

**ANGEL INVESTING: A REPORT PREPARED FOR THE FEDERAL RESERVE
BANKS OF ATLANTA, CLEVELAND, KANSAS CITY, PHILADELPHIA AND
RICHMOND**

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EXECUTIVE SUMMARY

This document summarizes the results of four focus groups conducted with angel investors. The goal of the focus groups was to provide information for research staff of the Federal Reserve Banks to develop hypotheses for future studies of angel investing. Five regional banks participated in the study (Atlanta, Cleveland, Kansas City, Richmond, and Philadelphia). Each bank provided a representative to help design a focus group protocol, identify angel investors, invite participants to the focus group session, and organize a focus group session. The author of this report conducted the focus groups, which took place during the summer of 2005 in Atlanta, Cleveland, Denver and Philadelphia. (One bank did not conduct a focus group). Each focus group lasted between two and two-and-a-half hours, and involved between eight and ten participants. The participating business angels were identified through a snowball sampling procedure, but efforts were made to identify angels that represented different types of angel investing. The focus group discussions were unstructured to encourage participation.

The following are the main findings of the focus groups: Angel investors are people who make relatively small magnitude investments (less than \$2 million) in private companies from their own funds. They can be categorized along a variety of dimensions. Including whether they invest alone or in groups, have high or moderate net worth, are passive or active investors, are knowledgeable or naïve about start-ups, focus on early or later stage, use a formal or informal process, are high or moderate risk investors, are accredited or non-accredited, and engage relationship or arms length transactions.

People become angel investors for a variety of reasons, including the achievement of financial returns, to support the community, to create and grow companies, to find a new job, to learn new things, to make use of their expertise, and for personal enjoyment.

They use a variety of different models to organize their investments. One fundamental difference in organization is whether or not the investors invest individually or in groups. The focus group participants offered several reasons why angels invest through groups: to pool capital, for diversification, to pool knowledge, to obtain better deal flow, to check their judgment against that of others, to divide labor, to have more investment options, and for social reasons. They also offered several reasons why angels invest alone: because of large personal financial capacity, to minimize overhead, to remain unknown, because networks are not an option where they are located or at the time that they start, and to become heavily involved in the portfolio companies.

Angels find deals through a wide range of sources, but prefer to obtain them through their social networks. Obtaining deal flow is more problematic for individual angels than those that invest through groups.

Angels believe that they provide value to their portfolio companies. This value comes from providing contacts to key stakeholders, by offering strategic advice, by providing operational assistance; through their selection processes, and by serving as confidants to entrepreneurs.

Angel investing is a local business, with angels primarily investing in companies located within a four hour drive from their offices. However, the angels indicated several exceptions to this rule: co-investing with a trusted partner, super angels who are known in their industries, and experienced angels.

The focus groups identified the characteristics of “good” angel deals. Good deals have recurring revenues and a defined competitive advantage, are scalable and in a large market, offer a solution to a real customer problem of importance, are not marketing intensive, do not involve commodity products, are not personal services, are not in declining markets, and do not involve the insertion of the entrepreneur into an existing value chain. Good deals also involve experienced entrepreneurs, a strong management team with good skills, entrepreneurs known to the angels, who communicate and work well with others, have charisma, passion and vision, and are good at overcoming obstacles. Lastly, good deals show a path to a good rate of return at a reasonable valuation.

Groups and individuals have different investment processes. Variance exists between groups on screening, presentations, and due diligence processes. Most angels co-invest with other investors and see themselves as complements to venture capitalists, who typically invest in the same companies at a later stage.

After making their investments, angels are often involved with their portfolio companies. The time that they spend with portfolio companies varies by stage of company development, the angel, and the development cycle of the company. Angels seek board seats to enhance control over portfolio companies.

Angels typically measure returns as X times the investment, with 10X being most common return expectation. The time horizon for investment is 3 to 7 years. The size of investment is around 250 thousand dollars, with two to four investment rounds per company. The typical exit is IPO or acquisition.

Angels use many investment instruments, but the modal instrument is convertible preferred stock. Angels’ term sheets look very similar to those of venture capitalists and discuss valuation, liquidation preference, anti-dilution provisions, board representation, information rights, redemption rights, control rights, piggyback rights and registration rights. Angels vary significantly in the proportion of ownership taken, with some angels preferring low-levels and other angels preferring high levels.

The focus group participants believe that successful angel investing in a region depends on the presence of seasoned entrepreneurs and managers, first generation capital, a relevant industrial base, strong universities, the right culture, scale, and successful experience. They also believe that angel investing would be enhanced by favorable tax policies toward angel investors and start-up companies, matching grants to angel investors, and support for universities.

The results of the focus groups suggest several next steps. First, the Federal Reserve regional banks could analyze existing secondary data and collect new primary data about angel investing. Second, the regional banks could educate potential and current angels and entrepreneurs about angel investing. However, the regional banks could not make policy changes to enhance angel investing. The regional banks have few tools at their disposal that affect the factors responsible for successful angel investing in a region.

INTRODUCTION

Many observers have remarked that business angels play a very important role in financing new businesses in the United States. Estimates of the amount of capital provided to new businesses by business angels are as high as 100 times that provided by venture capital firms.

Despite the importance of business angels to entrepreneurial activity, we know relatively little about how angel investing works or the role of angel investing in financing new firms, either from the perspective of public policy or from the perspective of managing and financing new businesses.

This document summarizes the results of a study designed to provide basic information about angel investing. The study, conducted by the author in conjunction with the research departments of five Federal Reserve regional banks, involved four focus groups with business angels around the country. The goal of the study was to provide information for research staff of the Federal Reserve Banks to develop hypotheses for future studies of angel investing. The types of questions that the focus groups were designed to investigate included such things as: Do business angels have a geographic preference for making investments? How do business angels obtain their deal flow? Do business angels have preferences for industries in which they invest? How do state and local taxes or other policy issues affect angel investing?

METHODOLOGY

The research directors of the ten Federal Reserve banks were invited to join in a study to learn more about angel investing. Five regional banks chose to participate in the study (Atlanta, Cleveland, Kansas City, Richmond, and Philadelphia). The five participating regional banks each agreed to have the author conduct a focus group of eight to ten business angels in their district.

In the spring of 2005, representatives of each of the participating regional banks and the author designed a focus group protocol for the study through a combination of conference calls and email correspondence. This group also designed a letter that was sent from the regional bank president to angel investors in the region inviting them to participate in the focus group.

The focus groups took place during the summer of 2005 in Atlanta, Cleveland, Denver and Philadelphia. (The Federal Reserve Bank of Richmond decided not to conduct a focus group). Each focus group lasted between two and two-and-a-half hours, and involved between eight and ten business angels. The participating business angels were identified by the representatives of the regional banks through a snowball sampling procedure. However, efforts were made to identify angels that represented different types of investing (high technology and low technology businesses, individual investors and investors through networks, moderate and high net worth individuals, and so on).

The focus group discussions were unstructured to encourage participation. While all the focus groups adhered generally to the standard protocol, not all questions were asked in all groups, and some of the participants volunteered information not asked in the protocol.

FINDINGS

The remaining pages of this report summarize the findings of the focus groups, organized by topic.

Definition of an Angel Investor

The focus group discussions sought to achieve consensus on what defines an angel investor. This proved difficult because of the wide range of people who engage in angel investing. The only common factors agreed upon by all of the focus group participants was that (1) angels make relatively small magnitude investments— less than two million dollars and more commonly in the tens and hundreds of thousands of dollars; (2) these investments are made in private companies; and (3) the investments are made from personal capital. This last criterion differentiates angel investors from institutional investors, such as venture capital firms, which raise from others the money that they invest in private companies. One angel investor in Denver highlighted this distinction, saying

“I think the biggest difference is the money comes out of your pocket versus somebody else’s pocket. I would think most people would say a true angel investor’s money comes out of their own pocket.”

Typology of Angel Investors

The range of things in which angels will investment, the type of organizational arrangements that they will use, their investment criteria, their decision making processes, and a host of other things, are extremely broad, much broader, in fact, than is the case for institutional investments. One angel investor in Cleveland described the range of possible angel investments, saying,

“The criteria for making an investment are exponentially more chaotic than what you will get with institutional money where people are answerable to others. When it’s your own money, it’s whatever you think makes sense at the time. You answer only to yourself and that broadens the scope of what’s possible.”

Because angel investors have only a few basic characteristics in common, and so include a wide range of activities, it is useful to think of a typology of angel investors. The focus group participants suggested a variety of dimensions on which to categorize angel investors, including whether investments are made individually or in groups, the net worth of the individual making the investment, whether investments are made exclusively in start-ups or in other types of private companies; how early in the start-up process the angel invests; whether the investors are active or passive, and the formality of the investment process. For example, one angel in Philadelphia explained,

“I believe that you will find about 3 or 4 different types of angel investors. You have informal people who are just check writers who probably won’t do any due diligence. They go in with friends and family, very early, prior to proof of concept. They have some kind of other relationship with the entrepreneur. Then you have this sophisticated angel that’s still somewhat informal. It might be a group of friends sitting around at the country club talking. Someone says that they have done a little bit of due diligence and people start making investments. Then you have the sophisticated angel networks. There’s a structure to the organization. It’s a little bit more sophisticated because you’ve got the benefit of the group, and their knowledge, and their network to make connections. Typically you have someone in the group who’s a champion, whether or not it’s a professional manager leading that kind of effort. The last group you have are super angels. Super angels can write big checks. They can invest a minimum of a million dollars in a deal. They bring a high level of sophistication.”

Below are some observations from these focus groups on the different dimensions of the typology.

Alone or in Groups

Some angels invest alone and others invest in groups. As one angel in Philadelphia explained, *“You got levels of sophistication from virtually none to people that are organized. You have people that are in groups or not in groups.”*

The use of the group mode of investing depends, in large part, on the characteristics of the investors. However, there appears to be a trend towards more group investing.

Net Worth of the Angel

Angels are typically wealthy because people must have liquid capital available to make investments in private companies. However, the angels differ on how much money they have and how large their angel investments are. Some angels have limited net worth and make a few relatively small investments. Other angels, often called “super angels”, have very high net worth and make many relatively large investments. The super angel group is perceived as one of the more rapidly growing groups of business angels.

Passive versus Active Angels

Some angels are passive investors and merely provide money to a new venture, rather than any kind of active assistance. In some cases, these angels merely provide money to an angel investment group, and others make decisions on how to invest their money. Other angels are very active investors who invest their time as well as money in their portfolio companies. Examples of the way that active angels get involved with their portfolio companies include offering strategic advice to the companies, putting the companies in contact with customers and suppliers and sitting on the board of directors. In some extreme cases, angels have been known to take operating roles in the companies in which they invest. One angel in Philadelphia described this range, saying,

“There’s a wide variety. There are angels who invest very passively. They write a check and they don’t hear from the company again until there’s an exit or it goes bankrupt. Then there are those that get incredibly involved and they get on the board. They make introductions to customers, potential buyers, potential partners, fundraisers, and VC’s. Some even come in to be the CEO. In our group, we have some investors who are very passive. They hardly attend meetings. We have to track them down to get votes. We have others that attend every meeting. We have still others that are really active and get on boards. A subset of them might be even looking for a new company to run.”

Knowledgeable About Start-ups Versus Naïve About Start-ups

Some angels are very knowledgeable about start-up companies and the start-up process. Other angels are naïve about these things. Often the more knowledgeable angels are people who have started and grown their own companies, whereas the less knowledgeable angels are people who made money in professional services who want to invest their money in the angel investment asset class.¹ One angel from Denver described the more naïve group of angels, saying,

¹ Naïve business angels are often accredited investors, but they are not “professional” angel investors as is the case for many knowledgeable business angels.

“There’s a whole crop of angel investors that are doctors, dentists and real estate people that make a fair amount of money as professional service providers. They do not feel comfortable investing. But they have a fair money amount of money and they want to invest it so they join investment groups and things like that to invest it. But they don’t really have that much of entrepreneurial background.”

Stage of Development of the Investment

Angel investors also differ as to the stage of development at which they invest. Some angels are pre-seed stage investors, often going in at the time that friends and family invest, which is typically prior to the proof of concept. Other angels are seed stage or start-up stage investors, who invest their money after friends and family investment rounds, but before institutional investors like venture capitalists make their investments. Some angels are late stage investors, providing growth capital or bridge financing to companies that have achieved revenues. Still other angels invest in management buyouts or leveraged buyouts of established companies.

The modal type of angel investment is a seed or start-up stage investment in a new private company. However, many angels seek to make later stage investments to obtain a better risk-return ratio. As one angel in Denver explained,

“I think that there are enough deals that you don’t have to get into seed. Seed is something that you sort of get pushed into because everybody is taking the downstream deals. As long as there are plenty of deals that already have product, revenue, and IP established, you don’t have to pick runt of the litter.”

Moreover, some angel investors focus on management buyouts or leveraged buyouts because of their expertise. In particular, retired executives of old economy manufacturing companies are often searching for turnaround opportunities where they can exploit proven management techniques, experience and contacts to earn a financial return. As one angel in Philadelphia explained,

“Angel investing is not just investing in early stage companies. We see a lot of interest in buyouts and bridge financing, basically anything where there is an opportunity to get some sort of return.”

Formality versus Informality of the Process

Some angels have a formal, organized approach to investing, while others have an informal, “disorganized” approach. The formal organized approach is different for angels who invest as individuals and angels who invest in groups. Some individual angels – particularly “super angels” whose high net worth allows them to make large numbers of high magnitude investments – set up their own legal organizations to manage their angel investment activities. Some angels who invest in groups participate in networks that have structured organizations, a systematic method for obtaining deal flow, and professional management.

High-Risk or Moderate Risk Investors

Some angels make high risk investments, while others make low risk investments. The tendency to make high risk investments is associated with making investments in early stage companies where a variety of risks are present, other than that of the ability of management to successfully exploit the opportunity. Typically early stage companies face technical risk; the risk that the entrepreneur may be unable to produce the product or service that he or she proposes offering. They also face market risk; which is the risk that the entrepreneur may not find a customer for

his or her product or service. They may face competitive risk, which is the risk that other companies may enter and imitate what the entrepreneur is doing, thereby taking away the entrepreneur's profit. Finally, they may face financing risk; which is the risk that the entrepreneur will be unable to obtain additional rounds of financing necessary to develop the company according to its plan.

The angels that make lower risk investments typically finance leveraged buyouts or growth stage companies. These companies can be evaluated more easily because the technical, market, competitive and financing risks are lower. Also lower is the likelihood that an investment will be squashed by later rounds of investors, thus making returns too low to justify the risk of early stage investments.²

Accredited versus Non-Accredited

Some angels are accredited investors, while others are not. As long as an individual makes an investment in a private company as an individual, they would be considered an angel investor, even if the investor is not accredited. Many companies that raise relatively small amounts of money from individuals raise money from non-accredited investors.

However, formal angel networks typically restrict their membership to accredited investors for two reasons. First, sophisticated angel investors do not like to make investments with non-accredited investors because those investors tend to be unsophisticated. Second, state and federal regulations are much stricter toward raising funds from unaccredited investors. In particular, a company that is raising money from only accredited investors is exempt from many SEC regulations, but must comply with the regulations for non-accredited investors if the offering includes even one non-accredited investor. One angel in Denver described the bias of angel networks toward accredited investors, saying,

“Typically they’re accredited both because they shouldn’t be investing if they’re not, and because there are laws in many of the states that limit how many non-accredited investors that you can have. A company wants to be very careful about taking money from a non-accredited investor because that can run into trouble. So more and more of angels get to be more formal and a little bit more institutional at least in their thinking. You tend to get groups that are only accredited investor. Our group would never take someone that was not an accredited investor.”

Relationship Investor versus Arm's Length Investor

Some business angels conduct extensive due diligence about the companies in which they are considering investing because they plan to make arm's length investments in businesses owned by people that they do not know well.³ Other angel investors make investments without much

² This is often the case because entrepreneurs are reluctant to accept very low valuations on their companies, which would allow the early stage investors to obtain rates of return commensurate with the risks they are bearing even if additional investors provide later rounds of financing and squash the valuations of the early stage investors.

³ Some business angels believe that the process of investing in businesses owned by people that they do not know well distinguishes angel investing from friends and family investing. These angels invest in people with whom they need to establish a relationship, whereas friends and family make investments with people with whom they already have a relationship. Because the relationship between the investor and the entrepreneur already exists, these angels argue that friends and family are “believer capital”, which makes emotional investments based on their relationships to the founder and angel capital makes arms length investments in businesses run by people that they do not know. However, other business angels, including many sophisticated angels, invest primarily in people that they know well without much due diligence.

due diligence because they invest in companies founded by people that they already know. As one angel from Atlanta said,

“There’s also what we call friends and family investing. That’s not accredited investing, but it would be considered angel investing.”

Why Do People Become Angels?

The focus group discussions sought to understand why the participants became business angels. The participants offered a range of motivations (many angels offered multiple motivations), which included to obtain financial returns, to support the community, to create and grow companies, to find their next gig, to learn new things, to make use of their expertise, and for personal enjoyment.

Financial Returns

One common motivation to make angel investments is financial. Several focus group participants indicated that they made angel investments to make money. The angels believed that they could obtain financial returns on their angel investments that would exceed the returns that they could obtain from other forms of investment. In fact, some of the angel investors indicated that they would not make an angel investment if that investment was not likely to offer them a high return. One angel in Denver described this view in a short vignette about his experience. He said,

“I definitely am a numbers investor. We had a presentation from a medical device company and the woman was describing why she wanted us to invest. She said that she was going to stay in Colorado. I asked if that was despite whatever cost savings you can get by going anywhere else and she said, ‘absolutely’. Then I said, ‘I’m done.’ I don’t see how an entrepreneur can go in and, along with every other challenge you have, also say ‘I’m going to restrict my choices as far as location.’”

Support the Community

A second motivation to make angel investments is to support the community in which they live and work. Some part of this motivation is a desire to give something back to a community, which has supported them in some way. Several angels explained that angel investing gave them a psychological return from community building. Another part of this motivation is a desire to encourage economic development, something that angels called “writing economic development checks”⁴ By spurring economic development through investments in start-up companies, the angels believe that they can keep jobs, technology, and talented people in the community. In places which have declined from their economic peak, this motivation was often expressed as a desire to get the community “back on its feet again” or to make it the community a place where young people will choose to live after they finish their education. One angel in Atlanta summed up this motivation when he said,

“You’ll find some people who’ve been successful and maybe sold a company and have the capacity to make this type of investment. A lot of it is giving back to the community or the industry or the entrepreneurs. The psychic income is a good return for some of the people.”

⁴ Angel investments, particularly those of angel groups, are often subsidized by state and local government, which supports these investments as a way to promote economic development. The motivations of angel investors to support economic development may reflect their desire to please their funding sources.

Create and Grow Companies

A third motivation to make angel investments was to help other people create and grow their companies. Some angels explained that they make angel investments to create successful new companies, to grow something from nothing.⁵ This motivation is particularly true of angels who were successful entrepreneurs. Once these angels have exited their own companies, they look for ways to help other entrepreneurs create and grow their companies. One angel in Cleveland articulated this point of view, saying,

“It’s being part of something special. I like creating something that wasn’t there. I think anyone who invests in early stages likes being part of something that wasn’t there before.”

Sometimes this motivation involves helping entrepreneurs to transform technology into new products and services. Other times it involves helping entrepreneurs take an idea and transform it into an organization. Still other times, this motivation involves helping young entrepreneurs develop as business people.

In general these angels believed that they can help entrepreneurs to develop successful new companies by providing the benefit of their experience. Because these angels had succeeded and failed as entrepreneurs, they had strong beliefs about what actions help and hinders the growth of companies. By investing as an angel, these angels believed that they could increase the upside potential of a business opportunity.

Find the Next Gig

A fourth motivation to make angel investments is to allow the angels a way get involved with companies that they might want to run as a CEO. As one angel in Denver explained,

“There seem to be investors that invest as a way to find a job. Not only are they going to put their money into it, but their time and their commitment. I can think of 6 or 8 companies right now where an angel comes along and puts in a lot of money, brings in a lot of group money, even VC money and becomes the CEO.”

Learn New Things

A fifth motivation to make angel investments is to learn new things. Angels often are people that have highly intellectually stimulating jobs prior to angel investing. When they sell companies that they have founded or retire from senior management positions, these individuals want to get involved in intellectually engaging activities, like learning about new companies. Some angels find it intellectually engaging to be exposed to different business models and learn how people manage those different models. Other angels like to challenge ideas in an open forum and debate different views. Still other angels like to learn about new pieces of technology before that technology reached the market place. One angel in Denver explained his motivation to invest as a way to learn new things. He said,

“I invest for education. I’m not a finance guy. I don’t get any rush out of investing in the stock market. I buy exclusively index funds. I find it educational to learn about a company and their technology far ahead of anybody else. I like being able to say ‘Wow that is so cool. I want to participate in some fashion.’ I don’t invest in biotech because I

⁵ For a few angels, the motivation to help create and grow companies reflected a desire to allow others to share in the fun and challenge of building companies.

don't have any interest in learning about biotech. But you talk to me about any sort of software and I get all excited."

Make Use of Their Expertise

A sixth motivation to make angel investments is to make use of their expertise. Angel investors often have expertise in an industry, with a particular technology or in building companies. They like to invest as a way to make use of that expertise. Angel investments provide the opportunity for angels to use their skills to help a company, whether that assistance involved taking new technologies and commercializing them or selecting managers to run companies. As one angel in Cleveland described,

"It's interesting to think about what causes you to become very excited about opportunities. It comes from leveraging your skill set, whatever you do extremely well. What I love to do and am extremely skilled at is handling technologies. If you understand technologies and you understand business, then you get really excited about uniting them."

In some cases, investing is necessary for people to get entrepreneurs to pay for the expertise that they were providing to them. Because many new companies can not pay cash for assistance, the parties providing that assistance often take their payment in the form of equity. If a company also needs capital, the party providing the assistance often ends up making an angel investment.

In other cases, angel investing is necessary before entrepreneurs will listen to the advice of experts. At least one angel group was established because executives who wanted to share their knowledge and experience with entrepreneurs found that the entrepreneurs would not listen to them unless they also invested in the entrepreneurs' ventures. As an angel from the LORE group in Philadelphia explained,

"LORE evolved because some retired executives got together because they wanted to be able to share their experience and knowledge with new start-up entrepreneurs that was their objective. What they quickly found out is the entrepreneurs wouldn't listen to them unless there was skin in the game. That's how LORE evolved into an angel investing group. That's sort of the draw you put skin in the game and then the entrepreneur has to listen to you a little bit."

Personal Enjoyment

A final motivation to make angel investments is personal enjoyment. Many of the angels in the focus groups explained that they make these investments for fun. They described angel investing as a "hobby", which is more fun than reading a book or playing golf. Some angels indicated that angel investing is fun because they are better at building companies than other hobbies, and people like doing things that they are good at doing. Other angels explained that angel investing is more fun than other hobbies because it is more intellectual stimulating. Still other angels explained that angel investing is more fun because it is exciting. It involves the rush of winning a game that depends both on luck and on creativity and skill at doing something that others have not done before. One angel in Denver described the personal enjoyment motivation for angel investment by analogy. She said,

"I liken it to fly-fishing. For a venture capitalist, investing is a job. If they don't come home with fish then they loose their jobs, like a commercial fisherman. A fly fisherman goes out there and really, really, really wants to catch a fish, but enjoys the experience."

If they don't bring home a fish, it's not the end. They'll go out tomorrow and do the same thing. Their livelihood doesn't depend on it. It's a sport. It's very serious sport."

Mechanisms for Angel Investing

The focus groups revealed several different mechanisms for angel investing. This section describes these mechanisms.

Individual Model

This model involves individuals obtaining information about deals and making investments alone. With the individual model, the angel hears about deals through some unsystematic means. For example, the angel has a friend who is starting a company or their accountant does work for a start-up. Investment levels tend to be low, leading the start-up companies to either be very early stage or smaller scale businesses. The level of due diligence that they conduct tends to be very limited. Most of the investments that are made are done with entrepreneurs known to the angel. However, occasionally these angels are quite well known in the community and receive significant deal flow.

Super Angel Model

This mechanism involves individuals of very high net worth who establish organizations to manage investments made with their own capital. Under the super-angel model, the organization often hires professional staff to evaluate deals and monitor investments. Deal flow is often substantial because the angel is known to the community as a major investor. Deals are often referred by service providers, entrepreneurs previously backed by the super-angel, or trusted contacts of the super-angel. The magnitude of the investments made by the super-angels tends to be large, and their terms tend to be professional, typically mimicking venture capital terms.

Social Tie Model

Under the social tie model, a group of people who know each other socially get together in a quasi-social setting to consider deals. In some cases, these angels learn about potential deals from their friends, and pass the deal on to friends who also consider making the investment. Typically, these groups exchange information on deals to others that they know well, who they know to be interested in particular industries or technologies, or who they believe to have an appropriate risk tolerance for that type of deal. This process of deal exchange is typically reciprocal with people exchanging information on deals with others who are willing to exchange information with them. The quality of the deals that people in these groups obtain access to depends largely on the quality of the deals that they provide to others. The magnitude of these investments tends to be relatively small and their terms tend to be relatively informal and unsophisticated.

Informal Group Model

The informal group is a set of investors that gets together at a country club or other setting and discusses deals that each member of the group has heard about. The members of the group then decide as individuals whether or not to invest. The main difference from the social tie model is that the angels have a set group and regular meetings to discuss investments, which is not the case for the social tie model of angel investing. The deal flow for informal groups depends largely on what people in the group have heard about from their other activities; there are no formal submissions or presentations. Investment terms tend to be informal and unsophisticated.

One example of an informal group in Denver is the Margarita Club. It consists of three angel investors who get together and drink margaritas and evaluate deals.

Loosely Organized Group Model

Loosely organized groups are groups of investors in which the group exists independently of its members, but for which organization is very limited. The group itself might have a web page and deals might come to the group as opposed to the individual members. The deals are often presented to the group of investors collectively. However, the group itself has very little organization. It is unlikely to have professional management, and screening and due diligence are led by volunteers. Usually someone must champion each investment because each member invests as an individual. Examples of the loosely organized group model are the Colorado Springs Investor Group and the Loosely Organized Retired Executives (LORE) in Pennsylvania.

Pledge Model

Angel groups organized under the pledge model typically have a group that exists independently of its members. The group members screen investments through a screening committee and have formal presentations. Each member pledges to invest a certain amount in ventures that the group looks at over the course of a year. The individuals opt in or out when they evaluate ventures.

Formally Organized Group Model

Formally organized angel groups tend to have a paid manager and, sometimes, paid staff. The organization itself has a budget, a web site, and a physical location. The staff of the angel network often does due diligence and basic screening of deals, as well as manages logistics. Typically, the group has regularly scheduled meetings. In most formally organized angel groups, investment is made collectively from pooled funds and angels cannot opt into or out of particular deals. Many of these groups have a fee to join, which pays for marketing and program organization.

Fund Model

Under the fund model, the angel investors get together and create a fund to make angel investments. The members of the group are organized, and the fund has managers who screen deals and manage the investment and monitoring portfolio companies. The fund itself makes the investments in portfolio companies, and the investors in the fund cannot opt out of deals.

Trends in Angel Investing Mechanisms

The participants in the focus groups identified several trends in angel investing.

The first trend is toward hybrid investment models. Under hybrid models, angels are able to invest through more than one of the mechanisms listed above. For example, some angel groups now offer investment funds as well as allow angels to invest individually. The investment funds provide the benefit of attracting passive investors who do not have the time or expertise to select target companies or manage angel investments. The individualized investing option allows members of the group to minimize investment in deals that they do not like, and maximize investment in deals that they favor. One angel in Philadelphia described the trend toward hybrid models, saying,

“There’s hybrid also. There are those that have a fund and then individuals opt in. We started out as individuals opting in on deals because it was post burst of the dot com.

People were feeling burnt by funds, saying the majority ruled on this but I didn't like that company anyway. We're moving down the path to a fund. People say to me, 'I don't want to join your group. I just rather give you the money and you manage it. I don't have time.' So there are different segments. Some are more active and want be involved. Then there are those who are more passive investors and want to be in the angel space but on a passive basis. So we're thinking of having a fund also."

The second trend is toward more structured investing. Over time, there has been a shift toward more group-based investing (with the exception of the super-angels who establish their own organizations to manage their investments). Moreover, the angel groups are becoming more formally organized, with regular meetings, structured deal flow and screening, professional managers and support staff. Some angel groups are even seeking SEC broker-dealer licenses and establishing investment funds.

The third trend is toward co-investing among angel groups. The main reason for this trend toward co-investing is that co-investing permits diversification of investment in larger companies. Often, companies with attractive business plans that are seeking funding need more capital than a single angel group can provide. The angels can provide funding to these companies if they invest as part of a consortium of angel groups.

Why Do Angels Invest Through Groups?

One important difference between angels is that some of them invest through groups, whereas others invest individually. This section explores the reasons why angels invest in groups.

Need to Pool Capital

One reason that the focus group participants gave for why angels invest in groups is capital constraints. Angel investing takes a lot of liquid capital and most people do not have sufficient liquid capital to finance start-ups on their own. In addition, better deals often require larger amounts of capital, motivating the preference for investing as a group. All but the wealthiest angels need to invest as a group to obtain access to the highest quality deal flow. Furthermore, by pooling their capital, angels can create stronger negotiating position with entrepreneurs seeking money from them. As a result, they can strike better terms for their investments.⁶ One angel in Cleveland explained the need to pool capital, saying,

"Sometimes it's dictated by size. I might personally put a million bucks in an angel deal but if it was 10 million bucks I'd want it to be part of a group."

Diversification

Angels also invest in groups to enhance their diversification. By investing as a group, the angels can invest the same amount of money, but spread it across a greater number of start-ups. The focus group participants pointed out that investors cannot have confidence of having a winning investment unless they invest in 10 to 12 deals across a variety of technologies and industries. Thus, by investing as part of a group, angels can create a more diversified portfolio and have better risk management. Moreover, the focus group participants explain that they cannot obtain the benefits of diversification across industries and technologies unless they invest as part of a

⁶ Groups also offer the opportunity to amortize the cost of due diligence over a larger investment. Because there is a limit on the amount of money that angels will spend on due diligence as a proportion of their prospective investments, the pooling of funds means that the angels will conduct more in depth due diligence.

group because they do not know enough about different industries and technologies to make independent investments in very many areas.

Knowledge Pooling

Angels invest in groups to pool knowledge. Because the group is made up of people with different knowledge and skills, angels who invest as part of a group are able to learn from each other about issues that enhance their ability to make angel investments, as is the case with many new investment terms. Moreover, different knowledge and skills allow the angels to pool pieces expertise so that they can evaluate deals and monitor portfolio companies more effectively than if they have only their own skills and knowledge to work with. In particular, the different knowledge and skills of the angels permit them provide an understanding about different aspects of the businesses of their portfolio companies. Furthermore, the group structure allows people to finance companies in industries in which they are not experts because different knowledge and skills among group members provides the group with someone who has appropriate knowledge and skills to evaluate and monitor deals. These experts conduct due diligence and vouch for the technology to those without the expertise to do so. An angel from Philadelphia described this phenomenon, saying,

“In our group, we have fewer than ten Ph.D. types or biotech executives that have a graduate level education or work experience in a life science. However, there is a great degree of interest among the group in life sciences. Most of the group can’t comprehend the technology, but they are extremely grateful to have people to count on because we can now get at the deals that not everybody else understands. I think that goes for other industries.”

Deal Flow

Angels invest in groups to obtain access to better quality deals. In the case of informal groups, pooling of deals presented to each angel increases the total number of deals from which each angel selects. In the case of formal groups, the presence of the organization as a source for funding increases the total number of deals from which each angel selects. Moreover, the screening process of many formal groups allows angels to focus their attention only the highest quality deals. Furthermore, the members of these groups typically see deals in a form that allows for better comparison of the information provided by the entrepreneurs. One angel in Denver explained how group investing facilitates deal flow. He explained,

“Deal flow is big for investors choosing the network model. They recognize the value in the pre-screening of deals. In our group, we separate some of the wheat from the chaff in bringing companies in so that we only put semi-legitimate deals in front of them. If they’re junk, they don’t waste their time coming to the meeting. They also see great diversity. We also collect information on the companies, so it’s very efficient for an investor to come in and see six or even an dozen deals in one month, and get a sense for what’s out there and the types of deals that they might be interested in.

To Check Their Judgment

Angels invest in groups to check the accuracy of their own judgment about the potential of new companies. In a group investment setting, angels need to convince other angels to support the investment before it can be made. The process of convincing others to support an investment provides a validation of the investment opportunity. In fact, because the people championing an investment to a group of angels are putting their reputations on the line, they tend to conduct

better due diligence than they would to satisfy just themselves. One angel in Cleveland described how investing in a group helps him to verify his judgment. He explained,

“Investing together let’s you pitch an idea to someone to see if you can generate the same enthusiasm in another stranger. It’s a great validation. Alone I’m scared to death because you get caught up in the moment.”

Division of Labor

Angels invest in groups to divide labor. Because angels are typically employed in other activities while making angel investments, they often do not have time to do everything necessary to evaluate and monitor angel investments. The opportunity to work as part of a team saves the angels “wear and tear” because it allows them to divide up work. The benefits of the division of labor to the members of angel groups are enhanced in managed angel networks, where professional staff does much of the work on behalf of the angels. For instance, in many networks, the managers often conduct much of the due diligence on potential portfolio companies, contacting technical advisors and writing summaries of their evaluation for the angels. One angel network even has a local law firm and law school collaborating to provide due diligence to the angel investors at no cost. One angel investor in Philadelphia explained the benefits of group investing in terms of the effort demanded of angels. She said,

“We’re a managed angel network. My partner and I drive the due diligence. We have the benefit of calling upon our membership to participate in the due diligence. We get technical advisors. We go to CMU and University of Pittsburgh and say, ‘you’re an expert in material science, can you help us with due diligence?’ We utilize our friends to get resources that they’re willing to share with us like Gardeners and Forester and things like that. My partner and I write a due diligence summary. We distribute that to the membership.”

Options

Angels join investment groups because group membership gives them the option of making their investments through the group or alone. Because some investments might be better made by an individual angel and others by a group of angels, this flexibility is advantageous. It is also advantageous because it allows the angels to obtain the benefit of knowledge sharing in the deal evaluation phase and still make individual investments if the group passes on a company that the angels think is worthy of investment. One angel in Atlanta described the option value of being part of an angel group, saying,

“People do both. They’re going to make individual investments and they’re also going to be a part of a group. And just because you join a group doesn’t mean you’re not going to continue to do those individual investments. Especially if you see one that you really like that the group has passed on. We’ve got two members that wrote individual checks to companies in the past that the group passed on but they liked it so much that they went ahead and invested themselves personally.”

Social Reasons

The angels also expressed a variety of different social reasons why they invest through groups. Some angels invest in groups because they already know the other members of the group and engage in other activity together. As a result, the group investing is an outgrowth of social activities. Other angels invest in groups because they want to learn more about the other angels, which particularly helpful to those angels thinking about taking operating positions in the companies that they finance. Still other angels invest in groups because the group arrangement

allows angels to deflect requests for financing away from them personally, allowing them to maintain relationships with the entrepreneurs seeking financing even if they do not invest in their companies.

Why Some Angels Invest Alone

Some angels prefer to invest alone. These angels offered several reasons for this preference:

Personal Financial Capacity

Some angels, particularly super angels, invest alone because they have such a large personal financial capacity that they do not need to pool their capital with other people to make angel investments. As one angel in Atlanta explained,

“Sometimes you’ll find an individual who thinks that their resources are equal to or above the group. They just think they don’t need that that capacity.”

Cost of Overhead

Some angels invest alone because they want to minimize the cost of investing and do not want to pay for administrative overhead. Because formal angel groups often require administrative overhead to operate effectively, some angels prefer individual investing to avoid this cost. As one angel in Denver explained,

“One of the things that keep investors from coming to an organized group is the requests for contributions. A lot of investors feel that they don’t need to pay for admin or overhead or anything else. They should be able to do this on their own. So that is actually a negating factor to have people come into our organization.”

Desire to Remain Unknown

Some angels, particularly super-angels, invest alone because they do not want others to know about their investment capacity or preferences. Often these angels are afraid that if they made these things public, they would be overwhelmed by requests for funding. One angel in Atlanta explained,

A lot of the individuals like playing it low key. They don’t like to have that open dialogue and discussion. They don’t want people knowing how much money they really have to invest. They want to stay under the radar. It makes them more open if they’re not sitting in a room with 30 other people.”

Networks Are Not an Option

Some angels invest alone because they do not have the option to invest in a network. Those angels who began investing before angel networks came into vogue often persist with an individual investment model because of their familiarity with the individual investment model. Other angels invest alone because they are located in places where there are too few other angels for a network to be established. As one angel in Denver explained,

“One of the dissuading factors is geography. If you’re in the middle of Colorado and there are no other angels near you, by definition you’re going to be a lone wolf. To the extent that that angel groups are available physically and convenient to you and that will influence whether or not you participate.”

Desire to Get Heavily Involved with the Company

Some angels invest alone because they want to become heavily involved with their portfolio companies. These investors often invest in only two or three companies at a time and offer

operating advice and sit on the board of directors. They find it easier to structure a deal in which they can become heavily involved in the portfolio company if they invest alone rather than with others. One angel in Atlanta explained,

“Part of it has to do with how involved people want to get with the company. Take Paul O’Neil, the former treasury secretary. He considers himself to be an angel investor. He only does two to three companies at a time because he gets very involved in those companies. I’d get a lot more involved in the majority of my companies than the group would.”

How do Angels Find Their Investments?

The focus groups explored how angels obtain their deal flow. Several angels indicated unsolicited deals from a wide range of sources are easy to obtain once you have indicated that you are funding new businesses because entrepreneurs seek out funding sources. However, most angels indicated that they do not like unsolicited deals and obtain their deal flow through their social networks. Among the common sources of deal flow are attorneys, accountants, investment bankers, former colleagues, previously funded entrepreneurs, customers and suppliers of companies that they have funded, other angels, and venture capitalists.

The focus group participants indicated that obtaining deal flow is easier for organized angel networks because entrepreneurs can learn about the network from its web site and email their business plans to the organization. As a result, the process of obtaining deal flow is much more systematic.

The angels pointed out that obtaining a flow of high quality deals is more of a problem than just obtaining deal flow. To obtain high quality deals, some angels only accept referrals from people they know and trust, such as their attorneys and accountants. Other angels attend many networking events and speak to a wide variety of entrepreneurs, to generate a large pool of business plans so that they can screen for the few good ones. Many of the angels pointed out that investors obtain higher quality deal flow once they have built a reputation as effective investors. As one angel in Philadelphia explained,

“I think you have to differentiate between the numbers you see in your deal flow and the quality of your deal flow. The quality is very difficult to build. You see the better quality deals if you’ve established a reputation as a quality investor. You’ve established the reputation as a quality investor if you don’t panic when things go wrong. You need to stand by the company and do the responsible thing either for the company or for your co-investors depending upon the circumstances. Unfortunately, it takes and experience to develop that.”

What Value-Add do Angels Provide?

The focus group participants were asked what value-added other than money angels brought to new ventures. Their responses were concentrated in five areas: providing contacts, offering strategic advice, providing operational assistance, their process for evaluating ventures, and serving as a confidant to the entrepreneurs.

Providing Contacts

Many of the focus group participants considered the greatest value-added that angels provide to new ventures to be introductions of the entrepreneurs to key stakeholders of the new businesses. Important contacts include introductions to managers who can help the entrepreneurs build out

their management teams, to senior managers at prospective customers, to other investors who can provide additional capital, to service providers who can establish the right legal and accounting structure for the new business, and to potential acquirers of the start-up. One angel in Philadelphia described the value that angels add to start-up companies by providing contacts. He said,

“A number of the companies we see have the idea that they want to go out and build a massive professional sales force. One of the things we’ve done is to short circuit that by suggesting that the companies take some people with experience and who don’t have a real need for large income and accept their business development assistance. We go in for a finite period of time, six months or a year’s time. We even go in on a success fee basis. The value that’s brought is experience. We’ve been in the business. We have contacts with chief executives and we can provide those introductions.”

Offering Strategic Advice

Angels also provide value-added in the form of strategic advice. Many angels provide guidance on such topics as sales strategy, which helps the entrepreneurs to manage their new companies effectively.

Those angels who had previously started or funded other companies view their experience as the basis for this strategic advice. The angels believe that their experience allows them to identify and reject bad ideas quickly. In addition, angels bring their own skills and knowledge to portfolio companies. Because everyone has different skills – the angel might be a marketing expert and the entrepreneur might be a technologist – the angel can provide skills and knowledge that the entrepreneur does not have. Furthermore, because the angels are investors, they are willing to provide their advice without demanding high fees or salaries from the companies. As a result, the entrepreneurs can obtain the benefit of experience without paying for expensive staff or consultants. As one angel in Cleveland explained,

“You can kill bad ideas quickly. One of the virtues of being around a long time is experience in making decisions. That’s real contribution.”

Providing Operational Assistance

Some angels provide value-added in the form of direct operational assistance to the new companies that they fund. These angels, who are often looking for positions as CEOs of new companies, often become involved in directly helping to run portfolio companies. Because these angels often have experience building successful companies, their direct involvement enhances the performance of the portfolio company.

Their Process for Evaluating Ventures

Some angels explain that their venture evaluation processes provide value to start-up companies. Even if the entrepreneurs do not obtain money, these angels explain that the feedback that they provide helps entrepreneurs to improve their companies. Moreover, the screening process itself requires entrepreneurs to think about the value of their entrepreneurial efforts. By pushing entrepreneurs to provide clear statements of such things as how their products benefit customers and what their company’s competitive advantages are, the evaluation process helps entrepreneurs to become better at selling their companies to others. As one angel in Atlanta explained,

“The goal is to make sure that the entrepreneur comes away with something to help them build their company whether it’s cash or not.”

Serving as a Confidant to Entrepreneur

A final source of angel value-added that the focus group participants identified is their role as confidant to the entrepreneurs in the companies that they fund. This role is important because the entrepreneurs do not have many close confidants with whom they can share the trials and tribulations of managing a new company. One angel in Philadelphia described the value of this role, saying

“The key thing an angel investor can provide is someone to talk to. Starting companies and building companies through tough times is extraordinarily difficult. Entrepreneurs shouldn’t take those problems home because they’ll ruin their home life. They can’t really talk inside the company. They can’t share the fear that they’re not going to make payroll next week because that tends to disrupt the troops. So a key role for an angel investor is to be that confidant.”

Where Will the Angels Invest?

The focus group participants explained that angel investing is primarily a local business, with most angels indicating that the maximum distance from their office where a portfolio company could be located is no more than a four hour drive away. Angel investors tend to engage in more geographically-localized investing than venture capitalists because angel investors co-invest with less frequency than venture capitalists and because angel investors are less likely than venture capitalists to have satellite offices in other locations.

The angels offered several reasons why they tend to make local investments. One reason is that they tend to become involved with the companies that they fund. It is difficult to become involved with new companies unless you can travel to their place of business and talk to them frequently. Moreover, sometimes crisis events emerge in young companies and investors need to get to those companies to help solve problems. Being a short drive away allows the angel to travel to a portfolio company quickly. As one angel in Atlanta explained,

“The primary reason why angel investors are local is that we need to be more involved with the entrepreneur. It is very difficult for you to be involved and have any impact upon an entrepreneur on the West Coast unless you’re going to travel out there. It’s something you need to do if you come in early like angels do. Now if you come in later it doesn’t matter that you are not that close.”

A second reason is that angel investors need to monitor their investments. One way that angels monitor their investments is by serving on their boards of directors. Serving on these boards is facilitated by the ability to travel to, attend, and return from a board meeting in a day. Another way that angels monitor their investments is by visiting the entrepreneurs’ place of business and observe what they are doing (“seeing them sweat” as one angel put it). Visiting the entrepreneurs’ place of business is facilitated by investing locally.

A third reason is that angel investors like to identify entrepreneurs that they know and trust. This is facilitated by investing locally because of the angels’ knowledge of the local business community. One angel in Philadelphia explained this motivation for investing locally. He said,

“We are all here in the Philadelphia area. We have more contacts in the Philadelphia area. More of the people we trust are here in the Philadelphia area. So therefore we are more likely to come to some level of comfort or trust with investments that are closer.”

A fourth reason is that angel investors would like to build sustainable companies in the community in which they live and work. By building a major company in their community, the angels can help create jobs and enhance local economic development. One angel in Atlanta explained,

“It’s almost a source of pride a lot of times that if a company is successful they helped to build a long-term, sustainable, world class company in the area and they are very proud of it.”

Angel investors rarely make angel investments outside of the United States. The problem with cross-border angel investing is that it is too complex. If a portfolio company is in another country, the investor must deal with international tax issues. Doing these deals also requires additional due diligence, the hiring of foreign lawyers and accountants and the translation of documents, which increase the cost and difficulty of doing a deal. Moreover, outside the United States, the angel investor might not have the same legal recourse in the event of a dispute with an entrepreneur. In fact, in some countries, the angels might not have confidence in the legal system at all.⁷ Furthermore, the process of analyzing an investment would likely be very different and require the angel to develop a new procedure for screening deals and conducting due diligence. Developing a new procedure for screening and due diligence might be prohibitively expensive unless the investor planned to make many investments in companies in that country. That scenario would be relatively unlikely, given the higher expected return necessary to do an investment outside of the country. One angel in Philadelphia explained the reluctance of angels to make investments outside of the United States. He said,

“It’s just a much bigger growth curve to do one deal. If you bring a deal in Belgium, I don’t know where to start. I’ve got to learn everything. I’ve got to figure out who’s a competent legal representative in that country. How do the laws work there? Do we have a purchase agreement? Am I going to be looking at different stuff? Is it going to be in English? If we have the choice of looking at a deal that we know how to pursue versus one we don’t, generally we’ll look at the one we know. It’s a matter of expertise and what you’ve done over time.”

However, the focus group participants offered several exceptions to their rule of local investing.⁸ The first exception concerns co-investing. Angels invest outside of their local geographic areas if someone else that they know and trust from outside the local area is co-investing with them. For instance, one angel in Philadelphia explained,

“You have to trust something or someone to get into a deal. My brother lives in Texas and if he signs off on something, I’ll do a deal in Texas. The distance makes no difference to me in that regard. We are all here in the Philadelphia area. We have more contacts in the Philadelphia area. More of the people we trust are here in the Philadelphia area. So therefore we are more likely to come to some level of comfort or trust with investments that are closer.”

The second exception concerns super angels. These people are well known in certain industries and so are often asked by many people to invest distant geographical locations. Because the

⁷ The accounting system might also be suspect.

⁸ A few of the angels believe that the geographic limitations on investing are decreasing because of Internet technology. However, the majority of the angels still believe that angel investing is geographically limited, except for a few situations.

scale of their investments is larger, super-angels sometimes find it worthwhile to conduct the additional evaluation and make investments outside of the United States. An angel in Cleveland explained,

“The super angels who have a lot of capital and have done a lot of deals are the ones that say that they have done a deal or two internationally.”

The third exception concerns experience. A minority of angels invest over wide geographic distances because they have developed experience and contacts from having done so before.

Characteristics of a Good Deal

The focus group participants were asked to identify the characteristics of a good angel deal. Their responses can be divided into three categories: the characteristics of a business opportunity, the characteristics of the entrepreneurs pursuing the opportunity, and the characteristics of the financial deal presented to them.⁹

The Business Opportunity

The focus group participants identified several characteristics of business opportunities that would make it a good angel investment opportunity: the industry, the technology, the customer problem solved, the market, the strategy. Several angels indicated that certain industries are inappropriate for angel investing and so are avoided. Biotechnology, for example, is avoided because drug development takes a long time and very large sums of money.¹⁰

The focus group participants also indicated several characteristics of business opportunities that make them desirable to angel investors. One desirable characteristic is recurring revenues. These are desirable because incremental sales have an annuity-like quality once initial sales are made to customers. Another desirable characteristic is a sustainable competitive advantage. Angels favor businesses that have a mechanism to deter competition. In many cases that mechanism is an innovative technology that can be protected by a defendable patent.

A third desirable characteristic of an opportunity is scalability. Angels are looking for businesses that can grow from small businesses into businesses that generate revenues of greater than \$100 million in five years. For this to happen, growth in revenue cannot be linear with growth in capital needs. Rather, businesses have to grow faster than their needs for capital. For example, banks, restaurants and retail businesses are not attractive to angel investors because they rarely reach a level where they can grow quickly without attracting additional capital. In contrast, companies in industries that rely heavily on technology are more scalable and so are more desirable to angels. One angel in Philadelphia explained,

⁹ The angels indicated that the ventures seeking financing would have to meet minimum thresholds in each of the three categories because they had limited “slots” in their investment portfolios. However, the angels also indicated that all ventures would not have all characteristics making a venture a good deal.

¹⁰ Other angels believe that a good investment is in the eyes of the beholder. Therefore, the right question is not what investments are appropriate for angels, but, rather, what investments are appropriate for a particular angel. Unlike banks or venture capitalists which have a particular investment profile, angels make decisions based on their preferences. Therefore, matching is particularly important in the context of angels. In particular, angels have preferences for those industries that they understand. Because different angels understand different industries – real estate people understand real estate, information technology people understand information technology – so the industry preference of angels is specific to the expertise of particular investors. Information about an industry gives people confidence and mitigates their perceptions of risk.

“Generally speaking angel investors have looked predominantly at high technology companies because of the potential for drastic scalability. These are companies that grow very quickly and can grow from nothing to 50 million plus in the 5 to 7 year period you have. So areas like computer software, hardware, medical devices, semiconductors, tend to be the areas that get picked over the most. There are other opportunities such as manufacturing plants or retail operations or restaurants, but scalability tends to be where a lot of a lot of investors start.”

Several desirable characteristics of the opportunity to angel investors relate to the market in which the business will operate. Angel investors find business that will operate in a large market or at least a large enough market to provide a sufficient return on the capital invested in the business to be more desirable than businesses in other markets.¹¹ They also find more desirable businesses that offer a plan to solve a real customer problem, particularly if the customer’s problem is one that causes them great pain or difficulty.. Evidence that somebody wants the company’s product and is willing to pay for it makes a business more desirable to an angel. Business angels also find more desirable those businesses that have a plan to obtain a reasonable share of the market in a reasonable amount of time.

The focus group participants also identified several characteristics of businesses that make them undesirable to angel investors. Consumer products are unattractive to angels because they are marketing intensive and require access to shelf space. Businesses selling commodity products are unattractive to angel investors because they cannot differentiate themselves, yet lack the scale to compete on price. Businesses in declining markets with excess supply and decreasing demand are unattractive to angel investors because competition for customers is intense. Businesses in which the entrepreneurs insert themselves into the middle of the value chain, but provide little value-added, are also unattractive to angels.

Several of the focus group participants indicated that personal service businesses are unattractive to angel investors for several reasons. These businesses sell at a low multiple, requiring rapid growth to generate enough revenue to generate a good price for the company. They also lack economies of scale and require additional employees to be hired to generate growth. Personal service businesses rarely have intellectual property to protect them against imitation by others. Furthermore, the people delivering the services are central to the business model, giving them tremendous control over investors. Finally, if personal service companies fail, there are no assets to sell. One angel in Philadelphia summarized the problem with personal service companies, saying,

“I’ve always stayed away from personal service companies. These are companies where the vast majority of the revenues go to pay the folks who deliver the services. I never understood the physician management practice companies that got so popular a while ago. Those folks hold the guillotine over your head as an investor.”

The focus group participants also stressed that the attractiveness of a business opportunity lies in the business idea itself, not in the specific financial plan presented by the entrepreneur because the specific financial plan presented by the entrepreneur is always positive.

¹¹ However, some angels point out that with new technology-based businesses, the entrepreneur is too late if they can already do a market study.

Several angels also indicated that the quality of the business opportunity was more important than the quality of the entrepreneurs pursuing the opportunity, arguing that it was the right opportunity they could coach or change the management team to achieve success

The Entrepreneurs

The focus group participants identified several characteristics of the entrepreneurs seeking financing that make an investment desirable for angel investors. First, many angels explained entrepreneurs who have built successful new companies in the past are desirable because experienced entrepreneurs understand how to build a successful new companies. Experience also signals that an entrepreneur can get things done and is not just a person with an idea and enthusiasm. As an angel in Cleveland said,

“If it’s a good idea being spoken and being articulated by someone who has got some track record of accomplishing things, particularly in start-ups, then we are interested. The world is full of good ideas, so you need someone who can accomplish tasks.”

Second, the focus group participants indicated that, they are positively disposed toward ventures proposed by a strong management team with good skills, even if the entrepreneurs had not previously started successful companies. Because the angels are unlikely to replace the management team of a venture that they back, they look for one with a balance between the different functional areas of business and team members with expertise in each area. As one angel in Denver explained,

“If I had to choose between a really great team in a bad business and a really bad team in a good business, I’d probably invest in the team. They’ll usually figure out how to make it a good business. I’ve seen more people screw up incredible technology. And I’ve seen really good people somehow pull it off with bad technology.”

Third, the focus group participants also indicate that they favor lead entrepreneurs who are smart and who know how to grow companies, but who also know their own limits. The angels believe that entrepreneurs who understand their shortcomings and know what skills they need to find in others on their team or know how to hire talented others and then step aside to let the other people grow the companies, makes ventures more attractive to business angels. As an angel from Atlanta explained,

“They also understand their shortcomings. They understand what they’re weak in and can plug the holes around them. That helps make them a complete team.”

Fourth, the focus group participants indicated angels are more favorably disposed to ventures led by entrepreneurs who they know as colleagues and business associates. Angels can gather more information about the background and skills of entrepreneurs that they know as opposed to entrepreneurs that they do not know, giving them more confidence in the former group of entrepreneurs. In addition, angels would also be more likely to trust those entrepreneurs that they know, which would minimize the potential for opportunism by the entrepreneurs. However, the angels also explained that they would be negatively disposed to investing in ventures proposed by personal friends because such investments have a high failure rate. An angel in Atlanta described the preference for investing in entrepreneurs known to the angels. He said,

“Two of the most recent investments that ATA has made have been into companies where we knew or had access to get to know the lead management very well. We had known them as colleagues or business associates as opposed to as friends. We knew their

background and we could easily reference whether the investment in that management team was good.”

Fifth, the angels explained that they are favorably disposed to ventures led by entrepreneurs who work well with others. If the entrepreneurs are not experienced, the angels explained that they will need help from others. Therefore knowing if the entrepreneurs are the type of people willing to accept help from others is important in making investment decisions. Moreover, the angels believe that the entrepreneurs need to develop an effective working relationship with them. An important necessary condition to have such a relationship is the entrepreneur’s listening ability. Some angels consider this to be so important that they even screen deals on the basis of the entrepreneur’s listening ability. These angels give feedback to entrepreneurs during the selection process to see what the entrepreneurs do with that feedback. If the entrepreneurs ignore the feedback, then the angels know that the entrepreneurs are not coachable, and therefore do not pursue investing in their companies. As one angel from Denver explained,

“The management group needs to be able to listen. I get less success out of people that will not listen to any of their advisors. I think that the management piece is critical. But they have to be able to listen. They may not be the greatest manager in the world but they have to have that trait to listen to people that might be savvy coming in from the outside.”

Sixth, focus group participants explained that they are more favorably disposed to ventures led by entrepreneurs who communicate openly and honestly. Some angels even design their screening mechanisms to discern this characteristic.

Seventh, the focus group participants identified several personality characteristics of entrepreneurs that made them more likely to invest in potential portfolio companies. The angels indicated that charismatic entrepreneurs who can attract other people are more desirable than other entrepreneurs. So are passionate entrepreneurs, who are driven by their excitement for their products and services and who want to see customers using them.

Eighth, the focus group participants indicated that they favor entrepreneurs who have a vision for where their company is going to go. The angels explained that such a vision helps entrepreneurs to avoid thinking small, allows entrepreneurs to think beyond the day-to-day, and helps entrepreneurs to develop plans to grow their companies.

Ninth, the angels indicated that they favor entrepreneurs who are good at overcoming obstacles. This characteristic leads the entrepreneurs to persist when faced by obstacles, which inevitably occurs when people start new companies. It also helps entrepreneurs to figure out answers when they do not have them and to adjust their approaches to avoid impasses. Furthermore, this characteristic leads entrepreneurs to try again if they have failed. An angel in Atlanta described this type of entrepreneur, saying,

“I’m looking for the ability of the individual or the team to navigate their way through roadblocks or difficulties in their market. They’ve got have a capability that when they run into something that is very complicated very difficult in their industry, they can figure out how to move the company into the right path. This could be either the adjusting the application or adjusting the approach to the industry because they’ve figured out something that’s just an impasse. If it’s a dyed in the wool, clay feet kind of person, they need to be in a big company.”

The Deal

The focus group participants explained that the characteristics of the deal presented by the entrepreneurs also influences their evaluation of the desirability of an investment opportunity. To be desirable, the deal has to offer a clear path to achieving a good rate of return. Moreover, it has to be reasonably valued. The angels indicated that they viewed investment opportunities with lower pre-money valuation more favorably because return expectations are more difficult to meet if ventures have high pre-money valuations. If the valuation is too high and the venture obtains additional rounds of investment, the investors will also lose some of the value of their investments as the venture gets revalued.

Because of the importance of a proper valuation, some angels even screen deals on the basis of the entrepreneurs' expected pre-money valuation and only invest in those ventures with an acceptable expectation. However, other angels are willing to consider any deal and negotiate with entrepreneurs to achieve an acceptable pre-money valuation. One angel explained his view on valuation, saying,

"I think a key issue what is the pre-money value? The entrepreneurs often have totally inflated pre-money value expectations. I saw one business plan that 5 years revenues and then took that 5 years revenue times 2 ½ times revenue and that was his pre-money value today. I said we don't need to talk any further."

Post-Investment Involvement

The focus groups examined the post-investment involvement of angels with their portfolio companies. Patterns were observed about two issues: time spent with portfolio companies and board seats.

Time Spent with Portfolio Companies

The angels explained that they spent a varying amount of time with their portfolio companies after they invest in them. The amount of involvement varied across angels, with some angels spending more time than others. In particular, lead investors spend much more time with their portfolio companies than do other investors.

The amount of involvement also varied across portfolio companies, with angels spending many hours a week with some companies and virtually no time with others. This variance across portfolio companies in the level of angel involvement was affected by the stage of company development, with early stage companies requiring more involvement than later stage deals. It was also affected by the experience of the entrepreneur running the company, with seasoned entrepreneurs taking less angel time than unseasoned ones.

The amount of involvement also varied over time with particular portfolio companies. The angels explained that events tend to occur in the lives of young companies that create peaks and valleys in their involvement, causing that involvement to range from close to nothing to close to a full time job. The peaks in angel involvement were typically driven by milestones in the life of the company, such as rounds of fund raising, or product launches.

Board Seats

The angel investors explained that they would like to hold board seats in the companies in which they invest to increase their influence over the management of those companies. However, only

the largest angel investments tend to be sufficient to justify a board seat. Most investments are made without angel involvement on the board of directors of portfolio companies.

Financial Parameters of Angel Investments

The focus group participants described several financial parameters of their investments, including their time horizons and financial return expectations, typical magnitude of investment, and preferred exit strategy.

Time Horizons and Financial Return Expectations

Many angels do not consider expected financial returns when making investments. Rather, they look for companies that they believe will be successful, separating life style companies from other companies, or making other crude comparisons. One angel in Philadelphia described how he views expected return. He said,

“It’s an interesting question because when I look at the companies that I’ve invested in I didn’t set out with an expectational return. I set out with an expectation that people running this business are going to create a successful business and not a life style business. That’s really been my dividing point. When you get done with the presentation, you realize that this is going to be a lifestyle business, so it’s not going to go anywhere. So I’ve gone into these things without any particular expectations other than I think this is going to be a successful business. Therefore I would get the two, three, four, five times my investment. But I haven’t really focused on that that number.”

The angels offer several reasons why they do not consider financial returns when making investment decisions. First, successful companies tend to generate positive returns, but with the time horizon for exiting the investment and the conditions of any follow on investments unknown, calculating returns is difficult. Second, the characteristics of investment opportunities that allow accurate calculations of returns – a normal revenue stream and an understanding of costs – are not present with most angel investment opportunities. Third, the level of risk in angel investing is so high that return calculations are not meaningful because the returns do not offer adequate compensation for risk bearing. Fourth, angels are not fiduciaries responsible for other people’s capital. Therefore, they do not need to calculate internal rate of returns like venture capitalists do.

Some angels explain that they do make decisions about investments on the basis of expectations for financial returns. Rather than express these expectations in terms of internal rates of return, however, they tend to express them in terms of “X times” the capital invested. The return expectations expressed by the angels ranged from 1X to 15X, with 10X being the typical aspirational target. The angels explained that they have a high return target because most investments will not succeed. If only one out of every ten investments that they make generates a 10X return and the others lose the capital invested in them, the high return expectations are necessary to provide a return above that earned from investing in the S&P 500.

Although some angels indicated that the time from investment to exit would vary across the industries in which the portfolio companies operate, most of the angels described that time horizon to be between 3 and 7 years.

Some of the angels explained that their return expectations are related to the time horizon to exit. One angel described his rule of thumb for financial returns to be

“2 to the N, where N is the number of years to exit. If the investment is going to exit next year, then I want a 2X return, but if it is going to be in five years then I want a 30X return.”

Other angels explained that angel investments involve different levels of risk and that the risk level for a particular venture influences their return expectation for investment in it. The effect of differing risk levels on return expectations are typically manifest in one of two ways. First, the angels expect a certain level of return on one deal and not another based on their respective risk levels. Second, they decide to invest at some part of the risk spectrum and then select deals offering a return appropriate for that risk level.

Exit Strategy

The focus group participants explained that they have two primary exit routes, initial public offering and acquisition. The angels indicated that, of the two, acquisition is the dominant exit strategy. The buyers of their portfolio companies could be private or public companies making the purchase for strategic or financial reasons.

Magnitude of the Investment

The focus group participants indicated that the typical angel investment round raised between 150 thousand and one million dollars, with 250 thousand being a modal number. Between 3 and 6 individual angels or one angel group is typically needed to put together the modal investment round.

The angels explained that the portfolio company now demands more than one round of angel investing. Therefore, angels must reserve capital for additional rounds of financing. The reserve ratios that the angels discussed ranged from two-to-one to four-to-one for each dollar of initial investment, reflecting a belief that the total number of angel rounds ranged from two to four. One angel in Philadelphia explained how his group views reserving capital. He said,

“During member orientation, we just say, ‘expect two more rounds’, so a total of three. That’s just a rule of thumb. It varies on deals. You can take a look at a cap table and never invest beyond the first investment and, if the company does well, you’re still sitting pretty nicely. But, as a rule of thumb, we suggest that for every dollar, reserve two dollars.”

Multiple angel investment rounds represent a change from the 1990s, when angels typically invested in only one round. Now, however, angels need to invest in multiple rounds because venture capitalists impose “fee-to-play” provisions. These provisions require investors who financed earlier rounds to put in additional money to maintain their preferences and avoid dilution. As a result, the size of the initial investment round made by angels has shrunk so that they can reserve money for later rounds.

A small minority of the focus group participants indicated that they still make only one round of investment.¹² These angels limit the number of rounds of investment to enhance their level of diversification.

¹² Some angels explained that they do not even think about how many rounds of investment they will make in their portfolio companies.

Terms of Angel Investment

The focus group participants discussed the terms of angel investments. In particular, the angels highlighted their choice of investment instruments, key terms, and ownership targets. This section reviews their comments on these topics.

Investment Instrument

Angels are not restricted in how they invest, nor do they have a fiduciary responsibility to others like venture capitalists. They are also not regulated like banks. Therefore, they can invest using a very wide range of financial instruments from pure debt to pure equity. Nevertheless, most angels do not use common stock because it does not provide a liquidation preference. The modal financial instrument used by angels is convertible preferred stock.

Convertible debt is sometimes used as an investment instrument. The convertible feature provides the opportunity for high financial returns to be achieved, while the debt feature provides liquidation preferences. The advantage of convertible debt is that it allows the angels to put off valuation until a later round of investment, thus facilitating getting ventures started. It also provides a preferential claim on the venture's assets in the event that the venture fails, yet offers the potential for higher returns. The disadvantage of convertible debt is that investors can have their return premium washed later round investors who do not accept the return premium that the investors were expecting for coming in early.

One of the angels in Atlanta explained why convertible preferred stock is more common than convertible debt. He said,

"I did some convertible debt until I had been taken to the cleaners by the VC a couple times. I had the return premium to be totally washed. You have these circumstances where you're trying to help the company by getting the round done quickly and you don't want to start talking about the valuation. So you do a convertible note to push the issue of valuation until a later time. You put your premium in for what your investors are getting. We're saying our premium is worth 20 percent for coming in this early. When the VC's come in a year later, they say they're not going to give you that 20 percent."

Key Terms

The key items on an angel term sheet concern valuation, liquidation preferences, anti-dilution provisions, board representation, information rights, redemption rights, control rights, piggyback rights, registration rights, and the investment instrument.¹³ In addition, angels often include negative covenants in their term sheets to limit what entrepreneurs can do with their money without permission. Angels include these covenants to protect their investments, particularly if they cannot obtain board seats. For example, many angels employ expenditure limits and approval rights for major transactions to keep the entrepreneurs from spending money without their permission. They also restrict the amount of money that entrepreneurs can be paid and require certain amounts of investment by entrepreneurs to avoid a substitution of investor capital for the entrepreneurs' capital.

The focus group participants also indicated that angels often include terms to ensure that they receive adequate information about what is happening with the ventures in which they invest.

¹³ A few angels reported that they still do handshake deals for small amounts of money – \$20-30,000 – because they invest in entrepreneurs who they know well.

The angels indicated that information rights are among the most important terms in an angel agreement. Therefore, angels often try to include clauses giving them a board seat or observation rights to help them keep abreast of what is going on with the ventures that they finance.

Another set of terms that the focus group participants consider to be valuable are terms that provide the angels with a level of control disproportionate to their level of ownership. For example, many angels seek to obtain control rights and supra majority terms.

The focus group participants explained that their term sheets look very similar to those used by venture capitalists, though perhaps with slightly less harsh terms.¹⁴ In fact, some angels indicated that they use standard boilerplate term sheets that they download from the National Venture Capital Association web site. One reason for the similarity to venture capital term sheets is that the angels need to prepare the ventures that they finance for later rounds of investment by venture capitalists. If the professional investors are working off of the same basic documents as the angels, it is easier and smoother to obtain a later round of investment from venture capitalists. In the absence of venture capital terms in the angel round, all of the investment documents have to be rewritten to conform to the terms used by venture capitalists when the venture capital round is made. Sometimes, venture capitalists will actually pass on a deal because it is too difficult to renegotiate its terms after money has already been invested in an earlier round. As one angel in Philadelphia explained,

“It makes a lot of sense for the angels, even if they’re individual, to have it look like something that a VC would be amenable to because many of these companies are going to need further capital. If you do anything that upsets the cap table or upsets the capital structure you’re creating problems for yourself and for the company. It just makes more sense to do it plain vanilla. If you make it easy it is a non-issue.”

Another reason for the similarity to venture capital terms sheets is that these term sheets reflect learning among investors about the best way to structure an deal. As angels become more sophisticated and experienced, they gravitate toward the optimal deal structure. Several of the focus group participants explained that when they first started investing in companies, they did not have their own term sheets. Through experience, they learned what terms worked and did not work effectively. That experience led them to develop standard term sheets as a basis for their negotiations with entrepreneurs, especially if the entrepreneurs are not experienced and do not come to the negotiations with their own standard term sheets. As one angel in Philadelphia explained,

“We’re becoming more knowledgeable, more sophisticated. When we first started we weren’t writing the terms. We didn’t have a term sheet. Now we are driving the terms and so it’s looking more like a venture capital term sheet.”

Portion of Ownership

The focus groups revealed very few patterns about the portion of ownership taken by angels. Some angels target owning 5 to 7 percent of companies, whereas others target 60 percent

¹⁴ Not all terms are included in all angel investment deals because the terms are related to the valuation – or price – of the investment. One angel in Philadelphia explained this trade-off, saying, *“I’ve been using a phrase in my negotiations pretty much since I started. I tell an entrepreneur you set the price, we’ll write the terms. Or you set the terms and we’ll set the price.”*

ownership. This wide range reflects two very different perspectives about ownership targets: the angels who believe in high levels of ownership and the angels who believe in low levels of ownership.

The angels who believe in a low level of ownership offered a variety of reasons for their preference. First, low levels of angel ownership increase the likelihood that the valuation of the venture in which they invest will be accurate. If the angels target a high level of ownership, then they will not be able to involve their peers in the investment. The presence of peer investors are necessary to ensure independent due diligence that confirms their valuation of the company. Second, low levels of targeted angel ownership increase the likelihood that decisions about the company will be made collectively, rather than by one party controlling judgment. Collective decision making facilitates communication with the entrepreneur, the benefits of which cannot be offset by greater ownership. Third, low levels of targeted angel ownership increase the alignment of the entrepreneur's incentives with that of the company by leaving a lot of the ownership in the entrepreneur's hands. The entrepreneur is motivated to make the company a success if they own a lot of the company because the entrepreneur will be hurt by the outcome if the company fails.¹⁵ Fourth, angels target low levels of ownership because they are unable or unwilling to take control of the companies in which they invest if the entrepreneurs do not lead them successfully.

The angels who believe in a high level of ownership offered different reasons for their preference. First, high levels of targeted angel ownership mean that angels will invest in only those companies in which they own enough shares to warrant a board seat. Many angels explained that having a board seat is necessary to obtain enough information about the progress of their ventures to monitor them properly. Second, high levels of targeted ownership mean that the angels will earn a reasonable rate of return on the investment despite the process of dilution that occurs if the venture receives several rounds of financing. In fact, several angels indicated that they want to own close to 50 percent of the company after an initial round of investment because their holdings are going to be diluted in subsequent rounds.

Co Investing

Most of the focus group participants indicated that angels tend to co-invest. In fact, some angel networks include a co-investment requirement in their by-laws. Even angel networks and individual angels that do not require co-investment tend to engage in it. Some of this co-investing occurs with other angels, and some of it occurs with venture capitalists. Angel co-investing provides entrepreneurs with more money per angel deal, which allows them to spend less time raising money and more time building their businesses, and provides the angels with the benefits of diversification.

Complements or Substitutes to Venture Capital

The focus group participants discussed whether angels are complements or substitutes to angel investors.¹⁶ Although a few angels indicated that investing in a company that never obtains

¹⁵ Sometimes the entrepreneurs do not have enough net worth to own a large portion of the company. Many of the angels explained that it is more important for the entrepreneur to have most of their net worth invested in the company than it is for the entrepreneurs to own most of the company because the proportion of the entrepreneur's net worth invested in the company is the key incentive affecting behavior.

¹⁶ There are a few cases where venture capitalists are neither complements nor substitutes because the tax benefits or cash flow characteristics of an investment make it appropriate for angels but not for venture capitalists.

venture capital investments is a good outcome (the investments tend to earn higher financial returns), most of the angels consider venture capitalists to be complementary investors. In a few cases, venture capitalists invest simultaneously with angels because they want to leverage the knowledge and expertise of the angel investors. In most cases, venture capitalists invest in later financing rounds in the same companies that have previously received angel investments. The venture capitalists invest in these companies because, as they progress, the companies often demand capital at a level that exceeds what angels can typically provide. Moreover, many angels see venture capitalists as a better choice for follow on investment than strategic investors because strategic investors typically will not make multiple rounds of investment, and often have a large number of non-financial expectations when they make investments in new companies. For example, if the strategic investor is a customer, as is often the case, the investor will demand product modifications to meet its needs. Because the strategic investor is the company's most important customer, it will often neglect other customers to meet the needs of the strategic investors. This diversion of attention hinders the development of the company, and makes venture capitalists a better choice for follow-on investment.

Because angels view venture capitalists as complements, not substitutes, they often bring the deals that they are considering to venture capitalists and encourage venture capitalists to co-invest in them. In addition, angel investors often obtain deal flow from venture capitalists, particularly when the venture capitalists find specific companies to be interesting, but believe them to be at too early a stage to warrant venture capital investment. The angels often will work with the venture capitalists to develop the company in such a way that the company will be attractive to the venture capitalists at a later round of investment.

The Process of Investing

The focus group members described the process of angel investing. Because that process is fundamentally different for angel investment groups and individual angels, the two models are described separately in the sections below.

The Group Process

The group investment process typically begins with a staff member of the group or a committee of group members looking at the executive summaries of business plans submitted by entrepreneurs. In some groups the pool of executive summaries will have been created by open submission (entrepreneurs who see the group's web site, know one of its members, or are directed to it by a third party, submit their plans), while in other groups, that pool will be limited to submissions sponsored by group members. In both cases, the majority of the deals will be rejected at this point. The remaining ventures will be contacted either by a screening committee member or a staff member, who conducts a basic screen. (The screening questions are designed to determine whether the founders of the company know what they are doing.) A decision is then made to invite some of the entrepreneurs to present their business plan to the members of the group.

Some angel groups move immediately to scheduling presentations to the overall membership of the group, while others move to presentations to a screening committee. In some cases, the entrepreneurs are asked to fill out a form summarizing their business plan to allow the group a standard format for evaluating all of the business plans. In other cases, the entrepreneurs are allowed to present their business plans in a freer format.

In the groups that have presentations to a screening committee, these presentations range in length from 5 to 45 minutes and include time for question and answer. In some groups, technical experts are brought into the screening committee presentation to give feedback to the investors.

In the groups that have presentations to a screening committee, ventures progress from the screening committee to the overall membership of the group if the screening committee votes in favor of that action. The threshold for a positive vote ranges from a simple majority to unanimous agreement.

The format for presentations to the overall membership of the angel group (which occurs at regularly scheduled monthly or quarterly meetings) typically takes the form of short presentations (10 to 45 minutes) followed by question and answer.

After the presentations, the members of the groups decide whether or not to conduct due diligence. In some cases, that decision is made individually, with interested investors given the option of pairing off with entrepreneurs to conduct due diligence. In other cases, the group votes on whether or not to conduct due diligence. The groups vary on how many angels must support a decision to move to due diligence, with some groups requiring a simple majority and others requiring unanimous agreement.¹⁷

Once the decision is made to conduct due diligence, the group either assigns responsibility for that due diligence to one of its members or a staff person, or ask for volunteers among their members. The due diligence is both technical and financial. The people conducting the due diligence look at the venture's product or service, the technology behind it, the characteristics of the venture team, and the details of the company's financial records.

After due diligence is conducted, a due diligence report is prepared and presented to the membership of the group. A meeting is then scheduled to discuss the results of the due diligence. The timing of these meetings often has a large effect on whether or not decision to invest is made. If the angels recently have had a successful exit and want to roll over their proceeds into another deal, then the probability of investment is higher than under other circumstances.

Some groups give their members the opportunity to invest as individuals, while others make a decision to invest as a group. For those groups that make decisions to invest as individuals, there is often an effort to get several angels to come together and support the venture because the companies generally need more money than a single investor can provide alone. The angels who are interested in investing in the company often email back and forth and have side conferences. They seek to persuade each other as well as to gather additional information. Some angels join the bandwagon to invest and others drop out as this process unfolds over time. The search for information and efforts to persuade other angels to join in generally continues until a deadline is imposed. Usually, that deadline is the date of the company's financing round.

The process of making an investment decision is different for those groups that make collective decisions. For those groups, the people who conduct due diligence generally need to persuade other group members to support the investment or the investment will not occur. Thus, the

¹⁷ In some cases, the group polls its members to make sure that there is enough interest to ensure that they could meet the level of investment needed by the entrepreneur if the due diligence evaluation was positive..

investment decision depends largely on the presence of a champion who works to garner support for the venture. Typically, the champion is one of the people who has conducted due diligence. The champion usually examines the venture very carefully, and continues to gather information even after deciding personally to make an investment. Because the champion needs to convince others to make an investment decision on the basis of their evaluation, they usually want to make sure that they have strong evidence to support their decisions.

For many of the group members, the decision to invest hinges on the evaluation of the champion who conducted the due diligence. Often many group members are unable to evaluate the venture themselves due to their lack of expertise in the industry or with the technology being exploited by the company. Thus, the decision is based on the group member's confidence in the judgment of the champion.¹⁸

For those groups that make a collective investment decision, the group then votes on investment, following a decision rule for what constitutes a positive vote that ranges from a simple majority to unanimous consent. If the decision is positive, the group moves to negotiating a term sheet.

If the decision is negative, the angels often continue the relationship that they have established with the entrepreneur and continue to coach him or her. Although some decisions are negative because the presentation process or due diligence uncovered a fatal flaw about the venture, many decisions are negative because the angels decide that the company is not yet ready for an investment. However, they believe that within six months or a year's time, the venture will have developed to a stage at which making the investment is likely. The angels want to maintain ties to the entrepreneur so that they can evaluate the venture again at that point in time.

Some groups disburse capital and monitor investments as individuals. Others disburse capital and monitor investments collectively. If the investment warrants a seat on the board, typically someone from the group is chosen to serve on the board and report back to the group membership.

For most groups, the angels begin the process positively predisposed to the ventures that they are evaluating. However, at each stage, – the initial screen, the presentation, and the due diligence – the angels look for problems with the venture (e.g., the wrong exit strategy, too high valuation, incomplete management team). Those ventures for which the fewest problems are identified are typically the ones selected for financing.

Because it is easier not to invest in a venture than it is to invest in a venture, a single person can often kill a deal with a negative analysis. This is particularly true if that person was the one responsible for conducting the due diligence.

The Individual Process

The angel investors that invest alone engage in a much less formal process. They generally obtain their deal flow through personal contacts, and usually do not have an organized submission process. They generally look at the business plans that come in and do an initial screen to see if they are appropriate. For the minority of plans that are appropriate, the angels

¹⁸ The investment process also depends on the successful outcome of horse trading because different members of the group often trade off support for different ventures.

read the plan more carefully and perhaps have someone else they know and trust also read it. If they are still positively disposed to the venture, they invite the entrepreneur to make a presentation. If the angel likes the presentation, he or she typically will conduct due diligence on the entrepreneur.¹⁹ If the outcome of the due diligence is positive, the angel makes a decision to invest. In many cases, that decision is followed by the presentation of a formal term sheet to the entrepreneur.

Key Factors to Have Successful Angel Investing in a Region

The focus groups examined what angels believe are the key factors necessary to have successful angel investing in a region.²⁰ The key factors are the presence of seasoned entrepreneurs and managers, first generation wealth, strong universities, a relevant industrial base, an entrepreneurial culture, scale, and successful angel investment experience.

Seasoned Entrepreneurs

One element that a region needs to have successful angel investing is a set of seasoned entrepreneurs. To have successful angel investing, a region needs people with ideas for new businesses who also possess an understanding of how to build those businesses. As one angel in Cleveland explained,

“There’s not a shortage of money, there’s a shortage of entrepreneurs. The problems go all the way back to the schools. Teachers belong to unions. They never teach you that you can be an entrepreneur with no money. They never cause you to start thinking about it. What we need are more people coming out of the schools that are willing to stay here and have the dream and want to do it.”

Seasoned Managers

Another element that a region needs to have successful angel investing is a set of seasoned managers. If the location is one in which talented people do not tend to leave, the companies in which the angels invest will have access to a talent pool from which they can find managers to help them grow. One angel in Atlanta explained why that city has a lot of angel investing. He said,

“A lot of people that are very talented come to Atlanta and don’t want to leave. That puts a pool of expertise in Atlanta that helps us spawn companies.”

First Generation Wealth

Most of the focus group participants did not think that the availability of capital per se was a key element to have successful angel investing in a region.²¹ The angels explained that there is always plenty of money for good ideas because money is a commodity that travels to locations where there are talented entrepreneurs and good ideas. As one angel in Cleveland explained,

“It’s not about money. It’s about the right people and the right opportunities for our businesses. Get off of money. There is a lot of money for good stuff.”

¹⁹ Many individual angels try to get to know the entrepreneur better during the due diligence process. They will have dinner or drinks with the entrepreneur to try to gain a better understanding of how the entrepreneur thinks. A few angels even insist on advising the entrepreneur first before investing, sometimes for as long as a year.

²⁰ Although the emphasis in the discussions was focused on specific elements, some of the angels did point out that angel investing was successful only in places, like Silicon Valley, where all the elements of the system were in place.

²¹ However, as some angels pointed out, if you have inadequate capital in a region, then you have no way to help your pool of entrepreneurs to build companies.

However, the angels did indicate that the presence of certain types of capital made it easier for a region to have successful angel investing. The focus group participants indicated that successful angel investing requires first generation wealth. Old money does not engage in angel investing because the holders of that capital are unwilling to take risks. They want to preserve the capital because, unlike first generation wealth, the people with the capital do not know how to make money. Therefore, if they lose money investing in other people's companies, they cannot make more. Moreover, first generation wealth trusts its own judgment about investments in start-up companies because it made money on the basis of that judgment. However, second and third generation wealth does not trust its own judgment and often hires fiduciaries to manage its money. Fiduciaries are unwilling to recommend risky investment to people whose goal is the preservation of capital because their compensation depends on meeting the goals of their clients. One angel in Cleveland described the need for first generation wealth in the following way,

“You need those folks who have made money in their own lifetimes. They have hard wired into their psyches that if they lose 10 million dollars they can make more. If I’m the fourth generation of the shipping company, it’s going to affect my lifestyle if I lose 10 million dollars because I can’t make anymore. I don’t know how to do that.”

The focus group participants also indicated that angel investing is more successful in regions in which the distribution of capital is highly skewed. The amount of money that people are willing to invest in risky asset classes increases with their net worth. Therefore, places with more wealthy people have a greater proportion of their population willing to make angel investments.

Strong Universities

A fourth element that a region needs to have successful angel investing is a strong university base. Universities are a source of new technologies allow for the creation of new companies. They also provide a source of smart people who can become employees of those new companies once they graduate. Furthermore, universities provide a place to educate people to become entrepreneurs.

Relevant Industrial Base

To have successful angel investing, a region needs to have an industrial base that is favorable to new companies. Angels invest in industries with which they are familiar because they would like to add value beyond their money and because they have a comfort in engaging in activities that they understand. If a region's wealth was generated in industries where entrepreneurs are not currently starting, it is much harder to create effective angel investing. An angel in Cleveland described the problems that occur when the wealth was generated in one industry and the companies seeking financing are in another industry. He said,

“A huge issue for this town is this split between biotechnology and industrial capital. I’ve been in meetings where biotechnology entrepreneurs make pitches to angels who made their money in industrial capital. The knowledge gap is overwhelming. How do they critically assess what the professor of genetics with this super cool software is saying, and how do they know the impact this will have on an industry that they don’t understand. It’s real hard to say I want to throw some discretionary capital at this person just because you have it.”

In addition, the entrepreneurs who found the companies in which angels will invest come out of a region's current industrial base. Therefore, to successful angel investing, a region needs to a set

of large companies in the same industries as the entrepreneurs. Where this industrial base is not present, angel investment activity works poorly. One angel in Cleveland outlined this system. He said,

“In Cleveland, you can start up as a retailer or be a manufacturer or distributor because the angel community has experience in that and they can validate things like that. In San Francisco, they have people in town that made their money in technology. So start-ups can raise money for that. Every region has a place where people made their money. Wherever they made their money, that’s the next generation.”

Furthermore, start-up companies need customers. The founders of young companies are not successful if they have to travel to other regions to find customers for their new businesses. They need, instead, to find local customers who can help them to develop their new products. Thus, start-up companies emerge in places where there is a critical mass of local customers. As one angel in Atlanta explained,

“These young companies are not getting on airplanes and traveling all over the place in the very early stage. They’re trying to hook in a couple key customers to help them commercialize and you don’t want to be getting on a plane to New York to do that. The next phase of customers could be anywhere, but in the early stage you’re going to be looking at the local industries where you have critical mass. In Atlanta that’s distribution, software development, security systems, telecommunications, logistics.

Entrepreneurial Culture

To have successful angel investing, a region needs to have a culture that supports entrepreneurship. That culture leads policy makers to focus their attentions on the development of new companies rather than on trying to attract large companies from other countries or states. It also leads people to think that becoming an entrepreneur is socially desirable, thus increasing the number of people willing to undertake that profession, and increasing the pool of potential angel investment opportunities. A culture that supports entrepreneurship attracts young and ambitious people who want to start companies to the area. That attraction of talent generates a pool of talented entrepreneurs who start companies in which angels can invest. One angel in Philadelphia described the role of culture. She said,

“A region needs to have a culture that supports entrepreneurialism. And if you look at what San Diego was back in the 80’s, it was pretty much like I see Pittsburgh right now. The economic development people focused on trying to attract large companies from another country or from another state to locate there and attract a lot of jobs. In Pittsburgh, the economic development efforts – the money, the resources -- goes toward that versus our universities and entrepreneurial support organizations that could be focused on supporting and creating a healthy culture that supports entrepreneurialism. It’s a huge disconnect in Pittsburgh. We’re number seven in the country for receiving NIH dollars because of UPMC and University of Pittsburgh but there’s hardly anything spun out in our world because you need the rest.”

Scale

To have successful angel investing, a region needs to have sufficient scale for the activity. Successful angel investing depends in large part in effective matching of angels to entrepreneurs. If a region does not have a large number of angels and entrepreneurs, it will not have effective matching between them. As a result, the performance of angel investing will suffer. Places with

relatively few entrepreneurs and angels need to cluster to reach minimum efficient scale to have successful angel investing.

Successful Experience

To have successful angel investing a region needs to have some initial successes on which future angel investing builds. Each angel investment provides the benefits of learning to the people who those investments. However, the willingness of people to make additional investments depends on their performance with previous investments. If people are successful at those investments, they are more likely to make additional investments. Thus places which have had successful angel investing are more likely to have more experienced investors. In addition, successful investing provides a pool of capital from which future angel investments can be made. Furthermore, successful angel investing changes the culture of a region and makes it more socially acceptable for people to engage in the activity, which increases the likelihood that people will do it. One angel in Philadelphia explained the value of successful experience. He said,

“Initially, it was hard for the entrepreneur to go out and find a CFO or the chief operating officer. Nobody would go with that guy. It was only when some of these folks started to make some money and do some neat things and all the other infrastructure grew up around it, that it really started to change. We now have awards, luncheons and evenings and the enterprise awards and whatever. And so somebody actually gets their picture in the paper these days for being the head of a small company that’s doing well.”

Government Policies That Would Help Angel Investing

The focus groups discussed government policies that could be used to encourage angel investing.²² These policies include tax incentives for angel investors, tax incentives for start-up companies, matching grants for angel investors and support for universities.²³

Tax Incentives for Angel Investors.

The focus group members suggested several tax incentives to encourage angel investing. One suggestion was to provide tax credits to investors who put money into angel investment funds. Another suggestion was a tax deduction for investments made in start-up companies that would compensate for some of the risk of making those investments. A third suggestion was an immediate deduction for all capital losses incurred from investments in start-up companies rather than amortizing them over time. A fourth suggestion was a lower capital gains tax rate so that angels could keep a greater portion of their profits from investing in start-ups. A fifth suggestion was tax free rollovers from investments in start-up companies. A sixth suggestion was preferential treatment for experienced investors. (Just as people with good credit scores would

²² Some angels do not think that government policies should be used to encourage angel investing. Several angels indicated that angel investing is about taking risk and you cannot legislate risk taking. Other angels indicated that the government should not be in the business of encouraging entrepreneurial activity as a way to stimulate employment. Still other angels indicated that government involvement would necessitate defining a “good investor” which is necessary to determine who should receive government support. Yet another group of angels indicated that government policies to encourage angel investing are not be a good idea because they would involve too much administrative paperwork.

²³ One focus group member suggested reducing the strength of non-compete agreements. In states in which non-compete agreements are weakly enforceable, more start-up companies are formed because people are better able to leave their employment to start new companies or to join entrepreneurs who have started new companies. This labor market fluidity creates a culture of entrepreneurship, which facilitates angel investing in a region.

pay less to borrow money than people with good credit scores, people with successful angel investing experience would pay a lower tax rate on their investments.) A final suggestion was to lower the state estate tax rate to keep wealthy people (who make angel investments) in state.

Tax Incentives for Start-up Companies

The focus group members suggested two tax policies toward start-up companies. One suggestion was a tax credit for purchases made from early stage technology companies. This credit would provide an incentive for companies to do business with young technology companies that are commercializing new technology. Because the credit would provide funds outside of companies' departmental budgets, it would encourage them not to focus attention exclusively on vendors with whom they have been working for years. Another suggestion was a reduction in wage taxes in locations with high wage taxes to encourage the creation of start-up companies in those locations. One angel in Atlanta provided an example of this type of tax incentive. He said,

"It would help if there were a government credit for companies that spend dollars with early stage technology companies that only can be applied if it truly is an early stage company. You don't want IBM coming in and saying well we're working on special new technology for your company and therefore they get this government credit. I think it needs to be really designated along the lines that it truly is an early stage company. What that does is give the company a better incentive outside the line item budget. When money gets handed down through an organization you have a department head that's responsible for making certain functions work inside a company. They're going to have to solve their business issues one way or another. If they have vendors that they've been using for years and they're large, the company can say here fix this problem for me and I'll remember you on the next big project that we have coming up. What they end up doing is kind of moving the dollars back and forth to help get the job done. We need to incent companies for commercializing these technologies by truly directing the benefits that way. For example, GE Power Systems was able to get a research credit for revenues that they directed to a Georgia Tech company to handle a particular technology that was working on power measurements. That's a great example of how they benefited and so did the company.

Matching Grants for Angel Investors

The focus group members suggested several types of matching grants that would allow angels to leverage the amount of money that they had to invest in start-up companies. One version of the matching grant approach was a state grant to start-up companies that was a dollar-for-dollar match of angel investments. For example, one angel in Denver offered the following,

"In this state, we used to have 15 to 25 thousand dollars that could go to some companies if someone else put that much in. So everyone was getting in essence a 2 to 1 return and that was seed money maybe before friends, families and fools. It allowed some capitalization of the company to do some of the basic the developmental research. Then you take it to the next step and apply it for an SBIR grant and leverage the angel investments going forward. There's a plethora of things both the state and federal government can provide to really help leverage this that I think has gotten lost in this state lately."

Another version of the matching grant approach was a government matching grant to angel investors for each dollar that they spent on due diligence. This match would provide angels with more money conduct due diligence, thereby increasing the quality of angel due diligence.

Support for Universities

The focus group members also suggested increasing support for universities as a way to enhance pool of talented entrepreneurs in the region, as well as to increase the number of technology spin-off companies in the locale.

What's Next?

The focus group discussions summarized above suggest several follow-on activities for the Federal Reserve regional banks. These suggestions are divided into three categories: research, education, and policy.

Research

The Federal Reserve regional banks could conduct several types of research about angel investing that would likely be valuable. First, the regional banks could analyze existing data on the private investing activity of representative samples of the working age population, as well as databases of accredited investors to measure the frequency of angel investing in different metropolitan statistical areas. Such data would both allow a comparison of the frequency and scale of angel investing across geographic locations, and, if conducted repeatedly over time, could provide information about trends in angel investing. This information would help the regional banks determine if angel investing is “sick” or “healthy” in their regions.

Second, the regional banks could analyze existing data on angel investing activity to identify factors that correlate with the level of angel investing activity in a metropolitan statistical area. While data limitations probably preclude identifying causal factors, researchers could identify the level of association between different factors and the level of angel investing in a region. Given the limited comparability of the focus groups, and the small number of them, such comparisons cannot be made with confidence from the focus group data. However, the differences in anecdotes reported in the focus groups suggest the value of such an analysis.

Third, the regional banks could collect and analyze primary data about angel investing to provide a greater understanding of the angel investing process. For instance, a Federal Reserve survey of angel investors would provide the data necessary to calculate the rates of returns achieved by angel investors and permit comparison of the relative performance of different types of angel investing arrangements. To date we lack the representative data on angel investors necessary to compare investment performance across the types of angel investors.

Fourth, the regional banks could incorporate information about angel investing into research on entrepreneurial activity in a region. The focus groups clearly indicate that angel investing is an important part of the process through which new companies are financed. However, most analysis of entrepreneurial activity in a region, whether scholarly or more policy-oriented, omit consideration of the role of angel investing, to the detriment of our collective understanding of entrepreneurship and its role in economic development.

Education

The Federal Reserve regional banks could provide several types of education about angel investing that would likely be valuable. First, the regional banks could educate potential investors, particularly accredited investors, about angel investing, both to increase the number of people who act as angel investors and to improve the performance of those individuals engaged in angel investing. The focus groups revealed that a large number of people who could be angel investors do not engage in angel investing, partly out of ignorance of what that activity entails. Providing a means for potential angels to understand what angel investing is and how to engage in that activity would increase the amount of angel capital available in a region. Moreover, the focus groups revealed that many angels do not engage in what might be considered “best practices” of angel investing. Education could be used to increase the number of angels employing “best practices” so as to enhance the performance of angel investors.

Second, the regional banks could educate entrepreneurs and potential entrepreneurs about angel investing. The focus groups revealed that angel investing is a very inefficient process because many entrepreneurs do not understand the value of angel investing or have unrealistic expectations about the terms of angel investments. As a result, many entrepreneurs who could benefit from angel investing do not seek it, or fail to obtain it. By providing entrepreneurs with a more accurate understanding of angel investing, the Federal Reserve regional banks could increase the number of successful angel-entrepreneur matches, thereby enhancing the development of young companies.

Third, the regional banks could educate angels about how to establish formal angel networks, and the terms employed by sophisticated angel investors. The focus groups revealed a trend toward the use of investment networks, and a tendency of those networks to employ more sophisticated investment vehicles, contracting terms, and evaluation procedures. By providing education to people interested in forming angel networks, the regional banks could facilitate the professionalization of this activity and bring the benefits of that change to angel investing.

Policy

In contrast to the wide range of potential contributions of the regional banks to research and education about angel investing, less can be said about the potential contributions to policy. One reason why few policy recommendations can be made on the basis of these focus groups is methodological. The focus groups involved small numbers of people who did not offer consistent policy recommendations. Moreover, these people do not represent a known population, making it difficult to draw inference from their responses.

However, a more important reason for the limited ability to draw policy implications is that few of the characteristics of a successful angel investing system suggested by the focus group participants are things that are under the control of the Federal Reserve regional banks. The regional banks have few tools at their disposal to affect the number of seasoned entrepreneurs and managers in a region, the proportion of wealth in the region that is first generation wealth, the strength of universities, the industrial base, the business culture, or the scale or success of prior angel investing.

In addition, the major policy suggestions made by the focus group participants concentrated on federal tax credits and deductions for some aspect of angel investing. Because federal tax policies would likely influence angel investing in the same way across all regions, it is difficult to see how any tax policy changes would do much to influence the relative level of angel

investing in one geographic location relative to another, even though they might influence aggregate levels of angel investing in the country.

Furthermore, none of the focus group participants made any suggestions for policies under the jurisdiction of the Federal Reserve. The angels made no policy suggestions to increase angel investment activity related to banking regulation, monetary policy, or other activities that would fall within the domain of the Federal Reserve. Thus, it is difficult to see the policy contribution of the Federal Reserve regional banks to angel investing.