li>Attract suppliers paying full taxes by providing tax breaks for anchor firms</li> <li>Obtain other taxes or fees from the firm that offset forgone property taxes</li> </ul>	<ul style="list-style-type: none"> <li>Are given to firms that would choose the same location even without tax breaks</li> <li>Are given to facilities that require costly infrastructure investments by the jurisdiction</li> <li>Extend for a longer time period than the lifespan of recipient plants</li> </ul>
<b>Promote Urban Revitalization</b>	<ul style="list-style-type: none"> <li>Redirect business investment within a metro area to distressed areas</li> <li>Offset lower business costs in wealthier areas</li> </ul>	<ul style="list-style-type: none"> <li>Have little impact on relative tax burdens due to widespread use of tax breaks</li> <li>Are utilized aggressively by wealthy areas</li> <li>Require very large tax breaks per job created to attract investment to distressed areas</li> </ul>



a multiplier, which is the ratio of the total increase in income, employment, or output across the local economy divided by the initial direct increase (Morgan 2010).

Using tax incentives to attract these types of facilities may increase a locality's per capita income and employment rate, although the latter effect is less likely given the high rate of U.S. labor mobility. Conversely, providing tax incentives for retail establishments, housing developments, and other businesses serving the local population is extremely unlikely to increase income or employment. The local population can only support so many of these businesses, and expansion by one firm will likely displace sales for competitors.

In addition, attracting a large facility may increase the productivity of other firms in the area and the wages of their workers. An initial cluster of firms specialized in one industry can create a positive feedback loop: workers with industry-specific skills will

move to the area, which will increase the number of other similar firms in the area, and in turn the concentration of firms supplying inputs. Meanwhile, the sharing of knowledge among workers and firms will increase productivity and the rate of innovation, leading to increased wages for workers in the industry, which will draw more skilled employees, firms, and suppliers.

Greenstone, Hornbeck, and Moretti (2010) provide evidence of how attracting one large facility can generate these types of productivity spillovers, sometimes known as agglomeration economies. For 47 large manufacturing plant openings, the authors compare economic trends for the “winner” county and one or two “loser” counties that were runner-ups. Before the plant openings, winning and losing counties had similar trends in productivity and other economic variables. Five years after the opening, productivity at existing plants in the winning counties had grown 12 percent more than



in the losing counties, and wage growth was also significantly higher. Although this study did not have data on incentive offers, if they had played a decisive role in attracting large plants then these spillover effects on productivity and wages could justify the cost of the incentives.

### ***Improve Fiscal Health***

A common goal for individual municipalities and counties using property tax incentives is to improve fiscal health, which occurs if revenue growth attributable to incentives exceeds growth in public service costs related to the business expansion.

If the firm truly would not have chosen the locality without the incentive, then local officials can conclude that some property tax revenue is better than none. This conclusion makes sense if the firm pays partial property taxes on the facility, or if the firm will pay full taxes in the future once a time-limited incentive expires. In theory, a jurisdiction can maximize revenue by negotiating taxes down to the level at which the firm just slightly prefers that location to alternative sites, and maintain its fiscal health by lowering taxes to the point at which they equal the cost of providing public services to the firm (Glaeser 2001).

Offering incentives for one firm could also boost tax revenues if that facility attracts other suppliers who would pay full taxes, or if it increases the property tax base in other ways. Greenstone and Moretti (2004) found that attracting a large facility increased property values in winning counties by 6.6 to 10.2 percent relative to runner-up counties over the course of six years.

Other taxes or fees paid by a firm could also offset revenue losses from property tax incentives. In particular, while incentivizing retail facilities may be unnecessary if they are tied to specific sites with high market exposure, attracting large retail stores can

substantially increase sales tax revenues for the locality, which is especially important in states with property tax limits.

However, for counties, municipalities, and towns combined, property taxes raise about 2.5 times more revenue than sales taxes. In 2007, property taxes accounted for 36.9 percent of own-source revenues for these local governments, while sales taxes accounted for 14.3 percent. Sales taxes exceeded property taxes in only ten states (State and Local Government Finance Data Query System 2012).

### ***Promote Urban Revitalization***

Redirecting business investment within a metropolitan region to areas with high unemployment or declining populations is a justifiable policy goal. Areas with declining populations tend to have underutilized infrastructure, so business investment in these areas is less likely to require costly new infrastructure to provide services for a new facility than areas with growing populations. In addition, the social benefits from new jobs may be greater in these areas, because a larger proportion of people without jobs has been involuntarily unemployed for long periods of time (Bartik 2005); workers with prolonged periods of unemployment suffer from an erosion of job skills that hurts long-term earnings (Bartik 2010); and inner-city residents may have difficulty obtaining jobs in wealthier suburbs due to limited knowledge about opportunities, difficulties commuting, or discrimination (Anderson and Wassmer 2000).

As described in chapter 3, property tax incentives are much more likely to sway a firm's choice of a specific site within a given metropolitan area than to alter its broader choice between different regions. If incentives are offered primarily in poorer areas and center cities, they can help offset the fact that the costs of business may be higher

in these areas for a variety of reasons, including higher property taxes, lower quality public services, higher crime or land prices, and the need to redevelop brownfields. Incentives can be considered a compensating differential to make these areas more competitive with suburban areas that would otherwise be more profitable locations for many new facilities.

### **OBSTACLES TO ACHIEVING DEVELOPMENT GOALS**

Achieving these economic development goals with property tax incentives depends on a wide range of factors and is far from guaranteed (box 1.2). Three general obstacles apply to all three goals: property taxes are a small part of total costs for most firms; tax breaks are sometimes given to businesses that would have chosen the same location even without incentives; and widespread use of incentives reduces their effectiveness.

Specific obstacles relate to the goal of increasing income or employment with tax incentives. First, most new jobs created by business investment will go to in-migrants or commuters instead of existing residents, because people move to areas with strong economic growth. For example, an analysis of 18 studies by Bartik (1993) found that between 60 and 90 percent of jobs created by employment programs go to in-migrants or unintended beneficiaries, while a study by Blanchard and Katz (1992) suggests that in the long run all newly created jobs will be taken by in-migrants.

Income growth or poverty reduction may be more realistic goals than increasing the employment rate, but these benefits depend on the characteristics of new jobs, such as the wage level and percent of full-time workers. Relying on selective incentives to improve the economy requires local governments to pick winners by strategically offering incentives and identifying key firms and local sectors that can sustain competitiveness.

Achieving the goal of improved fiscal health by offering tax incentives also depends on several factors. Most important is the cost of new infrastructure and expanded public services, which depends on the current use of existing infrastructure. Because of these costs, projects that require new infrastructure are unlikely to improve fiscal health in the short run (Altshuler and Gómez-Ibáñez 1993)

Another issue is that expecting a firm to pay full taxes in the future once an incentive has expired is often unrealistic. Based on several studies, Fisher (2007) has estimated that the median manufacturing plant is open for approximately 8 to 10 years. Since the duration for property tax abatements exceeds 10 years in about two-thirds of programs (Dalehite, Mikesell, and Zorn 2005), a majority of facilities may have closed



## A Cautionary Tale in Michigan

In 2009, the State of Michigan offered over 35 business tax incentive programs (Anderson, Rosaen, and Doe 2009). The most expansive of these is the Industrial Facilities Property Tax Abatement program (Act 198). Crafted in 1974, Act 198 provides geographically targeted property tax abatements for the creation, expansion, renovation, or addition of industrial property (Sands and Reese 2012; CRC 2007). Practically any local government may establish an industrial development or plant rehabilitation district. Once a district is established, any qualifying business wishing to develop within the district can apply for an exemption certificate subject to local and state approval and conditional upon job retention and creation. Instead of paying property taxes, certified businesses pay a substitute tax equal to 50 percent of the property tax for new facilities and equal to the property tax on the unimproved value of renovations or rehabilitations (Mikesell and Dalehite 2002; Significant Features of the Property Tax 2012).

Sands and Reese (2012) report that between 1974 and 2005 the program abated \$77.4 billion in real and personal property, with an average of 600 exemption certificates issued each year since 1980. The cost to local governments in lost revenue between 1990 and 2005 was roughly \$84 per person per year. In 2008, industrial property abated by this program accounted for 20.5 percent of the total industrial tax base (Anderson, Bolema, and Rosaen 2010).

Despite their widespread use, the impact of the Act 198 abatements is unclear. Over the 1990–2005 period, businesses receiving abatements reported they would create 234,000 new manufacturing jobs and retain 728,000 manufacturing jobs that otherwise would have been lost. Yet the number of jobs reported is not the same as the number of jobs actually attributable to the abatements, because the promised jobs do not always materialize and



many that do would have been created even without the abatements. In fact, in some industries the number of jobs reportedly created or retained through abatements actually exceeds the total number of all jobs in those industries. More generally, Michigan lost a slightly higher percentage of manufacturing jobs than the country as a whole over the time period. Although manufacturing job losses may have been even greater in the absence of abatements, the abatements were not effective in preventing substantial job losses (Sands and Reese 2012).

Evidence shows the abatements have not effectively targeted incentives to distressed areas or central cities. Among communities that awarded abatements between 1998 and 2000, distressed areas were no more likely to award them than flourishing communities, but spent more per job retained or created than wealthier areas. Furthermore, suburbs award abatements at a higher rate per capita than central cities. The suburbs report more jobs per capita as a result of incentives and had higher investment per capita. Abatements may promote sprawl to the extent that new investment spurred by the abatements is more likely to occur outside of central cities (Reese and Sands 2006).

before they ever paid the full tax rate. For these reasons, some studies have found that greater reliance on property tax incentives increases fiscal stress for local governments (Mullen 1990).

Finally, promoting urban revitalization with property tax incentives depends on their greater utilization in distressed areas than wealthier communities; if both types of areas use incentives aggressively, then relative tax burdens may change little. However, in practice, economic development incentives do not appear to be notably more common in low-income areas (Peters and Fisher 2004). There is also evidence that tax incentives are more cost effective in areas with high incomes and low unemployment, and thus their use could actually widen economic disparities between high- and low-income areas (Goss and Phillips 2001; Sands and Reese 2012). While the social benefits of creating jobs with tax incentives may be greater in areas with high unemployment, the costs could be even greater if it takes substantially larger tax breaks to induce business investment in these areas.

### **PITFALLS WITH DISCRETIONARY PROPERTY TAX INCENTIVES**

Discretionary tax incentives, which are distinct from as-of-right incentives given to all firms meeting certain criteria, have other pitfalls. Selective use of incentives raises major concerns about horizontal equity and the distribution of taxes, because granting

tax breaks to some mobile businesses likely means that long-standing local businesses or homeowners will pay more. This type of system is likely to be viewed as unfair by many taxpayers.

Decisions to grant discretionary tax incentives are sometimes not transparent or are made in ad hoc ways without clear economic justification. This process may be unduly influenced by political considerations, with incentives granted to well-connected firms or campaign contributors. For example, Felix and Hines (2010) found that communities in states with more corrupt political cultures were more likely to offer incentives.

A related concern is that politicians may grant incentives regardless of the economic rationale. Politicians can grant incentives and claim that they played an instrumental role in attracting a new facility to the community, even if a firm may have located there without incentives. Wolman and Spitzley (1996) find evidence of this type of credit-claiming among elected officials. Conversely, if politicians decide not to offer incentives, they could be blamed if the firm chooses to locate elsewhere. A final consideration is that negotiation over tax incentives significantly increases the cost of property tax administration for the local government. It is also economically inefficient for firms to spend time and money lobbying for tax breaks instead of focusing on improving their business.



# CHAPTER 2 Property Taxes on Business



**B**usiness property includes nonresidential, income-producing property such as commercial, industrial, farm, mineral, railroad, or public utility properties (Cornia 1995). This report focuses primarily on commercial and industrial property.

### WHY BUSINESSES PAY PROPERTY TAXES

In order to put property tax incentives in the proper context, it is important to consider the reasons for requiring businesses to pay property taxes.

*To fund services received.* State and local governments provide a wide array of

services that benefit business activity, including a small proportion that directly and solely benefit businesses, such as economic development support. Other types of state and local government expenditures, such as on the court system, transportation, and public safety, provide critical benefits for both businesses and households. Education is the single largest expenditure of state and local government. Although education provides direct benefits to individuals, it also benefits businesses by increasing the productivity of their employees.

Oakland and Testa (1996) examine several rationales for state and local taxation of business, concluding that the primary basis for

**TABLE 2.1**  
**Property Tax Base by Property Type in 31 States, 2009**

State	Residential	Commercial and/or Industrial	Other
<b>U.S. Average</b>	<b>59.8%</b>	<b>21.6%</b>	<b>18.6%</b>
Alaska	59.7	22.4	17.9
Colorado	46.2	25.7	28.1
Delaware	71.0	29.0	0.0
District of Columbia	58.4	40.9	0.7
Florida	74.2	17.1	8.8
Hawaii	68.6	24.8	6.7
Idaho	69.7	22.7	7.5
Illinois	65.0	32.5	2.5
Indiana	49.3	29.0	21.7
Iowa	44.5	30.2	25.3
Kansas	51.9	25.8	22.3
Kentucky	65.8	24.3	9.9
Maryland	80.2	18.0	1.8
Massachusetts	83.0	14.5	2.5
Michigan	69.4	20.1	10.5
Minnesota	66.9	13.3	19.8
Missouri	53.7	21.4	24.9
Montana	47.1	13.6	39.3
New Hampshire	79.6	16.3	4.1
New Jersey	62.5	15.2	22.3
North Carolina	65.0	15.8	19.2
North Dakota	43.3	23.3	33.5
Ohio	69.3	20.8	10.0
Oregon	52.5	19.0	28.5
South Dakota	39.2	24.1	36.6
Tennessee	55.5	27.1	17.4
Texas	52.3	20.3	27.4
Utah	47.2	19.4	33.4
Vermont	60.9	16.5	22.6
Washington	75.4	16.6	8.0
Wisconsin	72.1	20.3	7.6
Wyoming	15.2	10.5	74.3

Notes: The other 19 states do not report divisions of their tax base into classes for residential and commercial and/or industrial properties. States' definitions of "other" property vary widely. Source: Significant Features of the Property Tax (2012).

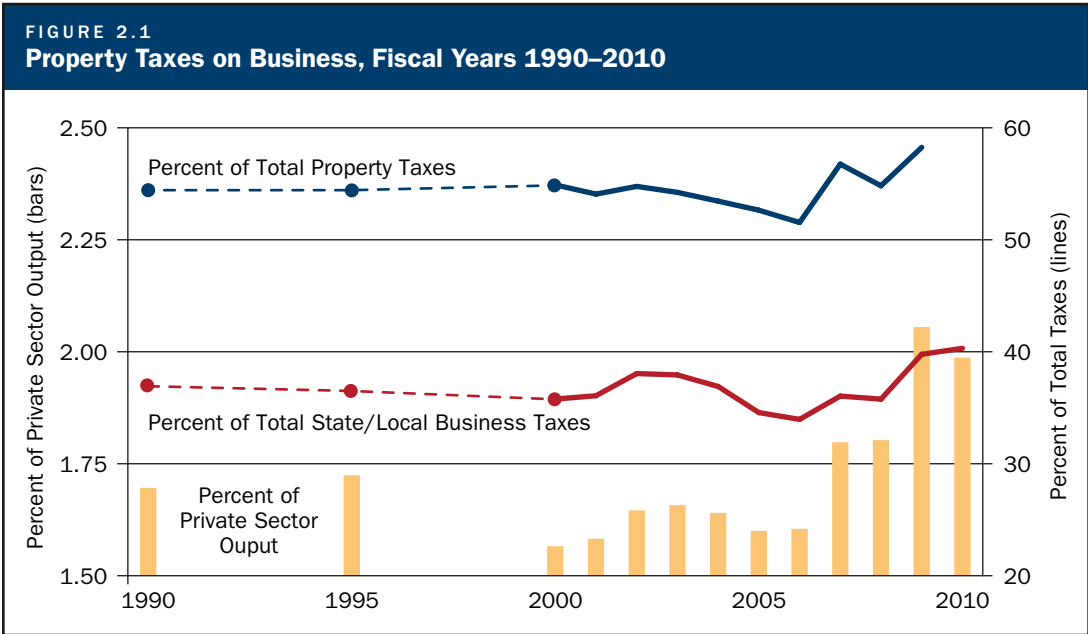
taxing businesses is to recover the cost of government services provided to them. The authors further argue that taxing businesses in accordance with benefits provided is both fair and efficient.

**To generate revenue for local governments.** Although popular discussion of property taxes tends to focus on those paid by homeowners, the assessed value of business property is an important part of the tax base. In 1986, the most recent year that the U.S. Census collected data on assessed property values, 39 percent of the property tax base could be attributed to businesses. This included commercial properties (16 percent), industrial properties (6 percent), farms (7 percent), and personal property (10 percent). The latter can be classified as business property since most states no longer tax household personal property. Residential property accounted for 55 percent of the tax base, split between single-family houses (48 percent) and multifamily properties (7 percent). Vacant lots accounted for the remaining 6 percent (U.S. Department of Commerce 1989).

More recent data can be obtained at the state level, but not all states report assessed values by property type, and the states that do report may not divide the property tax base into the same categories. Thirty-one states report some division of their property tax base by property type (table 2.1). For these states on average, nearly 60 percent of the property tax base was residential, 22 percent was commercial and/or industrial, and 19 percent was categorized as "other," which included various types, such as personal property and vacant land.

Revenue from business property taxes also constitutes a substantial proportion of all property tax revenue collected. According to Phillips et al. (2011), in FY2009 businesses contributed \$247 billion in property





Sources: Cline et al. (2011); State & Local Government Finance Data Query System (2012); U.S. Bureau of Economic Analysis (2011).

tax revenue to state and local governments, constituting 58 percent of all property taxes raised and 40 percent of all state and local taxes paid by business (figure 2.1). These estimates include multifamily housing, although many other researchers would not include it as business property. Business property taxes have been quite stable over the past two decades, although they did jump significantly in 2009 and 2010. It is likely that business properties will help shore up total property tax revenues in coming years, as the dramatic fall in housing values weighs down residential tax payments.

**To add progressivity to the state-local tax system.** For those concerned with state and local government use of regressive taxes, such as reliance on the general sales tax, levying property taxes on businesses can be a way to add a progressive element to the total state-local tax system. The property tax, particularly the part of the property tax levied on businesses, is often conceived as a tax on capital. Ownership of capital is proportionately greater for higher-income households, so any tax

on capital places a higher tax burden on high-income households than on low- and moderate-income households.

**POLICIES AFFECTING THE PROPERTY TAX BURDEN ON BUSINESS**

Property tax incentives for business can only be understood fully within the context of other major policies affecting the property tax burden on business.

**State Constitutions**

Although they vary enormously and have evolved over time, state constitutions together with case law set the framework that guides legislative action regarding business property taxes. The most important constitutional provisions are the uniformity clauses included in 39 state constitutions, which require property taxation at a uniform rate within a jurisdiction, although they are subject to important qualifications that vary by state (Coe 2009).

One example of a uniformity clause is Alabama’s constitutional requirement that “all taxable property shall be forever taxed

BOX 2.1

**Cuno Supreme Court Case**

In 1998 the City of Toledo, Ohio and two local school districts offered DaimlerChrysler, Inc., a \$280 million tax incentive package to expand operations within the city. The company estimated that the \$1.2 billion development of a new Jeep manufacturing facility would create thousands of new jobs. The tax incentive package included a 10-year, 100 percent property tax exemption and a state franchise tax credit (*DaimlerChrysler Corp v. Cuno* [2006]).

Led by Toledo resident Charlotte Cuno, a group of nine Ohio taxpayers and some area businesses filed a lawsuit against DaimlerChrysler, the State of Ohio, and the City of Toledo charging that the tax incentive package violated the U.S. Commerce Clause and the Ohio Equal Protection Clause (Carty 2006). The case was filed in state court, but DaimlerChrysler moved the case to federal court where the U.S. District Court ruled that the incentives violated neither the U.S. nor Ohio clause and dismissed the case (Lunder 2005).

On appeal, in 2005 the U.S. Court of Appeals for the Sixth Circuit affirmed the U.S. District Court's ruling upholding the property tax exemption, but reversed its ruling on the franchise tax credit, maintaining that the credit ran afoul of the U.S. Commerce Clause. In March 2006, the U.S. Supreme Court reviewed the lower court decisions and dismissed the case, ruling that the plaintiffs had no standing to challenge the credit for the state franchise tax.

Summing up the unanimous ruling, Supreme Court Chief Justice John Roberts wrote, "Indeed because state budgets frequently contain an array of tax and spending provisions, any number of which may be challenged on a variety of bases, affording state taxpayers standing to press such challenges simply because their tax burden gives them an interest in the state treasury would interpose the federal courts as virtually continuing monitors of the wisdom and soundness of state fiscal administration, contrary to the more modest role Article III envisions for the federal courts" (*DaimlerChrysler Corp v. Cuno* [2006]).

at the same rate" (Art XI, sec. 217(b)).

Arizona's constitutional requirement that "all taxes shall be uniform upon the same class of property" provides an important clue to the practical application of most such clauses (Art. IX, sec. 1).

Although these clauses ostensibly require all property to be taxed at a uniform rate, in reality most allow differential taxation between different classes of property at the same time that they require uniform taxation within a given class. But even that requirement is subject to the exceptions that arise from property tax exemptions, which are allowed in most states. It is important to realize that courts "are inclined to give state legislatures extensive leeway in their power to tax, as long as it does not violate any explicit provision of the state constitution" (Coe 2009, 131).

State constitutions also commonly address the issue of exemptions, but they range from strictly limiting the state legislature's discretion in granting exemptions (e.g., Arizona), to allowing the legislature broad latitude, as in Idaho, whose constitution states, "the legislature may allow such exemptions from taxation from time to time as seem necessary and just" (Art. VII, sec. 5) (Coe 2009, 150–151). The Florida constitution addresses the issue of property tax exemptions for the purposes of economic development: "Any county or municipality may . . . grant community and economic development ad valorem tax exemptions to new businesses and expansions of existing businesses." (Art. VII, sec. 3(c)).

A recent legal case challenging tax incentives for business went all the way to the U.S. Supreme Court (box 2.1).

***Classification or Split Roll***

Classification or split roll taxation is a policy, either constitutional or statutory, that applies different effective tax rates to different classes



of property. Effective tax rates are computed by dividing total tax liability by total property value. Comparison of effective instead of statutory tax rates is particularly important when comparing one jurisdiction that assesses property at market value with another jurisdiction that assesses property at some fraction of market value. For example, a jurisdiction can levy an effective property tax rate of 1 percent either by assessing property at 100 percent of market value and employing a statutory tax rate of 1 percent, or by assessing property at 50 percent of market value and employing a 2 percent tax rate.

States that employ classification typically use it to apply higher tax rates to commercial, industrial, and other business property than to residential property. Classification can be accomplished in two ways: statutory tax rates can vary by class, or the ratio of

assessed value to market value can vary by class. As an example of the latter, Alabama applies a uniform statutory tax rate to all types of property, but assesses utility property at 30 percent of market value; commercial and industrial property at 20 percent; and residential property at 10 percent (Significant Features of the Property Tax 2012).

Twenty-six states plus the District of Columbia employ some form of property tax classification and California policy makers have been considering adopting a split-roll property tax in order to increase property taxes on businesses relative to residential property (Lee and Wheaton 2010; Sheffrin 2009). Many state constitutions address the issue of classification. Some, like Florida's, prohibit classification, but others give the state great leeway in creating a classification system. Some place limits on classification,

such as the Massachusetts constitution, which limits the number of permissible classes to four (Coe 2009).

Certain states, including Connecticut, Illinois, Massachusetts, New York and Rhode Island, allow local governments some discretion in adopting or adjusting property tax classification. Others, such as Colorado, have adopted a system termed “dynamic classification” in which effective tax rates for each property class are changed over time in order to maintain a specific relationship between the share of the property tax paid by residential properties and other properties (Bell and Brunori 2011).

### ***Assessment Practices***

Although classification systems are generally used to impose greater effective tax rates on business than residential properties, a state can accomplish the same thing as a de facto rather than a de jure policy. Some states

even had long-standing policies of assessing business properties at a greater proportion of market value than residential properties before enacting legislation establishing classification systems to codify such practice.

Another way in which business properties can be systematically taxed differently from residential property is by using a different appraisal methodology. Of the three standard methods—sales, income, and cost—the sales method is most often used for residential properties and least often for business properties. Although each methodology should in theory lead to the same valuation, in practice they may differ. One concern is that the cost method might systematically undervalue properties, which would tend to lead assessors who employ that method to undervalue business properties relative to residential properties (Cornia 1995).

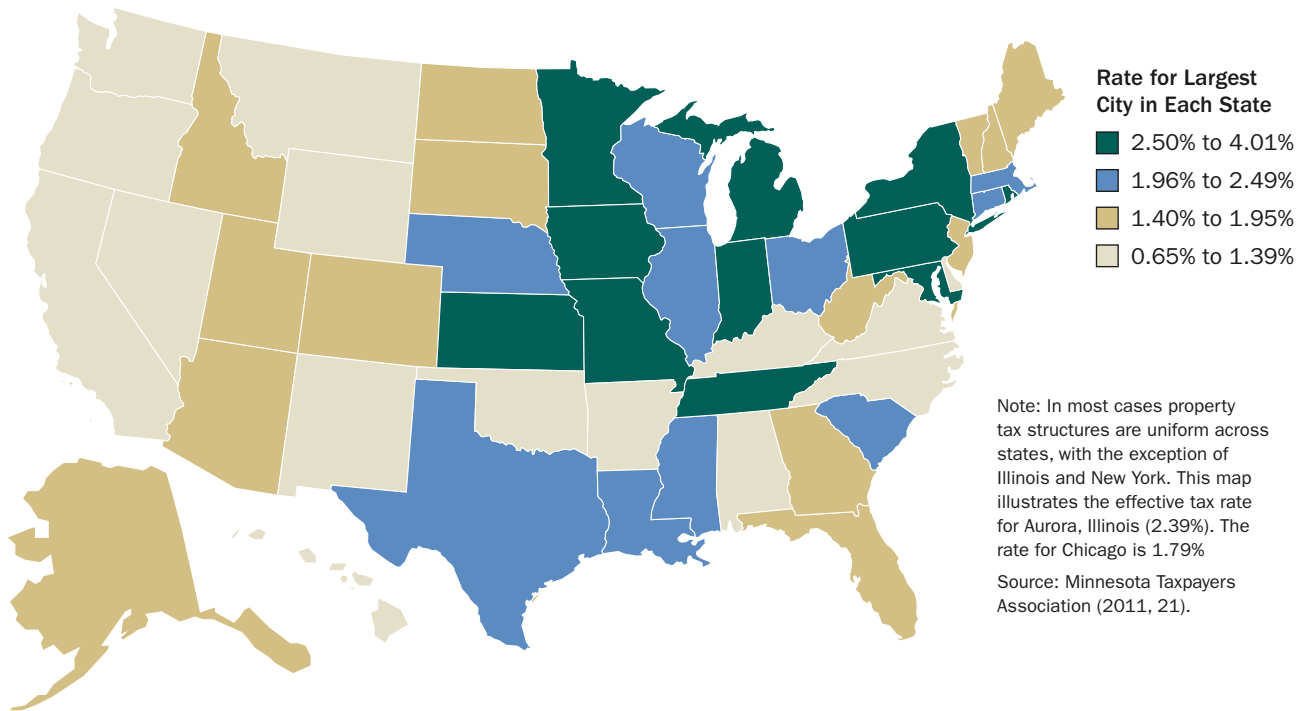
### ***Personal Property Taxes***

In considering property taxes on business, it is important to include personal property as well as real property, which consists of land, improvements to land, and buildings. Personal property includes machinery and equipment, inventories, and fixtures such as furniture or office equipment, and is typically taxed only when owned by a business. Personal property is characterized by its mobility, whereas real property is immovable (Almy, Dornfest, and Kenyon 2008). In part because of this greater relative mobility, the case for taxing business personal property is weaker than that for taxing business real property. For example, a business could easily move inventories from a high-tax to a low-tax jurisdiction in order to minimize tax liability.

Over time, personal property has become a smaller part of the U.S. property tax base, as most household personal property and later some business personal property was removed from the tax base. Personal property as a share of the local property tax



**FIGURE 2.2**  
**Effective Property Tax Rates for Urban Commercial Property (\$1 million value), 2010**



base was 17 percent in 1956, 13 percent in 1971, and 10 percent in 1986 (Mikesell 1995). In 1961, four states exempted personal property from taxation; by 2011, 12 states had exempted personal property (Mikesell 1995; Thompson/Reuters RIA 2012). In the past 12 years, 8 states reduced their reliance on personal property taxes, including raising exemption levels and eliminating personal property taxes on inventories (Drenkard 2012).

Ohio and Michigan recently reduced taxation of business personal property as part of their tax reform initiatives. Ohio adopted a new commercial activity tax, exempted new tangible personal property from taxation, and enacted a five-year phase-out of taxes on existing personal property. Michigan replaced its Single Business Tax with a new business tax structure at the same time that it significantly

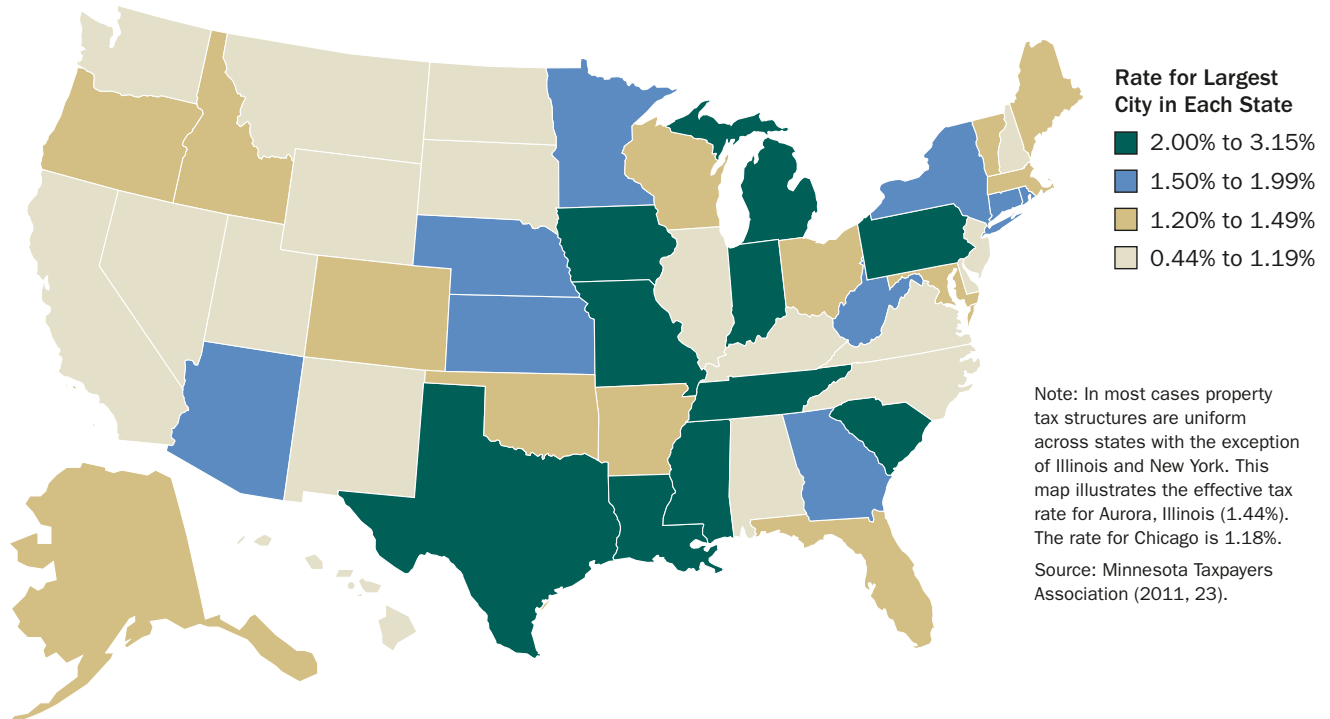
reduced personal property taxes for both commercial and industrial taxpayers (Neubig and Cline 2008).

### **EFFECTIVE TAX RATES ON BUSINESS PROPERTY**

The most comprehensive measure of effective tax rates is the one calculated for the largest city in each state by the Minnesota Taxpayers Association (MTA), which estimates effective tax rates for commercial, industrial, and homestead properties (Minnesota Taxpayers Association 2011). The MTA takes a number of factors into account, such as differences in assessment practices; exemptions, credits, or refunds that apply to a majority of taxpayers; tax rates for all state and local governments that serve a city; and tax classification when it is used.

Figure 2.2 shows that effective property tax rates for urban commercial properties

**FIGURE 2.3**  
**Effective Property Tax Rates for Urban Industrial Property (50% Personal Property, \$1 million value), 2010**



with a \$1 million market value range between 0.7 percent in Cheyenne, Wyoming, and 4 percent for Detroit, Michigan. These rates are highest in the Midwest and Middle Atlantic states and lowest in the West. They vary for many reasons, including reliance on other local revenue sources (e.g., sales tax and user fees), property values, and the level of local government spending.

Because some states tax personal property and others do not, estimates of effective tax rates for industrial property depend on the proportion of the total property value that is personal property. Figure 2.3 shows effective tax rates for urban industrial property valued at \$1 million, assuming that half of the value is personal property. Effective tax rates for industrial property are somewhat lower than for commercial property, ranging from 0.4 percent in Wilmington, Delaware, to 3.2 percent in Columbia, South Carolina. These rates are highest

in the Midwest and South and lowest in the West.

In the majority of cities the effective tax rates for commercial properties exceed those for homesteads. Figure 2.4 shows the ratio of commercial to homestead effective property tax rates for the largest city in each of 25 states. Effective tax rates on commercial properties exceed rates on homestead properties in 20 of them. A few cities, such as Baltimore, Maryland, and Virginia Beach, Virginia, have a higher tax on homestead properties than on commercial properties.

The MTA has tracked the ratio of effective tax rates of commercial versus homestead property since 1998, when that ratio was 1.76, indicating that on average across the country commercial properties were taxed about 76 percent higher than homestead properties. That ratio declined until 2002, then rose through 2008, and has declined slightly since then. In 2010 the

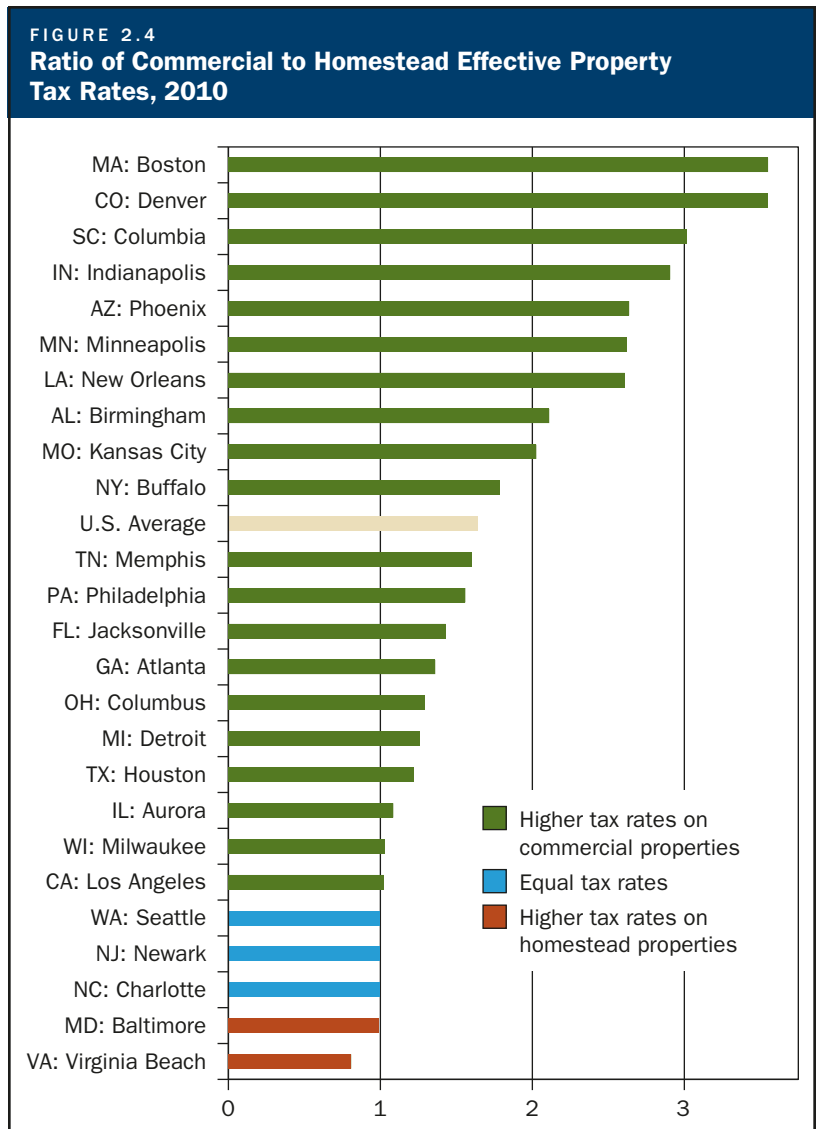
ratio was 1.72 (Minnesota Taxpayers Association 2011).

Whether or not effective tax rates for industrial properties exceed those for home-steads depends on the split of industrial property between personal and real prop-erty. In 2010, the nationwide average of effective property tax rates on median value homes across the United States was 1.34 percent. This fell short of the 1.43 percent effective tax rate for urban industrial prop-erty valued at \$1 million, assuming that 50 percent of the total property value was per-sonal property. However, it would exceed the 1.3 percent rate if personal property was assumed to account for 60 percent of total property value (Minnesota Taxpayers Association 2011).

It is important to note that effective tax rates measure the initial incidence of prop-erty taxes, but other studies explore final incidence, a more complicated concept that takes into account the fact that the ultimate burden of taxation always falls on persons. That is, depending upon factors such as whether a business serves a local or national market, the final incidence of business taxes will fall on business owners, workers, or consumers.

### SUMMARY

Requiring businesses to pay property taxes is based on three rationales: businesses benefit from local government services; business property tax payments are an important revenue source for local governments; and business property tax payments add a progressive element to the state-local tax system. This chapter surveyed policies other than property tax incentives for business that serve to either increase the property tax burden on business (e.g., classification or split-roll systems) or decrease the burden



Notes: Figure shows the largest city in the 25 most populous states, with the exception of Illinois and New York, which show the second largest city. The U.S. average is for the largest city in each state, with New York City excluded.

Source: Minnesota Taxpayers Association (2011, 14).

(e.g., phasing out personal property taxes). Effective tax rates on commercial and industrial property vary enormously across the United States for a variety of reasons. In the largest city in most states the effective tax rates on commercial property exceed those for homeowners, but in some states the reverse is true.



## CHAPTER 3

# The Impact of Property Taxes on Firm Location Decisions



**T**he site location process used by many businesses, as well as economic theory and empirical studies, suggests that the impact of property taxes on firm location decisions depends on the type of facility and the geographic area under consideration.

### THE SITE LOCATION PROCESS

With over 36,000 jurisdictions in the United States and a much larger number of potential sites, firms could not possibly evaluate all sites across the many location criteria that are typically considered in such decisions. Instead, the site location process normally occurs in several stages during which firms systematically narrow the geographic area under consideration and compare

with increasing detail the competing locations. The importance of property tax differentials in firm location decisions varies with the stage of site selection.

A two-stage process is one way to think about site selection, in which a firm first chooses a metropolitan area and then a specific site within that region. Property taxes are relatively unimportant in choosing a metropolitan area since tax differences have a much smaller impact on profits than differences in costs for labor, transportation, energy, and rent or occupancy. However, since effective property tax rates can vary significantly within a metropolitan area, differences in property taxes can be a deciding factor when selecting a single site within an area. At this stage, state taxes



and regulations as well as energy costs are often constant; labor cost differences are small because of the ease of intrametropolitan commuting; and there is little variation in proximity to suppliers or consumers.

Ady (1997) describes a more detailed three-stage process for facility location, developed by Fantus Consulting, which is now used widely by site selectors. In the first stage, the search is narrowed to a broad region, several states, or several counties based primarily on wage differentials, transportation variables (for manufacturing), and project-specific essentials such as access to port facilities, right-to-work laws, or proximity to an engineering school. Taxes will be considered, but only at a high level to eliminate clearly uncompetitive states.

In the second stage, 3 to 5 communities will be chosen out of a list of as few as 15 to 20 or as many as 50 to 100. The focus is on modeling operating costs for the specific project in each community. According to a database of firms using Deloitte & Touche/Fantus Consulting for site selection during 1992–1997, Ady (1997) reports that total operating costs for a typical manufacturing facility can be estimated with the following weights for five categories of input costs: labor (36 percent), transportation (35), utilities (17), occupancy (8), and taxes (4). Again, taxes are relatively unimportant at this stage because they account for a small part of geographically variable costs.

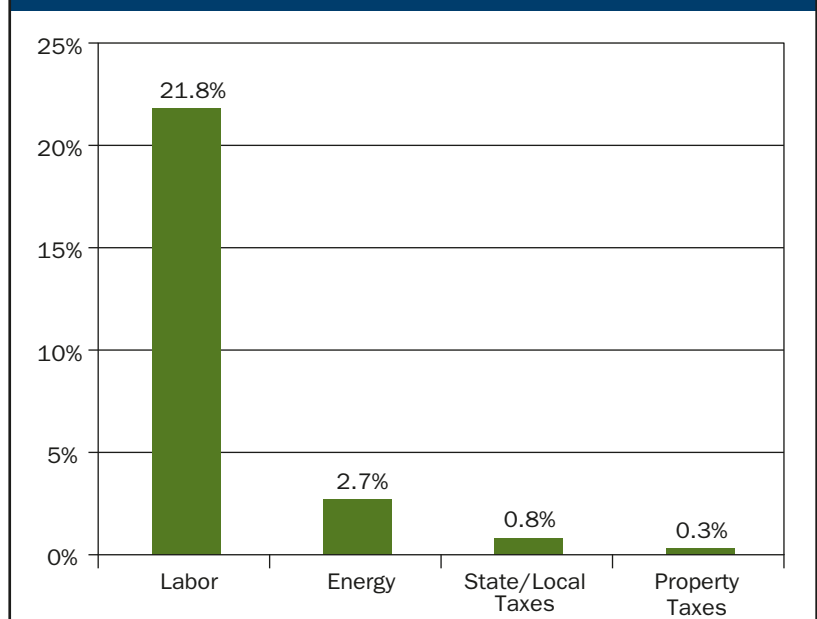
But in the third stage, when choosing a specific site, firms examine actual properties that can meet their needs, and then all taxes and incentives are compared in detail and the quality of public services is measured carefully. As Ady (1997, 80) says, “The only case where taxes alone could sway a location decision is a company relocation in a relatively autonomous geographic area, such as a city or metropolitan area.”

## THE EFFECT OF INPUT COST DIFFERENCES

The importance of differences in each cost factor will depend on each factor’s share of total costs for the firm and the extent of variation across states, regions, or jurisdictions. Large variations will have little effect on firm location decisions if a cost factor accounts for a small share of total costs, while factors accounting for a large share will be unimportant if there is little variation across competing regions.

When a manufacturing firm chooses a region in which to locate its facility, its decision is typically driven by proximity to suppliers and consumers (and the transportation costs to reach them) and the wages, skills, and availability of local workers. That is because three-quarters of costs for the average manufacturing firm are inputs purchased from suppliers, with labor accounting for most of the remaining costs. In fact, figure 3.1 shows that the manufacturing

FIGURE 3.1  
Input Costs as a Share of Total Costs for the Manufacturing Sector, 2004–2009



Note: See Appendix Notes for an explanation of the calculations.  
Sources: Phillips et al. (2011); U.S. Bureau of Economic Analysis (2011).

sector spends nearly 75 times more on labor (21.8 percent) than on property taxes (0.3 percent).

Even though taxes vary more across states than do labor costs, differences in labor costs are still much more likely to drive firm relocations. Figure 3.2 estimates the effect on an average manufacturing facility of relocating from a high-cost state to a low-cost state, using actual data on state input costs and the share of total costs for each input. Moving from the state with the fifth highest state-local taxes to the state with the fifth lowest will reduce business costs by 0.4 percent on average whereas moving from the state with the fifth highest labor costs to the fifth lowest will save almost 9 times as much (3.1 percent).

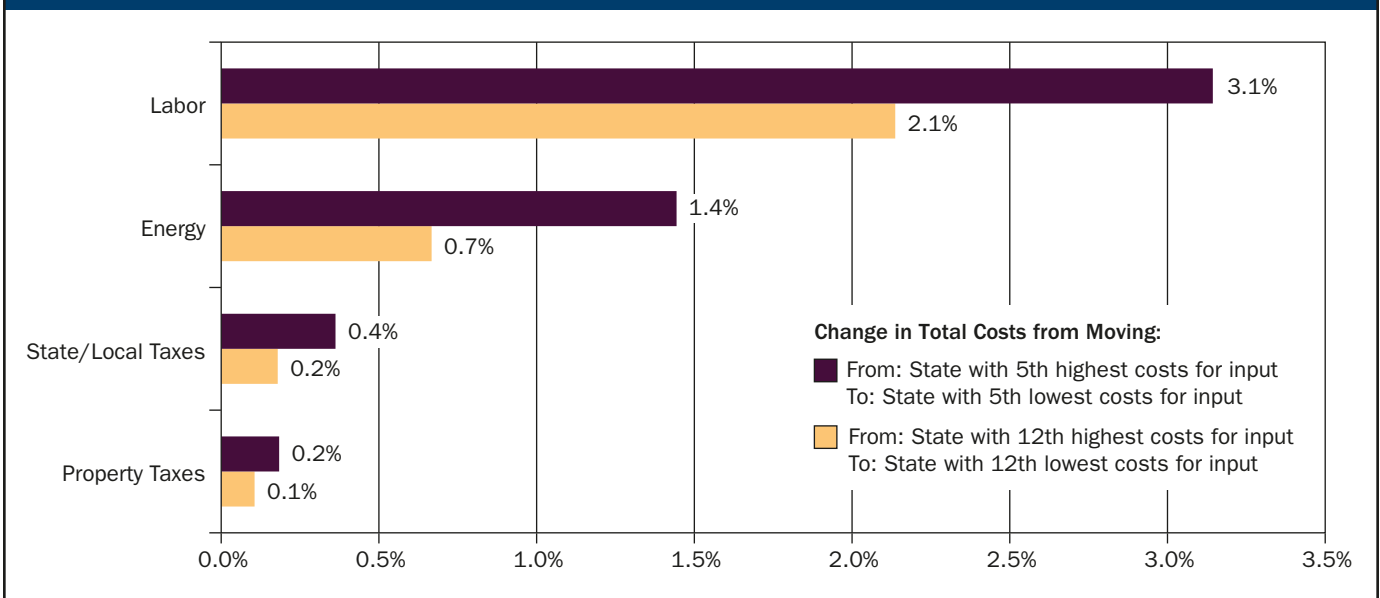
The importance of taxes is much greater when a firm chooses a specific site within a metropolitan area. At this stage, differences in the cost of labor, energy, state taxes, and transportation are normally small, but property taxes often vary more across indi-

vidual jurisdictions within a given region than they do across states. For example, among 103 Massachusetts municipalities in the Boston metropolitan area that have not zoned out industry, effective property tax rates on industrial properties ranged from 1.13 percent in the municipality with the tenth lowest rates to 2.82 percent in the municipality with the tenth highest rates. This means that a firm's total operating costs could be reduced by 0.5 percent by locating in the low-tax municipality instead of the high-tax one (see Appendix Notes for calculations).

### ECONOMIC THEORY

Differences in effective property tax rates on new investment will affect a jurisdiction's ability to attract mobile capital investment in direct and indirect ways. Above-average property taxes on business will directly reduce business investment, because higher property taxes decrease the rate of return on investment. According to the "New View"

**FIGURE 3.2**  
Impact of Relocation to Different States on Total Costs for an Average Manufacturing Facility



Note: See Appendix Notes for an explanation of the calculations.

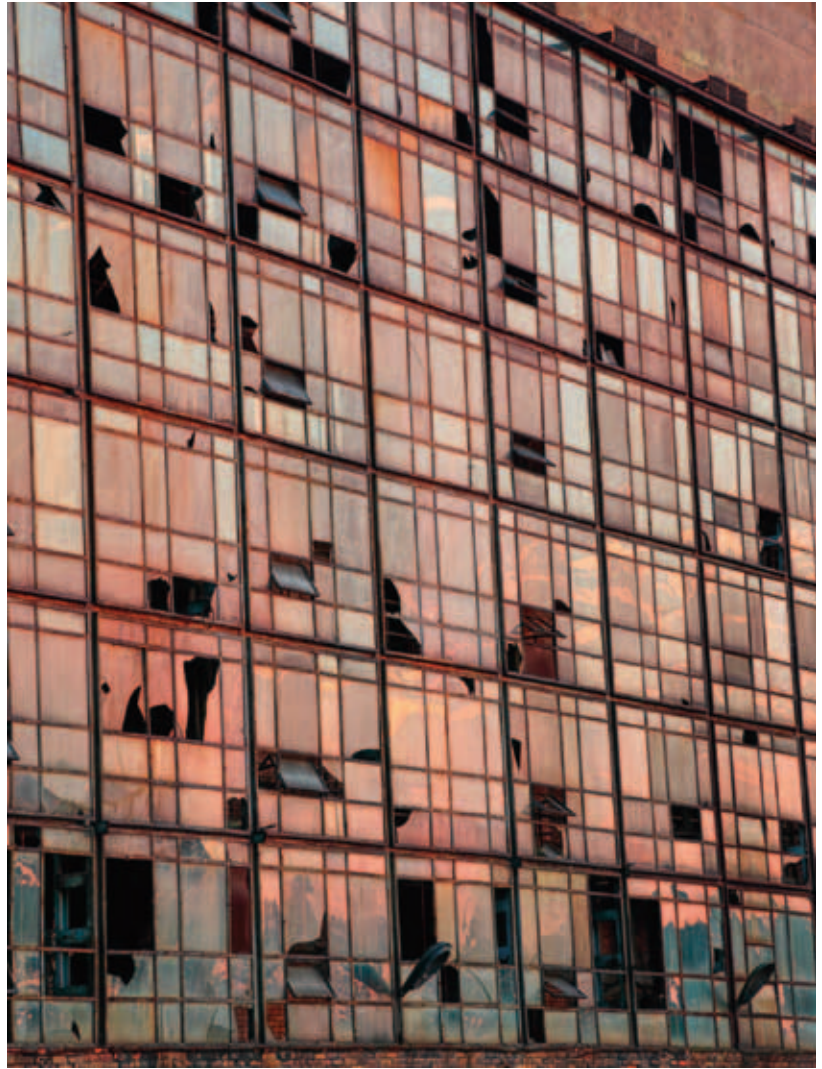
Sources: Moody's Analytics, Inc. (2011); Phillips et al. (2011); U.S. Bureau of Economic Analysis (2011); U.S. Energy Information Administration (2011).

of the property tax first put forth by Mieszkowski (1972), the average business property tax rate constitutes a profits tax that reduces the rate of return on business property nationally. Property taxes above the national average will reduce business activity, land prices, wages, and the employment rate.

However, higher property taxes are often associated with higher-quality public services for business and will be capitalized into lower land values. These indirect effects will tend to increase business investment. Higher-quality police and fire protection, highways, infrastructure, utilities, and education all affect firm location decisions (Ady 1997). Public services affect firm costs and productivity, such as the impact of police protection on insurance rates and the impact of education on labor productivity.

If property tax differentials were completely offset by differences in the quality of public services, then property taxes would be benefit taxes and have no effect on firm location decisions. Oates and Schwab (1991) have argued that under perfect competition all local government taxes would be benefit taxes, because jurisdictions would bid against each other to attract mobile businesses up to the point where the cost of providing public services to a firm would exactly equal the amount it pays in taxes. In this case, the level of public services provided would be economically efficient, although there would be no scope for redistribution at the local level.

Some research has cast doubt on the property tax being a benefit tax for business. According to Oakland and Testa (1998), in 1995 businesses paid twice as much in state and local taxes as the cost of public services they received. However, these estimates depend on assumptions about how the benefits of public goods are shared between households and business. For example, if 25 percent of public education spending is count-



ed as a benefit for business, then the estimated ratio of taxes-to-benefits drops from 2.06 to 1.31.

In addition, property taxes are capitalized into land values—that is, for otherwise identical properties with similar location advantages and public services, the one with higher property taxes will have a lower land value, which equalizes total expenses over the life of the property. However, Yinger et al. (1988) found that property tax differentials are not fully capitalized into property values.

Thus despite some caveats, the balance of evidence supports the basic intuition that firm location decisions are responsive to differences in property taxes. However, the net effect of a property tax cut on business

investment in a jurisdiction is much smaller than the direct effect, and depends on whether the tax cut is financed by reducing public services for business and the extent that land values increase in response to a tax cut.

In addition, while lower property taxes should increase business investment, the effect on employment is less clear, because lower property taxes reduce the cost of machinery and equipment relative to labor. Job growth induced by greater business investment (i.e., scale effect) could be outweighed by job losses due to substituting machinery for labor (i.e., substitution effect). Finally, the effect of property taxes on the location decision for a specific facility can be significantly different from the average effect for all firms.

### **EMPIRICAL EVIDENCE**

There are three common approaches for estimating the effect of taxes on local economies: surveys, regression analysis, and representative firm models. Surveys

ask business decision makers about the role of taxes and incentives in their facility location decisions. While surveys can be influential, they are unreliable since those surveyed have an incentive to exaggerate the effect of taxes and incentives on their decisions as a way to lobby for preferred policies. Regression analysis and representative firm models are more reliable because they look at a firm's actual decisions and take into account many of the other local factors that affect profitability to determine the true importance of taxes and incentives.

An examination of studies done between 1990 and 2011 suggests that the best literature reviews on this issue are still Bartik (1991) and Wasylenko (1997), who summarize the results of roughly 90 studies that used regression analysis to estimate the effect of state and local taxes on economic activity.

Table 3.1 describes the methodology used in these studies, including the measures of economic activity, which include employment, firm births and relocations, investment, and income. One key result is that differences





TABLE 3.1

**Impact of State and Local Taxes on Economic Activity:  
A Summary of Empirical Evidence**

	<b>Tax Differences Across Regions</b>	<b>Tax Differences Within a Region</b>
<b>Impact of Tax Cuts on Economic Activity</b>	Increase in Economic Activity from 10% Cut in Total State & Local Taxes	Increase in Economic Activity from 10% Cut in Local Property Taxes
Median Estimate	2% to 3%	16% to 20%
Most Likely Range	1% to 6%	10% to 30%
<b>Tax Revenue Change Per Job Created by Tax Cuts</b>	Annual Recurring Change in Total State and Local Tax Revenue	Annual Recurring Change in Local Property Tax Revenue
Median Estimate	– \$17,337	\$1,035
Most Likely Range	– \$52,011 to –\$3,853	\$0 to \$1,553
<b>Methodology</b>	These studies measure the long-run relationship between differences in taxes for entire regions (states or metro areas) and differences in employment, firm births and relocations, investment, income, and gross product for these regions.	These studies measure the long-run relationship between differences in property taxes for individual jurisdictions within a region (typically a metro area) and differences in employment and firm births and relocations for these jurisdictions.

Note: See Appendix Notes for details and calculations.  
Sources: Bartik (1991; 2005).

in taxes within a given region have a five to ten times greater impact on economic activity than differences in taxes across regions. This key distinction reflects the two-stage site selection process described earlier. However, while a 10 percent cut in property taxes for one jurisdiction is associated with a 16 to 20 percent increase in economic activity, the site location process suggests this effect is largely a zero-sum game for the region as a whole, because the increase in economic activity in one jurisdiction is offset by decreases in other jurisdictions (Wassmer 2009).

The across-region results in table 3.1 also rule out the possibility of across-the-board tax cuts generating enough new economic activity to actually increase tax revenues at the regional level. In fact, the median estimate suggests that creating one job through tax cuts would require a recurring annual loss in state and local tax revenue of \$17,337. Again, the story is quite different for individual jurisdictions. The within-region

results suggest that decreased revenues from lower tax rates could be more than offset by increased revenues from new economic activity, so that lower property tax rates could increase revenues by \$1,035 per year for each job created.

To obtain reliable estimates of the effect of taxes on economic activity, it is crucial to measure the quality of public services accurately. Otherwise the effect of higher-quality public services (expected to increase economic activity) can be incorrectly attributed to the effect of higher taxes (expected to decrease activity), which will underestimate the effect of taxes.

For example, Phillips and Goss (1995) find that studies that control for public services estimate the effect of tax differences between regions to be twice the size found by studies that do not. The average effect of a 10 percent cut in state and local taxes is a 4.48 percent increase in regional economic activity in studies with a public service

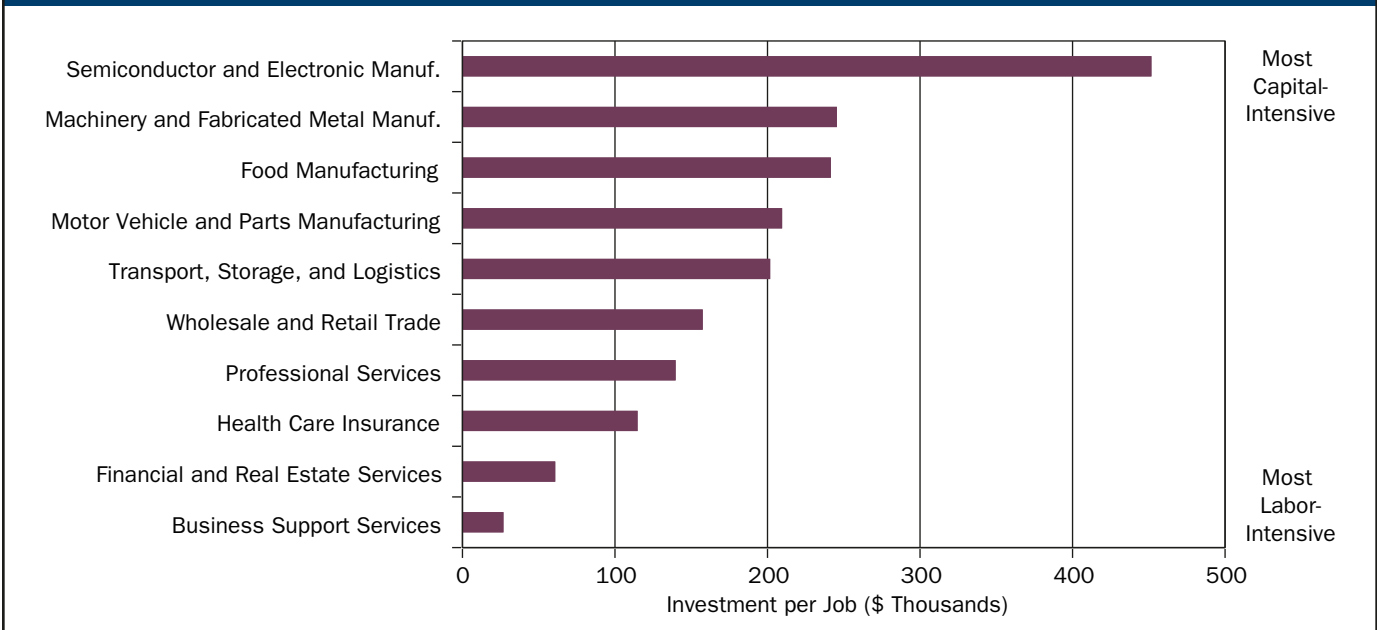
control variable, and 2.16 percent in studies that do not account for differences in public services. The 4.48 percent estimate could be interpreted as the effect of tax cuts holding public services constant, while the 2.16 percent estimate is the combined effect of tax cuts and accompanying reductions in public services.

Regression analyses must overcome a host of other econometric problems and measurement issues to obtain reliable estimates of the effect of taxes (Wasylenko 1997). Because of these significant challenges, regression studies may have inexplicably large variations across industries, statistically insignificant coefficient estimates, a very wide range of elasticity estimates, or be difficult to replicate using data from different years (McGuire 2003). One possible reason for these wide variations is suggested by Ady (1997), who is skeptical of trying to reach general estimates of the effect of taxes on

economic activity because the importance of taxes varies so much across industries, the stage of site selection, and even individual firms in the same sector. For example, property taxes place a higher burden on capital-intensive industries, such as most manufacturing firms, than on labor-intensive industries, such as many service-sector firms (figure 3.3).

An alternative methodology is the representative firm approach, which combines models built to accurately reflect the financial statements of typical firms with detailed information about state and local tax provisions. Starting with the same pre-tax profit rate for each city or state, researchers calculate the marginal after-tax profit rate for new investment projects in each location for specific industries. These studies allow for a much more complete picture of the tax system, including the treatment of depreciation, tax credits, exemptions,

**FIGURE 3.3**  
**Capital Investment per Job for Selected Industries, 2010**



Note: Based on an analysis of 6,500 large mobile business investments in 2010 worth \$137 billion.  
Source: Ernst & Young LLP (2011, 11).

and apportionment formulas; and how these features interact with firms' federal tax payments, geographic distribution of sales and existing facilities, and asset types. These factors often have a larger impact on firms' profits than do statutory tax rates.

Fisher and Peters (1998) look at 16 manufacturing sectors in 112 cities and find small differences in effective marginal tax rates for most cities, although there are significant differences between the highest- and lowest-tax cities. Similarly, Papke (1995) finds that tax differences have very little effect on after-tax rates of return among six states in the Great Lakes region. However, Papke (1987) finds significant tax differences across states, and her analysis suggests that higher effective tax rates do reduce capital investment in a state. In addition, this research shows how federal deductibility of state and local taxes significantly reduces the effect of property tax differentials on firms' profits.

### **SUMMARY**

Research suggests that taxes play a role in explaining differences in economic activity between different states and regions, but this effect is fairly small and easily outweighed by differences in other factors. On average, a 10 percent reduction in total state and local taxes will increase economic activity in a state or metropolitan area by 2 to 3 percent. However, the effect of property tax differentials within a given metropolitan region is five to ten times greater. On average, a 10 percent reduction in local property taxes will increase economic activity in a jurisdiction by 16 to 20 percent. Thus, a jurisdiction may be able to significantly increase business investment through tax cuts or incentives, although this effect will largely disappear if competing jurisdictions respond with similar policies.



Property taxes are usually a less important determinant of firm location decisions compared to other factors, such as the wages and skills of local workers, proximity to suppliers and consumers, and transportation costs. Yet because differences in these other factors are often small across jurisdictions within the same metropolitan area, property taxes play a more important role in the choice of a specific site in the broader region. It is important to note that the effect of property taxes on firm location decisions varies widely based on the characteristics of individual facilities.



## CHAPTER 4

# Types of Property Tax Incentives for Business



**F**ive types of property tax incentives for business are examined here: property tax abatement programs; firm-specific property tax incentives; tax increment financing; enterprise zones; and tax-exempt industrial development bond (IDB) issuance when it is combined with full or partial property tax exemption. An overview of each type of incentive offers evidence on how it works, its magnitude, and a summary of evidence regarding its effectiveness. Although each of these incentives is covered separately, economic development authorities often use these tools in combination. The primary source for the data included here is the online database

Significant Features of the Property Tax, published since 2008 by the Lincoln Institute of Land Policy and the George Washington Institute of Public Policy.

### **PROPERTY TAX ABATEMENT PROGRAMS**

Property tax abatement programs allow partial or full reduction in property tax liability for certain manufacturing, commercial, or retail parcels. Property tax abatements in the United States are as old as the property tax, but one of the first surveys on their use found that in 1967 they were used in only 15 states (Wassmer 2009). Dalehite, Mikesell, and Zorn (2005, 158) coined the



term “stand-alone property tax abatement programs,” or SAPTAPs, to characterize programs with these four elements:

- (a) They provide for a reduction in tax liability for select parcels; (b) they have a purpose beyond tax relief alone, such as redevelopment or economic development; (c) there is a time limit on how long the reduction remains in effect; and (d) they can be used by themselves and not in conjunction with other incentive programs.

This definition omits property tax incentives that can be offered only as part of a broader economic development package, such as property tax abatements that are part of enterprise zone programs, as well as residential property tax relief programs such as circuit breakers. The stated goal of most SAPTAPs is an increase in employment or income in the jurisdiction offering them (Wassmer 2009). Dalehite, Mikesell, and Zorn (2005) found that 35 states employed SAPTAPs in 2004, and Wassmer (2009) confirmed this count for 2007. Appendix table A.1 shows that in 2010 there were 82 property tax abatement programs in 37 states plus the District of Columbia.

### ***How the Incentive Works***

Property tax abatements vary along several dimensions. For example, the types of eligible properties include industrial (51 programs), commercial (44), and a wide variety of other types of properties. The taxes that are abated include real property taxes (70 programs), personal property taxes (46), taxes on improvements (24), and others. The form of abatement also varies with exemptions being most common (50 programs), but tax credits (12), freezes (8), and other approaches are also used to reduce tax liabilities. Some are geographically targeted, such as Indiana’s Deduction for Rehabilitat-

tion or Redevelopment of Real Property in Economic Revitalization Areas, but most are not.

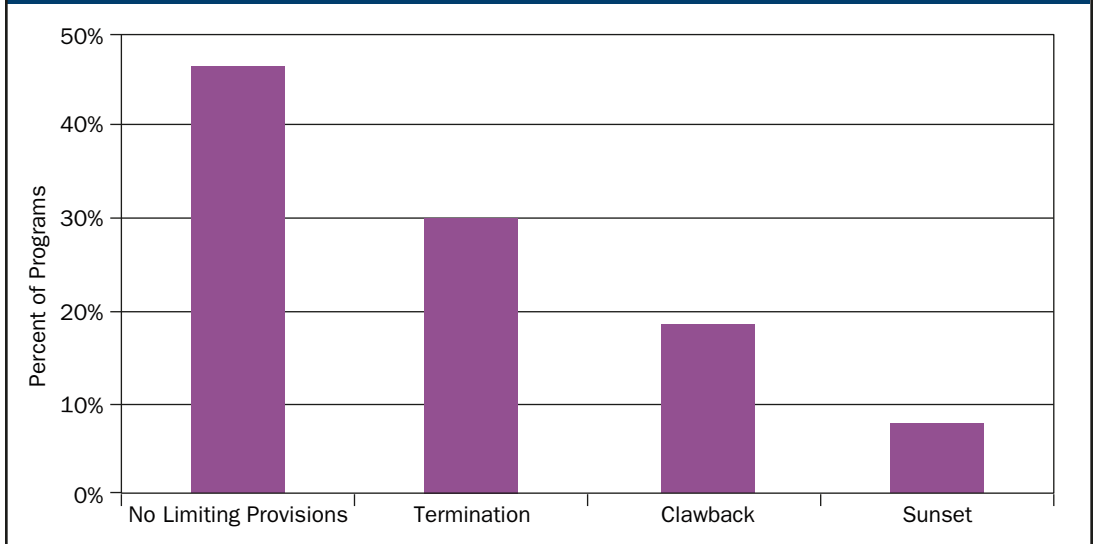
The most common duration for tax abatements is 10 years, but they are frequently renewable. While nearly half of these programs have no limiting provisions, 35 percent allow for the termination of tax incentives if firms do not meet job creation targets or other program criteria; 18 percent include “clawbacks” that attempt to require these firms to pay back some portion of the abatement; and 7 percent have a “sunset” or end date (figure 4.1). When a program has a sunset, it is important whether that date triggers an evaluation of the program or merely a pro forma renewal.

The governmental unit bearing the cost of the abatement also varies. For the majority of programs, each local government must approve its own abatement. However, for about a third of programs, an abatement granted by one local government, such as a municipality, automatically abates the firm’s property taxes owed to overlapping governments, such as school districts or counties. Some states reimburse local governments for property taxes they forgo when abatements are granted. In all cases, the state government controls the local government’s ability to grant property tax abatements.

### ***Magnitude***

The best nationwide source for firm-specific data on state and local business tax incentives is the Subsidy Tracker on the Good Jobs First website. For 2009 it reports that the states of Louisiana, Maine, and Michigan granted a total of 1,889 property tax abatements with a total dollar value of \$813.9 million. In addition, Subsidy Tracker reports the combination of property tax abatements and tax credits or rebates for New York state, which granted 2,631 such incentive

**FIGURE 4.1**  
**Limiting Provisions in Property Tax Abatement Programs, 2010**



Source: Appendix Table A.1.

packages in 2009, with a total dollar value of \$512.9 million.

Michigan has a number of property tax incentives for business and presents estimates of the revenue loss from them in its tax expenditure budget. In FY2010, that revenue loss totaled \$364 million, of which about one-fourth can be attributed to various enterprise zone programs. Thus, approximately \$261 million in property tax revenue was lost to Michigan’s local governments in FY2010 because of the use of property tax abatement programs (Connolly and Bell 2011). To put this loss in a larger perspective, Michigan’s total tax expenditure budget in FY2010 was \$36.4 billion, and the total amount for property tax and other local tax expenditures was \$10.1 billion. The largest local tax expenditures were for the homestead exemption at \$3.5 billion and the taxable value cap at \$3.4 billion (Michigan Department of Treasury 2010).

***Effectiveness***

Two recent literature reviews question the effectiveness of property tax abatement

programs in stimulating economic growth. Dalehite, Mikesell, and Zorn (2005, 160) conclude, “. . . the evidence on abatement effectiveness is mixed and leans toward the tentative conclusion that if abatements are effective, they are only partially, temporarily, or conditionally effective at best.”

In a lengthier and more recent review of the literature on effectiveness, Wassmer (2009) concludes that evidence supports the finding that property tax abatement packages can induce relocation of business firms within a metropolitan area, but this effect is likely to be temporary.

Anderson and Wassmer (1995) find one explanation for this in copy-cat behaviors in decisions to grant property tax abatements among the 112 Detroit-area municipalities. This helps explain their finding that manufacturing property tax abatements were effective initially, but not in later years. Wassmer (2009) also finds that abatement programs that induce a business to locate in a jurisdiction can provide fiscal benefits, but this positive result also requires that the new firm not impose substantial new public

service requirements. Finally, he points to studies that find an association between offering property tax abatement packages and fiscal stress. He explains that communities offering property tax abatements often find they need to raise other taxes to make up for the revenue loss, which in turn has a negative impact on the economic base.

Lee (2008) found that, after controlling for other important economic factors, states with property tax incentive programs did not have significantly lower rates of plant closures or relocations. In another study Anderson and Wassmer (2000) looked at municipalities in the Detroit metropolitan area from 1977 to 1992. They found that manufacturing property tax abatements offered shortly after they were allowed under state law did increase manufacturing

property values in cities offering abatements. However, within eight years manufacturing abatements were no longer effective, and abatements for commercial properties did not increase nonresidential property values in any years.

**FIRM-SPECIFIC PROPERTY TAX INCENTIVES**

This type of tax incentive allows partial or full reduction in property tax liability for specific firms and is typically combined with other financial incentives in a package. These packages are sometimes known as targeted tax incentives or company-specific economic development subsidies. They are offered on a case-by-case basis as opposed to incentives offered under pre-existing state programs, such as property tax abatement programs or enterprise zones.



### ***How the Incentive Works***

Firm-specific property tax incentives are usually offered to a company considering relocation. One example is the competition for the footloose military contractor Northrop Grumman. After operating in Los Angeles for 72 years, the company signaled its intention to move its headquarters to the Washington, DC area, setting off vigorous competition among the nearby local governments. The District of Columbia offered the contractor \$19 million in property tax abatements and a \$5.5 million grant to help fund relocation costs (Meyer 2010).

Virginia and Maryland presented counteroffers to the Fortune 100 firm, with Northern Virginia ultimately winning the corporate headquarters. Virginia Governor Bob McDonnell said that the commonwealth promised the company \$12 to \$14 million in various state grants and incentives, but expected that obtaining the company's headquarters would increase state tax revenue by a minimum of \$30 million, and would help the state attract additional companies to the region (Clabaugh 2010).

### ***Magnitude***

Data on the magnitude of firm-specific property tax incentives are difficult to find. Brunori (1997) tracked the largest tax incentive packages given to specific firms for 1986–1996, but he did not break out the dollar magnitudes of property tax incentives from the rest of the incentive package.

### ***Effectiveness***

We found no studies that examined the effectiveness of firm-specific property tax incentives. Besides general issues with tax incentives, there are two particular concerns with this type of incentive. One has to do with equity:

The biggest drawback to using company-specific tax incentives is that they are fundamentally unfair. . . . Usually the largest and most profitable companies are in a position to take advantage of targeted tax incentives. To give Fortune 500 companies substantial tax relief while subjecting small businesses to regular state taxes hardly distributes burdens equally. (Brunori 1997, 55)

Another concern is that once a firm-specific incentive is given to one firm, similar companies will lobby for their own tax incentive package. Although this appears to make the tax system fairer, it can have a dramatic impact on tax revenues. The pros and cons of one firm-specific property tax incentive are outlined in box 4.1.

### **TAX INCREMENT FINANCING**

With tax increment financing (TIF), growth in property taxes or other revenues in a designated geographic area is earmarked to support economic development in that area, usually to fund infrastructure improvements. Unlike property tax abatements, TIF does not lower taxes on business, but earmarking property tax revenue is an option in all TIF programs.

The first law authorizing TIF was passed in California in 1952, but by 1970 only eight states had adopted TIF legislation. Beginning in the mid-1970s, the pace of TIF adoption quickened, and 38 states had TIF programs by 1990. By 2010, only Arizona had not enacted TIF legislation (Appendix table A.2). The reasons for this expansion include decreases in federal aid, declining urban areas, and public pressure against tax increases (Johnson and Kriz 2001).

**How the Incentive Works**

TIF is a mechanism through which economic development can be jumpstarted in a blighted area through a creative, flexible, public-private partnership. Once a project is created, the incremental property tax revenue in the project area is used to fund infrastructure improvements. Bonds can be issued with future revenue growth earmarked to pay them back. In this way the project can be considered self-financing. After a specified time period, the TIF district is ended and all revenues flow back to the various governmental entities serving the geographic area in question.

In most states, cities are required to approve a TIF district, but approval agencies also include counties, school districts, states, community redevelopment boards, and TIF commissions (figure 4.2). States vary in the permissible duration of TIF projects, which may be unspecified, set to equal the term of the bonds, or allowed for as long as 50 years. Property taxes are eligible to be earmarked for all TIF programs, with sales taxes being the next most common revenue source, allowed under 15 programs.

Alabama’s program appears to be fairly typical. Either a city council or a county can approve a TIF project, and public hearings

**BOX 4.1 Illinois Gives Sears a Tax Break**

In 2011 Illinois lawmakers passed a temporary increase in the corporate tax rate from 7.3 to 9.5 percent in order to reduce a dangerously large state budget deficit (Keen 2011). In response, Sears Holdings Corporation, the successor to Sears, Roebuck and Co., threatened to leave the state unless lawmakers granted the company a substantial tax break. Sears had been based in Illinois for over 100 years, employing 20,000 people in 2011 and paying \$213 million in taxes in 2010 (Sears Holdings Corporation 2011).

Ohio offered Sears a \$400 million tax incentive to relocate to that state, and Sears was reportedly also considering relocating to Texas (Associated Press 2011). In December 2011, the Illinois legislature enacted SB397 to provide the company \$15 million in new tax breaks annually, in addition to an extension of existing property tax breaks for 10 years. Shortly after Illinois legislators approved the tax incentive package, Sears announced that it was closing 120 stores nationwide, including five stores in Illinois (Chicago Tribune 2011). In addition, Sears announced 100 layoffs at its Illinois headquarters where it employed 6,000 people (Associated Press 2012).

Those who support the Illinois legislature’s tax incentive package can note the company’s longstanding importance to the state, the need to counter offers from other states, and the necessity of reducing taxes selectively on some mobile companies in light of the overall corporate tax hike. Those who question the tax incentive package may wonder if the announcement of layoffs shortly after approval of the tax incentive package indicates bad faith on Sears’ part. Those opponents argue, “Its predecessor company, Sears, Roebuck and Co., played the same job blackmail game in 1989. The \$168 million, 23-year deal it won then was soon to expire when Sears Holdings announced it might again be footloose” (LeRoy 2012).



are required to authorize the district and approve the specific deal. It is necessary to stipulate that the district is blighted or economically distressed, and there must be a project plan. Bonds are issued to fund the project, and property tax increments from increases in assessed value go into a fund to reimburse the municipality or county for the principal and interest on the bonds.

**Magnitude**

Some cities and states use tax increment finance extensively to earmark tax revenues for a particular use. Youngman (2011) reports that in 2009 the City of Chicago had more than \$1 billion in TIF revenues while the city budget totaled \$6 billion. Merriman (2010) notes that there is no comprehensive national database with information about TIF usage, but he cites some state studies that show extensive use: in Missouri in 2007 the total property tax funded cost in TIF districts was nearly \$5 billion; in Iowa in 2002 TIF was used in 323 cities; and in California in 2001 more than 10 percent

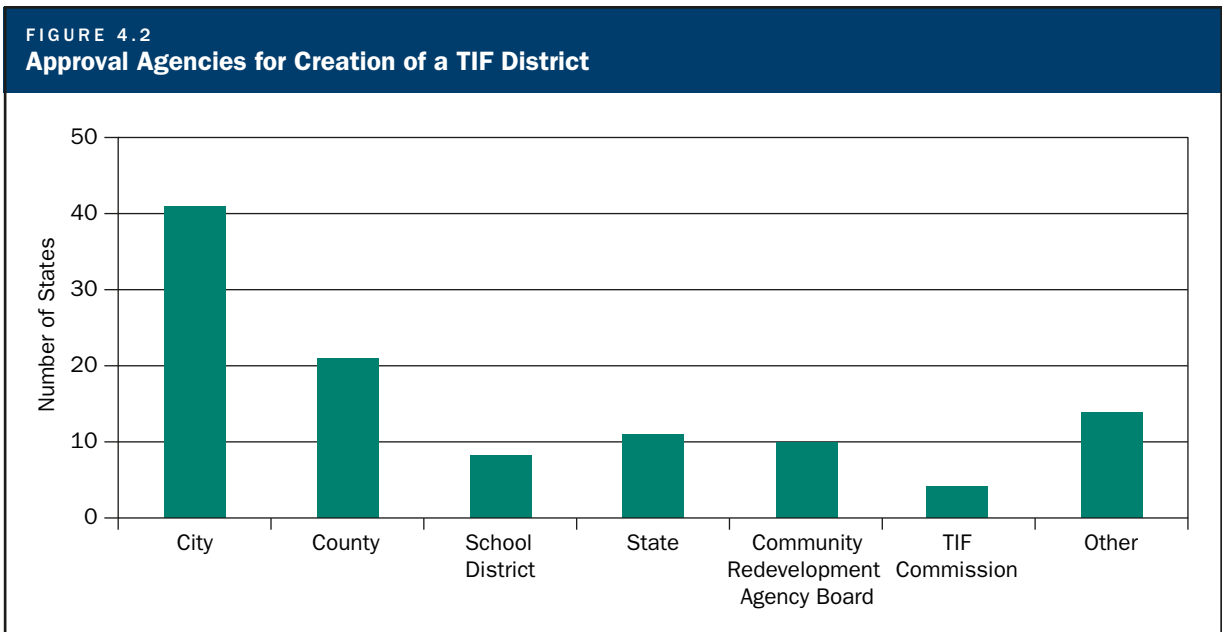
of statewide property taxes were used by TIF districts.

**Effectiveness**

Concern about TIF’s effectiveness in promoting economic development was an important reason why it was eliminated in California (box 4.2).

Man (2001, 106) reviews a number of TIF studies and concludes:

Empirical studies have yielded conflicting conclusions about the effectiveness of TIF programs. There is evidence suggesting that the TIF-adopting cities in Michigan experienced faster property value growth than non-TIF cities, and TIF programs in Indiana raised property value and employment level in a city beyond the level that would have been expected had the TIF district not been created. But such positive spillover effects of TIF on property value in the entire TIF-adopting city are not found in the study using data drawn from municipalities in the Chicago metropolitan area.



Source: Appendix Table A.2.

BOX 4.2

California Eliminates Tax Increment Finance



Early in 2011 California Governor Jerry Brown proposed disbanding all of the state's redevelopment agencies except those that agreed to share revenues with the state as part of his efforts to close a gaping state budget deficit. These agencies were responsible for administering both TIF and Enterprise Zone programs. A recent Legislative Analyst Office report concluded, "There is no reliable evidence that redevelopment projects attract business to the state or increase overall economic development in California" (Buchanan 2011, C2).

The League of California Cities vehemently opposed Governor Brown's proposal, arguing that it would hurt the creation of jobs. The League further argued that such a

move was hypocritical, since Brown had relied on such programs to lead the redevelopment of Oakland when he was the mayor. Nora Davis, mayor of Emeryville, said that without redevelopment funds her city "would still be decaying, industrial junk" (Kuruwila 2011).

Counties supported Brown, arguing that such redevelopment funding "has nothing to do with reversing blight, but everything to do with subsidizing private real estate ventures that otherwise made no economic sense" (Dolan, Garrison, and York 2011). The Governor stood firm, stating:

What's outrageous is that at a time when so much is being taken from education, care for the elderly, universities and community colleges, these local politicians can only express grief at the loss of redevelopment. There are a lot of things people could put their effort behind. They're choosing redevelopment over everything else that's being cut. Cutting redevelopment was not a tough choice because it's so wasteful. (Kuruwila 2011, C1)

Once the laws were enacted that disbanded the state's redevelopment agencies and allowed for revenue sharing with the state, the League of California Cities sued the state. In late December 2011, the California Supreme Court upheld the law disbanding the agencies, but struck down the measure permitting the state to claim revenues from the agencies as a condition of their survival. As a result, all 400-plus redevelopment agencies in the state were disbanded on February 1, 2012 (Walters 2012).

Man also notes that empirical work on TIF is particularly challenging because the structure of TIF programs varies greatly by state, and the nature of TIF projects also varies.

A more recent article by Dye and Merriman (2006) is less sanguine as they report on their two previous studies of Illinois cities. The first found that "property values in TIF-adopting cities grew at the same rate

or even less rapidly than in nonadopting municipalities" (Dye and Merriman 2006, 5). Their second study concluded that "any growth in the TIF district is offset by declines elsewhere" (Dye and Merriman 2006, 6). Merriman (2010, 309) summarizes the literature on TIF effectiveness as follows: "The key question that has been examined in most of the literature is whether TIF adoption significantly raises the total

economic activity in an area. Empirical findings have been mixed.”

### **ENTERPRISE ZONES**

Enterprise zones are designated geographic areas, usually economically depressed, within which special tax and other incentives are provided to encourage business development. In 2010 there were 48 enterprise zone programs in 42 states plus the District of Columbia. Thirty-one of the programs included some form of property tax reduction or exemption (Appendix table A.3).

Enterprise zones were first proposed in Great Britain in the 1970s and enacted in 1980 under the Thatcher administration. Interest in enterprise zones in the United States followed. Some of this support arose from the liberal concern with inner-city poverty caused by the decline in industry and the difficulties low-income workers had in finding employment opportunities. Other

support derived from the conservative concern about excess government intervention, which made the policy approach of promoting business growth by cutting taxes and streamlining regulations attractive.

In 1981 Connecticut was the first state to enact an enterprise zone program (Hirasuna and Michael 2005). The federal government enacted enterprise zone legislation during the Clinton administration in the form of the 1993 Empowerment Zones and Enterprise Communities Act. The discussion below focuses on state zones.

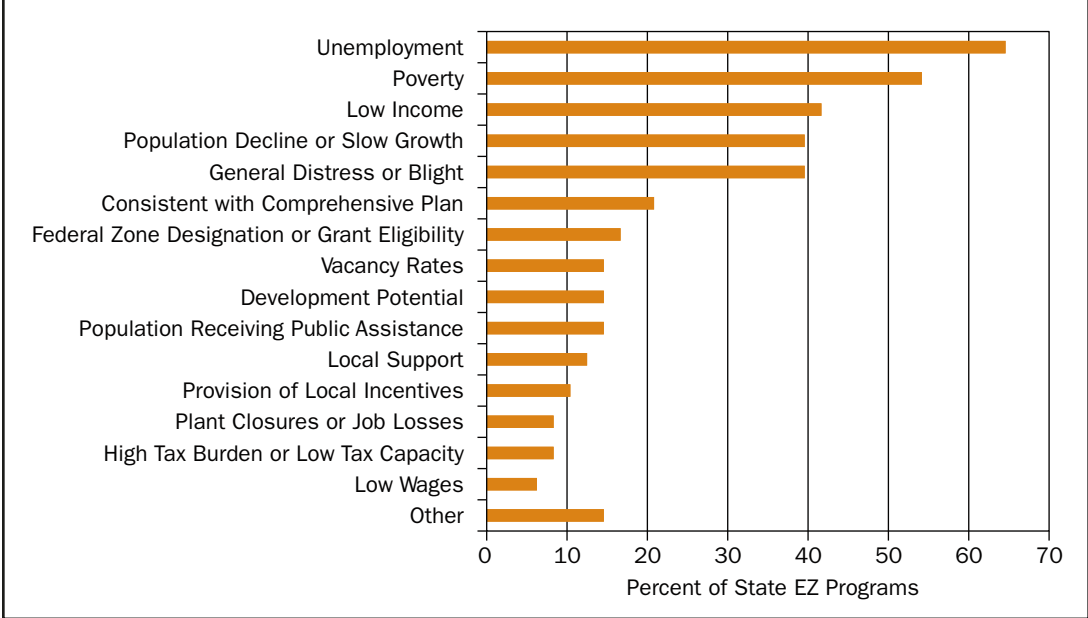
#### ***How the Incentive Works***

The common goal of all enterprise zones is to increase economic growth in a specific area. This may mean providing an incentive for businesses to relocate to the zone or for established businesses to expand. Another goal is to increase employment opportunities for residents in the zone. To that end,





FIGURE 4.3  
Criteria for Creation of an Enterprise Zone



Source: Appendix Table A.3.

enterprise zones often provide a jobs tax credit when a business employs these local residents.

There is enormous variation in enterprise zones around the United States and in their names, such as Pennsylvania’s Keystone Opportunity Zones or Maine’s Pine Tree Development Zones. Although the most common tax incentive is a reduction in the property tax, income and sales tax incentives are also used. The criteria for creation of an enterprise zone range widely, but many appear chosen to guarantee that the zone is targeted to an area of economic distress, with unemployment, poverty, and low income being the most common criteria chosen (figure 4.3). Although most enterprise zones are located in urban areas, some are in rural areas. Many enterprise zones are small, but in a few states qualifying businesses anywhere in the state can obtain the benefits. Connecticut has special zone programs for entertainment districts, bioscience enterprises, and railroad depots.

Hawaii’s Enterprise Zone Partnership, enacted in 1986, is fairly typical, and by 2004 it had established 19 zones statewide. To qualify as an enterprise zone, a census tract or two or more contiguous census tracts must meet specified criteria for low income and high unemployment. Once qualified, businesses in the zone are eligible for reductions in property, income, unemployment, and general excise taxes. Zones also receive regulatory relief such as waivers for permits and priority in job training and community development funds.

**Magnitude**

Currently there are about 3,000 enterprise zones in the United States (Schram 2010), but no comprehensive estimates are available to report their cost to state and local governments. Using tax expenditure estimates for Michigan and Oregon, which do have tax expenditure budgets that include estimated revenue losses for enterprise zones, a rough estimate of nationwide losses could

be as high as \$1.9 to \$6.3 billion (Connolly and Bell 2011).

### ***Effectiveness***

Although enterprise zones have been used in the United States for 30 years, there is a lack of definitive evidence regarding whether they are effective or not. One reason for the inconclusive findings is that enterprise zones take different forms and have somewhat different objectives in each state. Another reason is that data are generally available by census tract, zip code, or local government, but an enterprise zone may be created with boundaries that do not match any of those entities.

This report draws on three credible reviews of the literature on U.S. cases. Papke (1993) reviews enterprise zones with a special focus on Indiana, a state which at that time had a decade of experience and was cited in a number of other studies as having one of the most successful programs. Papke found that the Indiana program increased both employment and business inventories, but that the income of the residents of the enterprise zones did not improve. Her overall conclusion regarding enterprise zones across the United States was that such programs “do not seem to have improved the economic status of zone residents.” She speculated that if business is attracted to the enterprise zone in order to employ its low-skilled, low-wage labor, “there may be employment growth without income growth” (Papke 1993, 62–63).

Peters and Fisher’s 2002 review of enterprise zones summarizes the existing literature, examines the experience of zones in 75 cities in the 13 states with significant enterprise zone programs by 1990, and analyzes data for 104 cities in Ohio, a state with rich data and many enterprise zones. Their main conclusion is that enterprise zones have little impact on employment growth.

They also find that the typical package of tax incentives in enterprise zones creates a bias in favor of using capital rather than labor in production. This means that even if an enterprise zone attracts additional firms to the zone, it may not increase local employment.

In asking whether state and local governments are likely to gain or lose revenue from establishing enterprise zones, Peters and Fisher (2002, 121) conclude that “it is unlikely that state and local governments collectively will gain revenues from the incentive programs they offer within enterprise zones” and that the “magnitude of these revenue losses could be very sizeable.” They estimate that for an average enterprise zone in the 1990s, state and local governments lost about \$1.5 million per year as a result of offering a typical incentive package. Peters and Fisher (2002) also estimate that the average state and local government cost per manufacturing job gained through enterprise zones was \$60,700 per job, or \$7,130 per year per new job.

The most recent review of enterprise zone studies was done by Hirasuna and Michael (2005, 11), who conclude:

The most sophisticated statistical studies fail to identify a reliably narrow band of estimates on the employment performance of state enterprise zones. A few studies find some increase in jobs or income. However, most studies suggest no significant and prolonged increases in employment from enterprise zones.

They also ask whether some areas are more likely to benefit from enterprise zones than others. Their finding is that the areas most likely to benefit are suburban governments with low unemployment rates and historically high levels of investment in manufacturing facilities. Unfortunately, this implies



that enterprise zones are most likely to be effective for the local governments that least need them.

A recent study of federal enterprise zones (Hanson and Rohlin 2012) found that the zones gained businesses at the expense of similar nearby areas that lost businesses. This study has important implications for future enterprise zone research. If researchers merely compare business growth in enterprise zones to growth in neighboring areas, they can mistakenly conclude that enterprise zones create activity, when in actuality the zone incentives merely move existing activity. This can be beneficial if economic activity is shifted from a less needy area to a more needy one, but if the shift is from one area to another with similar need, the zone provides no overall economic benefit when spillovers are taken into account.

### **INDUSTRIAL DEVELOPMENT BONDS COMBINED WITH PROPERTY TAX EXEMPTION**

When a local government issues tax-exempt industrial development bonds (IDBs) on behalf of a firm, the government typically holds title to the property where the development is taking place, so the firm incurs no property tax liability. This package provides a double benefit for the firm: a below market interest rate and exemption from property taxes. In many cases the firm is required to compensate the local government for some portion of the forgone property taxes through payments in lieu of taxes (PILOTs).

Since the federal income tax was established, interest income from most bonds issued by state and local government has been exempt from federal income taxation.

In the early years, tax-exempt bonds were issued for traditional government purposes, such as roads or school buildings. In 1936, Mississippi was the first state to issue bonds for industrial development. Since then, state and local issuance of tax-exempt bonds for projects other than traditional government purposes has expanded.

IDBs fall under the broader category of private activity bonds, which states and localities can issue for a wide range of uses, including multifamily housing, student loans, and mortgage credit. Between 1975 and 1985, private activity bonds as a share of total tax-exempt bond volume increased from 21 to 68 percent, prompting concern that state and local governments were abusing their power to issue tax-exempt bonds, and that such issuance was reducing federal income tax revenue and thereby increasing the federal deficit (Zimmerman 1990;

Gordon 2011). The Tax Reform Act of 1986 capped the amount of tax-exempt private activity bonds that state and local governments could issue within each state.

The focus here is on IDBs issued to provide financing for manufacturing facilities. They amounted to \$665.9 million and accounted for 4.6 percent of all private activity bonds in 2010 (*Bond Buyer* 2011). Of particular interest in this report are cases where the property on which the manufacturing facility is built is partially exempt from property taxation.

#### ***How the Incentive Works***

The program offered by the City of Albuquerque (2011) provides one example of how tax-exempt IDBs and property tax abatements are combined. Albuquerque issues IDBs to attract companies interested in relocating or expanding. Companies



benefit from reduced interest costs because of the exemption from federal and state income taxation on bond interest (both of which result in a lower interest rate), but they also benefit from a substantial reduction in property taxes.

As part of the package, the city holds title to the property and leases it to the business for the term of the bond, typically 20 years. The city requires the company to pay 2.5 to 3.5 percent of the property taxes that would have been assessed through a PILOT. Our research has found some form of IDB/PILOT arrangement in the following states: Kentucky, Louisiana, Mississippi, Missouri, New Jersey, New Mexico, New York, North Dakota, South Carolina, Tennessee, Texas, and West Virginia.

The property tax benefits that accompany the IDB depend on state law, the structure of the IDB, and the local government's policy on requiring PILOTs. Ohio, for example, requires private companies that receive financing from IDBs to pay full property taxes. If the local government holds the property and leases it to the business, Ohio law stipulates that the property is subject to the local property tax as if the property were held by the business (Ohio Rev. Stat. §165.01).

### ***Effectiveness***

Fisher and Peters (1997, 116) reviewed five studies of the impact of issuing industrial revenue bonds on state economic growth and concluded that “the work on IDBs does not support any firm conclusions about the impact of IDB issuance and growth, although the majority of the evidence suggests little impact.” Unfortunately, all of the literature they reviewed was based on data from before 1986, when the federal tax code was changed to limit issuance of private activity bonds. Intergovernmental conflicts related to issuance of state and local tax-



exempt bonds continue to arise, however. State and local governments are tempted to make maximum use of this economic development tool because they do not bear the cost of reduced federal income tax revenues.

A recent example is the issuance by New York City of IDBs to finance Yankee Stadium. Interest rates on these bonds were about 25 percent lower than they would have been without tax-exempt status, saving the project between \$7.7 and \$15.7 million per year (Greaves and Henchman 2009). Because the city legally owns the property,

the stadium was exempt from property taxes, but the city negotiated a PILOT.

The IRS became concerned because it appeared that the city intentionally over-assessed the property to obtain a large PILOT, possibly larger than the property taxes that would have been owed if the property were subject to normal property taxes. In this way it appeared that the city was able to provide an interest subsidy for the Yankee Stadium project while boosting local tax revenues, all paid for by the federal government. Since then the IRS has tightened its regulations on IDBs in combination with PILOTs (McConnell 2006).

### **WIDESPREAD USE OF INCENTIVES**

Despite their widespread use, only rough estimates of the total dollar value of property tax incentives for business are available. Bartik (2003) used tax expenditure estimates from the State of Michigan to project estimated revenue losses from tax incentives of at least \$10 billion per year for the entire United States.

Bartik's methodology can be updated by using Michigan's 2010 tax expenditure budget (Connolly and Bell 2011), but with tax increment financing omitted since it is an earmarking device that does not reduce revenue. This analysis yields an \$11 billion estimate for the nationwide revenue loss from property tax incentives for business. Since some of Michigan's enterprise zones contain incentives other than property tax incentives, it may be more accurate to say that local governments forgo between \$5 and \$10 billion annually through the use of property tax incentives for business.

Incentives can make one jurisdiction a more attractive location for business invest-

ment by offering lower taxes in comparison to other areas, but overuse can reduce their effectiveness as an economic development tool. When few competing governments are offering incentives, tax breaks may be an effective policy for attracting mobile firms. However, if most jurisdictions in a region offer incentives, then they no longer provide a significant tax advantage for one jurisdiction over others, and they will have limited effects on firm location decisions, but all municipalities will end up collecting lower revenues. Whether or not communities benefit from property tax incentives depends crucially on whether the state government puts limits on their use.

### **SUMMARY**

State and local governments use many types of property tax incentives for business and the features of the programs vary widely across the states. The majority of studies suggest that property tax incentives have little impact on local economic growth, although evidence on the impact of TIF is more mixed.

These findings conflict with the economic studies summarized in chapter 3 showing that, within a given region, property tax differentials have a large effect on economic activity for individual jurisdictions. One reason for this apparent contradiction is copy-cat behavior among competing jurisdictions in a region, which reduces the effectiveness of property tax incentives over time. Some studies have even shown that property tax abatements and enterprise zones worsen a locality's fiscal health. Since the effectiveness of any incentive program depends on its details, generalizations obscure the fact that some programs are effective even if the majority of them are not.



# CHAPTER 5 Tools for Assessing the Effectiveness of Property Tax Incentives



**A**lthough property tax incentives for business can help achieve economic development goals, their effectiveness varies. This chapter examines some ways that policy makers can assess property tax incentives—a critical step in using them more effectively.

High-quality evaluations of tax incentives are uncommon. A recent study by the Pew Center on the States (2012) found that 16 states evaluate all major tax incentives, 15 states measure their economic impact, 17 states draw clear conclusions, and 4 states use evaluations to inform policy choices. Only Oregon met all criteria, and 25 states did not meet any criteria. States generally have greater resources and expertise available

for evaluating tax incentives than local governments. Thus, assessments of property tax incentives, which primarily affect local revenues, may be even less common than suggested by the Pew report on state evaluations.

A related problem is that many impact studies are biased in favor of incentives because they attribute any changes in employment or other variables to the tax breaks. A simple before-and-after comparison can result in egregiously wrong estimates of job creation or other effects because it fails to consider what would have occurred without the incentives. For example, firms may have chosen the same locations without incentives or the measured effect could be caused by broad economic changes rather than incentives.

Table 5.1 illustrates one way to estimate the true impact of incentives by controlling for what would have occurred without them. Many other variables besides employment, such as payrolls, property values, or the number of new businesses, can be used for this type of study, known as “difference-in-differences” analysis.

### TRANSPARENCY

Assessing the effectiveness of property tax incentives requires transparency about program costs and outcomes. One way to promote transparency is through state tax expenditure budgets, which provide information on the total revenue impact of incentive programs. These reports estimate the revenue impact of tax expenditures, which are generally thought of as revenue losses due to special provisions in the tax code, such as deductions, exemptions, or exclusions that reduce taxable income or assessed value; tax credits; preferential tax rates; or deferral of taxes.

Currently 44 states produce tax expenditure reports, but only 18 include property taxes. These reports focus on state tax expenditures; only 8 states estimate local property tax revenue forgone, which is critical information since the property tax is primarily a local revenue source (Connolly and Bell 2011). As a result policy makers in most states currently have limited information about the revenue effects of property tax

incentives for business. The most important step in putting together a tax expenditure report is to make a distinction between the normal tax structure and deviations from that structure. With few exceptions, state property tax expenditure reports use all real property as the normal tax structure (Connolly and Bell 2011).

An alternative way to improve transparency is disclosure of tax incentive awards. Nebraska, for example, requires data on business tax incentive programs to be published annually. This approach does not require as much effort by the state government, but allows outside researchers to use the data to analyze the effectiveness of these programs. Providing this information in online databases makes it more accessible to the public. As mentioned in chapter 4, Good Jobs First has compiled information on economic development subsidies for businesses into a database called the Subsidy Tracker, which as of April 2012 had information on more than 121,000 subsidy awards from 308 programs in 48 states.

### IMPACT OF INCENTIVES ON FIRM LOCATION DECISIONS

Assessments of tax incentives depend on assumptions about their impact on firms’ investment decisions. If local officials offer an incentive and the firm locates in their jurisdiction, there are two possible scenarios:

**TABLE 5.1**  
**Analyzing the True Impact of Incentives on Employment**

	Jobs Before Incentive	Jobs After Incentive (≈ 5 years later)	Difference	Explanation
Enterprise zone area with tax incentives	5,000	6,000	1,000 (6,000 – 5,000)	Simple before-and-after comparisons typically show that incentives are effective (i.e., 1,000 new jobs).
Similar area without tax incentives	5,000	5,800	800 (5,800 – 5,000)	Other economic factors could be driving job growth in some areas (i.e., 800 new jobs).
The impact of incentives on employment			200 (1,000 – 800)	Only the difference in job gains in these two areas can be attributed to incentives (i.e., 200 new jobs).





1. The incentive “worked”—it caused the firm to locate in that jurisdiction; without the tax break, the firm would have located elsewhere.
2. The incentive did not “work”—the business would have located in that jurisdiction even without incentives.

In the first case, policy analysis can measure the expected economic and fiscal effects of the firm’s investment, which can be attributed to the incentive and compared to the direct revenue loss from granting the incentive. In the second case, the effects of the firm’s investment should not be considered when analyzing the incentive, because the investment would have occurred regardless of the tax breaks. There are several ways policy makers can judge the likelihood that an incentive will actually work.

For example, as a condition for receiving tax breaks, localities could require businesses to present data showing that without incentives the businesses would be more profitable in another location. Businesses would

be free to locate in the jurisdiction without disclosing this information, but they would not be eligible for tax incentives. Another approach is to use the type of representative firm models described in chapter 3 to estimate firms’ profits at different locations with and without incentives, although constructing these models is a significant challenge.

Without this kind of detailed information, policy makers considering whether a tax incentive is likely to tip a firm’s investment decision can take into account these aspects of the facility.

- *Property taxes as a share of total costs.* The importance of tax incentives increases as this percentage grows. This statistic is easy to approximate with estimates of the facility’s assessed value and total operating costs, which may be provided by the firm or can be derived from operating costs at comparable facilities.
- *Geographic area of the facility’s market.* Businesses serving the local market will choose their location primarily based

on market exposure. For example, they may strongly prefer a specific street, intersection, or shopping center. Thus, tax incentives are unlikely to tip their location decisions. Businesses that serve national or international markets are more likely to have their decisions affected by tax incentives.

- *Industry or property class.* In general, manufacturing facilities are more likely to be capital-intensive and serve national markets than commercial or retail facilities. Thus, tax incentives are more likely to tip location decisions for manufacturing facilities.

Another way to understand this issue is to consider a range of probabilities that incentives induce investment. For example,

box 5.1 discusses a report on Connecticut tax incentives that considered a range of assumptions—20 percent, 50 percent, or 100 percent of business investment was caused by the incentives. These probabilities can be multiplied by the projected economic and fiscal effects of a firm’s investment to estimate the effects attributable to the tax incentive. For example, if economic impact analysis estimates that a firm’s investment will increase regional income by \$1 million, then the estimated income increase caused by the incentive is \$200,000, \$500,000, or \$1 million depending on which percent of the business investment was caused by the incentive.

The range of estimated effects can be compared to the revenue loss from granting the incentive, which is known. If the

#### BOX 5.1

### Assessing Connecticut’s Tax Credits and Abatements

In 2010, the Connecticut General Assembly passed a law requiring the Department of Economic and Community Development to assess the economic and fiscal impact of the state’s tax credit and abatement programs every three years. This led to the release of a 165-page report, which assesses more than 30 programs that had reduced tax revenues by roughly \$240 million in 2007 (CDECD 2010). The analysis assumes that providing tax incentives to firms has a direct initial effect in reducing state tax revenue, which translates into lower state spending and thus reduced public employment. In order for a business tax incentive to increase employment it must stimulate a sufficient increase in economic activity to counterbalance that initial effect.

While the sophisticated regional economic model used in the study provides more reliable impact assessments than most alternative approaches, the arcane methodology may be difficult for non-specialists to understand. Thus, the inclusion of

clear recommendations for each program administered by the department is especially valuable. For example, the report concludes, “We recommend that the Enterprise Zone property tax abatement program be eliminated. The analysis above suggests the Enterprise Zone property tax abatement generates negative net benefits for Connecticut for a range of inducement assumptions” (CDECD 2010, 137).







growth in industries paying 10–15 percent less than the average industry may not boost wages for other local residents, in which case it is doubtful that tax incentives will generate net benefits.

When previously unemployed people become employed, they have less time for leisure, school attendance, or child care, which can be assigned a dollar value. Many economists argue that these costs are smaller in high-unemployment areas, which is a rationale for targeting incentives to these areas. Higher crime and other social problems provide further justification for focusing economic development efforts on areas with high rates of poverty and unemployment (Bartik 2005).

It is also important to consider how attracting a new facility with incentives will affect the profits of other firms in the area. Businesses that serve the local market, such as many service-sector firms, will generally experience higher profits due to growth in the local population and its overall income. However, businesses that export goods and

services to other regions could face lower profits if local wages or rents increase. Finally, if incentives are offered to firms that will compete directly with other local businesses, then the net economic benefits from the incentives could be insignificant as profits for new firms largely displace profits for existing firms.

A host of other economic and social effects result from incentives. New projects can lead to environmental or congestion costs, although projects that redevelop brownfields can provide significant environmental benefits. Other effects are difficult to quantify, including community changes such as gentrification.

The framework in table 5.2 can be used by a locality, metropolitan area, or state. Evaluations of incentives for individual jurisdictions must take into account that many effects are dispersed throughout the region. For example, earnings increases will largely benefit residents living in other jurisdictions, and much of the cost of providing new services for households will be

borne by surrounding governments. In general, the larger the area, the less the researcher will have to worry about benefits and costs that spill over jurisdictional boundaries.

## **ECONOMIC AND FISCAL IMPACT ANALYSES**

The benefit-cost framework is a useful way to think about the effects of incentives generally, but empirical research on economic development projects are more frequently carried out with economic and fiscal impact analyses. For example, the report on business tax incentives by the Connecticut Department of Economic and Community Development used these approaches. Morgan (2010) outlines the frameworks and techniques that are typically used for these analyses, and describes six commonly used software packages.

Economic impact analysis estimates the direct, indirect, and induced effects of a new project, which are often measured in terms of employment, income, or business revenue. Direct effects are first quantified with data on a firm's initial increase in payroll or production that results from a project. Then indirect and induced effects are estimated by applying industry multipliers from input-output models to the quantified direct effects. Indirect effects account for increased business for local suppliers that sell goods or services to the firm that expanded, while induced effects account for growth in the local economy that occurs when higher incomes for affected workers boost spending on local goods and services.

Fiscal impact analysis accounts for changes in public service costs and revenues due to the project. Costs include tax revenues lost due to incentives, new public infrastructure needed for the project, and growth in public services caused by population or employment growth. The share of new

jobs going to current residents instead of in-migrants is important to know, because new residents will require additional services, which results in much smaller net fiscal benefits compared to projects that create jobs mainly for existing residents. New revenues include growth in property and sales taxes, user charges, utilities revenue, and changes in intergovernmental revenue.

## **SUMMARY**

Assessing the effectiveness of property tax incentives is important, although carrying out comprehensive evaluations can be challenging. One way to facilitate such assessments is to improve transparency about program costs and outcomes, including full disclosure of incentive awards to make it possible for outside researchers to conduct evaluations.

A benefit-cost framework also can provide some rules of thumb to determine if incentives are likely to generate benefits that exceed their costs. In particular, property tax incentives are most likely to generate net benefits when they are (1) used in low-income areas with high unemployment and/or underutilized infrastructure; (2) given to facilities that export goods and services out of the region; and (3) able to create jobs with pay equal to or greater than average local wages.

Empirical evaluations of tax incentives most frequently use economic and fiscal impact analyses to measure the benefits and costs of projects receiving tax breaks. However, assessments of incentives hinge on assumptions about whether or not they tip a firm's location decision. If they do, the measured economic and fiscal effects of a project can be attributed to the incentives; if not, these effects cannot be attributed to the incentives because they would have occurred even without tax breaks.



## CHAPTER 6

# Policies to Reduce Reliance on Property Tax Incentives



**P**olicy makers who wish to reduce reliance on property tax incentives for business can consider adopting policies that diminish interlocal competition for business investment, enacting tax reform, or pursuing nontax alternatives.

### REDUCTION OF INTERLOCAL COMPETITION

Using tax incentives to lure firms from one jurisdiction to another in the same metropolitan area will leave the region as a whole worse off unless the incentives are targeted primarily to low-income areas. Relocations within a metropolitan area do not increase economic activity; they simply redistribute it throughout the area, while leaving the

region with a smaller tax base. A variety of policies can reduce the likelihood that localities will engage in destructive incentive wars with neighboring jurisdictions.

Policies that change state aid to localities when they offer business tax incentives can significantly alter such decisions. States that reimburse local governments for the revenue lost from offering property tax abatements essentially provide “a state subsidy that may induce local jurisdictions to award abatements indiscriminately” (Dalehite, Mikesell, and Zorn 2005, 170). State reimbursement eliminates one of the strongest constraints on localities granting incentives—concerns that giving away tax breaks will reduce their revenues. Arizona takes the opposite approach by penalizing local governments



## Metropolitan Cooperation in Metro Denver

The Metro Denver Economic Development Corporation, whose members include 70 cities, counties, and economic development organizations, arguably offers the best example of a collaborative approach to regional economic development in the country. This cooperation centers on a Code of Ethics adopted in the mid-1980s (Metro Denver Economic Development Corporation 2004). While there are no statutory requirements, all members are expected to follow the principles established in the code, some of which are described below.

- Promote “Metro Denver First” and individual communities second.
- When companies consider relocating within the metro area, notify the community where the facility is currently located of the potential move—violation of this commitment is considered the most serious breach of the code.
- Never solicit another member’s prospects.
- Never advertise or promote one area in a way that is insulting to other areas in the region.
- Site location competition among members is fine, as long as the prospect has requested specific proposals.



More recently, executives of all 10 local economic development organizations in the Fort Wayne, Indiana area signed a similar pact following a trip where 36 regional leaders witnessed the “powerful collaborative culture in Denver” (Northeast Indiana Regional Partnership 2011). Some other regions with these types of agreements include the Bay Area of California, South Florida, and Columbus, Ohio (Patten 2006; Ball 2007).

absence of income or sales taxes is often referred to as the “New Hampshire advantage.” The state’s low taxes, together with other attributes such as a low crime rate, have resulted in the most robust economy among the New England states for many years (New England Economic Partnership 2011).

Other states could reform their tax systems with the objective of levying low tax rates on a broad tax base. This might entail reducing both individual and business tax rates, or simply reducing business tax rates if the primary concern is attracting new businesses. With this approach, policy makers would not have to “pick winners,” governments and businesses would spend much less time and money negotiating incentives, and the tax system would treat all businesses equally. However, the revenue

impact of across-the-board tax cuts would be much greater than targeted tax breaks, and would require larger increases in household taxes or cuts in public services.

### ***Split-Rate Property Tax***

Another alternative to tax incentives through tax reform is a split-rate property tax. The property tax might be viewed as two taxes in one: a tax on land and a tax on structures. By exempting businesses from property tax on new development, policy makers reduce the tax on structures. If such exemptions proliferate, the tax system can come to resemble a modified split-rate tax, with most business revenue obtained from land instead of structures.

It could be fairer and less administratively costly for states and localities to simply adopt a split-rate property tax with a higher



tax rate imposed on land than on buildings and other improvements. Shifting the tax burden from buildings to land reduces the disincentives for investing in new buildings, provides a more neutral tax structure with regard to the timing of new development, and discourages urban sprawl (Dye and England 2010).

### **NONTAX ALTERNATIVES**

A key issue in evaluating property tax incentives is not necessarily whether they generate net benefits, but how they compare to alternatives. Granting incentives typically means that local governments have less revenue to pursue other policies for promoting economic development. The opportunity cost for using tax incentives is the net benefit that would have been generated if revenues used to pay for incentives were instead available to fund the next-best alternative.

Several characteristics mark successful policies for promoting local business growth. First, these strategies are focused on increasing local productivity, not merely reducing business costs. Policies that boost productivity are generally more cost effective than tax incentives or cash subsidies, because profits can increase directly through financial incentives that lower business costs and indirectly with higher productivity. Higher productivity may also be a more sustainable way to promote long-run economic growth.

Second, these policies should build on local competitive advantages—such as existing industrial specialties, advantageous geographic locations, or local universities—rather than following economic development fads or trying to replicate strategies pursued by regions with very different circumstances. Third, policies should focus on export-based firms that sell a large share of their goods or services outside the region. Finally, policies focused on small- or medium-sized firms

may be more successful because they are more likely to benefit from many types of business services described in this chapter and to face liquidity constraints that inhibit investments that would improve productivity (Bartik 2008; 2010).

Figure 6.1 shows the current use of various economic development policies based on a 2009 survey of the country's largest municipalities and counties. Although tax incentives are used frequently, local governments employ a wide array of other policies to promote business development, and there is no correlation between a tool's frequency of use and its effectiveness.

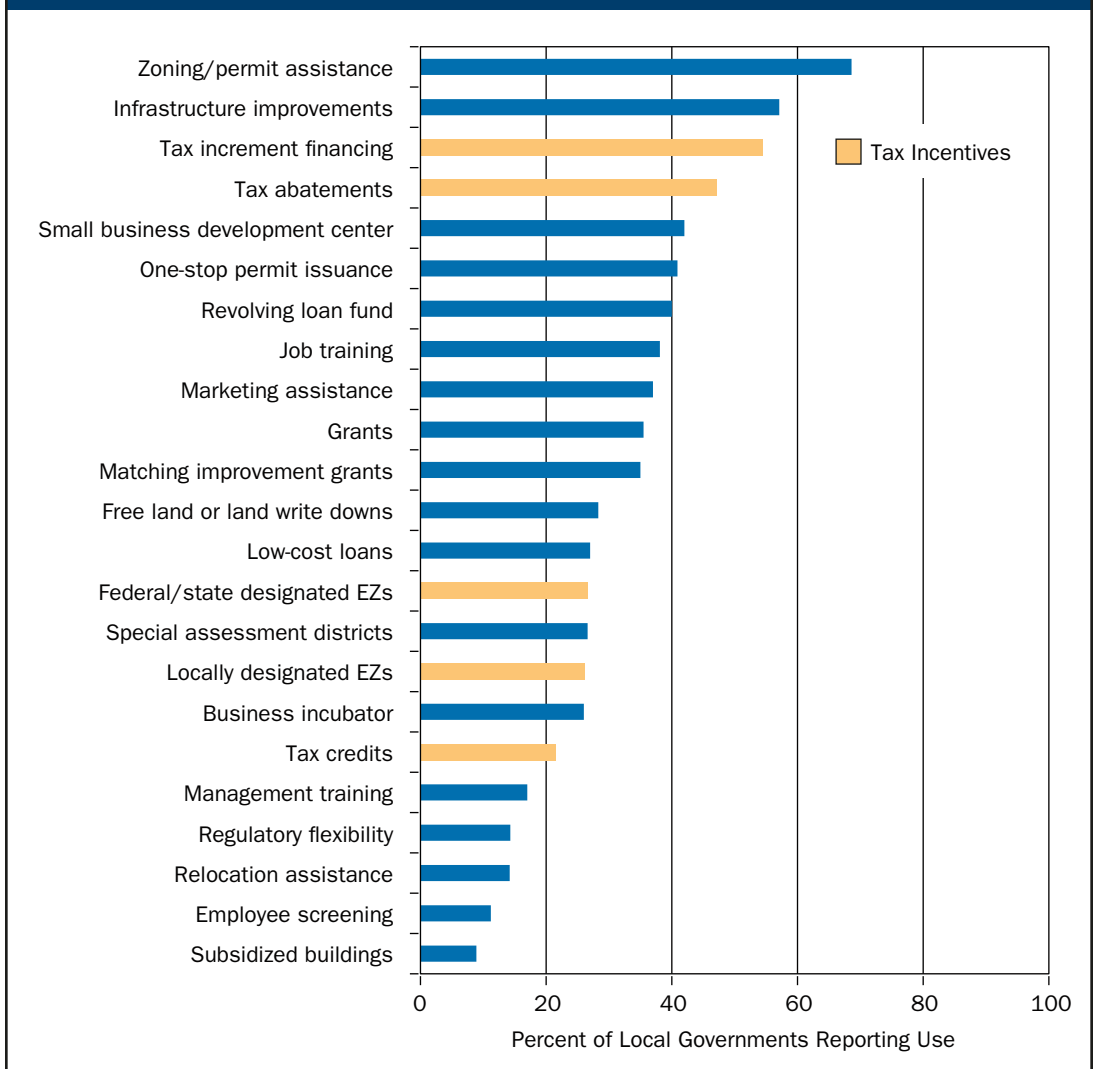
#### ***Most Effective Options***

***Customized job training.*** Businesses are treated as clients under these programs, with training designed to meet the specifications of each firm. Research suggests that these programs are 10 to 25 times more cost-effective in creating jobs than tax incentives. The most cost-effective programs cover the costs of training, but not salaries, and require firms to share training costs to ensure they are useful from their perspective. North Carolina's customized training programs offer an excellent example (Bartik 2003; 2008; 2010).

***Labor market intermediaries.*** These programs focus on matching unemployed workers with firms looking to hire. "First-source" programs consult with businesses on their labor needs, and then train unemployed workers and screen them for local employers, so a larger share of new hires are productive. Businesses are encouraged to hire these individuals, but typically that is not mandatory. A good example is the Berkeley First Source program in California (Bartik 2008).

***Regulatory assistance.*** Government staff is in a good position to assist firms with complex regulations and taxes, provide

**FIGURE 6.1**  
**Local Policies Used to Promote Business Development, 2009**



Source: International City/County Management Association and National League of Cities (2009).

information on useful programs, and resolve issues with state or federal agencies. Typically, this is a very low-cost program (Bartik 2008).

***Moderately Effective Options***

***Worker-oriented job training.*** These programs are not customized for individual firms, but will be most effective if they meet the needs of local employers by focusing on occupations in demand, providing up-to-

date training that firms desire, and actively working to place trainees. Community colleges are often well-suited to play this role (Bartik 2008).

***Incubators.*** These programs provide selected start-ups with “cheap space, shared office support, and business development advice” (Bartik 2008, 26). Incubators and training for potential new entrepreneurs appear to be effective ways to increase the odds of success for new businesses. One

successful incubator is University Park at Massachusetts Institute of Technology, part of the Forest City + Technology Group, which hosts a range of high-tech startups.

**Business services.** This approach includes a wide range of services, including “site selection assistance, procurement support, and government lobbying and research support” (Currid-Halkett and Stolarick 2011, 151). Small Business Development Centers provide advice to existing and prospective businesses on issues such as exporting, modernization, and management.

**Business improvement districts (BIDs).** BIDs address the possibility that property owners in certain areas of a municipality may be willing to pay for expanded public services, such as increased police patrols, street cleaning, signage, or beautification. Once a majority of property owners in a designated area agree to the special assessment to pay for these services, the fee is then mandatory for all owners under state law, with local governments collecting and remitting the extra tax or fee. BIDs have been shown to increase property values (Ellen, Schwartz, and Vioicu 2007) and reduce crime (Brooks 2006).

There is some evidence that greater spending on highly valued public goods, including police protection and transportation, can increase local economic growth (Fisher 1997), and that higher growth due to improved services may outweigh reduced growth due to tax increases (Lynch 2004).

### **Less Effective Options**

**Creative class strategies.** Many cities have adopted policies to improve cultural outlets and other urban amenities in the hope that they will attract talented young people who will in turn boost the local economy, an idea popularized by Richard Florida (2002). However, it is quite possible

that economic growth attracts creative class workers rather than the other way around. In addition, it is very difficult to replicate the urban amenities and other characteristics of cities where large classes of creative people live (Currid-Halkett and Stolarick 2011; Bartik 2008).

### **Trying to replicate Silicon Valley.**

While there have been many efforts to foster high-tech development, replicating Silicon Valley is highly unlikely. Currid-Halkett and Stolarick (2011, 151) found 70 cases of “Siliconias” in a survey of economic development practices, but little evidence of success. Silicon Valley emerged under a unique set of circumstances—including a highly entrepreneurial culture, laws regarding intellectual property, and a critical mass of scientists, engineers, and venture capitalists—that does not exist in most parts of the world (Lehrer 2012).

## **SUMMARY**

There are several ways that state and local governments can promote economic development while limiting their reliance on property tax incentives. State policies can make localities less likely to use incentives by ending state reimbursement for property tax incentives, withholding state aid from communities that use incentives to attract firms from other nearby jurisdictions, or enacting tax-base sharing. Tax reform can achieve economic development objectives without the need for property tax incentives if taxes are levied at a low rate on a broad base, or if local governments reduce taxes on business investment with a split-rate tax system. Nontax alternatives can be effective if they focus on increasing local productivity, building on local competitive advantages, and targeting businesses that export a large share of their goods or services out of the area.



## CHAPTER 7

# Findings and Recommendations



**T**he use of property tax incentives for business has escalated in the United States since the 1960s, and every state now employs at least one type. The range of incentives includes property tax abatement programs, firm-specific property tax incentives, tax increment financing, enterprise zones, and the combination of property tax exemptions with industrial development bonds.

Despite the widespread use of property tax incentives, documented evidence of their effectiveness is limited. In fact, most

studies suggest these incentives have little impact on economic growth. Achieving economic development goals with property tax incentives can be difficult because property taxes are a small part of total costs for most firms and are easily outweighed by factors such as differences in the wages and skills of local workers, proximity to suppliers and consumers, and transportation costs.

Although studies have shown that variations in local property tax burdens within a metropolitan area can have a significant impact on economic growth for individual

jurisdictions, the advantage gained by one local government is often cancelled out when matching incentives are adopted by other local governments in the same region.

The best estimates of the dollar value of property tax incentives suggest that state and local governments are spending \$5 to \$10 billion dollars each year on this economic development tool, but information on these incentives is limited. The approximately 3,000 enterprise zones across the country are the most studied type of property tax incentive. Good information is available on the statutory provisions of tax increment financing and property tax abatement programs, but only some states and local governments track the revenue impact of these incentives. There is even less information on firm-specific property tax incentives and property tax exemptions tied to industrial development bonds.

## ALTERNATIVES TO INCENTIVES

This report's first recommendation is to forgo the use of property tax incentives because of their cost and the limited evidence of their effectiveness. Instead, local governments should use more cost-effective economic development tools such as customized job training, certain types of business support services, and labor market intermediaries as discussed in chapter 6. Cutting back on tax incentives would provide revenue for localities to pursue policies that more effectively promote economic development.

Alternatively, policy makers can attract firms with across-the-board business property tax cuts, and thus avoid the administrative costs and inequities involved in selectively granting incentives. This option is suitable for states with classified tax systems, which generally tax business property more heavily than residential property. Policy makers could simply reduce the

differentially high tax rate for business properties, or eliminate classification altogether.

## STATE OPTIONS FOR REFORMING TAX INCENTIVES

Given the widespread and longstanding use of property tax incentives, policy makers may be reluctant to dispense with them completely. In these cases there are ways to improve upon their use and address the most egregious problems. Some states have already employed such tools.

***Restrict the proliferation of property tax incentives.*** Incentives are more likely to be beneficial when used in areas with high unemployment, low incomes, or underutilized infrastructure. States can limit the number of local governments permitted to use property tax incentives or restrict their use to the communities where they are most needed. Objective criteria should be used to define eligible communities, such as threshold levels of unemployment or population declines.

***Require that tax incentives be approved by all affected governments.*** In many parts of the United States, a single property owner pays taxes to multiple local governments—a municipality, county, school district, and perhaps special purpose districts. Local governments should be prohibited from reducing firms' property taxes paid to other overlying governments without their approval. States can also prevent destructive incentive wars by requiring that incentives be granted by metropolitan-level economic development organizations rather than individual jurisdictions.

***Penalize rather than subsidize localities that use property tax incentives.*** Some states reimburse local governments for using property tax incentives, in effect subsidizing pernicious interlocal tax competition. In contrast, Arizona cuts state aid to

local governments in the Phoenix area that grant tax incentives for retail properties.

***Publish information on incentives and conduct assessments.*** Taxpayers have the same right to information about tax expenditures as they do to data on government spending. The first step in giving voters useful information is to publish data on all the firms receiving property tax incentives. Then analysts in state government can conduct and publish benefit-cost analyses or other types of assessments of property tax incentive programs, and the results can be used to reform or eliminate unsuccessful programs.

### **LOCAL OPTIONS FOR REFORMING TAX INCENTIVES**

Attracting a new facility does not always improve the economic prospects in a particular jurisdiction or metropolitan area. Even in the absence of state reform, localities can benefit from unilaterally reforming or reducing their use of property tax incentives. Setting high standards for the use of property tax incentives will help localities avoid offering incentives with costs that exceed their benefits. Local government officials must weigh the cost of providing new infrastructure and expanded public services or the potential for environmental degradation against the potential economic benefits of attracting new firms. In addition, the benefits to the labor market from job creation—higher wages and lower unemployment—depend on the types of jobs, not merely the number of jobs. Figure 7.1 provides a list of questions local policy makers should ask before offering tax incentives.

***Set criteria for incentives.*** Restricting incentives to projects that meet certain standards will improve the likelihood that their benefits will exceed their costs. For example, incentives can be limited to facilities with wages greater than or equal to the region's

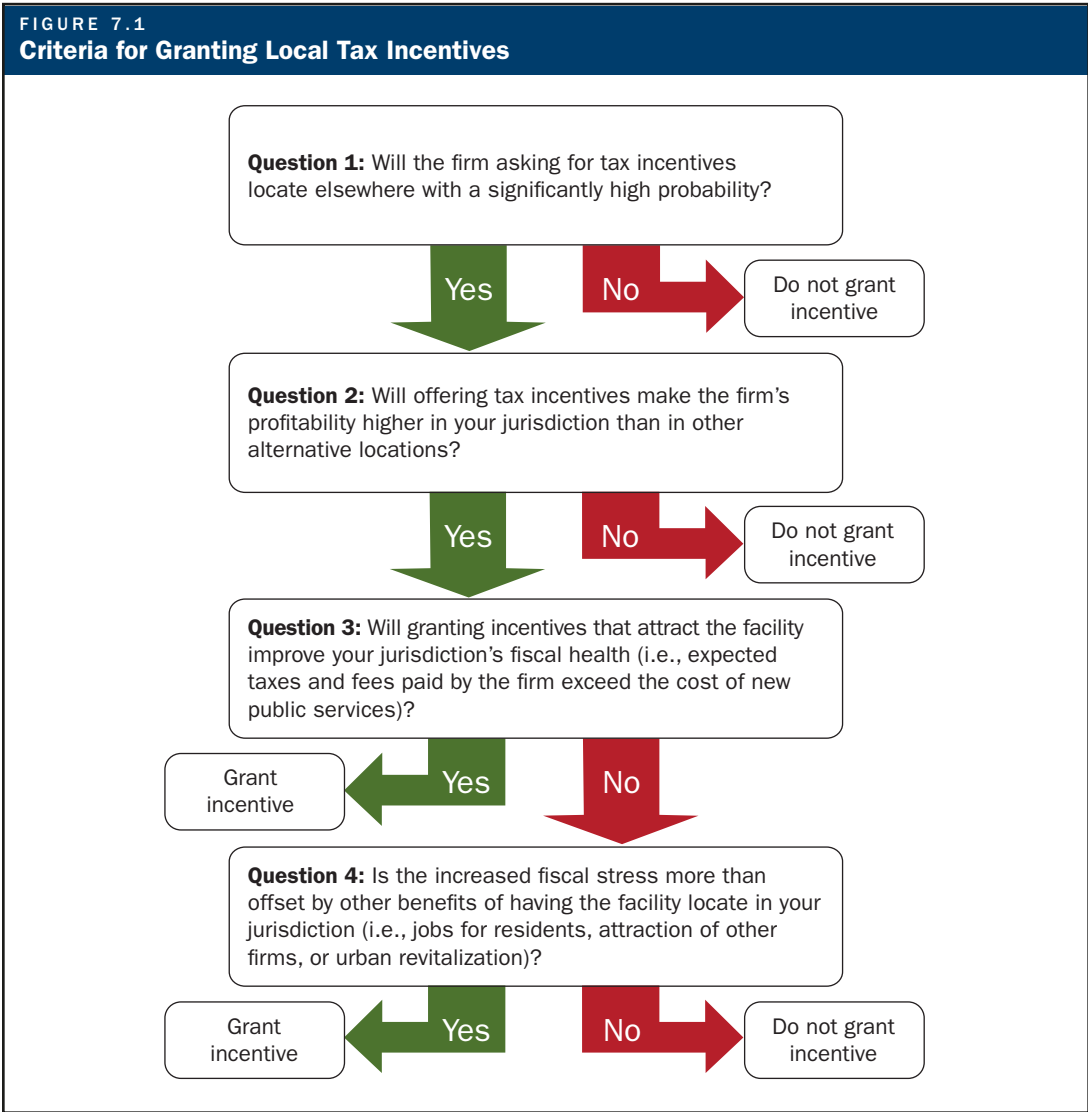
average wage, or with a certain percentage of full-time jobs. Similarly, projects hiring local residents or the unemployed should qualify for larger incentives than projects hiring people who are currently employed or reside outside the area. Local governments could also deny incentives for projects that require substantial infrastructure improvements.

***Limit incentives to mobile facilities that export goods or services out of the region.*** Site location for mobile facilities serving national or international markets is strongly influenced by labor and other costs that vary by location. Conversely, immobile firms that serve local markets choose their location based on proximity to their consumers and other site-specific factors. Thus, property tax incentives have the potential to tip location decisions for mobile facilities, but are unlikely to affect site choices for immobile facilities. In addition, attracting firms that serve national markets will typically increase a locality's aggregate income, while providing incentives to firms serving local markets may merely displace profits for other local competitors. One way to restrict incentives to mobile businesses is to grant incentives to manufacturing properties, and deny them for commercial properties or residential developments.

***Place limits on the number or total dollar value of incentives.*** One reason for the proliferation of tax incentives is that, unlike direct expenditures that are subject to annual appropriations, they are not typically constrained and are less likely to be evaluated. Placing limits on the number or total dollar value of incentives would force local officials to be more selective in their decisions to offer incentives.

***Enforce an open process for deciding on incentives.*** If the decision-making process for awarding property tax incentives were transparent and not limited to politi-

FIGURE 7.1  
Criteria for Granting Local Tax Incentives



Source: Based on Wassmer (2009, 252–254).

cians seeking reelection or economic development officials, communities would be likely to make better choices. For example, if tax administrators or taxpayer groups have a voice in the process, they can require decision makers to weigh the revenue loss of forgone taxes against the potential economic benefits.

**Cooperate with other localities.**

Individual jurisdictions often use tax breaks to compete with neighboring communities for business investment. However, moving

firms across jurisdictional boundaries does not generate economic benefits for the region as a whole. Broad use of incentives can leave the entire region with a smaller tax base, but will not significantly alter the distribution of capital investment. Without state intervention, localities can reach non-statutory, metrowide agreements to pursue cooperative economic development that will benefit all communities by setting standards for offering tax incentives.



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TABLE A.1

## State Property Tax Abatement Programs, 2010

State	Program Name <sup>1</sup>	Maximum Duration (Years)	Granting Authority <sup>2</sup>						Who Bears Cost				Eligible Property				
			LG	ST	CO	AR	CI	O	LG	OG	ST	UN	I	C	H	R	O
AL	Alabama Property Tax Abatements	10			X		X	X		X			X				X
AK	Property Tax Exemption or Deferral for Economic Development	5+	X						X			X	X	X			
	Exemption or Deferral for Deteriorated Property	5-10							X								X
AZ	Environmental Technology Assistance Program	40				X						X					
CA	Economic Revitalization Manufacturing Property Tax Rebates	5	X					X	X			X					
	Capital Investment Incentive Program	15	X						X			X					
CO	Local Incentives for New Business Facilities	10	X		X		X	X	X	X		X	X				X
CT	Manufacturing and Machinery Equipment Exemption	5				X			X	X		X				X	X
	Abatement for Improvement of Property	2-7	X						X			X		X			
	Urban Reinvestment Abatement	5	X						X								X
DC	Real Property Tax Abatement for Commercial Properties	5				X			X			X	X			X	X
FL	Economic Development Tax Exemption	10				X			X			X					
	Qualified Target Industry Refund	4+		X					X	X		X					X
HI	Wasteland Development Program	5		X							X						X
	Exemption for Property Used in Manufacturing of Pulp and Paper	5				X					X	X					X
ID	Tax Cap on Property Value Exceeding \$800 Million	NS		X						X							X
	Small Employer Growth Incentive Exemption	NS			X					X							X
	New Capital Investment Incentive Act	NS		X						X							X
IL	Abatement for Commercial and Industrial Property	20+	X		X		X	X	X			X	X				
IN	Deduction for Rehab/Redevelopment in Economic Revitalization Areas	10	X							X		X	X	X			X
	Investment Deduction	3			X					X							X
IA	High Quality Jobs Program	20		X						X		X	X				
	Industrial Property Exemption	5			X		X				X	X	X			X	X
KS	Economic Development Property Tax Exemption	10	X	X						X		X	X			X	
KY	New or Relocating Manufacturing Exemption	5	X						X			X					
	City Tax Exemption	5					X		X								
	Moratorium of Property Assessment	5	X						X				X			X	X
LA	Industrial Tax Exemption Program	15	X	X						X	X	X					
	Restoration Tax Abatement	10	X	X						X			X	X			X
ME	Business Equipment Tax Reimbursement	12		X							X	X	X				X
	Business Equipment Tax Exemption	NS		X					X	X		X	X				X
MD	Credit for Buildings Undergoing Renovation for Communications	10	X						X				X	X			X
	Credit for Businesses that Create Jobs	12	X		X				X								X
	Manufacturing Facilities Tax Credit	LO	X		X				X			X					X
	Credit for Property Used as a Publicly Sponsored Business	LO	X						X								X
	Commercial Waterfront Property Tax Credit	LO	X						X				X				X
	Vacant and Underutilized Commercial Buildings	LO	X		X				X			X	X				X
Rehabilitated Property	10	X		X				X									X
MA	Economic Development Incentive Special Assessment	4	X	X					X			X	X				
MI	Industrial Facilities Tax Abatement Program	12	X							X	X	X					
	Obsolete Property Rehabilitation Districts	12	X	X						X		X	X				X
	Commercial Rehabilitation District	10	X							X			X				
	Commercial Redevelopment District	12	X							X			X				X
MN	General Abatement Authority	15	X						X			X	X	X	X		
	Economic Development Tax Abatement	10			X				X			X	X				
	Property Tax Exemption for Redevelopment Projects						X			X		X	X	X			
MO	Land Clearance for Redevelopment Abatement	10	X	X						X							X

Key to abbreviations on pages 68-69.



**TABLE A.1 (CONTINUED)**  
**State Property Tax Abatement Programs, 2010**

State	Program Name <sup>1</sup>	Maximum Duration (Years)	Granting Authority <sup>2</sup>							Who Bears Cost				Eligible Property				
			LG	ST	CO	AR	CI	O	LG	OG	ST	UN	I	C	H	R	O	
MS	Industrial Exemptions	10	X	X						X			X	X				
	Start-Up Exemptions	5				X						X				X	X	
MT	Property Tax Abatement for New or Expanding Firms	10	X							X				X				
	Local Option Abatement for Expanding Value Added Machinery and Equipment	7	X		X					X	X		X				X	
	Remodeling of Business Structures Abatement	5	X							X			X	X	X			
	New Industrial Property	3		X						X			X					
NE	Nebraska Advantage Act Tier 4, 5, and 6 Exemptions	10		X					X									
NV	Personal Property Tax Abatement for New or Expanding Businesses	10		X					X				X	X				
NY	Abatement and Exemption for Industrial and Commercial Property in NYC	19-25	X							X				X			X	
	Business Investment Exemption	10	X							X			X	X				
	Residential Commercial Urban Exemption	12	X							X				X	X		X	
	Food Retail Expansion to Support Health	25					X			X				X			X	
	Commercial Expansion/Revitalization Program	5					X			X				X			X	
ND	Property Tax Exemption for Improvements to Commercial Buildings	5			X					X				X	X		X	
	Exemption for New or Expanding Business Projects	5-20			X		X			X			X	X				
OK	Five Year Exemption for Manufacturing Facilities	5	X	X		X					X		X					
	Local Development Act	5-6	X							X			X	X	X			
OR	Strategic Investment Program	15	X	X						X	X		X	X			X	
	Construction in Process Program	2				X				X	X		X	X			X	
PA	Economic Revitalization Tax Assistance	10	X							X			X	X				
RI	Exemption for Manufacturing, Commercial, or Residential Property	20	X							X			X	X	X			
	Exemption of Idle Manufacturing or Mill Property	1	X							X			X				X	
	Exemption/Valuation Freeze of Wholesaler's Inventory	25	X							X							X	
SC	Manufacturing and Research and Development Exemption	5		X						X			X			X		
	Corporate Headquarters, Office, or Distribution Facilities Exemption	5		X						X				X				
SD	Property Tax Abatement for New or Expanding Firms	5	X		X					X			X	X	X		X	
	Exemption of Multi-Tenant Business Incubator	5+			X					X							X	
VT	Property Tax Stabilization Agreements	10	X	X						X	X		X	X			X	
	Construction in Progress Exemption	2	X	X							X		X	X			X	
VA	Exemption for Rehabilitation, Renovation, or Replacement of Commercial/Industrial Structures	15	X							X			X	X			X	
WA	Aerospace Industry Business and Occupation Tax Credit for Property Tax Paid	NS		X							X		X				X	
	Business and Occupation Tax Credit for Property Tax on Aluminum Smelter	NS		X							X		X				X	
WV	Exemption of Inventory/Warehouse Goods	20				X				X							X	
	Five-for-Ten Program	10		X						X							X	
	Business Investment and Jobs Expansion Credit	NS		X						X			X	X				
	82 Programs in 37 States (Plus DC)		44	26	16	9	9	5		43	29	15	4	51	44	13	9	48
Key		NS: Not specified LO: Determined locally	LG: Local government ST: State CO: County AR: As-of-right CI: City O: Other							LG: Awarding local government OG: Overlapping governments ST: State UN: Unspecified				I: Industrial or manufacturing C: Commercial H: Housing or residential R: Research O: Other				

Note: See Appendix Notes on page 74.  
 Sources: Mikesell and Dalehite (2002); Significant Features of the Property Tax (2012); Various state sources and statutes.



Criteria Firms Must Meet to Receive Abatements													Form of Abatement <sup>3</sup>					Tax Abated					Maximum Abatement	Termination; Clawback or Sunset			
AP	QU	PI	J	I	RL	W	LO	NB	SP	SE	ER	EX	CR	F	R	SA	O	RP	PP	IM	LE	S		T	CL	SU	
X				X								X					X	X	X	X		X	100% VA or SA	X			
	X											X						X	X				100%				
				X				X				X						X	X				50%	X			
	X		X													X			X				SA				
		X										X						X	X	X			100% VA		X		
	X							X								X		X	X				3% Rate				
X			X	X								X							X				100%		X		
X			X			X		X				?							X				50%		X		
X		X										X						X		X			95% or 100% VA	X			
		X			X							X						X					50% VA				
X												X						X		X			100% VA				
	X												X	X				X					100%				
				X								X						X					100%				
		X										X						X		X			100% VA	X			
X					X			X				X				X		X			X		100%				
X			X	X		X						X						X	X	X			100% VA	X	X		
X												X						X	X		X		100%				
X				X					X			X						X	X				100%	X			
X	X											X						X			X		100%				
X	X				X					X		X						X		X			100%	LO			
		X			X							X				X		X	X	X			100%	X			
							X					X		X				X					100% or SA				
X	X	X			X							X						X	X				100%				
	X	X	X		X							X						X	X				100%				
X		X												X				X		X	X		Freeze				
	X											X						X					100%	X			
X			X									X						X	X				100%	X	X		
X		X	X									X						X		X	X	X	100%	X	X		
X	X	X										X						X					100% VA or 50% PC	LO			
X	X	X											X					X	X				100%			X	
X	X												X					X	X				100%			X	
	X											X							X								
X															X			X	X		X		SA	X			
X			X	X									X					X	X				80%		X		
36	22	23	22	17	8	6	5	5	4	4	2	50	12	8	5	5	11	70	46	24	10	3		29	15	6	
AP: Application form or certification requirement QU: Property used for qualifying use PI: Property improvement, renovation, or rehabilitation J: Job creation or retention I: Investment RL: Relocation/Expansion W: Wage, benefit, or employment agreement LO: Determined locally NB: New business or expanded business SP: Substitute payment SE: Socioeconomic criteria ER: Export requirements												EX: Exemption CR: Credit F: Freeze R: Rebate SA: Special assessment O: Other					RP: Real property PP: Personal property IM: Improvements LE: Land excluded S: School or education tax					AR: Assessment ratio VA: Value added SA: Special assessment PC: Project cost			T: Termination CL: Clawback SU: Sunset LO: Local option		

TABLE A.2 State Tax Increment Finance Programs, 2010		Duration (Years)	Eligible Tax Revenues <sup>1</sup>										Requirements for District Creation <sup>2</sup>										Approval Agencies <sup>3</sup>						Public Hearing Required?	
State	Program Name		P	S	I	PI	EA	GR	O	B	BF	FS	CB	CP	PP	PB	DP	O	CT	CO	SB	ST	RA	TC	O	A	D			
AL	Tax Increment Districts	30	X						X					X					X	X						Y	Y			
AK	Debt for Improvement Area Projects	Unspecified	X						X							X			X							N	N			
AR	TIF for Community Redevelopment Districts	25	X		X				X		X								X	X						Y	Y			
CA	TIF for Community Redevelopment Project Areas	Unspecified	X						X													X				Y	Y			
CO	Community Redevelopment	25-50	X	X						X	X						X		X						Y	N				
CT	TIF for Municipal Development Projects	40	X							X	X						X		X	X					Y	N				
DE	Municipal TIF District	30	X					X	X	X	X			X				X	X					X	Y	N				
DC	Tax Increment Financing		X	X				X		X	X			X				X	X						N	N				
FL	Community Redevelopment	7-40	X						X						X			X				X			Y	N				
GA	Tax Allocation Districts	Term of bonds	X	X					X								X	X	X				X		Y	N				
HI	Tax Increment Financing	Term of bonds	X									X										X			Y	Y				
ID	Revenue Allocation Areas	24	X						X	X	X							X	X			X			Y	N				
IL	Tax Increment Allocation Redevelopment	23	X	X					X	X							X		X					X	Y	N				
IN	Tax Increment Finance	25	X						X	X						X			X	X					Y	Y				
IA	Urban Renewal	20	X	X					X									X	X						Y	Y				
KS	Tax Increment Financing	20	X	X		X		X			X								X	X				X	Y	N				
KY	Kentucky Increment Financing	30	X	X	X			X	X	X	X								X	X		X			Y	Y				
LA	Tax Increment Development	30	X											X									X		Y	N				
ME	Municipal Development District	30	X						X								X		X			X			Y	Y				
MD	Tax Increment Financing	Unspecified	X														X		X	X					Y	?				
MA	Economic Development Incentive Program	30	X								X								X			X			Y	N				
MI	TIF Program	30	X							X				X					X			X	X		Y	Y				
MN	Tax Increment Financing	26	X						X	X									X	X				X	Y	N				
MS	Tax Increment Financing	30	X	X								X							X	X					Y	Y				
MO	TIF for Redevelopment Areas	23	X	X	X			X	X	X	X								X	X					Y	Y				
MT	Tax Increment Finance	15-40	X						X	X	X								X	X				X	Y	N				
NE	TIF for Community Redevelopment Areas	15	X						X	X	X								X	X					Y	Y				
NV	Tax Increment Areas	30-45	X						X										X						Y	N				
NH	Municipal Economic Development and Revitalization Districts	Term of bonds	X										X						X						Y	N				



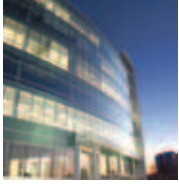


TABLE A.3

State Enterprise Zone Programs, 2010

State	Program Name	Number of Zones (2009)	Type of Incentive						Criteria for Designating an Enterprise Zone <sup>1</sup>													Zone Size Limits							
			P	I	S	OT	NT	U	PV	LI	GD	PD	CP	FD	PA	DP	V	LS	LO	PC	TR	LW	O	PL	AL				
AL	Alabama EZ Act	28		X	X	X	X	X	X	X	X				X										X			X	
AZ	EZ Property Tax Reduction	24	X						X							X													X
AR	Consolidated Incentive Act of 2003	Entire State		X	X	X	X																						
CA	EZ Program	42	X	X	X	X	X	X							X														X
CO	EZ Program	16	X	X	X										X														X
CT	EZ Programs	17+	X	X																									X
DE	Targeted Area Tax Credits	30 (2004)		X					X	X	X	X	X	X	X	X													
DC	Economic Development Zones	3	X					X	X	X	X																		
FL	EZ Program	59	X	X	X	X	X	X	X	X	X	X	X	X															X
GA	EZ Program	43+	X																										
	Opportunity Zones	73		X																									X
HI	EZ Partnership	19 (2004)	X	X	X	X	X	X																					X
IL	EZ Program	91 (2004)	X	X	X	X	X	X	X	X	X	X	X	X	X	X													X
IN	EZ Program	24	X						X																				X
IA	EZ Program	41+	X	X	X	X	X																						X
KS	EZ Initiatives	Entire State		X	X																								
LA	Economic Development Zones	1,740 (2004)		X	X	X																							X
ME	Pine Tree Development Zones	Entire State	X	X	X	X	X	X																					
	EZ Tax Credits	29	X	X					X	X	X	X	X	X	X	X													X
MD	Tax Credit for Arts District	19	X	X					X																				X
MA	Economic Opportunity Area	40 (2004)	X	X	X																								X
	EZ Program		X																										X
MI	Renaissance Zone Program	39 (2004)	X	X											X	X													X
	Border City Development Zones	5	X						X	X	X	X	X	X	X	X													X
MN	Job Opportunity Building Zones and Agricultural Processing Facilities Zones	15	X	X																									X
MO	Enhanced EZ Program	66 (2004)	X	X																									X
MS	Growth and Prosperity Areas	18	X						X																				X
NE	EZ Act	5 (2004)		X																									X
NH	Economic Revitalization Zones	77		X																									X
NJ	Urban EZ	32		X	X	X	X	X	X	X	X	X	X	X	X	X													X





## APPENDIX NOTES

### Chapter 3

#### The Impact of Property Taxes on Firm Location Decisions

**Figure 3.1: Input Costs as a Share of Total Costs for the Manufacturing Sector, 2004–2009**

The share of total costs for each input is estimated with a 2004–2009 average of data from the GDP-by-Industry Data for manufacturing, with total costs calculated as industry gross output minus gross operating surplus (U.S. Bureau of Economic Analysis 2011). For each year, the share for labor and energy is estimated by dividing costs for employee compensation and energy inputs by total costs.

State/local taxes and property taxes reported annually by Ernst & Young LLP and Council on State Taxation are divided by total taxes on production for all private businesses in the GDP-by-Industry Data. The analysis suggests that for the 2004–2009 period state/local taxes averaged 57.7 percent of total business taxes and property taxes averaged 21.2 percent. Each year's percentage for all private businesses was then multiplied by total taxes reported in the GDP-by-Industry Data for manufacturing to estimate state/local taxes paid by manufacturing firms.

**Figure 3.2: Impact of Relocation to Different States on Total Costs for an Average Manufacturing Facility**

The impact of relocation on total costs is estimated by multiplying the share of total costs for each input calculated for figure 3.1 by the percentage change in input prices from relocating from a high-cost state to a low-cost state.

State labor costs are the per unit labor costs for 2009 calculated by Moody's Analytics, Inc. (2011), which measures labor compensation per dollar of output for selected three-digit NAICS industry classifications, and then calculates a single state measure of labor costs by weighting unit costs for each industry based on the national share of employment.

State energy costs are 2009 total energy prices for the industrial sector measured as dollars per million British thermal units (U.S. Energy Information Administration 2011).

State/local taxes and property taxes are 2010 total effective business tax rates, which are total business taxes as a share of gross state product (Phillips et al. 2011).

#### Calculations for the Boston Metropolitan Area

The Boston Metro area includes 147 Massachusetts municipalities in the Boston-Cambridge-Quincy MSA as defined by the U.S. Census Bureau. Effective tax rates are calculated by dividing each municipality's equalized value by its nominal tax rate for the industrial class using FY2010 data from the Massachusetts Department of Revenue (2011). Since some municipalities may use prohibitively high tax rates as a way to zone out industrial facilities, this analysis follows Fox (1981) and excludes 44 municipalities where industrial properties account for less than 1 percent of total assessed value. The change in operating costs is calculated the same way for figure 3.2.

**Table 3.1: Impact of State and Local Taxes on Economic Activity**

In 74 across-region studies covered in Wasylenko (1997), the variables used to measure economic activity (i.e., the dependent variable) included aggregate regionwide data on employment (35.1% of studies), investment (17.6%), and gross product, income, or value-added (17.6%); and microdata on firm births or new plant locations (27.7%). In 11 within-region studies, the measures of economic activity included aggregate data on employment (45.5% of studies) and microdata on firm births or new plant locations (54.5%).

In the across-region studies, 67.6% of studies used measures of economic activity specifically for the manufacturing sector, while 54.5% of within-region studies used variables specifically for manufacturing.

In the across-region studies, the variables used to measure taxes are most frequently state and local taxes per capita or as a percent of personal income; nominal or effective tax rates for specific taxes (most frequently corporate income and property taxes); and sometimes measures of tax effort. In the within-region studies, the tax variable is always property taxes, most frequently effective property tax rates, but sometimes nominal or average tax rates (Bartik 1991).

Bartik (1994) shows how to estimate revenue loss per job created from tax reductions.

$$\begin{aligned} \text{Revenue loss per job} &= \\ &(\text{Business tax revenue per job}) \times (1 + 1/E), \\ &\text{where } E \text{ is the tax elasticity of economic} \\ &\text{activity with respect to state and local} \\ &\text{business taxes.} \end{aligned}$$

Total state and local taxes paid by business in FY2010 were reported as \$619 billion by Phillips et al. (2011) and nonfarm private sector employment averaged 107,118,000 in FY2010 according to the Bureau of Labor Statistics (2011), which yields business tax revenue per job of \$5,779.

With an across-region elasticity of -0.25, this suggests revenue change per job of -\$17,337:

$$\$5,779 \times [1 + (1/-0.25)].$$

Property taxes paid by business in FY2010 were reported as \$249.5 billion by Phillips et al. (2011), which yields property tax revenue paid by business of \$2,329 per job. With a within-region elasticity of -1.8, this suggests property tax revenue change per job of \$1,035:

$$\$2,329 \times [1 + (1/-1.8)].$$

**Appendix Table A.1  
State Property Tax Abatement Programs, 2010**

This table defines property tax abatement programs somewhat differently than Dalehite, Mikesell, and Zorn (2005). It excludes programs that primarily benefit housing development, have a primary purpose other than economic development, or are linked to industrial development bonds. It includes some programs that are not strictly stand-alone programs and thus were not reported by Dalehite, Mikesell, and Zorn (2005).

#### Notes

1. This table excludes 12 programs that are identified in the Incentives for Economic Development table on Significant Features of the Property Tax (2012) because they are either limited to a specific industry or have a primary purpose other than economic development. These programs include: AZ Healthy Forest Property Tax Reduction; CT Exemption for New Commercial Vehicle; DC Supermarket Exemption Act; HI Commercial Crop Shelters Exemption; IA Speculative Shell Buildings Exemption; MD Credit for Operating Railroad; MD Restoration/Rehabilitation of Historic Property; MD Business Property that is Software; MN Agricultural Processing Facility Exemption; MT Suspension/Cancellation of Delinquent Taxes; OR Oregon Food Processor Exemption; and RI Credit for Historic Structures.

2. Other Granting Authority: AL Public Authority; CA Redevelopment Agency; CO School Districts; IL School Districts; and MT Public Authority.

3. Other Forms of Abatement: AK Deferral; AZ Reclassification; MI Alternative Tax; MN Abatement of taxes owed in excess of what would be owed in neighboring county; MS Fee in Lieu of Taxes; MT Rate Reduction; ND Payment in Lieu of Taxes (PILOT); NE Deferral; and RI Stabilization.



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## ABOUT THE AUTHORS

**Daphne A. Kenyon** is a visiting fellow in the Lincoln Institute's Department of Valuation and Taxation and principal of D. A. Kenyon & Associates, Windham, New Hampshire. She has worked on a wide range of public finance issues as professor of economics at Dartmouth College and Simmons College, as a policy analyst for the U.S. Department of Treasury and the Urban Institute, and as a consultant. She earned her B.A. in Economics from Michigan State University and her M.A. and Ph.D. in Economics from the University of Michigan. Contact: [dkenyon@lincolninst.edu](mailto:dkenyon@lincolninst.edu)

**Adam H. Langley** is a research analyst in the Department of Valuation and Taxation at the Lincoln Institute of Land Policy, where he has coauthored papers on property tax relief programs, nonprofit payments in lieu of taxes, and state-local government fiscal relationships. He earned a B.A. in political studies from Bard College and an M.A. in economics from Boston University. He previously worked in the New York State Assembly. Contact: [alangley@lincolninst.edu](mailto:alangley@lincolninst.edu)

**Bethany P. Paquin** is a research assistant for the Lincoln Institute of Land Policy and D. A. Kenyon & Associates. She is a coauthor of another Lincoln Institute policy focus report on property tax circuit breakers. She earned her B.A. in political science from Grove City College in Pennsylvania. Contact: [bethanypaquin@gmail.com](mailto:bethanypaquin@gmail.com)

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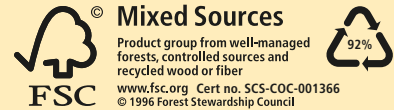
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OF LAND POLICY

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Cambridge, MA 02138-3400 USA

Phone: 617-661-3016 or  
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# Rethinking Property Tax Incentives for Business

State and local governments across the United States use several types of property tax incentives for business, including property tax abatement programs, firm-specific property tax incentives, tax increment financing, enterprise zones, and industrial development bonds combined with property tax exemption.

When these incentives attract new businesses to an area, they can increase income or employment, expand tax revenues, and revitalize distressed urban areas. Unfortunately, research shows that the escalating use of property tax incentives for business over the last 50 years has resulted in local governments spending billions of dollars with little evidence of economic benefits. There are several obstacles to the successful use of these incentives: property taxes account for a very small part of total costs for most firms; incentives are sometimes provided to businesses that would have chosen the same location without tax breaks; and the proliferation of incentives reduces their effectiveness since similar tax breaks offered by competing jurisdictions largely offset one another.

This report provides an overview of property tax incentives for business and offers recommendations for state and local governments.

- **Alternatives to tax incentives** should be considered by policy makers seeking more cost-effective economic development tools, such as customized job training, labor market intermediaries, and provision of business services. If tax policy is the preferred approach, officials can employ a general policy of low tax rates with a broad base, or move to a split-rate property tax with lower taxes on buildings than land.
- **State policy makers** should consider the following reforms to improve the effectiveness of property tax incentives: place limits on their use; require their approval by all affected governments; improve transparency and measure effectiveness; and end state reimbursement of local revenues forgone because of property tax incentives.
- **Local government officials** should consider the following reforms to avoid some of the pitfalls of business property tax incentives: set objective criteria for the types of projects eligible for incentives; target incentives to mobile firms that export goods or services out of the region; limit the total number of incentives; enforce an open process for decisions on incentives; and forge regional cooperative agreements.