W.E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH

Upjohn Institute Press

Introduction

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Chapter 1 (pp. 1-19) in:
State Enterprise Zone Programs: Have They Worked?
Alan H. Peters, Peter S. Fisher
Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2002

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Introduction

Enterprise zones have been part of American urban policy for more than two decades. Between 1981 and 1991, 38 states and the District of Columbia passed enterprise zone legislation. As of 1995, 34 of those programs remained active, and in those states, 2,840 zones had been established (Wilder and Rubin 1996).[1] Two more states—Iowa and Michigan—have initiated enterprise zone programs since that time, and Pennsylvania has introduced a much more aggressive version of its enterprise zone. While thousands of state-sponsored enterprise zones now exist, there continues to be controversy about what enterprise zones should be designed to achieve, what incentive instruments are appropriate to enterprise zone goals, and whether these zones are likely to be more or less effective than the rest of the state and local economic-development effort. Moreover, the situation became even more confusing in 1993 with the passage of the Empowerment Zone and Enterprise Community Act. With this legislation the federal government jumped into the enterprise zone arena. The federal program initially added 11 empowerment zones and 99 enterprise communities to the list of state zones (Hambleton 1996). It also added a distinctive set of incentives and policy goals.

Given the public resources being dedicated to U.S. enterprise zones by the federal government and by states and cities, and given the small size of the literature on enterprise zones, we believe it is high time for a multistate evaluation of the effectiveness of enterprise zones. In this book we look at state and local zones only, and our sectoral focus is on manufacturing. We ignore federal zones because they are very different from state zones, making summary comparison figures difficult to construct, and because there are vastly more state zones than federal zones. We ignore retail and other services because state zones still tend to concentrate on new manufacturing investment. Erickson and Friedman (1990a) found in a study of 357 zones between 1982 and 1987 that manufacturing accounted for 73 percent of new jobs. In a more recent study, we found that 74 percent of enterprise zone agreements in Ohio have been with manufacturing firms (Peters and Fisher 1998). Here we

examine seven policy issues that we believe should be the core of any serious evaluation of enterprise zones.

- What sort of business incentives are provided in state enterprise zones?
- What is the size of these incentives and what is their relative importance compared to other sorts of state and local business incentives?
- Do enterprise zone incentives encourage businesses to use more labor than would otherwise be the case? More generally, what sort of investment do the incentives favor?
- Do enterprise zones make sound fiscal sense? In other words, are enterprise zone incentives likely to produce revenue gains or losses for state and local government?
- How much business turnover is typical in enterprise zones?
- Is there a "causal" relationship between enterprise zone incentives and economic growth in enterprise zones? Do enterprise zones create growth?
- Do enterprise zones draw their labor from poorer, more depressed parts of metropolitan areas?

ENTERPRISE ZONES AND ECONOMIC-DEVELOPMENT POLICY

A central problem with almost all economic-development program evaluation is that, even after decades of research, we lack conclusive evidence on the effectiveness of policy. The problem is particularly acute in the case of enterprise zone incentives. Two difficulties bear special attention: proper measurement of incentives and assessing the impact of incentives on firm behavior.

At heart, almost all economic-development policy is a trade—government provides incentives that reduce the costs of doing business at a site; in return, business is meant to change its investment behavior in some way, by locating at one site rather than another or by employing more labor at a site than it otherwise would have, and so on. The problem we face is that, outside of a few geographically and temporally limited studies,[2] we do not have good measures of what government is giv-

ing away in enterprise zones; we don't know enough about the size of the public carrot being offered to the private sector. We need to know by how much zone incentives reduce the tax burden on business—thus increasing business profitability—since it is precisely this reduction in burden that is meant to give government its leverage over the firm's behavior.[3] To our minds, this is the fundamental hole in the enterprise zone literature. Our first tasks then are to find out what enterprise zone incentives are worth *to business* and to compare these to the size of other non-enterprise zone incentives routinely offered to industry (see Chapter 3). It turns out that these tasks have the useful side effect of allowing us to measure the true cost of incentives to government and to draw some conclusions about how incentive instruments could be designed to improve their overall cost-effectiveness (see Chapter 5).

The second issue is a variant on the first. A pressing policy question is whether enterprise zones actually work—whether they actually result in new local growth. Typically, econometric models are built to investigate whether a particular policy instrument has some "causal" influence on economic growth.[4] The problem is methodologically difficult because so many other factors could influence local growth, and all of these must be accounted for before the effect of enterprise zones *alone* can be properly measured. The existing econometric literature on enterprise zones reveals little regarding the impact of zone incentives on local economic growth, in part because the literature is so small and contradictory and in part because zone incentives have been measured so poorly. Some researchers, for instance, have simply counted enterprise zone programs to see whether places with more programs have more growth. This approach misses the fundamental economic point. It makes no economic or financial sense to expect a 100 percent property tax abatement over 10 years to have the same impact on growth as a 33 percent abatement over three years, or either of these to have the same impact as a sales-tax exemption on all machinery and equipment bought for use in the zone. Incentives lower the costs of operating at a particular site; the more they lower these costs, the more effective they are likely to be. If an econometric growth model treats all incentives as essentially homogenous, it ignores what makes a particular incentive "work." Other studies have looked at whether the geographical area covered by an enterprise zone experienced more economic growth after the designation of zone status than before designa-

tion. Again, what this misses is that designation alone does not alter the business operating environment; it is the incentives that come with designation that do that. At best, designation is a crude signaling mechanism to business of incentives to come. Our second major task, then, is to look at the impact of incentives on firm behavior.

In Chapter 7 we do finally develop econometric models investigating the relationship between incentives and local growth. Throughout the book, however, we look at the effect of incentives on firm behavior in various ways. In Chapter 3, for instance, we look at the size of incentives and compare them, using a wage-equivalency technique, to a factor widely seen as important in investment decisions, labor costs. This allows us to draw some conclusions about the likely impact of incentives on business decisions without having to rely on the results—and assumptions—of our econometric models. In Chapter 4 we look at whether zone incentives are likely to result in firms employing more labor than they otherwise would.

In this book, as in our previous book on economic-development competition, we use the "hypothetical firm" methodology to measure the value of enterprise zone incentives to business. The idea behind this method is quite simple. Construct a set of financial statements for reasonably typical firms, then apply the tax code and incentives to those firms. The extent to which a particular incentive increases the firm's returns on investment (calculated either as increased cash flow or an increased internal rate of return) is the measure of the incentive's worth to the firm. Underlying this approach are the principles of modern location theory—firms are profit maximizers and will therefore choose sites that maximize profits; government can influence firm location decisions by changing the after-tax profitability of operating at particular sites.

We use a new hypothetical firm model, TAIM^{ez} (the Tax and Incentive Model for Enterprise Zones), the building of which started in 1997. The new model is a direct descendant of the TAIM model that we used for much of our research in the mid 1990s. The TAIM^{ez} model, however, is larger, more flexible, and capable of tax simulations we were not able to perform in the original model. In order to encourage openness and transparency in this area of research, we feel it is imperative to discuss some of the methodological considerations involved in building this model *before* discussing our results. We include a short discussion of this model in Chapter 3 but leave almost all of the technical informa-

tion for Appendix A. In Appendix B we also provide a comparison of results from TAIM^{ez} with results from the earlier TAIM model; this should aid comparability with past research.

The focus of most of the research reported in this book is on the enterprise zone programs in place in 13 states. These states were selected because they are the largest states (in terms of total manufacturing employment) that had significant enterprise zone programs in place by 1990. We examine the incentive packages available in a sample of 75 zones within those 13 states during the period 1990 through 1994, and the changes in manufacturing establishments within the zones from 1989 through 1995. A more complete discussion of the sample is provided later in this chapter.

THE ORGANIZATION AND ARGUMENTS OF THE BOOK

The book is organized into eight substantive chapters. In the first of these, Chapter 2, we provide the background to the other chapters in the book; it should be read by all readers. Here we examine the history of enterprise zones in the United States—in particular, what policymakers hoped to achieve with zones—and the arguments for and against an enterprise zone strategy. In Chapters 3 through 8 we cover our research results. In the first three of these we use TAIM^{ez} to measure the size and comparative worth of enterprise zone incentives sponsored by state and local governments. In these chapters we also look at the extent to which enterprise zone incentives are biased in favor of some industrial sectors and capital-intensive sorts of investment, and finally at the cost to government of these enterprise zone incentives. In Chapters 6 and 7 we utilize a new, very complete, business establishment database to analyze the growth that has occurred in enterprise zones. In Chapter 8 we focus on the labor markets that enterprise zones draw from. And finally, in Chapter 9 we summarize our results and consider alternative policies.

Needless to say, the organization of this book has posed some challenges. As we indicated above, our results often depend on fairly complex methodological procedures. The book is aimed at a broad policy audience, however, and we suspect that most readers will not want to

wade through all the supporting methodological material. On the other hand, many readers will at some point wonder exactly how a particular number was calculated or conclusion reached. Our solution has been to segregate, wherever possible, the most technical material into appendices or endnotes. Moreover, by providing guides to our research and conclusions, both here and at the beginning of each chapter, we hope to direct readers to those places most appropriate to their individual interests. What follows is a brief summary of the content of each chapter and the conclusions we draw.

Chapter 2: Enterprise Zones and Economic-Development Policy

In Chapter 2 we present a history of enterprise zones in the United States and then critique the various rationales that have been put forward to justify geographically targeted approaches to economic development in general and enterprise zones in particular. The most notable of these rationales is the "spatial mismatch" hypothesis, which claims that inner-city residents face high rates of joblessness because they are spatially separated from suburban job opportunities. Enterprise zones can then be justified as a way of bringing jobs to depressed inner-city neighborhoods, thereby increasing employment rates of the urban poor. In this chapter we also review the major theoretical and policy criticisms that have been leveled at the enterprise zone idea. There is reason to be skeptical that spatial mismatch is the main cause of underemployment among inner-city minorities and that job proximity will necessarily produce higher rates of employment. Even if these claims were supported, it would be unclear that enterprise zones are the most cost-effective way to provide employment opportunities to those most in need of them. The primary conclusion of this chapter is that, even after decades of program experimentation, there is considerable confusion as to the goals of U.S. enterprise zone policy and the policy tools appropriate to attaining those goals.

Chapter 3: How Valuable Are Zone Incentives to Firms?

In this chapter we look at the sorts of incentives offered to firms locating in enterprise zones, estimate the true value of those incentives to business, and compare enterprise zone incentives to other (nontargeted)

incentives available to firms. The typical package of incentives available to firms locating in an enterprise zone consists of an investment credit and a jobs credit, under the state corporate income tax, and local property-tax abatements. Looking at the 13 states that had substantial enterprise zone programs in place by 1990, we find that the average package among our 75 sampled cities was worth $5,048 per job in 1994, where the value of the package is measured by the increase in the present value of the 20-year cash flow attributable to investment in a new plant. Among the 75 cities, half had at least one sector for which the total incentive package exceeded $10,000 per job, and 14 cities would have granted at least one sector more than $20,000 per job. Incentives of this magnitude are equivalent to a gross undiscounted value in the range of $20,000 to $60,000 per job.

The total incentive-package values reported above included both incentives available only within enterprise zones in the 13 states and incentives available anywhere in the state. We also examined incentives available in a broader set of 20 of the most industrialized states and found that the average incentive package increased in value from $4,061 per job in 1990 to $5,338 per job in 1998. On average among the 20 states, the enterprise zone incentives per se accounted for 63 percent of the total package in 1990, but only 51 percent by 1998. Looking just at our 75-city sample, the enterprise zone share fell from 65 percent in 1990 to 57 percent in 1994. General incentives have been increasing more rapidly than enterprise zone incentives. Still, for the typical manufacturing firm, the incentive package more than doubles if the firm chooses an enterprise zone location over a non-zone location in the same state.

Competition among states and localities for manufacturing investment has led to reductions in basic state taxes as well as to increases in state and local incentives. The importance of these tax and incentive changes can best be measured by their effect on the overall state-local tax rate on new investment. The overall trend in the 1990s was overwhelmingly to reduce basic taxes on corporations. Among the 20 states, the median basic tax rate was reduced from 8.5 percent in 1990 to 7.9 percent in 1998. Larger reductions in the median effective tax rate occurred when general incentives were included (from 7.6 percent to 6.7 percent) and when targeted incentives were added (from 6.3 percent to 5.2 percent).

We found that tax rate and incentive competition continued through the 1990s with no indication that this is producing convergence in effective tax rates among the states; the process resembles a game of leapfrog, with no state apparently content to be merely average. The most striking evidence of this is the prevalence, by 1998, of *negative* tax rates on new investment: not only does the construction of a new plant, and the generation of sales and income from it, fail to generate additional tax liability to the state in which the plant is located, but the plant actually reduces the firm's tax liability to that state in many instances because new-plant credits exceed the entire new-plant tax.

Chapter 4: How Taxes and Incentives Favor One Industry over Another and Capital over Labor

Knowing how incentives increase business profitability is clearly key to evaluating enterprise zones, but we also need to have a sense of the firm's likely behavioral response to incentives. Do enterprise zone incentives change the relative prices of capital and labor, and should we expect to see some substitution of labor for capital, or capital for labor? This is an important issue. We argue in Chapter 2 that the central justification of the enterprise zone idea is the creation of employment in targeted areas. If the incentives we use "cause" a firm to locate in our zone, but at the same time cheapen the cost of capital relative to labor, the employment-creating effects of the investment may be much smaller than they otherwise would have been.

We found that 4 of our sample of 13 states provide, at the state level, a set of incentives to zone firms that clearly lowers the price of labor. Four other states have a clear capital bias. In the other 5 states, credits provide no clear reduction in labor or capital prices at the margin. When local incentives—property-tax abatements, primarily—are brought into the picture, however, the capital bias becomes much stronger.

The possible effects of incentives on a firm's choice of technology, and the relative use of capital and labor in the production process, depend not on the dollar amount of incentives but on changes in the prices of capital and labor. The effects of labor incentives on the price of labor are quite small. In only two states does the average price reduction exceed 1.0 percent, and the maximum price reduction among the 16

sectors we looked at never exceeds 3.0 percent in any state. Capital incentives, on the other hand, have substantial price effects in several of the states. The average price reduction among sectors exceeds 5.0 percent in 8 of the 13 states, and in 6 states the maximum exceeds 20 percent for at least one sector. Indeed, there is a clear bias of incentive systems in favor of capital in all but 2 of the 13 states. Given the significant substitutability between capital and labor in manufacturing reported in empirical studies, it is likely that this capital bias in incentives will cause firms to adopt at least somewhat more capital-intensive methods of production, which would partly offset—or possibly more than offset—the employment gains from the location effects of incentives.

A related concern is the industrial policy implicit in enterprise zone incentives. Incentives not only change the relative prices of capital and labor, but also favor particular sorts of industrial firms. For instance, the exemption of machinery and equipment from the local property tax will benefit those firms that use relatively more machinery and equipment in their production processes. Sales-tax exemptions on energy use will benefit those firms that use relatively more energy in their production processes, and so on. We find that the industrial-policy effects of incentives are quite strong within our sample of 75 cities. It is quite common for the most heavily taxed sector in a particular city to be facing a state-local tax rate two (or even three) times the rate on the least-taxed sector. Thus, state and city taxes and incentives effectively discriminate in favor of some sectors and against others. We believe it is most unlikely that the industrial policy implicit in this pattern of sectoral preferences is intended, or even known, by state or local development officials or policymakers.

Chapter 5: The Fiscal Effects of Incentives

Even if enterprise zones do manage to encourage both new investment and new employment, they may still not be fiscally cost-effective for government. There are a number of reasons for this, the most patent being that expensive incentives may have a real but nevertheless small total effect. The aim of this chapter is not to conduct a benefit-cost analysis—we believe the benefits and costs of most economic-development policy still to be too ambiguous to be measured uncontroversial-

ly—but to analyze the direct fiscal impact of enterprise zone incentives. The analyses that we perform to look at this issue also permit us to evaluate the design of incentives and to recommend ways to structure them to increase the likelihood of generating a fiscal surplus.

Our research indicates that the direct revenue effects of enterprise zone incentives on state and local government combined are very likely to be negative, and rather strongly so. In the average enterprise zone city, among our sample of 75, each job that is actually induced by the zone incentives—in other words, jobs that would not exist there "but for" the incentives—would generate about $7,200 in net additional revenue to state government (in present-value terms over 20 years) and another $11,000 in local revenue. On the other hand, the state would lose about $4,600 for every new job that was not attributable to incentives (because some growth would have occurred anyway and that investment will receive the same incentive package), and localities would lose about $3,200 for each noninduced job. The key to determining whether government gains or loses from incentives is the ratio of induced to noninduced jobs. We find that in the average city, as long as this percentage of induced to total jobs was more than 30 percent, state and local government combined come out ahead. The problem is, research (ours and others) suggests that the percentage is likely to be considerably lower than 30 percent, if one defines an induced job as a job that would not have existed in that state but for the state-local incentive package. In fact, the current research consensus on the interstate or intermetropolitan effects of taxes on growth suggests the inducement percentage would be about 9 percent and the net annual state-local revenue loss would be about $7,130 per induced job in our average city. Total annual fiscal losses produced by an average-sized zone with an average incentive package could eventually be $1 to $2 million.

The purely local fiscal effects of a local zone tax incentive, on the other hand, are more difficult to estimate because of the paucity of intrametropolitan research studies, though positive effects are more likely since a move within the metropolitan area, while not representing a net gain for the state, will nonetheless produce a net gain for the receiving locale. Higher local inducement percentages are plausible and are supported by some research.

The work done for this chapter also allowed us to consider the design of incentive instruments. Contrary to conventional wisdom, we

find that governments lose more revenue the more they front-load their incentives; other things being equal, a cost-effective incentive is a back-loaded one. Moreover, a permanent tax cut is more likely to produce positive revenues than a temporary cut with the same power to create jobs (i.e., with the same value to the firm over some decision-making time horizon).

Chapter 6: Manufacturing Growth and Decline in Enterprise Zones

In Chapters 3 through 5 we focus on zone incentives. In Chapter 6 we turn our attention to enterprise zones and growth. The analysis in Chapter 6 is descriptive and relies on special data runs undertaken for us by the Bureau of the Census. The data consist of establishment counts by industry and employment-size class. Our focus is on the composition of economic growth and decline in enterprise zones—the relative importance of establishment births, deaths, relocations into and out of zones, and employment expansions and contractions in zones.

When we examine the 13 sample states as a whole, we find that the six-year period 1989–1995 saw relative stability in the manufacturing sector, as measured by changes in the number of manufacturing establishments. The enterprise zones within those states, on the other hand, experienced a net loss of establishments. The average zone had 111 establishments in 1989; about 11 establishments were born or moved into the zone each year, but about 12.4 died or moved out. The net effect was a decline in establishments at a rate of about 1.2 percent per year, or a 7 percent net loss for the six-year period. Twenty-four zones experienced net declines of 15 percent or more over the period, however, while 11 experienced net *growth* of over 10 percent.

Establishments exiting the enterprise zones (through deaths or moves out) were, on average, just slightly larger than those entering. The percentage loss of manufacturing employment over the six-year period due to net loss in establishments was therefore likely to be a little more than the percentage loss of establishments. Zone employment was also greatly affected by the job expansions and contractions of firms that remain in the zone. Overall, of the establishments existing in these 64 zones at the beginning of a given period, about one in three expanded employment within the two-year period, and about one in three

reduced employment. Larger establishments were much more likely to contract than smaller establishments, however, so it is likely that the net effect of expansions and contractions in these zones was further erosion in the job base, beyond the more than 9 percent attributable to net loss of establishments.

When we compared establishment growth and decline in zones with the states of which they were a part, we found that zones had a pronounced comparative disadvantage in attracting and retaining the more capital-intensive sectors of manufacturing. It is also clear that manufacturing in enterprise zones remains concentrated in "old economy" sectors, particularly printing and publishing and fabricated metal products. Zones appear to have a comparative disadvantage in electronic equipment, instruments, and chemicals.

When we examine expansions and contractions by time period we find a striking trend, however: the percent of establishments that remained in the zone and expanded increased with each two-year period, while the percentage that remained but reduced employment declined. Expansion rates exceeded contraction rates by a wide margin in the most recent period studied, 1993–1995, especially for the two smaller-size classes. It is quite possible that in the 1993–1995 period there was net employment growth in existing establishments in these zones sufficient to offset, or more than offset, the job losses due to exits exceeding entries. We think it likely that this trend persisted as the national economic expansion continued through the 1990s.

Chapter 7: Enterprise Zones, Incentives, and Local Economic Growth

In this chapter we make use of the same data set we employed in Chapter 6 and look again at the issue of growth, this time from an econometric point of view. Our aim here is to answer what is probably the key policy question: do enterprise zone incentives actually "cause" economic growth? We begin the chapter by looking at the various econometric models of enterprise zone impacts on growth developed by other researchers. Then we present results from our own analyses: one for our near-national sample of enterprise zones and another for enterprise zones in Ohio (Ohio has some of the best economic-development data in the nation). In essence, we develop models at two spatial

scales and thus are able to measure both interstate enterprise zone impacts and intrastate impacts.

If zone incentives are to be effective, they must be sizeable enough to influence geographic investment decisions. We find that the average incentive packages for each of the sectors for the 13 states are equivalent to a 1.6 percent to 7.1 percent cut in wages. Thus, a relatively small wage premium would be sufficient in many locations to wipe out the advantages created by the incentive packages there. With the exception of some extreme cases, therefore, one would not expect incentives to have noticeably large effects on location decisions. Our statistical models of enterprise zone incentives and growth bear out this deduction. We find no evidence of a strong positive impact of enterprise zone incentives on growth: zones offering larger incentives (or a lower net tax rate) for firms in a given sector did not attract significantly more births and in-migrations of establishments in that sector than zones with a less attractive tax and incentive regime. While we do not claim that our research settles this matter, we do believe our results cast considerable doubt on the belief, widespread in economic-development policy circles, that incentives are crucial for growth in targeted areas. Our conclusions here are in line with much, but not all, of the recent econometric work on enterprise zones and growth. It is almost certain, then, that incentives have little impact on employment growth.

Chapter 8: Enterprise Zones and Access to Employment

All this leaves out an important issue: Who are the people who work in enterprise zones? Enterprise zones "may"—the results of Chapter 7 suggest that this is a big "may"—encourage new investment and employment, but we still need to know whether the zones provide jobs for residents of neighborhoods with less access to growing suburban labor markets. Merely creating local growth may not, in and of itself, be good enough. In Chapter 8 we assemble various data to give what are only preliminary answers to these questions. They are preliminary because the data we are able to use are both limited and not entirely appropriate to most of the questions we need to answer. We focus on the extent to which enterprise zones are able to attract more-disadvantaged workers and the extent to which they provide special work opportunities to those living in enterprise zones.

Tying the provision of business incentives to the requirement that recipient firms hire targeted workers appears not to have been a success. These requirements usually only apply to jobs credits and jobs credits are typically only a small part of the incentive packages provided. Moreover, it is possible that firms may avoid using incentives with strong "tying" provisions.

Improving the access of inner-city minorities and others to buoyant labor markets by locating zones in targeted areas also seems to be problematic. Enterprise zones attract workers from far and wide. In most of the enterprise zones we looked at, the majority of jobs were taken by commuters from outside the enterprise zone. Moreover, commute time of those working in enterprise zones appears to be longer than the average for those working elsewhere in the regions that contain the enterprise zones. This suggests that spatial proximity between home and work does not necessarily improve the accessibility of jobs.

Chapter 9: Conclusions and Policy Recommendations

In the final chapter we summarize our results and provide some broader thoughts on the role of enterprise zones, targeted incentives, and economic-development policy. Our overall assessment of enterprise zones is negative. There is great variability in what enterprise zones look like, what they are meant to achieve, and consequently what incentives are offered. Although our research has focused on those states in which enterprise zones are targeted at problem areas, enterprise zones in some other states look to be little more than delivery mechanisms for standard state and local economic-development policy. During the 1990s, in fact, non-spatially targeted incentives grew in importance relative to enterprise zone incentives, thus lessening the potential impact of enterprise zones. The zone incentives offered tend to favor capital rather than labor and appear to constitute a chaotic and unplanned industrial policy. Furthermore, these incentives usually cause losses to the public purse. Although there is a lot of business turnover in enterprise zones, zone incentives have only a minimal impact on new investment. Finally, enterprise zones do not seem to improve the spatial accessibility of employment to the disadvantaged. We end by proposing policy alternatives to enterprise zones.

There are many other policy questions about enterprise zones that need to be answered. For instance, we need to know the relationship

between housing effects and economic-development effects in residential enterprise zones, whether zones can encourage minority entrepreneurship, and so on. We do not address these issues in this book, although we recognize that they are important to evaluating the overall effectiveness of the enterprise zone strategy. Because of how little we know about the basic employment effectiveness of enterprise zones, in this book we focus on a small set of basic economic questions: What are the incentives offered in enterprise zones and what are the employment growth effects of those incentives? Answering even this small set of questions has taken a huge research effort. We leave the other questions to other researchers.

STATES, CITIES, AND ENTERPRISE ZONES SAMPLED

The final issue to be dealt with in this chapter concerns our various state, city, and enterprise zone samples. The sample starts with the 20 states modeled in TAIM^{ez}—the largest industrial states, in terms of manufacturing employment. For these 20 states, we modeled taxes from 1990 through 1998. This sample provides us with our broadest historical view of enterprise zone policy in the United States and is the basis of the results in Chapter 3 comparing enterprise zone and nontargeted tax incentives. From these 20 states, we selected the 13 states with significant enterprise zone programs in place by 1990. (States with fewer than five enterprise zones were eliminated.) In each of these 13 states enterprise zone policy was "targeted" at distressed areas.[5] Within each state, we identified the enterprise zones located within cities of 25,000 population or more that were within a metropolitan statistical area (MSA or PMSA). The population cutoff was employed for two reasons: to facilitate data collection (since census data are readily available in much more detail for larger cities and for MSAs) and to avoid skewing the sample in favor of small cities in those states, such as Texas and Ohio, that have a very large number of zones in cities of all sizes. We then randomly selected six zones in each state, if possible (in a few states, there were only five zones in cities of 25,000 or more). This left us with a sample of 75 cities (see Table 1.1). It is a stratified sample, of course, based on states, in order to avoid having a sample made up largely of zones in the handful of states with 100 or more

Table 1.1 The 75 Enterprise Zones Sampled

State and zone name	Year started	City	City population	Included[a]
California				
Altadena/Pasadena (EZ)	1992	Pasadena	131,591	x
Los Angeles, NE Valley/Pacoima	1986	Los Angeles	3,485,398	x
Porterville (EZ)	1986	Porterville	29,563	x
Shasta Metro Redding/Anderson (EZ)	1991	Redding	66,462	
Sacramento: Northgate (EIA)	1986	Sacramento	369,365	
Stockton (EZ)	1993	Stockton	210,943	
Connecticut				
Hamden	1989	Hamden	52,434	x
Hartford	1982	Hartford	139,739	x
Meriden	1987	Meriden	59,479	x
New Britain	1982	New Britain	75,491	x
Norwalk	1982	Norwalk	78,331	x
Norwich	1987	Norwich	37,391	x
Florida				
Clearwater	1986	Clearwater	98,784	x
Fort Lauderdale	1986	Fort Lauderdale	149,377	x
Fort Myers	1986	Fort Myers	45,206	
Jacksonville	1986	Jacksonville	635,230	x
Miami Beach	1986	Miami Beach	92,639	x
Tampa	1986	Tampa	280,015	x
Illinois				
Champaign/Champaign County	1986	Champaign	63,502	x
Kankakee County (Manteno city)	1986	Kankakee	27,575	x
Maywood	1988	Maywood	27,139	x
Moline/Quad Cities	1988	Moline	43,202	x
Pekin/Tazewell County	1986	Pekin	32,254	x
Riverbend/Alton	1986	Alton	32,905	x
Indiana				
Evansville	1984	Evansville	126,272	x
Fort Wayne	1984	Fort Wayne	173,072	x

Table 1.1 (Continued)

State and zone name	Year started	City	City population	Included[a]
Indiana (continued)				
Hammond	1985	Hammond	84,236	x
Lafayette	1993	Lafayette	43,764	x
Muncie	1989	Muncie	71,035	x
South Bend	1984	South Bend	105,511	x
Kentucky				
Covington	1982	Covington	43,264	x
Hopkinsville	1982	Hopkinsville	29,818	
Lexington	1982	Lexington	225,366	x
Louisville	1982	Louisville	269,555	
Owensboro	1982	Owensboro	53,549	x
Missouri				
Joplin Area/Webb City	1985	Joplin	40,961	x
Kansas City Enterprise Zone	1985	Kansas City	435,146	x
Springfield Enterprise Zone	1984	Springfield	140,494	x
St. Joseph/Buchanan County	1985	St. Joseph	71,852	x
St. Louis Mid Town	1983	St. Louis	396,685	x
New York				
Auburn	1988	Auburn	31,258	x
New York City	1988	New York City	7,322,564	x
Niagara Falls	1988	Niagara Falls	61,840	x
Syracuse	1987	Syracuse	163,860	x
Troy	1987	Troy	54,269	x
Utica	1988	Utica	68,637	x
Ohio				
Canton	1986	Canton	84,161	x
Cincinnati 2 (#154)	1989	Cincinnati	364,040	x
Cleveland (#24)	1985	Cleveland	505,616	x
Elyria	1987	Elyria	56,746	x
Massillon	1986	Missillon	31,007	x
Warren (#111)	1988	Warren	50,793	x
Pennsylvania				
Chester	1983	Chester	41,856	x
Johnstown	1983	Johnstown	28,134	

Table 1.1 (Continued)

State and zone name	Year started	City	City population	Included[a]
Pennsylvania (continued)				
Lancaster	1988	Lancaster	55,551	x
Philadelphia-Hunting Park West	1983	Philadelphia	1,585,577	x
Pittsburgh: North Side	1983	Pittsburgh	369,879	x
Scranton	1988	Scranton	81,805	x
Texas				
Amarillo	1989	Amarillo	157,615	x
El Paso East	1993	El Paso	515,342	x
Fort Worth North	1988	Fort Worth	447,619	x
Pharr II	1991	Pharr	32,921	x
San Antonio: Eastside & Westside	1988	San Antonio	935,933	x
Waco Northwest	1991	Waco	103,590	
Virginia				
Danville	1984	Danville	53,056	
Lynchburg	1985	Lynchburg	66,049	
Newport News #1	1984	Newport News	170,045	x
Petersburg	1985	Petersburg	38,386	x
Portsmouth	1984	Portsmouth	103,907	x
Richmond #1 (south)	1993	Richmond	203,056	
Wisconsin				
Beloit	1989	Beloit	35,573	x
Fond Du Lac	1991	Fond Du Lac	37,757	x
Green Bay	1991	Green Bay	96,466	x
Milwaukee	1989	Milwaukee	628,088	x
Racine	1989	Racine	84,298	x

[a] x indicates that the zone was included in the final sample for the regression analyses.

zones each. There was no weighting applied; thus the results can be interpreted as comparisons of state enterprise zone policies, since each state receives approximately the same weighting in the sample. More detailed data on the sample can be found in Appendix E.

For the descriptive analyses of taxes and incentives in Chapter 3, we used the entire 75-city sample. The analyses in Chapters 6 and 7, on the other hand, were performed on a reduced sample of 65 zones, due to

problems with the additional data required for these analyses, particularly the mapping of zone boundaries (see Appendix E for a discussion of the boundary issue). For the 13-state, 75-city sample and its derivatives, our concern was with taxes and incentives in 1990, 1992, and 1994.

We also conducted a subsidiary analysis of enterprise zones in the state of Ohio. Because the state had readily available complete data on local taxes, including the actual property-tax-abatement schedules employed, as well as a complete set of computerized enterprise zone boundaries, it was feasible to do an additional analysis of all 104 Ohio cities with populations of 15,000 or more, with or without enterprise zones. Such a data set would be difficult or impossible to assemble for any of the other states we researched. The Ohio data set has an additional advantage: a number of new zones were created in these 104 cities during the period of our analysis, 1990–1994. This allows us to look directly at the impact of zone designation.

Finally, we have a small subsample of cities and zones (drawn from the original 75) for which we do further commuting analyses—these are described in Chapter 8. The reason for the reduction in sample size was that we needed to include a further set of conditions for zone specification in order to make sure that commuting patterns to and from zones were being measured appropriately. Thus, cities with fewer than 50 Traffic Analysis Zones (TAZs) were excluded as were cities that were part of very large, complex commuting regions (in essence, commuting regions with multiple, large, central cities). Also excluded were cities in which there were major changes to enterprise zone boundaries.

Notes

1. Of these zones, 2,083 were in just two states—Arkansas and Louisiana—and another 227 were in Ohio. At the other extreme, seven states had three or fewer zones. See Wilder and Rubin (1996).
2. See L. Papke (1994), Fisher and Peters (1997a), and Peters and Fisher (1998).
3. This assumes that differing tax burdens are not capitalized into land prices. We return to this issue in Chapter 2.
4. We put "causal" in quotation marks since econometric models by themselves are not evidence of truly causal relationships.
5. However, the degree of targeting varied, and some states had stricter targeting criteria than others. In Ohio, there were both targeted and nontargeted zones (see Table 2.1 in Chapter 2).