

## CHAPTER 8 EQUITY INVESTORS

### 8.1 SUMMARY

This chapter examines two sources of equity investment for businesses: venture capital funds and angel investors. The examination reveals how venture fund equity investments are concentrated in relatively few counties, mostly in the Northern Appalachian subregion and in large and small metropolitan counties.

The key findings with respect to venture fund and angel investors are:

- Less than 2 percent of the venture fund investments were in rural counties and less than 1 percent in Central Appalachia or at-risk counties.
- Allegheny County, PA (city of Pittsburgh) dominates venture fund investment in Appalachia followed by other knowledge-based or medical centers including Jefferson County, AL (city of Birmingham), Gwinnett County, GA (a suburb of Atlanta), Tompkins County, NY (city of Ithaca), and Clermont County, OH (a suburb of Cincinnati).
- The pattern of venture fund investment in Appalachia is consistent with the geographic distribution of biomedical, computer-related, and knowledge-based industries.
- While less is known about angel investors because of their informal nature, the data suggest that the pattern of investment is similar to venture capital fund investment; concentrated near large metropolitan areas and universities, leaving distressed and rural counties underserved.

The total amount of venture capital fund investment declined by about 27 percent between 2007 and 2010. Because venture capital funds tend to invest in high growth fields, such as biotechnology, medical and health, and computers, the investments are highly concentrated in the Northern Appalachian subregion, including Pittsburgh, PA, and Ithaca, NY, and in large metropolitan and transitional or competitive counties. Angel investments also declined between 2007 and 2010 by about 23 percent, with the majority of investments in software, healthcare, and biotechnology sectors. Because angel investors tend to invest near where they live, and because most live near urban areas or universities, angel investors appear to be a limited source of equity investment for businesses in rural and distressed communities.

### 8.2 VENTURE CAPITAL FUNDS AND ANGEL INVESTORS

Equity investors fall into two distinct categories: investment funds and informal investors. Venture capital funds pool assets from multiple investors and invest those funds in businesses run by other people. Informal investors are wealthy individuals who invest their own money in businesses. One category of informal investors are “friends and family” investors who fund businesses run by relatives, friends, or people they know personally. Angel investors are people who invest their own money in businesses run by unrelated entrepreneurs.

#### 8.2.1 VENTURE CAPITAL FUNDS

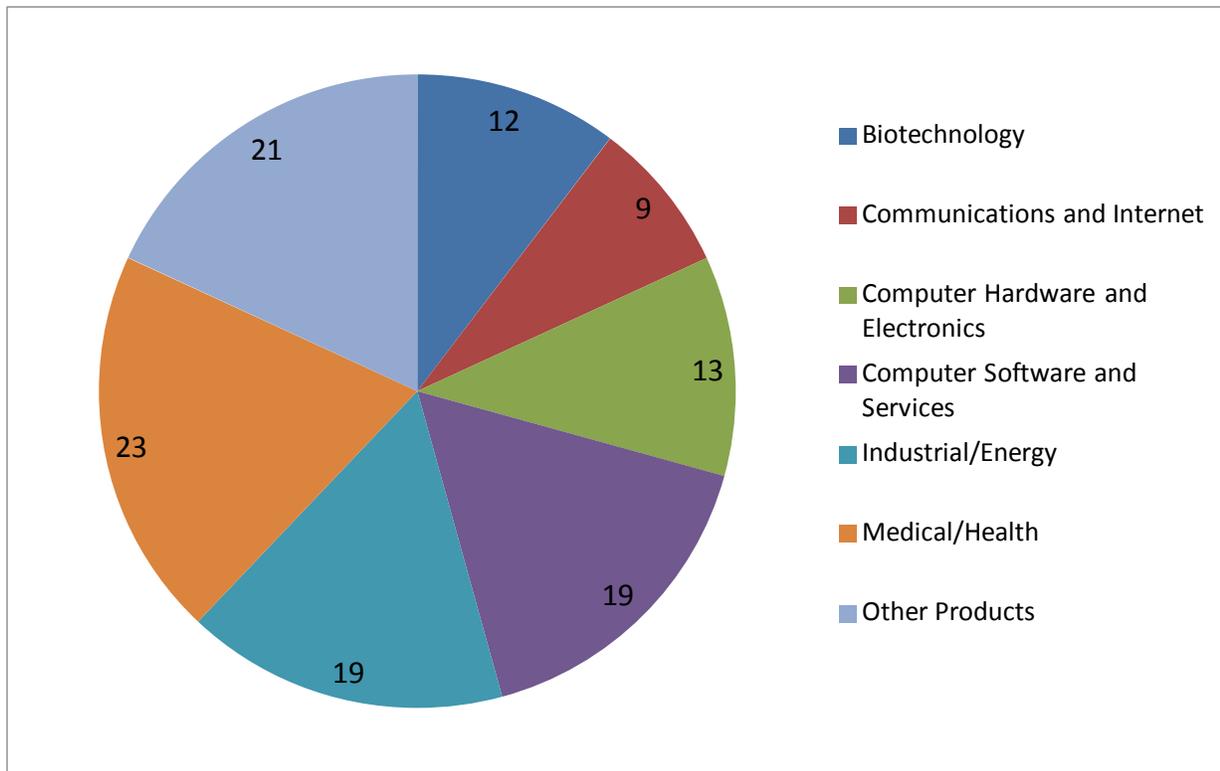
Typically, a venture fund is created by fund managers who raise money from large investors, such as pension funds, foundations, or wealthy individuals. Some venture funds are funded entirely from investors, while others, such as those in the Small Business Investment Company (SBIC) program, may receive some of the capital they invest from public sector sources. For example, venture capital funds in

the SBIC program are initially funded by private investors, but they can receive additional capital from the sale of SBA-guaranteed securities, up to three times the amount of the initial private investment in the fund. Some venture capital funds are entirely profit motivated, while others, such as Community Development Venture Funds, balance their profit motive with additional social objectives, such as investing in distressed communities.

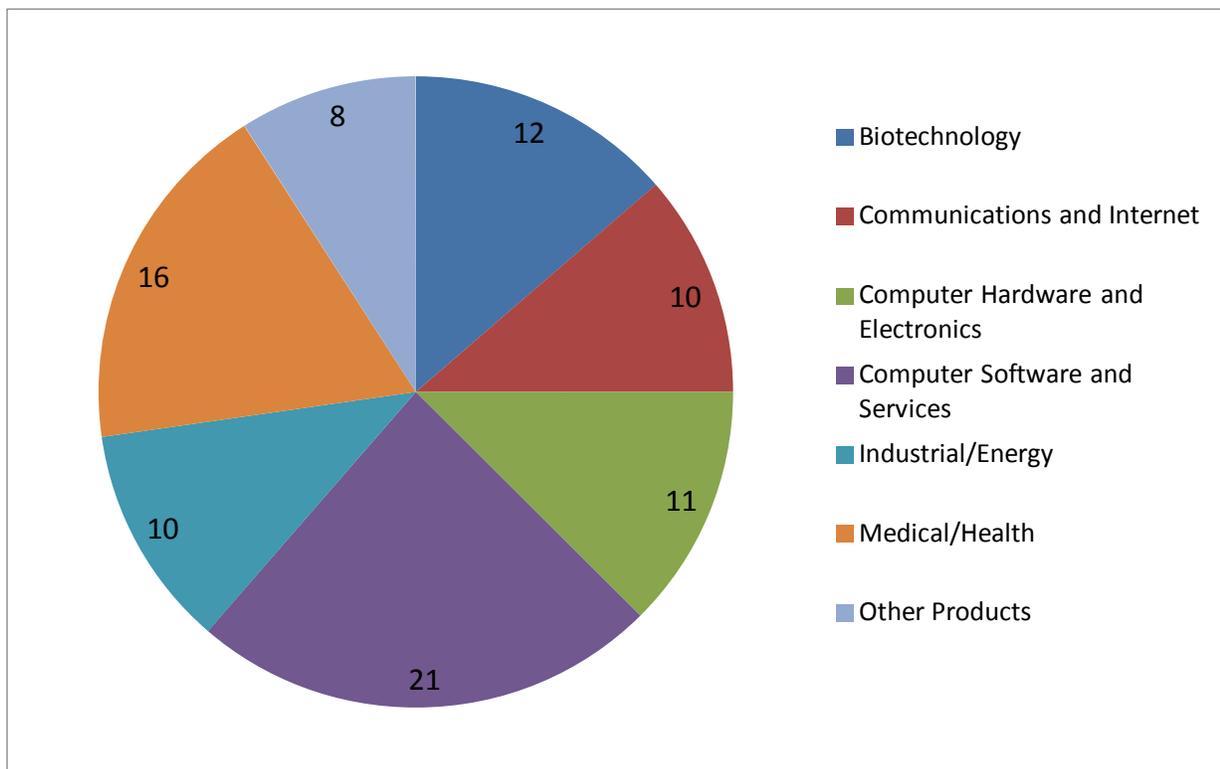
Venture capital funds are a crucial source of financing for companies moving from the start-up phase, with an innovative idea or promising technology, through the development phase to the point at which the company can go public or be acquired by an established company that can bring the product or service to market. When a fund makes equity investments, the fund managers take seats on the boards of directors in most cases. Over the life of the investment, the venture capitalists may also participate in running the company and help secure additional investments from other venture funds, if necessary.

Not surprisingly, venture capital funds tend to invest in fields in which innovative technology plays an important role, including biomedical- and computer-related industries. Based on the number of companies receiving venture capital fund investments, over 57 percent of venture capital fund investments in Appalachia were in companies in the biotechnology, medical/health or computer-related sectors in 2007 and over 68 percent were in companies in those sectors in 2010 (see Figures 8-1 and 8-2).

**Figure 8-1: Number of Venture Fund Investments by Sector in Appalachia, 2007**

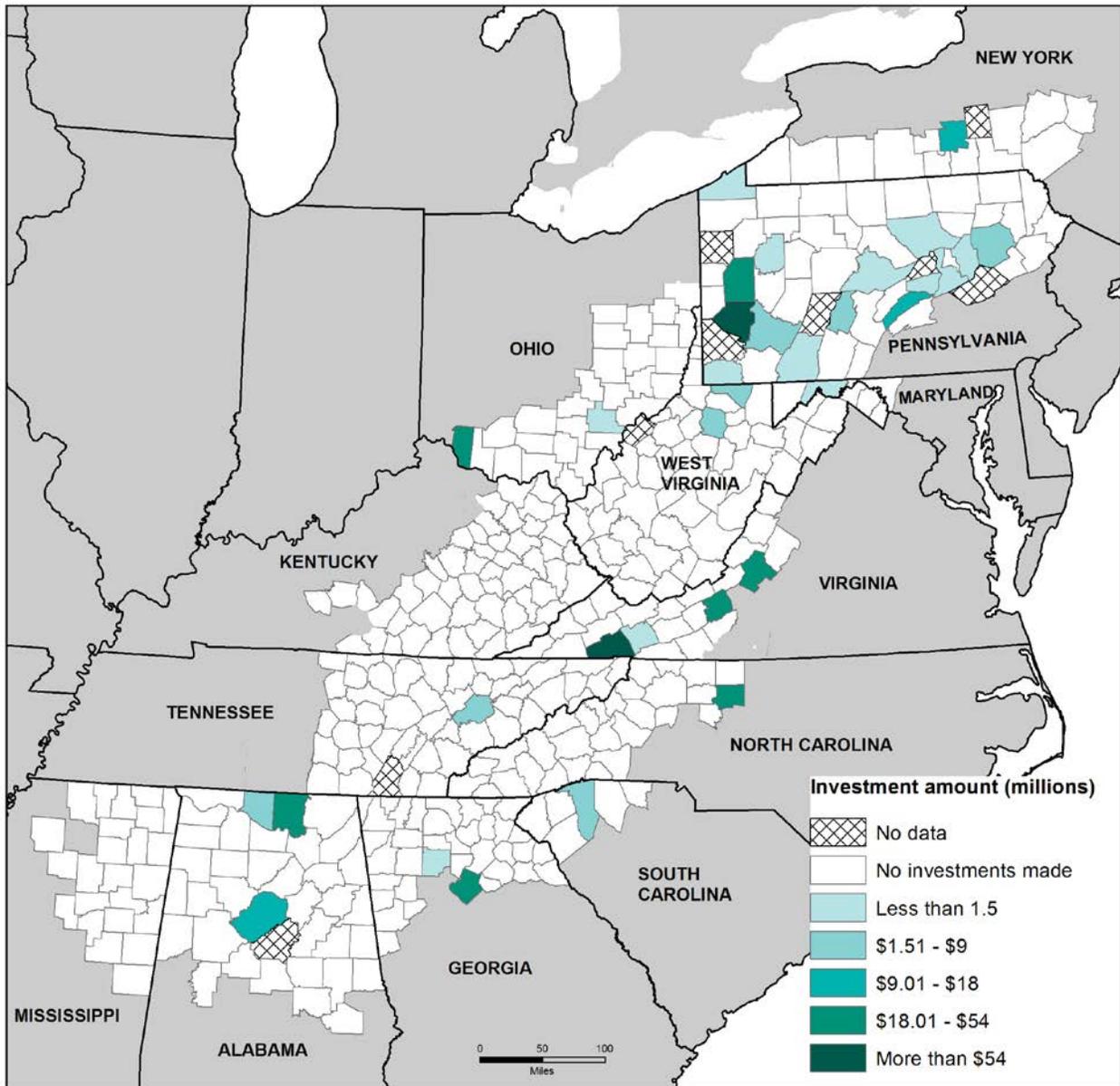


**Figure 8-2: Number of Venture Fund Investments by Sector in Appalachia, 2010**



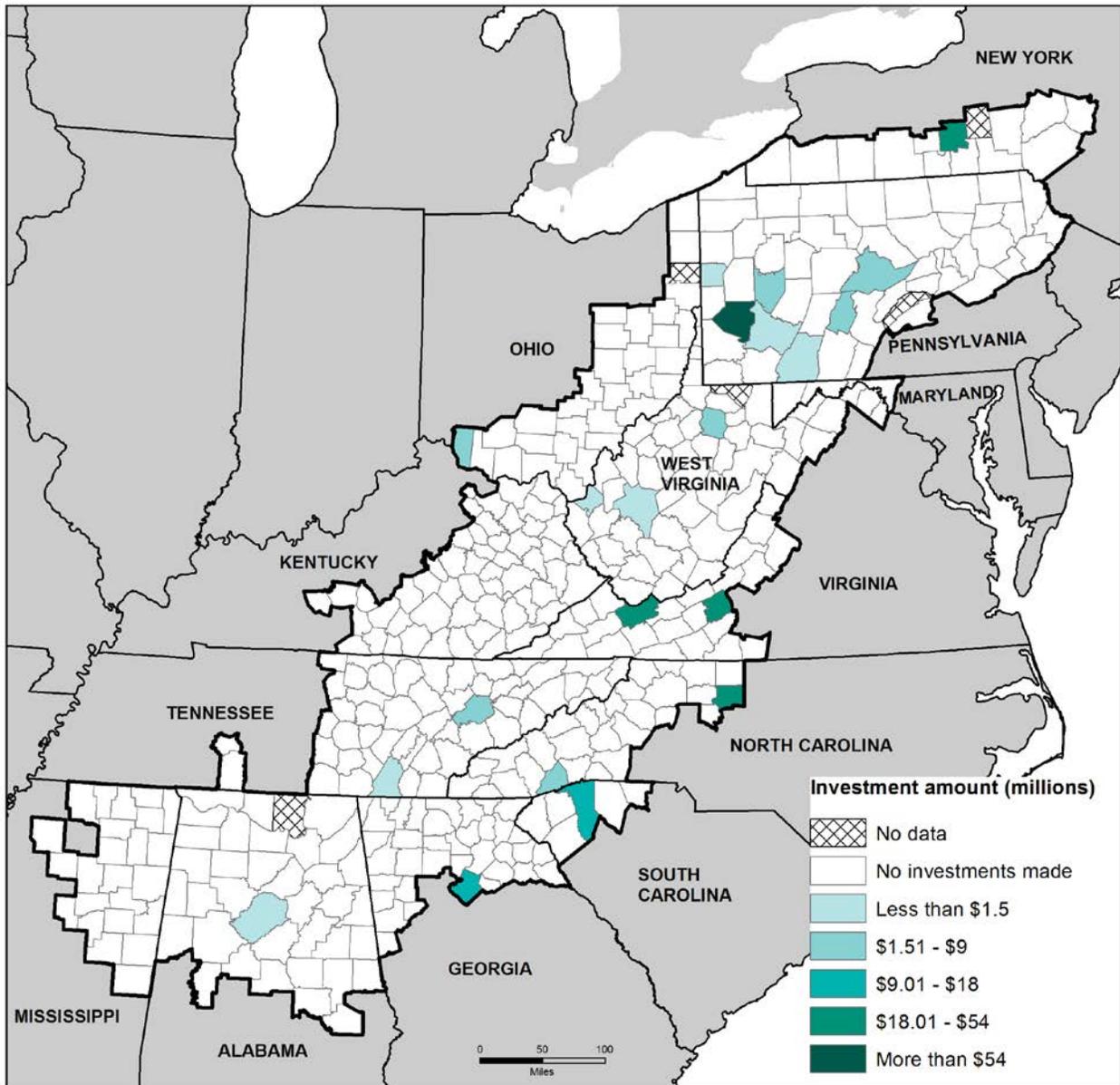
The distribution of venture capital fund investment in Appalachia is consistent with the geographic distribution of biomedical/health and electronics/computer-related business incubation. Allegheny County, PA (city of Pittsburgh) dominates venture fund investment in Appalachia, as shown in Maps 8-1 and 8-2 and Tables 8-1 and 8-2. The next highest numbers of investees (companies receiving investments) in 2007 are in either large or small metropolitan counties, including Jefferson County, AL (city of Birmingham), Gwinnett County, GA (a suburb of Atlanta), and Tompkins County, NY (city of Ithaca), home to Cornell University. In 2010, the next highest numbers of investees are in Tompkins County, NY, and Clermont County, OH (a suburb of Cincinnati). Outside of those few counties, no other counties in Appalachia had more than three companies receiving venture fund investment. Only 44 counties overall had firms receiving investment in 2007, and only 26 had firms receiving investment in 2010.

**Map 8-1: Amount of Venture Fund Investment by County, 2007**



Map Title: Investments Made by Venture Capitalists in 2007  
 Data Source: Price Water House Coopers 2007

**Map 8-2: Amount of Venture Fund Investment by County, 2010**



Map Title: Investments Made by Venture Capitalists in 2010  
 Data Source: Price Water House Coopers 2010

**Table 8-1: Venture Fund Investments in Appalachia, 2007**

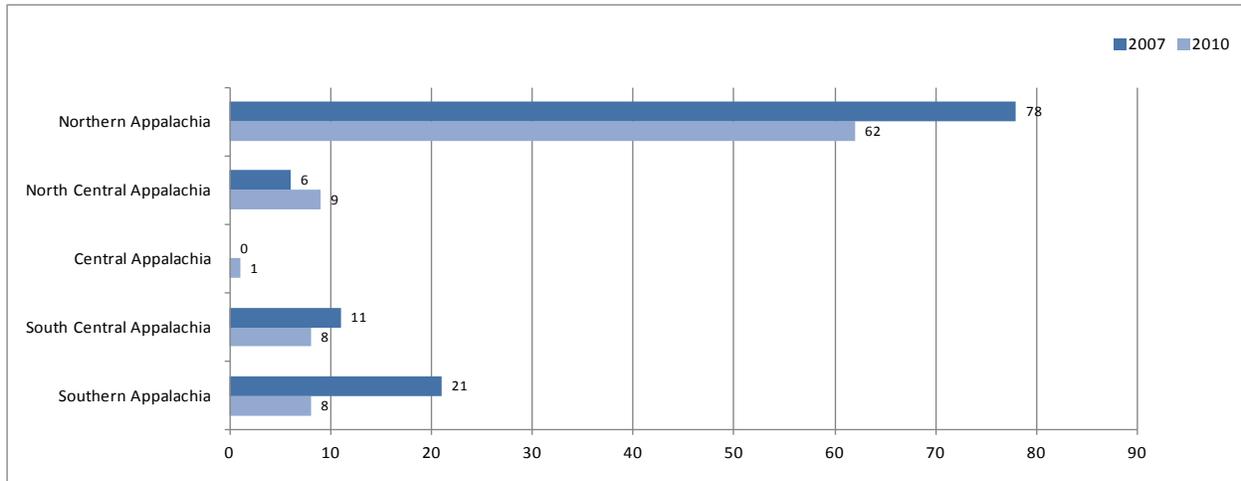
County	State	Investees	Venture Funds Investing	No. of Separate Investments	County	State	Investees	Venture Funds Investing	No. of Separate Investments
Jefferson	AL	6	7	7	Greene	PA	1	1	1
Limestone	AL	1	1	1	Juniata	PA	1	1	1
Madison	AL	2	2	2	Luzerne	PA	1	1	1
Shelby	AL	1	1	1	Lycoming	PA	1	1	1
Cherokee	GA	1	1	1	Mercer	PA	1	1	1
Gwinnett	GA	8	16	16	Northumberland	PA	2	1	2
Allegany	MD	1	1	1	Schuylkill	PA	1	1	1
Washington	MD	1	4	4	Snyder	PA	1	1	1
Forsyth	NC	1	1	1	Somerset	PA	1	1	1
Cortland	NY	1	1	1	Union	PA	1	1	1
Tompkins	NY	5	8	13	Washington	PA	2	2	2
Athens	OH	1	3	3	Westmoreland	PA	2	5	5
Clermont	OH	1	3	3	Greenville	SC	2	4	4
Mahoning	OH	1	1	1	Hamilton	TN	2	2	2
Allegheny	PA	45	31	77	Knox	TN	2	3	3
Blair	PA	1	1	1	Botetourt	VA	1	2	2
Butler	PA	2	5	5	Montgomery	VA	3	2	3
Cambria	PA	1	1	1	Smyth	VA	1	1	1
Centre	PA	1	1	1	Washington	VA	1	1	1
Clarion	PA	1	1	1	Harrison	WV	1	1	1
Columbia	PA	1	1	1	Monongalia	WV	2	3	3
Erie	PA	2	1	2	Wood	WV	1	1	1

**Table 8-2: Venture Fund Investments in Appalachia, 2010**

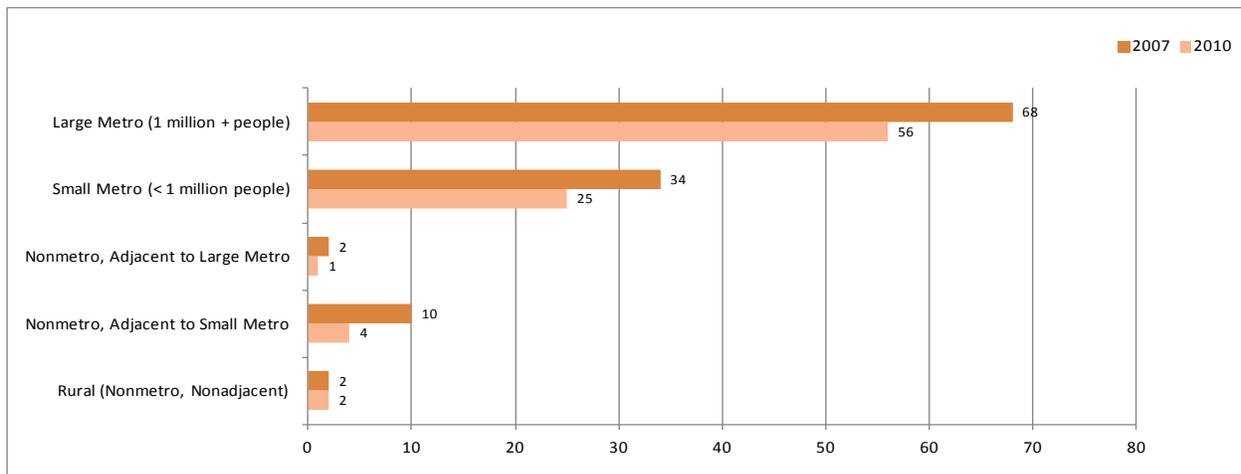
County	State	Investees	Venture Funds Investing	No. of Separate Investments	County	State	Investees	Venture Funds Investing	No. of Separate Investments
Jefferson	AL	3	4	4	Juniata	PA	1	1	1
Madison	AL	1	1	1	Lawrence	PA	1	1	1
Gwinnett	GA	2	2	2	Somerset	PA	1	1	1
Forsyth	NC	3	7	7	Westmoreland	PA	3	5	6
Transylvania	NC	1	1	1	Greenville	SC	2	4	4
Cortland	NY	1	1	1	Hamilton	TN	1	1	1
Tompkins	NY	7	8	14	Knox	TN	2	4	4
Clermont	OH	5	6	10	Montgomery	VA	1	1	1
Mahoning	OH	1	1	1	Tazewell	VA	1	1	1
Allegheny	PA	42	39	74	Cabell	WV	1	1	1
Armstrong	PA	1	1	1	Harrison	WV	1	1	1
Blair	PA	1	3	3	Kanawha	WV	1	1	1
Centre	PA	3	4	5	Monongalia	WV	1	1	1

The extreme concentration of companies receiving venture fund investment in so few counties, 55 percent in four counties in 2007 and 61 percent in three counties in 2010, results in a high degree of geographic concentration with respect to county characteristics, as shown in Figures 8-3 through 8-5. Allegheny County, with over 38 percent of investees in 2007 and over 47 percent in 2010, is a competitive, large metropolitan county in Northern Appalachia, and the data reflect its impact, as shown in Table 8-3. Over 85 percent of all investees in 2007 were in Northern or Southern Appalachia, large or small metropolitan counties, and in competitive or transitional counties. Less than two percent were in rural counties and less than one percent in Central Appalachia or distressed or at-risk counties.

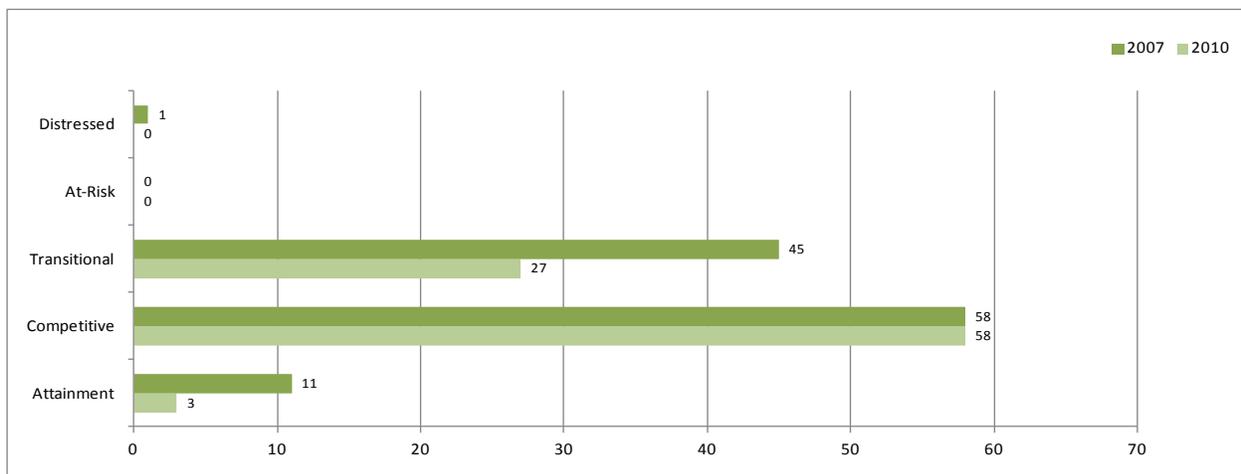
**Figure 8-3: Number of Investees by Region**



**Figure 8-4: Number of Investees by County Type**



**Figure 8-5: Number of Investees by Economic Status**



**Table 8-3: Venture Fund Investments by Subregion, Type, and Economic Status**

	2007				2010			
	Investees		Venture Funds Investing		Investees		Venture Funds Investing	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Appalachian Region	116		129		88		101	
<b>Subregions</b>								
Northern Appalachia	78	67.2%	74	57.4%	62	70.5%	65	64.4%
North Central Appalachia	6	5.2%	11	8.5%	9	10.2%	10	9.9%
Central Appalachia	0	0.0%	0	0.0%	1	1.1%	1	1.0%
South Central Appalachia	11	9.5%	12	9.3%	8	9.1%	14	13.9%
Southern Appalachia	21	18.1%	32	24.8%	8	9.1%	11	10.9%
<b>County Types</b>								
Large Metro (1 million + people)	68	58.6%	71	55.0%	56	63.6%	57	56.4%
Small Metro (< 1 million people)	34	29.3%	43	33.3%	25	28.4%	37	36.6%
Nonmetro, Adjacent to Large Metro	2	1.7%	2	1.6%	1	1.1%	1	1.0%
Nonmetro, Adjacent to Small Metro	10	8.6%	11	8.5%	4	4.5%	4	4.0%
Rural (Nonmetro, Nonadjacent)	2	1.7%	2	1.6%	2	2.3%	2	2.0%
<b>Economic Status</b>								
Distressed	1	0.9%	3	2.3%	0	0.0%	0	0.0%
At-Risk	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Transitional	45	39.1%	50	39.1%	27	30.7%	33	32.7%
Competitive	58	50.4%	55	43.0%	58	65.9%	65	64.4%
Attainment	11	9.6%	20	15.6%	3	3.4%	3	3.0%

### 8.2.2 ANGEL INVESTORS

Angel investors have recently been recognized as an important source of capital for entrepreneurs. Because they constitute a newly-recognized class of investor, the definition of an angel investor is still being determined. One suggested taxonomy distinguishes between two categories of equity investors, venture funds and informal investors.<sup>32</sup> As noted earlier, venture funds pool assets from multiple investors such as pension funds, foundations, or wealthy individuals and invest these funds in businesses run by other people. The second category of equity investor is the informal investor, a person who invests his/her own money. The taxonomy further distinguishes between two types of informal investors. One type is the “friends and family” investor who funds businesses owned by relatives, friends, or people he/she knows personally. The other type of informal investor is a person who invests in businesses run by unrelated entrepreneurs, and these investors are the angel investors.

Most angel investors are actively involved with the businesses they invest in, providing technical or financial guidance. Some, however, are more passive and have little involvement with the businesses after they make the initial investment.

According to the Center for Venture Research, over 57,000 businesses received angel investor funding in 2007, with a total of \$26.0 billion invested. Nearly 60 percent of the investments were in software, healthcare, and biotechnology sectors. In 2010, nearly 62,000 businesses received angel investor funding, but the total invested was only \$20.1 billion. Over 60 percent of the amount invested was in software, healthcare, and biotechnology sectors.

More recently, some angel investors have become more formally organized into groups to combine the resources of individuals into larger pools for funding and to broaden the expertise available in making investments. According to one estimate, between 10,000 and 15,000 individuals belong to angel groups. A leading industry association, the Angel Capital Association (ACA), surveyed its members, providing one of the most complete sources of data on angel investors.<sup>33</sup> The vast majority of angel investor respondents to that survey, over 80 percent, invest in start-up or early stage companies, but 35 percent also finance expansion of profitable small companies. More than half of the respondents expected to invest in five or fewer companies in the next year, and more than half of angel investor respondents had average investments of less than \$250,000 per company, with only about 9 percent investing an average of more than \$500,000 per company.

One key factor in determining the availability of angel investor capital for businesses in Appalachia is the geographic limitation that angel investors have on where they will invest. Forty-four percent of the respondents to the ACA survey indicated that they would only invest within a four-hour drive of the group’s location, while other studies have suggested that the range may be even more limited geographically, perhaps as little as a one hour drive, noting that angel investors prefer to invest close to

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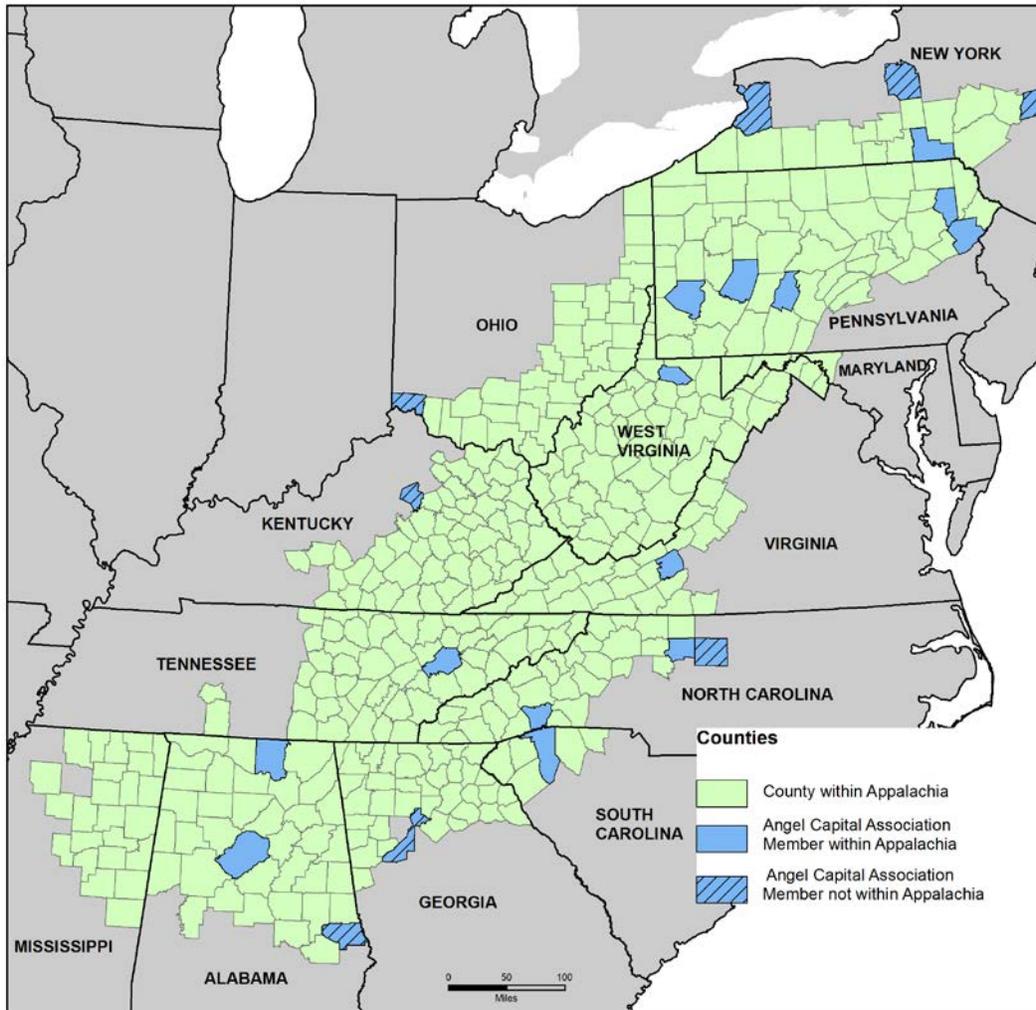
<sup>32</sup> This taxonomy is from Shane, S., 2008. *The Importance of Angel Investing in Financing the Growth of Entrepreneurial Ventures: A Working Paper*. Prepared for the Small Business Administration, Office of Advocacy.

<sup>33</sup> The data are from Shane, S., and A. M. Mixon, 2008, *Angel Groups: An Examination of the Angel Capital Association Survey*, and *Angel Investment Groups – Trends and Statistics*, May, 2008. This survey was of members of the Angel Capital Association for the Angel Capital Education Foundation. Because the survey was of a non-random group of angel investors, the results may not reflect the universe of angel investors outside of the ACA members.

where they are located.<sup>34</sup> That limitation suggests that businesses in Appalachia will need to find local angel investors if they are to access that source of capital.

Because most angel investors are individuals and most of the investments they make are informal and not reported publicly, it is difficult to know where individual angels are located. Locating some of the more organized angel groups, however, is possible. Map 8-3 shows the counties in or adjacent to Appalachia with a member or members of the ACA located in the county. As the map shows, angel groups are primarily located near urban centers and universities and are not likely to serve most counties in Appalachia.

**Map 8-3: Angel Capital Association Members by County, 2011**



Map Title: Angel Capital Association Member Location by County  
Data Source: Angel Capital Association

<sup>34</sup> Morrissette, Stephen G., 2007. A Profile of Angel Investors, *The Journal of Private Equity*, 10(3): 52-66, and DeGennaro, Ramon P., 2010. Angel Investors: Who They Are and What They Do; Can I Be One, Too?, *The Journal of Wealth Management*, 13(2): 55-60.