

The Failures of Economic Development Incentives

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Amidst the continuing controversy over American economic development incentives, this article looks at three key effectiveness issues: Do economic development incentives encourage new investment and employment? Are these incentives targeted at economically depressed areas or economically depressed people? How costly are these incentives? For all these questions, our findings come out against traditional economic development incentives. We suggest that there is a need for a radical transformation of economic development policy in the U.S.

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Journal of the American Planning Association,
Vol. 70, No. 1, Winter 2004.
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Economic development policy has been a part of state and local planning for over 30 years. Yet the integration of economic development into wider planning functions is still limited, and the field continues to generate controversy. The provision of business incentives, in particular, has long been one of the mainstays of economic development policy, and at the same time has been the target of the most intense criticism. Indeed, there are many prominent critics who believe that virtually all incentive programs should be banned (see Burstein & Rolnick, 1995). Nevertheless, indications are that spending on incentives has continued to expand.

At the heart of the controversy over economic development incentives is the fundamental yet unresolved question: Are they a cost-effective strategy for achieving economic growth?¹ This broad question can be broken down into three more precise questions:

1. Do business incentives actually cause states or localities to grow more rapidly than they would have otherwise?
2. If so, is the growth targeted so as to provide net gains to poorer communities or poorer people, or is it merely a zero-sum game?
3. How costly to government is the provision of these incentives compared to alternative policies?

Before attempting to answer these three questions, we first address a few preliminary issues: the scope of our study, the justification for focusing on these three questions, and our approach to answering them.

Scope and Method

Development Policy and Business Incentives

Defining economic development policy is a difficult task, because it is often difficult to distinguish it from other state and local policy interventions such as housing provision, workforce development, and community development. In

this study, we focused on only one aspect—albeit the most expensive aspect—of economic development policy: the provision of business incentives.

Under the rubric of *business incentives*, we include both tax instruments—property tax abatements, tax increment financing, sales tax exemptions and credits, and corporate income tax exemptions and credits for investment or jobs—and non-tax incentives such as business grants, loans, and loan guarantees. In all cases, the firm, not the worker or work seeker, is the initial recipient of the incentive.

The boundaries that define what is a business incentive are not always clear. For instance, it is common to talk of state and local tax *incentives* mitigating the effect of the state and local tax *system* (Eisinger, 1988). The system includes such things as the rate of taxation, apportionment formulas that determine how much of a firm's national income is taxable in a particular state or city, depreciation rules, rules for the taxation of real and personal property, and so on. All of these can be, and have been, changed for explicitly economic development reasons.² Moreover, many non-tax incentives, such as a city using general funds to build a road to a new plant, are hidden. In this article, we leave the boundaries of economic development business incentives somewhat undefined, except where their definition is crucial to understanding the data we present.

Is spending on traditional business incentives large enough to warrant concern? In a recent study, Thomas (2000) estimates conservatively that total state and local expenditures on economic development incentives were around \$48.8 billion in 1996. In an ongoing study of incentive expenditures using a variety of methods and using a conservative definition of economic development, we estimate a likely top-end annual state and local number of around \$50 billion (Peters & Fisher, 2002a). This is a considerable sum indeed, and almost certainly is much greater than spending on all other state and local economic development initiatives combined.³

Research Questions and the Rationales for Incentives

The questions that we addressed in this study follow directly from the central rationales for economic development incentives. There are two broad but related justifications for incentives (Eisinger, 1988). The first is that incentives will lead to business investment and thus new jobs, producing an increase in the local demand for goods and services, giving rise to further rounds of economic growth. The second justification is that economic growth increases public revenues, thus allowing for improved public services

or a decline in tax rates. Other justifications of economic development are commonly given—including industrial diversification or the promotion of high-technology industries—but most of these justifications are derivatives of the first two.

Nevertheless, it seems that more needs to be asked of economic development policy. Many economists argue that the U.S. is a highly mobile society; possibly as many as 14% of the U.S. metropolitan population moves between metro areas in any 4-year period. In this context, subsidizing new investment at a particular place merely makes that place more attractive to in-migrants (Marston, 1985). Local residents who had been at the back of the labor queue—those with the fewest economic options—would tend to remain there while in-migrants take the new jobs. The argument is that economic development policy is unlikely to have any impact on a city's long-term unemployment rate and thus on the well-being of the long-term unemployed.

The argument is, however, probably wrong, since the migration of employees across the American space-economy is slow and sticky. The lag between job creation and in-migration provides room for jobless locals and working locals on the bottom rungs of the occupational ladder either to become employed or to move up the occupational ladder. Skills are acquired that then help these locals to compete more effectively with the slow trickle of new in-migrants (Bartik, 1991). spurts of local growth (including those caused by incentives) materially benefit locals at the back of the labor queue, in the short term and the long term. Furthermore, those employed during such growth spurts tend, over time, to move up the occupational ladder, and less skilled and Black workers seem to benefit from these growth spurts more than the rest of the population (Bartik, 1991).

Suppose we accept the argument that incentives do induce growth spurts and actually provide some long-term benefits to local job holders. But if incentives are effective in this narrow sense, they result in the relocation of economic activity, from places without incentives to places with incentives. Will the redistribution of employment opportunities that results from local incentive competition provide net benefits to the nation as a whole, or will it simply be a zero-sum game, as critics often claim?

For state and local incentive competition to benefit the nation as a whole, the benefits to communities gaining jobs must exceed the losses to the communities that would otherwise have had those jobs. This will occur only to the extent that incentives are targeted at poorer populations,

who stand to gain more from job growth than residents of low-unemployment or middle-income communities. Thus the alleviation of unemployment or poverty becomes an additional rationale for incentives, and proper targeting of incentives becomes an additional criterion for assessing their effectiveness.

Research Method

Our method for answering the three questions varies by question. The answer to the first question—whether incentives induce new economic growth—relies on the findings of a massive literature on which a number of important and comprehensive reviews have already been published. We do not attempt yet another review but instead provide a metareview (a review of the reviews), summarizing the main differences of opinion.

Unfortunately, the second question—on the level of targeting of incentives—does not have so tidy a literature. Where appropriate, we do provide a compressed review of work, but to fill in some important holes, we rely on just a few recent studies (including our own). The third question provides the biggest challenge. There is very little work looking at the overall revenue impact of economic development incentive systems, and the work that does exist uses widely different methodologies. In our view, that makes a short review of the literature inadvisable. Instead, we focus on broader theoretical arguments and again some of our own recent findings, some previously published and some not.

Does Economic Development Induce Jobs or Investment?

This is the most important question of all. It is unsurprising, then, that the scholarly literature here is massive. The findings of our metareview of the most commonly cited or more recent reviews of this literature are summarized in Table 1.

Up until the late 1980s or thereabouts, most academics and many practitioners believed that economic development incentives had at best a marginal impact on firm location decisions and thus on the inducement of new investment and jobs (Due, 1961; Eisinger, 1988; Oakland, 1978; “induced” jobs are those that would not exist in a locality but for the incentives given). This, of course, did not mean that incentives were felt *never* to work, but that on the average, incentives did not tip the balance. Why not? Because taxes make up a small percentage of total

operating costs. Thus even quite large spatial variation in taxes and incentives could easily be neutralized by quite small spatial variation in factor prices or transportation costs.

There are other, slightly less obvious, reasons why taxes and incentives were thought not to matter. Firms pay income taxes on their incentives—in fact, estimates are that in some cases roughly 30–45 cents of every dollar given as incentives goes to other governments, primarily as higher federal taxes (Fisher & Peters, 1998). This serves to flatten fiscal differentials across states. State corporate taxes further flatten the property tax differentials across places within the same state. Moreover, firms have shown themselves to be wary of basing location decisions on massive incentive offers (Bartik et al., 1987). Very generous incentives may signal a profligate—and thus, in the longer term, expensive—local government. And finally, low taxes and large incentives may indicate poor public services. That firms do in fact care about the quality of local services has been documented in a review of recent research (R. Fisher, 1997).

Thus the early consensus position, popularly stated in Eisinger (1988), was that economic development incentives had at best an ambiguous impact on growth, but probably little to no impact at all. This consensus was disrupted by two very important reviews of the impact of taxes on economic growth. Newman and Sullivan (1988) and Bartik (1991) both concluded that more recent econometric studies had shown fairly consistently that taxes—and thus, by extension, economic development subsidies in general—impact regional and local growth. Newman and Sullivan’s review is notable for its emphasis on econometric method, Bartik’s for its comprehensiveness. Soon afterwards, Phillips and Goss (1995), running a metaregression on Bartik’s literature, seemed to confirm the reasons for Bartik’s findings and thus, obliquely, Bartik’s position itself.

Later in the 1990s the Federal Reserve Bank of Boston commissioned a series of reviews of the economic development literature. Looking at the most recent tax studies, Wasylenko (1997) seemed to confirm Bartik’s findings, although he believed the likely impact is somewhat smaller than Bartik claimed. In the same series, Fisher and Peters (1997) reviewed studies of non-tax economic development incentives (such as grants and loans) on economic growth and concluded that the vast majority of studies indicated that greater economic development incentives resulted in greater growth. A new “consensus” position had emerged: Lower taxes or more incentives are likely to result in greater economic growth.

Review	Types of incentives studied	Methodologies of studies reviewed	Impact of incentives	Comments
Due (1961)	Taxes	Statistical	Minor at best	Most studies show statistically insignificant impact
Oakland (1978)	Taxes	Econometric	Minor at best	
Newman & Sullivan (1988)	Taxes	Econometric	Recent studies able to identify small but statistically significant impact	Technical review of literature
Eisinger (1988)	Taxes, non-tax discretionary incentives, and abatements	Econometric, survey, and case study	Ambiguous impact, tending towards minor or none	
Bartik (1991)	Taxes	Econometric	Majority of studies show positive, statistically significant impact	Clustering of elasticity estimates between -0.1 and -0.6 (intermetropolitan) and between 1.0 and -3.0 (intrametropolitan)
Wilder & Rubin (1996)	Enterprise zone designation and incentives	Various	Variable impact on investment/employment growth	Variable impact in part due to variation in state programs
Wasylenko (1997)	Taxes	Econometric	Most studies show a positive, statistically significant impact, but with smaller estimates than found by Bartik (1991)	Clustering of elasticity estimates between 0.0 and -0.26
Fisher & Peters (1997)	(1) Non-tax discretionary incentives (2) Industrial revenue bonds (3) Enterprise zones	(1) Econometric (2) Econometric (3) Econometric and survey	(1) Most studies show positive impact (2) Ambiguous results (3) Ambiguous to no discernible impact	(1) No elasticity estimates since results highly questionable
Man (2001)	Tax increment financing	Various	Ambiguous, though majority of studies show positive impact	
Peters & Fisher (2002b)	Enterprise zones	Mainly econometric	Minor to no discernible impact	

Table 1. Summary of metareview of the impact of economic development incentives on economic growth.

Why was there such a major shift in findings? Newman and Sullivan argued convincingly that improvements in econometric method have enabled researchers to better model the relationship between taxes and growth. Bartik came to much the same conclusion. It is also likely that incentive competition has intensified, and the size of the tax and incentive differentials across states and cities has increased (for recent empirical support, see Peters & Fisher, 2002b).

Nevertheless, researchers have raised questions about this new “consensus” position on the relationship between incentives and economic growth. While it is true that the more recent econometric work on this issue is much more sophisticated than previous research, many of the studies are still open to important criticism. For instance, Fisher and Peters (1997) argue that none of the discretionary incentive/growth studies they reviewed is reliable because all used seriously flawed data. Others appear to agree and are dismissive, to say the very least, of the supposed “consensus” elasticities reported in the literature on the impact of incentives on growth (Netzer, 1997). Other researchers remain skeptical of any consensus position because of the difficulty researchers have had reproducing results across time periods and geographic regions (McGuire, 1992). And even those who are fairly optimistic about the relationship between taxes and growth offer important cautions in their reviews (Wasylenko, 1997). Indeed, even Newman and Sullivan (1988) concluded by saying that “. . . the evaluation of tax impacts on industrial location should be treated as an open rather than settled question” (p. 232).

If incentives have grown absolutely, how could incentives not have a measurably positive impact on growth? The main reason given by some of the dissenters is not much different from that given in the early reviews. Incentives, for all their cost to state and local government, are still too small to matter much. Typically, a firm’s wage bill will be much greater than its tax bill; for the average manufacturing firm in the U.S., payroll is about 11 times the firm’s state and local taxes before incentives (Peters & Fisher, 2002b). Thus fairly small geographic differentials in wages could easily outweigh what appear to be large tax and incentive differentials.

With the possible exception of the very small literature on the impact of tax increment financing (Man, 2001), the subliterations on the relationship between particular types of incentives and economic growth offer almost no support to the new “consensus” position. A review of research on industrial revenue bonds concluded that the growth effects of these instruments were ambiguous at best (Fisher &

Peters, 1997). Enterprise zones offer a particularly interesting study of the effects of incentives on local growth. In theory, enterprise zones should be one of the best forms of economic development, since they involve targeting generous incentives at small places. Wilder and Rubin’s (1996) review of this literature is pessimistic. The econometric, survey, and case study research they reviewed found small or no effects in all but a few instances (most importantly, L. Papke, 1994). Peters and Fisher’s (2002b) review of some of the same literature and a recent flurry of new econometric papers on enterprise zones and growth concur. Why have enterprise zone incentives failed to promote economic growth? Dabney (1991) summarizes the problems: The locational negatives associated with enterprise zones are seldom mitigated by the incentives offered.

Finally, there is a small amount of work using the hypothetical firm methodology. At their best, these studies use modern microsimulation techniques to build “virtual firms” (based on a set of existing firms) to model the effect of incentives on a firm’s income. This literature is small and has not been the subject of a comprehensive review; it does, however, provide a very useful alternative to the more common econometric and survey studies. What work exists shows convincingly that incentives are seldom big enough to have an impact on site location decisions. This is true even of the incentives offered in that most generous of target regions—the enterprise zone. Peters and Fisher (2002b) calculate that across their sample, all state and local incentives added together are equivalent to a mere 1.6% (minimum) to 7.1% (maximum) cut in wages. For a job paying \$10.00 an hour, the cut would equal between 16 and 71 cents an hour. Others who use this method have come to similar conclusions: J. Papke (1995) is skeptical that tax differentials are big enough to matter. Some have put the tax estimates deriving from hypothetical firm models into the right-hand side of econometric equations of taxes and growth—the results here are again highly variable (L. Papke, 1991, showing a substantive and statistically significant impact, and others showing little or none: Peters & Fisher, 2002b; Steinnes, 1984; Tannenwald, 1996)

Finally, there is the issue of whether or not statistical significance also adds up to practical significance. Suppose for a moment that we accept the new “consensus” position (as put forward by Bartik, 1991) that taxes have a statistically significant effect on economic growth, and that the interstate elasticity of economic activity with respect to taxes is about -0.3 . This implies a level of effectiveness that is still far below what many public officials and incentive

advocates appear to believe. In our experience, it is not unusual for public officials to attribute *all* new employment to incentive programs. But given a typical incentive package that represents about a 30% cut in state and local taxes, the new “consensus” elasticity implies that only about 1 in 10 new jobs in the average community will actually be attributable to the incentives, even if incentives are provided for all new jobs.⁴ Thus the best case is that incentives work about 10% of the time, and are simply a waste of money the other 90%.

The upshot of all of this is that on this most basic question of all—whether incentives induce significant new investment or jobs—we simply do not know the answer. Since these programs probably cost state and local governments about \$40–50 billion a year, one would expect some clear and undisputed evidence of their success. This is not the case. In fact, there are very good reasons—theoretical, empirical, and practical—to believe that economic development incentives have little or no impact on firm location and investment decisions.

Who Takes the Jobs “Created” by Economic Development?

In the last section, we argued that economic development policy probably did not induce much, if any, job growth. In this section, we leave this criticism aside and focus instead on another question: Is economic development policy appropriately focused on poorer people or poorer areas? The main reason for focusing economic development policy on the most needy people and places—besides the entirely correct intuition that poorer people need more economic help than others—is that such a policy is more efficient. Bartik (1991) argued that because the reservation wage (the lowest wage at which a person would accept employment) for those in high unemployment areas is lower than for those in low unemployment areas, moving jobs from low to high unemployment areas likely represents a net benefit for the nation and for the people in the poorer areas concerned.⁵

There are a number of different ways of conceptualizing this question:

- Do poorer places (states or localities) pursue economic development more vigorously than other places?
- Do states target incentives at more needy places or populations?

- Do poor people living in targeted areas benefit from targeted policies?

The empirical literature on these questions is fairly skimpy.

Do Poorer Places Pursue Economic Development More Vigorously?

There has been considerable argument over the geography of economic development programs. Unfortunately, the evidence on this issue is contradictory, to say the very least. Some have noticed that economic development as a policy concern took off in the Midwest and Northeast at precisely the time that long-term economic decline (what was called the Rustbelt Syndrome) hit those two regions. From this they deduce that economic stagnation (and thus, by deduction, poverty, unemployment, and so on) gave rise to economic development policy (prominent here are Eisinger, 1988; Fainstein, 1991; Fosler, 1988). The main problems with this argument are that (1) economic development programs have continued to expand in these two regions even after they rebounded from their previous economic malaise, and (2) it is hard to explain why economic development policy was institutionalized and expanded in other areas at a time when those areas were booming economically (e.g., Texas, California, and Florida).

More recent work in this area has counted up all state economic development programs; measured total economic development expenditure, or measured the typical incentive package a firm would likely receive; and then correlated this with some measure of state or local economic health. Unsurprisingly, the results have been mixed, and no clear picture has emerged. Those finding a link between economic problems and the vigor of the economic development effort have used a variety of methods (Atkinson, 1991; Bowman, 1987; Clarke, 1986; Clingermayer & Feiock, 1990; Gray & Lowery, 1990; Green & Fleischman, 1991), as have those finding little or no relationship (Fisher & Peters, 1998; Grady, 1987; Hanson, 1993; Peters & Fisher, 2002b; Reese, 1991; Sridhar, 1996). The more recent studies have paid closer attention to measurement and model specification issues, and it is possible that these studies—which find little or no relationship—are thus more reliable.

Why would economically depressed states and local governments not be more active in recruiting new investment? For one thing, poorer places have less money to spend on recruitment and incentives. Moreover, no matter what their economic conditions, most states and cities in the U.S. appear to believe that they are competing with

each other for new investment. Wealthier places may be induced to make use of the fiscal advantages they have. Furthermore, there is enormous policy inertia in state and local incentive systems. A particular incentive may be established during a period of economic decline, but will likely continue to exist even after decline has been replaced by growth. Hanson (1993) notes that states usually modify incrementally what they have previously been doing. Thus it is highly unlikely that incentive generosity will be determined solely by state economic conditions. In conclusion, the evidence for one of Bartik's theoretical prerequisites for net national benefits from economic development policy—that incentives be substantially more generous in poorer places—is shaky at best.

Do States Target Incentives at More Needy Places or Populations?

We argued above that left to their own devices, states are unlikely to generate a pattern of business incentives that draws economic activity to poorer states, nor will poorer cities necessarily enact larger incentives than rich ones. However, many states do attempt to target state and local incentives within the state to poorer localities or poorer populations. They do this either by providing special state incentives only to firms in targeted areas (or firms that hire targeted populations), or by allowing certain local tax incentives to be adopted only within distressed areas. Such targeted programs are, in a sense, the best that the economic development industry has to offer.

What evidence we have suggests that state enterprise zones (and analogous programs) are, in most states, effectively aimed at poorer areas and poorer persons. In the most rigorous work thus far, Greenbaum (2001) analyzed zones in 10 states and found that zip codes selected as enterprise zones exhibited more physical deterioration and population distress than zip codes not selected. Moreover, most states try to earmark some of their incentives for special categories of needy workers. Usually this means providing a jobs credit for each new hire who is a member of a targeted population, such as the unemployed or the poor (we will call this “labor targeting” to distinguish it from “place targeting”). Some programs combine place and labor targeting: The credit is only for disadvantaged workers hired by firms in disadvantaged areas.

Nevertheless, it is easy to exaggerate the level of labor targeting involved. Incentives tied to the hiring of targeted individuals may actually be avoided by eligible firms.⁶ Even very handsome job incentives may not be generous enough to overcome the perceived productivity shortcom-

ings of targeted populations (Peters & Fisher, 2002b). Furthermore, the substitution effects one would expect from labor incentives—since they reduce the cost of labor, they should result in some substitution of labor for capital—may be severely muted by the design of the incentives. Because the total amount of labor incentives a firm may receive is automatically capped, in most states, by the firm's pre-incentive tax liability, the firm will obtain no additional benefit from hiring additional workers if it is already bumping against the cap. Most importantly, targeted labor incentives are massively overshadowed by incentives that cheapen the cost of capital (Fisher & Peters, 2001, 1997; Peters & Fisher, 2002b). The latter are not directly targeted at disadvantaged persons. The net effect of all of this is that while enterprise zones and the like are indeed targeted at poorer areas, the incentives available in those areas are not effectively targeted at distressed populations.

While targeted programs are widespread, the growth in targeted incentives was greatly outpaced during the 1990s by the growth in non-targeted incentives available throughout states (Peters & Fisher, 2002b). The effect of this is that the limited targeting inherent in many enterprise zone incentives is increasingly nullified by the growth in non-targeted incentives.

Do Poor People Living in Targeted Areas Benefit from Targeted Policies?

Let us assume that enterprise zones and related targeted programs are effective in a narrow sense—they do induce some investment and job growth. Who gets the jobs that result from such efforts? The question is important; a central justification of targeted policy instruments is that they will help to overcome the spatial mismatch problem, the separation between inner-city minorities seeking work and buoyant but suburban labor markets. Enterprise zones and the like were meant to provide *local* jobs for those suffering under the spatial mismatch between the supply of and demand for jobs.

The evidence on this issue is tiny. In an influential study, Leslie Papke (1994) found that Indiana enterprise zones significantly reduced unemployment claims filed in the cities that contained the zones. However, in another study (1993) she found that these effects were not particularly targeted at residents of the zones; unemployment rates of zone residents fell only slightly more than those of non-zone residents, and the zones actually experienced *larger* declines in population and in per capita income than non-zone areas. Papke's results suggest that zones enhance

employment prospects citywide but do little to help the residents of the zones.

If enterprise zones are successful, they should attract firms that draw from localized labor markets, employing the inner-city residents who would most benefit from increased earnings. Peters and Fisher (2002b) looked at the commuting patterns of workers in enterprise zones in a number of states. They found that firms in enterprise zones, like all other firms, draw from metropolitan labor markets, not local ones. The result is that workers in most enterprise zones had longer commutes—even when standardized by mode and income—than workers who do not work in zones. The vast majority of workers in enterprise zones did not live in an enterprise zone; moreover, the vast majority of those who lived in these zones did not work in them. Thus the local employment gains derived from bringing jobs to poor neighborhoods are greatly diluted—a majority of the jobs will go to non-zone residents.⁷

Let us summarize our argument so far. In most states, some portion of a state's economic development funding will be targeted at distressed areas; some (small) portion of that funding may actually be effective in inducing investment and jobs in those areas; some fraction, and probably not a large one, of those induced jobs (if there are any) will actually go to residents of that area; and some of those newly employed residents may actually be the poor or unemployed we were trying to help. And even this doubtful level of policy effectiveness may be difficult to sustain in the long run. Politically it is difficult to maintain a truly focused program without acceding to the demands of other areas to be granted similar policy instruments. As targeting erodes, one is more and more likely to end up simply giving a wide range of localities the tools to better compete with one another for new investment; in other words, one is simply subsidizing mobility. And the older, more distressed areas are likely to be the losers in a contest between greenfield sites with incentives and small, congested, brownfield sites with similar incentives.

Are Business Incentives Fiscally Beneficial?

It is possible that although incentives induce few new jobs and fail to adequately target the poor, they still provide fiscal benefits for communities, the new revenues from the few induced jobs exceeding the program's costs. There have been studies that have shown neutral or positive fiscal impacts of incentives. For instance, M. M. Rubin's 1991

study of New Jersey enterprise zones combined a state input-output model with surveys of recipient firms. Rubin then estimated that the direct fiscal effects were negative: \$61 million in incentive costs to 976 firms, versus about \$42 million in revenue from the 315 firms who reported in the surveys that they were influenced by the incentives. With the indirect or multiplier effects taken into account, however, there was about \$1.90 in state and local taxes generated per dollar of incentive cost.

B. M. Rubin and Wilder (1989) found that the cost per induced job in the Evansville, Indiana, enterprise zone was actually quite low (under \$1,000 annually per job for some sectors). Though they did not do a full fiscal impact analysis, it is likely that the net revenue effects would be positive given these small incentive costs. It is doubtful that much can be generalized from a study of one zone, particularly since that zone relied almost entirely on a rather unique incentive: a reduction in the tax on inventories (most states do not allow taxation of inventories in the first place). The methodology (shift-share analysis) used in this study to identify induced jobs is also open to question.

Bartik (1994) has argued that it is highly likely that incentives are always revenue negative. His argument begins from the assumption that economic activity is not very sensitive to taxes; in fact, he assumes that the elasticity is around -0.3 (the previously mentioned new "consensus" elasticity), so that a 10% cut in taxes would produce just a 3% increase in investment or jobs. He then demonstrates that the net change in tax revenue is approximately equal to the percentage increase in jobs minus the percentage cut in taxes. Obviously, if the elasticity is -0.3 , the net result is negative (3% minus 10%, in our example). For interstate location decisions, the elasticity is almost certainly much less than 1, so the percentage increase in jobs will be smaller than the percentage change in taxes, and the net effect is a loss of revenue. Furthermore, the bigger the tax cut, the larger the revenue loss.⁸

Bartik's formulation is straightforward enough when applied to across-the-board reductions in taxes that reduce the average tax rate on businesses. Then it is clear why the percentage revenue loss is approximately the same as the percentage cut in taxes. But incentives are temporary tax cuts available only for firms that are building or expanding facilities and employment; surely this is cheaper than permanently cutting taxes on new and existing firms alike.

Peters and Fisher (2002b) estimated the direct fiscal impact of incentive programs through a simulation model based on the actual state and local incentives available in 75 enterprise zones across 13 major industrial states. They

assumed, generously, that 10%⁹ of new jobs in zones are actually induced by incentives, and modeled the revenue gains from those induced jobs and the revenue losses from incentives to non-induced jobs over a period of 20 years after a community enacts an incentive program. They calculated that each net new job (each induced job) costs state and local governments about \$42,000.

There are two basic reasons why it is very difficult for states to gain revenue through the typical incentive package. First, there is the basic problem identified by Bartik—tax cuts just don't have that much leverage, so you end up giving away tax revenue mostly to firms that would have been happy to locate in your state anyway. Second, there is the fact that establishments don't live forever. By the time incentives have expired and a firm would be paying full freight, some firms have already left town, and many others will be around only a few more years. Meanwhile, the firms getting the new full incentive package keep arriving.

However, it appears that incentives are more likely to be revenue positive at the local level. The main reason for this is that incentives are more likely to influence the location of investment among closely matched local areas (such as neighboring cities) than among states (Chapman & Walker, 1990). Because factor and non-tax transaction costs are more similar, differences in taxation become more important. Elasticity estimates of the impact of local tax differentials on growth generally support this view (Bartik, 1991, chapter 2).

The possibility that local incentives produce fiscal gains for the localities that adopt them (or that use targeted incentives provided by the state) is no reason for rejoicing. The movement of investment among localities in a state creates no fiscal benefits¹⁰ for that state—investment is merely reshuffled spatially. If a state subsidizes the reshuffling with incentives, its fiscal losses will grow quickly. The cities that use incentives may benefit fiscally from beggaring their neighbors, but states will often end up paying the costs.

The literature we have relied on in this section is the thinnest of all. It would be most unwise to claim that the fiscal issue has been resolved once and for all. Nevertheless, the evidence suggests that incentives are a costly proposition. Given the weak effects of incentives on the location choices of businesses at the interstate level, state governments and their local governments in the aggregate probably lose far more revenue, by cutting taxes to firms that would have located in that state anyway than they gain from the few firms induced to change location. Some localities may gain revenue by offering locally funded incen-

tives, because taxes may provide more leverage over location decisions at the intrametropolitan level. But this will come at the expense of other localities, generally within the same state, so the state gains nothing and local fiscal effects cancel out. And if the state funds locally targeted incentives, the state is merely spending money to move tax-paying firms from one place to another; once again the local fiscal effects cancel out, but now the entire incentive cost is a state loss. And these fiscal losses are not trivial; the cost per job could be massive.

Alternatives and the Future of American Economic Development Policy

On the three major questions—Do economic development incentives create new jobs? Are those jobs taken by targeted populations in targeted places? Are incentives, at worst, only moderately revenue negative?—traditional economic development incentives do not fare well. It is possible that incentives do induce significant new growth, that the beneficiaries of that growth are mainly those who have greatest difficulty in the labor market, and that both states and local governments benefit fiscally from that growth. But after decades of policy experimentation and literally hundreds of scholarly studies, none of these claims is clearly substantiated. Indeed, as we have argued in this article, there is a good chance that all of these claims are false.

It seems to us that there is a need for a radical transformation of policy ideas on how we achieve local economic growth and how we get people working. The standard justifications given for incentive policy by state and local officials, politicians, and many academics are, at best, poorly supported by the evidence. We do believe that there are alternatives to traditional economic development incentives that have some chance of capturing the attention of policymakers over the coming decade, but for this to happen, the old arguments must be put to rest.

The most fundamental problem is that many public officials appear to believe that they can influence the course of their state or local economies through incentives and subsidies to a degree far beyond anything supported by even the most optimistic evidence. We need to begin by lowering their expectations about their ability to micro-manage economic growth and making the case for a more sensible view of the role of government—providing the

foundations for growth through sound fiscal practices, quality public infrastructure, and good education systems—and then letting the economy take care of itself.

Against that general background, there is still a role for specific programs aimed at improving worker employability and mobility (both occupational and geographic) and for community development efforts. But continuing on the path of traditional incentive-based economic development policy will simply produce an unending merry-go-round of tax cuts and subsidies whose net effect is to starve government of the resources it needs to finance the services it should be providing and to make the state and local tax system ever more regressive.

Notes

1. Depending on the circumstances, local economic growth may mean a number of different, though related, things: An increase in local product, an increase in the number of local firms or jobs, decreased unemployment rates, or decreased poverty rates.
2. For instance, the move, common during the 1990s, from triple-factor to single-factor apportionment rules—thus reducing tax payments for certain kinds of firms—should rightly be treated as a business incentive (Edmiston, 2002).
3. It is difficult to determine total incentive spending with precision. While the National Association of State Development Agencies provides annual numbers on the budgets of state economic development agencies, the vast majority of incentive spending occurs outside state or even city economic development departments. Most occurs as tax expenditures (which the state may or may not document), and some comes out of the budgets of departments other than the state economic development agency.
4. The calculations used to get to these numbers are described in Peters and Fisher (2002b, chapter 5).
5. The difference between a given actual wage and the reservation wage of those who take the new jobs is a measure of the net benefit of the jobs to the employees.
6. Ohio, for instance, had a generous jobs incentive available in some state enterprise zones. But fewer than 1 in 10 eligible firms take advantage of this incentive (Ohio Department of Development 1995, p. 3). The reason appears to be that the degree of targeting necessary to be awarded the incentive—25% of new hires must meet the eligibility criteria for the firm to receive any credits at all—was deemed too demanding by these firms.
7. In a study of an empowerment zone in Cleveland, Gottlieb and Lentnek (2001) found, to the contrary, that residents of the zone had shorter average commutes compared to residents of a suburban neighborhood with similar demographics. But they attributed this to the fact that the zone is sandwiched between two large concentrations of jobs, and they noted that the employment destinations of zone residents closely matched the employment destinations of city residents generally. This reinforces our point: Job markets are not local, and there is no particular advantage to providing highly localized concentrations of jobs. Expansion of employment in existing employment centers rather than in the zone itself might be just as effective.
8. With any given elasticity, doubling the size of the tax cut doubles the revenue loss. With an elasticity of -0.3 and a 10% tax cut, for example, the net revenue loss was 7%. With a 20% tax cut, job growth and revenue growth would be 6%, so the net effect doubles to a loss of 14%.
9. We argued earlier in this article that the true figure could be close to 0%. Even those predisposed to economic development policy believe the number to be well under 10%. Thus the true cost per new induced job may well be over \$100,000. While we calculated only the direct fiscal effects, we argue that the indirect or multiplier effects are unlikely to result in positive fiscal flows if one takes into account the public service costs associated with both the induced development and the induced population growth that follows.
10. Besides some trivial interjurisdictional tax transfers.

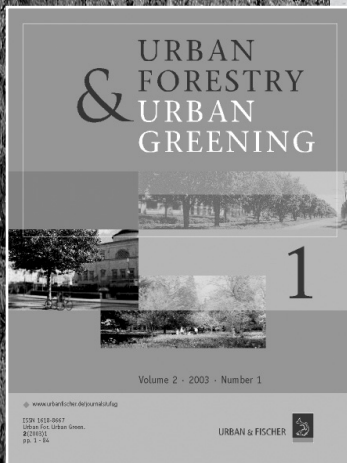
References

- Atkinson, R. (1991). Some states take the lead: Explaining the formation of state technology policies. *Economic Development Quarterly*, 5, 33–44.
- Bartik, T. (1991). *Who benefits from state and local economic development policy?* Kalamazoo, MI: W. E. Upjohn Institute for Employment Research Press.
- Bartik, T. (1994). Jobs, productivity, and local economic development: What implications does economic research have for the role of government? *National Tax Journal*, 47, 847–862.
- Bartik, T., Becker, C., Lake, S., & Bush, J. (1987). Saturn and state economic development. *Forum for Applied Research and Public Policy*, 2, 29–41.
- Bowman, A. (1987). *Tools and targets: The mechanics of city economic development* (Research report on America's cities). Washington, DC: National League of Cities.
- Burstein, M., & Rolnick, A. (1995, March). Congress should end the economic war among the states. *The Region*, 9(1), 3–19.
- Chapman, K., & Walker, D. (1990). *Industrial location*. Oxford, UK: Basil Blackwell.
- Clarke, M. (1986). *Revitalizing state economies*. Washington, DC: National Governors' Association.
- Clingermayer, J., & Feiock, R. (1990). The adoption of economic development policies by large cities: A test of economic, interest group, and institutional explanations. *Policy Studies Journal*, 18, 539–552.
- Dabney, D. (1991). Do enterprise zone incentives affect business location decisions? *Economic Development Quarterly*, 5, 325–334.
- Due, J. (1961). Studies of state-local tax influences on location of industry. *National Tax Journal*, 14, 163–173.
- Edmiston, K. (2002). Benefits and burdens of strategic apportionment policies: Preliminary results for the case of double-weighted sales in Georgia. *National Tax Association Proceedings: Ninety-Fourth Annual Conference on Taxation, 2001*, 331–339.
- Eisinger, P. (1988). *The rise of the entrepreneurial state*. Madison: University of Wisconsin Press.
- Fainstein, S. (1991). Promoting economic growth: Urban planning in the United States and Great Britain. *Journal of the American Planning Association*, 22, 22–33.
- Fisher, P., & Peters, A. (1997, March/April). Tax and spending incentives and enterprise zones. *New England Economic Review*, 109–130.
- Fisher, P., & Peters, A. (1998). *Industrial incentives: Competition among American states and cities*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research Press.

- Fisher, P., & Peters, A. (2001). The cost of enterprise zone incentives and an alternative use of the money. *National Tax Association Proceedings: Ninety-Third Annual Conference on Taxation, 2000*, 67–73.
- Fisher, R. (1997, March/April). The effects of state and local public services on economic development. *New England Economic Review*, 53–67.
- Fosler, S. (1988). *The new economic role of American states: Strategies in a competitive world economy*. New York: Oxford University Press.
- Gottlieb, P., & Lentnek, B. (2001). Spatial mismatch is not always a central-city problem: An analysis of commuting behavior in Cleveland, Ohio, and its suburbs. *Urban Studies*, 38, 1161–1186.
- Grady, D. (1987, Fall). State economic development incentives: Why do states compete? *State and Local Government Review*, 19, 86–94.
- Gray, V., & Lowery, D. (1990, March). The corporatist foundations of state industrial policy. *Social Science Quarterly*, 71, 3–22.
- Green, G., & Fleischman, A. (1991). Promoting economic development: A comparison of central cities, suburbs and nonmetropolitan communities. *Urban Affairs Quarterly*, 27, 145–154.
- Greenbaum, R. (2001). Selecting the right site: Where do states locate place-based economic development programs? *National Tax Association Proceedings: Ninety-Third Annual Conference on Taxation, 2000*, 74–82.
- Hanson, R. (1993). Bidding for business: A second war between the states? *Economic Development Quarterly*, 2, 183–198.
- McGuire, T. (1992). [Review of the book *Who benefits from state and local economic development policies?*] *National Tax Journal*, 45, 457–459.
- Man, J. (2001). Effects of tax increment financing on economic development. In C. Johnson & J. Man (Eds.), *Tax increment financing and economic development* (pp. 1010–1112). Albany: State University of New York Press.
- Marston, S. (1985). Two views of the geographic distribution of unemployment. *Quarterly Journal of Economics*, 100, 57–79.
- Netzer, D. (1997, March/April). Discussion of “Tax and spending incentives and enterprise zones.” *New England Economic Review*, 131–135.
- Newman, R., & Sullivan, D. (1988). Econometric analysis of business tax impacts on industrial location: What do we know, and how do we know it? *Journal of Urban Economics*, 23, 215–34.
- Oakland, W. H. (1978). Local taxes and intraurban industrial location: A survey. In G. F. Break (Ed.), *Metropolitan financing and growth management policies* (pp. 13–30). Madison: University of Wisconsin Press.
- Ohio Department of Development. (1995). *Ohio enterprise zone program*. Columbus: Author
- Papke, J. (1995). Interjurisdictional business tax-cost differentials: Convergence, divergence and significance. *State Tax Notes*, 9, 1701–1711.
- Papke, L. (1991). Interstate business tax differentials and new firm location: Evidence from panel data. *Journal of Public Economics*, 45, 191–203.
- Papke, L. (1993). What do we know about enterprise zones? In J. Poterba (Ed.), *Tax policy and the economy* (pp. 37–72). Cambridge, MA: National Bureau of Economic Research and MIT Press.
- Papke, L. (1994). Tax policy and urban development: Evidence from the Indiana enterprise zone program. *Journal of Public Economics*, 54, 37–49.
- Peters, A., & Fisher, P. (2002a). *A note on state and local incentive expenditures*. Unpublished manuscript. University of Iowa, Iowa City.
- Peters, A., & Fisher, P. (2002b). *State enterprise zone programs: Have they worked?* Kalamazoo, MI: W. E. Upjohn Institute for Employment Research Press.
- Phillips, J., & Goss, E. (1995). The effects of state and local taxes on economic development: A meta-analysis. *Southern Economic Journal*, 62, 297–316.
- Reese, L. (1991). Municipal fiscal health and tax abatement policy. *Economic Development Quarterly*, 5, 23–32.
- Rubin, B., & Wilder, M. (1989). Urban enterprise zones: Employment impacts and fiscal incentives. *Journal of the American Planning Association*, 55, 418–430.
- Rubin, M. (1991). Urban enterprise zones in New Jersey: Have they made a difference? In R. Green (Ed.), *Enterprise zones: New directions in economic development* (pp. 105–121). Newbury Park, CA: Sage.
- Sridhar, K. (1996). Tax costs and employment benefits in enterprise zones. *Economic Development Quarterly*, 10, 69–90.
- Steinnes, D. (1984). Business climate: Tax incentives and regional economic development. *Growth and Change*, 15(2), 38–47.
- Tannenwald, R. (1996, January/February). State business tax climate: How should it be measured and how important is it? *New England Economic Review*, 23–38.
- Thomas, K. (2000). *Competing for capital: Europe and North America in a global era*. Washington, DC: Georgetown University Press.
- Wasylenko, M. (1997, March/April). Taxation and economic development: The state of the economic literature. *New England Economic Review*, 37–52.
- Wilder, M., & Rubin, B. (1996). Rhetoric versus reality: A review of studies on state enterprise zone programs. *Journal of the American Planning Association*, 62, 473–491.

ISSN 1618-8667

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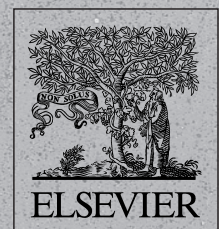
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