Linking Private Equity to Small Businesses in Rural Appalachian Communities

by

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Abstract

Previous studies have shown that private capital and entrepreneurship have a positive correlation. Because of this, the Appalachian economy stands to benefit by linking small businesses to investors. However, no significant deal flow currently exists between private equity or venture capital firms and rural Appalachian businesses. While the clog in the deal flow can be blamed on capital being concentrated in urban centers, it should also be analyzed from the perspective of the business owner. However, there is little literature that discusses the willingness of Appalachian business owners to partner with an investor. This paper attempts to fill this gap in the existing literature by assessing the attractiveness of Appalachian investments based on 1) the companies' outlooks for growth, 2) the risk tolerance of the business owners, and 3) what the business owners would require from an investor apart from cash. Data was gathered from a survey and eight interviews. The majority of the participants had a negative outlook for the Appalachian economy, little desire to grow their businesses, and a low risk tolerance. However, manufacturers stood out as having better growth prospects and a higher tolerance for risk. While the majority of the participants had no desire to partner with an investor, they appeared willing to cooperate and accept suggestions and changes that a partner might make. Additionally, the participants appeared to value protecting their business's reputation and employees above a dollar amount when considering an offer from an investor. Any investor must respect the business owner's commitments to their employees and their communities.

Introduction

Private capital has the potential to stimulate a region's economy. Investors support businesses financially that might not otherwise have access to capital due to poor credit ratings. However, investors can also provide mentorship and guidance that will encourage entrepreneurship. If an investor is a successful entrepreneur or an industry expert, then that individual might be able to use his or her expertise to cut costs, identify expansion opportunities, and grow a business. Because of this, the Appalachian economy might benefit from attracting private capital.

However, attracting that capital is difficult. Data published in 2018 (Florida) showed that over 80% of venture capital investments in the United States were concentrated in San Francisco, New York, Boston, San Jose, and Los Angeles. As investments pour into urban centers, growing their economies and attracting the top talent form the workforce, rural areas are left behind. Rural areas become less productive than their urban neighbors, making it more difficult for them to compete and attract investments. This creates an economic disparity between rural and urban America.

If private capital stimulates entrepreneurship and entrepreneurship is necessary to attract private capital, then a brutal cycle is established. Government sponsored programs might attempt to break this cycle by providing funding for rural businesses. However, these programs lack the professional guidance that only industry experts can provide. Additional programs centered on advising small business startups might help entrepreneurs get their businesses off the ground. However, this is not a substitute for a partner who has a longterm interest in the success of a company. Finally, small business angel investment funds can provide capital and guidance. However, the size and impact of these few investors are not

comparable to the venture capital and private equity funds that urban businesses are able to access.

The issue is how to link private investors to small businesses in rural Appalachian communities. Increasing deal flow is not fully dependent on investors spreading capital away from urban centers towards these rural areas. Private investments also depend on the openness of the business owners towards accepting those investments. There are multiple factors that can influence an individual's decision to sell a portion of his or her company. For example, an individual that values a work-life balance is not likely to pursue aggressive growth strategies such as partnering with an investor. Additionally, a business owner who feels a strong sense of responsibility to his or her family, employees, and community might be less willing to do something as risky as partnering with an investor. Finally, an individual that has operated within a niche for many years might be unwilling to cooperate with an external partner that attempts to implement changes within the company.

The purpose of this study is to examine the willingness of Appalachian business owners to take on an investor. The research is structured to answer three primary questions:

- 1) Growth Outlook: What is the growth outlook for Appalachian businesses? This question depends on the future of the Appalachian economy and the business owners' general desire to grow their businesses. If an individual has no desire to grow his or her company, then that individual is not likely to accept an offer from a potential investor.
- 2) Risk Tolerance: What is the risk tolerance of the business owners? If they have low risk tolerance, then they will be less accepting of major changes that a partner might implement and less likely to take on an investor.

Openness to Partnership: What is the general willingness of the business owners to partner with an investor? If most of the business owners have a clear succession plan, they will likely not want to sell any ownership interest to an external party. Additionally, the business owners must be willing to cooperate with a partner and implement changes that the partner might make. Finally, the business owners might require certain characteristics or value propositions, apart from cash, from potential investors.

Culture likely impacts the results of all the research questions discussed above.

While little literature addresses private investments from the perspective of the target business's owner, there is even less literature that discusses the topic with a focus on the Appalachians. This paper fills the gap in existing literature and highlights topics that should be researched further in order to develop a method for connecting private capital to the Appalachians.

This paper will begin with a review of the existing literature related to the three research questions previously discussed. It will then transition to the methodologies used to obtain and interpret data. The results chapter will present the key findings of the survey and interviews, organized by the three topics of this paper. Finally, the paper will conclude with a discussion of the results.

Literature Review

While an inflow of capital is necessary to spur economic growth, it is just as essential to provide mentorship on how to allocate that capital in a way that will create value. Hellmann and Veikko (2017) illustrate this point in "Fostering Entrepreneurship:

Promoting Founding or Funding?" The authors claim that the relationship between entrepreneurship and angel investing are positively related. But when entrepreneurship is low, then a region will fail to attract capital. This creates a compounding effect, leaving regions at a severe disadvantage for raising funding.

Hellmann and Veikko state that in these regions, there is an additional motive for government programs and policies that nurture entrepreneurship. They divide these policies into two sections: demand-side (founding policies) and supply-side (funding policies).

Founding policies are those that promote the formation of new businesses in a region.

Community colleges that give skill trainings, for example, might send multiple graduates that are entrepreneurs-to-be into a community. However, this will not necessarily attract capital.

Funding policies are those that attract capital to a region. Investor tax credits, for example, incentivize those with money to connect with those without money. Over the longterm, Hellman and Veikko showed that funding policies tend to benefit entrepreneurship more than founding policies. The authors' research assumes angel investors are already successful entrepreneurs. Due to this, it is necessary for angel investors to connect with entrepreneurs in order to pass on their experience. If the new entrepreneur becomes successful, he or she too will pass down experience, creating a compounding effect that fosters innovation.

Funding policies alone, however, might not be enough to connect investors with talent in rural Appalachian communities. Josh Lerner (2020) from the Harvard Business

School presents geography as a restriction to venture capital in his paper entitled "Government Incentives for Entrepreneurship." Over 75% of venture capital financing is condensed into the top 25 urban areas in the world.

Government funded programs attempt to solve this issue by distributing capital equally across the United States. However, Lerner argues that these programs inhibit entrepreneurship growth. Inefficient startups that are bolstered with government funds create short-term rivalry for other promising entrepreneurs. Furthermore, with a company already being funded via government programs, the necessity for private capital injections decreases, inflating valuations and creating unattractive deals that might otherwise have created an innovative company. This serves to further deter private investors from deploying capital into a community.

Assuming that direct, private investments are the most effective way to foster entrepreneurship, it's necessary to ensure there is a proper deal flow between businesses in rural Appalachian communities and investors. There are institutions that attempt to direct capital towards local businesses. The Appalachian Investors Alliance, for example, establishes micro angel funds throughout the Appalachians. While these funds are needed, it is difficult to measure their impact.

Deal flow is dependent on more than the availability of funding. The recipient of the capital must be willing to sell equity and is preferably actively looking for an investor. However, there is little existing literature that measures Appalachian residents' willingness to accept funding, whether through debt or equity. In this paper, we address this issue by going directly to business owners in rural Appalachian communities. The research presented is based on surveys and interviews designed to answer the following three questions: 1) will

/ how these businesses grow, 2) what is the risk tolerance of the owners of the company, and 3) how willing are these owners to partner with an investor and what would they require other than money from the investor.

Growth Outlook – Economic Impediments

Rural Appalachian communities are currently at a disadvantage. Despite efforts in past decades to stimulate the Appalachian economy, rural mountain communities are still lagging behind the rest of the country. The three-year average unemployment rate for 20162018 was 4.4% for the United States and 4.9% for Appalachia (Appalachian Regional Commission [ARC]). From 2014-2018, the median household income was \$60,293 for the United States and \$49,747 for Appalachia (Pollard et al., 2020).

These numbers, however, do not accurately represent the true disparity between rural Appalachian communities and the rest of the country. Most of the economic data presented for the Appalachian region includes metro areas and counties that surround them. Allegheny County, the county containing Pittsburgh, is included in the calculations. Douglas and Carroll counties, which borders Fulton County, the location of Atlanta, are also included in the calculations. Additionally, as smaller Appalachian subregions receive assistance, diversify their goods and services, and strengthen their economy, other counties become more isolated and are left further behind.

Low college-going rates are an impediment to rural Appalachian communities.

Pollard and Jacobsen (2017) published data about education levels in Appalachian subregions between 2011-2015. In the United States, 13.3% of the population over the age of twenty-five did not receive a high school diploma, while 29.8% had at least a bachelor's

degree. Out of the population in Appalachian counties that did not contain nor were adjacent to a metro area, 21% did not have a high school diploma and only 15.6% had a bachelor's or advanced degree.

With such a low college-going rate, many of the young adults in rural communities would be first-generation college students. Compared to youth whose parents had been to college, prospective first-generation college students in rural Appalachian communities value postsecondary education less. Additionally, they are not as confident about their ability to succeed at a university (Rosecrance, Graham, Manring, Cook, Hardin, & Gibbons, 2019). In another study (Gibbons, Taylor, Brown, Daniels, Hardin, & Manring, 2019), Appalachian high school students who wanted to attend college were found to have little understanding of what postsecondary education involves, including the cost of tuition and the importance of grades to get accepted into and to succeed at a university. Additionally, the students did not have teachers or mentors that guided them towards postsecondary education. As a result, the students had no sense of urgency to prepare for and get accepted to a college.

Those who do get accepted and complete a bachelor's degree might not be eager to return to rural communities. From 2010-2017, population growth in the Appalachians was 1.5%. During that same period, the population growth in the United States was 5.3% (Pollard et al, 2019). Appalachia population growth was propped up by counties near cities, while rural counties had negative population growth rates. This migratory trend away from rural counties to urban centers extends beyond Appalachia. In 2014, one rural Iowa county lost 150 people to a nearby county with a university (Chinni, 2017). The author writes that college is now seen as an opportunity to leave a rural home. College graduates are migrating

towards urban areas, resulting in a larger economic and education disparity between rural communities and cities.

As an alternative to four-year universities, many residents of rural areas are attending local community colleges. The workforce needs to be trained for an economy to develop (Competitive), and community colleges provide hard skill training to students who prefer to remain in their local area. Often, however, the training offered is relevant to the existing industries in the community, so it does not contribute greatly to diversifying a community's economy.

Rural Appalachian communities are also burdened by being geographically isolated. The economy has historically relied on manufacturing. However, it is typically more cost efficient to build a distribution center on an I-40 exit than to go into the mountains. For example, researchers found that access to Pendleton County, West Virginia was difficult for truckers (Ezzell, 2012). At the county line, there was a sign that announced steep grades ahead and instructed truckers to stop. Additionally, the researchers state that in Avery County, North Carolina, which is included in this study, 60% of the survey respondents believed that the county had poor road maintenance. The roads in Avery County are small and curvy, which makes it difficult for trucks.

Another impediment to economic development in the Appalachians is the lower rate of internet access compared with the rest of the country. Between 2014-2018, 80.9% of U.S. households and 75.7% of Appalachian households had an internet subscription (Pollard et al., 2020). However, in rural Appalachian counties, only 68.4% of households had a subscription. Out of the households in rural counties, only 52.3% had access to cable, fiber optic, or DSL. In the U.S., 67.9% of households had access to these faster internet services.

The primary issue facing rural communities in the Appalachians is that the impediments to economic development are related and compound to create a larger disparity. Lawrence, Oliver, Hogan, and VanLear (2015) proposed that a lack of internet access is one problem out of a trifecta that rural communities face. Poor local economies result in the younger generation leaving their homes to pursue careers in more developed areas. As the populations in rural areas age and decline, internet providers are less likely to service those areas. Without sufficient internet access, it is difficult for local economies to grow, resulting in more people leaving rural areas to find a job.

For businesses in rural communities to grow, they need to be supported by their local governments. Small town and county governments, however, are vulnerable to corruption. The probability of corruption in local government has been found to increase when the economy relies on natural resources (Snow & Prater, 2018). In rural Appalachian communities, two of the underlying industries that drive their economies are mining and logging. Because of this, it is possible that inefficient or corrupt local government is an economic impediment to rural Appalachian communities.

Finally, drug abuse is a symptom and a cause of the economic disparity between rural Appalachian communities and the rest of the country. Moody, Satterwhite, and Bickel (2017) state that opioid abuse "tears away at traditionally close-knit families, reduces the viable workforce, increases crime, overloads the justice system, and spreads disease through the region." In a report published by Oak Ridge Associated Universities and the Appalachian Regional Commission (2018), the researchers found that depression and anxiety related to poverty is a large contributor to drug abuse. Without purpose and hope, individuals begin to abuse opioids.

The researchers mention that opioid abuse and low productivity results in lower career aspirations for youth. Opioid prescription rates are 45% higher in the Appalachians compared to the rest of the country (National Association of Counties [NACo] & ARC, 2019). Children grow up seeing their parents abusing opioids. They do not develop aspirations or a strong purpose, contributing to another generation of drug abuse.

Risk Tolerance – Contributing Factors

Partnering with an investor with the intent of growing one's business is risky.

Because of this, an individual should have a degree of risk tolerance if he or she wishes to raise capital to fund growth. The risk tolerance of business owners in rural Appalachian communities deserves special consideration from three perspectives: 1) the risk tolerance of a typical business owner, 2) the risk tolerance of different age groups, and 3) the cultural impacts on risk tolerance.

Business owners are typically willing to take more risks. Wang and Hanna (2007) published research in which they measure the risk tolerance of three different households: those who own a business, those who own but do not manage a business, and those who own and manage a business. Using stock purchases as a measure of risk tolerance, the researchers found that the two business-owning households groups were the most risk tolerant. However, non-managers were more risk tolerant than managers.

The participants interviewed for this paper are heavily involved in the management of their companies. If the level of involvement in management is inversely related to risk tolerance, then business owners in the Appalachians are likely to take on few risks.

However, there are other factors that impact these business owners' tolerance for risk.

As mentioned previously, there is a trend of the younger generation leaving rural areas to pursue career opportunities in urban centers. With this rural flight, it is likely that the proportion of elderly business owners will trend upwards. This is significant for investors looking for opportunities in Appalachian communities.

Lots of literature exists that addresses the impact of age on risk tolerance. Much of this research supports the theory that risk aversion has a positive correlation with age.

However, researchers have found conflicting results. Riley and Chow (1992) found that risk tolerance increases with age as individuals build personal wealth. However, the researchers found that risk tolerance decreased once their participants turned 65.

Jianakoplos and Bernasek (2006) identified what they described as "cohort effects," or the shifting of risk aversion from older to younger cohorts. When separate households with similar characteristics that differed only in age were compared with one another, they found that a larger proportion of the older household's wealth was tied up in riskier assets. The researchers speculate that the shift in risk aversion is due to decreasing financial security for younger adults. This could be resulting from the uncertainty of Social Security or job security, according to the authors.

A major flaw with available literature on the impact of age is that researchers typically measure risk tolerance based on the riskiness of individuals' financial assets. That does not relate significantly to this study. When discussing the risk level of someone's portfolio, one is really only analyzing the risk that person is willing to take with his or her personal financial security. When discussing the risk tolerance of a small business owner, additional factors come into play. The business owner is not only risking his or her financial

future, but the owner might also be risking a long legacy in a community and the future of the loyal employees.

These risks become more extreme when the business owner is operating in a small and close community. However, there is little existing literature regarding the cultural impact on risk tolerance for Appalachian business owners. This paper attempts to provide insight on the risk tolerance of business owners specifically in rural Appalachian areas.

Openness to Partnerships – Value Propositions

The obvious reason an entrepreneur might seek an investor is to raise capital.

However, business owners might desire investors to offer more robust value propositions.

For example, an entrepreneur might need the industry expertise and professional guidance that a seasoned investor can provide. Other business owners might simply be seeking a partner; someone who can partially take over the management of businesses in order to alleviate their work loads.

In any entrepreneur-investor relationship, however, value congruence is of the utmost importance. The necessity of the investor and business owner's values aligning is arguably more essential when discussing small and mid-sized companies in the Appalachians. Investors are likely to be lower down on the stakeholder priority stack, while the tight community and employees might be higher up.

There is a lot of published literature exploring the effects value congruence has on workplace satisfaction and productivity. Most of these papers address it from the perspective of an employee and an organization or supervisor. For example, the alignment of work-related values, such as achievement orientation, has been shown to be negatively correlated

with job stress (Dale et al., 2018). However, there is little published literature that explores the effects of value congruence in the entrepreneur-investor relationship, especially as it relates to private capital in the Appalachians.

This paper attempts to fill this gap in the current literature. It addresses the emphasis that rural business owners place on investors and partners having similar values. By understanding what the business owners value, investors can develop strategies specific to Appalachian businesses and potentially open up deal flow within the region.

Methods

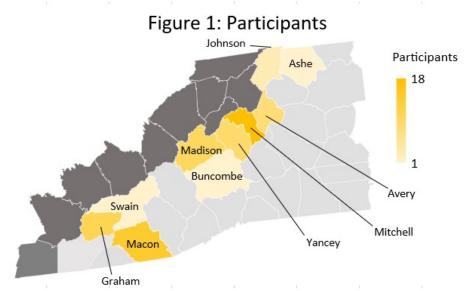
All of the data discussed in this paper was obtained from Appalachian business owners in the form of interviews or surveys. This study, which is reliant on responses from a small subset of a population (business owners) in a specific geographic region, is narrow in nature. This makes it difficult to find enough participants to enable the presentation of quantifiable results.

The data used in this study is primarily qualitative. However, focusing on a smaller set of participants allowed the researchers to gather deeper responses. Given that little research has been done on private capital in rural Appalachian communities from the perspective of the investee, the qualitative data provided by this study serves to highlight topics that should be researched further.

Participants

Seventy-six business owners from ten separate counties were sent a survey questionnaire, out of which twenty-four responded. The participants were mostly from

Western North Carolina. However, a few participants from Eastern Tennessee were included as well (Figure 1). Areas that previously relied on the coal mining industry, such as Kentucky, are of particular interest to many economic studies. However, this leaves a portion of the Appalachians, like Western North Carolina, underrepresented in academic research.



Participants for the survey were selected based on a few criteria: 1) owns and manages a small or mid-sized company, 2) the company is independently owned and operated (no franchises), and 3) the company must be well established. The purpose of this study is to analyze Appalachian business owners and how private investors could potentially drive innovation and entrepreneurship. This makes individuals who have started their own business the target of this study, not franchisees. Additionally, there are many small operations, such as a food truck on the side of the road, that do not represent the target population of this study. The third criteria was used to prevent these smaller businesses from skewing the results.

Out of the original set of survey participants, a subset of eight companies agreed to be interviewed. The industries represented by the interviewed companies were diverse, including retail, service, manufacturing, construction, and shipping. The size of the interviewed companies also varied, ranging from small mom-and-pops to businesses that generated millions of dollars in total annual revenue.

The survey and interview questions were submitted to an Institutional Review Board (IRB) who found the study to contain minimal risks for the participants. Because of this, this study was exempt from the formal IRB review process. Full anonymity was maintained for the survey respondents and no identifiable information for the interview participants will be given at any point in this paper. Additionally, both the survey and interview participants agreed to a consent form before participating in the study.

Survey

The survey included 23 questions, all of which are included in Appendix A. The first five questions provided details on a respondent's company – what it does, the number of employees, how many employees the company has hired recently, the number of customers, and sales revenue. The remaining questions were divided into three categories based on what they addressed: outlook for growth, risk tolerance, and need / willingness to partner with an investor.

The participants responded using a seven-point Likert scale. For the purpose of simplifying interpretation, the Likert scale was scored with a neutral value of zero. For example, if the mean for the risk tolerance questions was negative, it would indicate that the business owners are generally more risk averse.

Interview

All eight of the interviews were conducted using the same format which consisted of eleven primary questions, all of which are included in Appendix B. The questions were designed to address the three topics of this paper: how and will these businesses grow, what is the risk appetite of the owners, and would they be willing to take on an investor. However, in order to get deeper answers, the outline of questions was not strictly adhered to.

The average length of each individual interview was over forty-five minutes. The participants were recorded and their responses were transcribed in order to ensure accuracy. However, no specifics from the interviews that would identify a participant will be provided in this paper in order to protect their anonymity.

Results

Growth Outlook – Appalachian Economy

The largest concern for Appalachian businesses expressed by the interview participants was the ability to retain employees. When asked what challenges their businesses were facing, four of the participants pointed to the inability to find labor. Some of the participants stated that although they could find plenty of applicants on the job postings they put online, they could not get anyone to show up to an interview. Another participant, a mid-sized employer in the community, stated that it was difficult to find an employee who can pass a drug test. The interviewee estimated that around only 25% of the job applicants could pass a screening, calling the drug situation "pitiful." A couple of the participants pointed to rural flight as an issue. The individuals that go to college often do not come back. As these individuals leave, the talent pool becomes increasingly smaller.

"Young people just don't come back to [location omitted] because you can't make it, you know, living here. It's hard."

Infrastructure issues were discussed as well. One of the participants, a construction company, gets most of its business from repairing old town buildings. The owner stated that there is essentially no new construction going on, but rather repairing the old. The areas included in this study relied predominately on manufacturing up through the 1990s, which is not unique to the Appalachian economy. However, there is now greater competition between areas to attract large manufacturers. Appalachian communities that are not near an interstate or are isolated by twisty roads struggle to compete.

"All up and down Interstate 40, there are empty buildings sitting there, ready for businesses to go into. So, why would they come all the way up here, you know? Why would they come up this crooked little mountain with a tractor and trailer when they could be right on the side of the interstate? I doubt we'll ever get another big industry like that again."

One participant pointed to poor local government as an impediment to economic growth. According to the participant, the town is sitting on an excessively large cash position, much larger than the reserve requirement. The town manager, according to the participant, is reluctant to use any of the cash for infrastructure improvements. The downtown area, therefore, suffers from dilapidated buildings and very slow Wi-Fi.

Additionally, one interviewee discussed a unique identifier for the economic health of an area. If tourism is a large portion of economic activity, then there should be plenty of stores and restaurants in the downtown area that are able to bring in the tourists' cash.

However, this interviewee pointed out that many of the storefronts in one town were being used by warehouses and churches. Churches, which tend to pay less rent than businesses, do not generate taxable revenue, nor do they increase the downtown foot traffic. According to this individual, the more churches there are downtown, the less healthy the economy of the community.

"You've got about two or three retail locations down here taken up by churches now. And that's normally a sign that the downtown's dying, you know, when a church takes in your storefronts."

While many of the interviewees responded negatively when asked about the growth prospects for the region, some were more optimistic. One participant attributed the area's issues to simply a "poverty mindset." For example, if business owners are operating in a poverty mindset, then they might be reluctant to raise the rates for their products and services due to the fear of losing customers, even those that are nonlocal. This particular business, however, raised its rates by 20%, retained its customers, and was able to increase the employees' compensation package.

Growth Outlook – Desire to Grow

There were three primary questions in the survey that assessed the business owners' desire to grow their companies. The mean of the responses was -0.22 on a -3 to +3 scale, indicating that the majority of the business owners do not have strong intentions to grow their companies. While 50% of the respondents had a total outlook for growth score less than 0, only 21% had a score less than -1.

Most of the responses that indicated no desire to grow the business came from the first question. When presented with the statement "I am mostly interested in making enough from my business to make a decent living," 75% of the respondents at least slightly agreed, while 29% strongly agreed. However, when presented with the statement "I have little desire to expand my business because I do not want to deal with more employees, more difficulty with taxes, or any other complicated issues that would result from growing my business," only 50% at least slightly agreed and only 8% strongly agreed. Finally, 58% of the participants at least slightly agreed that expanding their business was important to them.

Out of the five industry categories surveyed (manufacturing, shipping, construction, service, and retail), manufacturing was the only category with a mean positive score (Table 1), with 4 of the 9 respondents scoring above zero. While the lowest score was in shipping, only one business from this category responded. The second lowest score was in retail, with three total respondents.

Table 1: Outlook for Growth Responses

	Responses	Negative	Positive Me	an Score (-3 to 3)
Construction	4	3	1	-0.33
Manufacturing	9	2	4	0.33
Retail	3	2	1	-0.67
Service	7	4	3	-0.48
Shipping	1	1	0	-1.67
Total	24	12	9	-0.22

Four of the eight interview participants expressed a desire to grow their businesses.

One participant identified an opportunity to diversify the company's business line using equipment and factory space that was already set up and ready to run. However, the business owner had not been able to find enough employees to run the equipment. Additionally, the

participant expressed concern that he or she did not have enough knowledge to break into the new industry.

Some of the business owners interviewed are already growing by adapting to the modern economic environment. One participant that desired to grow the business claimed that the future of the company would be limited to his or her ability to find new lanes of expansion. The company, which was originally reliant on manufacturers in the area, has been successfully diversifying its business as large plants have closed in the community. The company intends to aggressively look for niches that it can operate in. Another participant, a remaining manufacturer in a community, had recently expanded into ecommerce and was doing quite well.

Most of the business owners' succession plans were to pass their companies on to their children. However, those whose children did not want to take over the business had no succession plan and little desire to grow the company. In fact, one participant was in the process of downsizing. Without a young person to take over a business, it will most likely be closed within a few years.

"A while back, we went up and down the street, just looking, and the majority of all the businesses are owned by people who are sixty or older. So, within five years, everybody's eligible to retire. There's just not much young blood. We need young blood in here bad, you know, young people. But how do you do it? How do you get them?"

Unsurprisingly, the largest reason half of the interviewed business owners did not want to expand is because they were afraid of it interfering with their personal lives. One

interviewee had identified an expansion opportunity. However, the opportunity would require employees to work longer hours. Given the family values that the company supported, the business owner felt it would be hypocritical to ask the employees to work a lot of overtime.

"I'm not opposed to growth. And I know of a couple of ways that we could right now. I'm not thrilled about doing it... With our culture and the culture we're building, one of the parts of our business for our employees is that we're very passionate about family. So, we're a family business, but we want our employees to care about their families."

Multiple participants expressed that they cannot take on any more responsibilities with their companies. One participant had turned down expansion opportunities simply because he or she wanted to retain full control, believing that the company's competitive advantage relied upon the business owner being on the production floor and fully involved in the operations. Another interviewee preferred to limit scale in an effort to maintain control of the social and environmental influences the company had on the community. All four participants that did not want to grow their businesses shared one common theme: they valued their lives over work.

"Growth comes at a cost of life capital. This business owns me enough as it is.

I don't want to be an indentured servant, if you will, to my need to be in the office or to be confined to the role of being the CEO whereas a lot of the success of small businesses comes from the nuances of daily operation."

"You learn that adding and scaling isn't necessarily the goal. I think stability, some peace of mind, freedom, and the capacity to have influence."

Risk Tolerance

Three of the survey questions assessed the risk tolerance of the business owners. The mean of the responses was -0.72 on the -3 to +3-point scale. The negative aggregate score suggests that the business owners have a low level of risk tolerance. Surprisingly, 50% of the respondents scored equal to or below -1, while only 8% of the respondents scored equal to or above +1.

The first risk-related question had an average score of -1.50, driving the low risk tolerance score. When presented with the statement, "The thought of my business failing terrifies me," 79% of the respondents at least slightly agreed while 25% strongly agreed.

The second question, "If my business fails, I am afraid that I will be financially ruined," had a higher risk tolerance score of -0.88, with only 63% of the participants at least slightly agreeing and only 12.5% strongly agreeing.

The final risk-related question was "I consider myself risk averse." Despite the responses from the previous two questions, only 29% of the respondents at least slightly agreed. The total score for the third risk-related question was 0.21. Even though the business owners were generally afraid of their business failing and the impact it would have on them financially, they considered themselves less risk averse. Given that starting a company is inherently risky, it is not surprising that the business owners consider themselves risk tolerant.

Out of the five industry categories, none had a positive risk tolerance score on average (Table 2). Service business had the highest mean total score at -0.33, followed by manufacturing at -0.67. Apart from shipping, retail had the lowest mean score, similar to the desire for growth responses. None of the respondents for both the retail and the construction companies had a positive mean total score.

Table 2: Risk Tolerance Responses

	Res	sponses	Negative	Pos	itive ^{M6}	ean Score (-3	3 to 3)
Construction	4	4	0	-1.00 N	lanufa	eturing	9
5	2	-0.67					
Retail 3	3	0	-1.11 Se	ervice	7	4	2
-0.33							
Shipping		1	1	()	-1.67	
Total		24	17	4	1	-0.72	

Interestingly, businesses with annual revenue between \$50,000 and \$100,000 had the highest levels of risk tolerance, with a mean total score of -0.44 (Table 3). They also had the highest number of positive scores as a percentage of total responses. Apart from the one respondent with revenue less than \$50,000, the lowest scores came from respondents with revenue greater than \$500,000.

Table 3: Risk Tolerance vs. Business Size

Annual	Revenu	e .	Responses	s Nega	tive	Positive Me	ean Score (-	3 to 3)
\$0 - \$49,99	99		1	1		0	-1.67	
\$50,000 - 3	\$99,999	8 5 3 -0	0.29 \$100,	,000 - \$49	9,999 3	3 0 -0.44		
\$500,000 -	\$999,99	99	6	5	1	-1.17 \$1,0	000,000 -	
\$1,999,999)	2	2	0	-1.17	7 \$2,000,000 o	r above 3	
1	0	-0.89						
Total			23	17	7	4	-0.72	

Additionally, the participants appeared to have progressively less risk tolerance as the number of employees increased (Table 4). Companies with 6-10 employees showed the highest degree of risk aversion. However, there were only two respondents from this cohort. Apart from these two companies, there appeared to be a negative relationship

between the number of people a business owner employs and his or her level of risk tolerance. This is to be expected from business owners who operate in small, tight communities. As the number of employees increase, the business owners become responsible for protecting the livelihood of even more individuals.

Table 4: Risk Tolerance vs. Number of Employees						
Employees	Responses	Negative	Positive Mean Score (-3			to 3)
0	1 0	1	1.33			
1	- 59	7	2	-0.52 6	- 10	
	2	2	0	-1.17 1	1 - 20	
	6	4	1	-0.89		
More than 20	6	4		0	-1.06	
Total	24	17		4	-0.72	

The interview participants gave mixed responses about their risk tolerance. Many of the small businesses interviewed operate in some form of niche – producing a unique product or serving only a specific community. However, three of the eight companies interviewed showed a higher degree of risk tolerance by taking active steps to expand outside of their niches. As previously mentioned, one business was establishing a presence in ecommerce. Another participant was in the process of finding customers and employees in order to use existing equipment to enter a new market.

"We're dumb enough to try about anything."

Those participants that exhibited a higher level of risk tolerance appeared willing to try just about anything they identified as an opportunity. However, an issue for one of the manufacturing companies interviewed was that his or her industry had very low profit margins due to rising wages and heavy foreign competition driving up the costs of

production. While the company had recently expanded into a new product line that fit well with its current operations, the business owner had no intent of growing the business anymore due to the perceived lack of opportunities.

"The more profit, the more risk I'd take. Right now, it is not a profitable industry. I don't want any risk. Matter of fact, I'd shut down now if it weren't for the employees. I'd shut down, sell off the inventory, and never work again."

There was only one participant that was comfortable with taking on debt. Most of the respondents attempted to operate without any external financing. In order to eliminate risk, one of the business owners was in the process of becoming debt-free. Another participant, one who intended to grow the business, had a strategy to simply grow as the market let him or her. As opposed to using debt financing to capitalize on opportunities, the participant decided to use cash from operations to fund growth in order to eliminate risks.

"I'm not going to go borrow a bunch of money just to expand a little bit because it may work out and it may not. You kind of let it take care of itself the best you can. You have to sleep at night, and you don't want to sleep with worlds of debt on you. It leads to a short life."

Some of the business owners had negative associations about taking out a loan. One of the participants spoke about an experience in the 2008 Financial Crisis. The company had a loan with a local lender that was securitized and sold to investors. The business owner recounted a poor experience with the investors that visited and inquired about the health of

the company. After this, the business owner had a distrust for the financial institution that sold the loan package.

"So, they came and sat in this office and they were talking to me about people I knew who owned companies in my community. Because they're an outsider, they may assume that I don't know these five people. They're telling me that business's information. They're sharing their data with me, so I know when they walk out my door, they're going to go share mine with the next guy."

Finally, age was a factor that impacted the risk tolerance of some of the participants. While this is not surprising, it is concerning given the higher proportion of older-to-younger business owners in the Appalachians. However, this seemed to be more extreme with many participants without a succession plan in place.

Openness to Partnership – Survey

The survey included eleven questions designed to assess the likelihood of the participants to partner with investors. They were divided into three subcategories: need for funding, need for guidance, and general willingness to take on and cooperate with a partner. The mean of the responses was -0.23, indicating that most of the business owners are generally unlikely to take on an investor. However, 33% of the respondents had a positive total score.

Three questions assessed the likelihood of the business owners to partner with an investor based on their needs for funding. The average score of the responses was -0.61, the lowest of all three of the subcategories. Only 29% of the respondents at least slightly agreed that they would grow their business, but they do not have the necessary funding. A slightly

higher percentage of the respondents, 33%, at least slightly agreed that they have ideas for expanding their businesses, but they need cash and are not willing to take out a loan with a bank.

When asked if they would be willing to sell a portion of their business in order to finance their expansion plans, 63% of the respondents at least slightly disagreed.

Additionally, 50% of the respondents who agreed to having an expansion plan but lacked funding also disagreed to being willing to sell a portion of the business in order to secure financing. Whatever funding the business owners required, they did not appear to prioritize it above maintaining full control of their companies.

The second category assessed the likelihood of the business owners to partner with an investor based on their desire for professional guidance. The average score was -0.51, slightly higher than the questions that assessed the participants' need for funding. Only 17% of the respondents at least slightly agreed that they would like to expand their business, but they are not sure how. Additionally, only 13% at least slightly disagreed that they would only sell to an investor to raise cash and would not like someone being involved in the management of the business.

Interestingly, 54% of the respondents at least slightly agreed to the statement, "I feel that bringing in individuals with business expertise to help advise me with running the company might be beneficial and could help me expand the business." Despite the negative responses to the other two questions, the majority of the participants believed that professional guidance would be good for their businesses. The mean score for this question was +0.54, the only question of the three that had a positive response on average.

The final six remaining questions assessed the general willingness of the business owners to partner and cooperate with investors. The mean of the responses for this category was +0.18, indicating that the business owners were somewhat open to taking on an investor. Additionally, one of the questions was, "I would be open to selling __% of my company to investors in order to finance my ideas for growing the company." This question was not included on the total Likert scale score. However, 43% of the respondents were open to selling at least a portion of their companies to investors.

Two additional questions assessed how open the business owners would be to selling a portion of their businesses. When presented with the statement, "I would not consider selling a part of my company, even a small percentage, regardless of how good the offer is," 46% of the respondents at least slightly disagreed. However, only 25% of the respondents at least slightly agreed that they would be willing to partner with a larger firm.

Three questions gave insight into whether or not the business owners would be willing to cooperate with a partner. Only 38% of the respondents at least slightly agreed that they would be open to working with investors if they were to enter into a partnership. The next question asked if the business owners would be willing to cooperate with a business professional, not an investor, and implement any ideas that they propose. A surprising 63% of the respondents at least slightly agreed that they would be willing to implement suggestions. Finally, when presented with the statement, "I am unwilling to cooperate with a professional who might advise me with running my business. Nobody knows what is better for my company than me," 50% of the respondents at least slightly disagreed.

Only manufacturers had a positive total score for this section of the survey (Table 5), indicating that they are more open to partnering with investors than other companies. This

supports the results from the rest of the survey. Manufacturers scored the highest in the portion of the questionnaire that assessed the participants' general desire to grow their businesses. Additionally, they scored the second highest in the risk tolerance section.

Table 5: Likelihood to Partner with an Investor

	Responses	Negative	Positive Me	ean Score (-3 t	(o 3)
Construction	4	4	0	-0.57	
Manufacturing	9	4	5	0.07	
Retail 3	2 1	-0.09 Servic	e 7	4	2
-0.40					
Shipping	1	1	0	-0.91	
Total	24	15	8	-0.23	

There did not appear to be a relationship between the size of the business, measured by annual revenue, and the likelihood of a business owner to partner with an investor. However, businesses with annual revenue between \$500,000 and \$999,999 scored the highest by a significant amount (Table 6). Out of the six responses, four had a positive score. Every other cohort had a negative score.

Table 6: Likelihood to Partner with Investor Based on Business Size Positive Mean Score (-Responses Negative 3 to 3) Annual Revenue \$0 - \$49.999 1 0 -0.91 \$50,000 - \$99,999 8 5 2 -0.26 \$100,000 - \$499,999 3 3 0 -0.45 \$500,000 - \$999,999 6 0.33 2 \$1,000,000 - \$1,999,999 2 -1.05 \$2,000,000 or above 3 1 2 -0.22Total 23 14 8 -0.23

Openness to Partnership – Interviews

Many of the interview participants were open to selling their companies. The participants who were not had a clear succession plan in place and wanted to keep their business in the family. Those who did not have a succession plan were willing to pass the business on to someone else if 1) they made a good offer or 2) they would have the best interest of the employees and community at heart. However, most of those willing to sell their businesses would only do so if they sold their entire stake. They would not want to reinvest proceeds into the business nor deal with having a partner.

"If someone wanted to buy the place, I'd sell them 100% of it if I could come out from underneath my investment. Walk away. I'd sell them 100% of it and let them worry about it."

Only two of the eight interview participants were at all open to partnering with an external party. Most of the participants had previously been in partnerships. Two of the interviewees admitted to having fallouts with their partners. Others had bought out their partner's stake and did not want to go through the process again. Overall, the participants tended to have very negative opinions about partnerships.

"I see too many partners that don't agree on this and that and they hurt the business really bad. I'd step out of the way and let somebody else do it if they wanted to, but I don't want a partner."

The interviewees appeared to have an even stronger negative view about partnering with an investor. One of the participants, after having an unpleasant experience with a local lender, actively searched for an investor through an Appalachian-focused investment

program. While this participant received multiple offers, he or she was discouraged by how concerned the investors were with developing an exit strategy. According to the interviewee, they wanted to get into the business and exit quickly with only short-term profits in mind.

"They were flighty. They were here today, gone tomorrow. They wanted the exit strategy developed. They wanted that to be a tight package even though they were talking social capitalization."

Six of the eight participants stated that they are contacted frequently, usually multiple times a week, by "investors" wanting to buy their companies. They receive phone calls and emails from shadowy individuals and companies. While many of these are likely scams, some of them are legitimate, as one of the participants knew someone who sold to one of these callers. According to the interviewee, this individual received a very low price and the business did not survive for long after it was sold. The participants appeared to view investors through the lens of these emails and phone calls, viewing them as people who want to make a quick profit by exploiting an established business in a community.

"These big companies buy a company and use that name and run it into the ground, and it's gone. I feel like they would take the trusted name of [the business] in this community and milk it for everything it's worth and be gone."

However, most of the interviewees agreed that if they did take on a partner, they would be willing to cooperate and take management suggestions. Some said that they would completely step out of the way and let the partner run everything, believing that it is not productive to have two people making decisions. Others said that they would welcome the

guidance, but they would ask lots of questions and interject if the partner tried to do things that they had tried before. Five of the eight participants claimed that they would cooperate with a partner's decisions, but only if those decisions supported the values of the company, such as a commitment to the community and employees.

"It's not that they're changing things. That doesn't distress me at all. It would be why are we changing things."

For seven of the eight interview participants, whether or not an investor shared their morals and values was a crucial factor in determining whether or not they would accept an offer and cooperate with a partner. For most of the participants, their values were centered around protecting their employees. In general, the business owners appeared to value the wellbeing of their employees over profitability, and any investor that they partnered with must respect their values, even if it does not benefit the bottom line.

"I'd like somebody that I feel like would be here and protect these people around this area. Look at [another business]. They had four hundred something employees, and they just left. I don't want to do this area that way if I can help it."

Additionally, the interviewees valued their communities and the name and reputation that their businesses had in their areas. Three of the eight interviewees explicitly stated that any partner would have to act ethically, treat employees well, and not compromise the quality of their work in order to maintain the name that they had established in their communities with their businesses. In small towns, many of the businesses have built legacies, and any investor must be committed to maintaining these legacies.

"We've been doing business in the town of [omitted] for thirty years.

Everything we do is important because we're planning on being here another thirty years. So, we can't do whatever you've got to do to make a profit."

Discussion and Conclusion

The purpose of this study was to assess private equity, venture capital, and angel investing opportunities in rural Appalachian communities by answering three questions: 1) what are the growth prospects for these businesses, 2) what is the risk tolerance of the business owners, and 3) how open are the business owners to partnering with an investor and what will they require from this investor. While the survey and interview responses of all the companies considered indicated a pessimistic outlook for growth, manufacturers scored positive in the survey questions that assessed the business owners' desire to grow their businesses. Risk tolerance appeared to be generally low, decreasing with the number of employees. However, manufacturers scored the second highest in this category. Finally, while there was a general unwillingness to sell to an investor, many of the participants were willing to cooperate with a partner if they shared their values and continued to support the employees and their communities. Again, manufacturers were most likely to partner with an investor.

The outlook for growth for most of the companies included in the study was weak.

Many of the interview participants pointed to the inability to find employees and poor infrastructure making it difficult to compete with companies outside of the mountains. In addition, many of the interviewees did not have a desire to expand their businesses because they did not want to sacrifice their personal lives or the personal lives of their employees.

This was reflected in the survey, with the questions that assessed the respondents' desire for

growth scoring below zero. However, most of the survey respondents agreed that expanding their business was important to them. Additionally, five of the eight businesses interviewed had recently expanded or were in the process of expanding.

The survey and interview responses indicated a low level of risk tolerance for all of the industry categories included in the study. Additionally, the degree of risk tolerance appeared to decrease as the number of employees hired by a company increased. Given that the business owners interviewed demonstrated a passion for caring for their employees, it is likely that a negative correlation could be shown between risk tolerance and employees hired if a study was conducted on a larger scale. For a business owner in a small Appalachian town, the increase in responsibility is likely higher with the addition of each new employee due to his or her strong ties to the community.

While the results showed a low level of risk tolerance, it should be noted that the timing of the survey and the interviews likely impacted the responses. The survey was distributed in early 2020, and the interviews were conducted in mid-March of 2020. Since the data was collected while the stock market was crashing and a pandemic was shutting down the businesses, it is likely that the responses indicated less risk tolerance than they would have had this study been conducted at any other time.

Many of the survey and interview participants were not willing to sell a portion of their business to an investor due to them having a succession plan or simply not wanting to deal with a partner. However, the survey results indicated that the business owners would be willing to cooperate with a partner. Despite the respondents generally not wanting to partner with an external individual or firm, their responses showed that they would be open to suggestions and changes that a partner might make. Most of the interviewees claimed that

they would be cooperative as well, as long as those changes did not compromise their commitment to employees, their communities, and their names.

While the aggregate responses of all the companies included in the study suggested that businesses in rural Appalachian communities are not strong investment opportunities, there might be opportunities in manufacturing. Manufacturers had the strongest outlook for growth, being the only industry category that scored positive in the survey. Additionally, the three manufacturers interviewed had either recently opened a new product line or were in the process of expanding into a new product line. Manufacturers also scored the second highest in terms of risk tolerance despite it having a negative mean score. Based purely on the desire of the business owners to grow their businesses and their risk tolerance, manufacturers likely present the best investment opportunities.

The survey responses also indicated that owners of manufacturing companies would be more willing to accept an offer from an investor and cooperate with the partner.

Manufacturers had the only positive score in the survey questions that assessed the likelihood that a busines owner would sell to an investor. Considering that they also scored the highest in the outlook for growth category, as well as second highest in the risk tolerance category, manufacturers appear to be the best targets for individuals or firms that want to invest in the Appalachians.

The majority of the interviewees expressed that a potential investor would need to value their employees and community more so than profits. The largest fear expressed by the participants was that an investor might not protect their employees. Because of this, the interviewees would evaluate the investor's character before accepting an offer, meaning that they would ensure that the partner would not implement changes that would improve the

business at the expense of the employees or communities. Additionally, the investor would need to not sacrifice the quality of the product or service that the company provides in pursuit of higher profit margins in the short-term. The majority of the companies interviewed valued their reputation in their communities, and any investor would need to share that value.

While most of the study participants expressed little desire to partner with an investor, there might still be opportunities for private equity firms, venture capitalists, or angel investors. However, investors will need to take a different approach. Business owners in rural Appalachia value their personal lives, their employees, and their community. Investors should understand that management changes that threaten any of these three factors will likely not be accepted.

Additionally, investors should strive to develop exit strategies that do not compromise the company or its legacy in an area. A solution might be to sell privately held shares to members of the community. This would keep the business from being absorbed and trimmed down by a larger company. It would also incentivize the investor to maintain a strong relationship with the community and to build the reputation of the company. If investors can show that they are willing to support the values of rural Appalachian business owners, then these owners might be more open to partnering with an investor.

While this study had three research questions, the focus was on the willingness of the business owners to accept an offer from an investor and what they would require out of the investor. Little or no research specific to the Appalachians has been published on this topic. The results of this study indicate that Appalachian business owners are generally unwilling to accept an offer due to their negative views of partnerships and investors and their fear that

it would threaten their employees, community, and legacy. However, this might change if investors demonstrated a commitment to those employees and communities.

Appendix A – Survey Questions

- 1) What does your company do?
- 2) How many employees have you added over the last three years?
- 3) How many employees do you have?
- 4) How many customers does your company have?
- 5) What was your sales revenue for last year (2019)?
- 6) I am mostly interested in making enough from my business to make a decent living.
- 7) The thought of my business failing terrifies me.
- 8) If my business fails, I am afraid that I will be financially ruined.
- 9) I consider myself very risk averse.
- 10) I have little desire to expand my business because I do not want to deal with more employees, more difficulty with taxes, or any other complicated issues that would result from growing my business.
- 11) Expanding my business is important to me.
- 12) I would grow my business, but I do not have the cash available to hire employees or buy the equipment or property that I need.
- 13) I would grow my business, but I do not currently have any ideas for expanding, or I am not sure how I should go about expanding.
- 14) I have some ideas for expanding my business, but I need cash, and I am not willing or I am not able to take out a loan to finance my ideas.

- 15) I would not consider selling a part of my company, even a small percentage, regardless of how good the offer is.
- 16) I would be open to selling a small interest in my company in order to finance my ideas for growing my company.
- 17) I would be open to selling ______% of my company to investors in order to finance my ideas for growing the company.
- 18) I would be open to partnering with a larger firm in order to finance my company's expansion.
- 19) If I sold part of my company to investors, I would do so to raise cash. I would be hesitant to sell if the investors wanted to participate in running the company.
- 20) If I sold part of my company to investors, I would be open to working with the investors to run the company.
- 21) I feel that bringing in individuals with business expertise to help advise me with running the company might be beneficial and could help me expand the business.
- 22) If I brought in individuals with business expertise, I feel that I would be willing to cooperate with them and implement any ideas that they might propose.
- 23) I am unwilling to cooperate with a professional who might advise me with running my business. Nobody knows what is better for my company than me.

Appendix B – Interview Questions

- 1) Why did you start your business?
- 2) What is the biggest difficulty you are now facing as a small business owner?

- 3) What do you think is the biggest issue preventing economic growth in the Appalachians?
- 4) What experiences have you had with growing your company?
- 5) Do you see any possible way for your business to grow and add more jobs? Do you want your business to grow and add more jobs? If not, why?
- 6) What is the strategic plan for your business?
- 7) Do you have any fears about expanding into an area that you might not be comfortable with, or growing to a point that you feel is a little too risky?
 - a. If there was someone with a lot of business expertise and experience working with you and advising you throughout the process, would you feel more confident with making that expansion?
 - b. If you had a partner and easy access to capital, would that improve your tolerance for risk?
- 8) If someone made you an offer to buy a portion of your business and you could reinvest that money back into the business and grow it, would you be open to accepting that offer?
- 9) Let's say that you did sell part of your business to a bigger company. They then send someone to your office. They are sending this person in order to help you make things more efficient in the company, probably cut some costs, and hopefully find some new places where you could expand. How would you react to that? Do you think that would be beneficial to the company?

- 10) How do you think that interaction between you and that person would be? Do you feel like you would be able to work with that person? Why or why not?
- 11) This person's intention is to make this business as big of a success as it could possibly be, and you are aware of their experience maximizing small companies' potential. Now, when this person starts making big decisions, how would you react?

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