

State of Literature on Small to Medium-Size Enterprises and Entrepreneurship in Low-Income Communities

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Introduction

The topic of this paper seems rather simple at first glance; however, it is anything but simple. The issue, entrepreneurship and low-income (LI) communities, needs to be put into perspective, and that is not simple. So, let us start with a simpler question: Does entrepreneurship impact communities in general, and, if so, how? Over the years, the literature has given three answers to this question—job creation, innovation, and economic growth—each having a literature, its supporters, and its detractors. From these debates, we have learned a lot. Let me make a simple statement: Over the years, we have learned that job creation takes place in firms of all sizes; in some industries, small firms have the innovative advantage; and new firm formation seems to lead to economic growth. While this statement can be debated, it seems to be a reasonable summary of my view of the past three decades.

So, let us now shift to our question about the role of entrepreneurship not in normal communities but in LI or poor communities. The first question that comes to mind is, What do we mean by an “LI” community? Do we mean a developing country, a poor rural community, or a pocket of poverty in a rich country? If we mean a poor country, what the country most likely needs are capital accumulation, education, and foreign investment. All of this would mean declining rates of self-employment. If by “LI” we mean

pockets of poverty in a rich country, then the immediate question is about who the entrepreneur will be. Are we interested in rich people being entrepreneurs in poor communities, or are we asking a question about the role of the poor, and would entrepreneurship help them? If we are interested in cities, then we have a lot of literature upon which to draw.

The literature from the past decade suggests that when poor people start businesses without the requisite skills, education, financial capital, and social contacts, in most cases, they fail. The causes of poverty in these communities go much deeper than what entrepreneurship might fix. Of course, there have been many programs that have tried to help the poor help themselves, and we will review some of these. This paper will develop a framework to help guide our thinking and organize the literature on the subject.

The next section develops a very simple two-by-two matrix to help guide our thinking by focusing on a supply-and-demand model of the economy for rich and poor communities. The model helps us understand what role supply of inputs and demand for products play in a community that is above average and one that is below. If rich communities have functioning markets, then, perhaps, poor communities do not have such markets. The third section examines what is needed to create functioning markets where none exist. The fourth section asks questions about who becomes an entrepreneur. Why do some work for wages and others try self-employment? The fifth section looks at evidence from a host of studies that have examined self-employment in both rich and poor communities, with an emphasis on the latter. If the evidence on entrepreneurship and poor communities is mixed, as I think it is, what role can entrepreneurship play, if any? Next, I examine the role of social entrepreneurship and its role in community building. I suggest that social entrepreneurship, with its emphasis on utility maximizing as opposed to profit maximizing, might play an important role in community building, where government has failed. Finally, the last section examines entrepreneurship policy as a tool for impacting poor communities.

Basic regional development theories

Regional development can be approached from the supply side and the demand side. The supply side views a region as having a competitive pool of inputs consisting of an educated workforce, financial capital, technological base, land, and natural resources, which attract new investments. Each region's mixture of unique characteristics determines the nature of its activities. In contrast, in the demand-driven model, the supply of inputs is taken as given: Perfectly elastic supply follows demand (Hoover, 1975).

The focal point of supply-side theories is the origin of these inputs and how they shape a region's supply. The supply-driven model starts from the primary supply of "labor, capital, imported inputs, and government services" (Hoover, 1975, p. 231). A "supply multiplier" effect occurs as an increase in output by a successful activity spurs on, through forward linkages, increases in other activities (Hoover, 1993, p. 231). Measures for increasing the availability of and improving the quality of inputs include educating and training the labor force, creating university-industry linkages, and removing the "barriers to occupational mobility and technological change" (Hoover, 1975, p. 242).

Demand theories explain regional development through a process where the external demand for a region's product gives rise to the demand for other products in the region (either inputs to the central product or nonbase products and services). The process is called "backward linkage" to exemplify that the explanation of regional development starts with defining "where the demand comes from" and continues with tracing its "impact through the regional economic system" (Hoover, 1975, p. 218).

In the economic base model, there are "basic" activities that lead and determine overall development and "nonbasic" activities that are "simply consequences" of the region's overall development. In order to understand a region's growth, the "location of basic activities" has to be explained, and then the process has to be "traced" to see which basic activities give rise to

the development of nonbasic activities. The economic base of a region is its exports. It cannot grow from within, or by “taking in its own washing” (Hoover, 1975, p. 219). A critique of this theory is that if the unit of analysis (the region) is taken to be a large, self-sufficient region that has internal trade flows, then it becomes clear that this internal trade and demand can generate growth.

Hoover (1975) notes that the demand- and supply-driven models are not conflicting theories or rival hypotheses, but, rather, they should be viewed as complements. Both theories treat the central factors of a region’s economic growth as exogenous factors—the demand for the region’s base product or the supply of its inputs.

Both the supply-side and demand-side theories implicitly assume that regions are characterized by strong social capital (Porter, 1998; Rubin, 1994) and a regulatory system that guarantees smooth functioning of markets (Deininger, 2003; Klein and Hadjimichael, 2003). These theories do not explain how poor and uneducated regions start to develop in the first place, but assume, instead, that either some competitive competencies or resources are present or a competitive base economy is present.

Could entrepreneurship explain how poor communities develop (complementing the supply-side theories)? Start with the assumption that entrepreneurship is always desirable in poor communities, even if entrepreneurs need continuing public support and consultancy, and most small and medium-size enterprises (SMEs) never grow big and pay lower wages than large plants. Table 1 represents supply- and demand-side approaches to development in affluent and LI communities. A growing body of literature now suggests that affluent communities rely on supply-side policies to grow and develop. In other words, entrepreneurship seems to play an important role in economic growth and development. These communities have high-quality human capital, adequate financial capital, and social capital (Acs and Armington, 2006; Acs and Plummer, 2005; Bresnahan and Gambardella, 2004; Florida, 2002; Acs and Varga, 2005; Acs and Storey, 2004).

Table 1

Community Theory	Affluent	LI
Supply	Quality human capital Financial capital Infrastructure Leadership	Low-quality human capital Limited financial capital Poor infrastructure Limited leadership
Demand	Strong export demand Backward linkages Tradeable goods	Weak export demand Weak backward linkages Few tradeable goods

On the other hand, the role of entrepreneurship as a successful community development tool in LI communities plagued by low-quality inputs is unclear. Bates (1993) suggests that when LI individuals start businesses without adequate capital, education, social contacts, and networks, they will fail in most cases.

Macro-level debates

The development of functioning markets is critical to the creation and viability of regional activity, particularly in developing countries (Deininger, 2003; Hallberg, 2000; Klein and Hadjimichael, 2003). Klein and Hadjimichael (2003) assert that “effective markets are the fastest and surest way to reduce poverty” and that “one of the key functions of the markets is to select people and firms who do well and provide incentives to change those who do not” (pp. 9-10). A strong private sector, one that contributes to development, is able to tap into an “entrepreneurial spirit through the profit motive while embedding that spirit in disciplines that can harness private initiative for socially useful purposes” (p. 4).

Institutional infrastructure can be a major factor in market creation. Well-crafted policies pertaining to property rights, regulation, ownership and competition, rules (for example, regarding monitoring, conflict resolution, and enforcement), taxation, and subsidies can be influential in achieving social goals in ways that do not impede market operation.

Inner cities, with their unique local market demand, integration with regional clusters, and human resources (there are myths about the inner-city labor force that do not hold), offer opportunities for inner-city-based entrepreneurs. Porter (1998) declares that efforts at fostering inner-city development have “tried to defy the laws of the marketplace” (p. 10). The competitiveness of localities is largely a function of the nature of the local business environment, which, in turn, influences the productivity of inputs. Access to labor, capital, and natural resources no longer determine prosperity because they are more widely available.

As to the role of government subsidies and support, Porter’s position is that the focus and qualifying criteria for current programs erodes their effectiveness. Businesses should be supported on the basis of economic need rather than on the basis of the race, ethnicity, or gender of their owners. The qualifying criteria should be location and number of employees. The private sector has the leading role in revitalizing inner cities. The focus should be on “creating economically viable businesses,” rather than on subsidies and special-preference programs (p. 396). This can be accomplished by establishing business relationships with inner-city companies, redirecting corporate philanthropy from social services to business-to-business efforts such as training programs and management assistance, and adopting the right model for equity capital investment. Abolishing self-inflicted regulatory costs also can increase the economic value of the inner city as a business location.

Hallberg (2000) agrees that SME competitiveness and growth is most importantly a function of the overall business environment, and argues that a good business environment is a necessary condition for the success of targeted assistance programs. The primary role of government is to “provide an enabling business environment that opens access to markets and reduces policy-induced biases against small firms” (p. 8). SME development strategy is, in fact, a “private-sector development strategy” (p. 8). The rationale for intervention in the SME sector is to address market and institutional failures that bias the size distribution of firms, not the existence of inherent economic benefits provided by small firms. By promoting product innovation and

delivery mechanisms and building institutional capacity, governments can hasten the development of markets that SMEs can access for services.

Even though Porter (1998) argues, first of all, in favor of creating a favorable market environment (through enabling regulation), there also shines through the importance of the “correct attitude” of the community. Porter sees the role of community-based organizations (CBOs) in working to change the workforce and community attitudes and to create work-readiness and job-referral systems. Then again, he also states that in trying to develop a community economically, one should not rely on local human resources if these are inferior to the “incomers.”

Rubin (1994) notes that CBOs are moving away from advocacy to focusing on providing physical assets such as housing. Porter would argue that this is the right strategy—profit-oriented businesses are more efficient in using public subsidies. Some supporters of community-based development fear that this shift in philosophy will deprive the whole community-based development endeavor away from its initial mission, which is community regeneration, empowerment, and participation. CBOs counter that “enabling individuals to grow through property ownership, skill development, and continued education, and encouraging them to participate in decisions to physically and socially repair the community, increases the assets of both individuals and the neighborhood. As communities become more economically viable, they are better places to live, and communities that are better places to live become more economically viable” (p. 410). CBOs should not only take efforts to have the houses built, but also remember that the entire process flows from and benefits the community.

Cluster formation, which generally is associated with social capital, is an “essential ingredient of economic development” as well (Porter, 1998, p. 8). Klein and Hadjimichael (2003), quoting Audretsch (2002) and Glaeser (1998), state that: “Functioning cities...are the best of all incubators or clusters, as they help firms, particularly small and medium-size ones, establish themselves, grow, and create employment” (p. 80).

Micro-level debates

Characteristics of an entrepreneur

To evaluate the role entrepreneurship may play in community revitalization, it is critical to understand that “the entrepreneurial process is a long-term, human-centered practice of innovation that transcends industrial, sectoral, race, sex, and class lines” (Friedman, 1986, p. 35). On a more individual level, entrepreneurs, according to psychologists, exhibit the need to achieve, a locus of control, propensity for risk-taking, tolerance of ambiguity, and type A behavior (Gladwin and others, 1989). Each segment of the population includes some proportion of entrepreneurs. The extent to which they will emerge depends upon the availability of cultural, financial, and educational support they receive. Adding support in any or all of these areas can increase the impacts of entrepreneurship (Friedman, 1986).

Bates (1993) echoes Friedman’s observations, noting, “The personal traits associated most strongly with entry into self-employment are wealth holdings, education, and age (a proxy for years of work experience)” (p. 255). The necessary traits serve as complements not substitutes for one another. Startup capital cannot overcome deficiencies in entrepreneurial skills and education, and loans to less-skilled individuals often do not get repaid. Business survival is determined by many of the same characteristics that influence the success of individual entrepreneurs. New managers of businesses with uncertain abilities learn as time goes by. If they revise their abilities upward, they likely will survive; if not, they likely will die out. Newer firms with lower sales volumes are more likely to fail, while efficient (more experienced) firms grow and survive (Jovanovic, 1982). Financial capital and educational attainment are correlated most strongly with business survival—similar to the entry into self-employment.

What motivates startups?

Human capital theory fails to explain the determinants of becoming an entrepreneur (skills, knowledge, education, experience, motivation, creativity) (Sherrard Sherrarden and others, 2004). Entrepreneurship is a function

of need, opportunity, and environmental conduciveness, and, more often than not, triggered by negative occurrences that may include the loss of a job or a spouse (Friedman, 1986). Some individuals find discrimination in the labor market to be motivating (Sherrard Sherrarden and others, 2004). For others, the decision to start a business is the result of more positive rationales, which include a sense of self-fulfillment and personal growth, autonomy, flexibility, and community service (Sherrard Sherrarden and others, 2004). There are also those who start new firms to “appropriate the expected value of their new ideas, or potential innovations, particularly under the entrepreneurial regime” (Audretsch, 2002, p. 26).

Innovative output is affected by city scale, as spillovers are assumed to occur with greater frequency in those regions where the direct knowledge-generating inputs are the greatest (Audretsch, 2002). Following the theory of knowledge spillovers, derived from the knowledge production function, the greatest clustering of innovative activity will occur in industries where tacit knowledge is important. Within the literature, the consensus view is that knowledge spillovers, within a given location, fuel technological advance, but there is little consensus as to the manner in which this occurs.

What are the obstacles to starting a firm?

Entrepreneurs generally are faced with a myriad of obstacles as they begin new businesses. The barriers to entry originate from a number of sources including individual characteristics, government policies, financing issues, and location. Potential entrepreneurs are those with the human and financial resources necessary to overcome the barriers to entry and those who are prone to respond to opportunities.

The lack of language or technical skills that prevents entry into white-collar employment—which may be preferable to self-employment—is also an obstacle to starting a small business (Bates, 1993). Poorly designed land market policies or inefficient regulation of land markets by large and often-corrupt bureaucracies affects startups of small enterprises (Deininger, 2003). Poor land policies limit access to land for the poor and landless. Other encumbrances to business formation come as a result of tax policies and

regulation, subsidy programs, and regulatory burdens (Klein and Hadjimichael, 2003; Organisation for Economic Co-operation and Development, OECD, 1997). Entry requires adequate access to capital, financing, infrastructure, markets, technology, and a skilled workforce (Friedman, 1986; Klein and Hadjimichael, 2003; OECD, 1997). The success of startups also is determined by surrounding business and physical environments. The rate at which new businesses are formed is greatly influential in determining the viability of further small business development in a particular area (Bates, 1993). Venture capital, while essential for financing startups, typically is not effective in LI communities undergoing industrial restructuring (Friedman, 1986). Furthermore, areas in which unpredictable justice, corruption, crime, and theft are commonplace tend to be poor climates for the successful creation of businesses (Klein and Hadjimichael, 2003).¹

Relative to urban areas, rural communities have a smaller customer base and may be less welcoming of outsiders (Gladwin and others, 1989). In addition to low sales potential, these rural communities also may be constrained by perceived low returns, a lack of knowledge and previous management experience, unwillingness to work hard during the startup phase, a lack of capital and credit, and a lack of social acceptability and contacts.

Barriers to exit, including rigid labor market regulations, hard budget constraints, and stigma associated with business failure, also may present obstacles to entrepreneurship (Klein and Hadjimichael, 2003).

Empirical research

Trends in entrepreneurship and poverty: Appalachia

Appalachia, a 200,000-square-mile region stretching from New York to Mississippi along the Appalachian mountain range, encompasses the entirety of West Virginia and parts of 12 other states (Appalachian Regional Commission, 2006). Historically, it has been substantially reliant on heavy industry and natural resource extraction while being plagued by poverty.

Certain portions of this region have prospered, while many have continued to underperform.² In 1990, poverty rates were highest in central Appalachia, followed by the southern and northern segments. Counties engaged primarily in farming, mining, and government traditionally have exhibited the high poverty rates. More recently, farming counties have experienced a 10 percent greater reduction in the fraction of households in poverty than have mining counties. This is reflective of a national trend of reduced mining employment as capital intensity increases and a broadening economic base in farming counties. Among counties that were more distressed in 1990, poverty rates have declined more than for those closer to the U.S. average in their level of development, implying that the level of economic development is becoming more equal in the region. At the county level, particularly in distressed and mining areas, a substitution in labor force participation between men and women has been significant.

Between 1990 and 2000, the unemployment rate of men in Appalachia on the whole decreased more than for the entire United States. The decrease was particularly noticeable among white men in Appalachia relative to white men in the United States. The large decline for white men drove a decrease in unemployment in the region's distressed areas. While these figures are encouraging, the same improvement has not been observed for all racial and ethnic groups.

In the 10 years between 1990 and 2000, the economy has grown much faster, while income inequality appears to have grown more slowly in Appalachia than for the nation. However, median family income and labor force participation in Appalachia remains lower than U.S. averages, while poverty rates are higher. Per capita payments from the Food Stamp Program and Supplemental Security Income per county in Appalachia were higher than in the whole of the country in 1990. These figures are reflective of higher rates of poverty and disability in the region.

Despite some of the trying economic conditions present in the Appalachian Region, businesses are created, residents are employed, and wages are generated.³ While these activities typically occur on a smaller scale

than found at the national level, a more focused approach is necessary to best illustrate the nature of business development in Appalachia. It is true that establishment birth rates are lower in Appalachia than in the United States as a whole, but, at the same time, establishment death rates are lower. Between 1982 and 1997, increases in manufacturing establishments were 10 percent greater in Appalachia than in the United States overall. In Appalachia, births and deaths of nondurable goods producers are lower, births of durable goods producers are higher, and deaths of durable goods producers are lower than observed across the nation. It is not surprising that job creation rates are 1.2 percentage points lower in Appalachia relative to the rest of the United States. What is interesting is that Appalachian job destruction rates are 3.4 percentage points lower than overall U.S. job destruction rates. While these figures may lead to the belief that Appalachia is performing quite well, it is important to note that, in general, new businesses in the region are relatively less productive and offer lower wages. In fact, the average Appalachian worker makes 10 percent less than their average American counterpart. Additionally, while Appalachia has done well in retaining existing firms, most of which are in non-value-added retail and service sectors, it suffers from low levels of entrepreneurship and low growth among firms, and continues to be heavily reliant on branch facilities (Brandow Company, Inc., 2001).

To this point, we have scrutinized the whole of Appalachia against the entire country. Given its size and varying cultural makeup, a more in-depth look into variation among its subregions is needed. In 1982, all three subregions were dominated by manufacturing, but by 1997, the central and northern subregions became dominated by the service sector. Despite the shift in industry dominance, the southern subregion continues to fare best. Establishment size is relatively consistent across areas, although it is largest in the southern subregion. The southern subregion enjoyed the highest establishment birth rate, followed by the central and northern subregions. Employees in the central subregion have wages about 20 percent below the rest of the United States, while the gap for those in the northern and southern areas is only about 10 percent. In summary, the southern subregion appears to be in the best health of all the Appalachian subregions, at least in terms of the measures discussed.

Regional technology industries lag considerably in most retained-firm vitality measures, and the largest firms in this sector are likely in a lagging competitive position, as suggested by their lower-than-average sales-per-employee rates (Brandow Company, Inc., 2001). On a more positive note, startups in the region during a recent five-year period tended to survive at a slightly higher rate than the U.S. average and tended to add jobs at a favorable pace. However, a tendency among startups to grow jobs without being able to sustain them is likely, given that job loss from failed startups was greater than observed in the nation, and that the sales vitality of remaining firms was low. These insufficiencies underscore the region's poor entrepreneurial performance.

Upon examination of more targeted indicators, two things become apparent: 1) The Appalachian Region is quite heterogeneous, and 2) in certain aspects, such as southern subregion job creation, the Appalachian Region is comparable to the whole United States, however, it still lags behind the rest of the United States on the whole (Foster, 2003; Jensen, 1998). After reaching a similar conclusion, Jensen (1998) notes the need for "continuous public and private investment in job training, reemployment, and employment services."

There are lessons to learn from Appalachia, which traditionally has been thought of as weaker, on many levels, than the rest of the country (Brandow Company, Inc., 2001). Business retention does not necessarily translate into robust growth and vitality. Broad-ranging retention outreach programs detract from potentially more-beneficial activities, including specific assessments of the needs of and service delivery to core local industry clusters, high-vitality industries, and high-growth firms that potentially better the area in which they are located. The lag in entrepreneurial activity in Appalachia is clearly the "weakest link" (p. 30). Appalachia technology is not an oxymoron. Rather, targeted assistance is needed for the region to catch up. Branch facilities create entrepreneurial opportunities, which should be exploited; potential synergies with startups should be explored.

Trends in urban entrepreneurship and poverty

A major shift has occurred in the industrial makeup of cities. The service sector now dominates where manufacturing once did. While all cities have

a core service industry, the largest cities have a disproportionate concentration of financial and advanced corporate services, whereas smaller cities are subject to a greater concentration of manufacturing (Sassen, 1990). Sassen reports a finding of clear association between the size of the region and its functional specialization. Twelve of 16 large (more than 2 million people), metropolitan statistical areas, or MSAs had both a high concentration of production and exported producer and distribution services related to banking, insurance, real estate, business, and the law. The concentration of manufacturing industries was highest among smaller MSAs (less than 1 million people). In short, advanced services have concentrated massively into large cities, and the emergence of the producer service sector does not necessarily “lift the boat” of the poor in these cities (Sassen, 1990).

Trends in entrepreneurship and poverty: Role of policy

Public officials have some power to influence business location and relocation decisions. Infrastructure, education, tax, and expenditure policies potentially play a role, albeit to varying degrees (Fox and Murray, 1990). Large firms tend to be less sensitive to certain policy factors than smaller firms. Corporations looking to establish or relocate branch facilities place greater value on profitability, while local startups, which are typically smaller, emphasize amenities. Overall, the most influential policy-amenable factors appear to be the presence of an interstate highway, railroad infrastructure, and the educational attainment level of an area’s workforce.

How effective have SMEs been in creating jobs, generating economic growth, and initiating innovation?

A key variable in the firm formation rate is the educational attainment of the labor force. Although the actual knowledge acquired with a college degree seldom suffices as the basis for a successful new business, the analytical methods learned in college facilitate both future acquisition of knowledge and openness to new ideas received as spillovers from other activities in the area.

Glaeser and others (1995) find that for a cross-section of cities, a key economic determinant of growth is the level of schooling, just as had been found previously for countries. This suggests that higher education levels influence later growth, not through increased savings, but by promoting higher rates of growth of technology through spillovers. More specifically, Acs and Armington (2004a) find a positive impact of higher proportions of adults with college degrees on rates of new firm formation. But this positive effect of educational attainment was limited to the share of adults with college degrees. Although the high school graduate share is correlated strongly with the formation rate, after allowing for the effect of differences in the local share of college graduates, the additional impact of higher shares of high school graduates is negative. In other words, higher shares of high school dropouts were associated with higher rates of new firm formation, assuming similar shares of college graduation. This effect may be explained partially by the function of high school dropouts in supplying cheap labor to both old and new businesses. The high school dropout rate also may be interacting in a complex way with unemployment, with which it is correlated fairly strongly—regions with higher shares of high school dropouts tend to have higher unemployment rates also. While the unemployment rate generally is not related significantly to firm formation rates, when educational attainment measures are excluded, the local unemployment rate becomes significantly positive. This suggests that a substantial portion of new businesses is formed out of necessity, when workers are not able to find attractive alternatives in positions as employees.

Since the mid-1980s, the role of education and human capital externalities has been recognized as a key variable in theories of economic growth. Lucas (1988) emphasizes that the economies of metropolitan areas are a natural context in which to understand the mechanics of economic growth, and an important factor contributing to this growth is the catalytic role of human capital externalities within the cities. While the benefits of human capital to individuals have been studied extensively, economists now are realizing that individuals do not capture all of the benefits from their own human capital. Some benefits spill over to their colleagues and

observers—through discussion; example; publications; and even more positive attitudes toward change, risk, and new knowledge (Acs and Armington, 2004b). Acs and Armington (2004a) empirically investigate how new firm formation rates for various subsectors of service industries are influenced by human capital differences in 394 labor market areas, while controlling for other regional characteristics that also are likely to affect firm formation rates. They conclude that the extent of human capital already in a region has a significant effect on the new service firm formation rate.

The service firm formation rate is even more sensitive to how concentrated with similar businesses (establishments per thousand people) the local area already is. The greater the concentration, the more probable relevant knowledge spillovers are, and the more likely the resulting new ideas will lead to new firm formations (Acs and Armington, 2004a). New knowledge in the form of products, processes, and organizations leads to opportunities that can be exploited commercially. However, converting new ideas into economic growth requires turning new knowledge into economic knowledge that constitutes a commercial opportunity. Acs and Plummer (2005) develop a model that introduces a “knowledge filter” between new knowledge and economic knowledge and identifies both new ventures and incumbent firms as the mechanism that reduces the knowledge filter and increases regional growth. They test the hypotheses that new venture creation is a better mechanism than the absorptive capacity of incumbent firms for converting new knowledge into economic knowledge. The results support the contention that new venture creation is a superior method of penetrating the regional “knowledge filter” than incumbent firms. Simon and Nardinelli (2002) come to similar conclusions based on historical evidence that cities in the United States and the United Kingdom with more-knowledgeable people grow faster in the long run because knowledge spillovers are geographically limited to the city, and knowledge is more productive in the city within which it is acquired.

A growing body of literature suggests that variations across countries in entrepreneurial activity and the spatial structure of economies potentially could be the source of different efficiencies in knowledge spillovers and, ultimately, in economic growth. The empirical model used by Acs and

Varga (2005) attempts to examine this by endogenizing both entrepreneurial activity and agglomeration effects on knowledge spillovers within a Romerian framework. The model is tested using the Global Entrepreneurship Monitor cross-national data to measure the level of entrepreneurship in each particular economy. After controlling for the stock of knowledge and research and development (R&D) expenditures, the authors find that both entrepreneurial activity and agglomeration have a positive and statistically significant effect on technological change in the European Union.

To adequately explain how growth occurs, the transmission mechanism from human capital to growth must be identified. Acs and Armington (2004b) find that if the new firm formation rate increases by one standard deviation, from 3.5 per thousand (labor force) to 4.5 per thousand, the employment growth rate will increase by one-half standard deviation, from 2.1 percent to 2.85 percent. This holds for all years examined and for all sectors of the economy. The only exception is the manufacturing sector, where new plants are more important than new firms. Additionally, Acs and Armington find that if the high school graduation rate increased by one standard deviation, from 72 percent to 80 percent, economic growth would increase from 2.1 percent to 2.85 percent. The evidence also suggests that raising the overall level of education (high school graduation) has a greater impact on economic growth than raising the level of the best educated. The results indicate that if the business specialization rate increased by one standard deviation, from 2.2 establishments per 1,000 in the population to 2.6 establishments per 1,000 in the population, the employment growth rate would decline by 0.75 percent. Finally, Acs and Armington note that more crowding and density also is associated with less, not more, growth.

So, what function do entrepreneurs perform that will help enhance economic development? The answer is that the role of the entrepreneur is to recognize an opportunity to use resources which are yielding a low return and shift them into a function which yields a higher return from which they personally gain. Entrepreneurs seek out these opportunities for personal gain and, in so doing, ensure that resources are being constantly reallocated in a manner which improves efficiency. In the absence of entrepreneurs, resources continue to be devoted to functions where returns are low, leading

to an ossified economy in which resources are underutilized. It was the difficulties of redeploying resources to higher-value functions which lay at the heart of the Soviet economic malaise (Acs and Storey, 2004). Acs and Storey state: “The clearest example of an entrepreneurial act which can lead to resource transfer is the creation of a new firm that offers a product or service that was not previously available. The new firm founder assembles resources to provide the product/service and offers this to customers. Where this is an entirely new product, it may not explicitly displace an existing product or service.”

Entrepreneurs, however, do not always have perfect knowledge. They may observe what they believe to be an opportunity, but, either because of over-optimism and/or poor judgment, their idea proves nonviable in the short, medium, or long term. In this case, they may have entered the market and displaced an existing business, but then failed to satisfy its customers. In this case, the entrepreneurship is referred to as “destructive,” yet, even so, may have positive benefits. For example, other entrepreneurs may observe the actions of this unsuccessful entrepreneur. Some may take it as a signal to avoid such activities, providing valuable discouragement to others considering replicating the venture. Others, however, may observe aspects of the failed venture and decide they can make changes which would improve the chances of this venture being a success where others have failed. Finally, the entrepreneur who started the business may learn from this experience in a subsequent business (Acs and Storey, 2004).

But entrepreneurship is also more than new venture creation. If we define “entrepreneurship” as a factor of production, it means that output is enhanced not only by increased quantities of labor, capital, and knowledge, but also by how entrepreneurship improves the allocation of these factors throughout the economy (Acs and Storey, 2004).

While the potential enhancements entrepreneurship may offer an area are considerable, the fact remains that entrepreneurial activity varies greatly across and within countries, and disagreements exist as to whether clustering occurs because of intrinsic advantages or historical accidents (OECD, 1997). In the United States, two of the most well-known clusters have

occurred in “Third Italy” and the Silicon Valley (OECD, 1997). In South Korea, SMEs have played a significant role in major transformations within the economy, especially with regard to exports, foreign investment, and productivity performance (Nugent and Yhee, 2002). While particular regions in the United States and South Korea have benefited greatly from increased levels of entrepreneurship, it is important to note that others have not experienced comparable advantages.

Klein and Hadjimichael (2003) suggest providing nondependent, one-time services and basic education and marrying intervention with community development efforts is a better method for aiding SME success. Of course, whether or not certain regions should invest in aiding SME success is a significant point of contention. The provision of agricultural extension services has proved to be a disappointing experience, similar to the disappointment felt in providing support services for nonfarm SMEs in rural and urban areas alike. Ignoring the problems with providing assistance, the actual benefits, or lack thereof, gained by the presence of small/micro businesses, in impoverished communities in particular, must be considered.

Microenterprise has not proven itself to be a particularly successful weapon against poverty. The majority of microentrepreneurs studied who were LI prior to startup remained LI (Sherrard Sherrarden and others, 2004). While microenterprise has not been shown to increase incomes, it does provide enrichment in other manners. In the manufacturing sector, no association between the increase of incomes in the lowest income quintile and SMEs was observed, nor was a link made between the importance of SMEs and the “depth and breadth of poverty” (Beck and Demirgüç-Kunt, 2004). SMEs offer less job security, lower wages, fewer fringe benefits, worse working conditions, and less skill enhancement opportunities than large firms (Hallberg, 2000). Rural retail and service businesses have been found to contribute only modestly to local employment, income, and the tax base (Gladwin and others, 1989). Gladwin and others suggest that to achieve economic growth in rural areas, efforts should be targeted to industries and manufacturers that produce goods and services for export.

In Kenya, providing development assistance to indigenous community organizations of the disadvantaged led to increased turnover among the community members, emergence of young and more-educated leaders, and increased entries into groups (Gugerty and Kremer, 2000). While this may appear a positive change at first glance, it likely led to reduced appeal to outside funders who appreciated the former characteristics of the organizations.

Research focused on examining private enterprise training patterns and effects in Colombia, Indonesia, Malaysia, Taiwan, and Mexico found that large firms employing an educated and skilled workforce, investing in R&D and technology licenses, emphasizing quality control methods that have foreign capital participation, and exporting to foreign markets are more likely to train their employees (Batra and Tan, 1995). Manufacturing and small/micro firms tended not to offer formal, structured training or informal on-the-job training. This is of great concern, as firm-level productivity was found to be affected positively by the formal training of skilled workers. The training of unskilled workers, however, appeared to have no effect on productivity. Hallberg (2000) finds the empirical evidence for a causal link between SMEs and poverty alleviation to be very mixed, but notes that “encouraging their emergence in LI countries is warranted because of their share of employment—‘being there’ is a sufficient justification” (p. 2).

Social entrepreneurship

One conclusion of this literature survey is that entrepreneurship may not play an important role in poor communities. The reason is that the community does not have the prerequisite human capital, networks, social capital, finance, and other required supply inputs needed for successful entrepreneurship. Human capital building has to precede entrepreneurship. Poor communities do not have the government funding to supply these inputs, and, therefore, it would seem as though entrepreneurship does not and will not play an important role. When government fails to provide the prerequisite educational, community, and social inputs needed for successful entrepreneurship, we find that social entrepreneurship may play an important role in these communities.

What is social entrepreneurship?

“Social entrepreneurship” has a variety of definitions. According to Johnson (2000), the common trait of all the definitions is “the ‘problem-solving nature’ of social entrepreneurship” along with the “corresponding emphasis on developing and implementing initiatives that produce measurable results in the form of changed social outcomes and/or impacts” (p. 5). Referring to Thompson and others (2000), Johnson also admits that the skills of a social entrepreneur are “fairly replicable” if “‘social entrepreneurship’ is defined as ‘principally bringing business and management skills to the nonprofit sector’” (p. 11). However, “if a ‘social entrepreneur’ is defined as an ‘exceptionally creative and innovative individual,’ replication will be much more difficult to achieve, and the focus, then, should be on creating conditions in which latent entrepreneurial talent can be harnessed for social purposes” (p. 11).

Cannon (2000) identifies social entrepreneurs as: (1) individuals who have made a lot of money elsewhere and now want to “give back” to further social goals; (2) “recovering social workers” looking for more-effective approaches than offered by the system from which they came; and (3) a new breed of business school graduate with a social enterprise in mind (Johnson, 2000, p. 12). Combining attributes that various authors (Say, Schumpeter, Drucker, Stevenson) have associated with entrepreneurship, Dees (2001) gives a clearly idealistic definition of a social entrepreneur. He states that social entrepreneurs are the agents of change while: “(1) adopting a mission to create and sustain social value (not just private value); (2) recognizing and relentlessly pursuing new opportunities to serve that mission; (3) engaging in a process of continuous innovation, adaptation, and learning; (4) acting boldly without being limited by resources currently in hand; and (5) exhibiting heightened accountability to the constituencies served and for the outcomes created” (p. 4). Put somewhat more simply, social entrepreneurship is when an individual who has the prerequisite skills to pursue for-profit entrepreneurship chooses to maximize his or her utility instead of profits.

Whatever the definition of “social entrepreneurship” may be, the impacts of activities that fit within its range are becoming more noticeable. In a time when the gap between the affluent and poor is widening, social entrepreneurship is emerging as an innovative approach for dealing with complex social needs and has surfaced in the background of the move away from the “social welfare state approach” toward the approach of market-based distribution of wealth (Johnson, 2000, p. 2). Traditionally, the nonprofit sector has been the provider of publicly or charity-funded social services. However, whereas the number of nonprofit organizations has increased, the flow of finances to them has decreased (Johnson, 2000, p. 3). Nonprofit organizations increasingly have had to align themselves toward market-like principles of action. New donors, from diverse backgrounds, are rethinking the principles of giving, stressing real outcomes in place of donor satisfaction (Johnson, 2000).

How do social entrepreneurs operate?

Entrepreneurs are drawn in by “attractive” opportunities. Gucly and others (2002) state, “For social entrepreneurs, an ‘attractive’ opportunity is one that has sufficient potential for positive social impact to justify the investment of time, energy, and money required to pursue it seriously.”

In determining whether a promising idea is worthy of their investment, social entrepreneurs must be able to articulate a compelling social impact theory and a plausible business model (Gucly and others, 2002). Designing an effective operating model and crafting a viable resource strategy are central to framing a plausible business model and hinge upon credible assumptions about the intended operating environment. “Finally, the requirements of the venture must fit the commitment, qualifications, and life stage of the entrepreneur considering it,” say Gucly and others (p. 14). “When all these elements are feasible and aligned, the chances for success are relatively high, and those involved can make a more-informed estimate of the potential for social impact.”

The role of social entrepreneurship

Traditional sector boundaries are breaking down as societies search for more innovative, cost-effective, and sustainable ways to solve social problems and

provide socially important goods, such as education and health care (Dees and Anderson, 2002). Communities adversely affected by economic decline likely need both economic and social regeneration (Thompson and others, 2000). “Social entrepreneurship needs champions who understand which initiatives are most appropriate, feasible, and desirable and who can bring out the latent enterprise in others,” say Thompson and others (p. 328). These individuals must recognize that there is an opportunity to satisfy some unmet need that the state welfare system will not or cannot meet, and those who are able to gather the necessary resources need to use them effectively toward the goal of “making a difference” (p. 328). Development of new social capital (community-based tangible and intangible assets that otherwise would not exist) will help empower disadvantaged people and encourage them to take greater responsibility for, and control over, their lives.

Promoting social entrepreneurship

“If we assume that promoting an entrepreneurial culture is a desirable means of achieving our end (social and economic development), then we must clearly define what elements, behaviors, traits, and characteristics we want to encourage and value,” states Davis (2002, p. 6). Davis proposes five steps to foster entrepreneurial culture. These include rethinking the architecture of work (with emphasis on fair competition, equal access, and fair pay); changing the direction of macroeconomic policies from fighting inflation and protecting the investors to promoting decent work and employment-intensive growth; removing government-created barriers to entrepreneurship; and ensuring access to credit without race-, gender-, or firm-size-based discrimination. Lastly, social entrepreneurship must be “promoted, cultivated, and valued as a profession” (p. 15). These steps do not seem to be very helpful for practical purposes, nor are they realistic. Davis goes on to stress the believed importance of youth development, particularly as it relates to promoting young entrepreneurs: “Education and employment policies should be developed in an integrated manner, as they have direct implications and impact each other. Youth employment and entrepreneurship policies are likely to be more effective if they are closely linked and integrated with educational policies, including the structure and content of school curricula, extracurricular activities, and after-school programs. Vocational needs of young people should be central” (p. 19).

A picture of social entrepreneurship

In 1998, the Open Society Institute (OSI), a private operating and grant-making foundation, launched the Baltimore initiative to address “critical national urban issues as they are expressed locally.”⁴ The initiative functions within “the limitations and opportunities created by local social, economic, and political conditions” and “builds on the commitment of Baltimore’s government and nonprofit community to employ innovative strategies and develop public-private partnerships to address the city’s problems.” Continuing interaction between the staff of the initiative and the community leaders is considered of ultimate importance.

The initiative targets problems in five interrelated areas: drug addiction treatment, criminal justice, workforce and economic development, education and youth development, and access to justice. Measures applied are grant awarding and convening of educational forums to learn about these five problem areas. The goal of the initiative is to bring together “a representative cross-section of the region” while addressing the problem areas, and “to help identify policies and practices that will enable all residents to participate fully in Baltimore’s economic, social, and political life.”

OSI goes on to say:

Confronting high levels of drug addiction, crime, and unemployment, Baltimore city government acknowledges its responsibility to combat poverty and discrimination and has welcomed joint public-private efforts, including contributions from OSI, to change harmful or ineffective policies and implement promising initiatives. In a city of 620,000, where half of the students in neighborhood schools drop out before graduation, 60,000 residents are said to be drug dependent, and 56 percent of the African-American men are involved in the criminal justice system, OSI-Baltimore recognized that small initiatives or model programs would have limited impact. Instead, it concentrated on building partnerships and engaging large bureaucratic systems in a deliberate process of change (2004, p. 163).

Local hospitals were engaged to start a collaborative program to “recruit, train, and advance LI city residents as skilled health care workers” (p. 163). Local hospitals also were engaged in supporting the expansion of the public drug addiction treatment system. The “Campaign for Treatment Not Incarceration” was undertaken to promote alternative solutions to drug addicts. Grants were awarded to encourage “public and private agencies to offer employment training services to people who were previously incarcerated to help them re-enter the community successfully” (p. 164).

In the education system, some large, ineffective public high schools have been replaced with small learning communities that have increased attendance rates. After-school partnerships have been initiated.

With the Soros Foundations Network’s initial \$50 million investment, OSI has been able to leverage more than \$225 million to address Baltimore’s most persistent challenges, including poverty, drug addiction, criminal and juvenile justice, and education (OSI, 2004). OSI claims that it not only has received a good return on its investment, but also has alleviated some of Baltimore’s most challenging problems. Among OSI’s stated accomplishments are raising Baltimore students’ test scores; doubling the number of drug-dependent residents receiving treatment; “dramatically” reducing individuals’ illegal income after they have been in drug treatment; publicizing abuses at juvenile justice centers, including abuses at a notorious center which subsequently was closed; expanding high-quality summer learning programs for LI students; securing \$25 million for after-school programs for 14,000 students; helping to establish six new, innovative high schools; breaking up large neighborhood high schools into smaller learning centers; and creating an urban debate league now operating in 26 high schools.

Policy issues

What is the policy framework for entrepreneurship?

Acs and Armington (2006) propose an American solution to the social feedback mechanism, one that is consistent with the early work of Schumpeter.

American capitalism differs from all other forms of industrial capitalism in its historical focus on both the creation of wealth (entrepreneurship) and the reconstitution of wealth (philanthropy). Philanthropy is part of the implicit social contract that continuously nurtures and revitalizes economic prosperity. Much of the new wealth created historically has been given back to the community to build up the great social institutions that have a *positive* feedback on future economic growth. This entrepreneurship-philanthropy nexus has not been explored fully by either economists or sociologists. The authors suggest that American philanthropists—especially those who have made their own fortunes—created foundations that, in turn, contributed to greater and more widespread economic prosperity through knowledge creation.

Lundström and Stevenson (2005) suggest focusing primarily on the occupational choice issue and the shift in emphasis from firms to people. Hart (2003) focuses in on the regional level, with a particular view toward regional growth and the role of universities. Holtz-Eakin and Rosen (2004) choose to examine three issues that are germane to an entrepreneurial society: the design of effective public venture capital programs; new firm formation and the deregulation of the banking industry; and the relationship among entrepreneurial activity, social mobility, and wealth inequality.

Which public policy measures have been applied, and how effective have they been?

Thus far, a plethora of measures have been applied by government entities to encourage business formation, despite the relatively limited theoretical guidance. Governments have tried supplying certain types of financing (for example, long-term credit); providing management and marketing advice to small businesses; assisting with the establishment of interfirm linkages and matchmaking programs between foreign and domestic traders and investors; supporting technology development through risk-sharing programs and cluster or incubator promotion; and supporting enterprise-level training (Klein and Hadjimichael, 2003). A “key question” posed by Klein and Hadjimichael is, “[Are] such programs being pursued because they systematically improve on market outcomes or because they are politically attractive programs that sometimes may even replace more meaningful reform?” (p. 73). Hallberg (2000, p. 5) echoes

this sentiment in saying, “In reality, the desire of governments to promote SMEs is often based on social and political considerations rather than on economic grounds.”

Deiningner (2003), Hallberg (2000), and Klein and Hadjimichael (2003) all conclude that public financial support programs to SMEs, generally, are not effective.⁵ Public institutions should not try to imitate market functioning mechanisms. Their strengths lie in the application of nonmarket solutions to problems resulting from market failure, and the possession of resources that the private sector cannot make available or may not be willing to provide. Public institutions should do only what they can do better than the private market.

The primary regional development policies used in attracting firms to disadvantaged regions are investment in infrastructure, social assistance, training, and other forms of public assistance (OECD, 1997). Programs to assist the creation and development of microenterprises in inner cities and remote rural areas also have become widespread policy tools (OECD, 1997). More specifically, programs instituted in OECD countries with the goal of encouraging microenterprise in inner cities and rural areas are based on the premise that these new ventures become the catalysts of further/future growth.

What are the preferred, efficient, and effective measures of intervention?

The OECD advises, “Governments wishing to adopt policies used successfully in other regions or countries should take the regional context into account” (1997, pp. 4-5). Bates (1993) warns that money will not overcome gaps in education and entrepreneurial skill. It is important to recognize that “debt capital and owner human capital endowments are complements in the small business world, not substitutes” (p. 258). Successful public loan programs target higher-income, better-educated owners that possess appropriate skills and experience, and who contribute their profits to investments that promote expansion and growth (Bates, 1993). Klein and Hadjimichael (2003) state: “The emerging consensus is that lasting subsidies are undesirable and that business development services should be market-oriented and privately provided. Private firms have

powerful incentives to seek out advice and to search for better partners. When the market selection mechanism works well, firms that find ways to obtain such services grow, and those that do not fail” (p. 82).

Bates suggests the following policy measures: preferential public procurement, tax incentives on capital gains, and high rates of immigration (educated, with financial assets). Klein and Hadjimichael suggest that subsidies should be a one-time support (such as for development of credit assessment skills, or for a management toolkit). After this initial input, “follow-up activity and discipline” should be left to be shaped by market forces (p. 82). The authors further assert, “Public intervention should focus on the enabling environment for firms, including basic market infrastructure such as credit bureaus, but should abstain from direct support to individual firms or intermediaries” (p. 82). Public policies should ensure that firms are provided with necessary infrastructure (telecommunications, transport, energy, water) and social services (health, education), in addition to establishing a sound business environment and adequate market infrastructure (Audretsch, 2002; Glaeser, 1998). Functioning cities, for example, are the best of all incubators or clusters, as they help firms, particularly small and medium-size ones, establish themselves, grow, and create employment (Audretsch, 2002; Glaeser, 1998).

Klein and Hadjimichael favor policy measures that support the creation of industry clusters that are relevant to or develop high technologies, as they potentially can be powerful drivers of growth. As for private-sector development and pro-poor policy design, Klein and Hadjimichael stress the importance of free market entry, noting that consumer satisfaction will decide business survival, and fear of failure will prevent businesses from upgrading their products and services. The poor need to be able to realize opportunity through provisions of basic education and a minimum level of social cohesion necessary. “The design of pro-poor policies is a case-by-case effort” (p. 128).

Recommendations from the OECD mirror those of the majority of studies on the issue of public intervention. The role of government should be oriented toward ensuring a supportive business environment for SME growth, and policies should be carried out by local authorities who are more

intimately aware of local conditions and needs (OECD, 1997). Additionally, the availability of financing, the business environment, the presence of technology, management capabilities, and access to markets (foreigner markets, public procurement) are the five conditions under which best policy practices are brought together. Policies targeted toward an increase in entrepreneurial activity are influenced by certain regional characteristics, so, while labor force skill improvement programs may be effective in urban and intermediate-size regions, they typically are ineffective in rural areas, where take-up rates are low. Conversely, firm creation policies are likely to be more effective in rural areas than urban or intermediate regions as a result of low dead weight and displacement effects (OECD, 1997).

Summary

It is worth restating our earlier question: Are we interested in LI communities or LI individuals? We know that when LI individuals try self-employment, they often fail. The evidence supports this. If we look at LI communities, the issue is a little more complicated. We saw that the issue in LI communities evolves around the lack of both demand- and supply-side issues. On the supply side, we saw that LI communities lack the inputs for successful economic development. On the demand side, they lack the demand for goods and services produced by the region. Therefore, in a region that lacks an economic base, the role of entrepreneurship may be limited as an economic development tool. It is useful to think of a poor community in a rich country as an example of government failure. By this we mean that the basic supply-side institutions—education, infrastructure, leadership, finance—are missing. Many of these are public goods. We also suggested that when the supply side of the model is “broken,” it might be beyond both the ability of the state and market to solve the problem. Here, philanthropy that is free from both political and market forces might be the appropriate institution to tackle the problem of economic development by rebuilding. Baltimore provides an interesting example of this type of social entrepreneurship.

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Endnotes

¹This issue is relevant particularly for developing countries.

²The present and succeeding two paragraphs are drawn largely from Black and Sanders (2004), unless otherwise indicated.

³The present and succeeding paragraphs are drawn largely from Foster (2003), unless otherwise indicated.

⁴Open Society Institute—Baltimore initiative Web page, *<http://www.soros.org/initiatives/baltimore>*.

⁵On the other hand, Audretsch (2002) concludes that the Small Business Investment Company program has been an effective tool for “growing” SMEs, particularly with respect to commercializing inventions. The OECD asserts that SMEs play a key role in pioneering and developing new markets (OECD, 1997).

References

- Acs, Z.J., and Armington. 2004a. "The Geographic Differences in New Firm Formation and Human Capital," *Journal of Urban Economics*, 56 (2), 244-329.
- _____. 2004b. "Employment Growth and Entrepreneurial Activity in Cities," *Regional Studies*, 38, 879-877.
- _____. 2006. *Entrepreneurship, Geography, and American Economic Growth*, Cambridge, Mass.: Cambridge University Press.
- Acs, Z.J., and Plummer. 2005. "Penetrating the 'Knowledge Filter' in Regional Economies," *Annals of Regional Science*, 38, 1-18.
- Acs, Z.J., and Storey. 2004. "Entrepreneurship and Economic Development," *Regional Studies*, 38, 871-877
- Acs, Z.J., and Varga. 2005. "Entrepreneurship, Agglomeration, and Technological Change," *Small Business Economics*, 24 (3), 323-334.
- Audretsch, D. 2002. "The Dynamic Role of Small Firms: Evidence from the U.S.," *Small Business Economics*, 18 (1-3): 13-40.
- Bates, T. 1993. "Theories of Entrepreneurship." In Bingham, R.D., and R. Mier, eds., *Theories of Local Economic Development: Perspectives from Across Disciplines*. Newbury Park, London, New Delhi: Sage, pp. 248-264.
- Batra, G., and H. Tan. 1995. *Enterprise Training in Developing Countries: Incidence, Productivity Effects, and Policy Implications*. Washington, D.C.: The World Bank.
- Beck, T., and A. Demirgüç-Kunt. 2004. *SMEs, Growth, and Poverty: Do Pro-SME Policies Work?* The World Bank. Public Policy for the Private Sector, Note No. 268. <http://rru.worldbank.org/Documents/PublicPolicyJournal/268-private.pdf>.
- Black, D.A., and S.G. Sanders. 2004. *Labor Market Performance, Poverty, and Income Inequality in Appalachia*. Appalachian Regional Commission. <http://www.arc.gov/index.do?nodeId=57>.
- Brandow Company, Inc. 2001. *Analysis of Business Formation, Survival, and Attrition Rates of New and Existing Firms and Related Job Flows in Appalachia*. Appalachian Regional Commission. <http://www.arc.gov/images/reports/bizform/analysis-final.pdf>.
- Bresnahan, T., and A. Gambardella. 2004. *Building High-Tech Clusters*, Cambridge, Mass.: Cambridge University Press.
- Davis, S. 2002. *Social Entrepreneurship: Towards an Entrepreneurial Culture for Social and Economic Development*. Ashoka: Innovators for the Public. <http://www.ashoka.com/global/yespaper.pdf>.

- Dees, J.G. 2001. *The Meaning of Social-Entrepreneurship*. Duke University, Center for the Advancement of Social Entrepreneurship. http://www.fuqua.duke.edu/centers/case/documents/dees_SE.pdf.
- Dees, J.G., and B.B. Anderson. 2002. "For Profit Social Ventures," *International Journal of Entrepreneurship Education*, vol. 2.
- Deininger, K. 2003. *Land Policies for Growth and Poverty Reduction*. The World Bank policy research report no. 26384 (June 30, 2003).
- Florida, R. 2002. *The Rise of the Creative Class*, New York: Basic Books.
- Foster, L. 2003. *The Appalachian Economy, Establishment, and Employment Dynamics, 1982-1997: Evidence from the Longitudinal Business Database*. Appalachian Regional Commission. http://www.arc.gov/images/reports/service/service_sector.pdf.
- Fox, W.F., and M.N. Murray. 1990. "Local Public Policies and Interregional Business Development," *Southern Economic Journal*, 57 (2): 413-427.
- Friedman, R.E. 1986. "Entrepreneurial Renewal in the Industrial City," *Annals of the American Academy of Political and Social Science*, 488: 35-46.
- Gladwin, C.H., and others. 1989. "Rural Entrepreneurship: One Key to Rural Revitalization," *American Journal of Agricultural Economics*, 71 (5): 1305-1314.
- Glaeser, E.L., H.D. Kallal, J.A. Scheinkman, and A. Shleifer. 1992. "Growth in Cities," *Journal of Political Economy*, 100: 1126-1152.
- Glaeser, E.L., J.A. Scheinkman, and A. Shleifer. 1995. "Economic Growth in a Cross-Section of Cities," *Journal of Monetary Economics*, 36: 117-143.
- Gucly, A., J.G. Dees, and B.B. Anderson. 2002. *The Process of Social Entrepreneurship: Creating Opportunities Worthy of Serious Pursuit*. Center for the Advancement of Social Entrepreneurship. http://www.fuqua.duke.edu/centers/case/documents/SEProcess-Draft_FINAL.pdf.
- Gugerty, M.K., and M. Kremer. 2000. *Outside Funding of Community Organizations: Benefiting or Displacing the Poor?* National Bureau of Economic Research Working Paper No. 7896. Cambridge, Mass.
- Hallberg, K. 2000. *A Market-Oriented Strategy for Small and Medium-Scale Enterprises*. Discussion Paper No 40. The World Bank—International Finance Corporation, Washington, D.C.
- Hart, D., ed. 2003. *The Emergence of Entrepreneurship Policy*, Cambridge, Mass.: Cambridge University Press.
- Higgins, B., and D.J. Savoie. 1995. *Regional Development Theories and Their Application*. New Brunswick, N.J.: Transaction Publishers.

- Holtz-Eakin, D., and H.S. Rosen, eds. 2004. *Public Policy and the Economics of Entrepreneurship*. Cambridge, Mass.: MIT Press.
- Hoover, E. 1975. "How Regions Develop," *An Introduction to Regional Economics*, 2nd ed., Alfred A. Knopff, pp. 207-244.
- Jack Faucet Associates and Economic Development Research Group. 2004. *Analysis of Global Competitiveness of Selected Industries and Clusters in the Appalachian Region*. Appalachian Regional Commission. <http://www.arc.gov/index.do?nodeId=57>.
- Jensen, J.B. 1998. *Birth and Death of Manufacturing Plants and Restructuring in Appalachia's Industrial Economy, 1963-1992: Evidence from the Longitudinal Research Database*. Appalachian Regional Commission. <http://www.arc.gov/images/reports/manufacturing/manufact.pdf>.
- Johnson, S. 2000. *Literature Review on Social Entrepreneurship*. Canadian Centre for Social Entrepreneurship. <http://www.bus.ualberta.ca/ccse/Publications/>.
- Kindleberger, C. 1965. *Economic Development*, 2nd ed., McGraw-Hill.
- Klein, M.U., and B. Hadjimichael. 2003. *The Private Sector in Development: Entrepreneurship, Regulation, and Competitive Disciplines*. Washington, D.C.: The World Bank. Also available online at http://www.wds.worldbank.org/servert/WDSContentServer/WDSP/IB/2003/07/26/000094946_03071204032945/Rendered/PDF/multi0page.pdf.
- Lucas, R.E. 1988. "On the Mechanics of Economic Development," *Journal of Monetary Economics*, 22: 3-42.
- Lundström, A., and L. Stevenson. 2005. *Entrepreneurship Policy: Theory and Practice*, Boston: Kluwer Academic Publishers.
- Nelson, A. 1993. "Theories of Regional Development." In R. Bingham and R. Mier, eds., *Theories of Local Economic Development*, Sage, pp. 27-79.
- Nugent, J.B., and S.-J. Yhee. 2002. "Small and Medium Enterprises in Korea: Achievements, Constraints, and Policy Issues," *Small Business Economics*, 18 (1-3): 85-119.
- Open Society Institute. 2004. *Soros Foundations Network Report 2004: Building Open Societies*. http://www.soros.org/resources/articles_publications/publications/ar2004_20050718.
- Open Society Institute—Baltimore initiative Web page. <http://www.soros.org/initiatives/baltimore>.
- Organisation for Economic Co-operation and Development. 1997. *Small Businesses, Job Creation, and Growth: Facts, Obstacles, and Best Practices*. Paris. Also available online at <http://www.oecd.org/dataoecd/10/59/2090740.pdf>.

- Porter, M.E. 1998. "The Competitive Advantage of Inner City." In M.E. Porter, *On Competition*. Boston: Harvard Business School Publishing, pp. 377-408.
- Rubin, H. 1994. "There Aren't Going to Be Any Bakeries Here If There Is No Money to Afford Jellyrolls: The Organic Theory of Community-Based Development," *Social Problems*, 41 (3): 401-424.
- Sassen, S. 1990. "Economic Restructuring and the American City," *Annual Review of Sociology*, 16: 465-490.
- Sherrard Sherrarden, M., C.K. Sanders, and M. Sherrarden. 2004. *Kitchen Capitalism: Microenterprise in Low-Income Households*. Albany, N.Y.: SUNY Press.
- Simon, C., and C. Nardinelli. 2002. "Human Capital and the Rise of American Cities, 1900-1990," *Regional Science and Urban Economics*, 32: 59-96.
- Smith, W. 2000. "Regulating Infrastructure for the Poor: Perspectives on Regulatory System Design." Paper presented at the International Conference on Infrastructure for Development: Private Solutions and the Poor, London, May 31-June 2. <http://www.ppiaf.org/conference/section2-paper3.pdf>.
- Thompson, J., G. Alvy, and A. Lees. 2000. "Social Entrepreneurship—A New Look at the People and the Potential," *Management Decision*, vol. 38, No. 5, pp. 328-338. <http://www.emeraldinsight.com/Insight/viewPDF.jsp?Filename=html/Output/Published/EmeraldFullTextArticle/Pdf/0010380503.pdf>.