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William B. Lamb

Ohio University, lambw@ohio.edu

Hugh Sherman

Ohio University, shermanh@ohio.edu

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Developing High-Growth Businesses in Rural Areas: A Study of Four U.S. States

William B. Lamb
Hugh D. Sherman

Those who would establish high-growth businesses (HGBs) in rural settings face significant challenges. We report findings from more than 80 in-depth interviews regarding the obstacles that rural HGBs face and identify approaches for overcoming these obstacles. First, interviews confirm the need for improved access to a full range of financing options to support HGBs across different development stages. Second, HGBs need in-depth, sophisticated technical assistance, which is generally unavailable in rural areas. Finally, cooperation among financial and technical service providers is vital to program success. Based on these findings, a model is proposed for successful development of HGBs in rural areas.

Keywords: rural economic development, high-growth business, venture financing, technical assistance

Three broad strategies have historically been used in economic development: business attraction, business retention and expansion, and business creation. Business attraction has dominated state and local economic development initiatives in the United States since the 1940s. However, in recent decades, many rural areas have found that for every firm they have successfully attracted to their region, they typically have lost at least one other plant or fast-growing local business. This phenomenon has accelerated in recent years as communities lost more and more of their local manufacturing plants to locations with lower labor costs. Since the 1980s, limited success at business attraction has spurred increasing interest among economic development officials in business retention and expansion and business creation.

While entrepreneurial firms have made significant contributions to growth of the U.S. economy, there is evidence that rural areas have not shared equally in the gains (McDaniel, 2002). The special problems of economic development in rural regions have been widely discussed (e.g., Malecki, 1994; Wortman, 1996) but the topic still requires further study. Many argue that better support of entrepreneurial activities offers a path to enhanced rural economic development. Lin, Buss, and Popovich (1990), for example, provide evidence that rural entrepreneurship is not only viable, but increasingly successful. While certain types of entrepreneurial firms are

enjoying success in rural settings (Smallbone, North, and Kalantaridis, 1999), an important category of new firm, the high-growth business (HGB), seems less amenable to peripheral locations. Recently, economic developers have focused more attention on entrepreneurial HGBs as a tool for building new industries and creating jobs more quickly (Dabson, 2001; Henderson, 2002a). If rural economic developers can help spawn more HGBs in their regions, they can unlock an important source of increased economic prosperity.

The purpose of this article is to report findings from a four-state series of interviews, to discuss the major obstacles that inhibit potential HGBs from succeeding (or remaining) in rural regions, and to propose a model that can enhance the development and retention of HGBs in rural regions. When properly supported, HGBs can indeed succeed in rural settings.

Literature Review

Rural Economic Development

Wortman (1996) reviews a number of approaches to economic development that have been used in rural regions of the United States. These have included small business institutes, small business development centers (SBDCs), incubators, rural community research parks, and rural enterprise zones, among others. While many of these initiatives have shown success, rural regions still present entrepreneurs with unique hurdles that dampen the impact of such programs.

As McDaniel (2002) points out, growth in rural regions of the United States has not been of the same scope and quality as the growth in metropolitan areas. McDaniel also finds that rural entrepreneurs are less likely to build HGBs. They tend to build smaller firms and generate lower incomes. For example, in the United States in 2001, 5.5 percent of the rural self-employed worked in firms of more than 100 employees, while approximately 11 percent of the urban self-employed worked in such firms (McDaniel, 2002).

According to Malecki (1994), entrepreneurship is less common in rural areas in part because of demographic, economic, and historical factors. The lower population density of rural areas provides a smaller potential labor force that tends to have less-specialized skill sets. Historically, industrial activity in a given rural area has often centered on a single indus-

try. Malecki (1994) also points out that, in general, rural regions have lacked a tradition of entrepreneurship. This not only reduces the support received by rural entrepreneurs, but also results in a smaller crop of people inspired to become entrepreneurs.

Westhead and Wright (1998) note that in urban regions, entrepreneurs tend to have greater diversity of characteristics, attitudes, and backgrounds, and that such diversity is associated with a greater likelihood of success. They argue that this may in part explain the greater rates of absolute employment growth they observed in urban settings.

While rural entrepreneurs face many challenges, Chrisman et al. (2002) provide evidence that, in general, some types of economic development programs in rural regions are as effective as those in urban centers. Specifically, they find no difference between rural and urban SBDCs in the efficiency and effectiveness of small business support programs. As we discuss later, SBDCs may be more effective in assisting lifestyle businesses rather than HGBs.

High-Growth Businesses

The Kauffman Center for Entrepreneurial Leadership uses the personal goals of the founding entrepreneur to distinguish between two types of small businesses: lifestyle businesses and high-growth businesses. The lifestyle business provides family income or supports a desired lifestyle. Once the lifestyle business reaches stability at a certain size, the founder is unlikely to pursue significant additional growth. On the other hand, the founder of an HGB tends to have more ambitious, open-ended goals for the firm. HGB founders tend to want to build a highly visible firm that produces a high level of wealth and jobs. These entrepreneurs often seek to take the firm public after obtaining some degree of success.

Researchers around the world have demonstrated empirically that small firms make significant contributions to economic growth as measured by net new job creation (Kirchhoff, 1994; Storey, 1994; Baldwin, 1995; Wennekers and Thurik, 1999). In 2007 the U.S. Small Business Administration reported that 50 percent of the country's total private labor force is employed by small businesses. Findings indicate that, among small firms, recently founded firms create the largest share of net new jobs (Kirchhoff, 1994; Baldwin, 1995; Wennekers and Thurik, 1999). Over the past 10 years, small businesses also have created more than 50 percent of all new jobs and new innovations. Within the broad category of small business, HGBs are the subgroup that has been identified as creating the most new jobs (Birch, 1987; Pages and Poole, 2003). Moreover, among recently founded firms, highly innovative new firms create a disproportionate share of net new jobs compared to new firms with lesser innovation intensity (Kirchhoff, 1994). Westhead and Wright (1998) find that, in

both rural and urban areas, economic developers would do well to focus their efforts on this small, fast-growing subgroup of entrepreneurial ventures.

While HGBs offer many advantages from an economic development standpoint, they also present a unique type of risk for economic developers. It is reasonable to expect that start-ups will be formed near an entrepreneur's current home location, but it is also possible that the new firm's fight for survival will pull it toward more attractive locations (Stam, 2007). Helping entrepreneurs start HGBs will not be enough—rural economic developers must find ways to ensure that the HGBs founded in their region are able to thrive without moving to other locales.

Obstacles Rural High-Growth Businesses Face

Entrepreneurs who start, or want to start, HGBs in rural areas face a host of challenges. First, rural HGBs have fewer opportunities than their urban counterparts to benefit from agglomeration economies. For example, low population density and low levels of industrial activity in rural areas provide rural HGBs with a relatively small base of nearby customers. Psaltopoulos et al. (2005) suggest that a key success factor for rural entrepreneurs is their ability to find markets outside their own region. Remote locations also increase transportation costs and reduce access to important customers and suppliers. Rural areas often have the advantage of lower labor costs, although workers in these regions are less likely to have the most up-to-date training and job skills. Malecki (1994) points out many advantages that can accrue to small firms via their network of related firms. In a rural area there will tend to be less access to advice and support from the business network and fewer opportunities to benefit from knowledge spillovers. These factors pose difficulties for most new firms, but are especially problematic for HGBs.

A second significant problem faced by rural entrepreneurs is the availability of financing options (Psaltopoulos et al., 2005). Wortman (1996) points out that rural banks are often conservative in their lending practices, placing relatively little emphasis on lending to entrepreneurs. Due to their higher risk profile, HGBs often need venture capital, a source of funds that is very difficult to obtain in rural areas. One recent report (Henderson, 2002b) notes that two-thirds of all venture capital investments in the United States go to just five states and nearly all of these investments are made in metropolitan firms. Rural entrepreneurs, especially ones in remote areas, are at a distinct disadvantage when trying to raise capital for starting or growing their business (Henderson, 2002b). Rural states and regions are attempting to attract and develop equity investment by a number of methods, including targeted legislation and infrastructure.

A third obstacle to HGB development is that public offi-

cialists often lack an understanding of the role HGBs can play in developing wealth and new employment. Government investment in business retention and expansion is inhibited by the fact that it can take a long time before the public sees a tangible payback on these investments. HGBs additionally require much more sophisticated hands-on technical assistance than the typical small firm. Few successful programs are documented, and consequently public policymakers do not understand the potential benefits in terms of increased employment and wealth creation. Therefore public officials tend to favor business recruitment programs, which can yield major media ribbon-cutting ceremonies.

In spite of these challenges, HGBs do have the potential to make a significant economic impact on a region. Fontes and Coombs (2001) in their study of new technology-based firms, point out many ways that these firms can contribute to the development of a less-advanced economy. They also stress, however, that these firms can only thrive and contribute as predicted when a basic level of infrastructure exists to support their activities.

Methodology

As part of a U.S. Economic Development Administration research study, the research team conducted site visits and more than 80 interviews in four regions: Iowa, Nebraska, West Virginia, and southeastern Ohio. The goal of the interviews was to gain a more complete understanding of the challenges facing HGBs in rural regions from the perspective of those who are actively involved in investment and economic development activities in four rural regions of the United States. The interviews, conducted in 2004 and 2005, were with individuals connected to equity investing efforts in each state, including fund managers, representatives from state economic development offices, chambers of commerce, HGB owners, and nonprofit and for-profit business technical assistance providers. These interviews were taped, transcribed, and analyzed for common themes.

Findings from Interviews

All four of these rural areas were ranked relatively low compared to other regions in the United States with regard to entrepreneurship and venture capital activity. Economic activity in these rural regions was predominately tied to agriculture, manufacturing, and extractive industries. The majority of people interviewed were actively involved with entrepreneurs in their respective regions. Many of them reported that, in recent years, economic development officials in their respective states increasingly had come to understand the importance of business creation as an important economic development strategy. These officials recognize the importance of HGBs in developing wealth and employment and retaining talented younger workers.

In recent years these four regions had very different approaches to facilitating the growth of HGBs. Both Iowa and Nebraska have developed statewide approaches to facilitating HGB growth and development. Iowa state government policies are focused on developing angel investors and traditional venture capital funds. The assumption behind these policies is that HGBs exist but that they have not been able to reach their potential because they lack equity financing. Iowa created incentives to attract venture firms to the state and to make investments in local firms.

In contrast, Nebraska created a program to provide technical assistance to assist small businesses in becoming “venture ready.” Once the firms were ready, it was assumed that they would attract the necessary equity investments—state policies in Nebraska were not geared toward creation of additional financing options. West Virginia and Ohio did not have statewide programs. They had however, supported the development of independent, regional financing or technical assistance organizations. (Each state’s programs are briefly described in the “Overview of State Programs” box story.)

Unique Characteristics of HGBs in Rural Areas

The interviews conducted in the four states revealed that HGBs do exist in rural areas; however, there are differences in the characteristics of these HGBs compared to HGBs in urban areas. The interviews revealed widespread agreement among economic development officials, venture capital and angel investors, and bankers that rural entrepreneurs often lack the knowledge, management skills, experience, and networks necessary to expand their businesses. One fund manager in Iowa said that there are “plenty of [potential HGBs] out there but they are not neatly packaged.”

Traditional venture capitalists and others who are providing business assistance reported that most, if not all, entrepreneurs starting HGBs in rural areas need intensive, hands-on assistance before their businesses will become “investable.” One fund manager in Iowa called the assistance needed “meatball surgery.” Entrepreneurs need to form deep, long-term relationships with technical assistance providers. Many of the representatives from economic development offices reported that most rural entrepreneurs, even those with a great product or service, have not thought through their growth strategy. They often do not understand the level of market planning, financial planning, and executive team development required to exploit their growth potential. Getting these entrepreneurs to understand and appreciate the importance of the technical advisors’ suggestions requires a level of communication and trust that can only be built over a long period of time.

Respondents also indicate that rural entrepreneurs tend to emphasize the disadvantages of equity financing. According

Overview of State Programs

Iowa

The Iowa Capital Formation Act created a Fund of Funds for venture capital investment. Following a model used in Oklahoma, revenue for the fund is obtained by selling up to \$100 million in state tax credits to large institutional investors and then using those subscriptions to guarantee loans to jump-start the fund. Not more than \$20 million in tax credits can be used each year. To receive an investment from the Iowa Fund of Funds, a venture fund must commit to consider equity investments in businesses in Iowa and to maintain a physical presence in Iowa. The Fund of Funds is required by statute to invest 5 percent of its assets in a program to provide loan guarantees and other related credit enhancements on loans to rural and small business borrowers within the state of Iowa.

The Seed Capital Investment Credit ("Angel Investor" bill) provides a tax credit for individuals who invest directly in a qualifying business or a community-based seed capital fund. The tax credit equals 20 percent of the taxpayer's equity investment. To be eligible, a community seed fund must be a minimum of \$150,000 to a maximum of \$3 million and have at least five unaffiliated investors. Qualifying businesses must be Iowa-based and in operation less than three years; the owner must have training or experience; the businesses' net worth must be less than \$3 million; and the company must secure, within 24 months of first tax credit, another \$250,000 in "equity or near investments." Excluded are retail, real estate, professional services, and health services. In early 2004, there were 20 approved businesses and community seed funds. The majority of these funds are located in Ames (7), Des Moines (6), and Fairfield (2). Cedar Rapids, Solon, Mason City, Cedar Falls, and Orange City each have one fund. This legislation was designed to increase levels of angel capital for Iowa businesses by stimulating the creation of more local seed funds.

To promote the formation of Angel Investor groups, the Iowa Department of Economic Development purchased the licensing rights for the Regional Angel Investor Network (RAIN), a legal template to set up a Limited Liability Company that invests equity capital in small businesses. RAIN funds may take advantage of the Seed Capital Investment Credit if the fund is capitalized at a minimum of \$500,000, has qualified investors, and invests in two qualified companies in three years. Generally, RAIN funds look for a 40 to 50 percent return on seed- and start-up financing, 30 to 40 percent on second-stage financing, and 25 to 30 percent on later-stage financing. Each RAIN may choose to invest only in local projects or may partner with other Iowa funds. The benefit of a RAIN is that it allows for leveraging of dollars and provides for a greater rate of return.

Nebraska

Nebraska has tried before to address the lack of equity investing within the state through the Nebraska Research and Development Authority Act, which was created in 1986 and funded for 10 years using general funds, which would be invested with companies. The NRDA received \$10.5 million in general funds between fiscal year 1986-1987 and 1991-1992. During that time, the NRDA invested in approximately 24 companies. However, the program did not become self-sufficient as many companies generated little or no returns.

There is one venture capital company and two private equity companies in Nebraska. None of these are devoted to providing funding within the state, however. The venture capital firm invests in expansion-stage businesses, while the private equity companies fund either later-stage enterprises or firms outside Nebraska. There is also one angel group, Capital City Angels, based in Lincoln and developed through the Lincoln Chamber of Commerce. The fund has between 30 and 35 private investors, with a target of up to \$2 million. While funds can be invested outside the community, the goal is for the bulk of investments to be in Nebraska.

Invest Nebraska is a statewide organization that provides services to businesses and communities. It helps prepare small businesses to work with venture capitalists by conducting a business evaluation, developing strategies to overcome barriers, and connecting with its network resources. Overall, Invest Nebraska has found that many rural communities lack the awareness and preparedness to identify, support, and fund high-growth businesses.

To address these barriers, Invest Nebraska began working with selected communities to help them develop the capacity and tools necessary to further their involvement with equity investing. Invest Nebraska recognizes that it is not practical to work with all communities across the state and is now concentrating on those that can support entrepreneurial and growth industries. Invest Nebraska is acting as a facilitator with the community determining and driving the mission. It is working on improving awareness of equity investing and helping communities learn how to identify high-growth industries. Invest Nebraska is also providing technical assistance and training in the selected communities to enhance their capacity. Through this process, Invest Nebraska will develop templates that other communities can adapt to their localities. At a broader level, Invest Nebraska is engaged in a statewide effort to increase awareness of equity investing. It has developed a set of recommendations that are intended to increase equity investing in the state:

- develop an awareness campaign to help residents understand the market and its importance in the local and regional economy;
- enhance the operational assistance capacity of Invest Nebraska;
- create a Nebraska investment fund that invests matching capital in qualified and professionally managed funds targeting Nebraska investments; and
- develop an angel investment tax credit program to encourage angel investing.

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Ohio

Adena Ventures is the first New Markets Venture Capital company in the United States. The fund provides investment capital and operational assistance to smaller enterprises and entrepreneurs in the fund's target region of central Appalachia, which includes southeastern Ohio, West Virginia, western Maryland, and northeastern Kentucky. The fund is backed by 12 institutional investors, the U.S. Small Business Administration, and several prominent strategic partners from public and private sectors.

Adena Ventures has a goal to spread \$24 million into 10 or 11 companies with \$1 million to \$2 million up front, and another \$1 million over the life of the fund in technical assistance alone. In its first 20 months of operations, Adena invested \$3.2 million in four companies—Butterfly.net (WV), Vested Health (WV), SecureMethods (WV), and ED MAP (OH)—all of which are located in low-income communities. All of these are viable, sustainable companies but need equity to become scalable. For example, Butterfly.net did not have funding past the seed capital stage and would have likely died, but Adena Ventures provided the technical assistance needed to go to the next level.

Adena also provided \$1.5 million worth of operational assistance to 29 companies. The 25 companies that received operational assistance but not equity investment from Adena Ventures benefited from the operational assistance by securing \$3.5 million in funding they may not have received otherwise. For every \$1 Adena invested, companies have received \$5 in co-investing. Adena secured eight co-investors from three countries and six states.

The Appalachian Regional Entrepreneurship Initiative at the Voinovich Center for Leadership and Public Affairs at Ohio University is a technical assistance provider that integrates a wide range of business assistance offerings providing a full continuum of programs for businesses from start-up, early-stage, high growth to established small- and medium-size businesses. Business assistance services include marketing, strategic planning, financial planning and projections, technology and process improvement, organizational development, government procurement, and workshops for business owners.

The center hosts a number of state and federally funded business assistance programs including an SBDC and a procurement technical assistance center. Furthermore, they have developed services for medium-sized firms as well as HGBs. These services are more sophisticated and usually involve longer engagements. Companies receiving in-depth services are engaged with a team of two to four consultants for between four weeks to a year.

West Virginia

Before 2002, there were no venture deals in West Virginia. Six years ago, the state decided to recruit and make venture capital available in an effort to try to spur entrepreneurial activity. This decision was the outcome of a strategic planning process initiated by the State Development Council in 2001. It conducted 1,000 surveys among government officials, economic development professionals, entrepreneurs and venture capitalists. The most important finding was identifying the lack of venture capital in the state. Therefore, the state created legislation to attract and make venture capital available. It passed the 2002 West Virginia Capital Company Act. Legislation devoted \$25 million from the state's pension fund to create the venture capital fund. The state attracted and invested in six venture capital funds across the state.

to respondents, many rural entrepreneurs are frightened about giving up ownership of their business. The focus group of entrepreneurs in Nebraska especially emphasized the sense of independence and self-reliance they had when they started and ran their businesses. These entrepreneurs did not appreciate the compensating advantages of equity financing, such as improved access to a network of contacts and sophisticated business assistance. According to fund managers in Nebraska, many successful start-up companies have made it on their own via bootstrapping. These attitudes of rural entrepreneurs require both technical and financial experts to use approaches distinct from those used in urban areas.

Technical Assistance Needs

We found that many entrepreneurs were not aware of the technical assistance services available and how they could access those services. Many expressed a desire for greater coordination between the service providers. The Nebraska focus group of entrepreneurs recognized the value of quality infrastructure and education. They expressed the need for

mentoring and programs with staff that have the expertise to deliver the services they need. "I spent three hours on the phone trying to get information," one participant said. "That is three hours I lost that I could have been using to build the business." The same theme was identified in interviews with entrepreneurs from southeast Ohio and West Virginia. Entrepreneurs from HGBs mentioned that interaction with highly qualified and experienced technical assistance staff was crucial in their understanding of what it takes and means to grow their business or to obtain private investment. These interviewees stated that "without the advice, guidance, direction, and education from these service providers" they would have not been able to take their companies to the next level.

Although business incubators and SBDCs extend assistance to Nebraska, Iowa, West Virginia, and Ohio entrepreneurs, there was a widespread consensus that these outlets typically provide technical assistance at lower levels of sophistication. Interviewees saw the main role of these service providers as providing technical assistance with business formation, assistance with early-stage business plans, market

planning templates, accounting assistance, basic legal services, and other administrative advice.

While greatly beneficial for lifestyle businesses, this type of technical assistance alone is not sufficient to prepare HGBs for an appeal to traditional venture capitalists. HGBs often require more sophisticated business technical assistance that restructures a company with strong potential for expansion and equity financing. Sophisticated technical assistance requires seasoned professionals who have extensive experience in creating, growing and structuring businesses for debt or equity, and well-developed, widespread networks in the business, venture capital, and finance sectors. These assistance providers often help reshape a company's strategies to appeal to a broader market, recruit and groom new members of the executive team, bring important strategic partners to the table, launch operational restructuring for higher efficiency and profitability, and otherwise prepare the company for an equity deal.

Currently, economic developers in many rural areas are not able to provide these types of sophisticated business assistance services—services that are available in many urban centers. Economic developers in rural areas often have little knowledge or experience working with equity investment. The following statement reflects the perspective of many respondents across the four regions: "It is my experience that there is a general lack of knowledge concerning venture capital in Iowa. . . . Only a few dozen people in Iowa understand what venture capital is and what types of companies qualify as prospects for venture financing."

In addition, in some cases, the state or federal programs that could provide in-depth, long-term assistance to HGBs are not allowed the flexibility and extra time needed to properly support HGBs. Some state and federal programs measure the number of "touches" with clients (the number of different clients they contacted or provided with information). Therefore, service providers can face a disincentive to develop the longer term, more intensive service engagements needed to properly support HGBs. This can hurt the quality of the service provided to these businesses. Exacerbating this problem are the budget pressures being faced by many assistance providers. Several SBDC directors mentioned that they were having trouble providing even basic services such as business plan development and financial projections.

Another finding from the interviews was the impact of competition between technical assistance providers. Technical assistance providers acknowledged the benefits of collaboration between their programs; however, they also recognize that they often compete for the same sources of state or federal funding. This increases a program's isolation and dampens the referral of clients to other available resources. As a result, many respondents were not aware of all of the technical assistance service offerings available in their region.

Equity Financing Needs

As expected, the availability of equity financing in the rural areas we examined was very limited. The vast majority of equity investment takes place in more urban areas. More specifically, many of the people interviewed reported a complete lack of availability of early-stage capital. In early phases of HGB development small amounts of capital are needed to cover R&D and some operating costs. Needed investments at this stage range from \$50,000 to \$1 million. This initial equity investment is usually provided by angel investors.

The venture capitalists (VCs) and angel investors interviewed identified three obstacles to equity investment in rural regions. First, relative to other deals they could work on, identifying high potential rural deals is very time-consuming and costly. Second, those who have found potential equity deals in rural areas find they have to do in-depth work with owners to bring businesses up to the level necessary for investors to find the deals attractive. The few venture capitalists who had successfully completed rural equity deals reported that considerable hands-on involvement at the fund manager level was pivotal to successful program development. Most venture capitalists find this to be too expensive and would rather work with high potential deals in urban locations that require less effort.

The result is that there are not many VCs located in rural areas. Urban VCs are not looking at rural areas to find deals due to the abundance of potential deals in urban areas as well as better developed technical assistance services and networks. It is very difficult to break down these barriers in traditional VC thinking and attract VCs to rural areas. It takes education, public awareness, and success stories to get a VC interested in even looking at a rural area to evaluate an HGB for potential investment. One successful example is Adena Ventures in rural Athens, Ohio. Adena's investment deals have created awareness among urban VCs, which are now looking at Appalachia and have been willing to co-invest in companies with Adena. Without one pioneer VC, however, these other VCs would have never thought about investing in rural Appalachia due to the factors mentioned above that make HGBs in rural areas less attractive.

Third, in rural areas entrepreneurs often lack understanding about equity capital. Rural entrepreneurs often have few friends or acquaintances who have experience with equity capital, and they are less likely to understand what it means to obtain growth capital in the form of private investment. These business owners usually do not understand the changes that are to occur after an investor receives an equity stake in their company. They may not realize that an investor's participation can potentially change not only the strategic direction of the company, but also its day-to-day operations. These interviewees expressed the need for education about angels and venture capitalists, about structuring a

deal, and about “life after VC investment.”

An additional important finding is that all of the above three constituents (HGBs, technical assistance providers, and private investors/VCs) have indicated that the lack of organized collaboration networks makes it even more difficult to find, develop, and match potential investors with HGBs in rural areas. Often times, businesses are not aware of the existence of local private or institutional investors, and investors do not see a deal flow of potential candidates. Rural entrepreneurs are less likely to understand the importance of professional networking as a means of learning or accessing outside advice and counsel. However, those who acknowledged the importance of networking with other businesses, financiers, and technical assistance providers said they were frustrated with the perceived lack of value afforded by networking in rural areas. For example, one entrepreneur in the Nebraska focus group stated that the “[Midlands Venture Forum] ends up being a chamber or rotary meeting—just a bunch of people passing out business cards.” In the Appalachian regions, communication appears to be an issue: people are more isolated, so it is harder to build up trust, the interviewees said. These entrepreneurs also stated that there are no organized opportunities for networking. Although technical assistance providers, economic developers, and chambers of commerce are all making efforts to link these constituents, more collaboration and organization needs to occur to make this system work.

Another key issue is the availability of early-stage debt or equity capital financing. Even when companies attractive to investors can be identified and made “ready-to-invest,” both entrepreneurs and investors say the process is hampered by gaps in the bank debt-angel investment-venture capital financing continuum (\$20,000–\$100,000). Obtaining a small amount of financing is often the first step for HGBs to get off the ground. At this stage in their life cycle, these high-growth potential businesses are far from being attractive to angels or venture capitalists due to the fact that they may not yet have had time to prove the potential market demand for their product or idea. Due to the increased levels of risk associated with HGBs, banks usually will not provide debt financing. In such cases, HGBs are left with no alternative financing available except from family members and friends.

Entrepreneurs in Omaha, Nebraska, noted that one of their biggest challenges was raising initial seed capital, even though this is often a small investment. “We are a service business so were unable to get a bank loan,” one participant said. “So we piece-mealed the funding together and we are in a perpetual state of raising money, which impacts our bottom line. We didn’t need that much money; we just needed to get over the hump.”

In addition, angel investors are often hard to identify. Although wealthy individuals exist within rural regions, they

tend to be risk averse and more conventional in their investment choices. They are more likely to invest in real estate and housing than to provide equity funding to a company without hard collateral, interviewees said. They also do not wish to disclose who they are, and that they may not have experience in structuring deals and investing in high-risk, high-return business ventures. Developing an angel network to invest in early-stage HGBs was seen as critical to long-term economic development efforts. Unfortunately, due to underdeveloped angel networks in rural areas, HGBs are often forced to look beyond their home base for funds, eventually opting to relocate closer to their support network.

The Role of Government

Fund managers in Iowa and Nebraska called for a major effort to raise public understanding and support of entrepreneurship for rural economic growth and development. This includes efforts to raise the consciousness of politicians, investors, business owners, potential entrepreneurs, and community leaders about HGBs’ financing and technical assistance needs.

Respondents in Iowa and Nebraska worried about politicians’ tendencies to focus on attracting existing companies with ready-made jobs rather than encouraging entrepreneurship. Economic developers are still spending the vast majority of their time and effort trying to recruit a larger plant or firm to come to their region. In many rural regions, industrial recruiting, however, has proven to be a zero-sum economic development strategy, where most communities have lost more branch plants than they have been able to attract.

Interviewees, fund managers particularly, also believe that policymakers tend to select strategies with quick, visible results. They believe that politicians fear that impacts from the slower (but more long-lasting) process of entrepreneurship will come too late to benefit their political careers. Several fund managers stated that money provided by the state usually comes with too many strings attached, dampening the interest of potential investors. Many respondents were uncertain as to how government assistance programs might be formulated to address the obstacles that HGB development faces in rural areas. The consensus, however, was that steps to improve rural access to venture capital must be taken at the state or regional level. Respondents, however, voiced a strong belief that equity funds are best managed privately and as for-profit funds, not politicized and managed by government executives. Political considerations can overshadow sound business judgment, jeopardizing opportunities for economic success.

Additionally, technical assistance providers in Appalachia indicated that the success of current economic development and technical assistance programs is measured by metrics that do not capture all of the qualitative results of their work.

The metrics used by state and federal programs do not truly reflect the impact of economic development efforts in rural areas. Success of these programs is usually measured by number of jobs created or retained and the number of businesses assisted. However, especially in the case of HGBs, the greatest value added comes from sophisticated, longer term, intensive consulting engagements.

Recommended Model for Rural HGB Development

Based on the interviews and our own field experience, we contend that there is a need for a different type of economic development model for rural regions. In the regions we examined, we found potential HGBs; however, these firms needed much more assistance and a different type of assistance before they could become “venture ready.” The approach we recommend for rural regions includes the following:

1. a full continuum of technical assistance services, including sophisticated technical assistance;
2. a full continuum of financing options, including early-stage and more traditional venture capital;
3. cooperation among providers of technical assistance and financiers to facilitate the progress of potential HGBs through the development process; and
4. policymakers who understand the importance of HGBs to economic development and will help facilitate the support networks needed to develop successful HGBs.

Full Continuum of Technical Assistance

Rural economic developers need to foster cooperation, not competition, among assistance providers to help a region reach a critical mass of necessary resources. Technical assistance teams should collaborate to identify businesses that exist in the region and build an inventory of their support needs. This requires highly skilled staffs that are able to develop and maintain cooperative alliances with other assistance providers and financiers. To ensure that all levels of HGBs receive assistance, programs have to be in place that address the specific needs HGBs have at different developmental stages. HGBs need to be able to tap into a network of services at any point in their life cycle. Each provider should take each business as far as they can, given their special expertise and knowledge. They then need to refer the client to other technical assistance providers for expertise they do not possess. A start-up needs assistance mainly in the areas of business formation, legal assistance, incorporation, basic business planning, and financial projections to obtain initial financing (usually debt).

HGBs also need sophisticated consulting services to assist them with business strategy, growth strategy, recruitment of management talent into key positions, strategic marketing,

and structuring the company for “growth capital” in the form of equity financing. These growth plans and strategies must be developed to attract potential investors, angels, and VCs who will be using these plans to decide whether to make an investment. This process requires hands-on, long-term consulting as well as education of the business owner.

In the regions surveyed, technical assistance for lifestyle businesses generally existed. These assistance providers are often people who understand lifestyle businesses but are not as able to evaluate and help create a business model that can achieve high growth. Professional assistance providers with this type of experience are hard to find in rural areas and their services are expensive. In addition to direct work with clients, they educate and serve as models for existing technical assistance providers. Most rural economic developers lack funding and may not know how to recruit and attract such individuals.

Full Continuum of Financing Options

Entrepreneurs need different types of capital: bank loans, seed money, angel investment, and venture capital depending on their stage of development. A company’s growth can quickly stall if it reaches a critical stage of growth only to find that there are no financing options to create a bridge to the next level. As discussed, we found a persistent shortage of seed and early-stage capital in the range of \$50,000 to \$1 million. Venture capitalists will not provide these smaller amounts, nor will they step in to fund a company that has not had access to this level of financing. Banks are likely to view this as unattractively risky territory.

Angel investors can provide the critical missing link. Economic development officials need to develop a network of angel investors who have the knowledge and desire to make early-stage investments. It can be quite challenging to create formal networks due to cultural difference in rural versus urban areas. High net worth individuals need to be educated on the benefits, risks, and process associated with angel investing. Sophisticated technical assistance providers are in a good position to be the educator and facilitator, since they have in-depth knowledge of the opportunities.

To develop this continuum, elected officials can provide incentives for financial providers by improving the potential return to match the higher costs and risk level. For example, they can provide tax credits so commercial banks can make loans to community banks. Commercial banks can then recover some of their losses through the tax credit. Attracting VCs to rural areas is the greatest challenge in the finance continuum. States can provide financial incentives to venture funds to open offices in rural areas and also provide tax credits. In addition, state policymakers can offer to invest some portion of state pension funds in an existing VC fund with the stipulation that a specified amount is spent in the rural

region. This is the program that Iowa has been trying to get established with its Fund of Funds program.

Integration of Finance and Technical Assistance Providers

In the same way that technical assistance providers must network among themselves, financial providers must collaborate within their community and with assistance providers. This collaboration will provide information to validate the value of the businesses, and help to create a steady deal flow.

Angel and other types of investors in rural areas need education and experience in developing complex business deals. They can learn from each other in angel networks and by attending angel workshops provided by incubators or technical assistance providers. Technical assistance providers can then learn what investors are looking for.

Venture capitalists need to be willing to work with and coordinate local sophisticated technical assistance for their potential HGB clients. Even when sufficient technical assistance exists within a region, venture capitalists will likely need to add some level of their own hands-on guidance to help get the businesses fully venture-ready.

Public Policy

This research revealed that to be effective in supporting equity investments for HGBs in rural areas, the government must modify its approach to support both technical assistance programs and the development of sources of financing. Sophisticated technical assistance is the backbone of our recommended model; without it, entrepreneurs are unlikely to become venture-ready. Economic development officials, bankers, and investors must be confident in the quality of the assistance provided, so that they will act as conduits for linking businesses with assistance resources. In addition, banks, angel investors, and venture capitalists will be more likely to finance companies if they know that the businesses they are working with have the support and endorsement of the region's assistance professionals.

Any investment capital that government allocates for entrepreneurial development must be managed by for-profit organizations. The majority of successful venture funds have a professional management team with a strong record of accomplishment in the venture capital market. The fund needs to be managed and run as a private, for-profit fund. It is important to hold participating firms to the same high standard as other equity funds around the country. An example is Adena Ventures. Because it has been able to establish a credible record of success as a traditional venture fund, Adena Ventures has been able to attract \$5 of additional investment from major venture capital firms outside the region for every dollar that they have invested. Firms from New York City, San Francisco, Chicago, and even Switzerland have co-invested in

Adena deals in firms that are located in its region.

In our interviews, we were told of efforts to create venture funds. For example, the Iowa Capital Formation Act created a Fund of Funds for a venture capital investment organization that has political officials on its board. The board made investment decisions on the basis of social goals rather than on the basis of the economic prospects of the firms. The result was that very few investments were successful or lasted.

Conclusion

While interest in developing and supporting HGBs is growing, to date, few successful support programs exist in rural regions. When compared to traditional economic development efforts, HGB support takes longer, is more labor and resource intensive, involves greater risk, and takes longer to show tangible results. HGBs, however, also have the potential to make a dramatic impact on a rural region's economy. Even when HGBs are successfully founded in rural regions, a variety of pressures often cause them to uproot and relocate closer to urban centers. HGBs often find that the sophisticated business, technical, and financial support they need to achieve their growth potential are more readily available in urban areas.

From our interviews, we identified three critical elements that regions need to develop so that they can assist HGBs in realizing their potential growth in employment and wealth creation. First, HGBs normally need longer term, in-depth sophisticated business technical assistance. In rural regions this is a very difficult resource to obtain. HGBs need help from someone who has had extensive experience in developing high growth businesses (often with a technology orientation) and in working with venture capitalists to negotiate and structure investment deals.

Second, in rural regions we found a general lack of early-stage debt or equity investment. Such financing is a critical link between start-up status and "venture ready" status. One solution is to create a network of angel investors who can invest from \$50,000 to \$1 million.

Third, as we discussed, there are fewer resources present in rural regions to assist HGBs. To reach a critical mass, regions must foster a collaborative network in which a continuum of technical assistance providers and a continuum of capital providers exist and work together to create HGBs. HGBs need to be able to tap into a network of assistance services and different types of financing at any point of their life cycle.

Finally, a critical element in successful HGB development is the presence of one or two project champions. The development of a comprehensive support network does not just happen. An individual and more likely several individuals must understand the needs of HGBs and the capabilities of the various economic development organizations in the

region. These individuals need to take leadership roles facilitating collaboration and support of the HGB. These people could be local economic development officials or representatives of other regional organizations.

HGBs are an important source of wealth and employment creation. But it is clear that they require the support of many resources, which are in short supply in rural regions before their growth potential can be realized. To reach a critical mass, regions must foster a collaborative network in which a

continuum of technical assistance providers and a continuum of capital providers exists and works together to create HGBs. Local and state governments need to provide support for this comprehensive model. Technical assistance providers, venture capitalists, bankers, economic development officials, chambers of commerce, educators, and government officials all have an important role to play in helping rural entrepreneurship attain its great potential as an economic development tool.

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References

- Baldwin, J. R. (1995). *The dynamics of industrial competition*. Cambridge: Cambridge University Press.
- Birch, D. (1987). *Job creation in America: How our smallest companies put the most people to work*. New York: Free Press.
- Chrisman, J. L., Gatewood, E., and Donlevy, L. B. (2002). A note on the efficiency and effectiveness of outsider assistance programs in rural versus non-rural states. *Entrepreneurship Theory and Practice*, 26(3), 67-80.
- Dabson, B. (2001). Supporting rural entrepreneurship. *Federal Reserve Bank of Kansas City Proceedings*, 27, 35-47.
- Fontes, M., and Coombs, R. (2001). Contribution of new technology-based firms to the strengthening of technological capabilities in intermediate economies. *Research Policy*, 30, 79-97.
- Henderson, J. (2002a). Building the rural economy with high-growth entrepreneurs. *Economic Review*, 87(3), 45-70.
- Henderson, J. (2002b). *Are high growth entrepreneurs building rural economy?* Kansas City: Federal Reserve Bank of Kansas City.
- Kirchhoff, B. A. (1994). *Entrepreneurship and dynamic capitalism: The economics of business firm formation and growth*. Westport, CT: Praeger.
- Lin, X., Buss, T. F., and Popovich, M. (1990). Entrepreneurship is alive and well in rural America: A four-state study. *Economic Development Quarterly*, 4, 254-259.
- Malecki, E. J. (1994). Entrepreneurship in regional and local development. *International Regional Science Review*, 16(1&2), 119-153.
- McDaniel, K. (2002). *The main street economist: commentary on the rural economy*. Kansas City: Center for the Study of Rural America, Federal Reserve Bank of Kansas City.
- Pages, E., and Poole, K. (2003). *Understanding entrepreneurship promotion as an economic development strategy: A three-state survey* (A joint project of the National Commission on Entrepreneurship and the Center for Regional Economic Competitiveness).
- Psaltopoulos, D., Stathopoulou, S., and Skuras, D. (2005). The location of markets, perceived entrepreneurial risk, and start-up capital of micro rural firms. *Small Business Economics*, 25, 147-158.
- Smallbone, D., North, D., and Kalantaridis, C. (1999). Adapting to peripherality: A study of small rural manufacturing firms in northern England. *Entrepreneurship & Regional Development*, 11, 109-127.
- Stam, E. (2007). Why butterflies don't leave: Locational behavior of entrepreneurial firms. *Economic Geography*, 83(1), 27-50.
- Storey, D. J. (1994). *Understanding the small business sector*. London: Routledge.
- Wennekers, S. R., and Thurik, B. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27-55.
- Westhead, P., and Wright, M. (1998). Novice, portfolio, and serial founders in rural and urban areas. *Entrepreneurship Theory and Practice*, 22(4), 63-100.

Wortman, M. S. (1996). The impact of entrepreneurship upon rural development, in T. D. Rowley, D. W. Sears, G. L. Nelson, J. N. Reid, and M. J. Yetley (eds.), *Rural Development Research: A Foundation for Policy, Contributions in Economics and Economic History*, no. 170. Westport, CT: Greenwood Press.



About the Authors



WILLIAM B. LAMB (lambw@ohio.edu) earned his Ph.D. in strategic management at Virginia Tech. He is an associate professor of strategic management and chair of the Department of Management at Ohio University. His current research focuses on the relationships between knowledge management, academic research, and entrepreneurial success in emerging higher technology industries.



HUGH D. SHERMAN (shermanh@ohio.edu) earned his Ph.D. in strategic management from Temple University. He serves as dean of the College of Business and is a professor of management at Ohio University. He has previously worked as an entrepreneur, as well as in a variety of academic administrative posts, and has extensive economic development experience. His current research interests include entrepreneurship and economic development.