Thus, attracting the high-tech plant may be easier than attracting its business, and communities will have to put special effort into taking advantage of linkage effects.

In conclusion, high-tech manufacturers do locate in rural areas and can contribute to economic and job development goals. The specific contributions of these firms to the local economy, however, will vary depending on whether the establishment is a branch or unit plant. Community development leaders need to consider these differences when designing industrialization programs. Finally, the results of this study should not be generalized beyond the nonmetro West. Conditions in other regions, such as industrial structures, population densities, and distances, may lead to different influences on or different impacts for high-tech manufacturing. RDP

For Additional Reading...

David L. Barkley, "The Decentralization of High-Technology Manufacturing to Non-Metropolitan Areas," *Growth and Change*, Vol. 19, No. 1, Winter 1988, pp. 13-30.

David L. Barkley, Roger A. Dahlgran, and Stephen M. Smith, "High-Technology Manufacturing in the Nonmetropolitan West: Gold or Just Glitter," *American Journal of Agricultural Economics*, Vol. 70, No. 3, Aug. 1988, pp. 560-571.

David L. Barkley, John Keith, and Stephen M. Smith, "The Potential For High-Technology Manufacturing in Nonmetropolitan Areas," Western Rural Development Center, Oregon State University, Corvallis, WREP97, March 1989.

Stephen M. Smith and David L. Barkley, "Labor Force Characteristics of 'High-Tech' vs. 'Low-tech' Manufacturing in Nonmetropolitan Counties in the West," *Journal of the Community Development Society*, Vol. 19, No. 1, 1988, pp. 21-36.

Stephen M. Smith and David L. Barkley, "Local Economic Impacts of High-technology Manufacturing in Nonmetropolitan Counties of the West," Western Rural Development Center, Oregon State University, Corvallis, WREP, March 1989.

Mark G. Popovich and Terry F. Buss

Entrepreneurs Find Niche Even in Rural Economies

New businesses begun in North Dakota since 1980 employ nearly a fourth of the State's workforce. That ratio is about the same in urban and rural areas alike, even in areas highly dependent on farming. The new businesses seem to be durable, with a survival rate of nearly two-thirds through 1987. About half of the new business ventures turned to their local banks for startup financing, but few looked to government programs for help.

Throughout the 1980's, America's midsection contended with successive economic shocks that squeezed the economies of many rural communities. North Dakota was not exempt from the pinch of deteriorating agricultural markets and a declining energy sector.

But even during the hard times of the 1980's, entrepreneurs created thousands of new businesses and jobs in North Dakota, in rural areas and cities alike. Between 1980 and mid-1987, just under 7,800 new businesses, including 4,600 in nonmetro areas, were successfully launched across the State. These new businesses generated 42,000 jobs (22,000 nonmetro), representing just less than a quarter of the State's total private sector employment (specifically, those covered by unemployment insurance).

Based on a survey we conducted last summer and other data, we tried to measure the scope and impact of entrepreneurship in North Dakota, focusing on the State's rural areas. Our conclusions contradict some common assumptions about the impact and durability of new businesses and the role of local banks in financing new starts in rural communities.

Mark Popovich is senior staff associate at the Council of State Policy & Planning Agencies and Terry Buss is a CSPA associate and professor at the University of Akron.

This research was supported by the Northwest Area Foundation and the Rural Economic Policy Program of the Aspen Institute and Ford Foundation.

Figure 1

Employment impact of successful new businesses

(New business employment as a percentage of total private sector employment covered by unemployment insurance)

Thus, attracting the high-tech plant may be easier than attracting its business, and communities will have to put special effort into taking advantage of linkage effects.

In conclusion, high-tech manufacturers do locate in rural areas and can contribute to economic and job development goals. The specific contributions of these firms to the local economy, however, will vary depending on whether the establishment is a branch or unit plant. Community development leaders need to consider these differences when designing industrialization programs. Finally, the results of this study should not be generalized beyond the nonmetro West. Conditions in other regions, such as industrial structures, population densities, and distances, may lead to different influences on or different impacts for high-tech manufacturing.

For Additional Reading...

David L. Barkley, "The Decentralization of High-Technology Manufacturing to Non-Metropolitan Areas," *Growth and Change*, Vol. 19, No. 1, Winter 1988, pp. 13-30.

David L. Barkley, Roger A. Dahlgran, and Stephen M. Smith, "High-Technology Manufacturing in the Nonmetropolitan West: Gold or Just Glitter," *American Journal of Agricultural Economics*, Vol. 70, No. 3, Aug. 1988, pp. 560-571.

David L. Barkley, John Keith, and Stephen M. Smith, "The Potential For High-Technology Manufacturing in Nonmetropolitan Areas," Western Rural Development Center, Oregon State University, Corvallis, WREP97, March 1989.

Stephen M. Smith and David L. Barkley, "Labor Force Characteristics of 'High-Tech' vs. 'Low-tech' Manufacturing in Nonmetropolitan Counties in the West," *Journal of the Community Development Society*, Vol. 19, No. 1, 1988, pp. 21-36.

Stephen M. Smith and David L. Barkley, "Local Economic Impacts of High-technology Manufacturing in Nonmetropolitan Counties of the West," Western Rural Development Center, Oregon State University, Corvallis, WREP, March 1989.

Mark G. Popovich and Terry F. Buss

Entrepreneurs Find Niche Even in Rural Economies

New businesses begun in North Dakota since 1980 employ nearly a fourth of the State's workforce. That ratio is about the same in urban and rural areas alike, even in areas highly dependent on farming. The new businesses seem to be durable, with a survival rate of nearly two-thirds through 1987. About half of the new business ventures turned to their local banks for startup financing, but few looked to government programs for help.

Throughout the 1980's, America's midsection contended with successive economic shocks that squeezed the economies of many rural communities. North Dakota was not exempt from the pinch of deteriorating agricultural markets and a declining energy sector.

But even during the hard times of the 1980's, entrepreneurs created thousands of new businesses and jobs in North Dakota, in rural areas and cities alike. Between 1980 and mid-1987, just under 7,800 new businesses, including 4,600 in nonmetro areas, were successfully launched across the State. These new businesses generated 42,000 jobs (22,000 nonmetro), representing just less than a quarter of the State's total private sector employment (specifically, those covered by unemployment insurance).

Based on a survey we conducted last summer and other data, we tried to measure the scope and impact of entrepreneurship in North Dakota, focusing on the State's rural areas. Our conclusions contradict some common assumptions about the impact and durability of new businesses and the role of local banks in financing new starts in rural communities.

Mark Popovich is senior staff associate at the Council of State Policy & Planning Agencies and Terry Buss is a CSPA associate and professor at the University of Akron. This research was supported by the Northwest Area Foundation and the Rural Economic Policy Program of the Aspen Institute and Ford Foundation.

Figure 1

Employment impact of successful new businesses

(New business employment as a percentage of total private sector employment covered by unemployment insurance)

No Lack of Entrepreneurial Opportunity and Success

North Dakota's nonmetro counties kept up with the metro pace of job creation from new businesses between 1980 and mid-1987. Successful new firms accounted for 23.1 percent of the State's total employment, 22.7 percent of total metro employment, 26.1 percent of employment in nonmetro counties adjacent to metro counties, 22.1 percent of employment in more remote rural counties (more than 60 miles from a metro county), and 24.2 percent of employment in the State's agriculture-dependent counties.

Employment growth in North Dakota's private sector has been sluggish during the 1980's: 5.1 percent between January 1980 and January 1987. The 42,000 jobs spawned by new businesses, however, helped offset losses in existing businesses and contributed significantly to net employment growth (see map).

While new businesses were found in all major industrial groups, service and retail trade firms accounted for just over half of the new businesses and almost two-thirds of total new business employment. The national pattern of increased reliance on services and retail trade is mirrored in North Dakota trends.

These new rural businesses are also surprisingly durable. Their survival rate, at 63.4 percent, was well above expected levels in the five rural counties we surveyed.

Wes Black of Williston, ND, developed the "Stringliner," a string roll used by carpenters and masons on construction jobs. It's marketed to 7,500 outlets nationwide.

Characteristics of New Business Owners...

New rural North Dakota businesses are homegrown. About two-thirds of the successful new businesses surveyed were started by people with strong ties to their local communities. Sixty-four percent chose their business location because they or their family lived there. Fifty-seven percent started their business in the county in which they were born. Only about a fifth changed their county of residence to start their business.

Most owners of new rural businesses are strongly motivated. Having a good business idea or wanting to work for one's self were the most common reasons cited for starting the new business. Only about 20 percent started a business because they had lost a farm, lost a job, or were forced to close another business. The need to improve or supplement family income was cited by another 14 percent.

... And Their Businesses

More than three-fourths of the new businesses surveyed rely on sales to in-State customers. Most businesses also focus on local markets, specifically customers who live within or near the business's home community. This local orientation reflects the large number of new retail trade and service businesses that have been created.

Four-fifths of the new businesses were started from scratch. The remainder resulted from the acquisition of an existing firm by a new owner. Even in these cases, 87 percent of the businesses taken over were failing when acquired for the new start.

The startup teams involved in these new businesses were small and worked full time. Three-fourths of the new businesses surveyed were started by one- or two-person teams. While new businesses usually start out small, many have grown. Small businesses (one or two workers) accounted for more than half of the employment in startups. During startup, new businesses averaged 2.6 workers per firm. But, they had increased to 3.8 employees on average by mid-1988. Two-fifths of the new businesses had taken on additional workers since their startup.

Local Banks Helped Finance the New Businesses

Startup capital requirements ranged from a few hundred dollars up to $2 million. Half of the new businesses required less than $24,000, and three-fourths were started with $60,000 or less.

Entrepreneurial vitality is nurtured by the willingness of those with capital to invest in new businesses. But, lending institutions in nonmetro areas are often perceived either as having too little capital or as being too risk averse to

New Business in North Dakota

For $15, you can buy any piece of women's clothing in CJ's Fashions. Maximum pricing is a new idea in retailing that uses attractive prices for good clothes to generate higher sales volumes. CJ's Fashions may be the first of its kind in North Dakota, and business has been good enough for the owners, Doug and Cheryl Nelson, to start thinking about expansion.

Fashion retailing can be a roller coaster business, but Doug has used his previous experience with J.C. Penney and lessons from Penney's management training program to guide their start. Even so, the Nelsons planned carefully and hired Retail Management Consultants from Florida for even more advice, help in planning, and training.

Financing was a major concern for the Nelsons. Three women's clothing stores had recently closed in their town, and the bankers were hesitant. However, Cheryl's family have lived in the area for over 30 years and it helped that they were well known. Doug's experience and the high-quality help they got from Retail Management Consultants were also important to the bank.

support new ventures.

We asked new business owners about the sources of their startup capitalization. (Since more than one source of financing was often used, the percentages of businesses reporting these sources sums to more than 100 percent.) More than half of the sample reported using personal savings (55 percent). Just over half also indicated they used bank loans as a source of startup capital. That surprised us because the prevailing notion is that local banks tend to shun such endeavors. Of those with bank loans, almost two-thirds obtained commercial loans, with the remainder relying on home mortgages or home equity financing (table 1).

Ninety percent of the startup loans from banks were obtained locally. Familiarity between new owners and local lenders may be an important aspect of the rural lending environment. Over 90 percent of those who received bank financing for their new business said that they or their family are well known in the community. Over half believed the lender's familiarity with them was a factor in the loan approval. Only 14 percent of the new owners reported that they had been turned down for a bank loan.

Startup Problems

We identified startup problems in two ways. First, an open-ended question allowed respondents to list the three most serious problems encountered in starting their business. The startup problems most frequently identified included obtaining financing (36 percent), getting good workers (28 percent), small markets (21 percent), and poor general economic conditions (13 percent).

Second, we read a list of 18 problems and asked respondents to indicate which issues were "very much, somewhat, or not at all" a problem. Results from this question vary somewhat from the open-ended method. Poor overall economic conditions/small market, finding financing, and cash-flow were once again singled out by at least half of those surveyed as "very much" or "somewhat" a problem. However, other problems were identified as more severe when those surveyed were prompted by our list. These issues included high interest rates (49 percent), high taxes (48 percent), excessive paperwork (52 percent), and not enough time (52 percent). Finding a qualified workforce was frequently mentioned as a problem in the unprompted question, but was seldom picked out of the list of problems (table 2).

The results from the second question also indicate that new business owners face multiple startup problems. Nearly 90 percent experienced more than 2 of the 18 problems listed. And more than a third encountered 9 to 14.

Table 1—Sources of startup financing for new businesses

Source	North Dakota	Iowa
	Percent	
Personal savings	55	55
Family members, relatives	14	20
Friends, acquaintances	6	5
Bank loans	55	52
Venture or seed capital	3	1
Equity or stock	4	4
Government loans, grants or subsidy	5	8
Did not take salary	14	22
Unemployment insurance	1	0
Other	8	3

Numbers add to more than 100 because many obtained financing from more than one source.

Business Assistance Programs Generally Unused, Especially Those Sponsored by Government

Only 18 percent of the surveyed new owners participated in business assistance programs. For those who did, the most frequently used programs included specialized training, workshops or courses in starting a business, and assistance in finding workers. Government loans, usually from the Small Business Administration or the Bureau of Indian Affairs, were obtained by only 8 percent.

The private sector provided many of the assistance services used. More than half of those who sought assistance in specialized training, developing business or marketing plans, or management counseling did so from the private sector. Business assistance was provided by an array of private sector organizations, including professionals in accounting, real estate, law, and banking; manufacturers and suppliers; parent franchise corporations; and trade associations.

Assistance programs went unused because new owners either felt they did not need them or lacked information on them. When programs were used, they were highly valued. Three-fifths believed that the assistance they received was essential in starting their business. Four-fifths would use them again, and almost all would recommend the program to others.

The "Quality" of New Rural Businesses

There seems to be a common belief that new businesses, particularly those in rural communities, have high failure rates, may be only marginally profitable, seldom provide important fringe benefits, and have limited growth potential. The portrait of new businesses that emerges from this study is more optimistic.

Our survey results corroborated other project data on the durability of new rural businesses. Almost two-thirds of the new businesses contacted had survived for 3 years or more.

Less than 7 percent of the surveyed new owners reported family incomes below Federal poverty guidelines. This compares favorably to the statewide rate of 12.6 percent. In most cases, the new business is not the sole source of family income; rather, it supplements income from other sources. For example, four-fifths of the new owners have other family members who are also working. Two-thirds receive income from sources other than their new business.

New businesses' fringe benefits were generally low. Only a third offered health insurance, and only a tenth offered pension plans. Actual coverage was a bit better because of working spouses or other jobs: 90 percent of the new owners' families had health insurance from some source and 25 percent of the owners were covered by a retirement plan. About 76 percent of the U.S. workforce is covered by some form of employer-sponsored health insurance and about 41 percent are covered by employer-provided pension plans other than social security.

About the Study

The North Dakota study is part of a larger research effort to examine in greater detail the role and impact of new business creation on rural economies. Additional research has been completed or is under way in Arkansas, Iowa, Maine, and the Upper Peninsula of Michigan. In most cases, the findings cited here from the North Dakota study are similar to those emerging from the studies in the other States. Given similar findings from States with quite different rural economic and social conditions, it may be possible to generalize the project's conclusions to many of the Nation's rural communities.

The North Dakota survey project was designed to elicit detailed information from the owners or startup team of successful new businesses. The population of new businesses was constructed with information from several sources. As a starting point, Job Service North Dakota provided firm-level data from its Employer Data System. We supplemented that source through comparisons of telephone directories for target communities, site visits to these communities, and interviews with key community residents. We then selected a random sample of new owners and completed telephone interviews with 317 of them during the summer of 1988. The survey questionnaire collected up to 200 pieces of information from respondents. The average interview required about 22 minutes. And the response rate to the survey was slightly above 95 percent.

Table 2—Startup problems encountered by new businesses[1]

Type of problem	How much of a problem: Very much	Some-what	Not at all	Type of problem	How much of a problem: Very much	Some-what	Not at all
	Percent				Percent		
Raising money	22	27	51	Excessive paperwork	27	25	48
Cash-flow	28	31	41	Not enough time	27	25	48
High interest rates	28	22	51	Cost of land, buildings, or equipment	21	21	58
High taxes	32	16	52	High health insurance costs	26	13	61
Government regulations	24	18	58	Overall economy	40	30	30
Finding qualifed workers	17	17	66	Market too small	13	32	55
Poor savings/earnings	13	27	60	Too many competitors	18	23	59
Getting technical assistance	5	12	84	Not enough experience	6	17	77
Bad debts from customers	8	23	69	Poor timing	12	17	71

[1]Answers to the survey question "In keeping your business going, please indicate whether the following were very much, somewhat, or not a problem for you."

Finally, most new business owners are very optimistic about the future. Three-quarters expect their personal financial status to improve over the next 5 years. Their near-term business outlook is also bright. A third intend to expand operations or add employees. Less than a fifth plan to sell out, retrench in employment or production, or relocate.

Giving a Hand to Entrepreneurial Drive

Even in the face of economic turmoil, local rural residents have succeeded in creating thousands of new businesses that have helped raise family incomes and create new jobs. A supportive environment for business creation could become a crucial part of more comprehensive strategies aimed at rural economic revitalization.

Among the most surprising findings of our research were the indications of the strong role of local rural banks in providing startup capital for new businesses. Public programs to provide business financing are also available from both the Federal and State Governments, but participation in government programs was quite limited in our sample. This may be due, at least in part, to regulatory and administrative requirements of these programs. Those requirements may be too burdensome for borrowers who seek relatively small loans and for the banks who service them. It is also difficult for centrally administered public loan programs to acquire the type of detailed information about potential borrowers and local conditions that would be available to lenders already familiar with their borrowers and the local market. Therefore, it may be most appropriate to follow a dual strategy in addressing rural business financing needs: work through local lenders and also take additional steps to minimize barriers that hinder consideration of small loan proposals by Federal and State financing programs.

Technical assistance may be another way to support new businesses. Such services can help new owners address a wide range of startup or operating problems that must be resolved if their businesses are to survive and flourish. In most cases, when these services have been used by new business owners, they have been rated very highly.

Many new owners were unaware of the technical and other assistance programs, however. More effective outreach efforts could remedy that problem. For example, a catalog of services from public and private sector sources could include descriptions of the services and information on how they are delivered. A referral system, media coverage, or advertising of the directory could also expand use of these programs.

Finding time to use the available technical assistance programs is a separate and equally important issue. New owners often work 50 hours or more per week, and their home communities may be distant from the facilities of organizations offering the services. Training and assistance programs must be scheduled to accommodate cramped schedules. Innovative delivery mechanisms (television and radio broadcasts, or expanded use of video and audio taped materials) could also help overcome distance barriers while also allowing clients to make the best use of their time. RDP

For Additional Reading . . .

Terry F. Buss and Mark G. Popovich, *Growth from Within: New Businesses and Rural Economic Development in North Dakota*, Washington, DC, 1988.