



# **Wealth Creation in Rural Communities**

**PHASE ONE REPORTS**

## **The Role of Equity Capital in Rural Communities**

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## Wealth Creation in Rural America

This report is part of the Wealth Creation in Rural America initiative, funded by the Ford Foundation. The aim of the initiative is to help low-wealth rural areas overcome their isolation and integrate into regional economies in ways that increase their ownership and influence over various kinds of wealth. The initiative has produced nine previous papers, which can be found at <http://www.yellowwood.org/wealthcreation.aspx>. The goal of this report is to advance the initiative's broad aim of creating a comprehensive framework of community ownership and wealth control models that enhance the social, ecological, and economic well-being of rural areas.

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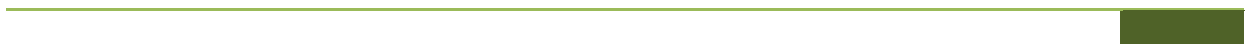
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Rural Communities**

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## Executive Summary

The Ford Foundation, under its Wealth Creation in Rural Communities effort, is supporting a set of projects that explore various means by which communities can create and sustain economic, social and natural capital including the role of entrepreneurship, local ownership models, industry clusters and value chains. This particular project seeks to examine the role of equity capital in rural and underserved areas. In particular, our research focuses on:

- The impact that venture or patient capital has on rural economies;
- How patient capital funds can promote a triple bottom line (TBL) in their rural investments (an approach which integrates economic, social and environmental considerations) and
- How practices with positive impact can be scaled and or replicated in other regions.

## Findings

For decades, equity-based angel and venture capital (VC) operations have provided a source of patient capital to businesses, especially start-up businesses and businesses in early or rapid growth stages that may have difficulty obtaining traditional debt capital. In recent times, this venture capital has been concentrated in only a handful of states (primarily California and Massachusetts), fueled by a general perception that the “best” investments are those in technology-heavy metropolitan areas. Whereas, rural states have experienced an environment where it is increasingly difficult to raise funds. We explored the dynamics of rural equity investment to understand the role patient capital plays in supporting business development in less populated regions.

Performance and Impact of Equity Capital: Comparing differences in states with various levels of venture capital, the states with lower than average deployment of venture capital (VC “lite” states) tend to have smaller funds and more individual investment per venture than VC heavy states. The average investment in a VC lite state is just over \$6 million, while investments in California or Massachusetts average about \$12 million. Even though the size of the investment was different, the return on investment and associated performance measures showed almost no variation among geographic location. In fact, in terms of average multipliers, exit types, job creation, and holding periods, there were no statistical differences in investment performance between those in urban areas and those in rural/underserved areas (for both angel or venture capital). What might this mean? High performing equity investments are found in all parts of the country; and smaller, more rural regions can have ventures that perform on par with those in Silicon Valley.

We did find that the movement within the VC industry to larger and later stage investments has left a significant investment gap in start-ups or businesses needing more limited amounts of capital. Despite the number of businesses included in this smaller scale category, operational factors in the existing VC model including limited management fees, the time it takes for a company to reach a viable exit point, and investors’ expectations for returns have pushed funds towards companies in more mature growth stages or with significant upward potential. With the downturn in recent VC performance and a stagnant economy, there is now a renewed dialogue in the investment community

to once again establish funds that can fill this gap. Given that startup investments can require just as much time and resources as later stage investments, modifications to operational structures would be needed. We believe a focus on smaller-scale (“entrepreneurial” capital) alongside traditional VC would greatly benefit rural communities.

Since equity investments are selected for their potential high rates of return, it is not surprising to see high rates of job creation. In a sample of 65 investments in rural and underserved areas, the median rate of job creation was over 100 percent in investments with an average holding period of five years. Even those investments considered to “fail” (in terms of financial returns to the fund) increased their job base by 90 percent from the time of initial investment. Our results are similar to the National Venture Capital Association’s 2008 report on the industry that noted venture-backed companies grew jobs at rates eight times the US average between 2006-2008.

Equity investments have potential for broad community impact. A detailed examination of different investments indicated that in addition to the direct influx of capital, impacts from equity investments included increases in local purchasing and value chain development, infrastructure improvements, employee training and skills development, above average healthcare benefits, and support of local cultural and community spaces. We also noted that while the potential for such community impact existed, many investments did not fully realize their potential due to factors such as the lack of awareness about TBL based business practices or limited resources among funds for providing the level of technical or operating assistance to help their investments implement these business practices.

#### *Performance & Impact Take-aways*

- Equity and near equity funds have a niche role in providing capital to businesses with high growth potential; these businesses can and do exist in rural regions.
- Investments in rural and underserved areas show the same level of performance as their metro counterparts.
- There is a need for small scale, entrepreneurial capital to augment larger scale venture capital.
- Equity-back companies are significant job creators, and appear to create jobs with the same efficiency as other economic development tools.
- The ripple effect of equity capital includes investments in local supply chains, workers’ benefits and training, and community assets and infrastructure, yet is under-realized in most cases.

Advisory Services: There was one finding in this project that had clear and significant benefit to rural communities: the need for advisory services along side capital. Advisory services in rural regions fill critical knowledge gaps and help companies build the internal capacity to grow and effectively utilize capital. We found a number of successful models for, and quantifiable benefits of, advisory services provided to businesses within and outside of investment portfolios. We also discovered that advisory services were instrumental in developing more robust business service networks that linked local providers to each other and to national expertise.

Advisory services are not cheap, and management fees do not cover the expense that most advisory services require. Consequently, managers devote significant amounts of time to raising additional resources to develop and deploy these services. Funds look towards government programs such as New Market Tax Credits or establishing a separate nonprofit organization as ways to expand their advisory services. Many advisory services have high unit costs due in part to each organization developing their own set of services rather than establishing a network of expertise or centers of

excellence. The apparent lack of learning infrastructures, along with a sense of competitiveness among some funds, has limited the ability of best practices to be shared within the industry.

Yet, we did discover ways that operational models and specialized expertise among advisory organizations could be more effectively linked and scaled to help rural regions access leading edge knowledge and practices. Building a cost-effective and scalable advisory services will require investment in a network approach and a more sustainable funding model that recognizes that services go hand-in-hand with capital.

#### *Advisory Services Take-aways*

- Advisory services play a key role in turning capital into smart money, helping businesses to be more efficient with their capital and to optimize their operations.
- Advisory services are effectively applied to investments and alongside, but independent of, financing activities.
- The standard process for delivering these practices remains high-touch with a high unit cost that needs to be streamlined.
- While some funds have developed expertise and scalable operational models, the industry lacks intermediaries and infrastructure to share best practices.

Triple Bottom Line (TBL) Practices: Triple bottom line or impact investing seeks to pursue social and environmental benefits along side financial and economic returns. While there is growing interest by businesses and funds to enhance social and environmental outcomes, there are still few funds with intentional and consistent triple bottom line (TBL) practices. Most funds we interviewed considered TBL investing as an “add-on” to their financial model, adopting specific TBL practices as needed or when requested by businesses. A few funds used a more integrated approach where they helped businesses prior to and throughout their investment period adopt progressive business practices. The add-on approach will continue to face market pressures since any TBL practices need to be translated to a finance model in order to be validated. Yet, with only a handful of funds using an integrated TBL model achieving a tipping point for a new investment model will take time.

Regardless of which operating model is used, funds indicate similar market forces working against the ability to readily deploy TBL practices--namely investors that want to play it safe because they are unsure if funds can “do good and do well” at the same time, and the need to raise additional funds since management fees simply do not cover the expanded services required to facilitate the adoption of TBL practices inside business operations. Even when funds have interest in or resources to deploy triple bottom line investing, many noted limited channels by which they could learn about or share expertise and practices. Traditional industry intermediaries, such as associations have played a limited role in developing or promoting TBL practices, and only a few funds have taken advantage of national and international business associations that are actively engaged in advancing TBL and sustainability. In addition, we found foundations and others interested in TBL historically have funded individual organizations rather than learning infrastructures or networks that promote and share best practices.

Not surprisingly, there is little standardization or widespread use of TBL assessment tools or metrics. Due to efforts through organizations like the Community Development Venture Capital Association, a set of social impact measures have been developed, yet limited resources have prevent distribution beyond immediate members. Environmental or conservation measures are much less consistent and tend to be input measures (does the company have a recycling program?) rather than outputs or outcome metrics (the amount of waste diverted from landfills). Many funds seem to measure what investors have asked them to measure, rather than applying a consistent, industry-wide framework.

There are examples of funds that have comprehensive assessment and measurement tools for impact investing, however, they report difficulty in finding ways to share the tool or bring it to scale.

#### *TBL Investment Practice Take-aways*

- There is growing interest by funds, businesses and investors in providing capital that can ‘do well and do good,’ yet market and institutional forces inhibit widespread adaptation.
- There are two basic approaches used by funds: most funds “add” social and environment onto a financial model; and some funds consider economic, social and natural capital in a more integrated approach.
- There are a handful of leading-edge funds with successful models, yet there is a lack of intermediaries and infrastructure that can accelerate the deployment of these efforts.
- While there are a few excellent examples, most measurement tools for TBL are static snapshots rather than dynamic assessment and continuous improvement tools.

## Addressing Identified Challenges

Equity capital is a long-term strategy, for investors, funds and communities. While each fund is an independent operation, over time organizations with multiple funds build staff expertise, external contacts and operating efficiencies. Being able to share this expertise and base of practice (whether for enhanced financial returns or deploying TBL practices) will be important in building wealth in rural communities.

This project discovered that many funds in rural and underserved areas are not just a financial organization, they are also a professional services organization. These funds, especially those promoting TBL practices do three things: 1) provide capital, 2) enhance operations and the competitiveness of businesses, and 3) build community capacity for economic development. The extent to which all three elements play a role in any given fund appears to be related to the attitude of fund managers toward TBL and the extent to which advisory services have a consistent model for funding and deployment.

Equity capital can have a broad impact on rural communities, especially for investments where capital is combined with services. Our research also illustrated that the impact or ripple effect of equity capital, as well as the adoption of TBL practices, were maximized when funds or businesses were aware of the triple bottom line practices at the start of an investment. This may indicate more focus on pre-investment services and education, and increased support for sharing TBL investment models that use an integrated assessment and investment system.

Given the findings that venture capital in rural and underserved areas perform favorably with all venture investments and can have significant impact on creating community wealth, then the following conclusions can be drawn:

- More should be done to actively promote patient capital in rural and underserved areas and focus on capital efficiency as well as capital allocation.
- Advisory services should be developed into working models that can be efficiently deployed and scaled in rural and underserved communities.
- Structural issues inhibiting the development and adoption of TBL practices need to be addressed.

This project has identified three broad opportunities that could enhance the impact of equity capital on rural communities and accelerate the promotion of TBL practices.

Opportunity	Possible Interventions
<p><b>Increase the availability of patient capital at various levels of investment.</b></p>	<p>Capital Allocation: Help institutional VC raise competitive size funds that have enough dry powder to realize returns; develop industry information that illustrates performance and impact of equity capital in underserved areas.</p> <p>Capital Efficiency: Pilot the concept of entrepreneurial capital (a pull system) that provides small scale patient capital to start-ups and high impact businesses with limited equity capital requirements.</p>
<p><b>Make advisory services an integral and sustained aspect of patient capital funds.</b></p>	<p>Develop a Knowledge Exchange: Inventory and identify industry and partner expertise and centers of excellence that can be linked in a 'knowledge exchange' of services and information expanding reach and reducing the unit cost of delivery.</p> <p>Expand 'upstream' advisory services models that help build business capacity and build awareness of TBL practices prior to investments.</p> <p>Refine funding models for advisory services such as matching management fees that provide funds with adequate resources to provide expanded services in rural areas.</p>
<p><b>Significantly enhance the ability to develop, deploy and evaluate triple bottom line investment practices.</b></p>	<p>Focus on the development or adaptation of TBL investing models and assessment tools that move the practice from an "add-on" to an integrated framework.</p> <p>Increase investment in existing working models that can be scaled throughout rural regions and enhance the learning infrastructure to share and replicate these best practices.</p> <p>Standardize metrics and establish an exchange of model and legal documents (e.g. model stock option plans) to facilitate the consistent provision of advisory services.</p>



# Project Overview

## Purpose & Methodology

Multiple studies indicate that regional economic prosperity will be increasingly dictated by the ability of local entrepreneurs to turn assets, ideas and opportunity into new or expanding businesses. This is especially true in rural communities where limited assets may be better suited for a “grow your own” course of economic development, rather than a recruitment focus where odds of attraction are small. With this in mind, access to capital, especially patient capital, is a critical element for rural economies. Venture capital (VC) and other forms of patient capital may offer a viable pathway that augments other forms of entrepreneurial and economic development.

In December 2008, the Ford Foundation embarked on a year-long project that conducted a series of research and assessments, and engaged an advisory council of fund practitioners and professionals to:

- Examine and understand the impact that venture or patient capital has on rural economies;
- Explore how patient capital funds can promote a triple bottom line (TBL) in their rural investments; and
- Identify how practices with positive impact can be scalable to or replicated in other regions.

From December through April the project explored the dynamics of three selected organizations that managed six venture funds. The purpose was to understand their operations and to identify best practices or challenges that should be explored in more depth. In particular, this phase used an initial set of funds to examine how equity investments attempted to create stickiness (staying power both financially and geographically), and to identify the challenges and opportunities for creating a more robust entrepreneurial environment and active network of assistance in rural communities.

A key focus of this project was to examine the application of triple bottom line (TBL) practices in equity investments, therefore, the majority of funds selected for interviews were considered to be community development venture capital or mission-based venture funds. While these funds are still considered “niche” markets within the VC industry, and for the most part, have smaller funds (in total value and average size of investment amount), they also represent some of the industry’s leading funds in terms of practices that promote impact or TBL investing.

From May through September the project used the results of the previous phase to expand the comparison of rural and urban angel and venture funding on a national scale, to examine the impact that venture capital funds and their investments had on rural communities, and develop a better understanding of how specific TBL practices could be replicated and scaled.

This report is divided into two primary sections. The main section contains key findings and recommendations, while the appendix contains details of supporting data and research. Key findings are summarized in six chapters:

- The Executive Summary
- The Performance of Rural Equity Capital
- The Use of Advisory Services
- The Promotion of Triple Bottom Line Practices
- The Resulting Impact of Equity Capital on Rural Communities
- Overall Conclusions

## Comparing Investment Performance

One of the project's primary elements examined how equity investments perform and contribute to the economic environment of rural communities. We compared key data between urban and rural investments, and also interviewed multiple funds with rural investments to understand what helped investments be successful in their rural setting.

Venture capital has been in the spotlight for decades. The historic returns on investment attract investors, and its job creation potential attract economic development organizations. The National Venture Capital Association notes that between 1970 and 2008 approximately \$456 billion was invested in 27,000+ companies. While this represents only a small fraction of all US firms, it represents 11 percent of all jobs and 21 percent of revenue as a percent of GDP. Moreover, these number do not include angel investments that have over the last decade or more matched total venture capital investments, and which have also distributed this investment among as many as 10 times the number of companies.

Reviewing the history of the venture capital markets helps to explain today's current set of dynamics. The venture capital market has gone through severe of ups and downs. In 1976 the venture capital (VC) industry was \$49 million and rose to \$406 billion by 1986, with the number of venture capital firms increasing from just over 200 to 674. During this same time period business angel investments were estimated at \$10 billion invested in close to 30,000 start-ups. Such overheated supply-side of equity capital came to a rather abrupt stop with a plummeting disk drive market (the golden child of VC investments). The VC industry went into an accelerated contraction with total dollars declining to \$1.1 billion by 1990, and funding only 1,900 ventures.<sup>1</sup>

**Key finding:**  
**Returns on equity investments in rural or VC 'lite' regions perform on par with urban investments, indicating that there is no bias on performance due to location.**

Fast-forward ten years and the cycle begins again- this time with the dot.com explosion. From 1995 to 2000 the VC market experienced a 15-fold increase from \$6.3 billion to over \$100 billion with average annual returns ranging from 20-38 percent. Yet by 2003, the dot.com implosion took the market back to \$20 billion in deals. From 2003 to 2008, venture investments have slowly increased from just over \$4.8 billion per quarter to approximately \$7.5 billion. In the past three quarters investments are down again, due to a tightening in supply of VC dollars.

While the amount of venture capital investment has gone through multiple cycles of ebbs in flows in terms of the number of deals and amount funded each year, another trend has taken place that may have more significant impact on rural and underserved areas of the country. Venture deals are becoming larger and later stage. Currently the average deal in California and Massachusetts is over \$12million, and even in states with very little history of VC investing, the average deal is over \$6 million. Today, an exit from one fund is as likely to be a buy-out by another fund as it is an acquisition by another company. In many ways, the current model is primarily one of financial return with little or no economic development mission of days past to nurture new and promising 'ventures'.

<sup>1</sup> Journal of private equity, Spring 2003

Interviews for this project and other research suggest that the trend toward larger fund size and investments is a result of several factors working together. Management fees have been squeezed over time and now average about 2.5% of the fund. For smaller funds, this makes it nearly impossible to have a diversification of investments and pay fund managers market rates. Seed and start-up companies also require as much or more work per investment and the investment is typically much smaller. Overlaying this fund structure is the expectation for the fund to be closed in ten years, meaning that investments are expected to exit in that time period. So with a limited fee structure and pressures to exit, operations are typically optimized through investments in larger deals that have already made it through the first few sets of hurdles.

This history helps to understand that the volume of deals will likely continue their ups and downs as key industry sectors and national and global economic conditions change. What is important to note, and that which may have influence on how rural communities benefit, are changes in the VC model itself-the scale and size of investments, the number of follow-on rounds, and the types of exits.

### **How Do Rural Equity Investments Perform?**

Over the last several decades, venture capital has increasingly been concentrated among a handful of states, whereby California and Massachusetts account for over half of all VC dollars. This project explored the question of whether or not equity capital could be effectively deployed in underserved areas (primarily rural). Specifically, can funds that invest in rural or low-income areas be as successful as those in tech-oriented metropolitan regions? The short answer is yes. An analysis of angel and venture capital investments indicate that by standard investment measures there is little or no difference among key variables such as the size of investment, type of industry funded, length of investment, and investment performance.

Two different analyses were performed to examine this issue: angel investments data collected by Willamette University that represented investments from 1996 to 2007, and 1990-2008 venture capital level data from VentureSource™. Using both sources of data provided insights into early-stage investments as well as equity investments in growth and expansion stage businesses.

For venture capital, the data indicate that while the average deal size and concentration of deals (inputs) in rural geographies may be less than that of urban regions, there is little difference in the performance of a rural investment in terms of multipliers, jobs, or exit types (outcomes). For angel investment there was little difference between rural and urban locations in both inputs and outcomes where size of deal as well as performance of the investment were statistically comparable in almost every category. There was also little difference in terms in the profile of the angel investor with regards to age, entrepreneurial experience, and other characteristics.

## Analysis Summary: Venture Capital Activity and Outcomes by Location

Rob Wiltbank, Willamette University

As part of the efforts of the Willamette University Venture Investment Program, we've been exploring the question of whether there are meaningful differences in the activity and outcomes of VC backed ventures in Venture Capital "Heavy" vs. Venture Capital "Lite" states? This is part of a broader exploration into the topic of whether venture investment returns actually vary by geography, in both formal and informal (angel) venture capital. The following points highlight the findings of a review of data from Venture Source on venture capital backed firms from 1990 to 2008.

The primary screen is to create groups of VC states that one might consider "heavy" and "lite." California, and Massachusetts occupy their own group, with a group of highly active VC states [WA, TX, CO] then a group of active VC mid Atlantic states [VA, MD, DC, NY, NJ, PA], followed by VC lite states ("everyone else"). California makes up 39 percent of the sample, the "all others" category makes up 23 percent. We then simply identify differences across these groups in terms of equity dollars raised, the nature of their exits (positive and negative), dollars generated by their exits, valuations, their overall 'multiple', and their employment patterns.

### Raising Equity:

*Total Equity Only Raise* is a measure of equity investment in these ventures, which is a combination of formal venture capital investment (90 percent of the total amount), individual investment, and corporate investment. The primary difference in equity raising across the heavy to lite state categories is that the skew increases in the lite states. This suggests that in the states with less overall VC activity, one finds fewer firms raising large amounts of equity, with a set of firms raising much smaller amounts. In the VC heavy states, all firms tend to raise more substantial amounts of equity. The overall mean amount raised in the sample is \$21.9M (median: \$10M) while CA ventures have a mean of \$25.2M (median: \$12.9M) and the "everyone else" category has a mean of \$16.1M (median: \$6.6M).

Also interesting, significantly more individual money is raised by ventures in the VC lite states. (\$190K mean per venture in CA, \$280K mean per venture in the 'everyone else' group.) (See *Equity Raised from Individuals* on data table)

### Cashed raised in exits:

In this data, the cash raised from positive exits is almost entirely data from IPO's (very little data on acquisition pricing). The over mean per positive exit is \$50.4M (median: \$37.4M) and it is important to note that that is in nominal, not real dollars. An 18-year data window, will require inflation adjustments for normalization. What's interesting, however, is that this amount varies little across the state categories. The amount of cash raised in these exits is very stable, although the Mid Atlantic state group overachieves with a mean of \$63M. (See *Exit Raise* on data table)

## Valuations

We looked at valuations of ventures simply by evaluating their highest post money valuation in any round, including any positive exit events. (*'Max Round Post'* on table) We find significantly lower valuations in the VC lite states. The mean valuation in the sample is \$118M (median: \$37M), while CA and MA were at \$137M and \$123M respectively, with the 'everyone else' category at a mean of \$88M (median: \$28M).

## Overall Multiple on all equity raised

We created a measure that estimates the *cash to cash multiple* by state category. It is merely an estimate because virtually all of the "cash returned" data is just IPO data, and not acquisition proceeds. We use the IPO cash proceeds as a proxy for the cash proceeds from acquisitions. Because IPO proceeds are usually higher than acquisition proceeds, this advantages the states with a higher ratio of IPO's.

We find no evidence that the multiples are more attractive in the VC 'heavy' state categories, or that the multiple in the 'everyone else' category is less attractive. Because of the estimations of these multiples, it is too fuzzy to know if the differences that do exist are statistically significant. That said, the smaller dollar denominator in the 'everyone else' category, makes their multiple the second highest of the categories, behind the mid-Atlantic group, which is strong because of their high mean on the dollar amount raised in positive exits.

## Employees

Looking at the headcount of the ventures, it is very comparable across states, with every category at a mean between 30 and 33 *employees*, and a median in the mid 20's.

## Types of Exit

We also looked into the simple distribution of *outcome types*, which avoids the estimation issues when evaluating multiples, looking at the rates of Out of Business, Acquired, and IPO's in each category. In addition to this end point outcomes, about 8,000 ventures are still 'on going' in the data set.

The distribution of outcomes across the categories is very stable overall. In this data, a mean of 36% of the venture have gone out of business, 47% were acquired, and 17% went into public markets. A significant portion of the 8,000 ventures still rated as 'ongoing' are probably actually out of business, as this particular outcome is the least discrete of the 3 events and therefore the hardest to measure precisely. Overall, the 'everyone else' category is right in line with the VC heavy states in both their overall distribution, as well as their ratio of acquisitions to IPO's. (This ratio minimizes any differences in errors estimating "out of business" ventures.)

The overall take away from this initial review would suggest that while the inputs are different across these categories, in terms of amount raised and overall number of ventures, the outcomes are essentially comparable. **There is very little evidence that the VC 'lite' states have less attractive outcomes.** It isn't clear how that would change if investments in those states increase significantly; it may or may not be 'scalable' which is a hypothesis that merits further exploration.

Table A: Venture Capital Activity and Outcomes by Location

		Total Equity Only Raise	VC Equity Raised	Equity Raised from Individuals	Exit Raise	Employees	Max Round Post	Estimated cash to cash multiple on equity raised
OVERALL	# Valid	18,933	18,933	18,933	1,541	16,027	11,358	
	# Missing	-	-	-	17,392	2,906	7,575	
	Mean	\$21.9	\$20.4	\$ 0.22 m	\$50.4	32	\$118	0.84
	Median	\$10.0	\$9.3	-	\$37.4	25	\$37	
	Sum	\$413,808	\$385,931	\$4,186 m		509,952		
CA	# Valid	7,419	7,419	7,419	621	6,309	4,565	
	# Missing	-	-	-	6,798	1,110	2,854	
	Mean	\$25.2	\$23.6	\$0.19	\$48.1	33	\$137	0.71
	Median	\$12.9	\$12.0	-	\$38.4	26	\$46	
	Sum	\$187,143	\$174,954	\$1,413		207,864		
MA	# Valid	1,984	1,984	1,984	176	1,732	1,259	
	# Missing	-	-	-	1,808	252	725	
	Mean	\$23.4	\$22.1	\$0.13	\$43.9	33	\$123	0.77
	Median	\$12.5	\$12.0	-	\$37.0	25	\$43	
	Sum	\$46,390	\$43,776	\$258		56,661		
TX/WA/CO	# Valid	2,093	2,093	2,093	157	1,801	1,284	
	# Missing	-	-	-	1,936	292	809	
	Mean	\$23.7	\$21.9	\$0.23	\$56.8	32	\$108	0.86
	Median	\$10.2	\$9.7	-	\$38.0	25	\$35	
	Sum	\$49,568	\$45,795	\$475		57,152		
VA/MD/DC	# Valid	3,151	3,151	3,151	240	2,633	1,746	
NY/NJ/PA	# Missing	-	-	-	2,911	518	1,405	
	Mean	\$19.6	\$18.0	\$0.26	\$63.4	30	\$118	1.07
	Median	\$8.0	\$7.1	-	\$42.0	23	\$32	
	Sum	\$61,681	\$56,680	\$830		79,532		
Everyone	# Valid	4,286	4,286	4,286	347	3,552	2,504	
Else	# Missing	-	-	-	3,939	734	1,782	
	Mean	\$16.1	\$15.1	\$0.28	\$46.2	31	\$88	0.99
	Median	\$6.6	\$6.0	-	\$33.9	24	\$28	
	Sum	\$69,025	\$64,725	\$1,211		108,743		

All dollars in million

Table B: Type of Venture Capital Exit Outcome By Location

	Count of Outcome Type	Outcome Type	Rate of outcome	ACQ to IPO Ratio
OVERALL	3,799	OOB	36%	
	4,992	ACQ	47%	2.7
	1,863	IPO	17%	
CA	1,606	OOB	37%	
	1,974	ACQ	45%	2.5
	782	IPO	18%	
MA	356	OOB	<b>30%</b>	
	594	ACQ	51%	2.7
	224	IPO	19%	
TX/WA/CO	444	OOB	37%	
	559	ACQ	47%	2.9
	193	IPO	16%	
VA/MD/DC	605	OOB	37%	
NY/NJ/PA	776	ACQ	47%	2.9
	265	IPO	16%	
	Everyone	788	OOB	35%
Else	1,089	ACQ	48%	2.7
	399	IPO	18%	

### **Angel Investment Data**

Eleven key factors were explored using data on 238 valid exits with angel investments. In this sample 69 exits were rural/underserved and 169 were urban. For this sample rural/underserved was defined as an investment that was outside of a larger metropolitan statistical area (as opposed to relying on the population of the town itself that could be within a metropolitan area).

The data indicated that there is very little difference between performances of investments:

- Overall multiples for angel investment exits are statistically equal; rural investments returned 3.43 times the capital invested and urban returned 3.81 times the capital invested.
- Holding periods were the same, approximately three years to fail and six years to win.
- Rural exits had somewhat fewer “failures” defined as investments where the return (multiple) was less than the original investment (1X); 52 percent of rural investments failed versus 60 percent for urban areas.
- The revenues at time of investment were the same—just over half of the investments had at least \$100,000 in revenues at the time of investment, with a median of \$125,000 for either region. Both areas made some investments in large revenue firms, such that the mean revenue for urban investors was \$2.25 million and \$1.79 million for rural investors.



- The average age of a company for an urban investment was 1.9 years old, whereas rural area investments were on average 2.3 years old.
- There was a slight difference in the cashout concentration of deals. The top 10 deals accounted for 91 percent of the cashout value in rural areas, whereas the top 10 deals accounted for 79 percent in rural areas. Both regions, however, were very reliant on “homerun” deals.

In addition to investment performance, characteristics of angel investors were also analyzed.

- The mean age of an angel investor was 50 years old in both urban and rural areas. Investors in both regions have comparable amounts of entrepreneurial experience.
- The percent of wealth held in investments were also statistically equivalent: rural angels held 12.7 percent of their wealth in such investments, whereas urban angels held 15.4 percent.
- Urban investors, however, have made significantly more investments; 16.78 investments for urban investors versus 9.1 investments for rural investors, and 7.3 versus 2.7 for exits, per investor. Given that angels tend to invest in close geographic proximity, this underscores the difference in the concentration of deals in less populated areas.
- Angels in both rural and urban areas have comparable mix of industry experience in the deals in which they invest, suggesting that rural investors are still able to find ventures related to their experience.
- Angels in both regions generally included co-investors of four to five people in their investments.

### **Can Equity Capital be an Effective or Efficient Contributor to Job Creation?**

In addition to return on investment, many philanthropic organizations also have interest in the broader economic and community impact of equity funding. From an economic development perspective, there is a question of how effective equity capital can be at creating jobs compared to other economic tools that may be used in a community (workforce training grants, tax incentives/holidays, etc.).

We examined 65 investments from six equity funds to estimate the job creation potential of equity capital. Deals from these funds had at least two years of investment history and job information at the time of investment as well as current job levels or jobs at the time of an exit. Some funds had a geographic focus and some were specific to specific industry sectors; two funds focused on companies with double or triple bottom line products or services. Of the 65 investments, 27.5 percent were in low-income or underserved large metro regions, 27.5 percent in rural and multi-site regions; 42 percent in small underserved metro areas, and 3% that could not be classified. The average size of an investment by individual funds was \$768,000 (a mean of \$684,000). The total investment in a venture ranged from \$500,000 to over \$6,000,000. The types of industries reflected national investment trends with the exception of slightly fewer biotechnology investments. The general composition of this sample is very consistent with other data analysis of angel and community development venture capital that included all types of equity funds, not just a sample of mission-based funds. This would suggest that job creation numbers for other funds might follow similar patterns as described below.

*Note about job creation estimates:* There are inherent issues that influence statistical certainty of this analysis; therefore findings should be viewed as general insights about the job creation potential of equity capital.

- Equity investments, by their nature are focused on high growth businesses. While all may not be high job creators, there is a strong correlation between the revenue and job potential of a company. Compared to other businesses, we should expect higher than average job growth with equity investments.
- The business stage of a company can affect the growth rate of jobs. Companies, especially those in technology-dependent industries, often require significant amounts of start-up capital before jobs are created. Depending on the business stage of an equity investment, the job growth could be underestimated. In this sample there were a range of start-up, growth and expansion investments that would minimize this bias.
- Funding per job created was estimated by the investment from each fund rather than the total investment per venture. In many of these investments, two to three funds were involved in a deal. We chose to use investment at the fund level to reflect the similar level of co-investment that takes place in other economic tools (e.g. )where tax incentives or grants are part of, yet not all, of the funding package.

### Investment Per Job

Overall, these investments created new jobs at a rate of just under \$11,000 per job, and just over \$7,300 per job created or retained. This is very competitive with other economic tools like tax incentives or workforce funds for recruitment and expansion where typically \$10,000-\$20,000 is expended per job created or retained.<sup>2</sup>

- Investments in large metro areas tended to be more efficient at creating jobs (just over \$5,500 per job) while small metros and rural areas averaged \$7,800 to \$14,000 per job retained or created.
- Investments of less than \$500,000 were most efficient at creating new jobs and retaining existing jobs.

Table C: Investment Per Job

	Total investment	Job at Investment	Jobs at exit/ 4Q 08	Net Jobs	\$/total jobs	\$/net jobs
Rural/multi-site with rural	17,177,500	523	1,206	683	\$14,243	\$25,150
Small metro	19,795,501	926	2,432	1,506	\$8,140	\$13,144
Large metro	13,707,540	811	3,269	2,458	\$4,193	\$5,577
Investments <\$500,00	6,254,726	918	2,328	1,410	\$2,687	\$4,436
Investments \$500,000-\$1,000,000	14,745,313	834	1,705	871	\$8,648	\$16,929
Investments >\$1,000,000	28,681,000	541	2,858	2,317	\$10,035	\$12,379

<sup>2</sup> Studies in Michigan, Oregon and Ohio indicate that \$5,000 to \$50,000 of state tax credits is expended for each job created by the targeted incentive package. Federal grants from EDA typically ranged from \$7,000 to \$12,000 per job match by other funds that raised the cost per job to almost \$20,000.

## Job Growth

The median job growth for a company from initial investment to exit or fourth quarter 2008 was 100 percent, with an average of over 200 percent (driven primarily by several companies with explosive growth). The average length of investment (holding period) for this sample was five years, equating to just over 18 percent per year in annual job creation. There was little variation among the rate of job creation in regards to investment size or type of industry.

*Top performing investments.* 16 of the 65 investments had proceeds or valuations of at least twice the initial investment. The average job growth rate of these top performers was over 400 percent- lead by one investment that experienced a 70-fold increase in its job base. When this investment was removed, the top performers experienced a job growth of 140 percent.

*Low performing investments.* 17 of the 65 sample investments were written off (10 investments) or had valuation of \$0 in the fourth quarter of 2008. Of these investments, 59 percent had positive job growth, even though the company had failed or was failing as an investment. The average job growth of these 17 “failed” investments was over 90 percent, almost double the number of jobs from the time of initial investment.

While economic development is not the primary purpose of equity funding, patient capital appears to be a competitive tool for creating jobs. What is most interesting is that job creation happens at a significant rate even when the company is considered to have poor investment returns. *This may indicate that the act of providing equity capital and the services and advice that is a part of that funding has economic impact regardless of the return to investors.* This may be an area where a more comprehensive study could further refine the economic development factors associated with equity funds.

## **A Gap in Small Scale & Start-up Capital**

It has been long held that successful venture capital investments develop disruptive technologies and dominating size businesses. To increase the likelihood of achieving outsized returns through such investments, most venture capitalists adopted a model driven by the axiom: “go big or go home”.

Looking at two different time periods, the move to larger and later stage deals is apparent. From 1994 to 2001, the average deals grew from \$2.1 million to \$12.1 million. From 2001 to 2008, the average size of a deal almost tripled to \$7.5 million.<sup>3</sup> Keeping in mind that a typical venture-backed company has, on average, three separate rounds of financing, such firms can easily consume \$25 - \$30 million from inception to liquidity. As a result, many note that venture capital has become more about the size of the deal rather than a craft of aiding entrepreneurs to build great companies.

There is a large gap in available start-up and small scale equity financing. In 2000, less than 3 percent of the capital and 7 percent of the deals were considered seed or start-up. From 2001 to 2008, the percent of investments in start ups ranged from less than 1 percent to just over 2.5 percent of deals with a slight increase in 2008. Still in 2008, venture capital firms made only 440 investments in start-ups nationally. Part of this gap has been filled by angel investors—in 2008, even with a recession,

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<sup>3</sup> Pricewaterhouse Coopers Moneytree

angels spent \$19.2 billion on over 55,000 deals<sup>4</sup> (an average of \$350,000 per deal). Despite this angel investment, a great need remains in small scale or early stage patient capital.

This raises questions for rural and underserved economies—does the trend toward larger and later stage deals eventually limit the number of rural equity investments? Do larger deals push rural based business towards location decisions in metro areas? Are high value businesses that require less capital being pushed out of a viable financing option? As one interview noted, “There are few rural businesses that can efficiently use financing rounds of \$7 million dollars or more, or have markets that can grow from \$10 million to \$100 million, as compared to the number of businesses that require just a few million or less or can sustain their operations by growing from \$2 million to \$20 million in sales.” While rural communities can offer opportunities for both types of businesses, the scale of rural economies typically mean there are more smaller scale investments available.

Analysis performed by Robert Wiltbank, PhD, Associate Professor of Strategic Management at Willamette University, reveals the effectiveness of small investments, or more appropriately, entrepreneurial capital. These firms are characterized by how much is accomplished with small dollars. Dr. Wiltbank analyzed the performance of more than 2,000 privately funded companies acquired by public companies between 1996 and 2007. Of these 2,000 plus acquisitions, 1,530 produced profits for investors.

While the range of investment across the companies is quite broad – from a few hundred thousand dollars to over \$100 million – the results break down nicely into two categories: those firms which consumed less than \$5 million from inception to acquisition and those that consumed \$5 million or more. The full effect is illustrated in the table below.

Table D: Deal Performance by Investment Size

Total Round	Less than \$5 million	\$5 million or more
Profitable Exits	1,208	322
Avg. Investment / Deal	\$770,000	\$24,000,000
Avg. Profit / Deal	\$24,000,000	\$83,000,000
Avg. Multiple	31 times	3.5 times

These results clearly beg the question: If small investments have such demonstrably better performance, why aren't more institutional investors demanding this approach and why aren't more venture capitalists practicing it? The simple answer is scale. Institutional investors – pension funds, endowments, etc – need large funds to manage their sizeable investments and fund managers need large funds to optimize management fees. Also, most institutional investors are not convinced that the entrepreneurial capital model is viable.

Yet there is another aspect of scale that is rarely addressed- the ability to scale capital allocation and capital efficiency. If smaller scale investments perform better and they have a broader reach to more businesses, then isn't there an advantage to developing a complementary approach of small-scale patient capital funds to service start-up businesses and businesses with limited equity capital needs? While it is apparent that traditional management fees would not suffice to fund operations, there are

<sup>4</sup> Bowers, Brent; In Pitching to Angels Investors, Preparation Tops Zeal; New York Times, June 11, 2009

plenty of other economic development and financing programs that provide overhead models appropriate to this size effort.

The observation about filling this investment gap is not limited to this project. Multiple presentations at the most recent annual National Association of Seed and Venture Fund Conference called for more small-scale funds that *“focused on why most of us got into the business—to help ‘ventures’.”* The potential benefit is significant since these funds could be deployed and scaled in more regions. And unlike CDFIs, these funds would be financing options of choice, rather than last resort.

Our findings point to a real need to demonstrate the value of entrepreneurial capital by establishing multiple funds that are subject to full life-cycle observation and analysis.

### **Understanding the Operations and Challenges of Equity Funds in Rural and Underserved Areas**

One of the first activities in this project was to interview several equity capital funds that make investments in underserved areas to understand their funding model and to identify what’s working and what challenges they face. Three organizations representing six funds were initially interviewed: Kentucky Highland Investment Corporation’s Southern Appalachian and Meritus Funds; CEI Ventures Funds I and II, and SJF Ventures Funds I and II. Four funds were managed within a structure that included a larger parent organization, and two funds were part of a federal government program (New Market Tax Credit and Rural Business Investment Company).

Each fund interviewed had a similar growth path for funds. Many firms started out with small equity funds of \$5-10 million, and with investments ranging from \$100,000 to \$500,000. Their second fund was typically three to four times larger (\$20-40 million) and made investments ranging from \$500,000 – \$1,500,000. While the current funds are significantly larger than previous funds, they still remain less than half the size of traditional venture funds.

#### Key Observations:

- There are experienced entrepreneurs and good deals in rural areas; the methods to mine these potential deals tend to be more extensive than in metro areas.
- Historical returns are the same in rural areas compared to metro areas, and there is no indication that rural investments perform any less well than urban investments.
- There is no indication that equity investments move out of a rural area at rates faster than other equity investments—there are, however, business characteristics that contribute to and can enhance the stickiness of an investment.

Since the basic investment model for equity capital is consistently applied across rural and metro regions, we examined the factors of scale or fit that can differ by location or mission of the fund. Four issues were explored:

- Expectations for investment performance and return
- Available deal flow and fundable entrepreneurs
- Characteristics of a “good deal” and
- Factors that influence stickiness

## Investment Expectations and Deal Flow of Funds

Earlier studies on community development and mission-based venture funds<sup>5</sup> suggested that these funds were expected to have lower returns on investment given their “dual mission” or location. Our interviews did not come to the same conclusion: while there were definitely challenges associated with growing rural companies, equity investments were expected to perform at the same market rate of other venture funds and with the same holding periods.

- One fund manager indicated that because there is a perception of lower performance from rural investments, a business must be an even higher performer (not just an average equity investment) to illustrate an advantage to their rural location.
- Self-assessment of fund managers indicated that their funds performed on average at the mid-point or slightly below mid-point compared to the market average. Deal Flow and Fundable Entrepreneurs

Previous studies on community development venture capital<sup>6</sup> indicated rural areas lacked deal flow or investment-worthy entrepreneurs. Our interviews explored this issue with funds. In the subset of funds interviewed, there does not appear to be a significant lack of deal flow or experienced entrepreneurs, rather a density issue (more geographic territory to cover to obtain the same level of activity in the pipeline).

- Earlier studies on rural equity funds noted the need to “create” deals by investing in early stage companies. We did not see an overwhelming need to invent deals. In a few cases, funds did pull together deals. These deals, however, were closely tied to entrepreneurs that were a ‘known commodity’ in the region. In the funds we examined, the majority of rural investments were for growth and expansion deals, as opposed to newer start-up companies.
- While metro-based equity firms get a large portion of deal flow from other fund referrals, rural-based funds also conducted a significant amount of prospecting to build their pipeline of deals. Funds we talked to found deals by keeping abreast of development trends within regions, having close connections to regional economic development organizations and small business development offices, examining trade journals, and attending trade shows. Those funds with extended partnerships appeared to have less concerns about the quality or quantity of deal flow--underscoring the value of rural networks.
- While some investments were in industries with ‘hot’ VC markets, most investments reflected the economic history of the region. There was an “organic” nature to each fund, reflective of the comparative economic advantage in each region: natural foods in Maine, manufacturing in Kentucky, agricultural products in the Midwest, etc. Given the distance to research institutions, the skill level of the resident workforce, and the community infrastructure, it is not surprising that investments tended to be in traditional industries rather than highly technical or scientific sectors. Few rural-based companies had intellectual property (IP) or were a spinout from a research facility.

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<sup>5</sup> Julia Sass Rubin, Financing Rural Innovation with Community Development Venture Capital: Models, Options & Obstacles. Federal Reserve Bank of San Francisco

<sup>6</sup> Julia Sass Rubin, *Community Development Venture Capital Funds*, and the Community Development Venture Capital Association, *A Report to the Industry*

- Funds also noted more entrepreneurs returning to the region in which they were raised or went to school, increasing the number of rural entrepreneurs with experience and connections with urban resources.

### **A Snapshot of Financial Returns for Community Development Venture Funds**

Information developed by CDVCA, 2007

The community development venture capital industry is young, and therefore definitive return information is not yet available. The CDVCA database contains information on 292 investments made since 1972. The majority of those investments, however, are quite recent, and only three larger funds have been investing for more than 10 years, which is the minimum typical life span of venture capital funds, and most funds extend for significantly longer.

In an effort to develop preliminary return information for the industry, CDVCA analyzed the portfolios of three of the oldest funds in the industry, which had relatively mature investment portfolios. The early funds were all organized as evergreen funds, and two of the three were organized as nonprofit corporations. To create a pool of investments that were, for the most part, fully exited, we looked at relatively mature investments, made prior to 1997. Of these, 32 had been exited. These included 25 in which at least some return had been realized and 7 that were written off.

Analyzing the exit data for these three funds shows a 15.5% gross internal rate of return (IRR) on all investments, including write-offs. In total, these deals accounted for cash-on-cash returns of 2.2 times capital invested and the average holding period was 6.1 years from the time of the first round investment.

The fact that these three funds were evergreen means that they did not have pressure to exit as rapidly as possible. Slower exits generally lower internal rates of return. Because they were either not-for-profit funds or a for-profit fund with highly social investors, they were not subject to the same pressure to earn high returns to which current, traditionally structured CDVC funds are subject. Much of their capital was provided through grants from government and foundations that were more interested in creating jobs in very low income areas than with financial outcomes. Finally, funds in the industry have simply become more experienced over the past 10 years, and the practice of community development venture capital has evolved considerably. For all of these reasons, we expect returns for the more recently formed, traditionally structured funds to be higher than their pioneering predecessors.



## Characteristics of a “Good Deal”

When funds sifted through the deal flow to find potential investments, they did so in a manner that was consistent with most venture funds. For the most part they evaluated:

*The company’s business model:* The extent to which the business was a good candidate for equity capital, and the ability to secure other necessary finance.

*The attitude and experience of the CEO.* Like most equity funds, the CEO was the lynchpin to the investment. All funds mentioned the CEO’s openness to take advice, and depending on the deal itself, experience and/or “fire in the belly” was often cited as the key characteristic of an entrepreneur. Local or rural ties made the CEO an even stronger candidate.

*The ability to innovate in growing or changing markets.* The product itself needed to be in a market with projected growth, or one that provided a clear innovative alternative to products or services already on the market. Many funds mentioned that the original product or service that the company had when it sought investment was not the same one that ultimately went to market. Investors said they looked for “potential rather than perfection.”

*Available talent:* Interviews noted the drivers of rural economic development are not always the same as those in metro areas. Many rural areas are losing population, and workers staying having lower overall educational attainment than metro residents. People with extended ties in rural communities, however, tend to be place based, providing what many note as a “hard-working” labor force with lower turnover. Therefore, it was important that the business could utilize the workforce skills and talent readily available in the area, and there is enough capacity (through existing workforce or recruitment) to grow talent to levels needed for a successful exit from the investment.

## Characteristics of Fit and Stickiness

Another question explored in this project was the “stickiness” of investments in rural areas. Do investments leave once they are successful? Are there fund practices or community characteristics that would make them sticky?

There is a general perception among the public that when an equity-backed business is sold to an outside investor/company it moves away. Our interviews did not find that rural companies left a region at rates any greater than equity investments in other regions. For the most part, rural equity investments tend to stay in their region. They may move to a larger facility within the region, or even establish additional facilities outside the region to reach key markets, but few funds or investments examined for this project moved completely out of the region when bought by another company or investor.

We did find that the mission of the fund or the attitude/experience of the fund manager did have a lot to do with investments that were selected for their potential stickiness. In some cases, funds seemed to have an intentional goal of investing in companies that had a dual purpose of creating jobs in their region and providing financial returns to the fund. Other funds were primarily return driven, looking for deals that could easily reach an exit point, with local economic impact as a secondary issue. We believe this is an important distinction and one that influences the stickiness of an investment.

Our evaluation of nine companies that stayed after an exit appeared to have the following characteristics that contributed to their stickiness:

- Having a CEO that is connected to the region or comes from a similar rural community.



- Receiving “extended” advisory services or technical assistance from a fund: A large amount of technical assistance goes into each rural project. Having staff and contractors to provide these services have been an essential part of the process. This assistance goes deep — helping with human resource issues, adopting environmental policies, completing grant applications, finding qualified tax incentives, etc.
- Having a geographic advantage to why the business should exist in a rural region or a specific rural location (e.g. access to natural resources, available and affordable workforce, presence of a federal lab with specific expertise, etc.) Businesses noted it was also important to be close enough to larger metro regions to capitalize on an expanded value chain and to attract additional management and technical talent.
- Using equity with other forms of finance: In many organizations like Kentucky Highlands Investment Corporation (KHIC) or CEI Ventures, equity capital was just one finance tool among an array of other loans, grants, and federal and state programs. At KHIC, even after an exit, many companies continue to use the organization for loans, lines of credit, etc—and not just for the money. CEOs liked having ongoing access to the staff expertise and advice. Even when using debt and other non-equity instruments, the investment staff was able to evaluate the companies as if they were making equity investments.
- Having investment staff with explicit and tacit knowledge of rural regions that knows how an investment “fits” beyond the business’ financial statement.

The primary reason that companies moved after an exit was the same as those in metro areas—they moved to be near targeted markets or closer to specialized expertise or capital. Since the equity capital model is an investment vehicle that seeks returns for its investors, it is the fund manager’s job to find business opportunities that offer potential returns. In some cases, these businesses have strong products or services in industries where their rural location would be a disadvantage to their current investment stage. Examples of these firms included software/IT companies or life/bio science companies with specialized markets.

There was one observation made during this project where several companies were moved to a specific location (a low-income census tract) at the time of investment in order to meet a condition of the New Market Tax Credit Program. Companies said they did this to receive funding, but it was not something they would have chosen to do on their own, nor did they think it offered any other strategic advantage besides its qualification for funding. There is a concern that without a set of other factors contributing to a company’s ‘stickiness,’ this form of temporary location to rural or low-income areas is no different than other equity funds requesting companies to move to meet their preferences. This may or may not have unintended consequences for rural and underserved areas, but may be a point of further research.

## A Case Study in Connecting Advisory Services and Investing

Advisory Services along side capital is shown to increase the stickiness and performance of an investment. An example of this can be illustrated through **Pacific Community Ventures (PCV)** approach they call *Development Investment Capital* that provides investment alongside other capacity-building resources to small businesses in economically disadvantaged areas of California. PCV focuses on companies with revenues of \$5 to \$30m. Through their Business Advisory Program, PCV advisors are carefully matched with portfolio company entrepreneurs to provide business advice and guidance on issues related to the company's growth and development. They provide additional services including business roundtables, CEO forums, and employee onramp initiatives to help companies develop peer networks and to build wealth among workers.

PCV augments business services with equity financing through PCV Investment Partners I, II and III, which make investments in high-potential companies in underserved industry sectors. The funds invest in private companies that provide good jobs with marketable skills, benefits, wealth creation vehicles (e.g. stock option and profit sharing plans) and job skills training in low/moderate income communities. In all of its investments, PCV seeks “double bottom line returns of both financial return and non-financial return”.

[www.pacificcommunityventures.org](http://www.pacificcommunityventures.org)

## Advisory Services

Compared to urban areas, rural communities often lack professional resources that support the development of businesses. We found that services play a critical role. More than just general advice, they help build the capacity of ventures and communities. As Jarratt Applewhite of New Mexico Community Capital notes, *“Capital of course is important, but our experience in New Mexico makes us believe that capital cannot come into play until the organization develops the internal capacity to manage its growth.”*

To fill this gap in assistance, venture and other patient capital funds have developed various levels of advisory services (also known as technical or operational assistance). For the most part, funds provide advisory services to:

- Increase the working knowledge of the company’s management team and to enhance company operations, and
- Enhance the quality of companies in their ‘deal’ pipeline. Positioning businesses to be stronger companies when seeking investment.

Funds with dual and triple bottom line missions also provide advisory services to:

- Promote specific business practices, especially social and environmental practices that provide additional business and community benefit.
- Create local networks of expertise that can benefit the broader business community and build entrepreneurial capacity in rural areas. Some funds believed that helping other companies strengthen their operations to the point of being good investments for any investor or lender is a valuable outcome.

The low concentration of business resources in rural areas can restrict the formal and informal knowledge exchange among companies and with business advisors. Having a network of advisory services has shown to positively influence the growth or success of a business. Therefore, the importance of creating these networks of people and services is an essential component in developing rural economies.

### Key Observations

- The funds interviewed for this project have extensive technical assistance services. Advisory services typically start before investment and continue until or after an exit, adjusting the type of assistance as the business grows and matures.
- Since current management fees do not cover the majority of these services, many are currently being delivered through one of two options: using federal programs with assistance funds such as New Market Tax Credits and/or through separate nonprofit advisory services set up by the fund or parent organization.
- Several funds have advisory services distinct from their financing activities where clients do not have an inside track to funding. These programs are intensive and disciplined efforts to help a business build capacity for growth and be able to efficiently utilize subsequent financial investments.

- Some organizations (through their non-profit) invest in their region's broader entrepreneurial and workforce base: they run a business incubator/accelerator, host entrepreneur bootcamps, have webinars, equity capital workshops, host industry symposiums, etc.
- Advisory services that were geographic-based tended to be well connected to their local economic and community development organizations. Many times these organizations were partners in technical assistance and community education measures, underscoring the connection between equity capital and community capacity.
- Since equity-backed businesses have characteristics that are different than most local businesses (high growth potential, national and international markets, specialized technologies or scientific applications, etc.) they view the services available by small business development centers or organizations like SCORE as insufficient for their needs. The advisory services covered in this report refer to the higher impact assistance most relevant to companies that can be defined as high impact or high growth.

## What Defines Advisory Services?

Virtually all equity funds provide advisory services to their investments. Some funds provide additional services to potential investments, and a limited number of funds provide advisory services to the broader business community.

### Advisory Services to Investments

Expanded advisory services are provided to investments with the intent to improve the financial and market performance of the company. Even practices that are considered to be triple bottom line (with social and environmental benefit) are implemented because they are also strong business practices that can help improve employee retention and product/service quality, or reduce costs or risk. As companies search for a competitive edge or market niche to differentiate them from others, these expanded practices are likely to become a larger part of assistance offered by funds.

**Core Advisory Services** (provided by virtually all funds engaged in this project and mostly through the funds management fees)

- *Capital planning*: developing strategies for capital efficiency and helping to obtain other debt and equity funding, tax credits, government supported loans and other financing options to grow operations.
- *Financial and operational assistance*: helping to establish financial goals, accounting systems and other feedback controls to maximize operations.
- *Management strategies*: helping to determine, and putting in place, management talent that can take a company to the next level of growth.
- *Operational Enhancements*: improvements to operational productivity and costs.
- *Technology development*: connecting to resources that can assist with developing technologies and/or protecting intellectual property.

**Operational Assistance** (provided by many funds and which can be partially covered with management fees but are typically funded through additional government programs or grants)

- *Marketing and branding*: providing research, developing strategies and connecting to strategic partners that can access markets and build brand.
- *Human resource development*: establishing benefit packages, retirement plans, and other employment practices to attract and retain employees.
- *Value or supply chain development*: helping to identify and secure critical suppliers and professional resources, often connecting to suppliers within the region.

**Specialized Advisory Services** (provided by a limited number of funds and typically delivered through grant funding or outside resources)

- *Employee wealth building programs*: providing information and assisting with evaluating employee programs such as profit-sharing, broad base stock options, ESOPs, etc. which have shown to increase employee retention and product or service quality.
- *Environmental and resource conservation plans*: connecting to resources that can provide assistance with establishing recycling, energy and material conservation, and/or toxic use reduction programs that can minimize risk and save money.
- *Workforce development*: connecting with local workforce organizations and education institutions to help companies develop training programs, access skill development tools for employees, etc.

*(See the section on Triple Bottom Line for additional services)*

### Advisory Services Delivered to Businesses Outside of the Investment Fund

Increasingly, and to the benefit of rural communities, many of these services are also being offered to other high impact businesses in a region that are not a part of the fund's investments. These programs can serve hundreds of entrepreneurs and companies, building individual and intellectual capital in the community.

Additional advisory services have been established in part because these funds have recognized the value of having businesses throughout their region with capacity to seek and manage growth. Funds also use advisory services as a way to promote progressive business practices including double and triple bottom line programs. Most funds work with other community partners including community colleges or universities, economic development council or workforce organizations. Almost all of these expanded efforts are funded through grants provided by foundations and governments.

While most of these advisory services are topic-specific efforts, a few funds like Pacific Community Ventures and New Mexico Community Capital run comprehensive advisory services providing a business with an advisor that is backed by a local team of expertise. Programs were established because funds reported that many of their most compelling financing opportunities were often with companies or entrepreneurs that were inexperienced or not yet in a position to effectively use an influx of capital. These types of programs are especially valuable in rural communities where an extensive network of partners can build the capacity of the business and the community.

Some funds are not geographic focused and offer services to entrepreneurs throughout the country. SJF Ventures, while primarily a clean tech investment fund, has an advisory service organization that reaches well beyond companies in green markets. Their "Get Ready for Equity" training, webinars, and one-on-one advisory services are open to an array of entrepreneurs, including a significant

number in rural communities. These services tend to complement the intensive capacity building programs described above and help entrepreneurs to learn more about specific topics or markets.

Examples of advisory services and technical assistance offered to businesses outside of a fund's investment portfolio include:

- Business plan development
- Advice on specific business and financing strategies
- Advice on business structures and employee engagement programs
- Coaching on how to present to funders
- CEO panels on issues such as clean tech, workforce development, etc.
- Advice on how equity funding works and how it compares to other financing options
- Referrals to potential business professionals, funders and fundraising networks
- Webinars on specific topics,
- Multi-session group trainings (e.g. entrepreneurial bootcamps)
- Comprehensive advisory services to build organizational and operational capacity of businesses.

Community-based services not only bring in expertise that otherwise would not be available to businesses in rural areas, this knowledge is transferred to the region's economic and community development service providers that can then share this knowledge with even more businesses.

### **Impact of Advisory Services to Companies Outside the Investment Portfolio**

The impact of advisory services to businesses outside of the investment portfolio was examined through two independent surveys that interviewed businesses that received various types of advisory services ranging from referral to one-on-one counseling to group training. The surveys included 24 businesses in rural communities with populations from 600 to 25,000.

Examples of direct impact of these services included:

- Expansion into new markets that resulted in increased revenues and product placement.
- Changes in business operation models that resulted in increased revenues
- New funding in terms of finding available debt, research grants, and seed level equity funding.
- Increased financial controls leading to cost containment and productivity improvements.

Other impacts of these services included:

- Enhanced network of advisors and peer businesses that companies could tap after services were completed.
- The confidence to "seek out help and not do things alone" as multiple interviews noted.
- More awareness and coordination of other business providers that lead to a more robust regional network of assistance.

One key finding of these evaluations is the **direct correlation between the depth of service and the impact to the business**. As a service increased in terms of the total length of time a business received advice and the number of times they interfaced with the advisor, the impact of the service on

the business also increased. Businesses receiving three or less hours of services in one-to-one contacts had the lowest impact rating, while businesses with six or more hours and multiple contact points had the highest level of impact.

### **Connections Between Advisory Services and Triple Bottom Line**

There is a strong connection between advisory services and how funds are or have the potential to promote triple bottom line practices (TBL) as part of their funding activities. Funds without separate nonprofit organizations or those under programs like New Market Tax Credits appear to be limited in their ability to provide services beyond specified types of assistance. Funds with nonprofit affiliates are well positioned and appear to be leading the industry in the application of TBL practices within an equity framework, yet must raise additional support to cover program expenses. Improving the efficiency and reach of successful TBL models will be required to reach a tipping point of funds that incorporate social and environmental considerations into their investment framework.

### **Identified Gaps in Advisory Services**

While advisory services are designed to fill business development needs, there continue to be noticeable gaps. The first gap is the availability of these high impact services in more rural areas. Programs like those run by Pacific Community Ventures or New Mexico Community Capital have shown they can be scaled in other regions, yet resources to expand working models have been limited. The use of technology has enabled businesses to take advantage of short-term advice through webinars and on-line resources, but significant gaps remain in more in-depth advice. In particular, businesses mentioned the need for:

- Advisors that can serve on and help develop Board of Directors
- On-going mentoring advice for start-up and early stage growth,
- Local/regional banks that understand and can work with various forms of equity and near equity arrangements.

The second gap is the limited subject matter offered by most rural advisory services. Businesses noted that services for enhancing financial operations were common, yet more specific operational assistance or business practices leading to social or environmental benefits were harder to find. Businesses noted several specific types of practices lacking in rural areas:

- Human resource programs that ranged from extended benefits to profit sharing to other forms of employee assistance,
- Information on “green” markets and operations; getting through the hype and really understanding whether or not there were ways to make their own operations more efficient (a cost and risk issue) as well as develop products or services for growing green markets, and
- Operational controls including data mining of customer information, tracking systems and project management tools to maximize the efficiency of capital and human resources.

### **Challenges For Building More Robust Networks Of Advisory Services**

#### **A relatively high-touch, high unit cost**

Currently, most funds develop their own set of expertise to deliver advisory services, whether through their staff or those of partners. There is little sharing or exchange of expertise across funds for



practices that may need specific expertise on an occasional basis. As a result, specialized resources are either not offered or are duplicated creating excess capacity and contributing to high unit costs of services and a fragmented delivery system.

In other industries or services, centers of excellence among industry leaders are often created to help efficiently develop and refine practices and expand networks that offer expertise (the distribution of knowledge) to others as needed. Centers of excellence can also provide comprehensive evaluations and use evaluations to continuously improve the field of practice. To the extent that there are equity funds that have developed specific expertise (e.g. SJF Advisory Services' in-depth knowledge of employee wealth models such as ESOPs/broad based stock options, and Pacific Community Ventures' ADVANCE program), the industry has the potential to develop a linked set of expertise that could increase the knowledge transfer and application of advisory services.

### **A lack of a system to develop and share new or working best practices**

The lack of a coordinated system to develop and share models of advisory services has resulted in mostly ad-hoc practices by funds. Funds learn about new practices or advances in existing practices primarily through conferences or periodic working groups of associations. Funds noted most information was either communicated through white papers or presentations, with a handful of slightly more interactive one-time workshops or webinars. With the exception of disseminating core financial practices, the equity capital industry does not appear to have systems in place that could share expanded advisory service expertise. There have been several occasions where organizations like CDVCA have developed tool kits around specific subjects such as workforce development. While these efforts were of value to the funds involved, resource limitations kept participation to members of a specific organization rather than a process open to all funds with interest or experience in the subject.

Funds noted several approaches which they believe would improve the information flow and knowledge sharing among funds:

- *More intentional development (R&D) of leading edge operations and practices* to establish service models that can be easily scaled or adopted to an array of funds or geographies.
- *Supporting leading-edge funds in expanding and scaling their operational models to other regions.* These organizations have already spent significant time and resources in developing an advisory service model with proven benefit, therefore, providing funds for scaling their model and training other funds could be a cost-effective method to accelerate the replication of best practices.
- *Establishing user groups around specific topics (modeled after user groups that are common learning networks for information technology, human resources, and other industries) to develop, refine and share practices on a more proactive basis.*
- *Strategic partnerships to share expertise.* Developing a service or knowledge exchange by which one advisory service organization with specific expertise could be contracted to provide specialized services to other funds. This service exchange would not only provide a more cost-effective manner by which funds could access resources, it would also connect businesses and the communities in which they operate with national expertise that might otherwise not be available.



- *Industry-wide evaluation of specific practices.* Currently, most funds that receive grant funding for specific services conduct their own evaluation. Since many of these services are similar (employee wealth building programs, environmental conservation practices, etc.) a more centralized approach to evaluation could provide a more cost effective and comprehensive way to compare variations, impacts and outcomes among practices. Funds believed they would learn more from evaluation of a group of programs rather than just analyzing their own effort.

### **The need for additional funding structures**

While the need for advisory services, especially in rural areas, seems apparent, the ability to fund additional services is marginal at best. To provide more than a minimal set of services covered by management fees, organizations must establish their fund as a part of a government program with limits on investments and type of technical assistance provided, or establish an affiliated nonprofit organization and seek grant funds, typically from sources different from the investors in their fund.

There is a clear need to establish more effective means to fund advisory services. Knowing that rural areas lack many business resources, it would prove beneficial to support venture funds that offer extended services to their investments and/or region. Several funding options were repeatedly suggested by organizations involved in this project:

- Establish a “matching management fee” whereby investors or foundations would match all or part of the base management fee for funds that invest in underserved areas and provide expanded services. For mission-based investors, the match could also be related to the degree by which services promote triple bottom line practices.
- Ensure that funding for advisory services also include adequate resources to transfer practices to the field. Many funds noted the resources they currently receive only pay for the delivery of services to a limited number of companies or within a specific geography, with virtually no resources to share expertise or knowledge with others.

### **Summary**

Advisory services are an integral part of equity funding, filling resource gaps and expanding the intellectual capital and knowledge network in a region. They are provided to both investments and to businesses outside of the investment pipeline. Research indicates that these services are most effective when they offer more than just a one-time, one-hit session with an advisor. The availability of more comprehensive and ongoing advisory services in rural areas should be considered a critical part of any rural economic or community development effort.

We found that most funds thought of advisory services as various types of technical assistance that is applied as requested, or as needed, by an investment. There were a few funds which viewed advisory services as a more strategic, comprehensive package. The funds that took a more comprehensive approach were also those more likely to be promoting triple bottom line investing. We also found that services independent of investments had significant value to rural and underserved communities--building the internal capacity of businesses to a point where they could effectively use an influx of either debt or equity capital.

To bring advisory services to scale, three key issues will need to be addressed:

- *Expand the knowledge base of practices:* Support the development and dissemination of leading edge practices that go beyond the financial operations, especially those that can help rural based businesses enhance their own operations in order to effectively use capital. Take advantage of working models that can be scaled and replicated to other rural communities.
- *Increase efficiency:* Encourage efforts like knowledge or service exchanges among funds and regional partners to expand the reach and minimize the cost of delivering services. This also creates urban-rural bridges to resources and expertise that otherwise is not available in many rural areas.
- *Stabilize Funding:* Explore and support models for more fully integrating advisory services into the initial investments of patient capital funds.

## Triple Bottom Line Practices

This section describes specific triple bottom line (TBL) investment practices and impact measures being used by equity funds and explores the challenges associated with replicating or scaling the practices across the industry.

Triple bottom line investment is referred to by many names.

Most common is 'impact investing,' yet mission-based investing, socially responsible investing, values-based

investing are also terms used to describe investment practices that seek to have simultaneous returns on financial, social and environmental capital. From an investment practice, it is relatively new and as the 2009 Monitor Institute Report noted, *"the pressing question is whether impact investing will remain a small, disorganized, and underleveraged niche or whether leaders will come together to make this a major complementary force for providing capital."*

**Triple Bottom Line Definition:**  
A balanced approach to development that benefits the economy, the environment and social inclusion simultaneously.

The research in TBL or impact investing also suggests two processes at play in today's investment community. One approach takes the current finance-based return model and overlays social and environmental elements to the extent possible; it optimizes financial returns with a floor for social and environmental impact. The other approach uses an integrated model that seeks to optimize social and environmental impact with a floor for financial returns. This distinction is important because the types of investors, size of investment, expectations for returns, etc. can differ between the two models.

In this project, almost every fund interviewed approached TBL investing from a financial return with a social and environmental overlay, as opposed to an integrated model. In other words, these funds viewed TBL as a set of discrete practices that are incorporated into investments as needed. We also found that unlike community development venture capital, funds interested in more comprehensive impact investing are disbursed among various industry associations and have no single intermediary that represents a critical mass of funds.

### Key Observations:

- Funds are reporting more businesses and investors interested in adopting social and environmental policies and practices that can allow them to "do good and do well."
- While there are social and environmental benefits to TBL practices, funds and businesses noted their primary reason for implementing such practices was to improve performance, quality or costs.
- Given limited resources, funds tend to focus on a handful of specific TBL practices (typically two to three practices in a particular fund). Practices outside a fund's focus tend to be referred to other providers.
- The funds promoting TBL practices use their advisory services and/or partnerships with other organizations. And like general advisory services, the costs for such effort are not covered in management fees and must be raised through separate means. This appears to be a limiting

factor for funds interested in providing TBL practices on a consistent basis to companies in their portfolio or region.

- Most funds collaborate with each other on financial tools, however, there is less collaboration among funds for expanded technical assistance. Most practices are disseminated “passively,” through written reports or presentation. Few interactive methods (workshops, webinars, etc.) for sharing practices are deployed on a regular basis.
- There are many organizations (funders, funds, businesses, policymakers) interested in TBL/impact investment, yet for the most part, these dialogues and learning communities are uncoordinated. While thought leaders and best practices are emerging, there are few intermediaries and virtually no social infrastructure identified by funds that connect those interested in TBL practices.

## What Practices Currently Define the Second and Third Bottom Line?

### Social Impact Measures

With community development venture capital and government programs focused on issues such as low and moderate income jobs, we found a fairly consistent set of measures for social capital. Whereas, environmental measures were much less common and far less consistent in their application. Working groups in organizations like the Community Development Venture Capital Association (CDVCA) have developed an Impact Tool Kit that outlines various financial and social measures (and to a much lesser extent, environmental) and illustrates how funds can collect data to measure various factors. While the CDVCA Tool Kit is comprehensive and well documented, limited resources for distribution have limited its reach primarily to its members.

**Expanded Benefits:** While most funds work with companies to provide basic benefit packages to companies, some funds actively promote expanded benefit packages that can include (in order of most commonly used practices):

- Establishing health care packages that are above industry standards and which have significant employer contributions.
- Offering life and disability insurance, or
- Offering employee assistance programs

Funds that promoted expanded benefit packages to their investments believed these resulted in the attraction of higher caliber workers, greater employee retention and less absenteeism, and a sense of loyalty from employees.

**Workforce Development:** Some funds were actively engaged in various workforce development efforts including both employee training and recruitment practices such as:

- Establishing educational benefit packages for employees that included on-site training for issues and/or off-site or on-line education utilizing tuition reimbursement and other similar tools.
- Working with educational institutions and other workforce organizations to secure training grants for companies. These services were typically provided through community partners under a government-supported program.

- Working with local workforce organizations to hire workers with disability or those from low-income communities. This was typically a focus for companies with a workforce that had a considerable number of low to medium skill jobs, rather than in businesses with a high percent of workers with technology or scientific skills.

### **The Effect of ESOPs on Company Performance (Excerpts from the National Center for Employee Ownership)**

In the largest and most significant study to date of the performance of ESOPs in closely held companies, in 2000 Douglas Kruse and Joseph Blasi of Rutgers University found that ESOPs increase sales, employment, and sales/employee by about 2.3% to 2.4% per year over what would have been expected absent an ESOP. ESOP companies are also somewhat more likely to still be in business several years later. This is despite (or perhaps because of) the fact that ESOP companies are substantially more likely than comparable companies to offer other retirement benefit plans along with their ESOP.

Kruse and Blasi obtained files from Dun and Bradstreet on ESOP companies that had adopted plans between 1988 and 1994. They then matched these companies to non-ESOP companies that were comparable in size, industry, and region. They then looked for which of these companies had sales and employment data available for a period three years before the plan's start and three years after. The sales and employment growth data were then compared for each year for each paired company. They also checked the companies' filings with the Department of Labor to determine which of the companies had other retirement-oriented benefit plans. Finally, they looked to see what percentage of the companies remained in business in the 1995 through 1997 period.

#### **Difference in Post-ESOP to Pre-ESOP Performance**

Annual sales growth	+2.4%
Annual employment growth	+2.3%
Annual growth in sales per employee	+2.3%

The relative growth numbers might seem small at first glance, but projected out over 10 years, an ESOP company with these differentials would be a third larger than its paired non-ESOP match.

#### **The New York and Washington Studies**

Economist Gorm Winther and colleagues in New York and Washington State followed up the NCEO study, using the same research design but different samples, one of 25 employee ownership firms in New York State and one of 28 employee ownership companies in Washington State. In both studies, employee ownership per se had little or no impact on corporate performance, but a substantial impact when combined with participative management. In Washington, companies that combined ownership and participation grew in employment 10.9% per year more than would have been expected. Sales grew 6% per year more. The New York results used correlations and cannot be compared directly, but the results were in the same direction. In Washington, majority employee-owned firms that were participatively managed did even better. The Washington study also found that the synergistic effect of ownership and participation was not diminished even when the control group companies had no employee ownership, but had profit sharing and participation programs.

#### **The GAO Study**

In 1987, the U.S. General Accounting Office (GAO) did a before and after study using a similar methodology, but covering 110 firms and focusing on productivity and profitability. The measures the GAO used were controversial because they assumed that employee ownership firms did not increase overall compensation when they set up an ESOP. In fact, it appears that about half of all ESOP companies do increase compensation, and few decrease it. The GAO results are probably too conservative because of this assumption. The GAO study found that ESOPs had no impact on profits, but that participatively managed employee ownership firms increased their productivity growth rate by 52%.

**Employee Wealth Building:** Several funds have been active in promoting the use of wealth building tools to help their investments increase performance. Employee wealth building programs can offer companies tax benefits as well as increase employee performance. With an expanding body of research showing direct benefit of these practices, they appear to be an area with growing interest by other funds:

- Establishing 401(k) plans, which are increasingly a part of a company's basic benefit package.
- Establishing profit-sharing programs that range from those for specific classes of management to profit sharing that includes all employees.
- Establishing employee stock ownership plan (ESOPs). An ESOP is a type of employee benefit plan in the U.S. that buys and holds company stock for the benefit of a broad group of employees. ESOPs are most commonly used to provide a market for the shares of departing owners, to motivate and reward employees, or to take advantage of incentives to borrow money for acquiring new assets in pretax dollars.
- Establishing equity compensation plans that could include stock options, employee stock purchase plans (ESPPs), restricted stock, restricted stock units, phantom stock, stock appreciation rights (SARs), direct stock grants, performance shares, and similar vehicles. (Very few funds were engaged in this practice.)

Funds promoting employee wealth models typically worked with national and regional organizations focused on social capital including the National Association for Employee Ownership, the Foundation for Enterprise Development, the Beyster Institute, Winning Workplaces, and state and regional Workforce Investment Councils/Boards.

### **Environmental Practices**

With growing public interest in clean technology and green markets, equity funds are increasing investments within this market space. Much of the current focus of equity funds, however, are centered around the selection of companies with a "green" market or product focus, as opposed to helping companies in more traditional industries with being as energy and resource efficient as possible. Funds note the greatest challenge in deploying conservation efforts was the lack of expertise and resources within their existing network of providers. Environmental practices being promoted by funds include:

- Assisting companies with product redesign for entering or expanding green markets: Assisting companies with qualifying for and obtaining environmental or sustainable certifications
- Promoting the use of recycling and basic conservation efforts. In funds we examined, recycling tended to be concentrated in office operations rather than a comprehensive recycling program throughout the operation.
- Establishing energy conservation measures for operations and facilities: Most funds limit this practice to the recommendation of basic steps like an energy audit. Some provide general information on LEED standards for facilities. Only a few funds take a systematic approach in assisting a business with developing a comprehensive conservation plan that includes the reduction of energy used in facilities and operations, the purchasing of green energy, installation of renewable power, etc.

- Providing connections to resources or expertise to help companies establish a pollution prevention or toxic use reduction program. Only one fund we interviewed was found to have any focus on helping businesses to take more aggressive steps in systematically reducing the use or emissions of toxics and greenhouse gases.
- Establishing environmental management or assessment systems like ISO14001, strategic environmental assessments (SEA), sustainability impact assessments (SIA) and integrated sustainability assessments (ISA). While these national and international standards have been available for years, only a few funds have linked their assistance programs to resources that set up enterprise wide environmental systems or help companies expand environmental practices to their supplier base.

Unlike the alliances with groups promoting social capital, there was the noticeable absence of partnerships with other business organizations that have lead efforts to promote sustainability or environmental practices in the business community including the US Council on Sustainable Businesses, the Zero Waste Alliance, the Natural Step and others.

### The Impact of Voluntary Environmental Programs on Business Performance

A recent study by Portland State University, Oregon State University and the University of Oregon provided insights on the extent to which businesses adopted environmental programs and practices. The purpose of the study was to “test the influences of firm, industry, and regulatory and voluntary program factors on firms’ environmental performance; and infer the ‘voluntary’ program elements (i.e., policies and practices) and other factors that significantly improve firm environmental performance.” Almost 700 companies participated in the study covering 30 out of 36 counties in Oregon and representing an array of manufacturing, construction, service and retail sectors. Like most businesses in the state, 95% had fewer than 250 employees, 69% with fewer than 50 workers.

Findings indicated that companies with voluntary environmental programs (VEP) showed significantly higher environmental performance than companies that were driven only by regulatory requirements:

- Among respondents that reported participating in at least one voluntary program, nearly 80% reported improved performance in at least one area of impact, compared to 54% of non-participants.
- A greater proportion of voluntary participants, 57%, reported over-compliance with regulatory requirements compared with 33% of non-participants.
- A greater proportion of VEP participants had implemented environmental practices than non-participants. In addition, VEP participants had implemented a significantly higher number of practices on average than non-participants.
- Impact-specific results indicate that VEP participants recycle at significantly higher rates than non-participants (59% versus 44%). In addition, in the construction sector, VEP participants installed significantly more energy-efficient equipment and built significantly more projects to green building standards than non-participants (28% versus 9%).

While current and potential regulatory conditions influenced the extent of environmental practices, the commitment to environmental policies/practices (EMPs) was shaped most heavily by upper management attitudes and market pressures, (e.g. competitors, investors). The size of facility or industry sector had little effect on whether environmental practices were implemented. In other words, the study implies that attitude and awareness of management mattered, and along with the pressures from investors and competitors, had a positive effect on a business’ environmental performance.



## Characteristics of Leading-Edge Funds

As we have noted, there are relatively few funds that use an integrated TBL approach (financial, social and environmental) in their investment operations and services. Yet, for those firms leading the industry in this respect, we found some common characteristics among their operations and management team.

**Intention:** These fund managers not only understand the possibilities of TBL practices, but also have a commitment or intention to consistently promote these practices to their investments and other businesses that they advise. These funds seek businesses with an open attitude toward progressive business practices and help companies define and reach their potential for financial, social and environmental goals.

**Capacity:** Funds have systematically built capacity to deploy practices to businesses in their service area, whether through their own organization or affiliate or regional partners. For the most part, this capacity includes the establishment of assessment tools and measurement systems, integrated TBL financial systems, and complementary advisory services.

**Leadership:** Funds leading the development and implementation of TBL practices in equity investment have not waited for organizations or industry association to lead the charge. These funds have taken proactive steps to share their expertise and operating models through their own webinars, conferences and white papers. They are, however, limited in their outreach since the majority of their funding is intended to cover their investments or a specific services area of a grant provider.

### Does Intention Make a Difference?

Can equity funds that promote social and environmental practices illustrate that their intent makes a difference? We first searched for issues where there was national data on the average percent of business participation in a given subject. We then reviewed data from the funds we have interviewed in this project to see if we could find comparable measures. Three of the funds kept detailed data on health care, retirement plans, and the use of environmental practices that goes beyond compliance. When we compared the reported participation from these funds to US averages we found that there was a clear distinction between the funds that actively promoted certain business practices and the national average for all businesses.

**Table E: A Comparison of Business Participation in Selected TBL Practices**

	Average for Fund	US Average
<b>Health Care with Employer Contribution</b>		
- Fund A	89%	62% <sup>7</sup>
- Fund B	100%	
- Fund C	80%	
<b>Retirement Plans</b>		
- Fund A	67%	45% <sup>8</sup>
- Fund B	73%	
- Fund C	67%	

<sup>7</sup> Kaiser Family Foundation, 2008

<sup>8</sup> US Bureau of Labor Statistics, National Compensation Study



## Environmental Practices

- Fund A	84%	54-60% <sup>9</sup>
- Fund B	100%	
- Fund C	71%	

## Measuring TBL Impact

Triple bottom line or impact investing within the equity/patient capital industry is not well defined; there is little common language and only few cases of standard practices. While there appears to be a tipping point of interest on the horizon, most efforts are still in exploratory or early collaboration stages. The inconsistency in measuring TBL impact also underscores the lack of standard practices within the industry.

Most funds measure and report impacts on financial performance and job creation. There are a handful of funds that have developed impact reports or comprehensive metrics to provide insights on the social and environmental outcomes of their investments. We examined measurement systems used by five funds with community development or impact investing missions.

- Impact measures tend to be a mix of input, outputs and outcomes. The lack of standard TBL practices in equity capital is apparent in the variation of measures used by funds. Economic indicators tend to be more focused on outcomes (e.g. number of jobs created), while initial social and environmental measures remain focused on inputs (e.g. number of low-income people served by a specific program or the number of business with a recycling program).
- In some areas measures are fairly consistent, especially for economic and social metrics. This appears to be influenced by a CDVCA working group on measuring impact which collaborated for over a year on developing a measurement and reporting "Impact Tool Kit."
- For some aspects of TBL, especially environmental, finding consistent and available data can be a challenge. This is particularly true in measures that seek to go beyond compliance issues.
- Different priorities and preferences of funders (including foundations) appeared to account for a significant amount of the variation in how funds measured impact.

### How funds use impact measures

- Four funds reported using impact measures and impact reports as a way to raise awareness about triple bottom line practices and benefits. In many cases, the use of TBL indicators served dual purposes of education and evaluation. To most funds, an impact report was used as a basis for dialogue between potential investments and funder, as an internal assessment tool for expanding advisory services, and finally as an audit tool for fund performance and adherence to their mission.
- Four funds had complementary advisory services (typically managed by a nonprofit arm) that intentionally promoted TBL practices. Each of the four funds had staff dedicated to evaluating impact as a matter of policy that went beyond the reporting requirements for government or

<sup>9</sup> statistics from three state studies of companies using at least one environmental practice

funding sources. Funds reported this additional assessment function as being very valuable in terms of determining the impact their funds and services had on specific goals.

- Four institutions published a separate annual impact report as part of their operations to highlight the community impact of their investments and to promote an overall TBL approach to financing. Another included their impact as part of their annual report.
- Most of the TBL impact measures and reports appear to be a static snapshot of a given time period. In most cases, there was little information about the progression of these measures over time. Therefore, it was difficult to understand whether TBL conditions were already in place at the time of investment or if the use of TBL practices was influenced by the fund.
- One institution uses their metric system as an evaluation and continuous improvement tool, working with businesses each year to track progress and to identify TBL gaps in their operations. The tool, which included an operational assessment as well as measurement protocol, uses easy-to-read graphics that illustrate a business' progress and remaining challenges.

### What funds measured

Funds tend to measure between nine and fifteen different indicators divided among the economic, social and environmental domains--most using three to four measures per domain. While many studies related to the measurement of TBL impact consist of far more indicators (in many cases, ten to twelve measures per domain), funds that use a TBL approach question the practicality and value to having more measures. Fund and advisory service managers we spoke to wanted to see a set of approximately ten measures that were focused on outputs of outcomes and which continually kept pace with changing industry standards.

In our limited sample, there appears to be a direct connection between a fund's approach to TBL investing (more integrated and earlier assessments) for investments and the measurement systems they use to promote ongoing progress toward sustainability. While we encountered several funds measuring more than just financial impact, the use of TBL measures is underutilized as a continuous improvement tool. The information collected by these funds can be useful information to encourage businesses to go to the next step of their sustainability journey. However, most funds have not set up measures to capture a baseline and continually measures progress towards desired outcomes. Therefore, most impact information is viewed as a passive rather than active communication model. This suggests that efforts to establish a shared set of metrics for TBL investment need to be more than a rollup of current practices. They need to be driven from the perspective of what do we need to measure to promote continuous and significant progress toward sustainability?

The following table represents metrics being used by the funds evaluated in this project. The measures are divided into three domains (economic, social and environmental). Each domain has a set of "aspects" that relate to an area of focus within each domain. Measures for each aspect are broken down into two tiers: Tier 1 illustrates basic measures that are commonly used by funds. Tier 2 measures are not as common, yet represent outcome measures that funds use to measure specific TBL goals and/or to measure more advanced levels of TBL performance.

**Table F: TBL measures used by patient capital institutions**

TBL Domain	Aspect	Basic "Tier 1" Measures	"Tier 2" Measures
Overall			Has a company policy or code of conduct for TBL/sustainability that is communicated to employees, investors, and customers
Economic	Jobs	Jobs created (net)	LMI or Target Jobs
		Job retained	Turnover rate
	Investment leverage	Implied leverage	
	Sales/revenue growth		Sales at exit compared to sales at investment
	Wages	Average wage (compared to regional wage)	Total payroll contribution
	Local Ownership/Purchasing		Percent of goods/services purchased regionally Percent of company controlled by local/regional ownership
Social	Benefits for hourly workers	Percent of investments with health plans for non-management workers; percent eligible & enrolled in plans	Percent of investments with other benefits including paid personal time/sick leave, life insurance, disability, etc.
	Employee asset/wealth building	Percent of investments offering retirement plans; percent of workforce participating	Percent of investments offering profit sharing, stock options, structured bonuses
			Percent of investments offering financial literacy training to workforce
	Training & Education	Percent of investments offering paid training to non-management workers	Percent of investments with education assistance programs including career ladders, tuition reimbursement, etc.
	Diversity	Percent of investments founded by women/minorities	Percent of executive management that are women/minorities
	Quality workplace	Percent of investments that promote or are active in community & charitable efforts	Percent of investments that have active employee engagement/involvement programs
Environmental	Overall		Percent of investments with a well-documented environment policy/goals that goes beyond compliance and is regularly audited
	Waste & toxic use reduction	Percent of investments with recycling programs	Percent of waste diverted from landfill/waste stream; Percent of waste recycled or reused on site
		Percent of investments that buy environmentally sensitive products or have a toxic use reduction plan	Percent reduction (or pounds) of chemicals and solvents; Percent of investments that have design processes that intentionally seek to reduce the use of chemicals, energy or water.
	Energy efficiency/conservation	Percent of investments with an energy efficiency/ conservation program	Energy saving in KWs and \$ (net of capital costs); KWs of power from green power or renewable energy systems

		Percent of investments that use low impact design or LEED construction principles for new or retrofit facilities
Land Use (primarily for natural resource based industries)	Percent of natural resource based investments that use sustainable land practices; Acres under sustainable practices	Acres ecologically rehabilitated; brownfields returned to ecological function; Use of certification process
Other		Percent of firms that have environmental standards for suppliers

### Challenges for Developing and Promoting TBL Practices

While there is growing interest by businesses, and even funds, to enhance social and environmental outcomes, there are still few funds with intentional TBL practices. Interviews with funds indicate that there are market forces working against the ability to deploy TBL practices.

- While there appears to be a growing interest among individual investors, a large portion of institutional investors remain unaware, view TBL as a distraction for financial returns, or lack confidence that funds can invest in companies that “do good and do well.” This perceived attitude of investors seems to be a key factor in limiting how aggressively funds promote TBL practices, even when fund managers understand the potential benefit of a TBL approach. Funds noted that there was little information to help them talk to investors; a lack of information that was summarized in a way easily understood by investors and businesses. While impact or performance information was sometimes available by specific practice (e.g. the Rudger study on ESOPs), our research could not find comprehensive summaries either.
- Another primary hindrance noted by most funds is the ability to support the development and deployment of TBL practices—much like the challenge facing general advisory services. Management fees simply do not cover the additional effort it takes to promote TBL practices, so funds must raise additional resources, often through different channels than their fund investors. To the extent that government programs like New Market Tax Credits provide additional funds for operational assistance, these funds are restricted in use to areas that are primarily focused on the financial bottom line, and therefore are not a significant resource for accelerating TBL practices.
- The venture capital industry appears to be slow in adopting TBL assessment tools and measurement systems. Traditional intermediaries such as venture capital associations have played a limited role in promoting practices that seek to enhance social and environmental conditions. There are, however, a growing number of TBL reporting structures (e.g. Global Reporting Initiative) and assessment tools for businesses (e.g. Green Plus, Bottomline3, or B-Labs) that are being used by other business and industry groups. Organizations like Shorebank Pacific has adopted these practices and developed an assessment tool especially for financing businesses. These tools offer a consistent measurement system that can be applied across various industry sectors at a relatively modest cost. Despite these benefits, promotion and use of TBL tools by equity funds appear to be very limited.
- Our efforts also uncovered the need to enhance the learning infrastructure and build capacity within organizations that can act as intermediaries to accelerate the awareness and deployment of TBL practices. Research from the Monitor Institute, Rockefeller Foundation,

and others have identified similar barriers. The Monitor Institute summarizes the key challenges as a lack of efficient intermediation (organizations that connect information and practices among funds and providers) combined with a compensation system that impedes small deals, and which has resulted in high search and transaction costs. They also note a lack of enabling infrastructure that allow people to share experiences and expertise along with few reliable metrics that can assess the trade-offs between financial and TBL benefits.

### A Case Study: An Integrated TBL System for Investments

Few funds we examined strategically used all three elements of a triple bottom line approach to help select and manage their investments. **ShoreBank Pacific** was perhaps the most effective model we examined. ShoreBank Pacific utilizes the *Global Reporting Initiative (GRI)* and the *Natural Step* as its framework for sustainability reporting. What makes ShoreBank different from many funds we interviewed is that they started from a sustainability perspective in 1997, using a triple bottom line approach to serve natural resource based industries in the Pacific Northwest.

The Bank employs a science officer in their mix, and has a board of directors committed to sustainability. Their offices are LEED Gold and Silver with salvaged materials and gray water systems. While they do not provide equity capital, they do provide working capital, term, project and real estate financing for businesses. Like many equity funds they focus investments in specific industries: specialty agriculture, specialty fish, green building, green building materials, and renewable energy. To augment the financial vehicles, they offer consulting services in ecosystem and energy management, green building practices, wetlands delineation, organic and alternative farm management, zero waste practices, and wealth generation structures for employees.

Their **Mission Assessment Program** is a comprehensive evaluation system to measure customer's impact on the economy, community and environment. Each customer is evaluated as part of the initial loan process and then re-evaluated on a regular basis to track progress. The evaluation tool has three primary sectors each with three key elements (9 total elements). The business sector is assessed on scalability, risk and local business; the community sector contains elements of jobs, quality of life and necessities (e.g. health care); and the environment sector considers elements of energy, materials and land/water. Each element is scored on a scale of 0 to 3 where 0 is conventional, business as usual behavior and 3 demonstrates the leading edge in sustainability.

Bank staff works with businesses to identify priority areas for improvements and then works to connect them with resources to reach their goal. ShoreBank Pacific credits the assessment tool with providing strategic benefit to the company--noting that they learn a lot from their initial assessment of a business and it has informed their lending approach not only to a specific customer, but to their practice as a whole. It is not important for a business to have a high score initially; it is important, however, for the business to want to improve. While the bank has not completed a formal assessment on their loan portfolio, the president notes that he sees a strong correlation between businesses with steady sustainability progress and their financials. [www.eco-bank.com/downloads/reports/sbp\\_gri\\_report.pdf](http://www.eco-bank.com/downloads/reports/sbp_gri_report.pdf)

## Measuring Impact of Equity Capital

*This chapter contains a report developed by the Office of Economic Development at Virginia Tech University. Virginia Tech was contracted under this project to use their expertise in assessing the community impact of economic interventions to examine the direct and indirect ripples that equity capital can potentially have on a rural community. The report is printed in its entirety.*

This section summarizes observations from Virginia Tech's research into the role of triple bottom line (TBL) patient capital investments in rural and small metropolitan communities. TBL is one of many terms commonly used to describe investments made with social impacts in mind, which has been described as a "Tower of Babel" of similar and overlapping conceptualizations.<sup>10</sup> Many of these concepts and terms refer to practices that are hard to distinguish from what might have been termed simply good business practice in another era. However defined, TBL typically ties traditional economic impacts to measures of environmental impacts and social inclusion as a more comprehensive means of assessing the impacts of an investment on overall community wealth and the creation of various forms of capital.<sup>11</sup>

Using a case study method, we explored "strings and ripples," i.e. the direct and indirect impacts of investments in five communities with limited access to capital. Our charge was to enrich the understanding of returns to communities from investments by patient capital funds, as well as the potential impacts of the funds' TBL practices and advocacy.

Our research evaluated five investments located in Maine, North Carolina, Ohio, Tennessee, and West Virginia. The businesses that received the investments are in sectors that include consumer products manufacturing, distribution, energy, and life sciences. Four different lead funding partners provided debt or equity capital: CEI Ventures, Natural Capital Investment Fund (NCIF), Adena Ventures, and the Southern Appalachian Fund (SAF).

We examined each case primarily through a series of intensive interviews with key informants in the funds, the businesses, and the communities where these businesses are located. Interview subjects included fund managers, CEOs, CFOs, middle managers, front-line employees, local government officials, economic development organizations, and university programs supporting business development.

We observed funds and firms working in ways that were beneficial for communities. We found that although the TBL framework was a useful tool for framing this exploration, few funds or businesses used this language in day-to-day activities. As an alternative framework that provides more useful insights, this paper describes firm activities in terms of three alternative categories: investing in people; building local business assets in the community; and catalyzing development of local capacity or stimulating

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<sup>10</sup> Monitor Institute (2009). Investing for Social and Environmental Impact. <http://www.monitorinstitute.com/impactinvesting/> (Accessed 9/27/09).

<sup>11</sup> Bailey, Jason (2008) Assessment of Triple Bottom Line Financing Interventions. Berea, KY: Mountain Association for Community Economic Development. Porritt, Jonathon (2007), Capitalism As If the World Mattered. London: Earthscan. Ratner, Shanna (2009). Formulating a Sustainable Economic Development Process for Rural America. St. Albans, VT: Yellow Wood Associates.

institutional policy changes. We develop a series of indicators of community impact for each of these categories for use in efforts to assess the “strings and ripples” resulting from patient capital investment.

## Background

Rural development has been a longstanding and central concern of the Ford Foundation's domestic programs. Ford has supported several research projects to identify practices that can stimulate sustainable wealth creation in rural communities, seeking to clarify a thicket of well-intentioned measures and terminology. Ford has turned towards a focus on entrepreneurial and business development strategies, which Colorado's Chris Gibbons terms “economic gardening” as a metaphor for the process by which small communities seek to grow their economic opportunities locally. This replaces traditional recruitment strategies that provide financial incentives to firms to induce them to relocate to a community, a type of “buffalo hunting” that has been yielding diminishing returns to communities in recent years.<sup>12</sup>

Our research for Ford specifically examines the use of triple bottom line (TBL) approaches to investing in rural communities and small metropolitan areas. The TBL framework typically ties traditional economic impacts to measures of environmental impacts and social inclusion as a means to gauge the true impact of investments and other economic activity on community wealth creation. The community capital framework elaborates on this idea by including the natural, social, human, manufactured, and financial capital of a community as factors for consideration.<sup>13</sup> In our analysis of patient capital investments and TBL practices, we sought to identify both direct impacts, where a clear “string” existed between the presence of the firm and community change, as well as indirect impacts, where the firm's contributions to the community were part of a larger “ripple” of change.

We conducted case study research in five communities where firms received equity or patient capital investments from mission-based funds whose concerns included TBL approaches. These case studies were developed primarily through interviews with executives, managers, and front-line employees at the firms, as well as representatives of local government, education and other community organizations. We acknowledge compromises inherent to this approach, forfeiting a large sample size for the opportunity to conduct more thorough interviews. With that tradeoff in mind, our intent is to offer our findings as a guide for future work by Ford and others interested in indicators of community returns on patient capital investment.

## Unpacking the terms

As described by Porritt,<sup>14</sup> a community capital framework associates business and community capital with a range of business strategies familiar to TBL advocates. The following examples of business practices provide a sense of the nature of their relationships to a variety of types of community capital:

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<sup>12</sup> City of Littleton Colorado (2009). Economic Gardening. <http://www.littletongov.org/bia/economicgardening/> (Accessed 9/27/09).

<sup>13</sup> Bailey, Jason (2008) Assessment of Triple Bottom Line Financing Interventions. Berea, KY: Mountain Association for Community Economic Development. Porritt, Jonathon (2007), Capitalism As If the World Mattered. London: Earthscan. Ratner, Shanna (2009). Formulating a Sustainable Economic Development Process for Rural America. St. Albans, VT: Yellow Wood Associates.

<sup>14</sup> Porritt, Jonathon (2007), Capitalism As If the World Mattered. London: Earthscan.



- A region's natural capital increases through companies' efforts to design their operations or products to be environmentally sustainable, eco-efficient, or mindful of specific issues like climate change or biodiversity.
- A region's social capital increases through corporate investments in communities, or communication of company strategies for sustainability to community stakeholders.
- A region's human capital increases as companies implement strategies shaped by value-driven leadership, such as personal or professional development and the application of quality management concepts, both of which can result in process innovations.
- A region's technological capital increases as firms strategically invest in innovative or environmentally friendly technologies, such as closed-loop processes or modifications to energy intensive processes.
- A region's financial capital increases with implementation of business strategies such as performance measurement, increased transparency, increased accountability and corporate governance, as well as accounting that internalizes environmental and social costs.

In order to increase community capital through these activities, venture funds and other vehicles for investment can establish investment criteria that encourage firms to increase the extent to which they incorporate TBL practices into their business models. Table One on the following page presents several examples of TBL strategies that may work to increase each type of community capital, and describes their identifiable benefits. The examples represent a narrow slice of the diverse strategies practiced in a TBL context, which may have other direct and indirect benefits not listed on that table which aggregate over time. The benefits flowing from these strategies accrue value both to businesses and communities, although some benefits are more abstract than others. The next sections discuss the value for firms and communities as observed in our case study research, which leads to a detailed discussion of communities and the challenge of identifying useful indicators of community returns on patient capital investment



Table One: Select examples of TBL strategies and benefits associated with community capital framework

	<b>TBL business strategies</b>	<b>Direct benefits</b>	<b>Indirect benefits</b>	<b>Aggregate benefits</b>
<b>Natural capital</b>	Design for sustainable development	Businesses increase eco-innovation  Communities enjoy safer environments	Businesses utilize government incentives  Communities capture aesthetic or recreational benefits	Businesses enhance their reputation  Communities secure social or environmental security
<b>Social capital</b>	Corporate investments in the community	Business develop links to local firms  Communities see local economic multipliers	Businesses lower transaction costs  Community spirit enhanced	Businesses develop stronger brand  Community cohesion greater
<b>Human capital</b>	Personal & professional development	Businesses develop loyalty and staff motivation  Communities see expanded access to training or learning opportunities	Businesses see improved customer service  Communities develop a better educated workforce or society	Businesses develop market advantage  Communities improve the quality of life enjoyed by residents
<b>Technological capital</b>	Reduced energy intensity	Businesses minimize impact of new taxes or charges  Communities find it easier to reuse and recycle	Businesses develop range of new products and services  Communities reduce their environmental or social footprint	Businesses reduce risk from old technology  Communities expand access to new economic opportunities
<b>Financial capital</b>	Investment criteria	Businesses reduce the cost of capital  Community members are better informed consumers or investors	Business gain standing with socially responsible investors  Communities see benefits as economic or employment opportunities are spreads more widely	Businesses enhance their responsiveness to a changing world  Communities see personal needs and aspirations met for residents

Source: Porritt, Jonathon (2007), Capitalism As If the World Mattered. London: Earthscan

## Value for firms

From the perspective of individual businesses, patient capital investments have had obvious direct impacts in the form of access to capital in communities where it was not readily available otherwise. Further, the funds often provided formal operational assistance programs to businesses, as well as other forms of technical assistance to address particular needs, which directly impacted firms' prospects for growth. For example, Protein Discovery credited investment by SAF as the key factor that kept them from moving out of Knoxville when they were venture-ready.

Similarly, Coast of Maine Organic Products identified the combination of technical assistance and capital provided by CEI Ventures as critical to their very existence. CEI Ventures leverages a network of business and government connections across New England that was developed over the long history of its parent entity, Coastal Enterprises. CEI relied on these relationships to coordinate a program of technical assistance that helped launch Coast of Maine Organic Products.

Comparatively younger investment fund entities, like Adena Ventures and Southern Appalachian Fund, were also particularly adept at networking within the local context of their investments, to the benefit of their companies and communities. For example, Adena has played a leading role in attracting state government funding to Southeast Ohio, which in turn has leveraged major commitments from Ohio University and others.

## Value for communities

For the communities we studied, the most obvious direct benefit from the investments is job creation, often in communities with limited employment options. In addition, the investments typically funded companies which contribute to the local tax base, in some instances representing a large percentage of local government revenue.

Often, the businesses' initiatives to build human capital had an identifiable impact on their communities, and funds often encouraged businesses to adopt progressive human resource policies. Although this encouragement was indirect at times, these policies directly impacted the businesses as well, eliciting low rates of employee turnover, high loyalty, and high rates of productivity. Frequently, these businesses were employers of choice in their respective regions. Human resources policies in our study include a variety of practices:

- Paying higher wages relative to other businesses in their communities
- Offering exceptionally strong benefit packages compared to other local firms
- Reinvesting in employees through training and education programs.

**Coast of Maine Organic Products** produces primarily organic soils, composts, mulches and fertilizers. The company bags, sells and distributes its products seasonally. Its production facility is operated in Washington County by 3 full time employees, while the company's sales and administrative staff is based in Portland.

**Location:** Portland and Machias, ME

**Employment:** 9 people full time, 5-7 seasonally

**2008 Revenues:** \$4M

**Venture Capital Investment:** \$600,000 in three tranches led by CEI Ventures and joined by Great Eastern Mussel Farms and the Small Growth Fund.

Although these human resource policies are beneficial, we found just a few examples of the most progressive, such as matched retirement programs or employee stock ownership programs.

Very few examples of the adoption of new environmental practices were found in our study. One firm, Protein Discovery, did encourage suppliers to pursue the environmentally focused ISO 14001 certification. Others engaged in very straightforward examples of environmental practices, such as recycling in employee break rooms, while still others pursued approaches already embedded in the business models of their firms, like diversion of materials from the waste stream. Other indirect benefits for community were apparent from businesses activity as well:

- Some firms make investments in community capacity through grassroots community philanthropy and engagement. In the most aggressive examples, funds were committed to both major civic ventures in the arts, as well as smaller scale, employee-initiated activities like sports team sponsorships.
- Some firms create an infrastructure legacy, including structural upgrades, enhanced broadband and telecommunication systems, and utilization of state and federal grants and incentives to develop facilities in designated redevelopment areas.

### Analyzing community impact

Our research found benefits accruing to communities from the investments, with several funds achieving a broad level of impacts in their communities:

- Funds help intentionally build strategic alliances and value chains for business, including local suppliers and access to professional services
- Funds are part of a regional economic network across communities that provides a nurturing environment for businesses in the community
- Fund activity often provides the impetus for other community partners to implement relevant policy changes and programmatic investments, specifically those that support business growth and entrepreneurial development at the regional or community level.

In some cases, the community's location and local organizational capacity shaped the potential impact of an investment on a community. The community's proximity to the fund appears to correlate with the extent to which the fund influences or inspires local networks and value-chains, with funds in close proximity to their investments tending to have the most developed network of suppliers or strategic partners.

The community's capacity to conduct economic development activities shapes meaningful, proactive interactions with business. Communities were aware of fund investments and activities in most cases, but interaction with the fund or firm itself was often very limited. For example, company executives in one community reported almost no direct interaction with local officials until the firm announced it would consider a cross-county move. Soon after, the city repaved the road to their facility in order to address a longstanding problem.

In general, we found an overall lack of intentional promotion of TBL business practices by funds as a means to enhance the impact of their investment on communities:

- Funds' major investment considerations involving social and environmental issues relate to the selection of firms with environmentally sensitive business models, or firms located in targeted underserved communities.
- Funds appear to do very little explicit advocacy to expand firms' use of TBL practices beyond practices already imbedded in a firm's business model, or those which are simply good business practice. This advocacy primarily concerned human resources policies, which has obvious returns to the businesses.
- There is little direct sharing of practices among funds. This was true even in one syndicated deal involving different funds, which possessed expertise that could have been leveraged for additional business assistance.

The limited advocacy of TBL practices by funds, as well as uncertainty regarding the level of penetration of TBL practices among firms, create fundamental challenges for our core task of understanding returns to communities from investments that encourage TBL practices. In addition to this difficulty, our analysis of the interview data left us with two additional outstanding questions, which represent issues for consideration in future studies and programmatic or policy actions regarding rural capital investment.

First, are the relationships established in equity investments profoundly different from those developed in subordinated debt transactions or other forms of patient capital? In our limited sample, equity relationships were the most intense for the straightforward reason that equity funds tend to maintain an active role in a business' governance and operations. However, equity investments were also distinct from other types of investment because of their ability to provide forms of operational assistance that firms valued highly. In some examples, non-equity lenders were able to link businesses to existing services in their communities, but this was not necessarily the case where local business support networks were not well-developed. Greater access to funding allowed equity funds to look more broadly for such support.

Second, what is rural? Our research into the impacts from investments found that differences between small metropolitan areas and deeply rural communities in our sample greatly influenced the capacity of communities to capture the benefits of these investments. Differences in relative rurality affect such factors as industrial diversity, labor market size and diversity, community capacity to support business development activities directly or through the funds, and the scale of impact from equity or near-equity investments.

### **Towards a Framework for Community Impact**

Despite these unresolved questions, our analysis identified three broad categories that can provide useful measures of impacts on communities from patient capital investments and business activity:

- Investing in people: new jobs develop local human capital/productivity, e.g. providing higher than average wages or benefits, expanding local labor markets, reducing commuting costs, and improving quality of life.

- Building local assets: firms enhance the competitiveness of communities as they circulate capital and knowledge in the community, e.g. buyer-supplier networking and support of local philanthropy.
- Catalyzing community change: funds and firms stimulate the development of local programmatic capacity, institutional policy, and infrastructure throughout a community, e.g. increasing efforts to support entrepreneurial development.

These categories include TBL strategies associated with several facets of the community capital framework. In particular, they address practices and impacts that relate directly to the social, human, and financial capital aspects of communities, although their relevance to natural and technological capital is less clear. Within each category, we identify several indicators that are fully realized measures of community impacts, as well as other indicators that show great apparent potential for assessing impacts of investment in communities. Unlike other efforts to develop metrics for community impact which employ complex causal models, we see the indicators in these three categories as a useful framework for analyzing both direct impacts, where a causal “string” clearly links to the investment, as well as indirect impacts, where the “ripple” of change in the community can be associated with the investment. In any case, considering both direct and indirect impacts aids efforts to construct the strongest narrative explanation of the changes in a community that result from such investments.

### *Investing in people*

At the surface, the idea that firms invest in people may provide the richest selection of impacts to document. These examples touch on aspects of social, human, and financial capital in a community.

Typically, rural and small metropolitan areas are hungry for jobs, but frequently they are less than discriminating about the quality of the jobs created. Nonetheless, all of the firms in our study were making noteworthy contributions to providing their communities with “good” jobs to employ local workers. Of course, the characteristics of “good” jobs for communities involve a composite of several factors, some of which are easier to quantify than others. As one obvious factor, firms in this study generally pay wages well above the norms in their communities. For example, some wages at Washington Homeopathic were as high as \$27 per hour, while averages in the region were only \$17.

**ED MAP** provides textbooks and other course materials along with program management and analysis services tailored for distance learning education. The company's clients include career colleges and institutions facilitating K-12 online programs, continuing education and corporate training.

**Location:** Nelsonville, OH

**Employment:** 108 people

**2008 Revenues:** \$4.8M

**Venture Capital Investment:** \$1.5M in 3 rounds led by Adena Ventures and OCA Ventures and joined by SJF Ventures.

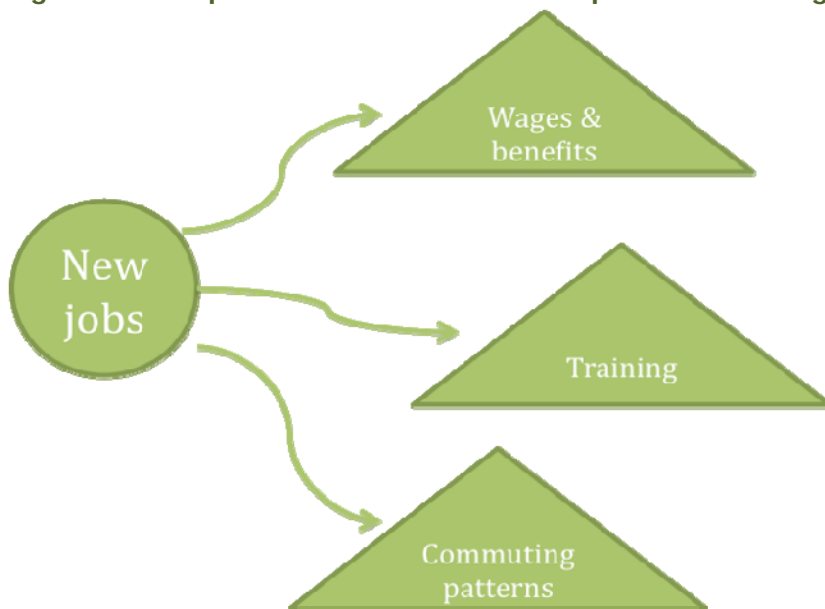
Good wages are certainly a building block of community wealth creation, but these firms also enhanced worker productivity and community quality of life through generous benefits, such as flexible work arrangements, pensions, personal financial training, and healthcare. Private employers rarely offer substantial healthcare benefits to employees in many of these communities, so these firms have made unique investments in people, their productivity, and their quality of life by paying a large

portion of employee healthcare costs. One ED MAP employee identified the hip replacement surgery covered by these benefits as the key to her ability to remain in the productive workforce.

Some of the firms also provided in-house or off-site training opportunities to employees in order to develop additional skills that allow them to advance in their jobs. Training providers included local community colleges, universities or private providers. Many of the opportunities encouraged by management involved direct skills upgrades for front-line employees, adding directly to firm productivity. Others supported participation in managerial, sales, or technical training, as well as participation in trade or professional associations.

Several firms in the study were major employers in rural labor markets, which often have few alternatives to long commutes that create challenges for workers' work-life balance. With 108 employees, ED MAP is the largest employer in Nelsonville, Ohio, and one of the 15 largest employers in Athens County. ED MAP employees reported that comparable employment scenarios would involve substantial and costly commutes of up to an hour in order to work in the Columbus Metro area. Similarly, Coast of Maine Organic's production facilities are located in Washington County, Maine. At 2,568 square miles and 13 persons per square mile, employment options are limited and widely dispersed in the county.

**Figure 1: Examples of direct and indirect impacts of investing in people**



From the examples in Figure 1 we derive several useful indicators of community impact:

- Wages and payroll above regional median. This indicator is perhaps the easiest indicator to quantify, but requires individual firms to release this data. Comparisons can be made with data available from a number of sources, including the Bureau of Labor Statistics, which provides quarterly updates to a monthly survey of establishments.
- Benefits above regional norms. This indicator is more difficult to quantify. Although the forthcoming US Economic Census will include the dollar value of benefits, these statistics are

reported only every five years. Often, data on benefits at the community level will often need to be collected through intensive interviews, as in this study.

- Investments by firms in employee training. As with employee benefits, this indicator is difficult to quantify through secondary sources, further emphasizing the importance of primary data from interviews for documenting community indicators.
- Expanded employment options and their impact on local commuting patterns. This indicator can be quantified from several public and private sources. One of the most accessible is the US Census Longitudinal Employer Household Dynamics “On the Map” online data mining tool. This tool blends data from several Census and economic sources to create maps at the zip code level which depict residential and workplace locations from and provide visual estimate of the density and character of job opportunities in a community.

**FLS Energy** plans, designs and installs solar hot water and solar electricity systems. Their clients are primarily corporations located in North Carolina, South Carolina, Tennessee and Virginia.

**Location:** Asheville, NC

**Employment:** 40 people

**2008 Revenues:** \$1.4M

**Debt Investment:** \$100,000 by Natural Capital Investment Fund.

### ***Building local assets***

We also see firms investing in building local assets. These activities build social capital in communities, and contribute to the financial and natural capital of communities.

Local asset building can occur very directly through local sourcing. For example, ED MAP buys boxes and printing services from local suppliers in Athens County. Protein Discovery purchases electronics supplies from a source in Northeast Tennessee. FLS Energy obtains most basic supplies locally. These local input purchases by firms, along with local consumer purchases by firm employees, have secondary impacts that help expand opportunities and create wealth in local economies.

Some firms in the study engaged in various forms of philanthropy. Most were traditional, externally-driven investments in community organizations, like an Opera House or a Basketball Tournament in Nelsonville, Ohio, a volunteer fire department in Berkley Springs, West Virginia, or a community garden in Washington County, Maine. In an era of corporate instability, these investments by local companies are often a valuable legacy for the community.

ED MAP takes this legacy to another level with a conscious effort to provide support for individual employee events and activities. These investments create not only a company legacy in the community, but also a high level of employee loyalty and a reputation in the broader community as the employer of choice. If ED MAP continues with a possible move across the county, and as the company believes most current employees stay with the firm, Nelsonville may experience two types of impacts. Firm-driven philanthropic investments may move to the new location, while employee-driven philanthropic investments remain in Nelsonville.

Investment in local assets can occur indirectly as well, as business' local partners become part of a cluster or network of firms engaged in best practices that improve competitiveness of all the firms.



For example, Coast of Maine Organic Products has been part of a technical assistance network and participates in a state-sponsored “Compost College” to promote best practices.

Such a network of model firms may play a role in diversifying a community’s industrial base and increasing local flows of capital, accompanied by more diverse employment opportunities and an infusion of new skills and talent into the local labor market. This process is beginning in Knoxville, where Protein Discovery is a “poster child” for bringing technology-based workers and economic development activity to Downtown, with around some 40% of their scientific staff coming from outside the region. Their ability to attract high tech talent has put Knoxville on the map as an option for top-flight talent graduating from the region’s research universities, who are increasingly interested in pursuing local employment. This process is allowing the region to grow and retain its own technology workforce.

**Protein Discovery** develops and commercializes sample preparation technologies that enable more efficient mass spectrometry analysis. The company has developed three products: an original consumable and two instruments. Currently, Protein Discovery handles final assembly and sale of these products.

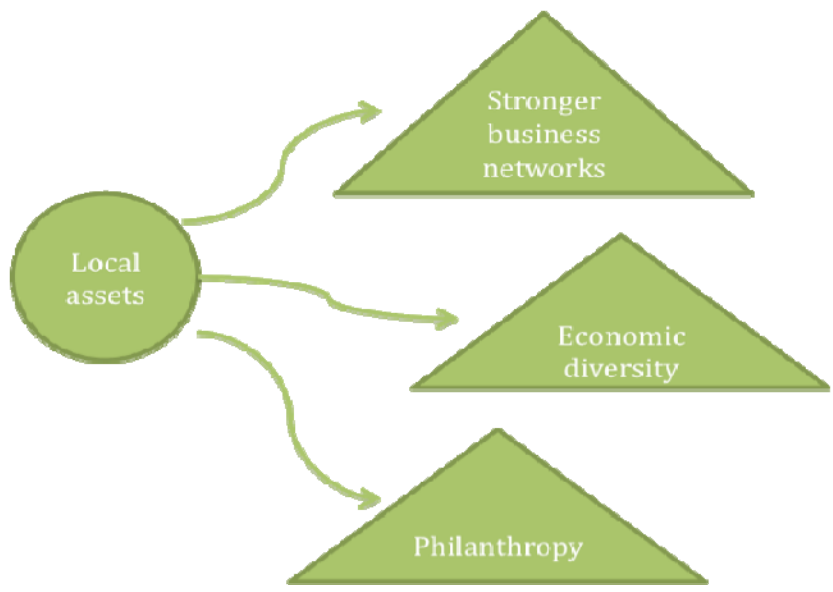
**Location:** Knoxville, TN

**Employment:** 18 people

**Venture Capital Investment:** \$1M by Memphis Biomed Ventures in 2003; \$600,000 with an \$184,000 extension by Southern Appalachian Fund (SAF) in 2006; \$10M led by Santé Ventures and joined by Memphis Biomed Ventures, SAF and Nashville Capital Network.

This case is exceptional, however, as jobs at most firms were very good fits for the existing skills of the labor force in their communities. Most fill vacancies with little effort, often through informal networks. For example, ED MAP employs many members of several extended families. ED MAP and FLS Energy also utilize local workforce centers to hire people with barriers to employment, many of whom advance to permanent positions with the firms.

**Figure 2: Examples of direct and indirect impacts of building local assets**





From the examples in Figure 2 we derive several useful indicators of community impact:

- The extent and character of firms' effect on local business networks, both through local purchasing, as well as improvement of practices through buyer-supplier relationships. These indicators are highly firm-specific activities, requiring documentation primarily through interviews.
- The firm's impact on local economic diversity. This indicator is relatively complex, reflected for example in changing industry and occupational structures. Short-term impacts could be identified through interviews, but changes may be realized fully only after a number of years. The BLS quarterly employer survey provides an important and readily available data source for documenting long terms changes and impacts in industry and occupational structure.
- The specifics of philanthropic efforts. This indicator is sometimes very public and readily identifiable within communities, but can be hard to track even within the firms themselves. Efforts to document this indicator must rely largely on interviews as well.

### *Catalyzing community change*

Lastly, firms serve as a catalyst for policy changes and investments by community partners, especially those that support both business growth and entrepreneurial or business development activities at the regional or community level. These activities impact social, human and financial capital in communities, as well as their stock of technological capital in some cases. Some of these activities involve soft changes, such as new networks, partnerships, or marketing strategies. Others involve hard commitments of cash invested in staff, capital projects, and physical infrastructure.

The presence of ED MAP and its lead funder Adena Ventures in Athens County stimulated the most dramatic policy changes we identified in our research. ED MAP has become a touchstone in Southeast Ohio, and a prime example used by government and university actors to illustrate their economic development initiatives. Since Adena invested in ED MAP, Athens County has replaced a traditional economic development organization with one focused on entrepreneurial development, and a regional angel investor network has been launched. In addition, Ohio University (OU) invested in entrepreneurship by launching an on-campus incubator and several new programs, some of which were funded by a \$400,000 grant to work with Adena to promote technology companies. OU also partnered with Adena Ventures to successfully pursue a \$15 million state grant to support operational assistance to firms and launch seed and angel funds in the region.

The close connections between Protein Discovery, its funder SAF, and informal and formal leadership

**Washington Homeopathic Products** produces and distributes over 1,700 remedies to individuals, physicians and veterinarians. The company maintains a store front in addition to their production facility. Washington Homeopathic carries products of other homeopathic remedy manufacturers (both domestic and international), sells to over 50 distributors and does private labeling for more than 35 companies.

**Location:** Berkley Springs, WV

**Employment:** 38 people

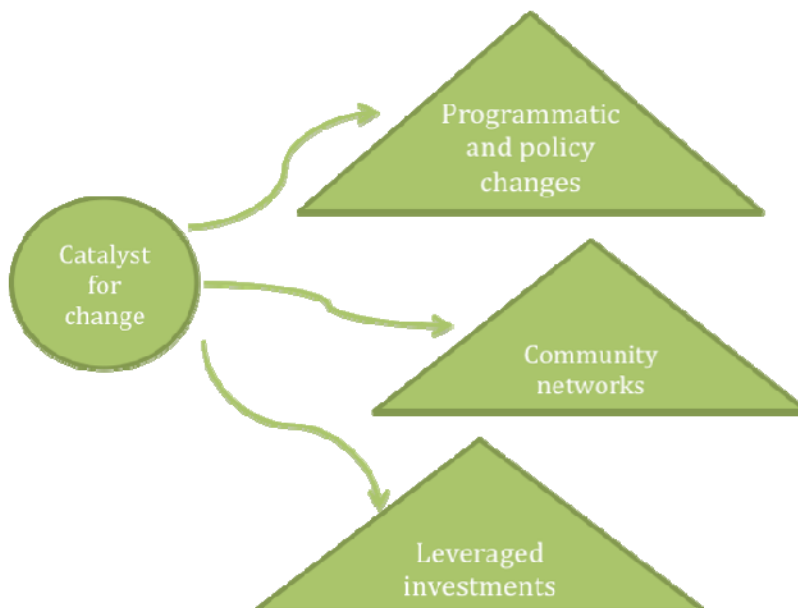
2008 Revenues: \$2,345,350

**Debt Investment:** approximately \$400,000 contributed by WVEDA, Natural Capital Investment Fund subordinated, contributing \$310,000

networks around Knoxville, have placed the firm at the center of a new Knoxville. The downtown Knoxville area now serves an important role in the technology-based economic development activities that are increasingly important to the region. Washington Homeopathic's production of alternative medicines already fit with the existing spa-lifestyle marketing of Berkeley Springs. Local officials describe Washington Homeopathic's operations as an important contribution to that narrative.

Other communities partnered with firms to leverage a firm's presence to elicit private or public investments in upgraded infrastructure. Coast of Maine Organic Products received a Community Development Block Grant of nearly \$500,000 for construction of facilities. Protein Discovery's office and lab space in downtown Knoxville was created with \$200,000 leveraged from public sources. ED MAP's power and telecommunication needs led private utilities to make investments in the local electric grid and broadband fiber capacity, while ED MAP has substantially reinvested in its physical plant themselves. All of these investments, especially in infrastructure capacity, have durable impacts that extend well beyond the life of the firm.

**Figure 3: Examples of direct and indirect impacts building community capacity**



From the examples in Figure 3 we derive several useful indicators of community impact:

- Policy or programmatic changes involving new commitments by organizations to “hard goods.” Examples of this indicator include investments at the local level in new facilities or personnel that advance the community's capacity to support or promote business development. This indicator is identified readily through local sources of secondary data, but interviews are likely necessary to develop a detailed understanding of the scale and scope of these commitments.
- Community networks, which are the “soft” counterpoint to “hard” policy or programmatic commitments. Examples might include a change in attitude or priorities by existing organizations, or changes in practices at partner organizations undertaken to support new investments. These indicators are derived from local interviews with local stakeholders.

- Leveraged public or private investments resulting from the fund or business activity. One example is the new lab space for Protein Discovery. This indicator is perhaps easy to quantify but harder to spot. Secondary data on these investments can be found in a variety of sources, but again local interviews are key for uncovering data on these impacts.

### Conclusions on Community Impact

The triple bottom line (TBL) concept was useful both as a rhetorical device and as an organizational framework to begin our study of firms supported by venture or patient capital investments in rural and small metropolitan areas. However, we found a selection of TBL concepts related to investing in people, building local assets, and catalyzing community change to provide a more relevant classification of returns to community. In the cases we researched, the indicators within these categories suggest the investments returned benefits in most areas of the community capital framework.

Table Two displays a summary of the categorized indicators we describe: **investing in people**, through wages and benefits above local norms, investments by firms in training individual workers, and expanded employment options and their impact on local commutes; **building local assets** through firm actions that expanded local business networks, stimulated economic diversity, and advanced local philanthropy; **catalyzing community change** through policy or programmatic changes, strengthening of community networks and community capacity to interact with business, and leveraging firm and fund investments to stimulate public or private investments.

**Table Two: Summarizing community indicators**

Categories	Indicator	Major data sources	Primary relevance to community capital framework
People	Wages and benefits	BLS data and interviews	Social, human, and financial
	Training	Interviews	Social, human, and financial
	Commuting	Census LEHD data	Social, human, and financial
Local assets	Business networks	Interviews	Social and natural
	Economic diversity	Interviews	Financial
	Local philanthropy	Interviews	Social
Catalyzing change	Policies and programs	Interviews	Social, human, and financial

	<b>Community networks</b>	<b>Interviews</b>	<b>Social, human, and financial</b>
	<b>Leveraged investments</b>	<b>Interviews</b>	<b>Technological</b>

The ability of foundations, investment funds, or communities to tell stories about the impact of businesses in rural and small metropolitan communities depends on their commitment and capacity to invest time and resources in accessing and developing this data. Development of most of these indicators requires data collection at the local level through an interview process, which reflects the intense activity on the local scale by many of the businesses in this study. This type of information typically does not appear in secondary data sources, and the identification of business and community networks in particular will require careful observation of formal and informal process at the local level.

While several firms in our study had important social and environmental considerations imbedded in their business model, we found few explicit efforts to drive a broader TBL agenda, particularly on environmental issues. Among the TBL concepts aligned with our categories and indicators, economic impacts clearly predominate. These are followed by social inclusion, followed by environmental impacts on the margins at best. This conclusion may have been influenced by the scale at which community was defined for our study. For instance, if larger regions had been the focus, rather than rural communities and small metropolitan areas, environmental or other indicators may have emerged through our discussions.<sup>15</sup>

The qualifications placed on our conclusions highlight a need for further research along these lines. For example, developing a significantly larger number of case studies could uncover firms with robust environmental programs and suggest stronger indicators for environmental impacts at the community level. As an alternative to such post-hoc analysis, communities might use these indicators to supplement job count and capital investment numbers, the metrics traditionally incorporated into performance agreements when launching partnerships or making investments.

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<sup>15</sup> CEI Ventures, for example has supported research into the environmental benefits for the State of Maine from Coast of Maine Organic.

## Firm Profiles

*Coast of Maine Organic Products produces organic soils, composts, mulches and fertilizers.*

The company bags, sells and distributes its products seasonally. Its production facility is operated in Washington County by 3 full time employees, while the company's sales and administrative staff is based in Portland.

**Location:** Portland and Machias, ME

**Employment:** 9 people full time, 5-7 seasonally

**2008 Revenues:** \$4M

**Venture Capital Investment:** \$600,000 in three tranches, led by CEI Ventures and joined by Great Eastern Mussel Farms and the Small Growth Fund.

### Overview<sup>16</sup>

Coast of Maine Organic Products (COM) was started as a venture company by Carlos Quijano and Great Easter Mussel Farms in 1996. CEI ventures provided a \$25,000 working capital loan which financed a feasibility study. The company's first commercial year was 1997. Originally, the company sold its products only in northeast New England, with sales at \$777,000 in 2001. Presently, COM distributes as far as Virginia with revenues greater than \$4M.

Over its first five years, COM raised \$600,000 from Great Eastern Mussel Farms, CEI Ventures, and Mr. Quijano. CEI Ventures' investment was critical to the formation of COM, and was primarily used as working capital. CEI provided little formal operational assistance to the company, but CEI Ventures has been active on the Coast of Maine board of directors and has engaged the company with substantial informal consult.

CEI Ventures' interest in COM stems from the company's ability to provide employment in low income areas of Maine. COM employs 3 people full time in Washington County, Maine's most rural county and also the county with the highest unemployment rate. Five people are employed full time in Portland, Maine in a low income census tract area. COM has received a \$500,000 Community Development Block Grant (CDBG) to create 5 jobs, and a Maine Department of Economic and Community Development Grant to pay for site cleanup, installation of environmental controls, and ongoing human resources work.

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<sup>16</sup> Information from company related interviews and <http://www.coastofmaine.com/>

## Coast of Maine Organic Products Community Indicators

Category	Indicator	Example(s)
People	<b>Wages and benefits</b>	COM pays 80% of health benefits (including dental), subsidizes a small life insurance plan, encourages employee ownership and gives yearly bonuses.
	<b>Training</b>	Each employee of COM attends a week long session at the Maine Compost School
	<b>Commuting</b>	Employment options in Washington County are limited and widely dispersed
Local assets	<b>Business networks</b>	COM has been a part of a Maine technical assistance network.
	<b>Economic diversity</b>	Industry and skills needed already fit region, so an impact on economic diversity was not apparent
	<b>Local philanthropy</b>	COM donates its product to community and municipal gardens as well as organizations planting gardens for cancer patients. COM sells its product to a food kitchen at cost.
Catalyzing change	<b>Policies and programs</b>	COM participates in the state-sponsored Maine Compost School to promote best practices and promotes the licensing and certification of compost products.
	<b>Community networks</b>	COM has helped to establish and promote Maine's Compost School.
	<b>Leveraged investments</b>	COM has used a CDBG to increase their facility's production capacity and create jobs. They are currently applying for another CDBG.

*ED MAP provides textbooks, educational materials and others services*

**Location:** Nelsonville, OH

**Employment:** 108 people

**2008 Revenues:** \$4.8M

**Venture Capital Investment:** \$1.5M in 3 rounds led by Adena Ventures and OCA Ventures and joined by SJF Ventures.

### **Overview**<sup>17</sup>

Dr. Michael Mark, co-founder and CEO of ED MAP, has been involved in textbook distribution for almost two decades. He and a number of colleagues established ED MAP, motivated by community colleges' need for a service oriented seller of textbooks and course materials. ED MAP has grown from an employer of 23 in 2004 to an employer of 108 this year. The company has grown steadily to reach \$4.8M in revenue. Its first major contract with the University of Phoenix represented 80 percent of the company's business in 2004, but now represents only 20-25 percent of ED MAP's revenue.

Adena Ventures and OCA Ventures joined with SJF Ventures to invest in ED MAP in 2004. The investment primarily allowed ED MAP to increase employment and effectively manage its growth. Additionally, Adena was able to offer ED MAP formal operational assistance through the New Market Tax Credit Program, which has been used to refine the company's business plan and assist its executive searches. ED MAP and Adena have collaborated to establish progressive HR policies, as both company and fund prioritize employee benefits. Such benefits include a tuition reimbursement program, employee training, 90-95 percent paid employee health insurance, an employee stock ownership plan for upper management, and 401k plans available for all employees.

As an extension of these benefits, ED MAP invests in employees' interests in the community. For example, ED MAP has supported sporting events, the March of Dimes, and a preschool; all at the request of its employees. In addition to these contributions to community endeavors, ED MAP's presence has promoted maintenance and expansion of public and private infrastructure in the town of Nelsonville. ED MAP's internet and electrical needs have improved the quality of services accessible for the entire town. Further, ED MAP's presence has promoted entrepreneurial activity as well as the understanding of equity capital throughout Athens County. Finally, Adena's investment in ED MAP has anchored its portfolio and thereby promoted its community influence beyond the technical assistance of its investments.

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<sup>17</sup> Information from company related interviews and <http://www.edmap.biz/>

## ED MAP Community indicators

Categories	Indicator	Example(s)
People	<b>Wages and benefits</b>	ED MAP pays between 90-95% of health benefits, matches 401k for all employees, and offers wages averaging \$15/hour
	<b>Training</b>	ED MAP pays for classes( e.g. software, accounting, etc) on a case-by-case basis
	<b>Commuting</b>	There are no comparable private employers to ED MAP in Nelsonville and few in Athens County
Local assets	<b>Business networks</b>	ED MAP makes some local purchasing but not particularly systematic or for high value-add inputs to firm
	<b>Economic diversity</b>	Industry and skills needed already fit region so an impact on economic diversity was not apparent
	<b>Local philanthropy</b>	ED MAP supports major community-wide projects and actively supports activities involving individual employees as a component of HR strategies
Catalyzing change	<b>Policies and programs</b>	ED MAP and Adena’s presence have encouraged county government and university have invested in new programs focused on existing business and business incubation
	<b>Community networks</b>	ED MAP and Adena’s presence has inspired cultural shifts in economic development organizations orienting towards entrepreneurial development
	<b>Leveraged investments</b>	ED MAP has invested in upgrades of its facility owned by local non-profit incubator, and encouraged private investment in upgrades to local infrastructure



*FLS Energy plans, designs and installs solar hot water and solar electricity systems.*

Their clients are primarily corporations located in North Carolina, South Carolina, Tennessee and Virginia.

**Location:** Asheville, NC

**Employment:** 40 people

**2008 Revenues:** \$1.4M

**Debt Investment:** \$100,000 by Natural Capital Investment Fund.

**Overview**<sup>18</sup>

CEO Hardy LeGwin, along with two partners, founded FLS Energy in 2006. Initially, the company installed solar hot water systems in residences, but has served the commercial sector primarily ever since installing one of the nation's largest hot water systems for the Proximity hotel. The company's revenues have grown from \$187,000 in 2006 to \$1.4M in 2008. By late 2006, the company employed six people beyond the three founders. The company's employment reached 40 this year.

Mountain BizWorks referred FLS Energy to the Natural Capital Investment Fund (NCIF), which had granted Mountain BizWorks a \$50,000 working capital loan. NCIF loaned FLS Energy \$100,000, which primarily financed the enhancement of the company's internet capabilities. FLS Energy has developed agreements in which FLS owns the solar system that is installed at the client's facility, and sells the hot water the system produces to the client. This agreement reduces the costs of installing the system for their clients, creates a stream of capital for FLS for new projects, and also allows FLS Energy to collect and transfer tax credits for installing solar systems for public institutions.

As a result of its success, FLS Energy has become a more involved community employer. FLS energy accepts on-site training participants of the Asheville Green Opportunities Training Team (Asheville GO), a job training and placement program for at risk people in and around Asheville. FLS Energy has hired two such participants as full time employees. Additionally, FLS Energy recruits graduates of the Appalachian State University Appropriate Technology program.

**FLS Energy Community Indicators**

Category	Indicator	Example(s)
People	<b>Wages and benefits</b>	FLS Energy pays \$12-14/hr and matches 401k for all employees
	<b>Training</b>	FLS Energy trains its employees to install and maintain Photovoltaic and Solar Thermal systems. Additionally, the company pays for its employees to be certified by the North American Board of Certified Energy Practitioners and to attend trainings offer by their solar manufacturer.
	<b>Commuting</b>	There are comparably sized private employers to FLS Energy in Asheville

<sup>18</sup> Information from company related interviews and <http://www.flseenergy.com/>

Local assets	<b>Business networks</b>	FLS Energy obtains all of its non-solar supplies locally.
	<b>Economic diversity</b>	Industry and skills needed already fit region so an impact on economic diversity was not apparent
	<b>Local philanthropy</b>	No examples
Catalyzing change	<b>Policies and programs</b>	No examples
	<b>Community networks</b>	COM employs two people from the Ashville GO, a job training and placement program for at risk people in and around Asheville. COM actively recruits graduates of the Appalachian State University Appropriate Technology program
	<b>Leveraged investments</b>	No examples

***Protein Discovery develops and commercializes sample preparation technologies***

Protein Discovery's technology enables more efficient mass spectrometry analysis. The company has developed three products: an original consumable and two instruments. Currently, Protein Discovery handles final assembly and sale of these products.

**Location:** Knoxville, TN

**Employment:** 18 people

**2008 Revenues:**

**Venture Capital Investment:** \$1M by Memphis Biomed Ventures in 2003; \$600,000 with an \$184,000 extension by Southern Appalachian Fund (SAF) in 2006; \$10M led by Santé Ventures and joined by Memphis Biomed Ventures, SAF and Nashville Capital Network.

**Overview<sup>19</sup>**

Protein Discovery was founded by Chuck Witkowski in 2001 in order to commercialize technology licensed from Oak Ridge National Labs. Before its first equity investment, the company purchased space from a Knox County business incubator and rented labs at Oak Ridge. The company changed directions in 2004, after receiving a \$1M investment from Memphis Biomed Ventures. Protein Discovery sold the license of its original technology back to Oak Ridge, hired a talented technologist, and sought an investment to finance the research and development of a new product.

In 2005, SAF invested \$600,000 in Protein Discovery under the condition that the company moved its operations to an "Empowerment Zone" in a low income area of downtown Knoxville targeted for development by the city. Protein Discovery received an \$184,000 extension in 2006 and finished the development of its new product in 2008. Subsequently, Protein Discovery received an additional \$10M in equity funding lead by Santé Ventures and joined by previous investors: Memphis Biomed Ventures, SAF and the Nashville Capital Network. Presently, the company has now developed three products for use in mass spectrometry analysis: an original consumable and two sample preparation instruments. It has grown from employing 8 people in 2005 to 18 people today.

SAF has provided approximately \$200,000 in operational assistance to Protein Discovery since its original investment. That operational assistance included executive recruitment, web design, marketing, inventory analysis, training, engineering for the redesign of a product, and market research. Through the development of Protein Discovery, Mr. Witkowski has become a model entrepreneur in Knoxville, and his company is recognized as contributing significantly to the enhancement of Knoxville's distressed downtown area. Further, the company has been able to attract and retain talented life science technologists and researchers by providing substantial compensation and opportunities for professional development.

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<sup>19</sup> Information from company related interviews and <http://www.proteindiscovery.com/>

## Protein Discovery Community Indicators

Categories	Indicator	Example(s)
People	<b>Wages and benefits</b>	Protein Discovery pays 80% of health benefits, offers a 401k for all employees as well as stock option for all employees
	<b>Training</b>	Protein Discovery provides access to Life Sciences literature and sends its employees to the field's premier conference
	<b>Commuting</b>	There are comparable private employers to Protein Discovery in Knoxville
Local assets	<b>Business networks</b>	Protein Discovery encourages the companies that manufacture components of its products to adhere to ISO 14001 standards. Additionally, Protein Discovery purchases electronics supplies from a source in Northern Tennessee
	<b>Economic diversity</b>	Protein Discovery has been used by Knoxville's local government to exemplify the opportunities for technology based economic development in downtown Knoxville
	<b>Local philanthropy</b>	No examples
Catalyzing change	<b>Policies and programs</b>	Presence has prompted the Knoxville Chamber of Commerce to promote entrepreneurship and location of innovation disposed technology businesses in Knoxville.
	<b>Community networks</b>	Protein Discovery participates in Knoxville Chamber of Commerce activities
	<b>Leveraged investments</b>	Protein Discovery leveraged \$200,000 from public sources to build office and lab space in downtown Knoxville

*Washington Homeopathic Products produces over 1,700 homeopathic remedies*

Washington Homeopathic distributes their products to individuals, physicians and veterinarians. The company maintains a store front in addition to their production facility. Washington Homeopathic carries products of other homeopathic remedy manufacturers (both domestic and international), sells to over 50 distributors, and does private labeling for more than 35 companies.

**Location:** Berkley Springs, WV

**Employment:** 38 people

**2008 Revenues:** \$2,345,350

**Debt Investment:** Approximately \$400,000 contributed by WVEDA, Natural Capital Investment Fund subordinated, contributing \$310,000

**Overview**

Washington Homeopathic Pharmacy is a “full line” homeopathic pharmacy established in 1873. Joe Lillard and Linda Sprankle-Lillard bought the pharmacy with three employees in 1991 and renamed it Washington Homeopathic Products (WHP). In 1993 the company was beginning to outgrow its original facilities, prompting Mr. Lillard to invest approximately \$1M in a building in downtown Berkley Springs. To maintain its steady growth, WHP applied for the \$710,000 from NCIF and WVEDA in 2005. That loan, along with some personal financing, funded a new facility and \$65-70,000 of new equipment. WHP has grown to employ 38.

Beyond financing, NCIF has provided a small amount of technical assistance in the way of assistance with financial, operations, inventory and sales management. Further, NCIF advised WHP on its employee benefit structure. Employees receive full benefits, 70 percent paid by WHP after working with the company for three months, and have the opportunity to participate in an IRA plan in which the company will match three percent after employees work with the company for three years. Finally, NCIF has introduced WHP to the new market of veterinary medicine.

The presence of WHP and its efforts to maintain a homeopathy museum and store front enhance the spa town reputation of Berkley Springs. WHP contributes to the local fire department, individual schools in the area, and the Morgan Arts Council Berkeley Springs. Finally, the company buys small amounts of organic plant products from local farmers.

**Washington Homeopathic Products Community Indicators**

Category	Indicator	Example(s)
People	<b>Wages and benefits</b>	WHP pays 70% of health benefits, offers an retirement plan for employees of three or more years in which the company will match 3%, pays full time employees from \$7.50/hr to \$27.00/hr
	<b>Training</b>	WHP trains its employees to manufacture homeopathic remedies
	<b>Commuting</b>	There are no comparable private employers to WHP in Berkley Springs and few in Morgan County

Local assets	<b>Business networks</b>	WHP purchases a small amount of plant materials from local farmers
	<b>Economic diversity</b>	Industry and skills needed already fit region so an impact on economic diversity was not apparent
	<b>Local philanthropy</b>	WHP gives donations to individual schools, the arts council and the volunteer fire department
Catalyzing change	<b>Policies and programs</b>	WHP's presence supports efforts by local economic developers to market the community to companies in green/alternative industries
	<b>Community networks</b>	WHP's store front, museum and concept enhance the existing spa-lifestyle narrative in Berkley Springs.
	<b>Leveraged investments</b>	WHP has built a new facility in the counties' US 522 business park

## Project Conclusions

The project began as an exploration of equity capital in rural communities: what was the impact of such capital and how did this capital help to promote wealth creation within a triple bottom line framework. In this initial stage of the project we interviewed several funds to understand how they applied equity capital in rural regions. We then used this information to explore three more in-depth issues: the degree to which investments in rural or underserved areas perform differently from regions with more VC capital; the extent to which advisory services and triple bottom line practices provide knowledge and networks to enhance business performance; and the extent to which this combination of financing and services has a broader impact on communities.

At the end of the day, what did we learn from this project? What are the take-away messages about the role of equity capital in rural communities?

### Performance Take-aways

- Equity and near equity funds have a niche role in providing capital to businesses with high growth potential; these businesses can and do exist in rural regions.
- Investments in rural and underserved areas have equivalent performance outcomes as their metro counterparts.
- There is a need for small scale, entrepreneurial capital to augment larger scale VC.
- Equity-back companies are significant job creators, and appear to create jobs with the same efficiency as other economic development tools.

### Advisory Services Take-aways

- Advisory services play a key role in turning capital into smart money, helping businesses to be more efficient with their capital and to optimize their operations.
- Advisory services are effectively applied to investments and alongside, but independent of, financing activities.
- The standard process for delivering these practices remains high-touch with a high unit cost that needs to be streamlined.
- Some funds have developed expertise and scalable operational models, yet the industry lacks intermediaries and infrastructure to share these best practices.

### TBL Investment Practice Take-aways

- There is growing interest by funds, businesses and investors in providing capital that can 'do well and do good,' yet market and institutional forces inhibit widespread adaptation.
- There are two basic methods by which equity funds approach TBL practices: most add social and environment onto a financial model; and some funds seek an approach integrating all three factors.
- There are a handful of funds with successful TBL investment models, yet there is a lack of intermediaries and infrastructure that can transfer and accelerate the deployment of these efforts.
- While there are a few excellent examples, most measurement tools for TBL are static snapshots rather than dynamic assessment tools.

### Impact Take-aways

- Equity capital can have a broad impact on rural communities, especially for investments where capital is combined with services.
- The ripple effect of equity capital includes investments in local supply chains, workers' benefits and training, and community assets and infrastructure.
- The potential impact of equity capital is under-realized in most cases, due to a lack of working models, underdeveloped networks and underfunded advisory services.

### **Addressing Identified Challenges**

Equity capital is a long-term strategy, for investors, funds and communities. While each fund is an independent operation, over time organizations with multiple funds build staff expertise, external contacts and operating efficiencies. Being able to share this expertise and base of practice (whether for enhanced financial returns or deploying TBL practices) will be important in building wealth in rural communities.

This project discovered that many funds in rural and underserved areas are not just a financial organization, they are also a professional services organization. These funds, especially those promoting TBL practices do three things: 1) provide capital, 2) enhance operations and the competitiveness of businesses, and 3) build community capacity for economic development. The extent to which all three elements play a role in any given fund appears to be related to the attitude of fund managers toward TBL and the extent to which advisory services have a consistent model for funding and deployment.

Equity capital can have a broad impact on rural communities, especially for investments where capital is combined with services. Our research also illustrated that the impact or ripple effect of equity capital, as well as the adoption of TBL practices, were maximized when funds or businesses were aware of the triple bottom line practices at the start of an investment. This may indicate more focus on pre-investment services and education, and increased support for sharing TBL investment models that use an integrated assessment and investment system.

Given the findings that venture capital in rural and underserved areas perform favorably with all venture investments and can have significant impact on creating community wealth, then the following conclusions can be drawn:

- More should be done to actively promote patient capital in rural and underserved areas and focus on capital efficiency as well as capital allocation.
- Advisory services should be developed into working models that can be efficiently deployed and scaled in rural and underserved communities.
- Structural issues inhibiting the development and adoption of TBL practices need to be addressed.

This project has identified three broad opportunities that could enhance the impact of equity capital on rural communities and accelerate the promotion of TBL practices.



Opportunity	Possible Interventions
<p><b>Increase the availability of patient capital at various levels of investment.</b></p>	<p>Capital Allocation: Help institutional VC raise competitive size funds that have enough dry powder to realize returns; develop industry information that illustrates performance and impact of equity capital in underserved areas.</p> <p>Capital Efficiency: Pilot the concept of entrepreneurial capital (a pull system) that provides small scale patient capital to start-ups and high impact businesses with limited equity capital requirements.</p>
<p><b>Make advisory services an integral and sustained aspect of patient capital funds.</b></p>	<p>Develop a Knowledge Exchange: Inventory and identify industry and partner expertise and centers of excellence that can be linked in a 'knowledge exchange' of services and information expanding reach and reducing the unit cost of delivery.</p> <p>Expand 'upstream' advisory services models that help build business capacity and build awareness of TBL practices prior to investments.</p> <p>Refine funding models for advisory services such as matching management fees that provide funds with adequate resources to provide expanded services in rural areas.</p>
<p><b>Significantly enhance the ability to develop, deploy and evaluate triple bottom line investment practices.</b></p>	<p>Focus on the development or adaptation of TBL investing models and assessment tools that move the practice from an "add-on" to an integrated framework.</p> <p>Increase investment in existing working models that can be scaled throughout rural regions and enhance the learning infrastructure to share and replicate these best practices.</p> <p>Standardize metrics and establish an exchange of model and legal documents (e.g. model stock option plans) to facilitate the consistent provision of advisory services.</p>

## References

- Applewhite, Jarratt, *Rural Entrepreneurs Need More than Good Advice*, Community Development Investment Review, Federal Reserve Bank of San Francisco, 2006
- Becker-Bease, John and Jeffrey Sohl, *Do Women-owned Businesses Have Equal Access to Angel Capital?* Journal of Business Venturing, 2006
- Broughton, Anne Claire, *Adding Value to Portfolio Companies*, presentation made March 27, 2008
- Broughton, Anne Claire, et. al, *Beyond Paycheck-to-Paycheck: Wealth Building Strategies for Venture Capital Funds*, 2004
- Bowers, Brent, *In Pitching to Angel Investors, Preparation Tops Zeal*, New York Times June 11, 2009
- CDVCA, Measuring Impact Tool Kit
- CDVCA, *New Markets Venture Capital Program for Community Development Venture Capital Funds*, April 2001
- Center for Venture Research, *Angel Investments Down, Deals Hold Steady*, New Hampshire Business Review, March 31, 2009
- Community Development Financial Institutions, *Providing Capital, Building Communities, Creating Impact*, CDFI Data Project, 2006, 2007, and 2008 reports
- Douglas, Penelope, Beth Sirull and Pete November, *Development Investment Capital: Three Steps to Establishing an Asset Class for Investing in Underserved Markets*, May 2006
- Johnson, William and Jeffrey Sohl, *Initial Public Offerings and Pre-IPO Shareholders: Angel Versus Venture Capitalists*
- Kauffman Foundation, *Entrepreneurship and Economic Recovery: America's Best Way to Stimulate Growth*, March 2009
- Klein, Karen, *Where Entrepreneurs Can Still Find Private Capital*, BusinessWeek, April 28, 2009
- Kropp, Robert, *Investors Want More Disclosures of Climate Change Risk Data from Corporations*, March 10, 2009
- Moncreif, L Ray and Grady Vanderhoofen, *A Vision for the Future of Rural Development Venture Capital*, Federal Reserve Bank of San Francisco
- Monitor Institute, *Investing for Social & Environmental Impact*, January 2009
- Rubin, Julia Sass, *Community Development Venture Capital: A Report to the Industry*, CDVCA document(no date)

Rubin, Julia Sass, *Financing Rural Innovation with Community Development Venture Capital: Models, Options and Obstacles*, Federal Reserve Bank of San Francisco

Schmitt, Brian T., *Financial Returns and Double-Bottom Line Capital: What Do We Know?* CDVCA, November 2004

Sohl, Jeffery, *Angel Investing: Changing Strategies During Volatile Times*, The Journal of Entrepreneurial Finance and Business Ventures, Syracuse University

Sohl, Jeffrey, *Current Trends in the Private Equity Financing of High Tech Ventures*, May 2001

Sohl, Jeffrey, *The US Angel and Venture Capital Market*, Journal of Private Equity, Spring 2003

Sohl, Jeffrey, *The Organization of the Informal Venture Capital Market*, Center for Venture Research

Spors, Kelly, *Federal Aid Sought For Equity-Back Companies*, The Wall Street Journal, April 21, 2009

Strommer, Susan, George Lipper and Daniel Sandler, *Seed and Venture Capital: State Experiences and Options*, May 2006

Impact & Sustainability Reports from

CEI Ventures

SJF Ventures

Pacific Community Ventures

ShoreBank Pacific

### **Interviews conducted for impact study**

- Benedict, Paul. Senior Associate, Adena Ventures. Interview by Patricia Scruggs, Ted Settle and John Provo. Unstructured interview. Athens, OH. 14 July 2009.
- Browning, Joey. Loan Officer, WV Economic Development Administration. Interview by John Provo. Unstructured, phone interview. Blacksburg, VA., 15 June 2009.
- Burns, John. Fund Manager, Small Enterprise Growth Fund. Interview by John Provo. Blacksburg, VA., 3 September 2009.
- Clark, William. Executive Director, WV Economic Development Administration. Interview by John Provo, Ted Settle and Mel Jones. Unstructured, phone interview. Blacksburg, VA., 01 July 2009.
- Clossey, Harold. Executive Director, Sunrise County Economic Development. Interview by John Provo and Mel Jones. Blacksburg, VA., 27 August 2009.
- Dotson, Kevin. Vice President of Nelsonville Chamber of Commerce and Retail Manager of Rocky Brands, Inc. Interview by Pat Scruggs, Ted Settle, John Provo and Mel Jones. Nelsonville, OH. 15 July 2009.
- Employees, ED MAP, Inc. Interview by Patricia Scruggs and John Provo. Nelsonville, OH. 14 July 2009.
- Hawk Maiden, Angie. Chief Executive Officer, ACEnet, Inc. Interview by Patricia Scruggs, John Provo, Ted Settle and Mel Jones. Unstructured interview. Athens, OH., 14 July 2009.
- Henshaw, Nat. Managing Director, CEI Ventures, Inc. Interview by John Provo. Blacksburg, VA., 30 July 2009.
- Jenkins, Marten. Executive Director, Natural Capital Investment Fund. Interview by John Provo and Patricia Scruggs. Unstructured, phone interview. Blacksburg, VA., 15 June 2009.
- Larson, Rick. Director of Sustainable Ventures, The Conservation Fund. Interview by John Provo. Blacksburg, VA. 7 August 2009.
- LeGwin, Hardy. Chief Executive Officer, FLS Energy, Inc. Interview by John Provo and Mel Jones. Blacksburg, VA., 15 September 2009.
- Lillard, Joe. Owner, Washington Homeopathic Products. Interview by John Provo, Patricia Scruggs, Ted Settle, Raymond Smoot and Mel Jones. Unstructured, phone interview. Blacksburg, VA., 12 June 2009.
- Lillard, Joe and Linda Sprankle-Lillard. Owners, Washington Homeopathic Products. Interview by John Provo. Unstructured, phone interview. Blacksburg, VA., 31 July 2009.
- Mark, Michael. Chief Executive Officer, ED MAP, Inc. Interview by John Provo and Patricia Scruggs. Unstructured, phone interview. Blacksburg, VA., 18 June 2009.
- Mark, Michael; Micah Zimmerman; Kerry Stoessel Pigman. Interview by Patricia Scruggs, John Provo, Ted Settle and Mel Jones. Unstructured interview. Senior Management, ED MAP, Inc. Nelsonville, OH., 14 July 2009.
- Mason, Thom. Director, Oak Ridge National Labs. Interview by John Provo and Mel Jones. Blacksburg, VA., 30 July 2009.
- McGowan, Joseph F.; Nancy Stotts and Rocky Brunty. Director and Employment Counselors, Work Station. Interview by Patricia Scruggs, Ted Settle and Mel Jones. The Plains, OH. 15 July 2009.
- Quijano, Carlos. Chief Executive Officer, Coast of Maine Organic Products. Interview by John Provo. Blacksburg, VA., 21 July 2009.
- Quijano, Carlos. Chief Executive Officer, Coast of Maine Organic Products. Interview by John Provo. Blacksburg, VA., 03 August 2009.

- Rice, Rhonda. Executive Vice President, Knoxville Chamber of Commerce. Interview by John Provo and Ted Settle. Blacksburg, VA., 09 July 2009.
- Riddlebarger, Sarah; Isaac Mowder; Amanda Davis; Roberta Washburn; and Teresa Cone. Management, ED MAP, Inc. Interviewed by Ted Settle and Mel Jones. Unstructured interview. Nelsonville, OH., 14 July 2009.
- Scherer, Joseph. City Manager of Nelsonville, OH. Interview by John Provo. Unstructured, phone interview. Blacksburg, VA., 01 July 2009.
- Shelton, Todd. Director, BusinessRemixed. Interview by John Provo. Unstructured, phone interview. Blacksburg, VA., 30 June 2009.
- Simon, Jennifer. Director, Ohio University Innovation Center. Interview by John Provo, Ted Settle and Mel Jones. Unstructured interview. Athens, OH. 14 July 2009.
- Vanderhoofven, Grady. Executive Vice President and Assistant Fund Manager, Southern Appalachian Fund. Interview by John Provo. Blacksburg, VA., 20 July 2009.
- Waldkoetter, Fred. Chief Financial Officer, Mountain BizWorks. Interview by John Provo. Blacksburg, VA. 23 September 2009.
- Weinberg, Mark; John Glazer, Shawn Mallet and Faith Knutsen. Ohio University Faculty and Staff. Interview by Ted Settle, John Provo and Mel Jones. Athens, OH., 15 July 2009.
- Witkowski, Chuck. Chief Executive Officer, Protein Discovery, Inc. Interview by John Provo. Blacksburg, VA., 06 July 2009.
- Witkowski, Chuck. Chief Executive Officer, Protein Discovery, Inc. Interview by John Provo. Blacksburg, VA., 30 July 2009.
- Zellers, Niels. Sustainable Business Consultant, Coastal Enterprises, Inc. Interview by John Provo and Mel Jones. Blacksburg VA. 4 September 2009.