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WEALTH, ENTREPRENEURSHIP, AND RURAL LIVELIHOODS

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The current attention of policy makers at federal and state levels is laser-focused on job creation—as New York Governor Cuomo said in a December 6, 2011 speech, "it's all about jobs, jobs, jobs." Entrepreneurship—the start up and growth of new companies—is viewed as a means toward this end and recent research supports this connection (Stangler and Kedrosky, 2010). Both policy makers and economic development practitioners want to understand how to encourage entrepreneurial start ups, particularly in rural areas. This understanding is linked, in part, to consideration of how investments in rural wealth, broadly defined, may drive entrepreneurship and improved livelihoods. Understanding the relationship between wealth, entrepreneurship and improved rural livelihoods will help focus policy attention on the most appropriate drivers of entrepreneurship.

This article begins by defining entrepreneurship and highlighting some important urban/rural differences in entrepreneurship rates. It then offers a synthesis of key findings from the literature suggesting the impact of wealth on entrepreneurship rates in general and in rural areas. Next, it makes the connection between entrepreneurship and improved rural livelihoods, defined not only in terms of job creation but also in terms of generating wealth over time. The concluding section identifies a set of research questions that need to be addressed to fully understand the relationship between wealth, entrepreneurship and rural livelihoods.

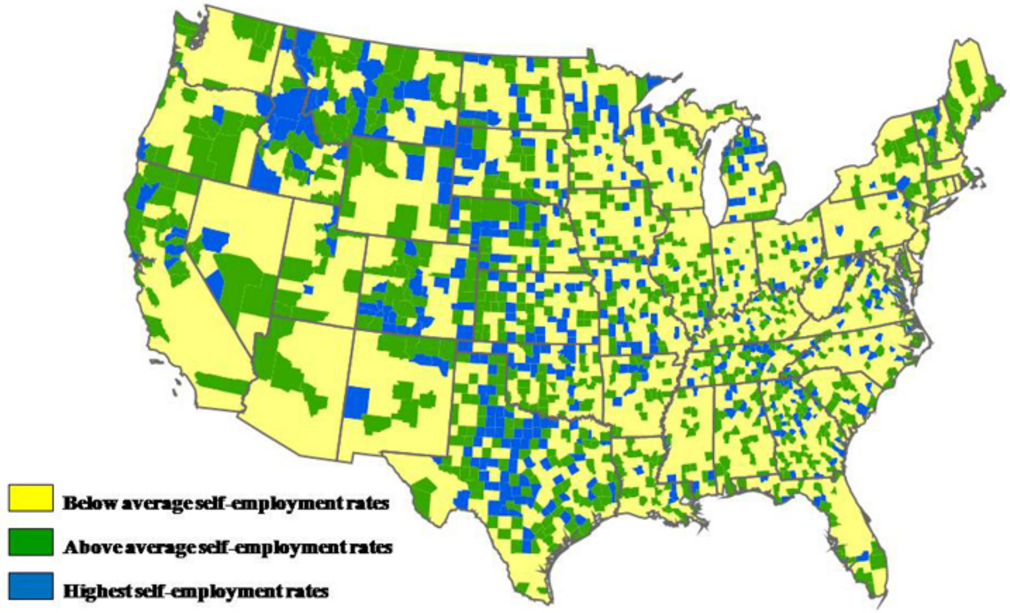
Entrepreneurship Defined

The definition and measurement of entrepreneurship is the subject of much discussion, as are the characteristics associated with entrepreneurs (Bull and Willard, 1993; Goetz, Partridge, Deller, and Fleming, 2010). According to Goetz, et al. (2010, p. 31), "conventional data sets only allow an approximation, forcing analysts to use indirect measures thought to be associated with entrepreneurship." While not ideal, the self-employment and employer establishment birth rates are widely used metrics because data are readily available. Neither measure adequately captures the presence or absence of entrepreneurial characteristics in the firm owner such as innovation, creativity, and opportunity seeking behavior. However, these measures do reflect two important types of entrepreneurs—those who pursue self-employment—as a means of earning an income and/or pursuing an opportunity—and those who start a business that employs others, often equated with growth entrepreneurs. Since both types of entrepreneurs play a role in the rural economy, these two measures permit an examination of urban/rural differences in entrepreneurship rates and provide insights into the connection between rural wealth and entrepreneurship.

Data show important differences in the type of entrepreneurship in rural vs. urban areas. The self-employment rate is highest in nonmetropolitan counties. This variation could reflect the realities of industry mix—barriers to firm entry may be greater in higher tech or more capital intensive companies located in urban places. It may also reflect necessity entrepreneurship, or individuals starting businesses because they have no other economic alternatives. These enterprises may be marginal in terms of opportunities for future growth but provide important income supplementation. This assumption is supported by the fact that the self-employed in metropolitan counties generate higher incomes and create more value-added, in the aggregate (Low, Henderson, and Weiler, 2005). Conversely, the employer establishment birth rate is highest in metro counties and lowest in the most rural counties. An important research question would be to test whether opportunities, resources and/or motivation to move from self-employment to employing others may be more limited in rural areas.

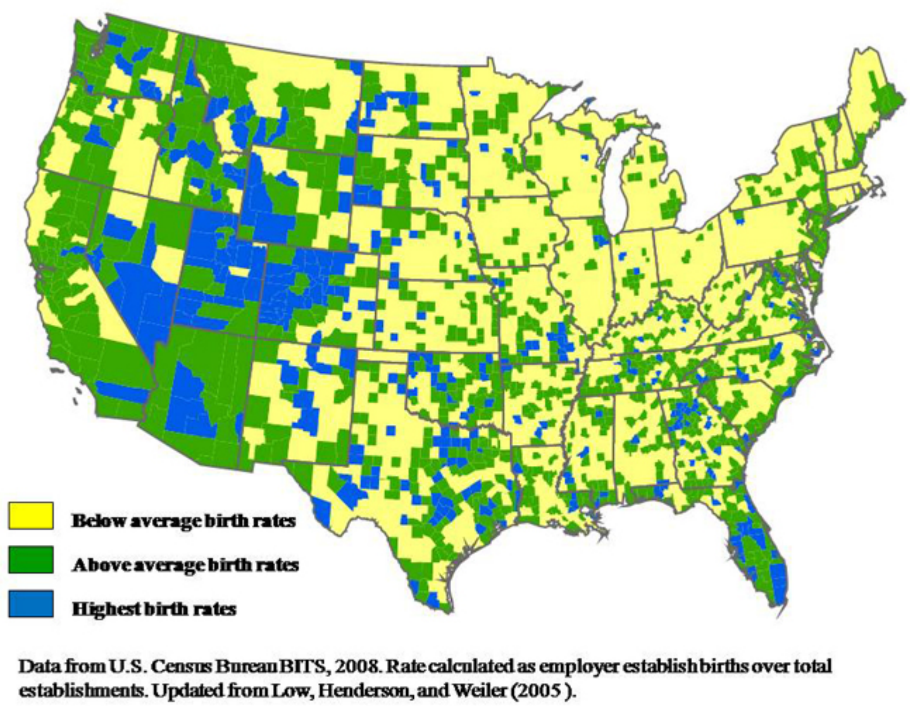
There are important regional variations in entrepreneurship rates as well. Self-employment rates are relatively high in the Great Plains and relatively low in the South (Figure 1). The employer establishment birth rate also exhibits regional variation—it is below average in the Great Plains region and highest in the West and Florida (Figure 2). Accounting for spatial variation raises an important research question—can differences in entrepreneurship across rural and urban places be explained by differences in human, financial, built and/or natural capital?

Figure 1: County Self-Employment Rates



Data from the Bureau of Economic Analysis, 2008. Rate calculated as nonfarm proprietors over total nonfarm employment. Updated from Low, Henderson, and Weiler (2005).

Figure 2: County Employer Establishment Birth Rates



Data from U.S. Census Bureau BITS, 2008. Rate calculated as employer establish births over total establishments. Updated from Low, Henderson, and Weiler (2005).

Wealth and Entrepreneurship

Research considering how different types of county wealth affect entrepreneurship rates focuses specifically on human, infrastructure or built, natural, and financial capital. The relationships of intellectual—R&D and university technology transfer, social, and political capital to entrepreneurship have not been widely studied. In this section, we focus on wealth as defined and documented in Low, Henderson, and Weiler (2005) and point out how differences in entrepreneurship across the rural-urban continuum may be driven, in part, by wealth differentials.

Human Capital

Human capital embodied in a region's labor force is an asset that can influence entrepreneurship development and the potential success of programs and policies designed to encourage business start up and growth. While human capital is usually assumed to contribute to entrepreneurship development, research suggests differential impacts depending on the type of entrepreneurship. The relationship with self-employment is weak—the percent of adults with a college degree is weakly negatively associated with growth in self-employment (Goetz and Rupasingha, 2009) and has no relationship with the self-employment rate, but has a positive relationship with self-employment income (Low, Henderson, and Weiler, 2005). These results may be explained by the fact that individuals with higher levels of educational attainment have greater wage and salary opportunities and are less inclined to seek self-employment. Research shows human capital is positively related to employer establishment births and there is also evidence that more educated individuals with entrepreneurial aspirations may be opportunity entrepreneurs—starting businesses in response to perceived market opportunities that, in turn, employ others immediately (Figueroa-Armijos, Dabson, and Johnson, 2012).

From a policy perspective, investments to increase levels of educational attainment and other forms of skill building may enhance the potential of growth entrepreneurs in a rural area. However, human capital is mobile. Investments to increase educational attainment may not increase the stock of human capital in rural places if, for example, young people leave after high school and do not return. Corresponding investments in other forms of capital, e.g., natural capital, or broadband access—built capital, may play an important role in encouraging more highly skilled individuals and entrepreneurs to remain in rural places, thus offsetting the mobility of this enhanced human capital.

Infrastructure or Built Capital

Several county-level studies of entrepreneurship have looked at infrastructure measures including highway density and broadband Internet availability. Drawing again on Low, Henderson and Weiler (2005), results show that self-employment income and value-added are positively related to highway density and broadband availability, in contrast to the self-employment rate alone which had a weak but negative relationship. These results suggest that built capital, including higher technology investments in broadband, are important components of a community environment that supports employer establishments or growth entrepreneurs. In today's global environment, entrepreneurs view broadband access as they do transportation options—as a way to connect with nonlocal markets in order to grow their companies. From a policy perspective, it is important to recognize that infrastructure degrades or becomes outdated over time, as can be seen with Internet access. Investment in built capital requires both current and planned expenditures to deal with obsolescence.

Natural Capital

Natural capital has been found to be positively related to indicators of entrepreneurship in many county-level studies (Glaeser, Kerr, and Ponzetto, 2010; McGranahan, Wojan, and Lambert, 2011; Stephens and Partridge, 2011). Natural capital is associated with economic growth in non-metro counties that have higher levels of creative capital and entrepreneurship, measured as average firm employment and self-employment (McGranahan, Wojan, and Lambert, 2011). The relationship between natural capital and entrepreneurship may work in two directions. Entrepreneurs may be attracted to areas rich in natural capital—ski slopes in Colorado and coastal communities—and, assuming investments in other forms of capital, choose to live and work in these regions. Alternatively, entrepreneurs may build their businesses around the natural capital assets or wealth of the region—wind farms, tourism companies, and regional food companies. Policies protecting and remediating the natural assets, as well as increasing access to the outdoors, could contribute positively to enhancing the entrepreneurial development potential in a region by attracting people who in turn create jobs for themselves and potentially others.

Financial Capital

Access to financial capital is widely seen as a critical ingredient for entrepreneurship development, particularly in rural America where a lack of access to financial capital is perceived. Many public policies and programs have been implemented to increase access to financing—state-run venture capital funds and the USDA business and industry loan guarantee program. This focus on the supply of financial capital does not take into consideration the effective demand for capital in rural areas. To be a positive ingredient to entrepreneurship development, financial capital must come at the right time and in the right form to meet the needs of the entrepreneur. Identifying these needs is difficult without survey and other primary data collection techniques.

Measures of financial capital used in research come primarily from publicly available secondary data. A positive relationship between bank deposits per capita and the employer establishment birth rate and the self-employment rates has been identified (Low and Weiler, forthcomingin *Economic Development Quarterly*). This result may reflect the fact that those seeking self-employment often do so as an income supplement and not to create a growth venture. Entrepreneurs are more likely to seek bank capital when they want to expand their business. Since entrepreneurs often use equity in their homes as collateral for business loans, the percent of owner-occupied homes or the median housing value in a county should be positively related to entrepreneurship. The association has been confirmed for self-employment and its growth (Goetz and Rupasingha, 2009; Low and Weiler, forthcoming in *Economic Development Quarterly*). Given this important relationship, the current housing crisis and the presence of "under-water homes" likely have a depressing effect on entrepreneurial development in rural and urban areas alike. Despite the assumption that financial capital is an important driver of entrepreneurship, the financial wealth measures presented explain less than 1 and 1.5 percent of the variation across counties in self-employment and establishment birth rates, respectively.

Wealth Interactions

In spite of the insights gained from considering several forms of wealth and their relationship to our two measures of entrepreneurship, it appears that many other factors are involved, and potentially more important, in determining entrepreneurship rates. Research is beginning to suggest that multiple forms of wealth, and their interactions, are necessary to achieve entrepreneur-driven economic growth. McGranahan, Wojan, and Lambert (2011) posit that the combination of creative capital and natural wealth holds promise for realizing growth from entrepreneurship in nonmetropolitan America. Creative capital provides knowledge and ideas. Natural capital provides quality-of-life amenities and resource-based assets that attract entrepreneurial talent. In testing this idea, McGranahan, Wojan, and Lambert (2011) find that creative class-driven economic growth is strongest in communities that have high levels of natural wealth and entrepreneurship, all else being equal. From a policy perspective, this research suggests that rural communities without natural amenities may be challenged in tapping the potential of entrepreneurship as a driver of economic growth.

Another important interaction across multiple forms of wealth relates to the connection between financial capital and human capital. Experience from venture investing suggests that money alone is less effective than if combined with high quality advisory services. Financial capital may meet one set of needs, but building the entrepreneur's skills to effectively use that capital and grow a business requires corresponding investments in human capital (Scruggs, 2010).

The Livelihood Connection

Entrepreneurship is associated with improved rural livelihoods when the businesses created enable individuals and families to increase their income and eventually begin to accrue assets—create wealth. The relationship between average self-employment income and the self-employment rate is mixed. Income volatility affects self-employment rates (Low and Weiler, forthcomingin *Economic Development Quarterly*) and counties with stable self-employment income streams have growing self-employment rates (Goetz and Rupasingha, 2009). This evidence suggests that entrepreneurship, defined by self-employment, may be perceived as a way to increase or stabilize income and contribute to improved livelihoods, if the opportunities are present.

According to the Global Entrepreneurship Monitor project (Ali et al., 2011), the rate of necessity entrepreneurship increased dramatically during the Great Recession—growing from 16.3 % of new U.S. ventures in 2007 to 24.7 % in 2009. If these necessity ventures are to generate improved rural livelihoods, a better understanding of the wealth needed to help these entrepreneurs successfully use self-employment as a strategy to increase income and resiliency would be helpful. At the same time, helping some of these entrepreneurs step onto a pathway from necessity to opportunity entrepreneurship, and begin to employ others in the region, may be an important policy consideration as well.

Entrepreneurs can also influence rural livelihoods through decisions they make about the management of their wealth or capital resources. The sustainable use of forest lands or investments made to reduce wastewater contamination of local waterways, for example, may improve natural capital and create opportunities for other entrepreneurs and residents to benefit from the use of those assets. Similarly, successful entrepreneurs may help endow education, amenity, or economic development efforts that improve livelihoods.

Key Research Questions

Research suggests that investments in multiple forms of wealth may be a prerequisite to entrepreneurial development, whether defined as self-employment or employer establishment births. It may be the interaction between forms of wealth or capital in a particular region that contributes to creating a strong environment for entrepreneurship. Research to date has been constrained by a number of factors. One, much research has focused on entrepreneurship in urban areas, which benefit from proximity to dense markets and transportation nodes by definition. More research is necessary to better understand the drivers of entrepreneurship in rural areas of the country. Two, existing research has been dependent at least in part on publicly available secondary data that, in many cases, provide only rough proxies for levels of entrepreneurship and specific forms of capital. As a result, there are drivers of entrepreneurship that are not yet well understand or measurable. Three, research suggests that the influence of wealth on entrepreneurship is place-based, giving increased importance to field-based research to better measure specific capital assets, entrepreneurial potential, and the interaction between these components of a regional entrepreneurial environment.

A number of research questions are worthy of further study:

- How do other forms of capital or wealth impact entrepreneurship development? What impact might social and political capital have on entrepreneurship? How might this be measured and what are the implications for both policy and practice?
- How do investments in multiple forms of wealth drive entrepreneurship and improve rural livelihoods? How can we better understand the interaction effects across multiple forms of wealth and entrepreneurial development? What are the likely regional variations in these interactions?
- How does ownership of regional wealth influence the entrepreneurial potential in a region? Outside ownership and extraction of natural resources often lead to impaired natural capital, reducing the opportunities for this wealth to contribute positively to entrepreneurial development in a region. How might new ownership structures—land trusts, cooperatives, and conservation easements—be used to capture wealth for the benefit of the region? What are the implications for entrepreneurial development?
- What are the returns to strategies that promote entrepreneurial development as compared to those that promote the attraction of outside companies? Are there differences in the forms of wealth that contribute most positively to these alternative strategies? What are the rural-urban implications of these differences?
- Is there a sequencing of investments in multiple forms of wealth that is most effective in supporting entrepreneurial development? For example, do investments in social and human capital need to precede investments in financial and built capital in order for the latter forms of wealth to be most effectively employed? What does that suggest for both practice and policy?

Entrepreneurial development offers an additional benefit to rural regions that is not addressed in past or proposed research but is important nonetheless. Effective entrepreneurial development can set in motion a wave of impacts in communities and regions that go beyond the wealth created by individual entrepreneurs and their enterprises. Successful entrepreneurs create returns for their investors, often family and friends located in their rural regions. As the companies they create expand and grow, local units of government benefit from the expanded tax base and revenue streams. As companies grow, they often create employment opportunities, contributing additional income and benefits for local residents, along with the allied multiplier impacts. Finally, growth entrepreneurs often create wealth that is rooted in the local region. Successful entrepreneurs may become donors to local community foundations and contribute their time, talent and treasure to other community endeavors. While the broad-based research to document and better understand the role that entrepreneurs play in local wealth creation is lacking, there is ample anecdotal information of the potential for local entrepreneurs to give back in multiple ways to the rural communities that have supported them.

Moving Forward

If, as some suggest, the future of the United States and its regional economies lies in the encouragement of entrepreneurship, it becomes imperative to understand the relationship between investments in wealth and the encouragement of a region’s entrepreneurial potential. While past research has created a starting point for this understanding, additional research is needed to clearly articulate for practitioners and policy makers the relationships between multiple forms of wealth and entrepreneurship. In addition, further study of the connection between entrepreneurship and improved livelihoods for rural people will require a better understanding of how wealth can help to move necessity entrepreneurs onto a pathway toward growth, how wealth can be used to maximize livelihood impacts, and how wealth can be captured in rural regions for the benefit of rural residents. The research questions offered here may stimulate further thinking and exploration by researchers, practitioners, and policy makers concerned about the future of rural economies in the United States.

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