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Abstract

This report examines the possibilities of improving the economic prospects of rural communities and regions through the provision of business assistance. Several specific approaches to business assistance are discussed: a focus on small business, industrial targeting, retention and expansion programs, seed and venture capital programs, industrial parks, business incubators, and enterprise zones. The authors stress that the success of any specific business assistance approach will depend upon the context, and that the strength of an overall economic development strategy for a rural community or region is likely to come from the thoughtful combination of several elements, often including some business assistance, rather than the selection of a single "perfect" ingredient.

Keywords: economic development, rural development, business assistance, small business, industrial targeting, retention and expansion programs, seed and venture capital programs, industrial parks, business incubators, enterprise zones

Washington, DC 20005-4788 September 1995

Foreword

This report examines business assistance as a strategy to promote rural economic development. It is the fourth and final report on the effectiveness of selected strategies that governments can use to stimulate such development. The three earlier reports examined strategies centered on financial market intervention, investment in public infrastructure, and education and training.

For the purposes of our analysis, the central goals of rural development are raising rural incomes toward the national average and helping preserve the viability of threatened rural communities. In this series, the effectiveness of each rural development strategy is measured by its chance of success in advancing either or both of these goals.

These reports are intended to support policymakers with timely economic analysis of rural issues. Like *Rural Economic Development in the 1980's*, the comprehensive collection of studies on rural conditions and economic characteristics published in 1988, it reflects ERS's efforts to sharpen the focus of its research and make it more useful and accessible to policymakers and their staffs.

Important rural policy issues are now on the agendas of the Executive Branch and Congress. Under the 1994 reorganization at USDA, rural development programs have been consolidated under the Undersecretary for Rural Development. Working in partnership with State, local and tribal governments (as well as the private sector), the Federal Government has encouraged over the past few years the establishment of State Rural Development Councils in the vast majority of States. These Councils and the numerous Federal agencies with rural programs are searching for ways to maximize the developmental effects of public efforts on behalf of rural America. As Congress in the mid-1990's reevaluates the role the Federal Government has come to play in American society, rural development issues will be given a very careful look.

The poor performance of the U.S. rural economy during most of the 1980's lies behind much of the current policy concern in this country. Similar trends are apparent in other developed countries. Following an historically unprecedented rural renaissance in the 1970's, most of America's rural areas were hit hard by and recovered slowly from the 1980-82 recession. Although there is evidence of an upturn late in the decade, the 1980's was a dismal decade for most rural areas by virtually every measure. Rural per capita income stagnated in real terms and fell in relation to urban per capita income. New jobs were created at a much slower pace and real earnings per job declined absolutely. Rural unemployment rates rose faster than urban rates and stayed at higher levels throughout the 1980's. At one point in the decade, the rural poverty rate was 35 percent greater

than in metropolitan areas. And more than half the Nation's rural counties lost population in the 1980's.

Each report in this series contains chapters exploring various aspects of one broadly defined rural development strategy. They review previous social science research and present new analysis. They do not evaluate specific programs. Rather, the objective of the series is to describe the likely consequences of adopting a broad approach, including its effectiveness, limitations, and incidental effects.

As in the whole series, the authors of this report used their own methods of analysis and reached their own conclusions. However, each author or team of authors read drafts of the other chapters, and sometimes reshaped their own study to make this report more congruent. David Sears and Andrew Bernat directed the current study. Other ERS researchers and analysts outside the agency also reviewed and commented on some or all of the chapters.

Rural development goals are numerous and diverse. They include reducing the gap in incomes and standards of living between rural and urban people, helping threatened rural communities remain viable, attacking extensive and persistent poverty in certain rural areas, preserving the rural character of some areas, helping the family farm survive, contributing to overall national economic well-being, and conserving natural resources and the environment.

Some of these goals are independent, some mutually reinforcing. But in practice, progress toward one goal often seems to come at the expense of others. Almost any strategy will succeed by some criteria and fail by others. Analysis that does not measure a strategy against a specified set of key goals may identify many benefits but not contribute much to the policymaker's search for the best means of achieving broader purposes. Therefore, we have chosen, in effect, to define rural economic development by what seem to us its two broadest and most widely held goals: increasing incomes and promoting community viability.

Richard W. Long
Acting Director
Rural Economy Division

Acknowledgments

Many people in addition to the authors contributed to this report and others in the series. A committee made up of Richard Long, David McGranahan, Tom Hady, Herman Bluestone, Katherine Reichelderfer, Sara Mazie, Norman Reid, and Patrick Sullivan planned the series. Richard Long was editor of the series. For this publication, Tom McDonald provided editorial guidance.

Like most research in the Rural Economy Division of the Economic Research Service, many of the concepts and some of the analysis used in this series are drawn from a base built by colleagues. That base is too interwoven and has been created by too many researchers over too long a period to allow full recognition for each contribution. Most notable in that group, however, are Calvin Beale, originator of many of the ideas and approaches echoed in all of ERS's rural development studies, and Kenneth Deavers, until recently Director of the Division, who has guided the ERS rural development research program intellectually, as well as administratively, for many years.

Although final responsibility for the contents rests with the authors and the Economic Research Service, many colleagues from academia and the world of rural development practice commented thoughtfully and usefully on one or more chapters in this report. We would like to thank the following persons, listed alphabetically, for their insightful comments and suggestions: Terry Buss, Scott Daugherty, Dan Gibb, Gary Green, Frank Hoy, Tom Johnson, Jules Lichtenstein, Phil Shapira, and Tom Stinson.

Contents

Chapter 1

Business Assistance and Rural Development: An Overview

David W. Sears and G. Andrew Bernat, Jr.*

Introduction

The Business Development Center of Lake County (California) was founded in 1986 to provide individualized business counseling, financial consultation, loan packaging assistance, and marketing and management consultation to area firms. The Center, housed with the local Job Training Office, is funded by an array of Federal, State and local agencies, and specializes in obtaining financing for existing businesses that have the potential to create or retain jobs. In its first 5 years, the Center contributed to the creation of 200 jobs and the retention of another 100 jobs (*9*).[1]

The Lake County example demonstrates the important role that business assistance can play in stimulating economic development in rural areas. This volume explores the use of a variety of business assistance approaches intended to enhance rural economic development.

Definition

Business assistance: Public sector activities whose primary objective is to assist one or more businesses.

While there are many essential sources of business assistance that don't rely on the public sector, we will not examine such assistance here. Thus, the role of rural electric cooperatives, banks, consulting firms, and other private sector institutions that often provide useful assistance to businesses are outside the boundaries of business assistance as we use that term in this report.

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* The authors are manager of evaluation systems for the Manufacturing Extension Partnership and Chief of the Analysis Branch, Regional Economic Analysis Division, Bureau of Economics Analysis, respectively, with the U.S. Department of Commerce.

[1] Italicized numbers in parentheses identify literature cited in the References at the end of this chapter.

In addition, the array of public sector activities aimed at reducing costs or improving the overall quality of life for a region or community as a whole are not included in our definition of business assistance. Businesses within a rural region would benefit, for example, from improvements in the transportation network or the local community college, and from reductions in the property tax rate; but the primary objective of these activities is not to assist business, and therefore none of these activities falls within our definition of business assistance.

While business assistance might have a number of objectives, in most instances the main one is economic development. Stated simply, business assistance is expected to contribute to the economic development of the region. In many rural development strategies, business assistance plays a key role.

Subsequent chapters in this volume will explore some of the business assistance tools and strategies that rural communities might consider using to help achieve their development objectives. The aim of this opening chapter is to set the stage for that discussion.[2]

The Range of Business Assistance Programs

Over the years, ingenious policymakers, with perhaps some help from businesses in search of public largess, have devised an enormous number of business assistance programs. The range of these programs is captured in chart 1, where we present 13 broad categories of business assistance. Within each broad category, several specific approaches are often included. In sum, then, several dozen specific types of business assistance programs are enumerated in chart 1.

While often business assistance programs will be implemented as discrete entities of the sort listed in chart 1, bundling of two or more programs has become increasingly common in recent years. Such bundling results in composite approaches to business assistance; the intention of the bundling of programs is to get more effective outcomes than would be likely if the individual programs continued to be administered independently. Some of the more common composite approaches are listed in chart 2. Several of these composite approaches will be discussed in later chapters in this report.

[2] A recent International City Managers Association report identifies several variations of public-private partnerships that might be used to spur economic development (*1*). For purposes of this volume, we hold that the activities of such partnerships which are intended to assist businesses, and where the public sector is dominant, meet our definition of business assistance.

Chart 1--Basic public sector approaches used to provide assistance to rural business

(1) **Favorable tax treatment**
- Reducing corporate income, property, sales, fuel, and/or inventory taxes

(2) **Loosening of regulations**
- Loosening of zoning regulations
- Loosening of environmental regulations

(3) **Regulations assistance**
- One-stop office for obtaining necessary licenses and permits for starting a business
- Business ombudsman

(4) **Tailored services**
- Favorable provision of government services (for example, upgrading access road for a firm, trash pickup on a daily basis, improved lighting in neighborhood, special extension of water and/or sewer service to a business site)

(5) **Site assistance** (assistance in obtaining sites)
- Industrial parks--development and/or management of sites
- Incubator sites--development and/or management of sites
- Broker services to match firms with sites

(6) **Management assistance** (technical assistance for management of individual firms)
- TA on preparation of business plan
- TA on accounting procedures
- TA on market analysis and marketing techniques
- TA on personnel management
- TA on cash flow analysis
- TA on input and output flow analysis
- TA on internal processes used for producing the firm's product or providing the firm's service

Chart 1 (continued)--Basic public sector approaches used to provide assistance to rural business

(7) **Institutional assistance** (assistance in creating and/or operating synergistic/mutual help institutions of similar firms)

- Assistance with respect to industry/trade associations/networks
- Assistance with respect to networks (formal or informal) of small firms located close to each other
- Assistance aimed at sharing knowledge (for example, technology transfer)
- Assistance aimed at sharing services (for example, clerical and accounting)
- Assistance aimed at sharing equipment (for example, copier and plastic mold producer)

(8) **Capital assistance**

- Provision of capital in the form of grants and other cash subsidies
- Matching lenders with businesses needing financing
- Training of market lenders to encourage them to broaden their horizons with respect to acceptable borrowers
- Provision of credit enhancements (loan guarantees and/or loan loss reserves) to encourage lenders to reduce interest rates and/or make riskier loans
- Support for secondary markets for business loans
- Linked deposits (i.e., government deposits with a financial institution contingent upon certain lending behavior)
- Provision of capital at below private market rates, or with less stringent payback requirements (for example, revenue bonds, industrial development bonds)
- Provision of capital for higher risk ventures than private market lenders are willing to support (for example, Development Credit Corporations)
- Provision of capital for those requiring exceptionally small loan amounts (microenterprise loans)
- Provision of public sector capital in conjunction with leveraged private sector capital (for example, Business and Industrial Development Corporations)*

*A venture capital program might have any or all of the last four features listed under capital assistance. Similarly, a revolving loan fund or a Small Business Investment Company might have any or all of the last four features.

Chart 1 (continued)--Basic public sector approaches used to provide assistance to rural business

(9) **Marketing assistance**

- Matching of local producers and local users of products and services (import substitution)
- Marketing of a set of similar products and/or services (for example, marketing of specialty agricultural products to out-of-state consumers, tourism promotion)
- Marketing to specific geographic areas (especially at the international level)
- Marketing to specific consumers (for example, Federal or State Governments)

(10) **Assistance in obtaining workers**

- Matching of prospective employers and employees

(11) **Worker training**

- Upgrading industry-specific skills of workers already working in a specific industry or firm (for example, customized industrial training for machine tool operators, open to those already employed at ABC Mfg. Inc.)
- Upgrading industry-specific skills of workers (for example, training for machine tool operators, open to all adults in community)

(12) **Economic information**

- Provision of general information (including descriptions and forecasts) on the local or regional economy
- Provision of information on some subset of the economy (tailored to the needs of a particular sector or firm)

(13) **Applied research**

- Conducting applied research on technologies, aimed at upgrading the quality of products and/or services in a particular industrial sector (for example, research in computer chip technology) or aimed at stimulating new product and/or service development

Chart 2--Composite approaches used to provide assistance to rural business

- **Business incubators***
  --a composite of 5, 6, 7, and 8**
- **Research parks**
  --a composite of 5, 6, 7, 10, and 13
- **Industrial targeting**
  --a composite of 6, 7, 8, and 9
- **Coordinated community investment strategies**
  --a composite of 7 and 8
- **Enterprise zones**
  --a composite of 1, 2, 4, 5, and 11
- **Retention and expansion programs**
  --a composite of 4, 6, 7, and 11
- **Small Business Development Centers**
  --a composite of 3, 6, 8, and 12
- **Industrial extension programs**
  --a composite of 6, 7, 9, 11, 12, and 13

* Each of these composite approaches might be configured somewhat differently in particular circumstances; some of the basic approaches listed here as components may be omitted in some cases, while others not listed here may be included.

** The numbers refer to the 13 basic approaches listed in Chart 1.

Key Dilemmas

The provision of business assistance to achieve rural development objectives is a complex undertaking. This makes it necessary for policymakers to resolve, implicitly, if not explicitly, a number of key dilemmas before finalizing the design and implementation of a program of business assistance.

Among these dilemmas are the following:

- Is business assistance seen as a long-term investment or as just a quick fix?
- Is the public sector seen as having, through its business assistance programs, a central role in shaping a region's business community or just a marginal role?

- Will the public sector's role in designing the use of business assistance be active or passive?
- At what governmental level(s)--local, regional, State, Federal--will business assistance programs be designed?
- At what governmental level(s) will business assistance programs be implemented?
- What, if any, repayment should those firms receiving business assistance be obligated to make?
- Should business assistance be provided to individual firms (retail assistance) or to institutions representing many firms (wholesale assistance)?
- What types of firms should be the focus of business assistance programs?
- What types of communities should be the focus of business assistance programs?

It is not our intention, in this opening chapter, to discuss these key dilemmas in any detail. Rather, we merely wish to note that grappling with these issues will necessarily be a prelude to, and a part of, the design and implementation of business assistance programs intended to promote rural development. No universally "correct" answers to any of these questions can be discovered; instead, different interests will have different versions of what the answers should be, and different settings will elicit different answers. Thus, the "correct" answers to these questions will vary from place to place, and from player to player within a given region or community; in addition, the appropriate answer may shift over time.

Even beyond the key dilemmas spelled out here, the design and implementation of business assistance will not be straightforward. Policymakers may want to consider the specific needs of the particular businesses, or the particular types of businesses, that they hope to assist. Thus, businesses are different, and will differ in their assistance needs. For instance, the top priority need for some businesses may be marketing assistance, while others may need help in finding a suitable site or appropriate training for workers. Thoughtful resolution of the enumerated key dilemmas is not enough; the more mundane task of carefully matching programs to customers is critical.

In later chapters, some of these key dilemmas are discussed; for instance, the targeting issue is examined in chapter 3.

The Economic Context

By definition, business assistance centers on the private sector. Therefore, it would be foolhardy for public sector policymakers who are designing and implementing business assistance to operate without a solid understanding of the

realities of the business environment in which firms must compete. Otherwise, it is unlikely that truly useful assistance can be provided.

The economy of the United States has grown increasingly complex over the past 20 or so years. In this section, we describe eight shifts occurring over this period that are particularly important for understanding the context in which rural business assistance can be provided. The first six of these shifts have affected both the urban and rural components of the economy.

Rapid technological change has transformed many of the basic parameters in most industrial sectors. In many ways, business is conducted very differently today than it was only a few years ago. For instance, assumptions about the quality of inputs and outputs, about appropriate worker skills, about likely markets and likely competitors have been modified significantly as technological changes have opened a range of new possibilities for conducting business. These technological changes have, in turn, contributed to some of the other seven key changes enumerated below.

In a related change, information flows throughout the economy have increased dramatically. Individual firms have better and easier access to information about their own internal processes, inventories, and costs. Firms also have better and more complete information on their suppliers and their customers. Industry organizations and the public sector, as well as individual firms, have quicker access to better information on the economy as a whole and its various industrial sectors. The Southern Technology Center and the Michigan Modernization Service, for instance, both have developed and implemented recent programs to improve the information available to key industries that they serve (*6*).

Rather dramatically, especially in some economic sectors, international markets have been replacing national or regional markets. The size of the total U.S. export market has much more than doubled over the 1970-90 period. Even more dramatically, the annual dollar value of imports into the U.S. quadrupled from 1970 to 1990. As a result of the increased information flows and the internationalization of markets, firms in many sectors are facing an increasingly competitive environment.

While the internationalization of markets has affected both urban and rural firms, it has had a particularly dampening effect on rural manufacturing. Many rural manufacturing firms were attracted to nonmetro locations in the 1960's and 1970's because of their low wage rates. When markets became more international in the 1980's, however, rural areas found themselves competing with nations offering much lower wages than any U.S. location. Rural extractive industries are facing much the same problem.

For many industrial sectors, a fourth change has involved a shift in the importance placed on certain process and product characteristics. In many industries, for instance, the importance of wage rates has decreased, while the value of workers' strong skill levels has increased. Customers are less interested in cost, and are increasingly focused on the quality of the product or service and the timeliness of its delivery.

Many industries, especially in manufacturing sectors, have been adopting new, more flexible production and organizational systems; related to the adoption of these new systems, the typical firm is often smaller, making flexibility easier to achieve. The move to increased flexibility has resulted in a greater demand for a highly skilled and adaptable labor force and a lessened demand for cheap unskilled workers.

Technological improvements have reduced unit labor costs to the point where the competitive position of individual firms depends upon high skill levels but is essentially unrelated to wage rates. For instance, Sara Lee, a best-practice-firm in the traditionally labor-intensive textile yarnmaking industry, recently opened a Tennessee plant in which all material is processed automatically from the time that bales of raw fiber are loaded onto conveyor belts at one end of the building until finished yarn is loaded onto trucks at the other end of the plant.

In an additional key economic shift, the service sector has grown rapidly over the past 20 years to become the dominant sector in the Nation. In nonmetro areas, service-sector jobs moved from 41 percent of total employment in 1970 to 50 percent in 1990 and accounted for virtually all net job growth over that period. The technological changes cited above have contributed to the growth of the service sector; this is true because most of the post-1970's gains in labor productivity have occurred in goods-producing sectors rather than in the service sectors.[3] The relative growth in service-sector employment (compared with manufacturing) is also due to sectoral differences in price and income elasticities and the resulting different shifts in demand curves.

A sixth change involves national demographics. Substantial demographic changes have affected both the labor supply and the market in most industrial sectors. The labor supply has been expanded and changed qualitatively by the higher participation rate of women in the job market, by high levels of immigration, and by the aging of the baby boomers. The markets for many products and services have been transformed by increased numbers and

[3] The relative share of employment in services increases when the rates of service-sector productivity growth lag far behind growth in the manufacturing sector's productivity. This is true, because, in order to maintain a constant level of output (or identical rates of increased output), the service sector must increase employment at a more rapid pace than manufacturing.

proportions of retirees and two-earner households, and by the "graying" of the baby boom generation.

The final two noteworthy shifts of the past two decades in the private sector are rural-specific.

The rural renaissance of the 1970's faded into the rural stagnation of the 1980's. This picture is consistent across a number of indicators; it holds whether we focus on income, poverty, employment growth, or population gains (or losses). Indicative of the overall problems, per capita income increases in nonmetro areas faded from a 21-percent increase during the 1969-79 decade to a much more modest 7-percent increase over the 1979-89 decade. Rural poverty rates declined in the 1970's from 20.9 percent in 1969 to 15.7 percent in 1979, but then rose during the 1980's to 16.8 percent in 1989. Employment growth in nonmetro counties slowed from 22 percent in the 1970-80 period to 13 percent in the 1980-90 period. Population actually declined in over two-thirds of nonmetro counties during the 1980's. Thus, recent years have been difficult ones for most rural communities, especially in contrast to the relatively upbeat 1970's.

Finally, within the rural economies of the United States, a shift in sectors has been occurring. The "traditional" resource-based sectors (agriculture, mining, timber) have diminished in importance. For example, the number of farming-dependent counties dropped from 716 to 516 over the 1979-86 period. The rural counties that performed the best over the past 20 years are those that have concentrated heavily on retirement and tourism; the service sectors associated with retirement and tourism have become increasingly important in rural America. So the shift to a greater emphasis on the service sector found throughout the national economy holds in the rural portion of the economy. Unfortunately for rural areas, many of the higher skilled portions of the service sector have been concentrated in metro areas, so that the rural service sector growth has been heavily concentrated in relatively low-wage employment.

In sum, then, the economy of the United States has gone through some major restructuring over the past couple of decades. The eight major shifts described above clearly have implications for many (in some cases, all) rural businesses. It was not our intent here to describe what these implications are; such an attempt would require more space than we have here, especially since the precise implications vary substantially across different types of businesses.[4] Rather, the

[4] As an example, the growth of the elderly population in both absolute terms and as a proportion of the total U.S. population is a substantial demographic shift with important implications for rural businesses (and urban ones, too, of course). The implications of this shift for a specific rural business will vary depending upon a number of factors, including region (for example, in contrast to the rural Sunbelt, most of the rural Midwest is not able to take advantage of much inmigration of the elderly), type of service or product (for example, a firm producing medical equipment is likely

point of this section has been simply to alert, or remind, the reader that these major economic shifts have implications for rural businesses, and thus need to be understood by those who wish to serve rural businesses through the provision of various business assistance programs. Understanding these shifts is necessary but hardly sufficient for designing programs that will effectively serve rural businesses; an understanding of some of the key characteristics of each specific business, or type of business, to be served is also important.

The Development Policy Context

Business assistance is intended to promote economic development, but it is only one piece of the entire economic development portfolio. Policymakers responsible for business assistance would do well to understand the larger economic development policy picture before embarking on business assistance programs or strategies.

Given the extent to which the private sector changes enumerated above have altered the rural development landscape, it is not surprising that major shifts have been occurring in the public sector approach to economic development. In this section, we describe the most important and dramatic changes in the public sector response to economic development issues that have occurred over this recent 20-year period. These changes are important to understand because business assistance programs are a subset of economic development programs; thus, the shifting public sector response described below underlies much of the shifting in the public approach to business assistance in rural areas.

First, in many places, the State government has become the dominant player on the field. Through the mid-to-late 1970's, the Federal Government was the leader in economic development activities. The granddaddy of economic development efforts, the Tennessee Valley Authority, was created in the 1930's. A variety of Federal programs were developed in the 1960's, including the Economic Development Administration and the Appalachian Regional Commission. Funding for many of these efforts was strong. Since the late 1970's, however, no new Federal programs have been introduced, and funding for existing programs has been significantly reduced.[5] In the 1980's, many State governments stepped in to fill the void; a very large number of new and

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to experience a growth in markets as the total U.S. population ages, while a sportswear manufacturer may see no such growth), and the need for part-time labor (for example, a retail firm may be able to expand operations by relying upon the local retiree labor force that wishes to work part-time at relatively low wages, while a high-tech research firm would find such a supply of labor irrelevant).

[5] The 1993 Empowerment Zone legislation may be seen as an exception to the observation that no new economic development programs have been unveiled by the Federal Government since the late 1970's; the EZ program, however, is deep, but not very broad, and will have a direct effect on only a handful of communities. EZ programs are discussed in chapter 5.

innovative economic development programs were created and implemented by State governments.[6]

Second, during the 1950's, 1960's, and 1970's, often the local economic development agency was a sophisticated label for an office whose sole mission was to recruit outside industry (largely branch plants) into town. This was especially true in many rural regions. Over the past 20 years, industrial recruitment has become less often the central focus of economic development efforts. In rural areas, part of this shift in attitude reflects the shift from relatively successful recruitment efforts in the 1970's to much less successful efforts of the 1980's--the "buffalo hunt" just is not producing as many buffaloes as it used to. Localities still engaged in industrial recruitment are more likely to target their recruitment efforts on industrial sectors that seem to be especially appropriate and promising for the local resource base (*9*).

Increasingly, most communities are looking at a broad array of job generation approaches, and placing less emphasis on industrial recruitment. Some of this shift has taken place in response to the poor performance of industrial recruitment in the 1980's, but some of the shift is due to the worsening State and local fiscal situation of the late 1980's and early 1990's. Industrial recruitment can be expensive (in the short run at least) if tax breaks and other relatively costly incentives must be provided; under tightening budget constraints, localities have been forced to develop and use a variety of less costly approaches to economic development. States have been encouraging this movement because industrial recruitment, as viewed from the State perspective, is often a zero-sum game in which Jonesville's gain of 100 jobs in the western part of the State through the relocation of an industrial plant is Clarksville's loss in the State's eastern region.

Third, development is being increasingly defined more broadly. Not only have policymakers changed their answer to the question "how do we get jobs?" from "industrial recruitment" to "using a variety of approaches," in many rural communities they have changed their answer to the question "what do we want from development?" from "any kind of jobs" (the 1970's answer) to "both jobs and quality of life" (the 1990's answer). As States and communities think about what they can do, and what they want to accomplish, in terms of development, the horizon has broadened to encompass quality-of-life factors as well as the creation and retention of jobs. Thus, in recent years, many communities have become increasingly conscious that new or expanded employment may have

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[6] The National Association of State Development Agencies stated in the foreword to its 1986 Directory of Incentives for Business Investment and Development in the United States: "To underscore the rapidity of change among state governments, the 1983 Directory was out of date and in need of revision by 1986 because of the massive changes in what states are doing to replace federal funds and to compete in the global economy" (*7*).

adverse effects on environmental quality, health, community cohesion, and other important community characteristics; communities are even willing to say "no thanks" to jobs that have too many negative consequences attached.

In a fourth change, greater emphasis is being placed on community involvement in economic development. In the 1960's and 1970's, in spite of strong Federal Government involvement, the key economic development decisions in rural America were largely made by the private-sector players with the jobs. In the 1980's, States and rural communities were increasingly willing to set explicit boundaries regarding acceptable private-sector economic development actions. Creation of and meaningful enforcement of local and State environmental and zoning regulations, for example, became more common in the 1980's. This increase in local involvement simply reflects the broadening goals of economic development described above.

Clearly, rural localities with the most desirable attributes (e.g., located near strong metropolitan economies or in physically attractive settings) will find it easiest to be strong in maintaining their community development standards. These communities will have the luxury of saying no to some "unacceptable" employers because of the expectation that yet other ("more acceptable") employers will want to locate or expand there.

Most rural areas did not, however, have to worry about controlling economic growth in the 1980's; for the majority of rural communities, the problem was how to stimulate development. Some of these localities turned to self-development as a mechanism for exerting greater community influence on economic development. Self-development, which involves local entrepreneurs working closely with the local public sector to stimulate jobs and income, was established in a handful of communities through the 1980's.[7]

Finally, new approaches to the delivery of economic development services have emerged. The traditional service delivery model, which was firmly in place through the mid-1970's, involves direct service delivery by a single provider (e.g., job training provided directly by the State's employment and training agency). New approaches that have been emerging over the past 20 years or so include the introduction of competition (multiple service providers competing for clients), the inclusion of a leveraging requirement (so that scarce public resources can be stretched with matching funds), and the concept of public-sector seed capital to underwrite only the founding and not the perpetuation of an institution. While the traditional model is still predominant, these newer approaches have

[7] After a nationwide search, one research team found 103 communities engaged in self-development (*5*).

clearly become key components in the overall delivery of economic development services by many governments (*8*).

Many States built new prisons in the 1980's, and, in contrast to the general point made above, found lots of rural communities politicking to become prison sites, even though the new jobs would be accompanied by a loss in community quality (*2*). Undoubtedly, other exceptions to the points made above can be found; there is almost always an exception to any generalization. Nonetheless, the basic points made in this section hold up as an accurate description of the development policy context in which business assistance programs must take place.

Measuring the Effects of Business Assistance Programs

Policymakers responsible for the design and implementation of business assistance programs might like to know whether business assistance works. In short, is economic development stimulated in rural areas by business assistance? The generic answer is that we don't know. While studies have been conducted to examine the results of some specific programs in some specific local settings, overall, the support for business assistance programs comes largely from anecdotal evidence.

Assessing the effects of business assistance is difficult since a single approach might be implemented quite differently in different places; that is, each program is different. And, because no two communities face exactly the same development challenges, no two local marketing programs, for instance, are going to be the same. A second difficulty is that many on the current roster of business assistance approaches have been used only rarely until recently; thus, little evidence has yet accumulated on the effects of these approaches.[8]

Despite the absence of rigorous, systematic evaluation of these business assistance approaches, it is still possible to offer some insights into the usefulness of business assistance in general as an economic development tool. Thus, the available research, which is a combination of some empirical evidence along with some anecdotal evidence and some logical arguments can be useful in providing guidance to policymakers.

Eisinger divides business assistance programs into two broad categories. He distinguishes between what he calls a supply-side approach to business assistance (basically traditional industrial recruitment, with an emphasis on low taxes and little regulation) and a demand-side approach (basically all those other

[8] In addition, public-sector programs are notorious for failing to build in an evaluation component as they are initiated.

approaches, such as management assistance and marketing assistance).[9] Eisinger concludes that the demand-side approaches are more likely to produce good economic development results. His conclusions rest, however, more heavily on a logical construct than on empirical evidence (*4*). What does seem clear, however, is that targeting business assistance to particular types of firms is likely to be more successful than an approach which does not carefully target assistance to firms with specific characteristics (e.g., high-growth or high-wage firms).[10]

The remaining chapters in this volume discuss key targeting issues and zero in on some particularly interesting categories of the entire array of business assistance approaches. An important facet of the remainder of this volume is a presentation of the available evidence on the effects of the business assistance approaches described.

Business Assistance in the Context of a Development Strategy

A rural community setting out to work on its economic development may want, as a first step, to select a broad strategy that describes the general direction in which it wants to head. Here are some examples of a strategy that a community (or a multicounty region or a State) might choose:

- Upgrade the competitiveness (including productivity and wage rates) of the primary and secondary wood products sectors.
- Improve the performance of the educational system (K-12 and community colleges) in order to significantly improve the math and reading skills of the local population.
- Improve environmental quality so that the local area becomes a more attractive place to live.
- Expand the area's printing industry by building upon the expertise that exists at local universities and local firms.
- Focus development energies on tourism.
- Upgrade the quality of the workforce and the quality of management in small and medium-sized apparel firms.

Taken together, these six examples indicate that a community has a wide range of options to consider in selecting a rural development strategy. The examples

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[9] In fact, the situation is somewhat more complicated than what we have just presented. It is not possible, for instance, to label each item in chart 1 (page 3) as clearly supply-side or demand-side. The first approach (favorable tax treatment) is the supply-side. But, most of the other 12 basic approaches listed in chart 1 might be either. For instance, if site assistance (the fifth item in chart 1) includes giving a firm a below-market price or rent on a building, then Eisinger would classify this as the supply-side; on the other hand, if site assistance means that the government is facilitating the co-location of several complementary firms, then Eisinger would classify this as the demand-side.

[10] For instance, see (*3*).

also indicate that implementation of some, but not all, community strategies is likely to call for the provision of business assistance.

If a communitywide, or regionwide, strategy is used, then business assistance will not be designed or implemented in isolation from other economic development activities taking place in the same community or region. Therefore, some thoughtful coordination of business assistance with other public and private sector actions is frequently helpful, enabling all participants to get more "bang for the buck" through complementary and synergistic effects. At the extreme, several business assistance approaches (for example, the development of a business incubator, an industrial park and a program of providing technical assistance to local machine tool shops) might be integrated with other economic development activities (for example, upgrading of a local highway, provision of a computer-assisted design training program at the local community college) to create an overall local or regional economic development strategy. Or, short of designing and implementing an overall economic development strategy, a community or region might still successfully coordinate the use of several business assistance activities.

If business assistance is seen in the context of a broader rural development strategy, then that strategy's overarching goals will help drive the selection of specific business assistance to be provided. For instance, if improving family incomes and wage rates is the central rural development goal, then worker training requests from firms might be granted only when it seemed likely that substantial wage increases would result from the skill upgrading.[11]

The information presented in this volume can be useful for a community, or a region or a State, as it addresses two questions:

- What development strategy should we pursue?
- If business assistance plays, or potentially might play, a role in the strategy chosen, which specific business assistance tools will be most useful?

The discussion of chapters 2 and 3 will be useful in addressing the first question, while chapters 4 and 5 will provide information that can be used in addressing the second question.

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[11] It is worth noting that often rural business assistance is an implicit subset of an overall business assistance strategy rather than an explicit subset of a rural development strategy; for example, recruitment of industrial firms to a particular rural area might just be part of a State commerce department's overall effort to recruit firms into the State.

Small businesses have been touted by many as excellent targets for business assistance programs. In chapter 2, Miller describes some of the strengths and weaknesses of this approach. He finds that:

- small nonmetro firms tend to be linked more closely to the local economy than large nonmetro firms;
- small firm growth patterns in the 1980-86 period contributed substantially to nonmetro employment stability; during the 1980-82 recession, large firms had a job loss rate one-fourth higher than small firms;
- small firm jobs are typically low-quality jobs;
- small enterprises are more important in nonmetro than in metro areas;
- three out of five nonmetro jobs are in small firms; this proportion held steady during the 1980-88 period; and
- the proportion of manufacturing jobs which are in small firms has been increasing (by more than 10 percent over the 1980-88 period); in contrast, the proportion of service-sector jobs which are in small firms has been decreasing (by more than 10 percent during 1980-88).

Thus, Miller presents reasons to argue for targeting business assistance efforts on small firms. That is, he finds that, because of greater local spinoffs, greater job stability, and the relative importance of small businesses in rural areas, programs which focus business assistance on small firms may have good rural development payoffs. But he also finds reasons for concern, as small firm jobs are less likely than large firm jobs to be good jobs.

In chapter 3, Reeder describes industrial targeting as an analytic approach that is often used for directing scarce business assistance resources. He finds that:

- industrial targeting uses research-based analysis to identify industries which are well-suited to local strengths; the intention is to focus on industries where the firms' growth prospects and benefits to the community are the greatest;
- in choosing a provider of industrial targeting services, a rural community should look for those that go beyond simply listing industries that are good prospects;
- to be most successful, industrial targeting analysis and implementation should be an integrated part of a community's overall economic development strategy, with strong involvement from key local leaders and organizations;
- the most useful industrial targeting will involve encouraging the creation and expansion of local firms, not just recruiting outside firms; and
- State targeting has the potential to be more effective than local targeting because States have a broader array of resources than localities to devote to implementation.

As indicated earlier in this chapter, many different approaches to the provision of business assistance have been used in recent years in an attempt to stimulate rural development. In chapters 4 and 5, we describe a handful of these approaches in some detail. The approaches that we have focused upon in these two chapters are some that have received particularly wide attention over the past few years.

In chapter 4, Stenberg and Sullivan discuss retention and expansion programs and seed and venture capital programs. These are approaches that have gained prominence in recent years as ways to assist rural businesses.

With regard to retention and expansion programs, they find that:

- retention and expansion programs are a low-cost way for a community to demonstrate a pro-business attitude and to address a range of key problems that existing local businesses face;
- local retention and expansion programs are likely to operate more smoothly if connected to some key State and Federal economic development programs;
- most retention and expansion programs involve the use of volunteers to visit individual firms; it is critical that these volunteers are carefully selected and well trained; and
- the logic underlying the retention and expansion approach is solid, but only indirect and tentative evidence is available to suggest possible economic gains (e.g., the creation or retention of new jobs) for the community.

Based on their examination of seed and venture capital programs, they find that:

- general availability of capital for rural businesses is not a problem, but for startup businesses or those interested in rapid expansion, capital availability is often a serious impediment to growth; public seed and/or venture capital programs are aimed at filling this gap;
- over the past 10 years, a number of State, local, and nonprofit seed and venture capital programs have been created;
- available evidence indicates that these programs are able to assist businesses, thus contributing to local economic growth, while still maintaining low failure rates and good returns on investment;
- most of these programs are capable of serving rural entrepreneurs, but few are targeted on rural areas; and
- the existing programs overall are serving rural areas less well than urban areas; this is due, in part, to a very strong focus on "high-tech" firms, which tend to be concentrated in metro areas and, in part, to the programs' inability to reach rural entrepreneurs as readily as urban ones.

Thus, the two approaches discussed in chapter 4 are potentially valuable tools, but care must be taken in the details of design and in choosing an appropriate setting in which to use them.

In chapter 5, Stenberg and Reeder describe industrial parks, business incubators, and enterprise zones. Each of these three is an approach to providing business assistance to rural firms that has received considerable attention in recent years.

With regard to industrial parks, they find that:

- industrial parks vary considerably in their characteristics and thus cannot be strictly compared, but in general these parks are most likely to be attractive sites for small light industrial firms with large market areas;
- industrial parks are often a central feature of a community's attempt to conduct industrial recruitment;
- the available evidence is inconclusive on whether industrial parks can be used to successfully attract businesses from outside the region, but it seems clear that having a well-designed and carefully located industrial park can influence the intraregional site selection process for a firm;
- good access to transportation can help spell success for industrial parks;
- the overall state of the national, regional, and local economy are key to the success of an industrial park; and
- industrial parks are typically slow to produce payoffs; patience is necessary.

Based on their examination of business incubators, they find that:

- business incubators should be targeted precisely on nurturing infant firms, usually engaged in light manufacturing or services, with strong potential;
- the key to a successful business incubator is the quality and timeliness of the services provided rather than the quality of the physical structure provided;
- successful incubators are often those that specialize, targeting assistance, for instance, on startup electronic firms;
- business incubators cannot be used to attract firms from outside the area; they work only to help small local firms succeed;
- limited evidence suggests that good business incubators can increase the success rates of new firms; and
- as in industrial parks, patience is required when using business incubators; the only payoffs will be over the long term.

With regard to enterprise zones, they find that:

- in addition to the tax and regulatory relief that is commonly associated with enterprise zones, many EZ programs also provide zone employers with technical assistance and assist the local EZ administrators with developing an overall economic plan and implementing it, by providing infrastructure investment, for example;
- enterprise zones have generally been successful in creating jobs, but not every EZ has had success;
- the zones that seem to be the most likely to perform well are small ones forced by a competitive process to design viable economic development strategies; and
- zones in good locations with respect to amenities, transportation access, and good infrastructure, are more likely to be successful.

In short, the evidence on all three approaches described in chapter 5 is mixed. The inclusion of any one of these three as part of a community's or region's economic development package may prove to be fruitful, but considerable care is advised in designing and implementing any specific proposal.

A Final Word

Since resources are limited, policymakers have to make tough choices. Many reasonable proposals for business assistance may need to be abandoned for lack of funds. This suggests that policymakers will need to consider the probable effects of alternative proposals, and choose those most likely to achieve their rural development objectives.

The success of any specific business assistance program will depend on the context, including the rural development objectives to be achieved, the characteristics of the community or region where the program will be undertaken, the characteristics of the assisted firms and industrial sectors, and the characteristics of the other pieces (if any) of the community's or region's overall rural development strategy.

Therefore, it is likely that researchers will never be in a position to declare a specific business assistance tool to be either a universally superb instrument or a worthless action. The reality is likely to be that a particular business assistance approach will be very useful in some situations, will be of little value in others, and will often fall well between these two extremes.

It seems likely that the strength of an overall economic development strategy for a community (or a region or a State) will come from the thoughtful combination of several elements (often including business assistance), rather than the selection of the single "perfect" ingredient.

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Chapter 2

Prospects for Small and Midsize Enterprise Development in Rural Areas

James P. Miller*

Introduction

In recent years, rural policymakers and officials have become increasingly dissatisfied with recruitment strategies that target only branch plants of large companies ("smokestack chasing") and have begun to experiment with new programs that encourage "homegrown" small and midsize enterprises. The probability of attracting a new branch plant has declined over the past decade while the costs of recruitment have steadily increased. It is also argued that "smokestack chasing" creates unstable low-wage jobs that are eventually lost to foreign competition, while at the same time eroding the revenue sources needed for government services and infrastructure (*36*).[1] Nor does branch plant recruitment enhance the type of local, indigenous development that could lead to self-sustained growth within the area (*24*). Indeed, such policies rarely promote entrepreneurship and local enterprises. These policies also distort the occupational structure in nonmetropolitan areas toward lower skilled manual workers, encouraging rural workers with professional, technical, and managerial skills to seek jobs in more prosperous metropolitan areas.

In a rush of enthusiasm for small and midsize enterprise development, many new programs have been started by States and communities, including providing venture capital, enterprise zones, "incubators" for small businesses that provide technical and managerial assistance for new startups and fledgling entrepreneurs, and export promotion through State-sponsored advertising and business promotion abroad. These newer instruments have often been combined with traditional approaches such as training and vocational education, industrial parks, and university-based research and engineering activities. To justify these

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[1] Italicized numbers in parentheses identify literature cited in the References at the end of this chapter.

initiatives, policymakers frequently cite studies showing that SME's create more jobs, develop stronger economic linkages to the community, and can adapt more easily to rapidly changing national and global markets than can large enterprises (for example, *9* and *46*).

Definition

Small and midsize enterprise (SME): An entire economic unit consisting of one or more establishments under common ownership and control that employs fewer than 500 workers. SME's range from single, independent proprietorships with only one establishment to interlocking corporations with numerous, geographically dispersed establishments.

There has been as yet very little analysis to determine whether SME programs will work in nonmetropolitan areas. If these programs are to be useful, they must be based on valid assumptions about which size of enterprise will have the greatest economic effect in nonmetropolitan areas. For instance, do SME's create more jobs than large-scale enterprises in nonmetropolitan areas? Are SME's more cyclically stable? Are they likely to offer jobs of comparable quality? Are they in innovative, rapidly growing industries that are likely to export products and services outside of the community? And finally, what are the long-term prospects of SME's in the nonmetropolitan economy? Will SME's provide only low-wage jobs in residential services and routine manufacturing and related services in nonmetropolitan areas or will the spread of flexible production, advances in telecommunications, and robotics allow them to create higher quality jobs in high-technology manufacturing and producer services?

This chapter documents changes in the enterprise-size distribution of employment in nonmetropolitan areas of the Nation between 1980 and 1988 and examines various explanations for a shift to SME's such as the business cycle, industrial recomposition, vertical disintegration ("downsizing"), and the spread of flexible production. On the basis of this analysis, it is argued that small enterprises operating independently in a rural environment lack sufficient financial, marketing, technical (R&D), and labor resources (skilled and professional workers) to compete effectively in external markets with large-scale, multiunit enterprises. To overcome these deficiencies, nonmetropolitan SME's must either encourage relationships with larger enterprises or be linked to a network of SME's in which resources and services are jointly purchased and shared. In this way, smaller enterprises can operate as if they were a part of a large enterprise and enjoy advantages similar to those possessed by large enterprises (*29*). Government may intervene in a number of ways to lend support to smaller enterprises to encourage this process.

The remainder of the chapter is in five sections. The first section examines enterprise size-related differences in nonmetropolitan employment growth and sectoral composition, reviews the debate on job growth, describes the secular trend and cyclical stability of SME's versus large enterprises, and identifies problems in interpreting the trend between 1980 and 1988. Following that section is an examination of the effect of urbanization on enterprise size and the sectoral composition of employment. The second section also examines differences in job quality and local market linkages and assesses alternative hypotheses for the localization of high-growth, high-pay, export-oriented small enterprises in metropolitan areas. The third section considers whether nonmetropolitan areas will win or lose relative to metropolitan areas during a global transition to mobile industries and smaller enterprises. The fourth section discusses some of the options for small and midsize enterprise development in nonmetropolitan areas. The final section offers some conclusions.

Employment Growth and Stability

The argument most frequently given for targeting small and midsize employers is that they create most of the new jobs in the economy and contribute to employment stability, particularly during cyclical downturns. Researchers have reported that SME's have generated between 60 and 100 percent of annual net employment growth in the U.S. economy since the early 1970's (*2*, *8*, and *46*).

Other studies show that during recession, smaller enterprises cushion the economy by staying in business and keeping their workers on the payroll, while experiencing reduced profits (*9*, *20*, *33*, and *44*). Small and midsize employers tend to contract employment less than larger employers during cyclical downturns and expand employment less during cyclical upturns, thus moderating the wide fluctuations in employment in large firms.

The impact of a recession is likely to be more severe and recovery slower in nonmetropolitan areas that depend for most of their jobs on manufacturing branch plants of large, externally owned firms (*17* and *47*). Labor-intensive operations in nonmetropolitan areas are typically the first to be curtailed during periods of slumping demand, whereas small, independent plants must adjust onsite or face the often prohibitive cost of moving. The decision to close an externally owned affiliate is a less fundamental one than to close a small, local firm, because, in the first instance, the parent company can often abandon the site in times of difficulty and, if necessary, expand at another site to compensate for the closed affiliate. Anderson and Barkley found that branch plants tended to close or to migrate from nonmetropolitan areas more frequently than did small independent producers (*1*). Based on longitudinal data, only 39 percent of the new affiliates of large, multiunit enterprises (starting between 1978 and 1980) survived through 1986, a period that included a deep recession (table 1). On the other hand, about 54 percent of smaller, independent enterprises survived.

Table 1--Survival rates of urban and rural establishments by type of enterprise, 1978-86

Item	Starts, 1978-80	Survivors, 1986	Survival rates
	-----Thousands-----		Percent
U.S. economy	924.1	416.9	45.1
Urban (metropolitan) economy	743.0	328.0	44.1
Independent enterprises	522.1	249.1	47.7
Multiunit enterprises	220.9	78.8	35.7
Rural (nonmetropolitan) economy	181.1	88.9	49.1
Independent enterprises	127.0	68.0	53.6
Multiunit enterprises	54.1	20.9	38.7

Source: Compiled from county data provided by the U.S. Small Business Administration. For further information, see (*31*).

Survival rates for both affiliates and independent enterprises were higher in nonmetropolitan areas.

Despite these important findings, considerable skepticism remains about whether small and midsize employers will continue to generate more jobs than large enterprises. Feldman, for instance, believes that the shift from large to smaller enterprises in the 1980's was a cyclical phenomenon and cautions policymakers not to generalize and not to base their policies on a trend that may have peaked in the early 1980's (*18*). The shift of employment toward smaller enterprises is not an unchanging, unconditional fact of life. In some periods, SME's account for most of the net employment growth. In other periods, larger enterprises may be in a rapid expansion phase. Over time, small enterprises continually create and destroy a large number of jobs, with only a few winners. Widely cited job generation studies may therefore overstate the contribution of SME's to job growth over a longer period.

Analysis of enterprise size data, 1980-88, yields the following results. First, employment share data show that SME's generated 61 percent of the net employment growth in nonmetropolitan areas between 1980 and 1988. The SME share of total employment, however, remained stable at 60 percent (table 2). Enterprises with fewer than 100 employees accounted for 44 percent of net growth in nonmetropolitan areas, but their share of total nonmetropolitan

employment also remained stable at 45 percent. Very small enterprises, those with fewer than 20 employees, were responsible for almost one-third of the net employment growth, but their share of employment increased only slightly to 27 percent in 1988, up 1 percentage point from 1980. These data suggest that while SME's continued to dominate job growth in the 1980s, the shift of employment toward smaller enterprises was not as large as had been documented in the 1970's.

In manufacturing, where the typical enterprise is much larger than average, the share data clearly suggest that firms are "downsizing" in nonmetropolitan areas. SME's increased their share of total manufacturing employment from 29 percent in 1980 to 33 percent in 1988 (table 3). The share of employment in large, multiunit enterprises fell from 71 percent to 67 percent. SME's generated all of the net manufacturing employment growth between 1980 and 1988. The average unit size in large multiunit enterprises declined from 236 employees in 1980 to 210 employees in 1988 (table 4).

Sluggish employment growth and the shift to smaller production units in manufacturing has been attributed to a host of factors including an increase in global competition, greater uncertainty in product and factor markets, the introduction of new production technologies, and organizational changes within companies.

Beginning in the mid-1970's, smaller, more flexible, and more specialized operations began to take over many of the functions of large, vertically integrated companies, particularly older companies that were streamlining their operations. The shift to smaller units in certain industries (such as machine tools and other metalworking industries) was facilitated by new technologies (such as robotics, computer-controlled manufacturing, microcomputers, fax machines, and the like). These technological advances have dramatically lowered the costs of small-scale manufacturing, allowing both smaller branch plants and independent enterprises to produce in smaller batches and shorter runs and still remain competitive. Such advances have also improved small-enterprise efficiency in marketing, personnel management, and inventory control.

In the retail trade sector, on the other hand, where enterprises tend be small, the movement was toward larger enterprises. Employment in large, multi-unit enterprises increased from about 700,000 to 1.3 million, an increase from 20 percent of retail trade employment in 1980 to 30 percent in 1988 (table 3). Enterprises with 500 or more employees generated 83 percent of nonmetropolitan employment growth. Much of this shift to larger enterprises has been attributed to the disappearance of small, "main street" businesses in nonmetropolitan areas and their replacement by retail franchises and branches, like the Walmart stores.

Table 2--Employment growth in the U.S. and in rural areas, by size of enterprise, 1980-88

Size of firm	Employees 1980	Employees 1988	Share of total 1980	Share of total 1988	Net employment growth, 1980-88: Employees	Net employment growth, 1980-88: Share	Net employment growth, 1980-88: Annual rate
	---Millions---		---Percent---		Millions	---Percent---	
U.S. economy	93.5	112.2	100	100	18.7	100	2.5
Under 20 employees	18.6	23.4	20	21	4.8	26	3.2
20-99 employees	16.6	19.6	18	17	3.0	16	2.3
Under 100 employees	35.2	43.0	38	38	7.8	42	2.8
100-499 employees	13.9	16.6	15	15	2.7	14	2.4
Under 500 employees	49.1	59.6	53	53	10.5	56	2.7
500 or more employees	44.3	52.6	47	47	8.2	44	2.3
Rural (nonmetro) economy	19.5	21.7	100	100	2.1	100	1.4
Under 20 employees	5.1	5.8	26	27	0.7	31	1.6
20-99 employees	3.6	3.9	19	18	0.3	14	1.0
Under 100 employees	8.8	9.7	45	45	0.9	44	1.3
100-499 employees	3.0	3.4	15	16	0.4	17	1.5
Under 500 employees	11.8	13.1	60	60	1.3	61	1.4
500 or more employees	7.8	8.6	40	40	0.8	39	1.3

Source: Compiled from county data provided by the U.S. Small Business Administration and the Bureau of Economic Analysis, U.S. Department of Commerce

Table 3--Rural (nonmetro) employment growth in selected industries, by type of enterprise, 1980-88

Sector and size of firm	Employees 1980	Employees 1988	Share of total 1980	Share of total 1988	Net employment growth, 1980-88: Employees	Net employment growth, 1980-88: Share	Net employment growth, 1980-88: Annual rate
	---Millions---		---Percent---		Millions	---Percent---	
Manufacturing	4.5	4.6	100	100	0.1	100	0.4
Under 500 employees	1.3	1.5	29	33	0.2	173	2.0
Independent enterprises	0.7	0.8	16	18	0.1	85	1.8
Multiunit enterprises	0.6	0.7	13	15	0.1	88	2.2
500 or more employees	3.2	3.1	71	67	-0.1	-73	-0.4
Independent enterprises	ns	ns	1	1	ns	-1	0.0
Multiunit enterprises	3.1	3.0	70	66	-0.1	-72	-0.4
Retail trade	3.6	4.2	100	100	0.7	100	2.3
Under 500 employees	2.9	3.0	80	70	0.1	17	0.5
Independent enterprises	2.0	2.1	55	48	ns	4	0.2
Multiunit enterprises	0.9	0.9	24	22	0.1	12	1.2
500 or more employees	0.7	1.3	20	30	0.6	83	9.8
Independent enterprises	ns	ns	0	0	ns	0	0.0
Multiunit enterprises	0.7	1.3	20	30	0.6	83	9.8

Note: (a) Employment and percentages may not be exact values due to rounding; (b) "ns" indicates fewer than 50,000 employees.

Source: Compiled from county data provided by the U.S. Small Business Administration and the Bureau of Economic Analysis, U.S. Department of Commerce

Table 4--Rural employment in large (over 500 employees) multiunit enterprises for selected industries, 1980-88

Sector	1980 Emp.	1980 Estabs.	Change, 1980-88 Emp.	Change, 1980-88 Estabs.	Average unit employment size 1980	Average unit employment size 1988
	-----Thousands-----				Number	
Rural (nonmetro) economy	6,172	62	611	39	100	67
Extractive industries	392	3	-104	ns	114	77
Manufacturing	3,704	16	-342	ns	236	210
Construction	123	1	-60	ns	101	67
Retail trade	557	21	442	18	27	26
Other service-producers	1,397	20	674	22	69	50

Note: (a) Employment and percentages may not be exact values due to rounding; (b) extractive industries include agriculture, forestry, fisheries, and mining; (c) "ns" indicates a change of fewer than 500 establishments.

Source: Compiled from county data provided by the U.S. Small Business Administration.

Table 5--Payroll employment growth by size of enterprise for selected industries in rural (nonmetro) areas, 1980-82 and 1982-88

Sector/time period	Enterprise employment				Total growth
	Under 20	20-99	100-499	500+	
	-----Thousands-----				
Total rural economy					
1980-82	5	-93	-22	-90	-200
1982-88	646	381	379	923	2,329
Extractive industries					
1980-82	-13	-20	-24	-45	-102
1982-88	175	-68	-84	-393	-369
Construction					
1980-82	8	-19	-24	-14	-49
1982-88	195	58	7	-61	199
Manufacturing					
1980-82	0	-20	-34	-307	-360
1982-88	74	98	130	201	504
Retail trade					
1980-82	-13	-20	12	64	42
1982-88	-31	73	90	486	617
Services-producing					
1980-82	23	-14	49	211	269
1982-88	233	219	237	690	1,379

Note: (a) Employment may not be exact values due to rounding; (b) extractive industries include agriculture, forestry, fisheries, and mining; (c) services-producing excludes retail trade.

Source: Compiled from county data provided by the U.S. Small Business Administration and Bureau of Economic Analysis, U.S. Department of Commerce

Not only did rural SME growth slow during the 1980's, but SME's no longer appear to be a strong countercyclical force in the nonmetropolitan economy. SME employment did not rise to offset reductions in larger enterprises during a cyclical downturn, as was documented in previous studies. To the contrary, employment declined more in SME's (110,000) than in larger enterprises (90,000) during the 1980-82 recessionary period (table 5). Smaller service activities, however, did provide some job growth to offset losses in larger enterprises in manufacturing and extractive industries. Enterprises with fewer

than 20 employees generated a net of 23,000 jobs and midsize employers (100-499 employees) generated 49,000 jobs.

Finally, job growth in SME's seems to have been influenced less by the business cycle than by longer term structural changes favoring smaller enterprises. Employment share data show that enterprises with fewer than 500 employees generated about 1.4 million jobs in nonmetropolitan areas, about 60 percent of the total job growth during the post-recessionary period, 1982-88 (table 5). This was in the lower range of the percentage of total job growth that SME's had generated before the recession. As demonstrated in previous studies (see, for example, *9* and *46*), enterprises with fewer than 500 employees have persistently generated at least 60 percent of the net job growth in the total U.S. economy since the early 1970's. These studies, taken together with the data presented in tables 2-5, suggest that this trend of job growth has persisted through the 1980's. Piore, citing data from both the 1980's and from previous decades, argues that this trend is a structural change that reverses the earlier trend of job growth in large-scale activities that began after World War II and is not simply a response to higher unemployment and recession in the early 1980's (*36*).

Innovation, Job Quality, and Local Linkages

The success of an SME development strategy depends ultimately on whether nonmetropolitan areas can encourage SME's that will develop and export new products and services, provide high-quality jobs, and increase the demand for goods and services in other sectors of the local economy. A growing literature, complemented by analysis of recent enterprise employment data, suggests that this strategy may be moderately successful but will succeed mainly in: (i) industries that complement the existing rural export base (agriculture, forestry, and mining) and (ii) nonmetropolitan communities close to major urban centers.

Innovation

One argument often put forward for the public support of SME's is that such firms are more innovative than large enterprises and are more likely to develop new products and services for export outside the area. SME's in high-technology manufacturing and those producer service industries undergoing rapid change on the leading edge of technology are thought to be especially critical to area prosperity. Many new programs were initiated during the 1980's to encourage small high-technology enterprises, but even with these programs, nonmetropolitan areas may have difficulty in attracting innovative, export-oriented enterprises.

Among urban and regional economists, the consensus seems to be that small enterprises, particularly if they are innovative, are drawn to metropolitan locations where they: (i) have good access to markets, suppliers, services, and professional and technical workers; and (ii) can trade ideas, information, and

innovations to improve products and expand markets. For instance, they can take advantage of "knowledge spillovers." Innovative SME's are thus more likely to "localize," to concentrate in one area rather than to spread out to the rural periphery. The seminal work of Hoover and Vernon (*23*) and Thompson (*45*) suggests that small manufacturing enterprises in the early stages of the product cycle achieve the more complex and innovative functions in the metropolitan areas and only in later stages spin off the more routine elements of production to smaller metropolitan and nonmetropolitan places.

Empirical studies generally lend support to the Hoover-Vernon and Thompson hypothesis. Small, innovative high-technology enterprises tend to agglomerate in metropolitan areas. For instance, innovative production in manufacturing industries, measured by the proportion of professional and technical workers, is more often found in larger cities (*43*). Because of their small size and limited resources, small innovative enterprises need access to facilities and service networks seldom found in nonmetropolitan areas; these include rentable office space, legal and financial services, current information on customers and suppliers, and a labor supply with the right blend of technical and professional skills.[2]

Other research casts further doubt on the claim that nonmetropolitan areas can attract small high-technology enterprises. Low-technology industries--the category most likely to include noninnovative, routine production activities--show a greater tendency to locate in nonmetropolitan areas (*31* and *35*). Most of the high-technology manufacturing in nonmetropolitan areas is noninnovative, routine production performed by branch plants of large companies.

Other empirical evidence suggests that most exportable "advanced" producer services are also unlikely to locate outside of major metropolitan centers. If tradeable producer service activities do spread to nonmetropolitan areas, the evidence, thus far, suggests that such activities will be routinized and standardized "back-office" clerical functions (such as, mail-order and billing operations) that do not require face-to-face contact with customers, suppliers, and technical support enterprises (*16*). Research shows that during the 1980's (a period marked by rapid advances in telecommunications), higher order producer services tended to concentrate only in a few major urban centers, with some

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[2] This finding was corroborated by Felsenstein and Shachar, who demonstrated that research and development employment in high-technology enterprises is positively associated with metropolitan location (*19*). It was also confirmed in a later study by Barkley and Keith, who found that the more sophisticated and complex high-technology manufacturing firms preferred populous counties with diversified economic bases near metropolitan areas (*6*). These authors concluded that sparsely populated and isolated nonmetropolitan areas will benefit little from development programs targeted to high-technology manufacturers.

smaller urban areas (population less than 50,000) serving as regional centers (*15*).[3]

The urban influence on the location of high-technology manufacturing and producer services is further demonstrated by examining employment location patterns in 1988. The results come through rather strongly even with the data grossly overaggregated. Metropolitan areas stand out as the preferred location of SME's in both these industry groups. As shown by employment location quotients greater than 1, jobs in these industry groups in independent enterprises with fewer than 500 employees were more concentrated in metropolitan than nonmetropolitan counties (table 6). Small high-technology manufacturing enterprises and highly specialized producer services, such as security and commodity brokers and legal, accounting, and data processing activities, were found almost exclusively in metropolitan counties with over a million people.

SME's in high-technology manufacturing and producer services tend to agglomerate in large metropolitan areas because of the opportunities for (i) hiring trained and highly educated people, (ii) establishing forward and backward linkages to customers, suppliers, and services, and (iii) sharing knowledge and information with other enterprises. Pools of highly educated people are attracted to large urban areas by cultural opportunities and public services. Urban proximity also gives SME's an advantage in purchasing and selling intermediate inputs and sharing ideas, innovations, and information. Evidence indicates that unless the information transmitted is relatively standardized (such as mail-order and billing operations), urban proximity (that is face-to-face contact) between SME's and their inputs and markets remains critically important in high-technology and producer services industries (*14*).

SME's in industries dependent on natural resources and low-wage labor were more attracted to nonmetropolitan than metropolitan locations. As shown by location quotients greater than 1, employment in SME's in agriculture, forestry, mining, and low-technology manufacturing industries was more concentrated in nonmetropolitan counties (table 6). Both small and large low-technology manufacturers dependent on low-cost labor were drawn to nonmetropolitan areas. Large high-technology manufacturers dependent on natural resources were also attracted to nonmetropolitan areas, primarily to counties adjacent to metro areas. As shown by location quotients greater than 1 in table 6, enterprises in these industries were more concentrated in nonmetropolitan counties.

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[3] Miller and Bluestone found that most producer-service industries were concentrated in large metropolitan areas (*32*). Highly specialized services such as those of security and commodity brokers, large financial and insurance institutions, and specialized legal, accounting, and data processing enterprises were found almost exclusively in large metropolitan areas. Porterfield found that 90 percent of producer services in the United States are located in metropolitan areas (*38*).

Table 6--Employment location quotients by type of enterprise for selected urban and rural industries, 1988

Type of enterprise and industry	Urban		Rural	
	Large	Small	Adjacent	Nonadj.
	-----Location quotient-----			
Small independent enterprises	0.98	0.95	1.15	1.18
Agriculture, forestry, mining	0.90	1.07	1.16	1.24
High-tech mfg., resource-oriented	1.15	0.89	0.91	0.55
High-tech mfg., other	1.15	0.85	0.90	0.71
Low-tech manufacturing	0.99	0.91	1.31	1.12
Producer services, advanced	1.26	0.82	0.51	0.52
Producer services, other	1.05	0.92	0.94	1.06
Residential services	0.90	0.98	1.33	1.39
Large multiunit enterprises	1.03	1.03	0.88	0.84
Agriculture, forestry, mining	0.91	0.90	1.13	1.80
High-tech mfg., resource-oriented	0.83	1.26	1.18	0.91
High-tech mfg., other	1.03	1.07	0.93	0.60
Low-tech manufacturing	0.66	1.08	2.08	1.79
Producer services, advanced	1.27	0.90	0.33	0.35
Producer services, other	1.23	0.90	0.42	0.50
Residential services	1.03	1.09	0.71	0.77

Note: A location quotient is the ratio of two percentages: the percentage of industry employment in a specific group of counties divided by the percentage of industry employment in the United States. Industries with location quotients greater than 1 could be considered as locationally oriented to the group of counties examined and those with location quotients less than 1 as under represented.

A large urban (metropolitan) area is one with over 1 million residents. Rural (nonmetro) areas are either adjacent or nonadjacent to a metropolitan statistical area. A small enterprise is one with fewer than 500 employees.

High-tech manufacturing refers to industries (2- and 3-digit SICs) with a proportion of technology-oriented workers (engineers, scientists, technicians, and computer specialists) at least 1.5 times the average for all industries. Resource-oriented high-tech manufacturing refers to high-tech industries that tend to use natural resources very close to their source (e.g., petroleum refining). Other high-tech manufacturing is "footloose" and not tied to natural resource sources (e.g., computer manufacturing). Low-tech manufacturing refers to all other manufacturing industries (e.g., textiles). Producer services comprise industries that market primarily to other businesses. Advanced producer services include security and commodity brokers, insurance carriers, educational services, legal services, management consultants, computer and data processing services, R&D labs, commercial testing labs, advertising, and auditing and accounting services. Other producer services include credit reporting and collection, personnel supply services, etc. Residential services are services that primarily market to households (e.g., retail stores).

Source: Compiled from county data provided by the U.S. Small Business Administration

SME's, in general, appear to be more important in nonmetropolitan than metropolitan labor markets. Rural SME's, however, are more likely to be low-paying, consumer-oriented activities. As shown by employment location quotients greater than 1 in table 6, SME's in residential service industries were more concentrated in nonmetropolitan counties, both adjacent and nonadjacent to metropolitan areas.

SME's thus appear to complement the existing rural economic base. They also provide jobs by serving the local economy. These businesses generally fall into two groups of activities: (i) export-oriented activities that revolve around natural resources and low-wage labor (such as agriculture, mining, and apparel and furniture manufacturing), and (ii) residential services that either satisfy fundamental needs (like medical care) or are useful no matter how remotely situated (such as grocery stores, auto repair shops, and restaurants).

Job Quality

If there is indeed a shift to smaller enterprises in nonmetropolitan areas, then we need to understand whether this entails a deterioration or an improvement in worker compensation and working conditions. Without considering the nonpecuniary advantages of working in a small enterprise, it is probably safe to say that job quality is lower there than in a large enterprise. Studies consistently show that employees in small enterprises typically have lower wages and fewer fringe benefits than employees in large enterprises (*11* and *29*). In some cases, small firms in the United States and very small firms in Japan paid wages about half of those of large enterprises.

We have also recently learned that low-quality jobs in nonmetropolitan firms, regardless of their size, seem to result from industry characteristics as much as from firm and worker characteristics. McGranahan found that workers in agriculture, mining, and manufacturing were more likely to have routine production jobs in nonmetropolitan than in metropolitan areas (*30*). Some 60 percent of the production jobs in resource-based industries in 1986 were in nonmetropolitan areas. In addition, about 13 percent of the total nonmetropolitan workforce was in routine manufacturing jobs, whereas only 8 percent of the metropolitan workforce was in similar jobs.

Two recent surveys of manufacturing establishments lend support to McGranahan's findings. One found that worker skill levels and wages in large multiunit enterprises were generally lower in nonmetropolitan areas than in metropolitan areas (*40*). Nonmetro branch plants in the West had higher percentages of low-wage workers and lower percentages of high-wage, professional, and skilled workers. A later survey of Georgia and South Carolina firms revealed that large enterprises provided, on average, relatively more lower skilled jobs (operators, fabricators, and laborers) and fewer opportunities in

higher paying executive, professional, and sales occupations in nonmetropolitan than in metropolitan areas (*7*).

The quality of service-sector employment, particularly in SME's, may also be lower in nonmetropolitan than in metropolitan areas. Services in nonmetropolitan areas tend to be small, low-paying residential activities (retail stores, restaurants, and the like) that supply services directly to consumers as end products. As shown by location quotients greater than 1, employment in SME's in low-paying residential service industries was heavily concentrated in nonmetropolitan areas (table 6). On the other hand, SME's in nonresidential, producer service industries that provide higher paying jobs were concentrated in large metropolitan areas.

Local Market Linkages

Economic base theory tells us that a business may generate employment either directly or in other sectors of a local economy by (i) employees in the enterprise purchasing locally provided goods and services and (ii) the enterprise itself purchasing locally provided specialized inputs and services (intermediate inputs). Businesses with strong linkages to the local economy will generate significant secondary employment while businesses with weak linkages will have little effect on the local economy beyond that attributable to the enterprises' workforce.

Large enterprises forming the economic base (export sector) are not likely to have high levels of backward linkages in nonmetropolitan areas. Branch operations of large enterprises generate considerable direct employment, but relative to small, locally owned enterprises that buy locally, the backward linkages are fewer. Branch plants do not encourage much indigenous activity outside the branch because they tend to draw support services and other resources from outside the area. On the other hand, locally owned SME's are more likely to develop local linkages and generate jobs and income indirectly in the nonmetropolitan area. Enterprises that sell locally also tend to purchase inputs locally because such firms perceive this behavior as being good for business.[4]

Other studies have further documented the weak linkage between nonmetropolitan branch plants and the local economy. In eastern Tennessee, for instance, nonmetropolitan branch plants acquired most of their inputs and

[4] A survey of manufacturing establishments in several Western States found that smaller independent establishments purchase a higher percentage of inputs locally. Independent enterprises purchased 38 percent of nonlabor inputs locally (within the county) and branch plants purchased 34 percent (*41*). Among export-oriented high-tech enterprises, independent firms purchased 35 percent of nonlabor inputs locally and branch plants purchased only 27 percent locally. A later survey of manufacturing branch plants in Georgia and South Carolina reveals that nonmetropolitan branch plants purchased only 16 percent of intermediate inputs and services within the county (*7*).

services from parent companies outside the region (*25*). Branch plants were contractually bound to their parent companies and seldom used local suppliers or financial institutions. In addition, most support services for manufacturing (consultants, computer processing firms, and so on) in the Tennessee Valley were located in urban centers near headquarters and core operations (*13*). Such services were virtually nonexistent in nonmetropolitan communities with manufacturing branch plants. A survey of nonmetropolitan firms in the West also found that branch plants in high-technology industries had weak backward linkages with the local economy, and as a result, provided low income and employment multipliers (*4*). However, branches in low-technology industries had surprisingly strong backward linkages with local industries. These stronger linkages for branch plants probably resulted from close ties to traditional rural industries such as mining and forestry.

Prospects for Nonmetropolitan SME Development in the 1990's

While largely based on conjecture, recent studies and commentary suggest that expanding world markets, improved communications and production technologies, and changes in corporate organization are leading toward a new spatial organization of production. Large-scale mass production is yielding to a system of flexible production. Enterprises are getting smaller, more efficient, and more mobile. The principal reasons for this trend identified in the literature may be summarized as follows.

First, according to several studies, large corporations are "vertically disintegrating," that is, they are becoming smaller and more specialized and, in the process, they are increasing the number of small enterprises by contracting out activities that are not a part of either final assembly or core management, such as the production of parts and components (*12*, *16*, and *42*). In many instances, the core operation controls only the final product and key technology, and subcontractors produce all of the parts and components. By "outsourcing," large corporations are able to cut labor and inventory costs by shifting the burden to outside suppliers and service enterprises.

Second, communications satellites, cellular telephones, fiber-optic cable, facsimile machines, and microcomputers are rapidly increasing the ability of firms to move information quickly and cheaply. With these new technologies, SME's in both manufacturing and producer service industries (financial services and the like) are able to compete with larger enterprises in dealing with customers, suppliers, personnel, and inventories.

Third, the emergence of new computer-based technology in manufacturing is dramatically improving the productivity of small producers relative to large, mass-production enterprises. This new technology enables small producers to

take over some of the internal manufacturing processes of large enterprises. With new computer numerically controlled equipment, small subcontractors can produce nonstandardized products in small batch runs and still meet the just-in-time delivery schedules of the main, final assembly plants.

The important question is whether nonmetropolitan areas are likely to win or lose relative to metropolitan areas in the transition to smaller enterprises and mobile industries. Will corporate reorganizations, telecommunications, and new manufacturing technologies decentralize or centralize economic activity? What will happen is far from clear. Two major schools of thought are now emerging.

The first position is that nonmetropolitan areas will benefit from the new technologies. It is argued that technological changes will reduce the effect of distance and thus eliminate differences between the urban center and the rural periphery. Several empirical studies have bolstered this position. The geographical dispersion of high-technology manufacturing, for instance, suggests that the proximity to urban amenities is not necessary (*3*). The use of automated machinery and telecommunications tends to lessen the importance of urban specialty skills and immediate access to intermediate inputs. Most of the critical manufactured inputs and services for high-technology firms can be easily and cheaply transported from distant locations. Office-based functions and other urban-based service activities will also decentralize because the new communications technologies make it possible for firms to transact business without face-to-face contact (*27*). Increasingly, we find evidence of professionals programming computers, engaging in research and development, and performing other tasks in nonmetropolitan areas while connected by phone to urban offices (*10*).

The second school of thought adopts the opposite viewpoint: that telecommunications and the new information technologies allow companies to concentrate higher order administrative, "front-office" services and nonroutine, high-technology manufacturing functions in metropolitan areas. Administrative and control functions are freed from the necessity of locating in proximity to the operations they direct. This contributes to a growing centralization of key control activities. As a result, nonmetropolitan areas and outlying regions are left with branch plants and "back-office" service activities (customer service centers, credit card clearance and billing centers, and the like) that perform only the most routine and standardized functions.

Although research on the spatial impacts of flexible production, telecommunications, and the new manufacturing technologies is just beginning, that which does exist lends strong support to the second (centralization) view. Krugman, for example, developed a two-region model of the urban/rural economy and demonstrated that improvements in transportation, production technology, and consumption of nonagricultural products induces producers of

goods and services to concentrate in urban areas (*26*). In addition, empirical studies show that most core manufacturing operations and "front-office" activities are almost exclusively urban functions. For example, as firms in the metalworking and motion picture industries "vertically disintegrated" in the 1980's, they returned their key assembly and administrative functions to major urban centers and became more dependent on local networks of suppliers and service firms (*12* and *42*).[5]

Barkley and Hinschberger believe that increased specialization, greater reliance on subcontractors, and "just-in-time" deliveries require greater proximity between a firm and its suppliers (*5*). This need for proximity encourages manufacturers to concentrate their activities in metropolitan areas where the benefits of specialized inputs, sophisticated transportation networks, and the sharing of knowledge and information can be found. In addition, the adoption of flexible manufacturing techniques, robotics, and computer-based technologies requires a labor-skill mix lacking in most nonmetropolitan areas. Such factors diminish the attractiveness of nonmetropolitan locations as a source of low-cost, unskilled labor.

Advances in telecommunications may contribute to even greater concentration of services, particularly in high-growth industries. Historically, high-growth service industries have concentrated in urban centers. Coffey and Bailly argue that the centralization of administrative functions, auxiliary producing services, and government services has continued unabated by advances in telecommunications (*14*). Sharing information and technology is still very important in advanced producer service industries and, thus far, new communications technology has not eliminated the need for face-to-face contact with suppliers, customers, and other businesses. Communications technology, however, has enabled some routine "back office" functions (customer billing, service, and credit card centers) with little need for personal contact to decentralize to take advantage of cost savings at peripheral locations.

Choices in Nonmetropolitan SME Development

The previous discussion leaves us with the following arguments:

- SME's create, on average, more jobs, provide more stable employment, and develop closer economic linkages to other businesses in the community than do large enterprises in nonmetropolitan areas.

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[5] Recent work involving metalworking industries supports (with some qualifications) the finding that vertically disintegrated, specialized enterprises prefer metropolitan locations (*5*). Metalworking industries experiencing marked shifts toward specialization and reduced enterprise size (vertical disintegration) showed a strong tendency to centralize production in metropolitan areas.

- However, nonmetropolitan SME's are generally inferior to metropolitan SME's in some respects: worker skill levels and wages are lower and the capacity for innovation and technological improvement smaller.
- Due to their size and isolation, nonmetropolitan SME's generally lack the economic resources (such as financial, marketing, technical, and management resources) enjoyed by large enterprises and metropolitan SME's.
- Deregulation, such as relaxing minimum wage laws, could also be counterproductive if it encourages small enterprises to continue to provide low-wage jobs instead of being more innovative and upgrading jobs.

Most nonmetropolitan areas will find it difficult, if not impossible, to counter the strong tendency of the most promising SME's--those enterprises that create new products and services and provide high-quality jobs--to concentrate in metropolitan areas. Several ways, however, have been suggested by Loveman and Sengenberger by which State and community organizations can help SME's overcome some of the economic disadvantages and resource limitations in nonmetropolitan areas (*29*).

- First, such organizations can provide SME's with special protection, privileges, and support, such as regulatory relief, subsidies, and technical assistance. It is argued, however, that State intervention alone will not ensure the economic vitality of small enterprises. Monetary assistance, such as loan guarantees and tax exemptions, could merely provide a cost cushion for incompetent small businesses that will eventually fail.
- Second, State and local organizations can encourage resource transfers from large to small and midsize enterprises by promoting subcontracting and franchising with large enterprises. Under subcontracting and franchising agreements, nonmetropolitan SME's would be ensured of dependable markets and access to outside resources (management training, organization techniques, and new technologies) unavailable to independent firms. Nonmetropolitan areas, particularly those with large pools of low-wage, low-skilled labor, may be considered as prime locations for this kind of subcontracting, particularly if they are within commuting distance of the large companies that do the contracting. For example, along "Japan's auto alley" (Interstate Highways 55, 65, and 75 between Michigan and Tennessee), large core Japanese auto assembly operations are increasingly contracting out "generic" parts that are relatively easy to manufacture, requiring little engineering (including plastic trim, batteries, and wipers) to smaller companies that are closely integrated into the parent company by ownership. One major drawback, however, is that small subcontractors may be as dependent and unstable as the former internally owned branches and affiliates. Small

subcontractors may be used as "buffers" by main assembly operations to spread costs and risks. Franchising may also be counterproductive if franchisees locate in regional shopping centers and pull shoppers away from village downtowns, replacing mainstreet businesses that are more committed to the community.

- Third, as an alternative to government subsidies and promoting close contractual relationships with large enterprises, State and community organizations can encourage SME's to come together to produce a product or service that none of them can provide alone. By forming a flexible production network with State and local support, small enterprises can counter the advantages of economies of scale found in large enterprises. Higher efficiencies are gained by sharing entrepreneurial ideas, technologies, services, labor training, and market information. In Denmark and Italy, for instance, communities of small enterprises have overcome many of the disadvantages of operating independently in geographically isolated areas by forming trade associations (*21*, *34*, and *37*). These associations handle virtually all of their members, payroll, billing, inventory control, general accounting, and legal and insurance services. They also provide industrial parks, affordable factory space, job training, bulk purchasing, joint export marketing, representation at trade fairs, and management training, particularly for startups.

Thus far, we have not seen much encouragement on a State or local level to form flexible production networks in U.S. nonmetropolitan areas, although a number of States are studying the feasibility of such efforts around urban centers (*34*).

- The costs of doing business with other small enterprises downstream and upstream ("transactions costs") may still be too high for small specialty enterprises in nonmetropolitan areas, particularly in areas outside urban commuting zones.
- In addition, the success of flexible specialization in Italy and Denmark occurred under only very special historical circumstances that may not be replicable in most U.S. nonmetropolitan areas.
- Finally, an additional disadvantage is that large enterprises may use small specialized enterprises in nonmetropolitan areas as an insulation against business cycles, exploit the smaller firms cheaper labor to reduce costs, make them bear unwanted inventory costs and, in general, keep them in a state of dependency (*29*).

Even so, a few rural development organizations have been experimenting with this new approach to local development. In southeastern Ohio, for example, a supplier network of small manufacturing firms was recently set up to produce kitchen cabinets and other furniture lines for elderly and disabled people (*22*).

Many economists believe that nonmetropolitan areas will be at a disadvantage in competing for small, specialized enterprises, particularly geographically isolated communities and communities with poorly educated or trained labor (*39*).

- Increased specialization, greater reliance on subcontractors, and "just-in-time" production strategies will require greater proximity between an enterprise and its suppliers and customers (*5*). Proximity is also needed to share information, innovations, and skilled workers. This need for proximity will encourage small specialty manufacturers and auxiliary services to agglomerate their activities, most likely in the suburbs of the same metropolitan area in which the main assembly plants and front-office functions are located (*14*).
- In addition, the adoption of flexible manufacturing systems, robotics, and computer-based technologies may require an upgrading of labor skills and reduce the demand for low-cost labor. The attractiveness of nonmetropolitan locations as a source of this labor thus may be reduced.

Other economists argue, however, that flexible specialization may work in nonmetropolitan areas under special circumstances. In Denmark and northern Italy, for instance, consortiums of small flexible manufacturers have been established in rural areas (*21*). These enterprises have succeeded without the economies of urbanization by forming networks for sharing entrepreneurial ideas, technologies, services, labor training, and market information. The conventional thinking is that small manufacturing subcontractors must locate near their customers (the main assembly operations) to meet "just-in-time" delivery schedules. But Linge claims that the just-in-time system of production is more spatially adaptable than has been suggested. Increasingly, we find networks of small subcontractors in the automobile industry opening up and spreading out to get away from union shops, labor shortages, and the burden of being so beholden to one main buyer (*28*). Such networks create more opportunities for rural component manufacturers who may have an advantage over urban component manufacturers in hiring lower cost labor and laying off workers during hard times.

- Nonmetropolitan areas with well-educated labor, good transportation and communication services, and proximity to metropolitan areas should be able to attract small subcontractors, independent support services, and intermediate input suppliers. By forming networks, SME's can overcome some of the disadvantages they face as individual firms acting entirely on their own in isolated rural markets. A county or community network of SME's within the same industry, for instance, can work together to meet technology and other needs.
- States and communities can support this process by providing seed funding for technology service centers and trade associations to help SME's keep up with changing production technologies and marketing

strategies. They can also assist by improving local transportation systems (roads and highways), helping establish overnight freight pickup and delivery service (for example, UPS), and upgrading communication networks.

Conclusions

In this chapter, I have attempted to integrate recent data and literature to assess small and midsize enterprise development as a growth strategy in nonmetropolitan areas. There are good reasons to examine SME development in nonmetropolitan areas.

- In recent years, SME's have created the largest share of the jobs in nonmetropolitan areas, particularly in export-oriented industries such as manufacturing.
- Studies also show that SME's under local ownership are more innovative than large enterprises and develop stronger economic ties to the community.
- However, SME's in nonmetropolitan areas are less likely to innovate and generally employ relatively fewer professionals and skilled workers than are found in metropolitan areas. In nonmetropolitan areas, SME's tend to be either low-paying residential service activities that satisfy fundamental needs (for example, medical care, grocery stores) or export-oriented activities that revolve around natural resources and low-wage labor. SME's in innovative industries (high-technology manufacturing and producer services) paying high salaries for professional and technical workers locate almost exclusively in metropolitan areas.

Most nonmetropolitan areas will find it difficult, if not impossible, to counter the strong tendency of SME's in high-technology industries to concentrate in metropolitan areas. During the 1980's, high-technology manufacturing and auxiliary producer service industries that experienced marked shifts toward specialization and reduced enterprise size (vertical disintegration) showed a strong tendency to centralize production in metropolitan areas.

- SME's operating independently in nonmetropolitan areas may lack sufficient financial, marketing, technical (R&D), and labor resources (skilled and professional workers) to compete with urban-based enterprises.
- To overcome these deficiencies, nonmetropolitan SME's must either develop contractual relationships with larger enterprises or be linked to a network of SME's in which resources and services are jointly purchased and shared. In this way, SME's can operate as if they were

a part of a large enterprise and enjoy advantages similar to those possessed by large enterprises.

- Government may intervene in a number of ways to lend support to smaller enterprises to encourage this process, as discussed in the preceding section.

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Chapter 3

Industrial Targeting

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Rural communities often take for granted that all manufacturing firms make good targets of opportunity. When such firms come seeking financial incentives to locate within the community, many communities accommodate these requests as long as the community needs the jobs and can afford the tax expenditure. But, because not all firms are ideally suited for a given community, this policy can result in misdirected and costly development that, over the long run, meets the needs of neither the firm nor the community.

A well-conceived industrial targeting strategy avoids these problems by using research to identify ideal industries (both manufacturing and nonmanufacturing) for local development. Besides identifying industries or firms that may be enticed to move to or locate branches in the community, a good industrial targeting strategy identifies existing local firms for expansion and it also helps to create new firm startups.

Definition

Industrial targeting: A research-based method of (i) identifying key industries or firms with potential for development, and (ii) formulating policies that encourage their development.

In theory, industrial targeting has many advantages over conventional business assistance approaches. By targeting assistance only to industries where the growth prospects and benefits to the community are greatest, industrial targeting promises to cost less than providing assistance to all firms regardless of industry. Industrial targeting can also lead to the formulation of an assistance package uniquely designed to encourage the growth of a particular industry.

In practice, the advantages of industrial targeting can be nullified by potential pitfalls in the process. Success depends on the quality of the research and the ability of the community to follow through in formulating and implementing

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research-based development policy. Failure at any stage in this process can result in a significant waste of time and resources.

Industrial targeting can be applied at any level of government. At the local level, industrial targeting focuses on the needs of a particular community. State (or regional) industrial targeting focuses on an entire State or a region within a State.

Local Industrial Targeting Techniques

Local industrial targeting tries to organize and redirect local economic development efforts toward developing a comparative advantage. This usually involves: (i) information gathering about the local economy and community preferences, (ii) identifying industries with the greatest potential to meet community goals, and (iii) recommending policies that would encourage the growth of industries identified as targets of opportunity. For example, such policies can be used to diversify a local economy by adding new firms in carefully chosen industries. These efforts can also be used to strengthen the long-term viability of existing firms through assistance that shores up a firm's weaknesses (for example, through technological and organizational improvements or through the upgrading of labor skills of employees) and/or identifies opportunities for import substitution and value-added activities.

Industrial targeting methods vary considerably from informal to formal. Informal industrial targeting is fairly common. Most local economic development practitioners use their intuition and general knowledge of the local economy to target at least a few industries for development (*3* and *12*).[1] University extension personnel and other outside experts may assist by providing research-based boilerplate recommendations as to which industries have the greatest growth potential and how to encourage their growth. The main weakness of this approach is that individuals' knowledge is limited to industries with which they themselves are familiar, and even this knowledge may suffer from a lack of objectivity.

A more inductive approach involves surveying local community business leaders to discover which local businesses are actually growing and what government actions could encourage more growth in these industries.[2] This strategy, however, provides no information about opportunities for industries not yet present in the local economy. In addition, local industry trends may not synchronize with regional and national trends that may ultimately prevail.

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[1] Italicized numbers in parentheses identify literature cited in the References at the end of this chapter.

[2] Retention and expansion programs usually follow this kind of inductive approach. See Chapter 4 for a detailed discussion for retention and expansion programs.

Hence, hidden growth opportunities may exist for some currently stagnant local firms, while prospects for some currently growing local firms may be dimmer than local trends suggest. A resourceful person can lessen this problem by obtaining published data on current and projected national and regional trends for selected target industries.[3]

Formal industrial targeting analysis is designed to overcome the weaknesses of these informal approaches by providing a systematic review of the situation facing local industries in the context of related national and regional industry trends. Formal industrial targeting is quite recent in origin, having been developed largely in the last 10 years. It usually requires an outside expert (the provider of the targeting service) to do the analysis. The best providers also help design local economic development strategies. Targeting services can be obtained in many States, often provided by extension experts and consulting companies associated with universities. The cost varies from over $100,000 charged by some private sector service providers to less than $10,000 for services provided by universities and extension personnel (*13*).[4]

Central to the analysis is the industry fit, which matches community and local industry characteristics with national or regional data on industrial location factors, those factors that industries look for when considering expansion in a locality.[5] The industry fit analysis produces a list of feasible industries (those that might consider the locality a viable site for expansion), whose growth potential is then estimated based on regional and national industry trends and other factors.[6] Once the list is completed, strategies are formulated (either by the service provider or by some economic development practitioner working with the community) to encourage the growth of selected industries (*25*).[7]

The importance of strategy formulation should not be understated. As one critic notes, there is a danger that, "by drawing policymakers' attention to industries rather than to the process of development, development policies are poorer for the exercise" (*24*). It is, therefore, crucial that the results of the analysis be properly integrated into the community's development strategy, rather than being

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[3] For example, see (*2*) and (*17*).

[4] Pennsylvania State University has provided this service free to many rural governments in the Northeast.

[5] For example, a community that has skilled labor available as a result of a recent auto plant closure and wishes to recruit a similar high-paying industry to locate there may be matched with other high-paying industries that require similar skills and other locally available characteristics, such as excess water supply, transportation infrastructure, and proximity to product markets.

[6] Input-output models are used in some of the more sophisticated analyses, such as the University of Minnesota model (*14*) and the Pennsylvania State University Needs model (*9*).

[7] The strategies these services provide vary: some only offer a mailing list of CEO's and firms for the community to contact while others work out a comprehensive development strategy with local officials.

merely a freestanding component. The results of the analysis should be provided to the various economic development actors within the area so that they may alter their policies accordingly. To be most effective, these policies should be coordinated as much as possible in order to form a coherent and consistent local economic development policy.

Examples of Local Industrial Targeting Applications

No comprehensive empirical studies have assessed the effectiveness of these techniques. Simply comparing a list of targeted industries with the industries that subsequently grew in an area does not really reveal the effectiveness of the approach, because as Lee notes:

> "Even if the target industries' list in the specific year matches with the industry mix in later years, it is difficult to determine whether new industry mix is created by policymakers' and planners' efforts based on recommended target industries or whether the industry mix is generated by other economic forces" (*11*).

Anecdotal information, however, can reveal some insights on this question. A study by Lipman and Miller, prepared for the Economic Development Administration, collected anecdotal information from local development experts and industrial targeting service providers (*13*). The following examples of successes and failures of local industrial targeting analyses were included among the interviews summarized in the appendix of their report.

One industrial targeting analysis was viewed as a success because it redirected the local officials of a "smallish" Ohio community to emphasize the community's proximity to the river, which they had not seriously considered before, and "to look at their highly unionized labor force as an asset" that reflects the kind of highly skilled labor force that is increasingly a required input to industries today. This effort was offered as an example of how "communities are often shocked to find out they even have a comparative advantage." The individual that Lipman and Miller cited for these views (Richard Bingham, University of Wisconsin) added that the "focus should be on helping communities find their comparative advantage; then let communities go out and sell themselves."

In the Alaskan islands, an industrial targeting provider was called in to advise about economic diversification options. Sealing had been the main industry there. The analysis concluded that, rather than trying to attract an IBM or developing tourism, the greatest local development potential was in expanding the local halibut-fishing industry. The service provider (Economic Research Associates) went beyond merely informing the community of its comparative advantage and became directly involved in such specifics as the design of the

fishing boats, the development of a labor-intensive production process, and assistance in financing and marketing the industrial expansion.

Another apparent success story was in Tupelo, MS, where the provider (Southern Methodist University's Center for Enterprising) had an "ongoing relationship" with the community for about 10 years. Tupelo was characterized as having high income, a skilled labor force, and furniture and meatpacking industries. Although the provider originally "went in to cool them off of hi-tech," it ended up recommending that the area's vocational schools and junior colleges should put computerized numeric control into their machinery and equipment repair courses. This was viewed as a success in that it resulted in "a lot of hi-tech machinery applications."

The failures mentioned in these interviews were mostly cases where industrial targeting was used simply as a recruitment tool, where the strategy formulation step involved only providing the community with a mailing list of CEO's to contact and where there was little followup by local development experts. For example, an analysis done for Beaumont, TX, produced a list of promising companies and names of CEO's to contact, plus materials to use "for direct mailings and follow-up." Unfortunately, "the person who was supposed to implement the program left and it turned out to be a lost opportunity." In Arizona, a provider "advised several small communities on what industries to go after, including names and addresses of CEO's...A couple communities did follow up with mailings but nothing came of it."

Some Conclusions on the Effectiveness of Local Studies

Failures such as those mentioned above may be caused by a lack of community involvement up front, which can lead to a lack of community interest and followup at the end. Such disappointments have led experts to conclude that a well-designed industrial targeting study should begin by requiring the community to come to a consensus on what it wants most from industry (higher wages, employment growth, jobs for the poor, economic stability) and what kind of sacrifices it is willing to make to achieve its goals. Otherwise, the targeting study may produce recommendations that the community is unwilling to follow. It makes sense, therefore, that industrial targeting be a part of a more comprehensive strategic planning exercise that draws together the various community leaders and organizations from the beginning and requires that they commit themselves to acting upon the findings.

Targeting efforts also seem more likely to fail when communities or targeting service providers approach industrial targeting with the sole object of finding large firms from outside the area that might relocate or open a new plant in the area. Although some targeted recruitment may still be justified, encouraging the

growth of new and existing small businesses appears to have much greater economic development potential in today's economy (*21*).

To be effective in today's economy, industrial targeting should help local officials build on their existing businesses by identifying opportunities for small business expansion, value-added activity, and import substitution.[8] Unfortunately, many computer targeting services focus on recruitment opportunities and make no effort to address the needs of local small businesses. Local officials would be well advised, therefore, to choose targeting providers carefully, seeking out providers that can help formulate strategies for local small business expansion. Rural communities must also exercise caution because not all targeting services are geared to the relatively low level of industry agglomeration and multiplier effects that exist in rural economies (*25*). Failure to account for the smaller rural multiplier effects can lead to overly optimistic projections of the effects on the community from industry expansion or relocation.

Another potential drawback for rural communities is the cost of industrial targeting services, which is probably too high for many of the smaller rural governments. The smallest communities, those with populations under 10,000, might do better by persuading the county, a public utility, or a regional economic development organization to undertake, or at least assist in, the analysis.[9] Some small communities may be able to join together into a cluster and share the costs of a local targeting study. Such collaboration usually requires a good working relationship among communities that share common goals and characteristics (*7*). Low-cost, informal approaches may be best for small places acting alone with little industrial complexity and little money to spend on targeting services.

For places that can afford it, though, a good targeting study should lead to a better understanding of the local linkages to the regional, national, and international economy. Such knowledge may be particularly valuable to rural communities that have been going through major economic restructuring during the last 10 years and have little capacity to assess their economic situations.

As the anecdotal evidence suggests, however, not all places will benefit. To be effective, rural communities must be actively involved with the analysis, especially in the front (goal setting) and later (policy designing and

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[8] Value-added activities are those that add to a product's value before it is exported or used locally (for example, food processing). Import substitution reduces the use of imports by substituting home-grown products and services for imported ones.

[9] The community should maintain control over the process, because the entity performing the analysis may have different interests than the community. For example, a utility may prefer capital-intensive industries that are heavy users of electricity, while a community may prefer a more labor-intensive industry to encourage employment growth.

implementing) stages, and they must select and direct the targeting providers with care to make sure that the analysis goes beyond just recruiting manufacturing firms and extends to other industries and to expansion of local firms.

Intergovernmental Support for Local Industrial Targeting

The Federal Government has been directly involved as a provider of industrial targeting analyses. The Economic Development Administration performed targeting analyses for local governments (for a nominal fee) during the 1970's and early 1980's, but this service was considered by many to be methodologically flawed and it went rapidly out of date (*13*). As a consequence, relatively little demand for this service was seen (fewer than 25 requests per year), and it was discontinued in 1984. The Tennessee Valley Authority's service-oriented Commercial Business Assistance Program may have greater potential, featuring a market study and followup activities focusing on the local service sector (*6*).[10]

Recently, the Federal Government has played a more significant role in encouraging local governments to have targeting analyses performed (by private providers, mostly) as a requirement for receiving some Federal development grants. For example, the Appalachian Regional Commission usually gives $40,000 to $100,000 to distressed communities for strategy formulation, usually including funds for targeting analyses.

Some State economic development agencies are also encouraging communities that apply for grants to produce economic development strategies. Targeting analyses are sometimes performed for this purpose. Several States have also been active through university extension programs as providers of local targeting analyses for rural governments; the Pennsylvania State University approach is a prominent example.[11] Industrial targeting is also sometimes included as a component of strategic planning programs.[12]

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[10] The USDA's Rural Revitalization Initiative is considering new forms of directly providing targeting services, including creating a national computerized network to link rural target industries to site location efforts of industry prospects (*23*).

[11] In the late 1980's, Penn State provided about 20 local targeting analyses in the first year of implementing its program. Although this service is still available, fewer analyses have been performed in recent years because of staff turnover. Current plans are to make the analysis more comprehensive (to include more than manufacturing) and to update for 1990 Census data.

[12] Oklahoma's community economic development workshop series, for example, features industrial targeting as one of its tools and techniques used in strategic planning. Because "utility companies in Oklahoma have good programs and information on industry recruitment...they have often assisted with this section of the workshop" (*26*).

State Industrial Targeting Efforts

State industrial targeting is more comprehensive than local industrial targeting and focuses on entire States or regions. In some cases, State targeting efforts arise out of difficulties incurred by a key industry in the State. In other cases, these efforts may arise because a depressed region needs to be revitalized.[13] In either case, State targeting has the potential to be more effective than local targeting because States have more resources to devote to implementing targeted development strategies than do local governments.

State industrial targeting aims to improve technology, networking, marketing, and other industry characteristics that would allow industries to compete better in a global economy. In some cases, the effort involves creating new institutions or requiring existing institutions to support specific industries. For example, Maine's Center for Technology Transfer, associated with the University of Maine, provides a variety of services to selected industries (*19*).

Industrial targeting is believed to have many advantages over traditional State economic development programs. Rosenfeld and others claim that traditional State economic development programs "ignore differences among sectors and address functional needs...(such as training, capital, technical assistance)...(and) States are beginning to realize they can provide the needed expertise best by concentrating on specific sectors" (*19*). Carlson and Mattoon add that industrial targeting "helps States focus their economic development services more narrowly and effectively, rather than dissipating state resources by trying to offer programs for every type of business" (*5*). This, they maintain, is particularly advantageous in an era when States are financially pressed and must ration their economic development resources with care.

State targeting often begins with a list of preexisting industries to be strengthened or modernized. Formal analysis may be limited to these and related industries, without any attempt to identify other potential industries that might be attracted to the region. This effort differs from local targeting, which emphasizes the use of analytical methods to identify industries to assist.

However, State analyses of industry needs and policies to address those needs are more comprehensive than those of local targeting efforts. State targeting usually involves the completion of comprehensive, industry-specific studies that identify barriers to growth of the industry(ies) and recommends policies that can

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[13] Mount Auburn Associates made a similar distinction between two types of targeting efforts: the first "seeks to strengthen an existing industry of critical importance" to retain jobs (this usually involves a mature industry); the second reviews the "competitive advantages of a region...aimed towards promoting new enterprise development and supporting the expansion of growth companies" (*15*).

overcome such barriers.[14] As in the case of local industrial targeting, success depends on the quality of the research and the willingness and ability of State and local governments to follow up the study recommendations with policies.

Examples of State Targeting

Examples from Massachusetts and Oregon illustrate how State industrial targeting has been used in recent years to stimulate rural development. An example from Kentucky shows how a regional approach, with the help of State and Federal assistance, may achieve much the same results as a State targeting initiative. Although an objective assessment of the effectiveness of these efforts is difficult to make, each began in the mid- to late 1980's and was still being viewed as successful in the early 1990's.

The Massachusetts Northern Tier Project, for example, was created by the State in 1985 to examine structural problems associated with this region's mature industrial base. After spending 6-8 months talking with various community groups, the project director, Michael Kane, hired Mount Auburn Associates as a consultant to do a 9-month study (*10*). This produced a 1986 strategic plan that included detailed studies of specific industries in the region (*20*).

For example, the industry analysis concluded that the specialty food industry would grow in the future and was well suited to the region. It recommended "creative marketing, the development of particular market niches, and innovation in packaging and process technologies" to ensure that the region would maintain its market share in the industry. Specific recommendations called for the State to:

- Promote cooperative relationships within the industry by organizing meetings "for farmers, food product managers, academic researchers, food industry machinery producers, food packaging materials manufacturers and representatives of the labor force in these industries."
- Create a university food technology center that would provide small specialty food businesses with technical advice and access to research and development facilities.
- Use the University of Massachusetts (UMASS) pilot food processing plant as a low-cost "industrial workshop" for entrepreneurs with new food product ideas.
- Create "a shared facility, similar to an incubator space" for housing small food companies (*20*).

[14] For a good description of how to structure an industry study, see (*18*).

According to Hochberg and Kane (both associated with this project), these recommendations led to (a) the creation of the Western Massachusetts Food Industry Association (WMFIA), whose networking and technical assistance activities have been described as having achieved "spectacular" results; (b) the opening of UMASS's Pilot Food Processing Plant for the use of local food companies; (c) the completion of a feasibility study for an Agricultural Business Center (negotiations are currently underway with a local development group for this Center); and (d) current efforts to create a shared-use kitchen facility (*10*). The study was viewed as an asset in itself, by providing authoritative evidence that the industry was important to the region and by leading to greater public financial support of small local firms, which helped some small food companies.

Other industries important to the region and included in the study, such as metalworking, tourism, and the wood products and furniture industries, have benefited from implementation of the study's recommendations. Although some of these initiatives have been more successful than others, the project appears to have improved the region's overall development potential "by increasing access to State resources, promoting cooperative relationships within the region, and providing a framework and guidelines for further regional economic development efforts" (*4*).

In 1986, the Southern Kentucky Tourism Development Project was created to address the economic difficulties of southern Kentucky, specifically, in the 27 counties making up the 5th Congressional District. This scenic area had been targeted by many projects and agencies over the years with only limited success, and it was believed that a more comprehensive regionwide effort was required. Requests were made to various Federal and State agencies to fund research and development activities, resulting in a regional strategy to promote tourism in the area.[15]

The key steps in the process were: (i) the creation of a steering committee consisting of local leaders whose support would be crucial in legitimizing the study and implementing its recommendations; (ii) a regional study performed by an "expert" consultant firm to assess the region's overall development potential, to clarify the importance of the I-75 corridor connection to the region's potential tourists, to identify "historic, natural, cultural, and other resources" available for tourism development, and to make recommendations for specific tourism attractions, providing guidance on how these might be established; and (iii) communication and educational efforts, including a media event to publicize the findings of the study in a positive way and "tourism business study tours" to organize local leaders and expose them to similar approaches used elsewhere.

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[15] This material came from Allan J. Worms, Recreation and Tourism Specialist at University of Kentucky (*27*).

Several new developments around Lake Cumberland, at Renfro Valley, in the London/Corbin area, and in other localities have been "directly attributed" to the project. Management of one of these new developments specifically acknowledged the industrial targeting study as instrumental in justifying the expansion of the resort. In addition, various existing businesses modernized or expanded to meet the demand of increased tourism in several areas. For example, visits to the Lake Cumberland area increased 28 percent from 1985 to 1990. Many tourists were drawn to the area by new festivals and special events (such as the London World Chicken Festival).

In 1989, the Oregon Economic Development Department identified 10 industries for its Key Industry Development Program. Its approach was to award grants to "catalyst" projects that would then serve as examples of how the industries could adopt new methods to become more competitive. Industry studies have been instrumental in many of these projects (*16*).

For example, a study found that Oregon's secondary wood industry, including products such as custom doors, craft items, and furniture, was growing faster than its primary wood industry and was expected to grow more rapidly in the future. To facilitate that growth, additional research included doing a "German market study" on new market opportunities abroad. A "Smart Wood Products" conference presented information on new wood products, markets, and technologies. Another large project focused specifically on the southwest region of the State, a region particularly hard-hit by reductions in timber cutting. This project focused on ways to diversify the local economy through value-added secondary wood products, and included "market and resource surveys, assessment of high potential products, and analysis of the most promising product ideas...(and plans) for more extensive analysis."

Other States have done studies to help direct targeted rural industrial assistance. Some, such as Michigan and Kansas, have focused on the agricultural sector and the potential for encouraging alternative agricultural products or value-added industries, such as food processing or wood processing (*22*). Others have focused on tourism (*1*) and retirement attraction (*8*). It remains to be seen how effective most of these efforts will be.

Conclusions

Industrial targeting can provide useful insights in formulating a sound and effective economic development strategy. Much diversity, however, is found in what is provided in local-area targeting analyses and in who provides the analysis. In choosing providers of targeting services, rural communities should seek out providers that go beyond simply producing a list of industries or firms to attract; better results are expected from providers that focus on local industry expansion or modification and produce specific policy recommendations aimed

at achieving such development. Success also requires active participation of the local leadership and community and a willingness to follow through on the recommendations of the study.

State (or regional) industrial targeting involves whole States or regions and entails a more extensive analysis of existing industries and policies to encourage their growth. State targeting has the potential to be more effective than local-area analyses because it involves more indepth research of industry needs and opportunities. States also have more far-reaching policies at their disposal than do local governments. State targeting efforts are relatively recent, however, and information is not yet available to determine how successful they have been.

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Chapter 4

Business Assistance Strategies for "Home Grown" Firms

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Business assistance programs aimed at individual firms or at specific classes of firms have existed for hundreds of years. The 19th-century development of the American railroad system was fostered by business assistance from the Federal Government through both direct cash payments and land title transfers. More recently, State and local governments have attempted to lure relocating firms with offers of property tax abatements, below-market financing, job training programs, and other subsidies. Such "smokestack chasing" programs remain an important component of many communities' economic development efforts despite the questionable effect of such policies on industrial location decisions. A new awareness, however, has grown up that assisting businesses and local entrepreneurs that already exist in the community may bring a much greater payoff in terms of sustainable economic growth for most rural communities.

In this chapter we examine two programs at length--retention and expansion programs and seed and venture capital programs--to better understand what roles these can play in rural development. Retention and expansion programs are those that identify local, though not necessarily locally owned, business needs of already established businesses, so that these needs can then be addressed with followup actions by local, State, or Federal agencies. Seed and venture capital programs, on the other hand, provide much-needed financial and technical support to entrepreneurs as they attempt to start new businesses. Both approaches aim to assist individual businesses by providing responses tailored to their specific needs. Unlike the strategies discussed in chapter 5, retention and expansion programs and seed and venture capital programs are not tied to place-specific infrastructure. Instead, they represent an approach by which State agencies and community organizations can help foster business development in any place that falls within their area.

The two programs examined here are not necessarily superior to alternative approaches, nor are they "strategies" in and of themselves. But, both programs

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provide good examples of means by which public officials and community groups can devise multifaceted strategies responsive to the needs of individual businesses. The two programs serve very different clientele through different means. However, both programs can serve as cornerstones for economic development, overcoming local barriers to development by solving problems facing the business community.

Retention and Expansion

Local, State, and Federal government agencies over the centuries have operated a profusion of initiatives that fall under the general rubric of encouraging the retention and expansion of existing businesses. In the 18th century, George Washington helped establish the first canal system alongside the Potomac River, in part to help the businesses in Alexandria and Georgetown to expand. In the 19th century, many communities, especially in the West, fought to bring the railroads through their communities--since places without this boon lost businesses to the winning communities. Such modern-day local government actions as changes in zoning laws are sometimes intentionally used to facilitate the expansion or retention of businesses.

In the early 1980's, explicit retention and expansion programs began to appear. These programs were generally more encompassing in their efforts than were earlier endeavors and were part of a broad community economic development venture. In the following discussion, the primary focus is on these more explicit programs aimed at the retention and expansion of existing local businesses. (The term "retention and expansion," however, has been, and continues to be, more broadly used.)

Definition:

Retention and expansion (R&E) programs: All economic development efforts by private groups and public agencies designed explicitly to support the growth and vitality of existing local businesses.

R&E programs are designed to support a community's existing businesses so that they need not move or expand elsewhere. The ultimate objectives of the programs are (i) to help reduce costs faced by local businesses and (ii) to increase the demand for local products and services by the expansion of markets using such means as promotion through dissemination of information for the creation of new markets. When a community adopts an R&E program for its

development policy, it will often have the additional aim of attracting new businesses as part of a broader economic development program (*21*).[1]

R&E programs are locally driven, strategically planned, and action-oriented and are aimed at existing local employers, including perhaps State or Federal facilities. Ultimately, they show a pro-business attitude. The programs themselves generally cost the local public sector little, since they rely heavily on volunteers, on public agencies, especially in State government, and on private organizations.

Retention and Expansion Program Components

A typical R&E program involves a progressive sequence of activities within two stages: (i) identification of existing businesses, appraisal of the problems and needs of those businesses, and identification of appropriate government programs or actions; and (ii) use of these government tools to address the germane private sector concerns (*12*, *17*, *20*, and *29*).

The first stage in all R&E programs requires the formation of a committee, task force, or some other group to oversee the identification and evaluation of existing businesses in the community. The identification of existing businesses is critical for a proactive community-level R&E program. The identification process will vary by the types of businesses targeted by the R&E program and by the level of cooperation received from State agencies and business groups. For example, this step may be as simple as getting the membership lists from local business groups.

A business visitation program is often included in the first stage (see, for example, *6*). The local development group identifies the needs and concerns of local enterprises. The visits are designed to improve lines of communication between the public and private sectors, to make the contacted businesspersons feel wanted by the community (public relations), and to gather information on the local economy. Information gathered may include an early warning system for plant closings or the forecasting of local economic conditions. But the information being collected should ideally assist in developing shortrun and longrun strategies for providing business support. Appropriate government agencies and programs are identified either from previous work with the agencies or by contacting other local development groups or government agencies.

Any visitation interview process requires significant preparation. Local businesses are more likely to cooperate if a campaign explaining the program and

[1] Italicized numbers in parentheses identify literature cited in the References at the end of this chapter.

its benefits has been carried out in advance. Before conducting the interviews, selecting and training volunteers is critical for the success of a visitation program. Poorly selected or trained volunteers can do more harm than good and, in the extreme, they can alienate local business (*26*).

A visitation program is not, of course, the only way to gather information. Other proactive methods include the solicitation of information from local chambers of commerce and other business groups. Reactive methods include having the business community take the initiative to confer with local governmental units.

The second and final stage of an R&E program directs or attracts the attention of appropriate local, State, or Federal agencies to remove obstacles to the economic vitality of the community. These governmental programs address specific problems or solutions that fall within one or more broad categories: (i) improving business location factors to the community's advantage, (ii) increasing private sector competitiveness or efficiency, and (iii) providing direct or indirect subsidies to businesses.

R&E programs often attempt to improve those factors that are under local control or can be influenced by local people. Such factors include education, public services, recreational opportunities, health services, and cultural activities. Many studies have indicated that most businesses require an educated and skilled workforce (*30*). Public services might range from major concerns such as getting the county to improve a road's capacity to handle higher freight tonnage to relatively minor ones like adding a street light outside a business's door.

Other factors in the area, such as the prevailing State or Federal tax structures, may greatly influence an enterprise's location decision, but these factors are, in general, not locally determined. For example, an excise tax on high-sulfur coal will affect some communities more than others. In such cases, a local development group may choose to lobby State or Federal governments to improve the "business climate."

Additionally, other government agencies can be solicited to aid the competitiveness of local firms' production processes, input markets, and output markets. Various programs are available for this purpose, including site assistance, capital assistance, management assistance, institutional assistance, marketing assistance, technical assistance, worker training, and applied research. Also, some organizations sponsor labor-management councils to help encourage cooperation between labor and management within businesses. Additional special education might fill a perceived need. An R&E program, for example, might work to get the local vocational-technical institute to offer training courses matching the needs of a local company.

Offering direct subsidies to retain or expand businesses is a time-honored, but not necessarily effective, government approach, being a close relative of "smokestack chasing," the traditional method of economic development. In many cases, this has been a very costly process, on a per-job basis, since it often retains jobs only temporarily. In addition, sometimes the retention or expansion would have occurred in any case, without the subsidy.

Local governments now more often purchase locally produced goods and services rather than those from outside the region. The resulting import substitution is often a form of subsidy to local businesses. Government procurement programs, however, can create significant headaches in their administration, such as identifying goods or services that really are produced locally. Some local firms and organizations may also follow local procurement policies.

Local organizations can promote exports of locally produced goods and services. Often a community's chamber of commerce will do so. Promotion may include hosting special events and participating in trade shows and other marketing occasions.

As Phillips has suggested, a triage-like process can help in determining where to concentrate community development efforts and resources (*26*). For mortally wounded businesses, the efforts can be limited to those that ease the end. Primary treatment should go to problems causing the most severe injuries to businesses that have a chance of survival. Superficial problems should be dealt with later.[2]

Range of Use

No comprehensive survey of local R&E programs exists. Though the discussion here has been limited to locally administered programs, programs administered at the State and national levels, such as tax incentives, loan guarantees, workers' compensation laws, and subsidies explicitly aimed at the retention or expansion of existing business, could also be included in a definition of R&E programs.

Two studies on industrial development programs may shed some light on the extent of R&E programs. Humphrey and others surveyed 20 States in 1985 and identified 2,610 State government-recognized industrial location development programs (*11*). State offices were asked to identify local programs known to them, but individual program managers were not surveyed, so the estimate may significantly undercount the actual number of programs in existence. The groups identified by the State offices included private profit and nonprofit organizations, chambers of commerce, regional development commissions, and county and

[2] Chapter 3 discusses industrial targeting.

municipal agencies. In the second study, Levy estimated that there were at least 15,000 governmental and private industrial development groups in the Nation (*14*). Most, but not all, of the industrial location development programs contain explicit retention and expansion elements.

In July 1992, the Growth Strategies Organization surveyed approximately 2,700 economic development organizations they had identified (*2*). About 500, of which 200 were from communities of 50,000 or less, responded to the survey. Sixty-two percent of the respondents from the smaller communities described themselves as heavily involved in business retention and expansion efforts. Slightly less than half, on the other hand, were heavily involved in business attraction. Nearly all (more than 95 percent) were involved in some kind of retention and expansion effort.

In a 1985 survey of State economic development offices, Otto, Morse, and Hagey found that 40 of the 44 responding States had or were developing programs to assist communities to retain and expand existing businesses (*24*). Most of these efforts appeared primarily administered at the State level but implemented by local people. Only 7 of the 42 States responding to the question reported no known local R&E programs operating in their States. The survey report, however, includes only the programs with which the States were familiar. Like the study of Humphrey and others, the survey doubtlessly undercounted the retention and expansion activity taking place.

Among the most influential programs in the Nation are the first two business visitation R&E programs established in Ohio and New Jersey. These two programs, while similar, arose independently during the early 1980's. The Ohio program directly inspired the creation of similar programs in Indiana, Iowa, Kansas, North Dakota, Oklahoma, and Arizona. The New Jersey program led to the creation of similar programs in Wisconsin, Michigan, Georgia, and Pennsylvania. Altogether, at least 15 State-level technical assistance programs for business visitation R&E efforts have been established since 1982. Both Ohio's and New Jersey's programs ultimately put local retention and expansion efforts in a structured and systematic framework, thus making local R&E programs more effective.

The New Jersey retention and expansion technical assistance program that helps communities establish R&E programs is cosponsored by the New Jersey Department of Commerce and Economic Development and by New Jersey Bell Telephone Company. Rutgers University's Department of Public Administration is under contract to prepare the final report for each New Jersey community in the program. The final reports are based on surveys of the information obtained from the visitations. The Ohio retention and expansion technical assistance program is cosponsored by Ohio State University's Cooperative Extension Service and the Ohio Department of Development.

Business visitation R&E programs have traditionally been oriented toward retention and expansion of manufacturing industries. In 1990, Ohio's R&E program was adapted for use in the retention and expansion of retail and tourism businesses. Leroy Hushak, Ohio's R&E program director, believes the Ohio R&E program has been effective in meeting the needs of this broader group of industries, to the benefit of the communities they serve (*19*).

Reasons for the Use of Retention and Expansion Programs

The survey by Humphrey and others of industrial development programs, which consist of R&E and other development programs, indicates that the reasons for organizing a program include: (i) to reduce area unemployment; (ii) to take advantage of Federal or State programs or financing; and (iii) to "follow the leader," that is, to assume that "others are doing it, so we must also do it" (*11*).

Historically, local government largely ignored business retention. In the late 1970's and early 1980's, however, the popularity of industrial recruitment dimmed somewhat, and new information arose regarding the importance of business retention. A growing perception developed that the traditional program of recruitment, "smokestack chasing," was often a failure since many more communities tried to attract businesses than there were firms either relocating or starting new operations. At the same time, economists were finding evidence that more local growth could be found in the existing business sector than in the recruitment of outside firms (*1* and *15*).

Local communities also began to realize that retaining existing businesses required less expenditure and effort than attracting new businesses (*18*). These perceptions helped cause a shift in the attitude and approach toward economic development that has led to more involvement by community groups in R&E program development.

Resident managers of nonlocally owned businesses do not make the final decisions on the capacity of their operations.[3] Neither do such managers make the final decisions on the locations of their operations. Not surprisingly then, business R&E programs usually focus largely or exclusively upon locally owned businesses. Such programs are more effective at retaining or expanding locally owned businesses than nonlocally owned businesses, such as branch plants or chain stores.

Locally owned businesses have many advantages for the local economy over nonlocally owned businesses. Such firms tend to be more responsive to the

[3] Capacity of the operation is, of course, directly related to the physical size of the business and the number of employees hired.

needs of the community. The owners live locally, so benefits to the community also benefit the proprietors of the businesses. Firms with absentee ownership are more likely to ignore a community's needs, and such firms may be less sensitive to the impact their actions have on the community. Also, firms headquartered elsewhere may be less involved in and supportive of improvements in the community's quality of life, such as spending for education or other public services. The company is interested in minimizing costs, and, if it is a large local employer, it may use its economic power to wring concessions from the community.

Locally owned businesses are less likely to leave the community. Plants under absentee ownership, such as branch plants of major corporations, are likely to be late in the product cycle. Plants such as these tend to be "footloose." As market conditions change, they are more likely to move to where labor is cheaper or where transportation costs to and from markets are less. Local firms' profits more often remain within the community. In addition, a larger percentage of their supervisory personnel come from the local labor force (*25*). With greater regional retention of firm profits and higher average income for the labor force (because of the larger percentage of supervisory personnel), a locally based firm's impact on the economic base of the community must necessarily be greater, other things being equal.

Examples

The following two examples illustrate what an R&E program may be like. The first, Barnes County, ND, has elements of a visitation program combined with other development policy tools. The second, Washington County, OH, is an R&E program using the Ohio model.

The Barnes County Business Retention and Expansion and Industrial Recruitment Program was initiated in 1988. It was established as a joint effort of local private and public groups in response to the closing of several local businesses and was organized by the Valley City Chamber of Commerce. The program has elements of both the Ohio R&E program as well as a more traditional firm recruitment program. The traditional recruitment program element focused on the establishment and operation of a new development corporation. The corporation successfully recruited eight firms (*7*).

The retention and expansion element consisted of the efforts of volunteers who interviewed 88 business proprietors concerning their business needs and were credited with retaining or creating 37 jobs in the Valley City area. The Barnes County visitation volunteers comprised 27 two-person teams. Each team visited three or four businesses. The visits resulted in the identification of constraints to growth being experienced by some businesses. These businesses were then helped in preparing expansion proposals and obtaining financing.

Financing came from State and Federal sources--the State-owned Bank of North Dakota and the Community Development Block Grant program of the U.S. Department of Housing and Urban Development. Firms helped by the program included locally owned retail, industrial, and financial enterprises (*7*).

Washington County was the first county to participate in the Ohio Business Retention and Expansion Program in 1986, although there was a pilot program prior to its participation. The program was initiated by the Washington County commissioners, with the Washington County Extension Service formally involved a few weeks later. As a first step, a committee, called the Economics Practitioners Group, was formed with the initial objective of exchanging information and building rapport among the members. After training sessions and practice visits, 53 volunteers conducted visits to 99 businesses over a 4½-month period.

The results of the surveys and recommendations were presented at an invitation-only meeting of 165 county, regional, and State economic development leaders. The recommendations included continuing the business R&E program, developing management and marketing assistance, and designing an import substitution effort (*16*). In addition, the program identified a need for chemical operators in local chemical companies, and 23 people were trained for these jobs (*7*). The funding of the program for this initial period came from the county, which provided $5,000 in in-kind services for office space and telephones, and from the Ohio Department of Development, which provided $8,000.

Evidence of Success

The evidence of success presented by Morse for the Washington County program included: (i) three chambers of commerce decided to repeat the process with retail and service sector firms, (ii) some progress was achieved on each of the task force's recommendations, (iii) funding of the program was continued by the county commissioners, (iv) interest was expressed in the program by other counties, and (v) the local extension agent recommended that new county extension agents start with this development strategy (*16*, *17*, and *19*).

Smith and others also surveyed local R&E program coordinators for their opinions on their R&E business visitation programs (*28*). The programs overall, not surprisingly, received very high ratings from these local coordinators, with most finding the program worthwhile. In addition, most (89 percent) of the respondents to the survey would recommend it to their peers. The study identified six important lessons or results coming from their survey. First, inexperienced local economic development professionals were likely to serve as the R&E program coordinators. Second, the extended time required to lead a local R&E program suggests that responsibility should be delegated among several local leaders. Third, efforts to sell the program to communities should

focus on its pro-business attitude and strategic planning aspects; these were strong selling points for local communities. Fourth, the program can best be introduced to new communities by giving them the opportunity to interact with an experienced coordinator. Fifth, sufficient training should be given to local participants in the R&E program, and sixth, a close working relationship should be established between a State R&E agency and State and Federal development programs.

No published research explicitly measures the success of the rural retention and expansion efforts beyond Morse's assertions in the Washington County example and the Smith and others study, but an additional study adds further dimensions to the subject. Humphrey and others investigated industrial location development programs and, although they did not differentiate between various types of community development programs (which generally include some form of community R&E programs), results to some degree may be inferred (*11*). They examined two indicators of success for the programs: (i) jobs created and internal (program) resources expended in the process and (ii) the ability of the specific organization examined to significantly alter the performance of its region's economy.

Their survey was based on sampling half of the 2,610 local development groups recognized by the 20 State governments queried. Humphrey and others had a response rate of 32 percent and indicated that 60 percent of the organizations had come into existence before 1977. The survey indicated some success in local groups generating or saving jobs with very limited internal financial resources, but only a small number of jobs were created. The impact on the regions, therefore, was negligible and overshadowed by broader external economic forces.

Sources of Funding and Assistance

Federal Government funding and assistance to improve the local business climate or to help local businesses directly come from many diverse agencies. Grants, loans, and other assistance that can help local business include, for instance, the USDA's Water and Waste Disposal Grants and Loans program; the U.S. Forest Service's Economic Diversification Grants, Rural Development Grants, and Economic Recovery Grants programs; the Department of Transportation's Local Rural Freight Assistance and Essential Air Service programs; the Department of Interior's Urban Park and Recreation Grants and State Historic Preservation Grants programs; and the Department of Housing and Urban Development's Community Development Block Grant program.

Possible Federal Government funds and assistance for businesses include the USDA's Business and Industry Loans and Rural Business Enterprise Grants programs as well as its Rural Development Grants and Loans Programs; the Small Business Administration's General Business Loans, Micro-enterprise

Loans, Micro-enterprise Technical Assistance, Small Business Development Centers, and Minority Enterprise Small Business Investment Company Loan programs; and the Department of Labor's Job Training Partnership Act programs.

Private funds for community development may, for example, come from the Bush Foundation, the Ford Foundation, and the Northwest Area Foundation. Local governments, of course, may raise funds through bond issues or taxes. State governments may, as discussed, have programs aimed at helping local businesses and communities.

Conclusions

Business visitation programs are more promising than nonvisitation retention and expansion approaches. They take little of the local government's financial resources, since volunteers typically form a major portion of the operation. The programs are proactive, in the sense that they go directly to businesses to ascertain the firms' perceived needs. Hence, they act to more closely tie firms to the community. In addition, such endeavors try to help find solutions to business problems.

Unfortunately, little evidence exists of their real economic impact. Nevertheless, some evidence indicates acceptance and popularity among local business groups, such as local chambers of commerce, and among the public institutions involved with their communities' economic well-being. At the very least, then, the programs do no harm to the local economy. At times, they may play a critical role in the retention or expansion of specific local businesses.

Seed and Venture Capital Programs

While R&E programs are concerned with fostering growth among existing businesses through appropriate use of a wide range of development tools, seed and venture capital programs have a very different clientele and use a more limited set of tools. Seed and venture capital programs provide financing, often coupled with technical and management support, to local entrepreneurs interested in starting new businesses or expanding into new product lines.

The vast majority of rural businesses rely exclusively on retained earnings or private financing to purchase supplies, equipment, and the various other inputs needed to produce goods and services. And, as was discussed in a companion volume to this report--*Financial Market Intervention as a Rural Development Strategy*--rural financial markets usually serve the credit needs of established businesses very well (*32*).

Relatively small, publicly supported business finance programs have been used to supplement private sector financing for many years. For example, Mississippi

authorized the first industrial development bond to attract new business and jobs in 1936 (*9*). Over the years, other State and local governments have used a variety of financial incentives to attract businesses and support business expansions (for example, direct loans, loan guarantees, revenue bonds, linked deposits, and loan loss reserves). However, most of these programs serve only established firms with proven job-generating potential. Such programs are useful tools for attracting relocating firms or helping existing businesses expand but are not designed to assist entrepreneurial activities.

For entrepreneurs in the early stages of starting a business or expanding rapidly into a new product line, limited financial capital is often a serious impediment to growth. Until a firm has a well-established earnings history and a proven market for its output, financial institutions (banks, credit unions, insurance companies, and pension funds) and most publicly supported business finance programs are reluctant to provide business credit. And, venture capitalists serve only a limited number of new firms with rapid growth potential. Even the few rural businesses that have significant growth potential often find their geographic isolation hinders access to venture capital firms, which tend to be urban-based.[4]

To help address the financing needs of entrepreneurs, programs have begun to provide public funds to help finance new business starts. Nonetheless, seed and venture capital programs are a recent phenomenon and currently support only a small number of new business firms. Only within the last two decades have public seed and/or venture capital programs come into being, and the vast majority of such programs are less than 10 years old (*31*).

Program Characteristics and Goals

The terms "seed" and "venture" capital are not well defined. But in general, seed capital is used in the pre-startup stages of a business's development to cover the costs of product development, market research, and the creation of a business plan. Venture capital is then used to actually begin production and meet the firm's capital needs until such time as it can sell public stock or is acquired by another company. But, the distinction between seed and venture capital is not always clear, particularly for public programs of interest to rural businesses.

Perhaps the most important characteristic of such programs is their willingness to provide long-term investments that do not require the entrepreneur to begin repayment immediately (*4*). Largely through the use of royalty agreements, equity investments, or deferred-payment debt, public seed and venture capital

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[4] Inadequate access to formal venture capital funds is compounded by the lack of information on such funds among rural entrepreneurs. Pulver and Hustedde found that rural banks were far less likely to refer their customers in need of equity capital to potential investors than were urban banks (*27*).

programs allow the assisted business to begin marketing its product(s) before encumbering it with significant repayment obligations.

Definition:

Seed and venture capital programs: Publicly sponsored economic development programs that provide relatively small amounts of "patient" financing during the early stages of business development.

But, equally as important for many business ventures, well-designed seed and venture capital programs, like the private sector activities they attempt to mimic, provide technical and managerial assistance as well as financial support. Private venture capitalists do not serve as banks for entrepreneurs; they become part-owners in the businesses they support and often become involved in the day-to-day operations of those businesses. Public program managers are less likely to become so heavily involved in a client's business, but they can and often do provide valuable business advice to beginning entrepreneurs.

The aim of seed/venture capital programs is to help a wider selection of entrepreneurs start new businesses or develop new product lines that, once established, are expected to provide the revenue flow needed to repay the public investment and, more important, create jobs within the local economy. Programs of this type may be particularly beneficial in rural America, although few State or Federal programs specifically target rural businesses. Investors generally like to be close to the startup businesses they support, so the pool of likely investors is limited to "wealthy" individuals in the entrepreneur's own community, making it difficult for rural entrepreneurs to find willing investors.[5] As a result, rural entrepreneurs, even more than urban, rely on their own savings or those of family, friends, and associates and on personal debt for the funds needed to start a business. But rural Americans tend to be less wealthy than urban Americans, and thus have less savings to invest in new business concerns.[6] As a result, the informal nature of the venture capital market makes it more difficult for rural entrepreneurs to acquire sufficient financing to successfully launch new businesses. Public seed and venture capital programs, by assisting those who

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[5] In a survey of informal investors in small business startups, Gaston found that few investors were willing to finance firms more than 50 miles from home (*10*). The desire to be directly involved in the business' operations and the increased transaction costs involved in assessing and monitoring distant business deals make the informal equity market geographically segmented.

[6] Gaston points out that informal investors need not be millionaires (*10*). The average net worth of the investors he surveyed was $750,000. More important is the amount of liquid assets available for investment. Lerman reports that, in 1986, the median rural household held $4,527 (in 1983 dollars) worth of liquid assets, while the median urban household held $10,909 worth of liquid assets (*13*).

cannot finance their business startup entirely on their own, can fill an important niche in the financial markets serving rural communities.

Public Seed and Venture Programs Take Many Forms

The Federal Government's involvement in early-stage financing is chiefly through programs that help support local small business investment companies (SBIC's) and revolving loan funds (RLF's). While neither SBIC's nor RLF's are major suppliers of seed capital, they can and sometimes do help finance new business startups. SBIC's are privately owned investment companies licensed by the Small Business Administration (SBA) to supply loans and venture capital to small businesses. In exchange for servicing the small-business sector, SBIC's can use SBA-guaranteed loans to supplement their own equity capital. RLF's are publicly administered funds that supply credit to local businesses unable to raise affordable financing on their own. RLF's receive their initial financing from a number of Federal programs in addition to State and local government allocations.[7] Once capitalized, these programs use retained earnings to grow, continually reloaning funds paid back by assisted businesses. Since RLF's are designed to meet local credit needs, they often use their funds to help leverage greater private sector financing of higher-risk businesses. Some RLF's make a special effort to provide seed capital to new startups, although most emphasize latter-stage development.

The Federal Government also funds a modest SBA program supporting locally operated microenterprise loan programs. Microenterprise loans represent a special class of seed capital. The loans themselves are typically very small--in the $500 to $15,000 range--and are almost incidental to the technical assistance provided to typically low-income individuals wishing to start their own business. Many microenterprise loan programs target welfare recipients for assistance and often rely on group lending--in which the group of assisted borrowers guarantees all of the group's loans--to encourage repayment.

Several State governments and a growing number of local governments and community-based organizations currently operate seed and/or venture capital programs of potential use to rural entrepreneurs. Eisinger reports that in 1990, 23 States operated a total of 30 different venture capital programs.[8] These

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[7] Over the years, RLF's have been capitalized with Community Development Block Grant funds, Urban Development Action Grant loan repayments, Economic Development Administration Title IX funds, and by SBA's Section 504 Certified Development Company program and USDA's Intermediate Relender program, among other Federal programs.

[8] An additional 8 States were among the 21 States that had public employee pension funds that invested a portion of their portfolios in venture capital funds. While some of these pension-based venture capital funds placed geographic or other restrictions on permissible investments, most are operated to maximize returns (*5*). As such, they are more realistically viewed as pension fund investments rather than as public venture capital programs.

include eight product development corporations that specialize in financing the development of new products by State-based businesses and 22 programs that invest in new businesses. The product development corporations are modeled after Connecticut's Product Development Corporation (CPDC), founded in 1973. Capitalized through the sale of State bonds, the CPDC finances up to 60 percent of a new product's development costs. Funds are then recouped through royalties on the sale of the sponsored product (*4*).

State-sponsored business development venture capital programs take two general forms. One approach is to use State funds to invest in privately operated and managed venture capital funds. Pennsylvania's Ben Franklin Seed Venture Capital Fund Program used this approach to establish five seed capital funds serving small businesses in specific geographic areas of the State. A more popular approach is to set up a State corporation to manage the program. The Massachusetts Technology Development Corporation (MTDC) is an early example of this approach. Started in 1978, the MTDC provides both debt and equity capital, in partnership with private investors, to technology-based in-State firms with significant growth potential (*4*). Targeting high-tech firms with rapid growth potential is almost universal among State venture capital fund programs (*5*). In addition to creating State-sponsored and/or controlled funds, several States also offer tax incentives to encourage the creation of private seed and venture capital funds.

To the extent that public programs address the venture capital needs of rural entrepreneurs, it is most likely through small, locally organized efforts. However, because of the small size and sporadic nature of rural entrepreneurial capital needs, few local programs exist as separately identified seed or venture capital funds. Most local efforts along the lines outlined above, if they exist at all, are carried out under broader economic development programs, often as one-time efforts, or by areawide nonprofit organizations. For example, the city of Killdeer, ND, used a Community Development Block Grant to help finance the start-up of a local electronics manufacturing plant (*22*). A local economic development organization in Los Ojos, NM, operates a revolving loan fund to assist small business startups primarily associated with the area's sheep industry (*22*). While only anecdotal information exists, other locally managed revolving loan funds, community development corporations, and SBIC's undoubtedly provide "patient" capital to selective startup businesses, although their primary efforts most likely continue to target established businesses experiencing difficulty acquiring credit for expansion or for new product development.

In addition to these government-sponsored efforts, several nonprofit corporations operate seed capital funds that assist certain types of entrepreneurs or business starts in specific geographic areas. The Women's Economic Development Corporation, headquartered in St. Paul, MN, operates a revolving loan fund for assistance to women entrepreneurs starting their own businesses. Since 1984, the

fund has been used to make low-interest loans of up to $10,000 to women denied business credit from traditional sources (*4*). The Small Business Development Association operates a revolving loan fund that makes small loans to "micro" businesses located in or around Cedar Rapids, NE. Capitalized with funds donated by the Ford and Mott Foundations, assistance is provided to self-employed, largely home-based entrepreneurs through small, unsecured loans combined with training, technical guidance, and peer group meetings (*23*). Over 200 such microenterprise programs are currently in operation nationwide, up from only a handful in 1987 (*3*).

Program Performance and Employment Impacts

Since relatively few public seed and venture capital programs have existed for very long and ongoing programs remain fairly small in comparison with other development strategies, a thorough assessment of their impact on small business development has not been completed. The actual size of locally administered public seed and/or venture capital funds remains unknown, but State programs totaled $192 million in 1990 (*5*). To put this in perspective, the formal private venture capital market was estimated to total $33.7 billion in 1989, or more than 170 times the size of State venture capital funds.[9] Investments by State venture capital programs tend to be small by private sector standards, averaging roughly $230,000 per firm (*31*).

Earnings information is not generally available, but anecdotal evidence suggests that State venture capital programs earn rates of return that are either comparable to or lower than those earned by private venture capitalists. Thompson and Bayer report that the programs that responded to their survey earned annual rates of return of between 25 and 40 percent (*31*). However, Eisinger cites evidence suggesting that returns are more modest for some State programs (*5*). While maximizing rates of return should not be the aim of publicly supported seed and venture capital funds, these programs should be self-supporting. If failure rates among assisted businesses contribute to consistent negative returns, the public and government should move promptly to end the program. To date, this has not been a problem among State-sponsored funds. Of the businesses assisted by State venture capital programs, about 10 percent subsequently failed, with considerable variation in failure rates among State programs (*31*).

Thompson and Bayer report that the 14 State programs responding to the employment portion of their questionnaire invested in firms that employed a total

[9] Gaston argues that the formal venture capital market is dwarfed by the informal equity market, so the size of State venture capital funds is even smaller when compared with "all other sources" of seed and/or venture capital (*10*).

of 17,683 people in 1989.[10] On average, $7,362 of public venture capital was invested per job (*31*). If you accept this employment as being contingent on receipt of public funds and remember that most of the venture capital will be repaid, earning the fund a healthy return in the process, then these programs appear to be both beneficial and highly cost effective.

Even if employment effects are more modest than the above figure would suggest, State venture capital programs have had an indirect impact on business financing. Eisinger argues that public programs have induced an increase in private venture capital investment in many areas of the country (*5*). The formal venture capital market is highly concentrated in a small number of States (*8*). By demonstrating the potential for earnings on venture capital investments in their States, public programs have encouraged private venture capitalists to move beyond their traditional markets in the Northeast and California. And, in those States that continue to have a shortage of private venture capital activity, State programs fill a critical gap in business financing.[11]

While public venture capital programs typically aim to earn a profit, microenterprise programs tend to be more closely aligned with welfare programs. Reliance on volunteers and private donations holds down the public cost of these programs, which are typically not designed to operate as profit centers. In their preliminary assessment of five microenterprise programs, Clark and Huston report that only 51 percent of the businesses receiving assistance earned a profit (*3*). As expected, most businesses were part-time operations used to supplement other sources of income. Still, a sizeable minority of the microenterprises receiving assistance--nearly 30 percent--were large enough to support employees other than the owner-operator.

Program Usage by Rural Entrepreneurs

While the potential benefits of public seed and venture capital programs may be considerable, rural entrepreneurs often lack access to locally administered programs and remain underserved by existing State programs. The lack of a critical mass of clients hampers establishing ongoing, locally supported programs in most rural communities.[12] And, while seed capital may be available on an

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[10] This amounts to 0.58 "assisted" jobs per 1,000 regular employees in the reporting States. Modest job-generating impacts were also reported in other studies examining specific State programs (*5*).

[11] Eisinger reports that Illinois, Iowa, Kansas, Michigan, Minnesota, and Pennsylvania all experienced increased private venture capital fund activity after they began their State venture capital programs (*5*).

[12] One area where local communities have an advantage over State programs is in administering small seed funds for "micro" businesses. Such programs use community pressure and group assistance to hold down delinquencies.

"as needed" basis from other local programs, the transaction costs involved make this form of assistance impractical for many small business startups.

Economies of scale are easier to realize for regional or statewide seed and venture capital programs, but to date few such programs have targeted rural entrepreneurs. Indeed, the geographic isolation of rural entrepreneurs and the nature of most rural-based businesses hinders participation in State programs. Many of the State venture capital programs require substantial private investment before committing public funds, program objectives often target fast-growth firms, and the small size of public programs limits their ability to advertise widely, placing rural entrepreneurs at a distinct disadvantage.

As a result, public seed and venture capital programs remain a largely untapped strategy for fostering increased rural economic development. For entrepreneurs requiring moderate-sized investments, located in areas underserved by private formal and informal venture capitalists, publicly supported seed and venture capital funds could remove a critical barrier to business development. By broadening their investment objectives to include other than high-tech firms, State and areawide programs could better serve the needs of a broad range of rural entrepreneurs and encourage greater economic development in rural communities.

Conclusions

Rural entrepreneurs, even more than their urban counterparts, often lack access to startup financing. Because of uncertain risks, high transaction costs, and regulatory prohibitions, institutional lenders leave this type of financing to informal sources--the entrepreneur's personal savings and those of relatives, friends, and associates. In rural settings, this informal cadre of investors is often too small to nurture entrepreneurial development and the job growth it eventually fosters. Public seed and venture capital programs can help alleviate this funding gap by providing "patient" capital to rural entrepreneurs with solid business plans.

But equally as important, seed and venture capital programs can provide management and technical assistance to rural entrepreneurs as they attempt to form new businesses. By providing in-house expertise, contracting with outside consultants, or through peer-group meetings, public programs often provide nonfinancial assistance critical to a new firm's survival. By providing managerial training and technical assistance, program administrators gain a small measure of control over the operations of assisted businesses and reduce the incidence of failure, with its associated investment losses. Technical assistance is particularly important to the success of microenterprise loan programs.

The aim of seed and venture capital programs is to improve the efficiency of business decisions; they are generally not designed to provide subsidies to assisted businesses. Nonetheless, while public seed and venture programs should be self-supporting, they should not necessarily aim to maximize returns on their investments in the narrow sense. By accepting a lower rate of return and assisting other than high-tech businesses, public venture capital programs could assist more rural entrepreneurs, thereby providing the basis for sustainable rural economic development in the future.

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Chapter 5

Business Assistance Strategies Aimed Toward the Community

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Programs aimed at the development of communities have an ancient lineage, beginning well before the Romans and their aqueducts, stretching back as far as the earliest of farming communities. Modern strategies arose with the industrial age and the ensuing nation-building era. The beginning of the 20th century saw the emergence of the industrial park, the granddaddy of modern local development efforts. The last 15 years have seen the ascendancy of business incubators and enterprise zones.

The chapter will discuss these three strategies: industrial parks, business incubators, and enterprise zones. Each bears similarities to the others in aiming to help develop and direct local economic growth, but each differs from the others in what businesses it assists and how it serves them. Often the terms are used together. Unlike the business assistance approaches discussed in previous chapters, these approaches encourage business development on a single site or within a defined zone to enhance business and community development.

One caveat, before going on in this chapter, should be kept in mind: no single program can usually serve by itself as an economic development plan; typically, several programs will, together, constitute an overall plan.

Industrial Parks

What is an industrial park? On the face of it, it would appear to be simply a large tract of land, subdivided and developed for use by several industrial firms simultaneously. Industrial parks, however, should not be confused with industrial complexes or industrial districts. An industrial complex bears a similarity to an industrial park, but, unlike an industrial park, only one tenant resides in it. An industrial district, also frequently called an industrial zone, will often be situated

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in an urban area and is not necessarily under one ownership; this space is usually developed by various people under existing zoning and building code ordinances. Industrial parks are further distinguished from industrial districts by their already in-place sharable infrastructure and by their covenants with the park's businesses, such as a restriction on the height of structures (which might, for example, hamper the firm's ability to expand).

Definition

Industrial parks: A large tract of land mostly occupied by, and with in-place sharable infrastructure primarily designed for use by, manufacturing firms.

Most firms locating in the parks are manufacturing firms. For the sake of brevity, the discussion here will focus on industrial parks, not on other types of development parks. These other parks, such as office parks, business parks, agricultural parks, supply parks, technology parks, science parks, and research and development parks, as their names indicate, do not focus on traditional manufacturing plant tenancy, but instead focus on other kinds of businesses or include within their boundaries a more diversified set of businesses. Nonetheless, industrial airparks are included in the discussion, though not necessarily explicitly mentioned; the airport facilities constitute a portion of the shared infrastructure.

Not all operations calling themselves industrial parks are, in the strictest sense, industrial parks. Many would be more appropriately termed office or business parks. This lack of a consistently applied definition further challenges the researcher making a systematic assessment of the general effects of industrial parks. Further clouding the picture, as developers try to find their market niche, a park may undergo a transformation from one type of park to another.

Industrial parks are an industrial recruitment policy tool, part of what Ross and Friedman have called the "First Wave" of economic development policy (*35*).[1] Although primarily designed for industrial recruitment, these parks do not preclude the entry of local firms. Some parks are also created as real estate investments and are not primarily intended to be a part of development policy.

While the following discussion covers industrial parks in the more restrictive sense of the definition (see box), the discussion, in most ways, is also applicable to the other types of development parks. The other parks will differ most in the types of firms attracted to their premises. Such parks will also differ, to some degree, in their frequency of use by communities, the exact nature of their shared

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[1] Italicized numbers in parentheses identify literature cited in the References at the end of this chapter.

infrastructure, the number of tenants, and the relative importance of location factors.

Range of Use

Industrial parks are very commonplace today. The first one was established in Chicago in 1903. Initially, the number grew slowly. No more than 100 industrial parks appeared by 1950, but then the number began to increase rapidly (*22*). There were slightly more than 500 in 1960, 2,400 in 1970 (*22*), and over 4,000 by 1978 (*18*). These estimates, however, are based on national association lists and, hence, may under-count their number; parks often are not registered on national association lists when they are not active (that is, when they have no tenants) or if they are fully occupied and thus not currently recruiting tenants. No comprehensive list of industrial parks exists.

Many industrial parks are in rural areas. Unfortunately, no basis exists for estimating the number of industrial parks in rural areas of the United States nor for determining the number of rural publicly owned industrial parks. Nevertheless, some studies have shown some of the extent of their rural presence. Jones surveyed 130 small rural Georgia counties in the early 1970's.[2] He found that more than half of the counties had at least one industrial park. Many programs aimed at economic development in rural areas include an industrial park component.

Reasons for Industrial Park Development

Industrial parks were developed by many nonmetropolitan communities during the 1960's and 1970's in an effort to attract firms that were "decentralizing." Not all communities, however, were successful in attracting firms to their parks because of the large number of competing industrial parks and the limited number of plants relocating or expanding to new sites. As Hitzhusen and Gray have pointed out, everything else being equal, parks providing the desired services at the least cost will gain the tenants (*15*).

Good found that 80 percent of industrial parks in eastern Tennessee were established with the explicit objective of attracting new jobs (*14*). Of the other 20 percent, all were in urban areas and were primarily established as real estate investments. The principal objective of all the parks in rural areas was to expand employment.[3]

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[2] Fewer than 50,000 people lived in each county at the time of the 1970 census (*18*).

[3] Rural areas were defined as areas with urban centers of fewer than 40,000.

The opportunity to reuse closed military bases has led to the establishment of many industrial parks. The combination of the desire to replace jobs lost from military base closure and the opportunity to use existing infrastructure on the former bases, such as roads, utilities, and buildings, often led to industrial park development. Liston identified approximately 100 industrial parks in 1970 located on World War II-vintage surplus military property that had been deeded over or returned to local governments (*22*). Some of the former military properties are in rural areas. For example, the Wolters Industrial Park was established on part of the former Fort Wolters (1973 closure) near Mineral Wells, TX. Roswell Industrial Air Center (an industrial airpark), for another example, was developed on the grounds of the former Walker Air Force Base (1967 closure) in Roswell, NM.

Which Plants Choose Industrial Park Sites?

A number of hypotheses on what kinds of firms will locate within an industrial park can be found in the literature. Several of these ideas center around the fact that most successful parks locate where their tenants are easily supplied with the necessary ingredients to their production activities and can easily deliver their goods; that is, such parks are near transportation nodes.

The first of three commonly held hypotheses centers on the size of the business operation. Small establishments are more likely than large establishments to locate within a park. Very small firms, however (a photo copy service, for example), will not want to locate within a park because of unneeded expense; they would be paying for infrastructure, such as heavy-duty water and sewer lines, that they will not use. Large plants may consider industrial parks too restrictive, given the park covenants and fixed infrastructure. Large plants often need facilities not already provided or need higher capacity than is available in the existing infrastructure. And, the larger the plant, the more likely the park will be too restrictive.

The second hypothesis revolves around the type of industrial activity of a firm. The type of activity affects its decision to locate within an industrial park. Light industry is more likely than heavy industry to locate in an industrial park, since heavy industry has the same reservations as large plants toward industrial parks. Industries involved in weight-gaining processes are more likely than others to locate in parks. Transportation amenities, such as a railroad siding, often associated with a park, are very attractive to such firms. The more energy-intensive the firm, the less likely the firm will locate within a park. A firm with special energy needs will most often be better off developing its own site rather than using the in-place infrastructure.

The third hypothesis involves the distance to a firm's customers. The larger the market area of a firm, the more important it is for the plant to be near a

transportation node. Therefore, the larger the market area, the more likely the firm will locate within a park.

The only relatively exacting test of these hypotheses was conducted by Peddle (*30*). His evidence supported the tenets that small firms were more likely than large ones to locate within an industrial park, and the more energy-intensive a firm, the less likely it would choose to locate within a park. The rest of his study was inconclusive.[4]

The most important constraint on the potential success for industrial parks, and one which must be addressed, is location (*11* and *24*). Location is usually the primary concern of a firm and outweighs any physical site characteristics. Location factors include access to markets and availability of labor, transportation, and raw materials. Nonetheless, when it comes down to two sites which are both equally valued as locations, and assuming the firm would not find an industrial park too restrictive for its purposes, the one with an industrial park is more likely to be preferred.

An Example of a Rural Industrial Park

One example of industrial park development comes from the State of New Hampshire. The Charlestown Economic Development Association (CEDA) and the Sullivan County Economic Development Council founded the Charlestown Economic Development Association Industrial Park in 1987. Their aim was to strengthen the local tax base and create better jobs.

The industrial park was developed in an idle factory building and on adjoining land, with the cooperation of the owner, Nash Family Investment Properties, Inc. The Nash family provided CEDA with money to cover the difference between the appraised value and the mortgage outstanding on the property, and CEDA borrowed money to pay off the mortgage. CEDA subdivided the property into industrial lots and sold them. The proceeds paid off the loan and paid for improvements in the park's infrastructure. The adjacent property owner also subdivided his land into industrial lots. Two locally owned companies expanded to the park and two out-of-State firms located branch plants there. The developers believe that the park provided 100 new jobs (*12*).

How Successful Are Industrial Parks for Rural Development?

Unfortunately, most evidence of the success of industrial parks is circumstantial rather than conclusive. Due to intrinsic characteristics, such as labor quality,

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[4] The results from the study, however, must be taken with some caution. The parks in Peddle's study did not have identical covenants, and their physical size and accessibility to markets varied.

labor cost, location of markets (to name just a few) of an area, it is very difficult to sift out the effect of an industrial park on its community. Nonetheless, a few lessons can be deduced. The more a region is growing, the more likely an industrial park will succeed. The more a region is growing, the more restrictive the covenants a community can impose on the firms entering its industrial park. No conclusive evidence exists to prove industrial parks, by themselves, attract businesses from outside the region. Some evidence, however, suggests that industrial parks help direct business location decisions within a region.

Many attempts have been made to determine the effect of the development of industrial parks on rural areas. Two of the best studies were produced by Deaton (*8*) and by Hitzhusen and Gray (*15*).

A study of rural areas of Kentucky and Tennessee revealed that "interstate highway access, the presence of a college, improved fire protection, higher education expenditures, the willingness to provide revenue bond financing, publicly-owned industrial sites, and the quality of the industrial site were statistically significant factors of industrial location" (*8*). The quality of an industrial site was measured by the presence of "traditional industrial park infrastructure." In essence, Deaton's study indicates that the presence of an industrial park can have a positive effect on industrial recruiting.

Hitzhusen and Gray's study of industrial parks in nonmetropolitan Ohio helps identify factors associated with the success of the parks. These authors used two measures of success: primary employment and primary income in the park, both measured on a per acre of park (land) basis.[5] The effects of the parks were analyzed by separating the park factors from other factors, such as "geographic location" and community factors. Park factors included services and facilities provided to park occupants by the park's private or public owners. "Geographic location" factors included accessibility to markets, labor, transportation, and raw materials. Community factors consisted of population size, unemployment rate, property tax rate, and the presence of a full-time chamber of commerce representative.

The "geographic location" factor, distance to an interstate highway interchange, was significant. Each additional mile from an interstate interchange represented less employment in a park. Some community factors were significant (though not as significant as "geographic location"), with the finding that the higher the local population and the greater the unemployment rate, the more employment in the park.

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[5] Primary employment and primary income are direct employment and income generated at the park and do not include the secondary effects, such as the increase in business at main street restaurants (*15*).

Analysis of park characteristics led to several conclusions. First, the larger the park, the less the employment per acre; this implies that the larger the park, the less intensive its use. In other words, the type of manufacturing operation present varied by size of park. The larger parks were used by firms that needed more space per worker, such as those that needed larger on-site warehouse space for parts used in their production activities. Second, the older the park, the more employment; this implies a community needs patience if it develops an industrial park. Third, the availability of a railroad siding meant more employment in the park. Finally, restrictive park covenants (such as purchase agreements, lease conditions, or zoning ordinances) and public sponsorship of the park were found to have some positive effects.

The study also found that a number of factors were not significant in the success of rural industrial parks. The presence of a full-time chamber of commerce representative in the community, the county property tax rate, the distance to the nearest large metropolitan area, the availability of a speculative building shell, the number of use restrictions (such as required landscaping, controlled sign use, building setbacks, or off-street parking availability) or user restrictions (for example, limited to light or heavy manufacturing), and the improvements and services imposed or available were not significant factors.

Agthe and Billings, using 1968 data, examined the relationship between community economic factors and the success of public industrial parks in the Southeastern States (*1*). The average annual increase in the percentage of parkland occupied was used as the measure of success. These researchers argued that such factors were a more appropriate and comprehensive measure of success than the number of firms locating in a park per year, because the measure varies with park size, number of firms, and firm size. The results of their analysis indicated the success of an industrial park depends on favorable community economic factors, such as low wages and high labor productivity.

Jones examined the effectiveness of industrial parks in attracting industry to rural areas in Georgia (*18*). He compared counties that had industrial parks with those that did not. He attributed any difference in new jobs created between the two groups of counties to the presence of, or lack of, industrial parks. His analysis, however, may be critically flawed because it makes an implicit, but untenable, assumption that industrial parks are randomly spread across rural Georgia. His conclusion was that industrial parks attracted new manufacturing plants and new jobs. Jones argued that, in addition to the advantages industrial parks have for manufacturing firms, the success of rural industrial parks is due to the fact the community demonstrates its desire for industry by establishing a park. Good, studying industrial parks in eastern Tennessee, also found some evidence that nonmetropolitan counties with industrial parks seemed to do better than those without them (*14*).

Sources of Funds for Development of Industrial Parks

Capital and operating funds for industrial parks originate from myriad sources. Nonetheless, the main sources for funds are local. Private investors and banks are the most common local sources. Cost, using a common rule of thumb, will run higher than $15,000 for rural communities to prepare a single site for one tenant (excluding construction of a building). Cost for several tenants will exceed $30,000.

Options exist for obtaining funds from many nonlocal sources for different purposes. State and Federal funds may be available for highway and road improvements. Federal funds are available for wastewater treatment facilities. Municipal bonds could be used to support site development or for businesses locating in the industrial parks. Many more options abound.

When local authorities wanted to make improvements to the Benedum Airport in Bridgeport, WV, the $4 million work was funded by the Benedum Airport Authority, the Economic Development Administration, and the Appalachian Regional Commission. The airport is part of the infrastructure serving the Benedum Airport Industrial Park and the Mid-Atlantic Aerospace Complex and is a former World War II-era Army Air Corps training site that had been returned to the community after the war.

Cuba, MO, a community of 2,100, established an industrial park as part of a broader effort at industrial recruitment and development in 1985. The town received $1.6 million in State grants for attracting industries, providing improvements in public services, and refurbishing buildings to house new industries. Under the authority of the State of Missouri they were able to issue $1.2 million in industrial revenue bonds. The municipality also received $850,000 in block grants for road, water, and sewer improvements for the industrial park. Cuba also received $719,00 in State grants to be loaned to local industries (*21*).

Conclusions

The public sector has developed industrial parks as a means of spurring community employment and income. Its role has varied from very little involvement, such as a private development group empowered to develop an industrial park with little public sector interference, to complete public control of park development, with the community choosing the site and planning, financing, building, and managing the park. No single model of public sector involvement exists. Each community has approached park development from its unique perspective.

Precise assessment of the success of rural industrial parks is not possible, given the limited available evidence, but some general guidelines emerge from the review of accessible information.

- Communities entering the industrial park effort should realize that the economic development payoffs are likely to take many years to materialize.
- Park planning must also take into account that every community is subject to the vagaries of the regional, national, and international economies.
- Location is a critical factor for a park. If the park does not have good access to a transportation system, it will be hard to entice prospective park residents. What "good access" means will vary from firm to firm, based on their individual needs. The farther away a site is from interstate freeways, highways, river barge service, or railroads, the smaller the number of firms interested in it.
- Perhaps a limited economic exposure approach may be best, especially in slow-growth regions. A community may proceed with some actions in preparation for an industrial park, such as obtaining the necessary titles to the property, determining the kinds of operations wanted on the property, clearing the property of unnecessary impediments, lining up potential lines of credit for improvements, and running the necessary soil tests.
- When a region is growing, industrial parks may be quite useful in directing the location of new or expanding industrial activity. Under these circumstances, a community must have a much wider plan for land use. For rural counties adjacent to growing metropolitan counties, an industrial park also can entice a firm away from urban core counties.

Like many programs, industrial park development does not stand alone. Such a program should be part of a broader policy of development. Potential tenants must be identified. Potential sources (Federal, State, and local government and private sector) of funding for building the infrastructure must be found as well. Potential partnerships in putting together a package must be formed. Business incubators have, in the last decade, become part of many industrial parks, and these are the subject of the next section of this report.

Business Incubators

As the name indicates, business incubators are facilities devised explicitly for the purpose of strengthening a firm in perhaps its most delicate stage, its infancy. Business incubators offer a unique supportive and nurturing physical environment and services for startup firms. Incubators are designed mainly to insure higher survival rates and growth rates for startup enterprises than those obtainable in

traditional laissez faire settings. A few incubators, however, do house one or more mature firms.

Definition

Business incubators: Facilities offering newly emerging firms a supportive physical environment along with business services to help in the firms' survival during their critical first stage of development.

An incubator may be located in a building, a portion of a building, or a group of buildings. Business incubators are often part of development parks, such as industrial parks or science parks, or of enterprise zones. Business incubators are operated or sponsored by government agencies, nonprofit organizations, educational institutions, private groups, or some combination of these organizations. To describe the typical public sector involvement in incubator development is not possible, yet it is safe to say that the minimum role of the public sector has been to help private sector developers clear existing legal hurdles. At the other extreme, the public sector is the sole developer (that is, the financier, builder, manager, and recruiter).

Business Incubator Characteristics

Weinberg discussed a survey of nonmetro incubators that indicated that no single type dominated in facility ownership; a fairly even division was seen among nonprofit organizations, for-profit organizations, local government, universities, 2-year colleges, and miscellaneous organizations (*44*). Firms engaged in light manufacturing were most common, followed by personal and professional service businesses, and government/nonprofit enterprises. All other types of firms, such as those engaged in construction or heavy manufacturing, were relatively rare. Among the on-site support services provided were physical/logistical service, shared office service, and business consulting services. The business consulting services were business plan preparation, advertising and marketing, government loans and grants, relocation plans, employee relations, computing, patent assistance, research and development, government regulations, business taxes, government procurement, and equity and debt services.[6]

Brooks has defined, based on their primary purpose, two kinds of publicly owned and privately owned incubators: real estate and economic growth incubators (*4*). Real estate incubators fill a niche in a real estate market by providing relatively inexpensive space, flexible lease terms, and some on-site support services to small businesses. In these incubators, the real estate is the centerpiece of the

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[6] The life cycle of an incubator is beyond the scope of this discussion. Allen, however, is a good source for further information (*2*).

development. The businesses taking part in such programs tend to be further along in development than those in economic growth incubators. That is, such firms tend to be those more advanced in their product development, management and production organization, and marketing. These firms were chosen for a real estate incubator because there was more information to determine their probable success. Hence, the incubator developers faced less risk of tenant failure.

Economic growth incubators serve businesses in their early stage of development when a relatively greater degree of direct support is required. These businesses often have no business plan at this stage, though they usually have at least an explicit idea concerning the product or service they will offer. The development organizations involved in these incubators are committed strictly for the long term (that is, they are not particularly interested in quarterly or yearly profits, but are interested in the gains over many years). These facilities, by targeting access to firms, are designed to encourage business formation in growth industries, including those that may not be native to the region. The program addresses long-term problems of economic development for a region through an effort to make changes to the economic base (*4*). Most rural incubators are economic growth incubators.

Ideally, all incubators (including those publicly owned) will eventually become self-supporting. Nevertheless, the time horizon will vary by type of incubator and the explicit and implicit objectives for the incubator. The economic growth incubator, for instance, will require a longer period of support than the real estate incubator. Brooks argues that no incubator should be designed as a "rent and overhead subsidy for entrepreneurs." Rather, it should be a "showcase of entrepreneurial activity and a focus for the support of entrepreneurship" (4). In other words, it should be a market-driven service, with the natural economies (reduction in the cost of doing business) that each firm located in a incubator will gain. The main purposes of the incubator are to express the economic vigor of the region and to reduce the cost of bringing entrepreneurial ideas to market.

If, as Brooks contends, the design and implementation of incubators should be market driven, then the facility must address the concerns of businesses it intends to serve as well as the economic development goals of the community. Two major elements are necessary for successful market-driven business incubators. First, a support network, usually a group of more experienced businesses, must be designed to help the startup firm avoid fatal flaws. Second, on-site support services that businesses need on a daily basis must be easily, and cheaply, accessible. An additional element, a link to a university for education, technology transfer, and other benefits, such as one of the Small Business Administration-sponsored Small Business Development Centers, may also be very beneficial.

Range of Use

Incubators became popular in the 1980's with the convergence of preexisting forces: the emergence of shared office services arrangements, multi-tenant real estate operations, professional management and technical assistance networks, new early-stage capitalization mechanisms, and an upsurge of entrepreneurial initiative (*6*). The services of the management and technical assistance networks come in many guises, but the most common programs offer assistance in developing business and marketing plans. The capitalization mechanisms have often meant access to special funds or to venture capitalists. In the late 1970's, growing evidence also appears of the positive role played by the small business sector in the growth of economies.

Incubators are operated by:

- Public agencies: e.g., Rome and Floyd County Center for Industry, Rome, GA,
- Private firms: e.g., Control Data Corporation's City Venture Corporation, which developed a series of Business and Technology Centers, the first in St. Paul, MN,
- Educational institutions: e.g., University City Science Center in Philadelphia, one of the earliest in 1964, which served as an incubator, although it was not expressly designed as such.
- Nonprofit organizations: e.g., Atmore Small Business Incubator, Atmore, AL.

In a 1984 survey, most incubators were reported to be a form of public-private partnership (*37*). Of the 55 incubators surveyed, primary ownership/sponsorship was 44 percent private, 26 percent public, 16 percent nonprofit corporations, and 14 percent university.

The number of incubators nationwide has grown nearly tenfold from 1984 to 1991, reaching almost 450 during that time. Incubators, as a part of a rural economic development program, have become increasingly popular. As of 1991, rural areas had 28 percent of all incubators, with most rural incubators founded since 1987 (*25* and *31*).

Reasons for Use of Business Incubators

The basic rationale for business incubators as a tool of economic development is the existence of what may be described as a market failure, either private sector or public sector, in a local economy. A market failure may be due to several factors. First, necessary services and assistance may be lacking. Examples include local banks that are unfamiliar with, and hence reluctant to loan to, a business startup; no existing local venture capital market; and a lack

of specific training programs. Second, unexploited opportunities could indicate an information problem in the private sector, such as deficiencies in business networking. This latter element, an informal system whereby businesspeople learn what other goods and services may be provided to run their operations more efficiently or cheaply, can also provide knowledge about potential customers or markets for products or services. Business incubators may overcome either of these two market failures.

Another reason for supporting incubators is that after a firm leaves the incubator it tends to set up shop in the same region in which the incubator was located. Thus, the public expenditures for incubators are often less than the benefits derived from them. For example, by failing to spend $1,000 to support a business development center at the local college, which, in turn, would deliver business assistance to a local incubator, a $2,000 increase in local tax receipts might be forfeited. Finally, business incubators can be expected to increase the survival rate of new ventures, thus leading to an increase in income and employment for the region.

Land-grant university extension programs are one group that has been surveyed about their reasons for involvement in business incubator development. The general goal of the extension programs for incubators is to stimulate rural economic activity through employment and income generation. The specific objectives of these extension programs include: increasing knowledge and skills of business managers and entrepreneurs; retaining, expanding, and attracting businesses; aiding local leaders in determining the appropriateness of and the establishment of incubators; and providing an environment in which new businesses can develop *(31)*. Without these goals, an incubator may be solely a real estate investment. These goals and objectives, however, are fairly typical for any public institution involvement.

Example

The ADVOCAP incubator in Fond du Lac, WI, was initiated in 1985 by ADVOCAP, Inc., a local community action group, as a response to the closure of a leather company and the resulting loss of 250 jobs. An old post office building in the center of town was converted into the incubator and operations were started with funding from local banks, foundations, an energy company, a State agency, and a Federal agency. In addition, the Fond du Lac Association of Commerce, the Fond du Lac SCORE Chapter, the Marian College of Business, Morrain Park Technical College, and the Winne Fond Lake Private Industry Council cooperated with and sent referrals to the incubator (*12*).

The operation now provides startup businesses with technical assistance, such as planning and helping the businesses to apply for low-interest loans. The young firms located in the building are furnished with the basic services: telephone,

heat, light, and janitorial. ADVOCAP attempts to restrict tenancy in the building to firms that are service-based and are committed to providing a certain minimum of jobs for low-income people. Rents are based on the firm's amount of space and services. A business is generally limited to 2 years in the incubator, but this time limit is treated on a case-by-case basis. Over the 4-year period, 31 firms with a total of 114 employees were assisted, generating a half million dollars worth of business in 1988. With the success of the incubator, ADVOCAP is expanding to a second facility in Oshkosh (*12*).

Evidence of Incubators' Success in Building the Local Economy

No empirical studies on the long-term effectiveness of incubators have been completed, but several small case studies suggest that success varies, and that incubators designed to address well-targeted enterprise development objectives, such as a focus on startup electronics firms, have greater success creating jobs. Trying to be all things to all types of enterprises necessarily leads to attempting to deliver a wide range of services and to having all kinds of physical space available in the incubator. The result will be either a very costly endeavor or an impossible undertaking.

The often limited diversity of the local economies in rural areas makes targeted objectives critical. On a promising note, no evidence indicates that incubators merely induce firms to change location within a region. Research also affirms that incubators nurture homegrown businesses; most of the entrepreneurs, prior to establishing their business, had lived for many years in the same area as the incubator (*6*).

Difficulties in developing incubators can occur anywhere, but rural locations offer special challenges. Incubators are expensive to develop; they typically cost $500,000 (*42*). Funding the operating budgets may be difficult, since continuous funding is not easily found from outside sources. Very few incubators are self-sufficient, and many have no realistic plan for achieving self-sufficiency. Most rural incubators find it hard to develop financing for those businesses wishing to enter the incubator. Hence, an important precondition for developing incubators is revolving sources of capital.

Rural areas are often perceived as being short on business consultation expertise. Even if this is true (or true only absolutely and per capita), management assistance may prove difficult to provide. The relatively small pool of entrepreneurial clientele in rural areas and the limited ability to attract entrepreneurs from other regions, including other rural areas, impede incubator development (*43*).

Rural incubators should be based on the communities' strengths, not their weaknesses. The strengths may include the skill levels of potential employees,

the types of existing businesses, or the location of the community. Incubators should focus on firms that are likely to succeed rather than the reverse. A firm likely to succeed without help, however, should not take a place in the incubator away from a firm that would greatly benefit from that assistance. Incubators work best as part of larger economic development strategies, specifically, when tied into comprehensive support networks for startup companies (*5*). Weinberg argues that "effective community leadership and appropriate rural incubator strategies can lead to the successful development of incubators" (*44*).

Some other guidelines to keep in mind before attempting the development of incubators have been suggested by Brooks (*4*). First, the characteristics of the physical structure should not take precedence over the incubation process. A developed support network for new ventures is much more important than having a perfect building to house the new ventures. Shortage of available space arises infrequently in many rural areas. Necessary or helpful business assistance, however, is seldom immediately available. Hence, supplying only a building or other space for a business is less crucial than providing additional services. Second, incubators should not be perceived as panaceas for a depressed economy. The actual number of jobs created in an incubator will be relatively small. The program is designed more for the long-term economic health of a region than for a short-run increase in employment or income. The intent is to help several fledgling businesses get started in the hope that eventually some of them will prosper and grow.

Sources for Capital and Operating Funds

The needed capital and operating funds can come from many sources. Possible sources for initial capital investment include the Economic Development Administration, the U.S. Small Business Administration, the Department of Housing and Urban Development, the Farmer's Home Administration, private foundations, corporations (such as utility companies), local government, and regional organizations, such as the Appalachian Regional Commission. Sources for operating funds originate from rental revenues, fees for services provided, private foundation grants, ongoing fund raising, and from other specialized State or Federal programs, such as the Federal Job Training Partnership Fund. In the example presented earlier (the ADVOCAP incubator), funding sources included local groups, a Federal agency, and a State agency.

The Luzerne County Business Incubator Center (Pennsylvania) opened in 1990. The $1.4 million cost to acquire and renovate the building came from six area banks, local utility companies, the county's Office of Community Development, the Luzerne County Commission on Economic Opportunity, the State's Ben Franklin Partnership and Department of Community Affairs, and the U.S. Economic Development Administration (Title I program). Operating funds have been supplied by Pennsylvania's Ben Franklin Partnership and by local utilities.

Conclusions

Incubators have become increasingly popular but are not realistic for every rural community. They should be designed to serve the potential entrepreneurial activities of the local region and should not be expected to attract such activities from elsewhere. Evidence suggests the operations do increase the success rates for their fledgling businesses. Businesses nurtured in them will usually remain in the community. Incubators, however, should not be operated merely as subsidy programs for the private sector. Incubator services must be targeted to needs critical to the success of startup firms that are not otherwise provided in a truly effective manner.

Incubators are not practical as a quick fix for a community's economy. The firms graduating from incubators will typically take time to grow and, hence, few jobs will be created, at least in the first few years, in any of these businesses. Incubators fulfil a strategy designed for helping a community's economy over many years.

Enterprise Zones[7]

The enterprise zone is a relatively new economic development strategy that provides tax incentives to firms creating jobs in distressed areas. State governments began creating enterprise zone programs in the early 1980's. By the end of the decade, 38 States had programs. About half of the State enterprise zones are in rural (nonmetropolitan) areas. In 1993, Congress authorized the creation of nine empowerment zones (three rural, six urban) that would provide Federal tax relief to zone businesses plus grant assistance programs to help zone residents to achieve economic self-sufficiency. Although this analysis focuses on evaluations of the more established State enterprise zone programs, the findings should have implications for Federal as well as State zones.

Types of Assistance

Enterprise zones (EZ's) were originally envisioned as places where government taxes and regulations might be significantly relaxed to encourage the growth of "free enterprise." What actually evolved was something quite different; most EZ's ended up with more government activity rather than less. Although most State EZ programs do offer some form of tax and regulatory relief, many provide other forms of government assistance, such as State aid for local planning, infrastructure, and training programs. The goals of EZ programs often go

[7] The material for this section comes from a 1993 ERS Staff Report containing a more complete review of the literature (*33*).

beyond economic development, encompassing other community development objectives (*10*).

Definition

Enterprise zones: Distressed local areas that receive special Federal or State tax incentives and nontax benefits to stimulate local economic and community revitalization; most enterprise zone programs also require local government revitalization initiatives in the zones.

EZ tax incentives tend to be modest and restricted to firms that create new jobs and investment in the zone.[8] Some programs require that firms receiving tax benefits provide most of the new jobs to zone residents or to disadvantaged individuals. Pennsylvania's program offers no EZ tax incentives, relying exclusively on nontax assistance. Although regulatory relief has been a component of many EZ's, this usually involves streamlined paperwork processes rather than the waiving of regulations (*45*).

Competitive and Noncompetitive Programs

EZ programs can be divided into two types: competitive and noncompetitive. Competitive programs require that local governments compete with each other in the application process for EZ status. This helps weed out those applicants that are not sufficiently distressed and those with insufficient development potential. Applicants may compete on a number of criteria, including extent of distress, growth potential, a realistic local economic development strategy, community consensus behind the plan, coordination with regional or State economic development plans, local organizational capacity to implement the plan, and the community's willingness to offer some kind of local incentive (tax, regulatory, or expenditure). Noncompetitive programs award EZ status to all communities that meet eligibility requirements.

States with competitive programs tend to designate fewer zones than States with noncompetitive programs; hence, they are able to offer more financial assistance to each EZ. This should give a marketing edge to competitive EZ's. Competitive programs may also do a better job in selecting communities with viable development strategies and dynamic local leadership. Some researchers have concluded from this that competitive programs have a greater potential for producing successful, revitalized zones (*10*). Unless a reasonable set-aside is provided for rural areas, however, rural communities are at a disadvantage in

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[8] Incentives usually come in the form of nonrefundable credits on the State corporate income tax; these are commonly job credits or sales tax credits for purchases of equipment and materials for investments.

such programs because rural areas often lack the technical expertise necessary to compete effectively with urban areas in the application process.[9]

Effectiveness of EZ's

A recent review of about 10 State program evaluations found that most evaluations associated EZ's with job growth (*33*). EZ's generally outperformed non-EZ portions of these States in employment growth, an impressive result given that EZ's are distressed areas.[10] While not all employment growth in EZ's is attributable to EZ policy, most of the new or expanding firms surveyed in the zones have indicated that EZ policy contributed to their well being. These findings from State evaluations are corroborated by two major multistate studies covering 18 case studies (*19* and *39*). In terms of cost effectiveness, most of these studies have concluded that the cost per job created was reasonable compared with other economic development and job creation programs. Many of the new jobs (most are in manufacturing) have gone to residents of disadvantaged zones, and most EZ jobs do not appear to be sweatshop-type jobs (*10*).

The job creation associated with enterprise zones may surprise those who follow the conventional wisdom that tax incentives have little effect on firm location or expansion decisions. That conventional wisdom, however, has been questioned in recent years, as many firms have become footloose and consider taxes more important than before. In addition, recent econometric studies using sophisticated models have detected significant tax effects on firm location and employment (for reviews of this literature, see *3*, *27*, and *41*). In any event, enterprise zones involve more than tax incentives: strategic planning, infrastructure investment, technical assistance, so that other zone-related activities might easily explain much of the observed job growth.

Another concern involves whether EZ job growth reflects net national job growth or merely the relocation of jobs from one place to another. EZ evaluations have found a mixture of relocation and indigenous job growth. Most firms involved in EZ job growth are new or existing businesses already located within the zone, leading some researchers to downplay the fear that jobs are merely moving from one part of the State to another.[11] Although net national job growth is usually preferable to relocation, both equity and efficiency gains may accrue when firms

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[9] Some competitive programs try to offset the urban advantage in the application process by providing special assistance to rural governments in the application process, by requiring that county governments apply for rural towns in their jurisdiction, or by providing a set-aside reserving some zones for rural areas.

[10] Not all studies have found that EZ's were effective in creating jobs or investment. For example, see (*38*).

[11] An exception to this is found in a Louisiana study by Nelson and Whelan (*26*).

relocate from wealthy, overly congested, high-cost areas to poor, underpopulated, distressed areas. Thus, relocation may actually be desirable in some instances. More research is needed to identify the extent of relocation and the nature of relocation patterns before more definitive conclusions can be made.

Other issues also await further research. For example, it may be too early to tell much about job retention because many of these programs were created only since the late 1980's. In addition, better data are needed to measure such job retention (*13* and *17*).

Only a few evaluations have singled out rural EZ's. McDonald found small city or rural zones in the southern (downstate) part of Illinois performed better in employment growth than did large city zones in the Chicago area (*23*). Downstate zone employment grew 6 percent after designation, slightly more than the 5.3 percent growth of downstate areas without zones, and substantially more than the predesignation growth rates for downstate zones (-8.3 percent).

A Louisiana study surveyed firms participating in that State's rural EZ's and concluded that EZ policy significantly affected job creation decisions, the majority of firms claiming that they would have created many of the jobs elsewhere (in another State or another part of the State) were it not for the EZ policy. Although this relocation of jobs into a State's distressed areas is a legitimate goal of State policy, the authors discounted these footloose jobs, counting only the jobs the EZ created that would not have been created elsewhere, and concluded that the cost per job was $5,000 (*26*). Even with this conservative way of counting jobs created by the programs, the cost estimate is similar to other job creation programs: $5,500 for Urban Development Action Grants and $5,000 for Community Development Block Grants (*16* and *36*). This amount is also well within the range of cost estimates of other enterprise zone programs (*33*).

The Louisiana study did not compare rural zones with urban zones. However, evaluations of the Kansas (*29*), Indiana (*28*), and Illinois (*32*) programs provided evidence suggesting it costs less to generate jobs in small city or rural zones than in large city zones.

A more inclusive study, covering 345 EZ's in 17 States responding to a survey by the U.S. Department of Housing and Urban Development (HUD), found metro EZ's created more jobs, on average, than nonmetro EZ's (*10*). When the analysis controlled for regional and other factors, though, metropolitan status had no statistically significant effect on job creation. In other words, being located in a metropolitan area did not produce any advantage for an EZ. A subsequent analysis (*33*), using a subset of this same HUD data set, found that, relative to their population sizes, rural EZ's appeared to be more likely to create a

substantial number of jobs per year than were urban EZ's.[12] Many of the most productive zones were in Arkansas, a State with a noncompetitive program. This finding, though seeming to conflict with expectations, may follow from the smaller population size of the EZ's in Arkansas, since EZ's with smaller populations seemed to create the most jobs per person (*33*). Most jobs created in the rural zones, however, were in low-paying, traditional manufacturing industries (*34*).[13]

Examples of Rural Enterprise Zones

Macon, MO, population 5,700, needed to diversify its depressed agricultural-dependent economy in the early 1980's. Although the largest city in Macon County, it had no economic development program before it received EZ status in 1983 and established the Macon County Economic Development Corporation (MCEDC). The enterprise zone became a focal point for its economic development strategy. MCEDC did much of the administrative work, starting a revolving loan program for businesses and completing all paperwork for local permits and financing. As with other EZ success stories, Macon had generally good infrastructure. State loans helped eliminate a key barrier to economic development: limited local sewage treatment capacity. The city built a new industrial park to provide much needed industrial space, and the enterprise zone was used to market the space.

The Macon County enterprise zone created or saved 621 jobs. Most of Macon's 186 new jobs were with 4 large industrial firms, only 1 of these being new to the area. Of the six firms creating jobs in the zone, four said the zone incentives were the key to their investment. Two large firms decided not to close their plants in the zone, saving an additional 435 jobs. By 1986, Macon County's unemployment rate had dropped below 6 percent from the 22-percent level of 1983, when the zone was created.[14] Although other factors, such as the nationwide economic recovery during the mid-1980's, contributed to this decline in unemployment, the enterprise zone was a critical factor in Macon County's economic revitalization.

This example and other publicized EZ "success stories" suggest that rural EZ's can achieve dramatic success when they pursue an aggressive economic development strategy and have other factors in their favor, such as amenities, linkage to markets, and decent infrastructure (*39* and *40*). Where such factors

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[12] This subset included 26 nonmetro and 53 metro zones.

[13] This was not the case in urban zones. The small sample size covering questions on this issue makes it difficult to say much about the type of jobs created in urban zones, however. HUD data on this question covered only 3 percent of jobs created in metro zones, compared with 18 percent coverage in nonmetro zones.

[14] This summary of the Macon EZ is based on two works published by HUD (*20* and *39*).

are not present, success is not guaranteed. A study of the Illinois program, for example, found that Canton, hit hard by an International Harvester plant closing, had difficulty attracting new businesses to replace the lost jobs because it was "located outside the network of either interstate or rail transportation." Mound City's rail connection was "in jeopardy" and "its hopes of becoming both a barge repair site and a transfer point for goods moving from barges to rail or truck transportation is dimmed by prospects of flooding....It would require a multimillion dollar project to build new pumps." Both zones performed worse than most other zones in the State (*9*).[15]

Conclusions

The limited information available on rural EZ's suggests that the enterprise zone is a viable rural job creation strategy for distressed places with the necessary preconditions for development. Because the rural jobs created appear to be relatively low-paying, more care in selecting industries that receive tax incentives could result in some improvements in rural zone performance. The biggest problem, however, seems to be one of inadequate rural participation, especially in competitive programs.

Improved rural participation might be achieved by providing a reasonable rural set-aside, by assisting rural communities in the competition process, and by altering zone population and area restrictions to enable more rural EZ's to be designated. But, as long as the total number of EZ's remains small, only a small percentage of distressed rural (and urban) communities will be able to adopt this technique. Increasing the number of EZ's may be impractical in some States that already have so many zones that diminishing returns may have set in. In such cases, instead of adding more zones, it would be better to improve the screening process to assure that when old zones are found to be ineffective or when their zone status expires, they are replaced by new zones that have the potential to make good use of EZ incentives.[16] Over time, therefore, greater participation of rural areas may be achieved through such a replacement process.

Some of the lessons learned from State zone programs have been incorporated into the new Federal program, a highly competitive program that requires strategic planning, involves relatively few empowerment zones, and contains a rural set-aside to guarantee rural participation. However, the Federal program differs from most State programs in providing Title XX grants for social services

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[15] See (*33*) for more rural case studies.

[16] A recent study of the New York EZ program underscores the importance of providing relevant data to those making designation decisions so that policy makers have the "opportunity to consider explicitly any selected attributes, recognize the importance they attach to these attributes in a complex array, and compare openly the basis of their decisions with the bases of others with whom they must interact to make program expectations become a reality" (*7*).

and "economic self sufficiency." In addition to the 9 empowerment zones, the Federal program will create 95 enterprise communities (65 urban, 30 rural). The enterprise communities will receive few if any Federal tax incentives, relying instead on Title XX grants and other forms of nontax assistance. This social service funding, together with the relatively high 35-percent poverty rate eligibility requirement for the Federal program, reflects a greater concern with human and community development than do most State EZ programs.

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