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# Angel Investing: A Literature Review

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# Angel Investing: A Literature Review

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# Angel Investing: A Literature Review

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### ABSTRACT

Even though scholars have amassed a large body of research on angel investors, few systematic and comprehensive reviews are available. The purpose of this monograph is to review this literature and then to offer suggestions for future investigation. To that end, we compiled a set of journal articles on angel investing. We start with Wetzel's (1983) seminal article describing the characteristics of angel investors and end with the work published more recently. In total, we have 152 articles that we review. For parsimony, we chose to focus our review only refereed journal articles, thereby excluding conference proceedings, books and book chapters, industry reports, and dissertations. This implies that there is additional work that has been done on the topic

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Angel Investing: A Literature Review

of angel investing that is not covered by our monograph. For this, we offer our apologies. However, we did include studies using data from the Global Entrepreneurship Monitor (GEM) because these capture early stage financing globally. GEM defines angel investment a little differently than we do in the monograph, in that in GEM they include early stage family and friends money as angel investment. This is likely due to the international nature of the GEM data collection and the lack of a robust angel investment community internationally. In the final chapter, we have included a table that breaks out the GEM studies, to better represent the data.

# 1

# Introduction

#### 1.1 Introduction and Definitions

The early 1980's marked a transition in the U.S. from a declining industrial/manufacturing economy to an emerging entrepreneurial/innovation driven economy (Sohl, 1999). This shift has had profound implications. Where previously large firms were the economic drivers, now small firms account for 55% of all business sales and 66% of new jobs according to the US Small Business Administration and there is evidence that new firms are even more productive in terms of job creation (Haltiwanger et al., 2010; U.S. SBA, 2017). Concurrently, there was a quiet revolution in the way in which small and new businesses were financed. Angel investors, the less well-known sibling in early stage financing, increased in importance during the last two decades. The Center for Venture Research estimates that in 2014, angels invested \$24.1 billion, in 73,400 deals. The best estimates are that approximately 300,000 individuals made angel investments in the US over the past two years, investing an average of \$83,000.<sup>1</sup> By way of comparison, the National Venture Capital Association reported that in 2014, venture capitalists invested

<sup>&</sup>lt;sup>1</sup>http://www.angelcapitalassociation.org/faqs/

#### Introduction

\$48 billion in 4,356 deals.<sup>2</sup> At the time, there were approximately 1,562 active venture capital firms in the US who had a little more than 5,000 investment professionals, and the median deal size was \$11 million (Brush *et al.*, 2014; Venture Capital Insights-2013 Year-End, E&Y, 2014). Hence, angel investors overall invested about half of the amount of capital, yet in smaller proportions, to 20 times more ventures.

Angel investment is not limited to the United States. In 2015, the European Business Angel Network (EBAN) reported that angel investment grew 8.3% from 5.5 billion euros in 2012 to 6.1 billion euros in 2015. The best estimates are that there are approximately 303,650 angel investors across Europe, with the most activity in the United Kingdom (96 million Euros) followed by Spain (55 million Euros) and then Germany (44 million Euros) (www.eban.org/eban-2015-statistics-compendium-angel-investment-grows-to-e61-billion). In addition to Europe, there is evidence of robust start-up activity in the Middle East and Africa, however, in these regions most early stage investment comes from friends and family. Asia also reports start-up activity but little information is available on early stage financing (www.gern.co/gern/resources). However, despite the size of the angel investment phenomenon, research on venture capital has continually overshadowed research on angel investing.

Angel financing is defined as "[i]nformal venture capital-equity investments and non-collateral forms of lending made by private individuals... using their own money, directly in unquoted companies in which they have no family connection" (Mason and Harrison, 1999, p. 95). This definition specifically excludes friends and family money or "love" money. Mason and Harrison (2000) argue that investments made by close relatives and friends are based on considerations and criteria other than those used by that external investors, and therefore, family-related investments should be excluded.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup>http://www.nvca.org

<sup>&</sup>lt;sup>3</sup>It should be noted that while we adopt the definition of angel investor from Mason and Harrison (1999) in this review, we include studies that use Global Entrepreneurship Monitor (GEM) data. GEM defines "business angels" and "informal investors" as friends, family and foolhardy strangers.

#### 1.1. Introduction and Definitions

Business angels are high net worth individuals who invest a proportion of their assets in high-risk, high-return entrepreneurial ventures (Freear et al., 1994; Avdeitchikova et al., 2008). The capital they provide can be a one-time injection of seed money or ongoing support. There are two general types of angel investors, affiliated and nonaffiliated. An affiliated angel is someone with whom the entrepreneur is acquainted or has some type of relationship. Affiliated angels include business associates such as suppliers, customers, employees, or competitors. A nonaffiliated angel investor is an angel who has no connection with either the entrepreneur or the business. These include lawyers and accountants, consultants, managers and any other high net-worth individual that the entrepreneur does not personally know. Several authors have created typologies of angels – ranging from five types- corporate, entrepreneurial, enthusiastic, micromanagement and professional (Evanson, 1998) to tenthe godfather, peers, cousin Randy, Dr. Kildare, corporate achievers, Daddy Warbucks, high-tech angels, the stockholder, and very hungry angels (Gaston, 1989).

One characteristic of angel investing is the rising prominence of angel groups or business angel networks. Angel groups are individual angels who join together to evaluate and invest in entrepreneurial ventures. While they make their own investment decisions, angels typically pool their capital in groups to make larger investments. It is estimated there are approximately 400 angel groups in the US.<sup>4</sup> Angel groups meet regularly to evaluate business proposals where they hear presentations from selected entrepreneurs, work together to conduct due diligence, evaluate plans and the team, then decide whether to invest in businesses. The average angel group has approximately 42 members, invested about \$2.42 million in 9.8 deals in 2015, and reviews about 80 deals per month. The average angel round investment in a business is \$700,000 to \$800,000.<sup>5</sup> Further, angel groups vary widely in terms of size, investment focus and process. For instance, some groups are small and locally focused, while others, such as the Kieretsu Forum are national with

<sup>&</sup>lt;sup>4</sup>http://www.angelcapitalassociation.org/faqs/

 $<sup>^{5}</sup> http://angelresourceinstitute.org/research/report.php?report=_100&name=_2015\%20Annual\%20Halo\%20Report$ 

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several locations. Some angel groups focus on only women-led ventures (e.g., Golden Seeds), while others focus only on technology (e.g., Walnut Venture Associates). Angel groups may have a fund whereby everyone invests a certain amount and decides collaboratively to invest, while others may require a certain amount or number of investments per year as part of the membership requirements.

### 1.2 Comparing Early-stage Investment Modes: Angel Investors and Venture Capital

In the world of entrepreneurial finance, angel investing comes between money from friends and family and venture capital (Sohl, 1999; Mason and Harrison, 2000). Traditional wisdom posits that initially new ventures bootstrap and raise what money they can from their own personal sources of funding, and from investments made by their friends and family, popularly referred to as the three-F's: friends, family and fools (Kotha and George, 2012). When those sources of finance are exhausted, entrepreneurs turn to angel money for what is typically a larger investment. If, at a later stage even more capital is needed, entrepreneurs seek venture capital investors. Research shows that most firms that obtain venture capital financing, previously obtained angel money (Van Osnabrugge, 2000; Madill *et al.*, 2005).

However, there are a number of possible complementarities between angel investors and venture capitalists. Consider situations where angel investors or venture capitalists may share information around deals that may be of a size that is inappropriate for the other party. Alternatively, angels may co-invest in deals with venture capitalists, thereby gaining the expertise of a professional investor, or albeit in relatively rare cases, even invest as a limited partner in a venture fund (Mason and Harrison, 2000). Finally, investment by an angel investor may send a signal to the venture capital that the entrepreneur is not going to "take the money and run," thus mitigating possible moral hazard issues (Elitzur and Gavious, 2003) in future VC investments.

Angel investing also shares a number of similarities with venture capital. Like venture capital, angel investing is a financial intermediary (Van Osnabrugge, 2000). However, unlike other intermediaries such as

#### 1.2 Comparing Early-stage Investment Modes

banking or institutional investing, where the investors invest and then remain quiet and receive management fees, angel investing is active. This is partly due to the high-risk nature of the investment. Like venture capital, angel investors invest in young firms, which are well known for their upside potential but also for their lack of tangible assets. One way angels manage this risk is to become involved in the new venture once they have made an investment. Venture capitalists typically do this through a seat on the board of directors, where angel investors may actually get involved in the day-to-day operations of the business.

Unlike other financial investments that are purchased and sold on a public exchange, angel investments are illiquid. This means there are no indices to track angel investments, nor is there a secondary stock market on which investors can buy or sell shares (Fenn and Lian, 1998). In addition, angel investing suffers from the same information asymmetries as venture capital, but with one important difference. The venture capitalists are agents; professional investors whose job it is to invest limited partners' capital in typically later stage ventures. In other words, venture capitalists invest other people's money and receive management fees for these efforts. In contrast, the angel investor invests his or her own money in seed or early stage deals (Van Osnabrugge, 2000). Similar to venture capital, this opens up the angel investor to all of the upside benefit of a successful investment, however, unlike venture capitalists who, given the principal-agent relationship with their limited partners, are somewhat shielded from the downside risk of failure, angel investors are exposed to all of the downside risk.

The difference in risk profiles between angel investors and venture capitalists reflects this important structural difference between the two forms of early stage investment. Angels typically invest their own money, while venture capitalists invest the money that they raised from their limited partners who are often large institutions or pension funds. This means that angel investors are principals in the investment, while venture capitalists are agents, acting on behalf of their limited partners.

In contrast to venture capitalists whose sole focus is on the financial rewards that come from growing and then successfully exiting the business (Muzyka *et al.*, 1995), angel investors often have different motivations. These include coaching entrepreneurs, helping younger

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ventures to succeed, co-investing with other investors, and participating in the growth and development of the fledgling venture (Freear *et al.*, 1992). Angel investors do this by providing the entrepreneur access to individuals, mentoring the entrepreneur, advising the business, and by providing money.

In sum, angel investors provide early stage financing to entrepreneurial businesses. While they have a number of things in common with venture capital, both the timing of the investment and the level of risk are important differences. In addition, while venture capitalists invest to secure a financial return, angels often have other motivations, such as coaching and mentoring entrepreneurs. Additional information on research in venture capital can be found in the publication "Venture Capital Investors and Portfolio Firms" (Manigart and Wright, 2013). Table 1.1 provides an overview of the similarities and differences between angel investments and venture capital.

#### 1.3 The Focus of the Monograph

Even though scholars have amassed a large body of research on angel investors, few systematic and comprehensive reviews are available. The purpose of this monograph is to review this literature and then to offer suggestions for future investigation. To that end, we compiled a set of journal articles on angel investing. We start with Wetzel's (1983) seminal article describing the characteristics of angel investors and end with the work published more recently. In total, we have 152 articles that we review. For parsimony, we chose to focus our review on only referred journal articles, thereby excluding conference proceedings, books and book chapters, industry reports, and dissertations. This implies that there is additional work that has been done on the topic of angel investing that is not covered by our monograph. For this, we offer our apologies. However, we did include studies using data from the Global Entrepreneurship Monitor (GEM) because these capture early stage financing globally. GEM defines angel investment a little differently than we do in the monograph, in that in GEM they include early stage family and friends money as angel investment. This is likely due to the international nature of the GEM data collection and the lack

	Venture Capital	Angel Investing
Stage of Investment	Invest in early growth and established	Invest in seed and start-up companies
	companies that have typically received	that have previously received founder,
	founder, friends and family investment as	friends, and family investment.
	well as angle investment previously.	
Structure	Partnerships whereby fund providers be-	Individuals or group affiliations which
	come limited partners supplying the cap-	usually require membership fee. Often
	ital for investments.	angels are former entrepreneurs.
Governance	Involved contracts and incentives, con-	Equity ownership but not controlling
	trolling interest, board membership.	interest.
<b>Risk Reduction Strate-</b>	Large ownership stake through preferred,	Heavy reliance on face-to-face personal
gies	convertible stock. Downside risk reduced	contact, bears all of the downside risk.
	due to the agent-principal relationship.	
Source of Funds	Professional investors, invest larger sums	Non-professional investor, often former
	of money obtained from limited partners.	entrepreneur or advisor, invest smaller
	Limited personal financial responsibility.	sums of own money. Significant per-
		sonal financial responsibility.

 Table 1.1: Similarities/Differences Between Venture Capital and Angel Investing

1.3.

The Focus of the Monograph

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	Table

	Venture Capital	Angel Investing
Due Diligence Strate-	Extensive due diligence, typically con- Varying amounts of due diligence, typ-	Varying amounts of due diligence, typ-
gies	ducted over a longer period. Heavy re-	ically conducted over a shorter period.
	liance on quantifiable firm metrics (infor-	Relies on previous experience as an en-
	mation rich environment).	trepreneur (information poor environ-
		ment); often syndicated among angel
		groups.
Information Asymme-	Invest in later stage of venture develop- Invest in earlier stages of venture de-	Invest in earlier stages of venture de-
try (adverse selection)	ment.	velopment.
Deal Flow	High deal flow to improve probability of	Less reliance on high deal flow.
	success.	
Syndication	Co-investment relationships, reliance on	Less, but increasing use of syndication
	syndication to spread risk.	especially across angel groups as a risk
		reduction strategy.
Industry Specialization	Typically limit investments to industry	Less specialization but this is changing
	or industry sector where the VC has ex-	with emergence of angel groups which
	pertise.	may focus on a particular type of en-
		trepreneur (e.g., women), or a particu-
		lar sector (e.g., technology, consumer
		products, medical)

Introduction

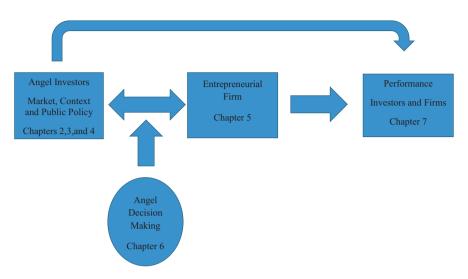


Figure 1.1: Organizing Framework

of a robust angel investment community internationally. In the final chapter, we have included a table that breaks out the GEM studies, to better represent the data.

Based on our analysis and consideration of previous literature reviews (Van Osnabrugge, 2000; Mason and Harrison, 2000; Wetzel, 1987), we created an organizing framework that captures the major aspects of the angel investment landscape.

Our framework includes the major perspectives in angel investingthe angel investors (including angel networks and angel groups), the entrepreneurs and their ventures, the relationship and decision-process between angels and entrepreneurs, and performance. Figure 1.1 illustrates our organizing framework.

It is interesting to note the increase in the number of articles over the years. In the 20-year period, between 1983 and 2003, there were only 59 articles that explored angel investing; however in the last ten years, between 2004 and 2015 that number increased to 93 articles. In terms of the number of researchers, that number has grown explosively as well, but, given the difficulty in obtaining samples of angel investors, the total amount of articles and researchers pales when compared with the plethora of articles on venture capital.

Introduction

### 1.4 Article Collection Methodology

International Business Review

We conducted an extensive search using multiple databases and key words to identify the articles included in this review. Our data collection was limited to articles published in refereed journals, which included the following:

Venture Capital: An International Journal of Entrepreneurial Finance Small Business Economics International Journal of Management Reviews Journal of Business Venturing Journal of Management Journal of Banking and Finance Financial Management European Economic Review Journal of Accounting and Economics Journal of Private Equity **Review of Financial Studies** Journal of Finance American Economic Review Entrepreneurship and Regional Development Entrepreneurship Theory and Practice Journal of Economic Perspectives

#### 1.5. Moving Forward

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The following key words were used as search terms:

Angel Informal Seed Angel Investor Private Early Investment Early Investor

We then searched the more general databases such as ProQuest, Google Scholar, and Web of Knowledge, using the key words listed above. We concluded that we had the relevant articles when (1) none of the above search words turned up any new results, (2) the results were irrelevant, (3) more than 1/2 of the articles that the search came up with were devoted to a topic other than angel investing, (4) we only found articles that compared angels to venture capitalists, (5) articles that only sporadically referred to the topic of angel investing, (6) and the database returned a large number of results and the gap between relevant results was greater than 50. To check the robustness of our results, we looked at the early angel investing authors and searched the databases for their names and for articles that cited their work. In total, we collected 152 articles from 18 sources. Figure 1.2 shows the number of articles we collected by year.

#### 1.5 Moving Forward

We divided our topic of angel investing into eight chapters. This review begins with a look at the angel investors themselves and into the market characteristics that lead to angel investing. In chapter 2, we focus the contributions made by angels as well as subgroups of angel investors such as women and micro-angels. We continue with angel characteristics in chapter 3, looking at angel networks and public policy implications.

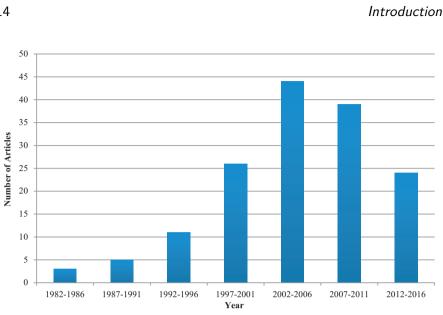


Figure 1.2: Number of Articles by Year

In chapter 4, we explore different typologies of angels, focusing on their reasons for investing and on some differences between angel investors and venture capitalists. In chapter 5, we shift our focus, now looking at the other side of the dyad, the entrepreneurial firms, and we review the literature that explores the firms that are seeking angel money. We move back to the angels in chapter 6, here drilling down into one topic of angel investing, the decision making process. In chapter 7, we review the articles that look at angel investor and firm performance. Chapter 8 reviews the methodologies used by the researchers in the angel investor literature, thereby illustrating how the data collection and analytic tools have both changed and remained the same over time, and then offers our conclusions about the literature as well as suggestions for future research. In this chapter we highlight what we believe to be the key and most critical issue around the angel investment literature, which is a lack of generalizable data and a dearth of strong methods. To aid the reader, in each chapter we provide a set of summary tables. These tables include every article reviewed in that chapter, the authors, journal and editions, date published, main research question, theoretical perspective if applicable and a summary of the findings.

#### 1.5. Moving Forward

In summary, while there has been a critical mass of work conducted on angel investing, it pales when compared to the volume of work on venture capital. This is due in part to the invisible nature of angel investing, which is compounded by a lack of strong generalizable data. The purpose of this literature review is to provide a thematic review of this literature, make connections between the research when possible and then to present a set of ideas for future research. Angel investing is a dynamic, exciting, and under-researched form of early stage equity financing. Our hope is that this review will inspire researchers to engage in work in the area of angel financing.

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