1-1-2007

Solving the Problems of Economic Development Incentives

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Citation

Bartik, Timothy J. 2007. "Solving the Problems of Economic Development Incentives." In Reining in the Competition for Capital, Ann Markusen, ed. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp.103-140. https://doi.org/10.17848/9781429492065.ch5

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Solving the Problems of Economic Development Incentives

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How can economic development incentives best be reined in? I agree with most students of this issue that economic development incentives are often wasteful. But this chapter maintains the position that some incentives are socially beneficial.[1] The challenge is to design reforms that encourage dropping wasteful incentives and keeping those that are socially beneficial.

To design incentive reforms, we must first agree on the causes of current U.S. incentive practices. This is the focus of the next section. What are the social benefits and costs of incentives? Why are incentives so often wasteful? Answering these questions allows us to address the problems leading to wasteful incentives, while encouraging beneficial incentives.

My conclusion is that some incentives are beneficial for two reasons: 1) because corporations are becoming more footloose, they are becoming more responsive to incentives; and 2) increased local employment rates yield social benefits. However, incentives are often wasteful for two reasons: 1) local policymakers often overestimate the benefits of incentives, and 2) the local debate over incentives is dominated by business interests. Unlike some students of this issue, I do not think that incentives are excessive because a state government ignores an incentive's "spillover costs" for other states.

Based on this analysis, I conclude that incentive reform should focus on improving the local decision-making process for incentives. Local decisions about incentives will be improved by a more democratic process with full information, a budget constraint on incentives, better benefit–cost analysis, incentive designs that target new business activity that brings social benefits, and performance requirements. Federal

policy can encourage better information about incentives, help finance efficient incentives in economically distressed regions, and encourage cooperative economic development policy in metropolitan areas that cross state lines.

THE FORCES LEADING TO INCENTIVES

Before discussing the forces leading to incentives, I should define what I mean by incentives. In this chapter, I focus on the type of incentive that looks most like legalized bribery of the rich: cash or near-cash assistance provided on a discretionary basis to attract or retain business operations owned by large businesses. Such cash or near-cash assistance includes property tax abatements, discretionary credits under the state's corporate income tax, low-interest financing, and free land or buildings. This type of incentive deserves the most attention because, out of the total resources for economic development, such incentives comprise the largest share. For example, in Michigan such incentives are about three-quarters of all resources devoted to economic development programs (Bartik, Eisinger, and Erickcek 2003).[2]

Other incentives to large businesses are close substitutes for cash assistance. Incentives to attract or retain large businesses may also include customized services, which help meet the needs of an individual business, such as information on potential sites, help with state or local regulations, customized training for new or existing employees, and expedited provision of site-related public infrastructure, such as access roads. Customized services are sometimes almost equivalent to cash; for example, in some cases "customized training" is writing a check to the company to train its own employees. Another close substitute for discretionary cash incentives are business tax breaks provided as an "entitlement" under state or local tax laws, such as investment or employment expansion tax credits that go by legal right to all businesses that meet the tax law's criteria. Discretionary tax incentives, such as property tax abatements, may become so routine that they are almost equivalent to "entitlement" tax breaks. Reforms to cash incentives for large businesses may lead to increased use of these other incentives.

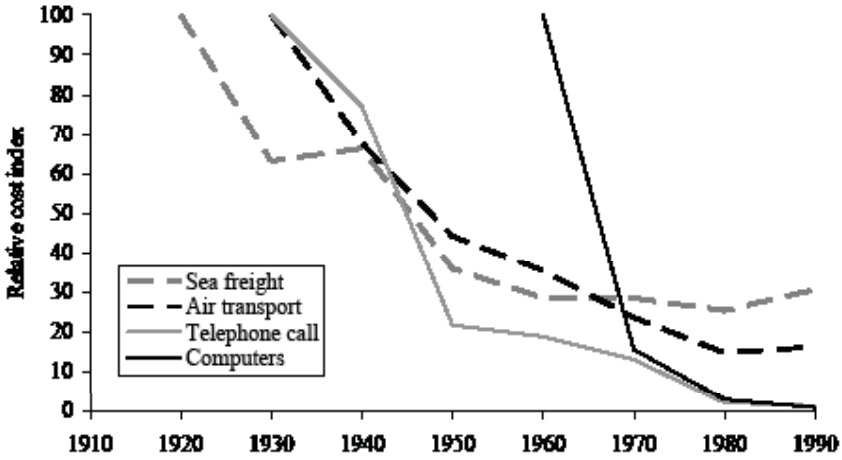
Economic development programs also provide assistance to new businesses and small and medium-sized businesses, including many high-tech businesses, which is intended to be an "incentive" for the growth of such businesses. Assistance to small and medium-sized businesses includes cash assistance, such as loans or equity finance, and grants for research and development. Assistance to small and medium-sized businesses may also include customized services, such as information on how to start up a business, or make an existing one more profitable (e.g., industrial extension services, and small business development centers). Reforms to incentive programs for large businesses may also affect these other programs.

Is there a good rationale for state and local governments to offer economic development incentives to attract or retain large businesses? Is there a good rationale for why such incentive use appears to be rising over time? One plausible rationale is that incentives are increasingly perceived as a necessary cost incurred to produce social benefits. It seems increasingly plausible that incentives might help attract or retain business, and thereby produce benefits such as greater employment rates and a stronger state and local fiscal situation. I will argue that these statements are true, but that incentives' costs are often large while incentives' benefits are often modest.

Incentives may increasingly affect business location decisions because businesses are increasingly footloose. As shown in Figure 5.1, over the past 100 years, transport and communication costs have declined. Cheaper transport of inputs and outputs, and the greater ease of using communications and computers to coordinate business activities at distant locations, allows business activities to be sited at a wider variety of locations. Because businesses have many more sites that are acceptable options from a transport and communications perspective, businesses are much more sensitive to local costs, such as wages and taxes. Wages are a larger share of costs than taxes, but taxes and the incentives that offset them are more immediately controllable by government.

Declining transport and communication costs help explain why research increasingly shows a statistically significant but modest effect of state and local tax rates on economic development. Reviews of the literature suggest that the long-run elasticity of a state or metropolitan

Figure 5.1 Relative Transportation and Communication Costs



NOTE: The figure sets transport and communication costs equal to 100 for the first year for which such cost data are available in the UN report. Each type of cost therefore uses a different base period. This allows all the data to be placed on one graph.

SOURCE: These data are derived from United Nations Development Programme (1999, p. 30). This particular presentation was developed by Rodrigue, Comtois, and Slack (2004).

area's business activity with respect to state and local taxes is between −0.2 and −0.3 (Bartik 1991a, 1992; Wasylenko 1997), which means that a 10 percent reduction in effective state and local business tax rates (for example, a reduction of the state corporate income tax rate from 5.0 to 4.5 percent, accompanied by similar reductions in other state and local business taxes), with state and local public services held constant, will increase the long-run level of local business activity by 2 or 3 percent.[3]

Such an effect on business activity is not huge. If the state and local tax cuts are financed by cutting public services, the result may be lower business activity. The elasticities are not large enough to produce a Laffer Curve, in which cuts in tax rates would raise the tax base enough to increase revenue. The estimates imply that the gross cost of creating a job through lower business tax rates is a sacrifice of $10,000 annually per job in lower business tax revenue. The higher business tax base would offset only about a quarter of this "static" revenue loss, resulting in a net cost of creating a job through lower business tax rates of about

$7,000 per year in foregone business tax revenue. At a 10 percent real discount rate, the present value cost in foregone business tax revenue is $70,000 per job created.[4] Still, for state or local officials searching for some way to affect the local economy, lowering taxes seems one of the few options.

These figures are for business tax cuts for an entire state or metropolitan area. Research suggests that a business tax cut by an individual suburb within a metropolitan area, holding the taxes of other jurisdictions constant, has much larger effects, perhaps 10 times as great per dollar of incentive. That is, a 10 percent cut in an individual suburb's business taxes, such as a cut in the business property tax rate from 2 percent to 1.8 percent, will increase that individual suburb's business activity by 20 percent, largely by capturing business activity from other jurisdictions in the same metropolitan area. These larger effects make sense because individual jurisdictions within a metropolitan area are closer substitutes for one another than different states are for one another, as jurisdictions within the same metropolitan area offer more similar access to markets and inputs. The research is mixed on whether business tax cuts for large central cities have significant effects on business location (Bartik 1991a, 1992; Haughwout et al. 2003).

What implications do these estimated effects of state and local business tax cuts have for the effects of incentives? Few studies directly estimate the effects of incentives. However, under the assumption that a "dollar is a dollar," tax incentives for a large business should have similar effects on its location decisions to an equal dollar-sized business tax cut. Therefore, the effects of incentives on the probability of a particular branch plant locating in a state should, on average, be such as to yield the same expected gross dollar cost per job as business tax cuts. For example, the highest incentive offers, according to Fisher and Peters (2002), are equivalent to an annual subsidy of about $2,800 per worker inside some enterprise zones.[5] To be consistent with the business location literature, reducing business taxes via an incentive offer of $2,800 per job for a branch plant, compared to no incentive offer, would increase the probability of a new branch plant choosing the state by about 0.3.[6] This implies that for every 10 plants offered such an incentive, the incentive would be decisive for about 3 of them. The incentives given to the other 7 plants would have no effects on business location or employment growth. The only effect would be an extra cost to state and

local governments of these unneeded 7 incentives. Unless economic developers can somehow determine which of the 10 plants "needs" the incentive to tip its location decision, this loss on 7 of the 10 plants is a necessary cost to tip the location decision of the other 3 plants. For smaller, more "normal" incentives, an even lower percentage of location decisions would be tipped by incentives. Fisher and Peters' figures imply that the mean state/local economic development incentive outside of enterprise zones is equivalent to an annual subsidy of about $300 per worker. Such an incentive would be expected to affect the location decision of only 3 out of 100 subsidized companies.[7]

The benefits of greater job growth in a metropolitan area occur in the form of earnings increases for local residents who get jobs as the local employment rate increases, earnings increases for local residents who move up to better-paying jobs with a tighter local labor market, local property value increases, profit increases in local businesses that have a head start in serving a larger local market, and tax base increases for state and local governments.[8] These benefits must be netted against costs of greater local job growth, including the value of the foregone nonwork time for local residents who gain jobs, the costs of additional public services required by expanding employment and population, and environmental costs.

We have reasonable estimates of the magnitude of these benefits and costs and how they are affected by differences in local conditions and the type of job growth (Bartik 1991a, 1993). A 1 percent increase in local employment is associated in the long run (more than five years) with an increase of 0.8 percent in local population, implying that 8 out of 10 new jobs in a metropolitan area go to persons who otherwise would have lived elsewhere. This 1 percent job increase is also associated with a 0.2 percent increase in the local employment rate (employment to population ratio), as local residents increase their labor force participation as they acquire better job skills with their greater job experience. One percent extra job growth in the long run is associated with average real wages moving up by 0.1 to 0.2 percent, but due entirely to local residents moving up to better-paying occupations; the real wages of particular occupations are unchanged, with occupational wages just matching increases in local prices. At low unemployment rates, when jobs are easy to get, the value of time spent unemployed, which economists call the reservation wage, may be 90 percent of the market wages,

which would imply a cost of foregone nonwork time of 0.18 percent in a low unemployment labor market due to 1 percent extra job growth.

The required public services due to growth should, in the long run, increase about the same as the tax base for employment growth that is accompanied by the same population growth and involves no occupational upgrading. But as detailed above, the employment growth due to the "labor demand" shock caused by economic development policies will raise employment rates and increase real wages due to occupational upgrading. If employment rates go up, tax revenues should increase faster than public spending needs for three reasons: 1) business growth by itself brings tax revenue greater than public services, estimated as $1.70 in taxes per dollar of required public services according to one source (Oakland and Testa 1996); 2) increased employment rates should reduce required state spending for transfers, reducing welfare spending by about 6 percent for a 1 percent increase in employment growth (Bartik and Eberts 1999), and unemployment benefit outlays by about 3 percent (Bartik 1991b); and 3) increased employment rates will raise personal tax revenues per capita, by a percent equal to the percent increase in the employment rate. Increases in real wages, such as those caused by the occupational upgrading due to increased labor demand, will also raise personal tax revenues, which should go up approximately proportionately with the increased real wages. In the short run, public service costs associated with growth will go up less than the percentage increase in employment and population if there is excess capacity in local infrastructure. On the other hand, if new infrastructure is required, and the depreciation cost of the current infrastructure is not reflected in local budgets, then most estimates suggest that additional public service costs will significantly exceed new tax revenues in the short-run (Altshuler and Gomez-Ibanez 1993).

One percent extra employment growth will increase local property values by 0.4 percent. However, the present value of the increased earnings from growth are at least triple the size of the property value gains (Bartik 1991a, 1994b). In addition to increases in property values due to increased land demand, the value of "brownfield" property that is cleaned up as part of an economic development project may also go up due to removing this development barrier. Other local asset values will also change: locally owned businesses that have some comparative advantage in selling to a local market will increase their profits, whereas

locally owned businesses that sell to an external market may lose profits due to increased wages and rents.

Other than brownfield clean-up, most environmental effects of growth are likely to be negative, but will vary greatly with project details. In addition, changes in community character that accompany growth may be viewed negatively by the original local residents.

The net effects of greater job growth are likely to be progressive, as lower-income groups are more likely to be initially nonemployed or employed in low-wage jobs. Therefore, most estimates suggest that the lowest income quintile probably has earnings gains that are three or four times greater, in percentage terms, than the earnings gains of the average family, and income gains that are around twice as great, in percentage terms, as the real income gains of the average family (Bartik 1994b). However, the actual dollar effects on earnings and income of the lowest income quintile are less than that of the average family, as many low-income individuals are disconnected from the labor market (Bartik 2001, Table 5.3). The progressivity of increased job growth is considerably less than the progressivity of redistributive social programs, which deliver their greatest dollar benefits to the lowest income quintile (Bartik 1994b).

The bottom line from this analysis is that for an average incentive project in a low unemployment local labor market, benefits and costs are of similar magnitude (Bartik 1991a, p. 183). The chapter's appendix and its accompanying table present some illustrative calculations. There is sufficient uncertainty about the estimated effects of taxes on growth, and growth on local economic variables, that whether the net benefits are positive or negative is unclear. Benefits and costs will vary greatly with project particulars.

Social benefits of incentives are greater if the project overcomes "market failures" that impede the use of local resources.[9] For example, social benefits are greater if the project helps overcome involuntary unemployment or underemployment that impedes workers from being employed or being employed in higher-wage jobs. Social benefits will be greater if local employment rates increase more, or local residents move up to higher-paying jobs to a greater extent, or if the local labor market is more depressed. An increasing local employment rate provides more earnings benefits to local residents, reduces the need for social services to the nonemployed, and reduces the public services costs and envi-

ronmental costs associated with increased population. An increase in higher-paying jobs for local residents increases earnings benefits, and increases fiscal benefits by reduced social services and increased taxes. In a more depressed local labor market, the nonemployed will be more desperate for jobs and have lower reservation wages.

Social benefits will also be greater if the current public infrastructure is underutilized, which allows increased employment and population growth to increase tax revenue without a commensurate increase in public infrastructure costs. This is more likely in a local area that has been sufficiently economically distressed that it has lost population and employment from some previous peak. Social benefits will also be greater if the project overcomes regulatory and other barriers that prevent brownfields from being productively used.

But policymakers should also be aware that social benefits of growth will be much reduced under any of the following circumstances: low-unemployment local labor markets; lower wages of the new jobs; fewer local workers for the new jobs; significant public infrastructure or environmental costs. For example, estimates suggest that if the job growth is in industries that pay 10 or 15 percent less than the average industry controlling for worker characteristics, then the job growth may produce no earnings benefits for local residents (Bartik 2004b). If there are zero earnings benefits from additional employment growth, and consequently little if any fiscal benefits, it is highly unlikely that an incentive package will pass a benefit-cost test unless it has extremely low costs per job created.

Therefore, incentives can affect business location, and increased job growth can yield important social benefits. We would expect informed state governments, or metropolitan agencies concerned with economic development, that are maximizing the well-being of all their residents, to only offer incentives if the benefits outweigh the costs. These calculations would consider that only a fraction of incentive offers would prove decisive, and only a fraction of newly created jobs would go to local residents. Policymakers would consider the circumstances of the local economy, the environmental costs or benefits, the quality of the new jobs, and who is hired for those new jobs. So, what is the problem?

The problem is that many incentives currently being offered in the United States have costs that exceed benefits. For example, in 2001 Chi-

cago awarded large incentives to the Boeing Corporation for relocating its headquarters, even though the jobs would go to relocated workers, which eliminates many of the labor market benefits.

One cause of wasteful incentives is ignorance. Policymakers assume that all growth is good. They assume that all incentive offers are decisive. It is often assumed that benefits can be measured by looking at the earnings and tax base associated with the new business activity. This assumption forgets that only a portion of the new jobs go to local residents and the unemployed, and that new public expenditures will be required.

But there may be reasons for ignorance. As Upton Sinclair (1935) said, "It is difficult to get a man to understand something when his salary depends upon his not understanding it." Local economic development decisions have been dominated by local business interests, including Chambers of Commerce, newspapers, banks, and real estate developers. From these groups' perspectives, the benefits of economic development are the increase in the value of their property, including the value of local business assets, and this increase in local capital values is closely related to the earnings and tax base increase of the new plant. Furthermore, the costs of the incentives, including the incentives that do not work, will be borne largely by the general public. There is truth to the observation by Logan and Molotch (1987, pp. 50–51) that, "For those who count, the city is a growth machine, one that can increase aggregate rents and trap related wealth for those in the right position to benefit."

Unlike some analysts of incentives, I do not think the fundamental problem is that a state government (or a metropolitan-wide economic development authority) fails to take into account the negative effects of its incentives on other states. If all states had rational incentive regimes, on the margin investors in each state would be charged a tax rate net of incentives that would reflect the marginal public service and environmental costs, net of any employment benefits, that the investment caused. Under those conditions, a state's incentive that attracts a marginal plant that would have otherwise gone to another state causes no net cost for that other state. Of course, states don't usually have rational incentive regimes, and so it is likely that attracting this marginal plant would cause net social costs (or benefits, depending upon the net effect in the other state) for the state that otherwise would have received this

investment. But this "externality" is not the fundamental problem, rather it reflects the fundamental problem: each state lacks, from its own self-interested perspective, a rational incentive regime that maximizes the interests of all state residents.

Critics who argue that incentives negatively affect other states also argue that states are offering incentives so excessive that the social costs of attracting these new plants exceed the social benefits. If this is the case for all states, then if state X attracts a plant that would have gone to state Y, state X is doing state Y a favor by saving it from a wasteful incentive.

This analysis so far has considered economic development decisions by a state or an entire metropolitan area, and asks whether a state or metropolitan area acting rationally has the proper incentive to consider all benefits and costs. The analysis is different when we consider economic development decisions for an individual suburban jurisdiction. For an individual suburban jurisdiction attracting a new plant, the main effects on the jurisdiction itself are effects on the jurisdiction's tax base and the jurisdiction's environmental quality. The net fiscal costs of providing public services to additional households attracted by the new business activity will mostly be incurred by other jurisdictions in the metropolitan area, or by the state government, as most workers in an individual suburban jurisdiction do not live there. The employment benefits of increased employment rates and promotions to better-paying occupations will also mostly be received by residents of other jurisdictions. The decisions of individual suburban jurisdictions about incentives have no strong reason to fully reflect all these social costs and benefits.

ALTERNATIVE INCENTIVE REFORMS

Given this economic context, what incentive reforms are desirable? This section evaluates the merits of possible reforms. Although some reforms are mutually exclusive, others could be combined.

Maintain traditional state and local policies towards business, but remain competitive in the global economy. State and local gov-

ernments would maintain their traditional business tax systems and not offer any incentives or other business cost reductions to improve the local business climate. As mentioned previously, this traditional system imposed state and local taxes on business that exceeded the public services to business, with $1.70 in business taxes per dollar of public services to business (Oakland and Testa 1996).

For most state and local areas, I doubt whether this alternative will prove politically viable. The mobility of business is increasing. Most state and local areas will sometimes experience high unemployment that will lead to public demands for action, and this high unemployment will also increase the benefits of growth. There is enough evidence that business taxes and incentives affect local growth that business interests will be able to argue for reduced taxes or increased incentives to reduce unemployment. The argument for doing something will win out over the argument for doing nothing.

Localism. Rather than competing for mobile capital, local areas could "just say no," eliminate incentives for mobile corporations, and rely on locally generated capital. The best articulation of this approach is in Michael Shuman's (2000) book, *Going Local,* although this approach appeals to many American community activists. Shuman advocates community corporations with voting shares controlled by local residents, with these community corporations making the local economy more self-sufficient by producing goods and services that replace imports of goods and services from other local areas.

The main problem with this approach is that greater reliance on local capital and local production would significantly reduce an area's real per capita income. There are static and dynamic gains from trade and capital mobility. Local areas should be free to pursue this option, but local residents should understand the costs.

Develop unique local assets that yield economic rents. Local areas can develop unique assets that make their area significantly more valuable to large businesses than these businesses' next best alternative, so that these large businesses receive what economists call an "economic rent" from the local area. This "economic rent" would allow business taxation in excess of public service costs without offering incentives to attract or retain these large businesses. One unique local asset would be

a unique cluster of industries that increases productivity by resulting in more new ideas, and greater availability of specialized inputs such as workers with special skills (Rosenfeld 2002a,b). Another unique local asset would be distinctive local amenities that attract what Florida (2002) calls the "creative class," the professional and technical workers who enhance productivity for many high-tech businesses.

The problem is that for most local areas, it is difficult to develop unique industry clusters or local amenities. Businesses will have many options of similar metropolitan areas that offer advantages from industry clusters and local amenities. There are then no economic rents for local areas to exploit, and offering incentives must at least be seriously considered.

Lower overall business tax rates. Faced with businesses with many location options, localities can respond by lowering overall business tax rates rather than offering special incentives. This low-tax alternative to incentives is favored by many conservative critics of incentives.

The problem is that this change would significantly reduce tax revenue, forcing difficult choices on state and local governments about raising household taxes, or cutting public services or transfers. These problems would be particularly acute in economically distressed local areas.

Lower marginal tax rates on new business operations. Rather than cutting business tax rates across the board, state and local areas could give tax credits or deductions for business investment or employment expansion. Compared to overall business tax reductions, this results in less of a short-run or medium-run revenue loss. Reductions in taxes on new business operations are similar to incentives, but would be provided as an entitlement to all businesses meeting the law's criteria, rather than in a discretionary manner to approved businesses.

Providing tax breaks as an entitlement, rather than at discretion, in theory encourages a state or local government to analyze the impact of the tax break in toto. In practice, such tax breaks are not reviewed closely. In addition, entitlement tax breaks, compared to discretionary tax breaks, do not allow the advantages of being selective, such as selecting projects in which assistance is more likely to tip the location decision, or the location has greater benefits.

Make discretionary incentives truly selective. As mentioned before, many discretionary incentives are provided so automatically to projects that they become equivalent to a tax break provided as an entitlement. Economic developers can be forced to become selective by requiring the number of incentives be capped, or better, that the dollar volume of incentives be capped. Criteria can be required for selecting incentive winners from incentive applicants, such as evidence that this incentive will tip the location decision, and benefit-cost analyses of the projects. Michigan's "MEGA" program, for example, which provides large tax credits to attract or retain businesses, has limits on the annual number of projects. It requires that all projects present data showing that a non-Michigan site would be more profitable without the incentive, and that all projects be subject to fiscal impact analysis.[10]

Capping incentive volume limits incentive costs. Political debate on the incentive cap may lead to a broader debate about the incentive regime. Whether government officials can determine if the incentive is needed to tip the location decision is more questionable. However, requiring businesses to legally certify, with official financial figures, that without the incentive the business would have located elsewhere, might discourage some egregious cases where clearly the incentive was irrelevant to the location decision. Finally, models can be developed to provide reasonably accurate estimates of the labor market and fiscal benefits of a new facility.

Transparency. The details of incentives and incentive offers can be required to be clearly publicly disclosed. This disclosure promotes broader public debate. If the incentive offers are reported in a consistent fashion nationally, the disclosure may also give economic developers a more accurate knowledge of what alternatives are open to business location decision makers, which should improve the bargaining position of economic developers. Businesses already know what they have been offered by different local areas, but economic developers do not. The national collection of this information would allow better research on incentives. Finally, transparency is essential for any incentive regulation by the federal government or supranational organizations. The European Union requires public disclosure of incentives by its member states, and disclosure and transparency are encouraged by international trade agreements.

Metrowide economic development programs, not within-metro competition. State governments can require that incentives not be provided by individual local governments, but only by the state as a whole or by metrowide organizations or coalitions. As discussed previously, local governments that are a small part of the local labor market will not consider many important social effects of business growth when offering incentives, such as the labor market benefits throughout the metropolitan area, and the fiscal effects of increased metropolitan population. This makes it unlikely that incentive policies conducted by small individual local governments will be optimal. A metrowide perspective would seem to be a minimum requirement for incentive policy to consider the full range of economic and fiscal effects. One limitation of state governments in this regard is that some metro areas cross state boundaries, a subject considered below.

Better benefit-cost analyses. State legislatures can require that all economic development incentive offers be subject to a prospective benefit-cost analysis to estimate whether their incentive offers are efficient. This analysis would estimate employment benefits, including what proportion of the new jobs would likely go to local residents, particularly unemployed local residents; wage effects, including the wage rate paid on the jobs for workers of given credentials versus current local jobs held by local residents with similar credentials; fiscal effects, including local as well as state effects, effects on required public expenditure as well as taxes, and analysis of the capacity of existing infrastructure to accommodate job growth; and environmental effects. If the estimates are high quality, they increase the likelihood of the right incentive choices. Even imperfect estimates would encourage debate on some relevant issues about incentives.

Job quality and other project standards. As suggested by Greg LeRoy and the organization "Good Jobs First," as well as others, states could require that all projects awarded incentives meet some minimum standard for job quality (LeRoy 1999; Nolan and LeRoy 2003; Purinton et al. 2003). In theory, concerns about job quality are already addressed as one component of the benefit-cost analysis. Decisions should be based on the net benefits of the incentive, not just on whether the project met a job-quality standard. However, as a check on the incentive deci-

sion-making process, it might be wise to identify in advance some minimum standards for projects, under the assumption that projects failing to meet standards would be unlikely to pass a benefit-cost test. Projects that did not meet these minimum standards would have to go through a special review process to be approved. These minimum standards would give economic developers a summary of what types of projects they would be encouraged to pursue, and would give the public and policymakers extra assurance that there is some selectivity involved in the benefit-cost analysis process. Benefit-cost analysis is too often a "black box" dominated by technical experts. Standards may help clarify what the analysis process is trying to do.

More up-front incentives. Studies indicate that corporate executives use very high real discount rates in making investment decisions, averaging 12 percent (Summers and Poterba 1992). For business location decisions, this implies that the portion of the property tax abatement provided 10 years from now is almost completely irrelevant to the location decision, because the business decision maker is focused on shorter-term profit objectives. On the other hand, most studies suggest that governments should use social discount rates much lower than 12 percent. To serve the public interest, governments should have a longer time horizon than corporate executives.

As a result, it is possible to have a greater effect on business location decisions at a lower cost by providing a greater proportion of the incentive up front. Up-front incentives also force state and local political leaders to immediately deal with incentives' costs, rather than pass on costs to their successors. However, providing more up-front incentives brings to the forefront the issue of whether the incentive can be recovered if the location decision does not provide the promised benefits, for example, if the company relocates. To provide more incentives up front, a greater proportion of the incentive can be provided as customized training or infrastructure, or tax incentives can be made larger but shorter term.

Clawbacks. The net benefits of an incentive regime increase when some of the incentive can be recovered if the business receiving the incentive does not provide the planned social benefits, for example, if the business relocates or the number of jobs created falls short of pro-

jections.[11] This can be dealt with by legally binding "clawback" provisions, which recover some portion of the up-front incentives if the business does not meet performance goals. State use of clawback provisions is increasing, with the number increasing from 9 to 17 between 1992 and 2002 (Peirce 2002). It is believed that local use of clawbacks is also increasing. Surveys of local governments show that 59 percent of local governments claim they "always" require a performance agreement as a condition for incentives, and an additional 30 percent of local governments claim they "sometimes" require a performance agreement (Bartik 2004a).

The main potential problem with clawbacks is that if they are unduly onerous, they may be a disincentive to attracting businesses. However, if they are designed with incentives so they are clearly related to the social benefits associated with the business, then businesses that expect to make a long-term investment in the community should not perceive clawbacks as a huge disincentive to their location decisions.

Redesign incentives to focus more on the social benefits of business growth.[12] As discussed above, the largest portion of the social benefits of growth arise from increasing local employment rates. Increasing such rates provides the unemployed with greater job experience, puts upward pressure on local wages, and increases local taxes more than public spending needs. Local employment rates are most likely to go up when the new business hires the unemployed, and least likely to go up when the new business hires in-migrants. The rates may go up when the new business hires local residents who are already employed, as this creates a job vacancy that may be filled by the local unemployed.

Therefore, incentives will be more targeted on the projects with greatest social benefits if the amount of the incentive is based on whom the business hires. Incentives should be somewhat greater for projects that hire local residents, and considerably greater if the business hires the unemployed.[13] More benefits of greater employment experience occur in the first year of employment, so it would be justifiable for greater incentives to be provided for the initial hiring of the unemployed and their first year of employment, and somewhat smaller incentives for subsequent years. In addition to targeting incentives on projects that provide greater social benefits, such incentives will encourage busi-

nesses to do more hiring of the unemployed. Such hiring incentives will be more effective if tied to local programs that attempt to screen and train potential hires from among the unemployed, which I discuss next (Bartik 2001, Chapter 8). Finally, tying incentives to the provision of social benefits is an automatic "clawback," as the incentive that is not paid until the benefit is delivered does not need to be "clawbacked" if the benefit is not delivered.

Tie incentives to participation in "first source" hiring programs.[14] Many local governments have some nominal requirement for local hiring by businesses receiving incentives, but frequently these requirements are unenforced because of fears of discouraging business locations. A few cities, such as Portland (Oregon), with its now-defunct JobNet program, and Berkeley, with its First Source program, have tried to encourage local hiring without adversely affecting business locations. These programs combine a moderate requirement—that businesses "consider" hiring workers referred by the program—with a public service to help businesses overcome the many difficulties they face in finding productive workers to fill jobs with few formal credential requirements. Studies suggest that one-quarter of new hires in small and medium-sized firms are producing less than 75 percent of what the employer anticipated after six months on the job (Bishop 1993). These difficulties may occur in part because job performance is so dependent on "soft skills," such as showing up at work on time and getting along with co-workers and customers, and these soft skills are hard to observe in the normal hiring process. Because normal hiring so often is disappointing to employers, a program that can train and screen qualified workers, who are then considered for hiring by employers receiving incentives, can potentially help businesses find productive workers. Local public agencies may have some comparative advantage over private businesses, particularly private businesses from out of town, in working with neighborhood groups, churches, and social service agencies to find productive workers for jobs with low credential requirements. Local public agencies may also be better able than businesses to mobilize resources for training from local workforce agencies and the local community college.

Focus incentives on in-kind up-front services such as customized training and access roads and other infrastructure. Customized training and infrastructure are incentives that inherently are concentrated up front and therefore have the advantages of up-front incentives mentioned previously, including a greater effect on location decisions per present value dollar of incentive. They also can be at least partially clawed back, without legal proceedings, as the infrastructure and most of the trained workers will remain in the local area even if the business relocates or downsizes. Customized training can be designed to increase the likelihood that a greater proportion of those trained and hired are local residents who otherwise would be unemployed (see Batt and Osterman [1993] and Osterman and Batt [1993] for some examples in North Carolina's customized training programs). Finally, both customized training and infrastructure can be justified as making public services more effective, rather than unjustifiably treating some businesses more favorably than others. For example, public infrastructure, such as highways, is supposed to be provided in response to demand. Providing access highways as part of an incentive package is only an "incentive" because the access highway is expedited to the top of the "to do" list. It could be argued that making the provision of highways more responsive to changes in demand makes government more responsive. It could also be argued that training programs can increase their quality by becoming more customized to the needs of both those receiving the training and those organizations that will demand the skills of those trained.

Federal intervention in incentive policy. In theory, federal intervention could be used to require or encourage all of these recommendations for more effective incentive policy. However, absent some rationale for why there is a national interest in incentive policy, there is no reason to think that federal intervention will be any wiser than state and local incentive policies. There is some reason to think that federal intervention would make things worse. The federal government has less knowledge about local labor market institutions, which might be important, for example, in designing customized training programs. The federal government will also have less of other "local knowledge": less knowledge about job needs of different groups, the hiring practices of local employers, the problems caused by particular environmentally contaminated properties, the capacity of particular local infrastructure,

etc. In addition, the federal government is likely to be less responsive to local needs. Because the benefits and costs of incentive policies depend on the details of the local labor market and local fiscal structure, effective policymaking depends on an intimate knowledge and responsiveness to these details. Federal intervention is at a disadvantage.

Federal government intervention in incentive policy is particularly likely to be casually reckless if it is free of cost constraints, accomplishing its goals by regulating or taxing state and local incentives it wants to prevent rather than subsidizing incentives it wants to encourage. For example, some have proposed having Congress ban or heavily tax incentives (Minge 1999; Burstein and Rolnick 1995). As argued previously, some incentives have social benefits, and assuming the "federal incentive tax" was not easy to evade, a uniform tax would discourage these beneficial incentives. For example, an economically distressed city may find that economic development incentives are part of the best policy package for its economic revitalization. If a federal incentive tax prevents these incentives, that distressed city may have to adopt an inferior revitalization package—for example, one that tries to make the city competitive by lowering overall business tax rates and making cuts in redistributive public services. However, in practice I would suspect that most federal incentive taxes would be easy to evade, so this policy would serve little purpose except political posturing.

In theory, federal intervention could be more selective than a uniform federal incentive tax, which would make the intervention more beneficial. For example, Congress could only impose the federal incentive tax on incentives provided by affluent local areas. However, I am skeptical that Congressional intervention would be so enlightened.[15] If Congress is able to gain revenue, or at least not lose revenue, by regulating state and local economic development activities, I suspect that this unfettered intervention would be just as likely to discourage efficient economic development programs as inefficient programs.

Federal intervention in incentive policy is more likely to be effective if it is 1) targeted on instances where there is a clear national interest in state and local incentive policy, and 2) accomplished through federal subsidies rather than taxes and regulation, which forces some awareness of costs by federal decision makers. Three types of federal interventions appear justified based on national interests. First, federal dollars should continue to be provided for initiatives that seek to target

economically distressed areas, such as Empowerment Zones and the New Markets Initiative. The rationale for this intervention is that there is a national interest in promoting a more progressive income distribution, which such initiatives help accomplish. Second, federal dollars should be provided for rigorous prospective and retrospective benefit-cost analyses of economic development incentives. In the process of evaluating these incentives, such study will disclose exactly what incentives are being offered in different states. The incentive offers from the different states should be compiled by the federal government into a database that would be publicly available. The rationale for this intervention is that information on what incentives are being offered, and these incentives' effectiveness, is a public good with benefits to economic developers and the public in all states. Third, federal dollars should be provided to help fund metrowide economic development organizations, with extra funding for metrowide economic development organizations that extend across state boundaries. The federal government has some advantage over the states in encouraging cooperation that might benefit an interstate metro area as a whole.

CONCLUSION

Wasteful economic development incentives should be dealt with largely by opening up the incentives policy process at the state and local level to broader public participation and debate. To promote more effective public participation, we should continually improve our data on and analyses of the benefits and costs of incentives. Broader public participation and better analysis should lead to the specific reforms that are discussed in this chapter.

Such a reformed incentive policy would only offer incentives selectively, subject to an overall budget constraint. Incentive offers would be coordinated at the metrowide or state level. Full public information would be available on all incentive offers and their results. Incentive offers would be subject to a prospective benefit–cost analysis, have some minimum standards for job quality, and have provisions for recovering incentives if performance goals were not achieved. Incentives would focus on encouraging more hiring of the unemployed, for example,

through hiring subsidies and customized training grants. Economic development incentives should be seen as a part of an overall policy to improve local labor markets. Economic development incentives should be used to increase labor demand for those local residents who are unemployed or underemployed. Such local demand policies should be coordinated with local labor supply policies, which would provide the training and education needed for local residents to succeed in these new and better jobs. In addition to overcoming barriers to the efficient working of local labor markets, economic development incentives should be used to overcome barriers preventing the use of brownfields, and to encourage use of underutilized public infrastructure.

A "bottom-up" approach to reforming incentives, by working at the state and local level to improve incentive policy, is likely to be more effective, more durable, and more democratic than a heavy-handed "top-down" approach of using federal intervention to prevent certain practices. Federal policy can be more helpful by providing financial support for "bottom-up" reform: subsidizing better benefit-cost analyses and information on incentives, encouraging stronger coordination of incentives at the metro level, and targeting assistance on economically distressed local areas.

Incentive reforms are preferable to incentive abolition, as there are real economic forces that in some cases make incentives a desirable policy. Attempting to abolish incentives will lead to even more wasteful policies to create a "good business climate."

If one believes the government can take wise action, it is sensible to allow state and local governments the flexibility to use incentives. We should have a reasonable faith in state and local governments as "laboratories of democracy." State and local experimentation in economic development incentives can lead to better public policies if the public has the information and participation needed to allow for incentive reforms.

Appendix 5A

Plausible Calculations of Medium-Term Benefits and Costs of Economic Development Incentive Programs for a State or Metropolitan Area

This appendix presents in table form plausible medium-term flows of benefits and costs associated with an economic development incentive program. The table is an expansion and updating of calculations I have previously presented in Bartik (1991a, 1992, 1994b, 2004a) and Bartik, Eisinger, and Erickcek (2003). The incentive program considered is for a state or a metropolitan area. The benefits and costs estimated are for the residents of the state and metropolitan area, and their governments and businesses. Benefits and costs to the federal government, or to persons, businesses, or governments outside the state or metropolitan area, are not considered. The benefits and costs are calculated as annual flows over some medium term after the incentives are provided, say, five years. Some table entries also speculate about shorter-term or longer-term benefits and costs. Benefits and costs are calculated in two ways: 1) as percentages of annual state or local personal income for a 1 percent once-and-for-all labor demand increase to state or metropolitan area employment, with this 1 percent employment increase induced by incentives of average effectiveness; and 2) as real dollars, using prices of 2003, per job induced by incentives of average effectiveness. This appendix will go through Table 5A.1 line by line, explaining how each line is calculated based on the research literature and various data sources.

The gross incentive costs (line [1]) are derived assuming the response of state or metropolitan employment with respect to an incentive will be equivalent in gross costs to the foregone business tax revenue to induce increased local activity if the elasticity of local employment with respect to state and local business taxes is −0.25. As derived in Note 4, the gross foregone business tax revenue per induced job (line [1], column B) is $dR/dJ = (JdT)/dJ = T(1/E)$, where dR is the gross change in business tax revenue due to a reduction in business taxes, J is the number of jobs, dJ is the number of induced jobs, T is the business tax rate calculated as state and local business taxes per job, dT is the change in that tax rate, and E is the elasticity of state and local employment with respect to the business tax rate, which is assumed to be −0.25, a compromise between the −0.3 preferred in the literature review of Bartik (1992) and the −0.2 preferred by Wasylenko (1997). Business tax revenue per job is calculated as detailed in Note 4. Line (1)(A) is derived in similar manner, using the

Table 5A.1 Estimated Benefits and Costs of Economic Development Incentives

Category	Benefits/costs as % of local personal income for 1% induced employment growth (column A)	Benefits/costs in annual real 2003 dollars per induced job (column B)
(1) Incentive costs	−0.218	−9,699
(2) Fiscal effects		
(2.1) Induced revenue from additional business tax base	0.055	2,425
(2.2) Net incentive cost = (1) + (2.1)	−0.163	−7,274
(2.3) Net long-run fiscal effects of equal employment and population growth	0.000	0
(2.4) Gross effects of extra jobs on revenue from business tax base	0.011	485
(2.5) Required public services for extra jobs	−0.006	−285
(2.6) Net fiscal effects of "profit" on extra business tax base = 2.4 + 2.5	0.005	200
(2.7) Reduced social spending and unemployment benefits due to higher employment rates	0.019	845
(2.8) Sales/income taxes on increased personal income of local residents = 3.8	0.018	795
(2.9) Property taxes on increased real estate values	0.008	343
(2.10) Short-run fiscal effects: Positive if underutilized infrastructure, negative if growth requires expensive new infrastructure	Uncertain	Uncertain
(2.11) Net quantifiable fiscal effect = 2.6 + 2.7 + 2.8 + 2.9	0.049	2,183

(3) Labor market effects		
(3.1) Gross real earnings gains for local residents	0.317	14,104
(3.2) Extra real earnings on new job	0.916	40,766
(3.3) Subtracting out earnings of in-migrants = 80% of (3.2)	−0.733	−32,613
(3.4) Net earnings of local residents on new jobs = 3.2 + 3.3	0.183	8,153
(3.5) Increase in real wages due to promotion of local residents to better-paying occupations = 3.1 − 3.4	0.134	5,950
(3.6) Loss of social spending transfers = 2.7	−0.019	−845
(3.7) Net increase in real income of local residents before taxes = 3.4 + 3.5 + 3.6 = 3.1 + 3.6	0.298	13,258
(3.8) Sales/income taxes on increased income of local residents	−0.018	−795
(3.9) Increase in income of local residents after taxes = 3.7 + 3.8	0.280	12,463
(3.10) Reservation wages in low unemployment local area = 90% of 3.4	−0.165	−7,338
(3.11) Reservation wages in high unempl. area: assumed zero	0.000	0
(3.12) Net labor market benefits in low unemployment area = 3.9 + 3.10	0.115	5,125
(3.13) Net labor market benefits in high unemployment area = 3.9 + 3.11	0.280	12,463
(3.14) Shorter-run or longer-run labor market benefits: probably greater in short-run, less in long-run	Uncertain	Uncertain
(4) Real estate effects		
(4.1) Gross gains in real estate values, as annual income flow	0.077	3,426
(4.2) Increased annual property tax	−0.008	−343

(continued)

Table 5A.1 (continued)

Category	Benefits/costs as % of local personal income for 1% induced employment growth (column A)	Benefits/costs in annual real 2003 dollars per induced job (column B)
(4.3) Net gain to property owners	0.069	3,083
(5) Locally-owned business effects: Profit increase at businesses serving local market, decrease at export-base businesses.	Uncertain	Uncertain
(6) Environmental/congestion effects: likely to be negative unless project involves restoring brownfields	Uncertain	Uncertain
(7) Community effects: Some loss in community character and increased rents for local residents for growth beyond original community size, some gain for growth that restores community's customary size	Uncertain	Uncertain
Total quantifiable effects		
(8.1) In low unemployment local labor market = 1 + 2.11 + 3.12 + 4.3	0.016	692
(8.2) In high unemployment local labor market = 1 + 2.11 + 3.13 + 4.3	0.181	8,030

equation that the foregone taxes as percentage of income to induce 1 percent employment growth will be = 100(dT/Y) = ([1% employment growth/E](T/Y), where T is now business taxes in dollar terms, Y is personal income, and state/local business taxes as a percent of personal income are assumed to be 5.46 percent, based on calculations in Bartik (1991a, p. 180).

Lines (2.1) through (2.2) present a side calculation showing fiscal effects and net incentive costs if the only fiscal effects considered are the extra business tax revenue from enhancing the business tax base. This extra business tax revenue is simply the business tax revenue associated with the induced jobs. Line (2.1)(B) is business tax revenue per job in 2003 dollars, based on calculations in Note 4, as the (B) column expresses everything per one induced job. Line (2.1)(A) is 1 percent of average business tax revenue as a percent of personal income, because the (A) column expresses everything per 1 percent in induced extra employment. Line (2.2) then shows a supposed "net incentive cost," which, however, is erroneous because it omits all the fiscal effects from the public services associated with the extra business tax base, as well as the taxes and public services associated with the extra households, and the effects of higher employment on the need for social services and revenue from the property tax. This erroneous calculation is the style of calculation frequently done by advocates for incentives who claim that such incentives "pay for themselves." Line (2.2) shows that such incentives clearly don't pay for themselves even if we only look at the business tax base gains.

To simplify the analysis of the full fiscal effects, I start from the baseline of the long-run fiscal effects of employment growth and population growth when both increase by the same percentage. This baseline is straightforward to analyze, and the actual net fiscal effects of the incentive-induced growth are then analyzed as effects of deviations from this baseline. Line (2.3) assumes that if state and local public services are constant returns to scale in the long run, as indicated in Fisher (1996) and Inman (1979), a balanced increase in employment and production should produce equal tax revenue and public service needs. But of course we don't expect that induced jobs will bring about the same percentage increase in population. Based on Bartik (1991a, 1993), we expect that for a given percentage increase in induced employment, the percentage increase in population will be about four-fifths as much. So we analyze the fiscal effects as if for every 1 percent in induced jobs, we have four-fifths of 1 percent in increased population. The fiscal effects then are a combination of a "balanced" increase of four-fifths of 1 percent in both employment and population, which should have zero fiscal effects in the long run, and the fiscal effects of the "extra" one-fifth of 1 percent of jobs. The effects of these extra jobs are the effects of these extra jobs on the business tax base and required public services, as well as the effects of the extra jobs, via a higher employment rate,

on the taxes and transfers associated with higher earnings for local residents, considered in the section on labor market effects.

Line (2.4) calculates the business taxes from the extra jobs as one-fifth of the business taxes from the business tax base associated with all the jobs, from line (2.1). Line (2.5) is based on Oakland and Testa's (1996) calculation that business tax revenue is 70 percent greater than public services directly required by businesses. Line (2.7)(A) is based on estimates from Bartik and Eberts (1999) that 1 percent employment growth reduces welfare caseloads by 6 percent, and estimates by Chernick and McGuire (1999) that own-source state and local spending on social services is 1.3 percent of personal income; social services spending is assumed to decline by the same percent as welfare caseloads. This yields a decrease in social services spending as a percent of income of −0.008 percent. This may seem small compared to overall earnings gains of 0.317 percent (see line (3.1) below), but growth is only modestly progressive; about 4.2 percent of the total earnings gains from stronger regional labor demand goes to the bottom income quintile, which is not much more than their share of income (Bartik 2001, Table 5.3). In addition line (2.7)(A) is based on estimates (Bartik 1991b, Table 2) that 1 percent extra local employment growth in the short run reduces unemployment payments by 3.4 percent. Based on 1995 statistics from O'Leary and Wandner (1997, p. 733), and 1995 personal income data from the Regional Economic Information System, UI benefits are 0.33 percent of personal income, so a 3.4 percent reduction in such payments will reduce unemployment benefit payments by 0.011 percent of personal income. Adding 0.011 percent to the 0.008 percent reduction in social spending yields the 0.019 percent figure shown in line (2.7)(A). Line 2.7(B) is derived from (A) by using ratios. Line (2.8) is based on the taxes associated with the extra earnings of local residents, and will be discussed further when the labor market section of the table is discussed. Line (2.9) is based on the property taxes on the increased real estate values associated with growth and is discussed further in that section. Line (2.9) is based on case studies by Altshuler and Gomez-Ibanez (1993) that show that new required infrastructure frequently vastly exceeds tax revenue from growth; because existing infrastructure will eventually require replacement, this suggests that depreciation charges for existing infrastructure are understated.

Line (3.1)(A) is based on estimates reported in Bartik (1991a, p. 163) on effects of growth on real earnings, expressed as a percent of personal income by assuming earnings are 73.5 percent of personal income (Bartik, 1991a, p. 163). Line (3.1)(B) uses ratios to calculate this on a per job basis. Lines (3.2) through (3.5) attempt to divide line (3.1) into various components: gains for workers newly employed, vs. gains for workers already employed who get better jobs. Line (3.2) attempts to replicate what a naive benefit-cost analysis

would assume about earnings gains: they are equal to the earnings on the induced jobs. Line (3.2)(B) is based on dividing total earnings by total employment, using 2002 data from the Regional Economic Information System. Line (3.2)(A) uses ratios to calculate this as a percent of personal income. Line (3.3) subtracts out the earnings of in-migrants to get the effects on local residents who get jobs in line (3.4). The rationale for subtracting line (3.3) is twofold: 1) this analysis takes a local perspective in which only the original residents count, and 2) the analysis in Bartik (1991a) suggests that the well-being of in-migrants is not substantially affected by extra jobs in this local area, as the in-migrants would otherwise move to a similar local area. After subtracting line (3.4) from line (3.1), the remaining earnings gain must be from local residents moving up to better paying jobs. The residual calculation for line (3.5) appears roughly consistent with data from Bartik (1991a) on how employment growth affects occupational upgrading for local residents. The loss of transfer income in line (3.6) was previously derived for line (2.7). Line 3.8 is based on estimates from Citizens for Tax Justice that state and local personal sales and income taxes in 1995 averaged 6 percent of income for households in the middle income quintile (Ettlinger et al. 1996, Appendix 1, p. 51). In line (3.10), the reservation wage figure of 90 percent is used in Bartik (1991a) based on a review of the reservation wage literature. The assumption that reservation wages are zero for the unemployed in high unemployment areas is arbitrary. This assumption might be justified, even if nonwork time has some value for the unemployed, as seems likely, if unemployment has sizable social costs such as increased crime or increased social problems for the children of the unemployed. Lines (3.12) and (3.13) emphasize how different the labor market benefits are based on different assumptions about reservation wages. Line (3.14) reflects that estimates suggest that the earnings effects reported in this table for local residents are probably greater in the short run and less in the long run than the medium-run figures used here (Bartik 1991a; Bartik 1994b). The question mark for line (3.14) suggests that it is unclear how this would affect a present value analysis compared to simply using the medium-run annual flow benefits and costs reported in the table.

Line (4.1)(A) comes from Bartik (1994b, Table 3) and is based upon estimates by Bartik (1991a) that 1 percent employment growth increases real estate values by 0.451 percent. A 10 percent real discount rate is used to convert changes in capital values to annual flows. Line (4) (B) is derived from (A) using ratios. Line 4.2 is based on Table 3.13 of the 2001 American Housing Survey, which estimates that the median residential property tax rate for owner-occupied housing is 1 percent of value (U.S. Census Bureau 2001).

The line (5) discussion assumes that only locally owned businesses should be considered in this local benefit-cost analysis. This is consistent with this

analysis focusing on the perspective of the state or metropolitan area, and ignoring effects on the federal government, or other state or metropolitan areas. Growth will clearly increase nominal wages and prices, as shown in Bartik (1991a), which reduces profits for businesses selling to outside markets. But businesses with some comparative advantage that they can maintain as the area grows (e.g., a local newspaper) will likely increase profits due to growth, as discussed in Bartik (1991a). For more discussion of environmental effects of local economic development, and of brownfields, see Bartik (2004b).

The line (7) entry assumes that in a world with imperfect mobility, changes in a community's "character" that bring it away from the originally chosen amenity package of the area's households, with the accompanying wage and price changes, will reduce utility of the area's original residents, as these original residents must have preferred the original amenity package given prevailing wages and rents. For more on this type of model, see Bartik (1991a, pp. 73–76), and Bartik (1986).

There is considerable uncertainty in these figures; for example, I could come up with a rationale for adjusting the incentive cost figures and the earnings gains numbers up or down by 50 percent or more. Stating the numbers in this table to three, four, or five digits is an aid to calculation, but is a misleading indication of how much we really know. Therefore, it would be relatively easy to come up with a scenario under which quantifiable net benefits of economic development in a low unemployment area are negative.

Notes

This chapter reprinted by permission. See Bartik (2005).

1. I have previously written about incentives in Bartik (1990; 1991a; 1993; 1994a,b,c; 1996a,b; 2001; 2003; 2004a,b), as well as in Bartik, Erickcek, and Eisinger (2003). My comments on the benefits and costs of incentives from a state and local perspective are reasonably consistent. As I will footnote later, my comments on federal intervention in incentives have some inconsistencies.
2. The following Michigan programs are cash or near-cash incentives to large businesses: property tax abatements, one-third of tax increment financing, MEGA tax credits, brownfield tax credits, Renaissance zones, and federal Empowerment Zone/Enterprise Community funding. Together these programs comprise $531 million of the $706 million in annual Michigan economic development resources. Michigan also spends $13 million on customized job training, $60 million in federal community development block grants on infrastructure development for economic development in nonurban communities, and $48 million on business recruitment and retention. The remainder of Michigan economic development

resources are devoted to small business development, high-tech research, and manufacturing extension.

3. Although this is the general consensus, not all scholars agree that state tax effects on business location are significant. The most prominent scholarly critic of the notion that state taxes affect business location is McGuire. McGuire admits, however, that her position is inspired in part by fears of how state policymakers will respond to the conclusion that taxes affect business location. According to McGuire:

> . . . I confess to being somewhat (perhaps very) irrational in my interpretation of this literature. With respect to the interstate and interregional studies, despite the number of studies with significant coefficients, I find it difficult to be convinced that taxes are an important factor in explaining differences in business location decisions and economic activity between states or regions. In part I believe the discrepancy between my conclusion and that of many other scholars of the topic is due to our different perspectives. I came to this topic through the tax-study, blue-ribbon-commission route. I have seen firsthand state policymakers grasping for straws. I simply do not think that the evidence allows us to comfortably advise lawmakers that reducing the corporate income tax rate or the personal income tax rate will revive a flagging state economy. (McGuire 2003)

4. This calculation is as follows: the tax elasticity of private employment with respect to state and local business taxes (E) is defined as $(dJ/J)/(dT/T)$, where J is the number of jobs, dJ is the change in the number of jobs, T is the tax rate, and dT is the change in the business tax rate. The percentage change in revenue from a tax cut, dR/R, will approximately equal $dT/T = dJ/J$.

   Substituting and rearranging, one obtains, for the net foregone revenue cost per job created, $dR/dJ = (R/J)[1 + (1/E)]$. R/J is state and local business tax revenue per job, which was about $1,634 per job in the United States as of 1989. With a value of −0.25 for E, one obtains dR/dJ = −$4,902. Updating by the change in consumer price index from 1989 to 2003 gives a figure in 2003 dollars of (184/124)4,902 = $7,274. The figure of $1,634 for state and local business taxes per private employee comes from three sources. Total state and local tax revenue in fiscal year 1989 was $469 billion (U.S. Census Bureau 1991, p. 21). One estimate of the business share of state and local taxes is 31 percent (ACIR 1981, revised version of table A-1; figures for 1977). Private nonagricultural employment in the United States averaged 89 million during fiscal year 1989 (U.S. Department of Commerce 1991, S-10). These figures could be updated using more recent data, but most of the studies were estimated using earlier data, so use of this historical data is probably better. The elasticity used is a compromise between the −0.3 preferred in the literature review by Bartik (1992) and the −0.2 preferred by Wasylenko (1997). The Consumer Price Index figures come from the U.S. Bureau of Labor Statistics. I used an identical calculation in Bartik (2004a, 1992). The dynamic calculation here only looks at effects of taxes on

the business tax base, and ignores extra public expenditures required by a higher business tax base, and extra taxes and required public expenditures because of a larger household tax base.

The cost in static tax revenue is $dR = JdT$, which, per job created by lower business tax rates, is $JdT/dJ = T(1/E)$ = (business tax base per job) (1/0.25). Using the same figures the loss in static revenue from a business tax cut in 2003 dollars is \$9,699 = 1,634(184/124)(1/0.25).

5. Derived from Fisher and Peters (2002, Table 3.7). This takes their present value of incentives per job in the highest subsidy city and state of \$22,678 in 1994, translates this into an annual equivalent by multiplying by the 10 percent discount rate used by Fisher and Peters, and then adjusts to a 2003 value using the Consumer Price Index, or (1984/148.2) × (0.10)(22,678) = 2,816.
6. An annual subsidy of \$2,816 per job will yield a gross cost of \$9,699 per induced job, as previously calculated, if the proportion of induced jobs (p) satisfies the equation p = \$2,816/\$9,699 = 0.29.
7. These calculations are based on Fisher and Peters' figures for the mean value of "general incentives" per job in 1994, translated into an annual equivalent and updated to 2003 dollars.
8. What about migrants? I explore this in Bartik (1991a, Chapter 3). The argument is that persons on the margin of migrating in, or migrating out, do not have their opportunities substantially affected by changes in the characteristics of this one local area. If the local area had remained unchanged, with no growth, the persons who would have otherwise migrated in would choose other, similar metropolitan areas. Similarly, the individuals whose outmigration is averted by growth are by definition close to indifferent between staying or moving.
9. For more "market failure" analysis of state and local economic development policy, see Bartik (1990, 1994c) or Courant (1994).
10. This fiscal impact analysis is imperfect. The fiscal impact analysis only looks at state revenues, and not at state expenditures, or local taxes and expenditure. In addition, a full benefit-cost analysis would include labor market benefits. See Bartik, Erickcek, and Eisinger (2003) for a more detailed discussion of MEGA.
11. More extensive discussion of clawbacks is found in Peters (1993) and Weber (2002).
12. This is advocated by Bartik (2001) and Schweke and Woo (2003).
13. Favoring the unemployed in jobs associated with business subsidies would seem likely to be acceptable discrimination from a legal perspective. Favoring local residents is more open to question.
14. More on "First Source" programs is in Anderson (1999); Bartik (2001, Chapter 9); Molina (1998); and Schweke (1999).
15. I have been inconsistent over the years in my comments on federal regulation of incentives. I have sometimes been tempted by the notion that the federal government should intervene to prevent the wasteful incentives of state and local areas with low unemployment. In the current political environment, I am pessimistic that an intervention that comes at no federal cost, such as taxing incentives, would be so benign as to simply target wasteful incentives.

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Reining in the Competition for Capital

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Editor

2007

W.E. Upjohn Institute for Employment Research
Kalamazoo, Michigan

Library of Congress Cataloging-in-Publication Data

Reining in the competition for capital / Ann Markusen, editor.
p. cm.
Includes bibliographical references and index.
ISBN-13: 978-0-88099-295-4 (pbk. : alk. paper)
ISBN-10: 0-88099-295-6 (pbk. : alk. paper)
ISBN-13: 978-0-88099-296-1 (hardcover : alk. paper)
ISBN-10: 0-88099-296-4 (hardcover : alk. paper)
1. Capital movements. 2. Capital market. 3. Fiscal policy. 4. Competition, International. I. Markusen, Ann R.
HG3891.R449 2007
332'.041—dc22

2006103084

W.E. Upjohn Institute for Employment Research
300 S. Westnedge Avenue
Kalamazoo, Michigan 49007-4686

Cover design by Alcorn Publication Design.
Index prepared by Diane Worden.
Printed in the United States of America.
Printed on recycled paper.