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Working Paper
Incentive Solutions

Upjohn Institute Working Paper, No. 04-99

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Suggested Citation: Bartik, Timothy J. (2004) : Incentive Solutions, Upjohn Institute Working Paper, No. 04-99, W.E. Upjohn Institute for Employment Research, Kalamazoo, MI, <https://doi.org/10.17848/wp04-99>

This Version is available at:

<https://hdl.handle.net/10419/172434>

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2004

Incentive Solutions

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Upjohn Institute Working Paper No. 04-99

****Published Version****

[Growth and Change](#) 36 (Spring 2005): 139-166. Under title Solving the Problems of Economic Development Incentives

In [Reining in the Competition for Capital](#), Ann Markusen, editor. Kalamazoo, MI: W.E. Upjohn Institute, 2007, pp.103-140. Under title Solving the Problems of Economic Development Incentives

Citation

Bartik, Timothy J. 2004. "Incentive Solutions." Upjohn Institute Working Paper No. 04-99. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/wp04-99>

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Incentive Solutions

Upjohn Institute Staff Working Paper No. 04-99

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February 2004

JEL Codes: R580, R380, H71

Paper prepared for presentation on February 27, 2004, at “Reining in the Competition for Capital,” a conference organized by Professor Ann Markusen at the Humphrey Institute at the University of Minnesota. I appreciate the assistance of Claire Black, Linda Richer, and Babette Schmitt with this paper. All opinions expressed are those of the author and should not be construed as official views of the Upjohn Institute.

Incentive Solutions

Abstract

This paper reviews the research literature relevant to economic development incentives provided by state and local governments, and recommends reforms in these incentives. I argue that the main problem with current incentive policies is that state and local governments often provide incentives that are not in the best interest of that state or local area, for example that are excessively costly per job created, or that provide jobs that do not improve the job opportunities of local residents. I suggest that reforms should be “bottom-up” rather than “top-down.” Regulation of incentives by the federal government, or by international trade treaties, may prevent both desirable and undesirable incentives. “Bottom-up” reforms would include more information on incentive offers, a budget constraint on the volume of incentives, stronger standards for job quality, accessibility, and performance in incentives, and better benefit-cost analyses of incentives.

How can economic development incentives best be reined in? I agree with most students of this issue that economic development incentives are often a poor investment or wastefully designed. On the other hand, in this paper I continue to maintain my position that some incentives can be socially beneficial.¹ The challenge is to design policies under which wasteful incentives are dropped but productive incentives are kept.

To design “incentive reform” policies to rein in incentives, we must first agree on the economic and social forces that have led to current U.S. incentive practices. I focus on this economic and social context in the next section of this paper. What are the social benefits and costs of incentives? Why are incentives so often wasteful? Once we have answered these questions, we can focus our reforms on the key problems leading to wasteful incentives, while encouraging incentives that target important social benefits.

My conclusion is that the underlying forces that makes some incentives beneficial are twofold: 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 tend to 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.

I then use this analysis to consider possible incentive reforms. I conclude that incentive reform should focus on improving the process and design of local incentive policy in basic ways: a more open and democratic process with full information, a budget constraint on incentives, better benefit–cost analysis, incentives focused on encouraging the aspects of new business activity that bring social benefits, and performance requirements. Federal policy can encourage

better information about incentives, help finance efficient incentives in the economically distressed regions, and encourage cooperative economic development policy in metropolitan areas that cross state lines. Many proposed federal policies to ban incentives are likely to be evaded in ways that are counterproductive. I do not think that incentive regulation from international organizations or trade treaties is likely to prove beneficial at the present time for the United States.

The Forces Leading to Incentives

Before discussing the forces leading to incentives, I should define what I mean by incentives. In this paper, I will 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 tax 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 devoted to 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, Erickcek, and Eisinger 2003).²

Other incentives to larger businesses are close substitutes for cash assistance. Incentives to attract or retain large businesses may also include various types of customized services, which help meet the specific 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 public infrastructure (such as access roads) that is related to the project.

Customized services are sometimes a very close equivalent to cash; for example, in some cases customized training is provided by writing a check to the company to train its own new hires and employees. Another close substitute to incentives are tax breaks provided for new business activity as an “entitlement” under state or local tax laws, such as investment or employment expansion tax credits that go by right to all businesses that meet the tax law’s criteria. The supposedly discretionary tax incentives, such as property tax abatements, may become so routine and usual that they are virtually equivalent to tax breaks provided as an “entitlement” under state or local tax laws. Reforms to cash incentives for large businesses may lead to increased use of these other incentives for large business.

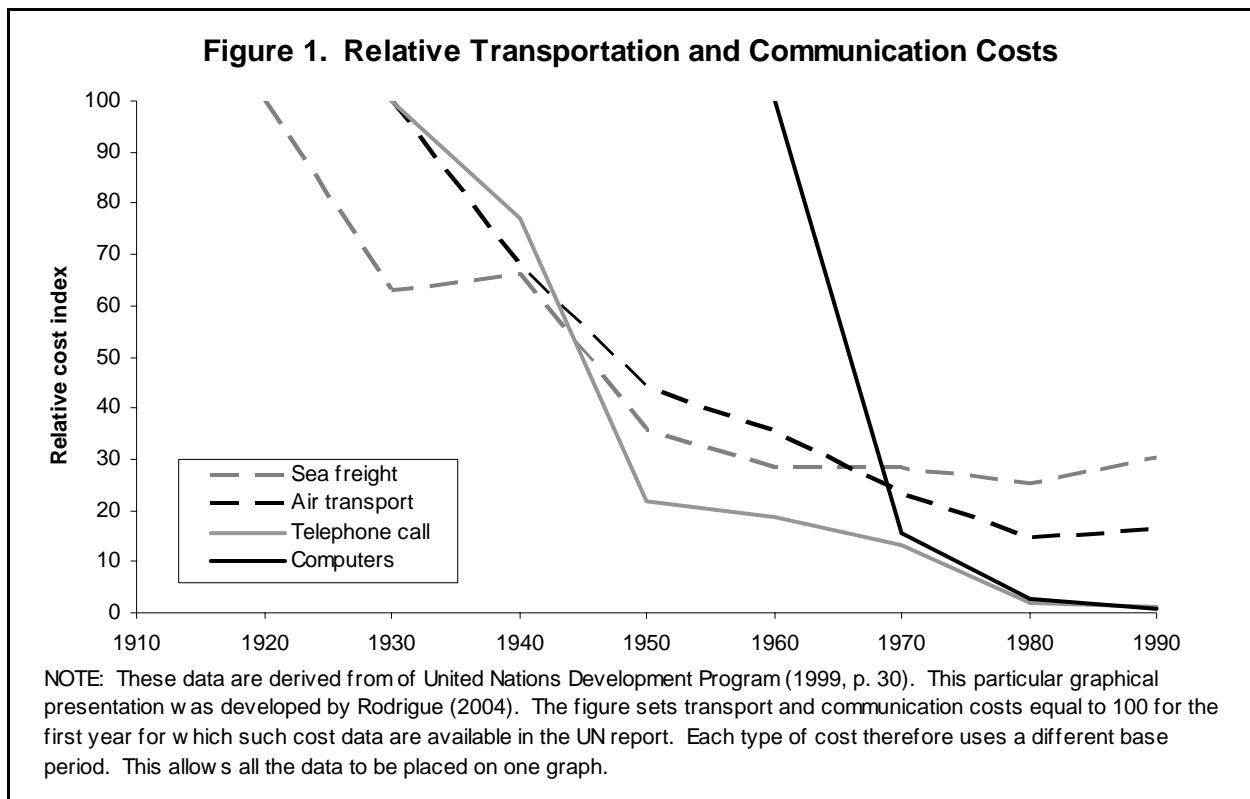
Economic development programs also provide assistance to new businesses and small and medium-sized businesses, including many that are high-tech, which is certainly intended to act in part as an “incentive” for the growth of such businesses. This assistance to small and medium-sized businesses includes cash assistance, such as loans or equity finance, and grants for research and development. Economic development assistance to small and medium-sized programs may also include customized services, such as information or training in how to start up a business, or make an existing one more productive or more profitable (e.g., industrial extension services, small business development centers). In practice, it is not easy to draw a fully justifiable line between large and medium-sized businesses, or between high-tech and non-high-tech businesses. Reforms to incentive programs for large businesses may also affect these other programs.

Is there any good rationale for state and local governments to offer economic development incentives to attract or retain large businesses? Is there any good rationale for why

such incentive use appears to be rising over time? One plausible rationale is that such incentives are increasingly perceived as a necessary cost incurred to produce social benefits. It seems more and more plausible that incentives might make a difference in attracting or retaining business, which produces social benefits such as greater employment rates and a stronger state and local fiscal situation. I will argue that these statements are qualitatively true, but that from a quantitative standpoint, compared to what government officials expect or at least claim, the costs are often relatively large and the benefits are often relatively modest.

Incentives may increasingly affect business location decisions because businesses are increasingly footloose. As shown in Figure 1, there was an enormous decline in the relative costs of transport and communication during the past 100 years. Business production activities can be sited at a wider variety of locations, with cheaper transport of inputs and outputs, and easier use of communications and computer technology to coordinate the overall activities of the business at a wide variety of sites. 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. Taxes and the incentives that offset them are more controllable by government officials than wages.

These economic changes 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 area's business activity with respect to state and local taxes is between -0.2 and -0.3 (Bartik 1991, 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 of business activity is not a miraculous or huge effect. If the state and local tax cuts are financed by cutting public services, the result may be lower business activity. These elasticities are not close to large enough to produce a Laffer Curve, in which cuts in tax rates would raise the tax base enough to increase revenue. In fact, these estimates imply that the net cost of creating a job through lower business tax rates probably involves sacrificing about \$7,000 per year in business tax revenue, which at a 5 percent real discount rate would have a present value cost of \$140,000 per job.⁴ If the tax base did not go up, the creation of a job through lower tax business tax rates would cost about \$10,000 annually per job in lower business tax revenue,

so the higher tax base offsets only about a quarter of the static revenue loss.⁵ Still, for state or local officials searching for some way to affect the local economy, lowering local costs through some adjustment to taxes seems to be one of the few options to do so directly.

These figures are for the effects of business tax cuts for an entire state or metropolitan area. The research suggests that a business tax cut by an individual suburb within a metropolitan area, holding the tax rates of all 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 that would have otherwise gone to 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 market and inputs, including the crucial input of labor. The research is more mixed on whether business tax cuts for large central cities have significant effects on business location (Bartik 1991, 1992; Haughwout et al. 2003)

What implications do these estimated effects of state and local business tax cuts have for the effects of incentives? There is little research that directly estimates 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 for that business. Therefore, absent more specific information to the contrary, 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.⁶ To be consistent with the business location literature in gross costs per job created, 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 0.3.⁷ So 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 make no difference to business location, and therefore no difference to any benefits of business location and growth for the state or metropolitan area. 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, unless economic developers can be successfully selective.

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 the required public

services associated with the demands due to 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 1991, 1993). A 1 percent increase in local job growth is associated in the long run (say, 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. One percent extra job growth is 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 0.2 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. Local property values increase by 0.4 percent; under any reasonable assumptions about discount rates, however, the present value of the increased earnings from growth are at least triple the size of the property value gains (Bartik 1991, 1994b). In the long run, we would think local tax bases would increase at least proportionally with the increase in the local population, and more than proportionately if employment rates increase and the occupational mix shifts to higher-paying occupations. Relatively little research has been done on the value of the nonwork time foregone when employment rates increase; the research that has been done suggests that 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 with population if employment rates and real wage rates are unchanged; when these go up, as we would expect, the required social services per capita associated with nonemployment and low wages should go down. 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. Environmental costs vary too much with the situation to generalize, but generally will depend on both the increase in employment and the increase in population.

The net effects of this 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 even with vigorous growth (Bartik 2001, Table 5.3). The progressivity of increased job growth is considerably less than the progressivity of redistributive social programs, which usually deliver increased real income for the lowest income quintile that is greater in dollar value than what the average family receives (Bartik 1994b).

The bottom line from all this analysis is as follows: for an average incentive project in an average local labor market, the benefit and cost numbers work out so that benefits and costs are of roughly similar magnitude (Bartik 1991, p. 183). There is sufficient uncertainty about some of

the estimated effects of taxes on growth, and growth on local economic variables, that whether the net benefits are positive or negative is unclear. The actual benefits and costs will, of course, vary quite a deal with the particulars of the project.

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 environmental costs associated with increased population. An increase in higher-paying jobs that actually are obtained for local residents increases earnings benefits directly, and may reduce the need for social services to low-wage workers. In a more depressed local labor market, the non-employed will be more desperate for jobs and have lower reservation wages, and local infrastructure is more likely to be underutilized, which reduces the short-run public service costs associated with growth.

But policymakers should also be aware that social benefits of growth will be much reduced in low-unemployment labor markets, or if the new jobs pay low wages, or if few local workers are hired for the new jobs. Any of these circumstances make it much more likely that a policy of offering incentives will have benefits less than costs, even if the incentives are frequently decisive.

All these estimates of social benefits of growth are for the effects for an entire metropolitan area or state. For an individual suburban jurisdiction pursuing economic development, the main effect on the jurisdiction itself is the increased tax base from the new business activity, and whatever environmental effects surround the new plant site. The fiscal

costs of providing public services to the 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 who work in an individual suburban jurisdiction do not live there. The employment benefits of increased employment rates and promotions to better-paying occupations for local residents will also mostly be received by households living in other jurisdictions.

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 seeking to maximize the well-being of all their residents, to only offer incentives if the benefits outweighed the costs. These calculations would consider the strong likelihood that only a fraction of incentive offers would prove decisive, and that only a fraction of newly created jobs would go to local residents. Policymakers would consider the circumstances of the local economy, the quality of the new jobs, and who is likely to be hired for those new jobs. State and metropolitan policymakers would continue considering incentive offers until the last offer, or “marginal offer,” that is approved would have expected benefits just equal to expected costs. So, what is the problem?

The problem is that in reality, many incentives currently being offered in the United States have costs that exceed benefits. For example, in 2001 Chicago 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. As another example, since the late 1990s, New York and New Jersey have battled over many financial service companies that would probably have located somewhere within the New York metropolitan area

anyway, so the incentives probably had little effects on overall metro employment levels, employment rates, and wages.

Part of the cause of wasteful incentives may simply be ignorance. Policymakers want to assume that all growth, of whatever nature, is good. Policymakers often optimistically assume that all incentive offers are decisive. Even when the policy analysis gets sophisticated enough to use benefit–cost analysis, it is often assumed that benefits can be measured by simply looking at the earnings and tax base associated with the new business activity. As pointed out above, this assumption ignores the reality that only a portion of the new jobs go to local residents and the unemployed, and that new public expenditures will also be required.

But there may be reasons for this ignorance. As Upton Sinclair is reported to have said, “It is difficult to get a man to understand something when his salary depends upon his not understanding it.”⁹ Economic development decision making at the local level usually has 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 holdings, including the value of their 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 by a far wider group than just the local business community. There is much truth to the observation some years ago by John Logan and Harvey Molotch 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” (Logan and Molotch 1987, pp. 50–51). Economic development, if pursued correctly, can do much more than that, and at a

lower cost per job, but there are certainly strong reasons of self-interest why state and local governments would make incentive offers that are socially inefficient and wasteful from the broader social perspective.

Unlike some analysts of incentives, I don't 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 their incentives on other states. If, in fact, 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 for that state. Under those conditions, a state's decision to offer an incentive that attracts a marginal plant that would have otherwise gone to another state causes no net social benefit or cost for that other state. Of course, in the real world, states don't 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 the fundamental problem here would seem to be the fact that each state lacks, from its own self-interested perspective, a rational incentive regime that truly maximizes the interests of all state residents.

Critics who argue that incentives cause negative effects for other states also sometimes argue, in many cases persuasively, that states are offering incentives so excessive that the social costs of attracting these new plant 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 actually doing state Y a favor by saving it from wasting incentive money on this plant.

Even if all states have incentives, but not so excessive that new plants don't offer net social benefits, the problem with this competition would seem to be that it leads to lower net tax rates on business capital. Although we don't really know the ultimate incidence of taxes on business capital (are they ultimately paid by business capital owners? Are they instead passed forward to consumers or backwards to workers or other factors of production?), if we assume that such taxes are in large part paid by owners of capital, then lowering net tax rates on business capital makes that after-tax distribution of income more unequal. But this is a distributional problem that can be offset by changes in federal policy: for example, by an increase in the progressivity of the income tax, at least in the United States. (The European Union does not have this option, which makes a distributional rationale for controlling incentive competition more powerful in the European Union's situation than for the United States.)

Using federal policy to restrain state actions that might cause negative effects on other states by affecting business location could potentially rationalize a lot more than a federal ban on incentives. Should affluent areas be allowed to provide attractive amenities (e.g., bike paths, waterfront parks, downtown festivals) that might attract the "creative class," which, according to writers such as Richard Florida (2002), is the source of entrepreneurial vigor in regional economies? Such amenities could indirectly attract business away from other areas that have a greater need for jobs, imposing social costs on these areas. This line of thinking fairly quickly rationalizes a national government that dominates and controls most state decision making.

On the other hand, I do think some of the local incentive activity does present a legitimate case where externalities should be taken into account and somehow corrected. Local governments only have such powers as state governments have chosen to grant, and they are

inherently prohibited to set up the tax regime they might desire. Suppose a local government uses an incentive to attract a new business. The local government will realize a gain in business tax revenue. Most of the persons employed in this business will reside outside the local government's boundaries, within the boundaries of other local governments in the metropolitan area. The employees who migrated to the metropolitan area will impose windfall losses on these other local governments that must provide extra public services. Any employees who gain new or better jobs will receive benefits, even though they are not residents of the local government providing the incentive. These external costs and benefits will not be considered by the local government attracting the business, which will tend to lead to excessive incentives for businesses that cause a lot of extra population growth in metropolitan areas that have congested infrastructure, and too low incentives for businesses that will provide new jobs for the unemployed. It might be argued that the losses associated with public services for new households could be solved if local governments all had "efficient" tax regimes that charged taxes to each household equal to marginal public service costs, but this is simply not an option for local governments in the United States. Such an "efficient" tax regime would probably have to be organized at the metropolitan level.

What about the common argument that incentives distort business location decisions, causing inefficient locations to be chosen? (e.g., Thomas 2001). In theory, if all jurisdictions offer the "right" level of incentives, where the social costs are equated with benefits, then incentives actually correct for the failure of a laissez-faire market in business location to achieve efficiency. Incentives allow state and local governments to intervene in business location decision making to force businesses to recognize the social costs and benefits of their location

decisions, including labor market benefits and fiscal benefits. In practice, of course, as already mentioned, jurisdictions often don't offer the right level of incentives. But it is certainly unclear whether a laissez-faire private market in business location would be more efficient than a market with incentives.

What about the argument that all of this competition with incentives is a zero sum game, in which one local area's success in winning a new branch plant is another local area's loss? (e.g. Buchholz 1999). As I have argued at length elsewhere, the wins and losses would only evenly balance out if we assumed that the social benefits of a new branch plant are the same at all locations (Bartik 1991). But we would expect these social benefits to differ a great deal in different local areas. For example, the social benefits of a new branch plant should be greater in economically distressed local areas. If all state and local governments rationally sought to advance the broad public interest, we would expect incentives to be greater in economically distressed areas. Fisher and Peters's research (1998) shows that incentives do seem to be higher in high-unemployment areas, although only just high enough to offset the higher regular business tax rates. One can use this to argue that incentives have not succeeded in providing a net advantage to business from locating where the jobs are most needed. Alternatively, one could use this to argue that incentives help distressed local areas be more competitive than they otherwise would be for new business locations, in a political context in which federal and state governments do not do enough, through revenue sharing or other means, to help distressed local areas have adequate resources for needed public expenditure.

Alternative Incentive Reforms

Given this economic context, what incentive reforms are desirable? In this section, I evaluate the merits of various possible reforms. Although some reforms are contradictory, others could be combined into an overall incentive reform package.

Maintain traditional state and local policies towards business, but seek to remain fully involved and competitive in the global economy. That is, state and local governments would seek to maintain their traditional business tax systems and not offer any special incentives or other business cost reductions to improve the local business climate. This traditional business tax system imposed state and local taxes on business that were greater than the direct public services to business, by some estimates collecting about \$1.70 in taxes from business for every dollar of public services directly provided to business (Oakland and Testa, 1996). These extra taxes helped finance public services to households, and redistributive services to households, that exceeded what state and local governments could afford through household taxes alone.

I doubt whether over time this alternative will be politically viable for most state and local areas. The mobility of business is increasing over time. Most state and local areas at some time will experience high unemployment that will lead to a considerable public demand to do something, and this high unemployment will also increase the true social benefits of increasing growth. There is enough uncertainty about the effects of business cost reductions—through lower taxes, incentives, or other measures—that business interests will be able to argue that something should be done in this area, to help alleviate high local unemployment in a global economy. 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 of any sort for mobile corporations, and rely on locally generated capital. The most elaborate outline and justification of this approach is in Michael Shuman’s (2002) book, *Going Local*, although this approach appeals to many community activists around the United States. Shuman advocates promoting 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 any local area that makes a large-scale shift to relying on local capital and local production is likely to enormously reduce real per capita incomes of that area’s residents. There are both static and dynamic gains from trade and capital mobility. Local areas should, of course, be free to pursue this option, but local residents should understand the costs.

Develop unique local assets that yield economic rents. Local areas can seek to develop unique assets that make their area significantly more valuable to many large businesses than their next best alternative, so that these large businesses receive what economists call an “economic rent” from the local area. The unique value of this 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 workers with specialized skills and other specialized inputs (Rosenfeld 2002a,b). Another unique local asset would be distinctive local amenities that are particularly attractive to what Florida (2002) calls the

“creative class,” which is the professional and technical workers that help many high-tech and other advanced businesses stay productive and increase their productivity.

The problem is that for most local areas, it is hard to imagine that they can really develop truly unique industry clusters or local amenities. What is feasible to do for most local areas is also feasible for many other similar areas. As a result, businesses are likely to have many options of similar metropolitan areas that all offer advantages from industry clusters and local amenities. There are then no economic rents for these 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 to attract or retain particular business operations. As mentioned above, the traditional business tax regime had businesses pay taxes greater than the direct public services received. State and local governments could simply decide that this traditional tax regime is no longer tenable in a world with low transport and communication costs and revise their tax systems to reflect this reality. This lower tax alternative to incentives is favored by many conservative critics of incentives.

The problem is that this change would immediately result in a large loss of tax revenue and force some difficult choices on state and local governments about raising household taxes, or cutting public services or redistributive 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 modify their business tax systems to give tax

credits or deductions for business investment or employment expansion. This results in a lower short-run and medium-run loss in tax revenue compared to overall business tax rate reductions. Reductions in tax rates on new business operations are in many respects similar to incentives, but they would be provided as an entitlement to all businesses meeting the tax law's criteria, rather than in a discretionary manner to approved businesses.

Providing tax breaks as an entitlement, rather than in a discretionary manner, in principle allows for a state or local government to do an overall analysis of the costs and benefits of the entire program, and allows for democratic and public participation in this review. In practice, such tax breaks usually are not reviewed very 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 the assistance is more likely to tip the location decision, or selecting projects in which various qualitative evidence suggests the project will have greater social benefits.

Make discretionary incentives truly selective. As mentioned before, many discretionary incentives are provided so automatically to projects that they become the same in practice as a tax break provided as an entitlement under the tax system. Economic developers can be forced to become selective by requiring that projects provided incentives be kept to a limited number, or that the total annual dollar volume of incentives provided stay under some dollar limit. Criteria can then 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 location decisions. Michigan's "MEGA" program, for example, which provides large refundable tax credits to attract or retain businesses, has limits on the annual number of

projects selected. It requires that all projects present financial data showing that a non-Michigan site would be more profitable without the incentive, and that all projects be subject to a fiscal impact analysis.¹⁰

Capping incentive volume has the advantage of at least limiting the costs of incentive programs. Political debate on the incentive cap may lead to a broader debate about the benefits and costs of the current incentive regime compared to alternatives. 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 location decision would have gone to another location, might at least discourage some egregious cases where clearly the incentive was irrelevant to the location decision. Finally, it is certainly possible for economic development programs to develop reasonable models that can provide helpful estimates of the labor market and fiscal benefits associated with attracting a particular new facility.

Transparency. The details of incentives and incentive offers can be required to be clearly publicly disclosed. This disclosure promotes broader public discussion and 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 various state and local areas, but economic developers do not. The national collection of this information would also allow for better research on incentives. Finally, transparency is obviously essential if any national or international regulation of incentives is to be feasible. The European Union requires

public disclosure of incentives by its members states, and disclosure and transparency are encouraged by various 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 if there is to be any hope that incentive policy will 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 I return to below.

Better benefit–cost analyses. State legislatures can require that all economic development incentive offers be subject a prospective benefit-cost analysis to estimate whether the incentive offer is likely to be efficient. This analysis would need to include employment benefits, including analysis of what proportion of the new jobs would be likely to go to local residents, particularly unemployed local residents; wage effects, including analysis of 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 the extra job growth. If the estimates are done in a high-quality

manner, they increase the likelihood of making the right incentive choices. Furthermore, even imperfect estimates would encourage debate on some relevant issues about incentives.

Job quality and other project standards. As suggested by Greg LeRoy and Good Jobs First, as well as others, state legislatures or governors could require that all projects awarded incentives meet some minimum standard about the quality of these jobs (LeRoy 1999; Nolan and LeRoy 2003; Purinton et al. 2003). Theoretically, the quality of jobs should be only one component of the benefit–cost analysis. Decisions should be made on the net benefits of the incentive offer, not just on whether the project met a job-quality standard. However, in practice, as a check on the incentive decision-making process, it might be wise for policymakers to identify in advance some minimum standards that a project would have to meet, under the assumption that projects failing to meet such 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 quick summary of what types of projects they would be encourage 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 little understood “black box” dominated by technical experts. Standards may help communicate what the benefit–cost analysis process is trying to do in a clearer manner.

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 1994). 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, given that

the business executive making the decision is focused on shorter-term profit objectives and the business's stock price. On the other hand, most studies suggest that governments in making decisions should use social discount rates much lower than 12 percent. To serve the overall 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 social cost by providing a greater proportion of the incentive up front. Up-front incentives also has a political advantage, forcing state and local political leaders to immediately deal with incentives' costs, rather than passing on these costs to their successors. On the other hand, 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 social benefits, 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 property tax abatements and other tax credits can be made larger but shorter term.

Clawbacks. The net benefits of an incentive regime can be increased if some of the incentive can be recovered, and if the business receiving the incentive does not provide the planned social benefits for example, if the business ends up relocating, or if the number of created jobs falls short of projections.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 mean specific 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 generally believed that local use of clawbacks is also increasing, and 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 forthcoming (a)).

The main potential problem with clawbacks is that if they are unduly onerous, they may offset an excessive amount of the attractiveness of the incentives. However, if clawbacks are designed in a straightforward way so that incentives and clawbacks are clearly related to the social benefits associated with the scale of business operations, then businesses that have a reasonable plan of making a long-term investment in the community should not perceive such a clawback as a huge disincentive to their location decision.

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 wage rates, and reduces the pressure on public infrastructure capacity associated with additional population. 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 automatically tend to be more targeted on the projects with greatest social benefits if the amount of the incentive is based on whom the business hires and employs. Incentives should be somewhat greater for projects that hire and employ local residents, and considerably greater if the business hires the unemployed.¹³ Probably more of the 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 tend to encourage businesses to do more hiring of the unemployed. Such hiring incentives probably will be more effective if tied to local programs that attempt to help screen and train potential hires from among the unemployed, which I will discuss next. (Bartik 2001, Chapter 8). Finally, tying incentives to the provision of social benefits is, in a sense, 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.

Tying incentives to participation in “First Source” hiring programs.¹⁴ Many local governments have had some nominal requirement for local hiring by businesses receiving incentives, but frequently these requirements are unenforced because of fears that it will discourage 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 try to 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 that have few hard credential requirements. Studies suggest that one-quarter of new hires are producing less than 75 percent of what the employer anticipated after six months on the job (Bishop 1993). Because normal hiring so often is disappointing to employers, a program that can help train and screen qualified workers, who are then considered for hiring by employers receiving incentives, can potentially help businesses make the hiring process more effective in finding 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, local churches, and local social service agencies to find productive workers for jobs with low credential requirements. They also may be better able to mobilize resources for training from local workforce agencies and the local community college.

Focusing 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. Customized training and infrastructure also are incentives that inherently can be at least partially clawed back, even without special legal procedures, as the infrastructure and most of the trained workers will remain in the local area even if the business relocates or downsizes. Customized training also 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 of this in North Carolina's system of customized training for economic development). Finally, both customized training and infrastructure can be argued to, in some sense, simply be an attempt to make public services more effective. 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 and infrastructure more responsive to changes in demand makes government more responsive. It could also be argued that training and education services can increase their quality by becoming more customized to

the needs of both those receiving the training and education and those organizations that will demand the skills of those educated and trained.

Federal restrictions via the courts on incentives. Some legal scholars (e.g., Enrich 1999) have argued that state and local incentives can be invalidated as an interference with Congress's right to regulate interstate commerce. Whatever the legal merits of this claim, it makes little sense from an economic perspective for most incentives. Consider property tax abatements. State and local governments have policies and programs that determine what public services are received by residents and businesses, and what taxes they pay, including policies that determine property tax liability. This property tax liability will depend on the value of the property, but it also may depend on when the property was purchased (e.g., Proposition 13); the income of the property owner (state circuit breaker programs that provide a rebate of property taxes for households with low income); whether the property is being used for farmland; and, for businesses, what job creation or new investment is associated with the property. An incentive such as a property tax abatement is simply one more complexity that changes the property tax liability for a particular type of state resident business. How does this discriminate against businesses in other states? To put it another way, the fact that state and local governments provide services and impose taxes on residents, both households and businesses—and do not do the same for nonresidents—is an inherent form of “discrimination” in any system in which state and local governments have any power.

The biggest complication to the legal situation is the case of multistate corporations and how to apportion their income. State taxation considers the national income of such corporations and uses various procedures to apportion that income to the state, typically based on some

combination of the proportions of the corporation's property, payroll, and sales that are located in the state. The legal question is whether it is permissible for the state to then provide a tax credit only for investments located in the state. The issue is whether the apportionment is really only dividing the income among states, in which case it would seem each state could make its own rules about how much to tax the income that is associated with the state—or alternatively, whether the apportionment is really just a fiction, and the state is taxing the national income of the business and must treat all activities of the business the same no matter where they occur. I believe the legal situation would be clearer if Congress set up uniform national rules for apportioning corporate income among the states. Congress could then decide whether states are entitled to have their own rules regarding taxation for any state-allocated income.

Even if legal rulings did outlaw some state incentives, it would be relatively easy to evade such rulings and substitute other incentives. For example, if income tax incentives for multistate corporations were outlawed, states could provide incentives if businesses separately incorporated in the state, or could provide incentives as credits against local property taxes. If local property tax abatements were somehow outlawed, states could provide incentives via customized training, free infrastructure, and other free services. Courts are unlikely to catch up with the creative minds of economic developers and politicians.

Congressional regulation and reform of incentives. 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 socially beneficial incentives. For example, an economically distressed city may find that economic development incentives are

part of the best available 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 therefore having to make additional 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 and benign.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 innovation would be just as likely to discourage efficient economic development programs as inefficient programs.

Congressional intervention would be inherently more limited if it occurred not through unfunded mandates on state and local governments, but rather through providing state and local areas with funding to encourage more efficient economic development incentives. 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 studies 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 would 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, even if the different state parts of that metro area might perceive some advantage from not cooperating.

International regulation of incentives. The European Union extensively regulates some incentives, and various trade treaties could, under some interpretations, make certain incentives “actionable” if they are large enough to be appreciably “trade-distorting.”¹⁶ An incentive is “trade-distorting if it favors domestic production and exports over foreign production and imports. Although such trade agreements could eliminate some wasteful economic development incentives, trade agreements could also limit socially beneficial incentives, alternative approaches to economic development that emphasize small businesses, or some environmental regulations and other regulation of businesses. Fully exploring all these issues would be the task of another paper. However, certainly there should be some hesitation before turning over too much power to international organizations with uncertain accountability to the public, and away from state and local governments for which there are clear democratic mechanisms for encouraging economic development policies that promote broad public purposes.

Conclusion

Without summarizing the paper in detail, my main point is that 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 and more effective incentives, over time we should continually improve our data on and analyses of the broad public benefits—and costs—of incentives. Broader public participation and better analysis should lead to some of the specific reforms that are favored in the above detailed discussion.

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 the nature of 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. A particularly important feature of a reformed incentive policy is focusing more incentives on encouraging more hiring of the unemployed, for example, through hiring subsidies and customized training grants. Properly understood, economic development incentives should be seen as a part of an overall policy to improve the functioning and outcomes of local labor markets. Economic development incentives should be used to increase local 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 be hired for and succeed in these new and better jobs.

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 or international regulations to prohibit 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 at creating jobs in 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 simply abolish incentives will lead to even more wasteful policies to create a “good business climate.”

If one believes in the potential for government activism to improve social outcomes, it is sensible to allow state and local governments the flexibility to in some cases 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.

Notes

1. I have previously written about incentives in Bartik (1990, 1991, 1993, 1994a, 1994b, 1994c, 1996a, 1996b, 2001, 2003, and forthcoming (a) and (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 not been completely consistent over time.

2. This counts as cash or near-cash incentives to large businesses the following Michigan programs: 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 scholarly 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 Professor Therese McGuire of Northwestern, who has done much excellent work on state tax issues. Professor 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 $dR/dJ = (R/J)[1 + (1/E)]$. 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 (Bureau of the Census, *Government Finances: 1988–89* [Washington, DC: GPO, 1991], 21). The most recent estimate of the business share of state and local taxes is 31 percent (ACIR, *Regional Growth: Interstate Tax Competition*, Report A-76 [Washington, DC: ACIR, March 1981], revised version of table A-1; figures for 1977). Private nonagricultural employment in the United States

averaged 89 million during fiscal year 1989 (Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* [January 1991]: S-10). These figures could be updated using more recent data, but most of the studies estimating elasticities 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 (forthcoming (a)) and Bartik (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.

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

6. 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 $(184/148.2) \times (0.10)(22,678) = 2,816$.

7. 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 $(184/148.2) \times (0.10)(22,678) = 2,816$.

8. What about migrants? I explore this in more depth in Bartik (1991, Chapter 3). Essentially, 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 in this metropolitan area or moving elsewhere.

9. I originally came across this Upton Sinclair quotation in a column by Paul Krugman, "Fear of All Sums," *New York Times*, June 21, 2002. I have not yet been able to verify the precise source in Sinclair's writings.

10. This fiscal impact analysis is hardly perfect. Among other things, the fiscal impact analysis only looks at state revenues, and not at state expenditures, or local taxes and expenditure. In addition, ideally there would be a full benefit-cost analysis that would include labor market

benefits. A more detailed discussion and critique of MEGA is in Bartik, Erickcek, and Eisinger (2003).

11. More extensive discussion of clawbacks is found in Peters (1993) and Weber (2002).

12. This is advocated by Bartik (2001) and by 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. Whether favoring local residents would be legally acceptable is more open to question. It is acceptable in state university tuition rates.

14. More on “First Source” programs is in Bartik (2001, Chapter 9); Schweke (1999), Anderson (1999); and Molina (1998).

15. I should note that I have not been completely consistent over the years in my comments on federal regulation of state and local incentives. I have sometimes been tempted by the notion that the federal government should intervene to prevent the wasteful and inequitable incentives adopted by state and local areas with low unemployment. As the discussion in this paper makes clearly, in the current political environment I am pessimistic that an intervention that comes at no federal cost, such as taxing incentives, would be likely to be so benign as to simply target wasteful incentives.

16. Much more on international regulation of incentives is in Thomas (2000); Lawrence (2000); Schweke (2000); and Colgan (1995).

References

- Anderson, Barbara. 1999. "First-Source Hiring Agreements." *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(3): 1. Washington, DC: Corporation for Enterprise Development.
- Bartik, Timothy J. Forthcoming (a). "Local Economic Development Policies." In *Management Policies in Local Government Finance* 5th ed., J. Richard Aronson and Eli Schwartz, eds. Washington, DC: International City/County Management Association.
- . Forthcoming (b). "Evaluating the Impacts of Local Economic Development Policies on Local Economic Outcome: What Has Been Done and What Is Doable?" In *Evaluating Local Economic and Employment Development*, Alistair Nolan, ed. Paris: Organization for Economic Cooperation and Development.
- . 2003. "Thoughts on American Manufacturing Decline and Revitalization." Upjohn Institute Staff Working paper no. 03-96. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- . 2001. *Jobs for the Poor: Can Labor Demand Policies Help?* New York: Russell Sage Foundation and Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- . 1996a. "Eight Issues for Policy Toward Economic Development Incentives." 1996. Paper presented at the Minnesota Public Radio and Ford Foundation sponsored conference, "Economic War Among the States," May.
- . 1996b. "Strategies for Economic Development." In *Management Policies in Local Government Finance*, 4th ed., J.R. Aronson and E. Schwartz, eds. Washington, DC: International City/County Management Association Press, pp. 287–312.
- . 1994a. "What Should the Federal Government Be Doing About Urban Economic Development?" *Cityscape* 1(1): 267–292.
- . 1994b. "The Effects of Metropolitan Job Growth on the Size Distribution of Family Income." *Journal of Regional Science* 34(4): 483–502.
- . 1994c. "Jobs, Productivity, and Local Economic Development: What Implications Does Economic Research Have for the Role of Government?" *National Tax Journal* (December): 847–861.
- . 1993. "Who Benefits From Local Job Growth, Migrants or the Original Residents?" *Regional Studies* 27(4): 297–311.

- . 1992. “The Effects of State and Local Taxes on Economic Development: A Review of Recent Research.” *Economic Development Quarterly* 6(1): 102–110.
- . 1991. *Who Benefits From State and Local Economic Development Policies?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- . 1990. “The Market Failure Approach to Regional Economic Development Policy.” *Economic Development Quarterly* 4(4): 361–370.
- Bartik, Timothy J., George Erickcek, and Peter Eisinger. 2003. “Economic Development Policy in Michigan.” In *Michigan at the Millennium*, Charles Ballard, Paul Courant, Doug Drake, Ron Fisher, and Elizabeth Gerber, eds. East Lansing, MI: Michigan State University Press.
- Batt, Rosemary, and Paul Osterman. 1993. “Workplace Training Policy: Case Studies of State and Local Experiments.” Working paper no. 106. Washington, DC: Economic Policy Institute.
- Bishop, John. 1993. “Improving Job Marches in the U.S. Labor market.” *Brookings Papers: Microeconomics*, 335–400.
- Buchholz, David. 1999. “Incentives: Are They Really ‘Zero Sum’?” *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(2): entire issue. Washington, DC: Corporation for Enterprise Development.
- Burstein, Melvin, and Arthur J. Rolnick. 1995. “Congress Should End the Economic War Among the States.” *The Region*, Federal Reserve Bank of Minneapolis.
- Colgan, Charles S. 1995. “Brave New World: International Regulation of Subsidies and the Future of State and Local Economic Development Programs.” *Economic Development Quarterly* 9(2): 107–118.
- Enrich, Peter D. 1999. “Breaking the Incentive Cycle: A Role for the Courts.” *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(9): entire issue. Washington, DC: Corporation for Enterprise Development.
- Fisher, Peter S., and Alan H. Peters. 2002. *State Enterprise Zone Programs: Have They Worked?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- . 1998. *Industrial Incentives: Competition Among American States and Cities*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Florida, Richard. 2002. *The Rise of the Creative Class*. New York: Basic Books.

- Haughwout, Andrew F., Robert P. Inman, Steven Craig, and Thomas Luce. 2003. "Local Revenue Hills: Evidence from Four U.S. Cities." NBER working paper no. 9686. Cambridge, MA: National Bureau of Economic Research. <http://papers.nber.org/papers/w9686>.
- Krugman, Paul. 2002. "Fear of All Sums." *New York Times*, June 21.
- Lawrence, Sara. 2000. "Curbing Harmful Tax Practices: Can the OECD and EC Help?" *Accountability: The Newsletter of the Business Incentives Clearinghouse* 2(8): entire issue. Washington, DC: Corporation for Enterprise Development.
- LeRoy, Greg. 1999. "Counterpoint: We Are Making Progress!" *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(12): entire issue. Washington, DC: Corporation for Enterprise Development.
- Logan, John, and Harvey Molotch. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press.
- McGuire, Therese J. 2003. "Do Taxes Matter? Yes, No, Maybe So." *State Tax Notes*, June 9.
- Minge, David. 1999. "Reforming Incentives through Federal Action." *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(6): entire issue. Washington, DC: Corporation for Enterprise Development.
- Molina, Frieda. 1998. *Making Connections: A Study of Employment Linkage Programs*. Washington, DC: Center for Community Change.
- Nolan, Anne, and Greg LeRoy. 2003. *Get Something Back! How Civic Engagement is Raising Economic Development Expectations in Minnesota*. Washington, DC: Good Jobs First.
- Oakland, William, and William Testa. 1996. "State-Local Business Taxation and the Benefits Principle." *Federal Reserve Bank of Chicago Economic Perspectives* 20(1): 2–19.
- Osterman, Paul, and Rosemary Batt. 1993. "Employer-Centered Training for International Competitiveness: Lessons from State Programs." *Journal of Policy Analysis and Management* 12(3): 456–477.
- Peirce, Neal. 2002. "State, Local Corporate Subsidies: A New Coalition for Accountability." Syndicated column for *Washington Post Writers' Group*, August 5. Available on-line at <<http://www.postwritersgroup.com/archives/peir0805.htm>>.
- Peters, Alan. 1993. "Clawbacks and the Administration of Economic Development Policy in the Midwest." *Economic Development Quarterly* 7: 328–340.

- Purinton, Anna, Nasreen Jilani, Kristen Arant, and Kate Davis. 2003. *The Policy Shift to Good Jobs: Cities, States and Counties Attaching Job Quality Standards to Development Subsidies*. Washington, DC: Good Jobs First.
- Rodrigue, J-P et al. 2004. *Transport Geography on the Web*. Hofstra University, Department of Economics and Geography. Available at: <http://people.hofstra.edu/geotrans>.
- Rosenfeld, Stuart. 2002a. *A Governor's Guide to Cluster-Based Economic Development*. Washington, DC: National Governors Association.
- . 2002b. *Just Clusters: Economic Development Strategies that Reach More People and Places*. Carrboro, NC: Regional Technology Strategies.
- Schweke, William. 2000. "Curbing Business Subsidy Competition: Does the EU Have an Answer?" *Accountability: The Newsletter of the Business Incentives Clearinghouse* 2(9): entire issue. Washington, DC: Corporation for Enterprise Development.
- . 1999. "Linking Incentives and Employment Programs." *Accountability: The Newsletter of the Business Incentives Clearinghouse* 1(3): 1. Washington, DC: Corporation for Enterprise Development.
- Schweke, William, and Lillian G. Woo. 2003. "There Are Job Creation Alternatives to Traditional Business Incentives: A New Direction for North Carolina." Unpublished manuscript. Washington, DC: Corporation for Enterprise Development.
- Shuman, Michael. 2000. *Going Local*. New York: Routledge.
- Summers, Lawrence, and James Poterba. 1994. "Time Horizons of American Firms: New Evidence from a Survey of CEOs." In *Capital Choices: Changing the Way America Invests in Industry*, Michael Porter, ed. Boston: Harvard Business School Press.
- Thomas, Kenneth P. 2001. "Competing for Capital." *Trade and Sustainable Development: A Newsletter* 2(1). Washington, DC: Corporation for Enterprise Development.
- . 2000. *Competing for Capital: Europe and North America in a Global Era*. Washington, DC: Georgetown University Press.
- United Nations Development Programme. 1999. *Human Development Report 1999*. New York: Oxford University Press.
- Wasylenko, Michael. 1997. "Taxation and Economic Development: The State of the Economic Literature." *New England Economic Review* (March/April): 37–52.

Weber, Rachel. 2002. "Do Better Contracts Make Better Economic Development Incentives?"
APA Journal 68(1): 43–55.