Understanding Business Angel Networks

Marco Da Rin
Tilburg University, ECGI, and IGIER
Marco.darin@uvt.nl

María Fabiana Penas
Tilburg University (*EBC and TILEC*)
m.penas@uvt.nl

Motivation and project outline

Over the last few decades the creation of new successful entrepreneurial ventures has become an increasingly important engine of economic growth and prosperity. Such ventures need to resort to external sources of finance to sustain their fast-paced growth trajectories, and venture capital has traditionally been the main source of capital for these companies, especially at their early stages of formation. However, since the collapse of the "dot.com bubble" this channel of external finance has turned more towards financing later stage ventures. This is largely due to pressure from institutional investors ("limited partners") that have been disappointed by the poor returns earned on many early stage venture capital funds (see Kauffman Foundation (2012)).

As a result a 21st century "entrepreneurial equity gap" has emerged, whereby formal sources of entrepreneurial finance (Venture Capital) are leaving areas where they have so far been dominant. An interesting response has then emerged in both the US and Europe, as informal investors (Business Angels) have taken up the opportunity to fund entrepreneurial ideas at early stages. While Business Angels have long been active investors, in the last decade or so they have provided increasing amounts of financing, and have become the dominant player in early stage venture financing.[1]

Despite the enormous amounts invested, and the increasingly crucial role they play, we know extremely little on the economics of these investors. Few theoretical papers provide guidance to empirical analysis (Chemmanur and Chen (2006), Schwienbacher (2007, 2009)). Most empirical studies are mainly descriptive (e.g., the work of Harrison and Mason in the UK), or policy-oriented (see Shane (2008)). Only a handful of academic studies have appeared so far, largely due to the difficulty to obtain reliable data. Notable exceptions are Kerr, Lerner and Schoar (2011) and Goldfarb et al. (2012). These papers focus on different aspects related to the performance of companies financed by business angels. They obtain data from two prominent angel networks and from one defunct Silicon Valley legal firm.

Our project aims at breaking new ground by looking more broadly at how the emergence of business angel networks affects the provision of early stage

[1] While precise estimates are not available, reports suggest angel investing to reach possibly even 20 USD billion in the US (Sohl (2011)) and 5 to 10 EUR billion in Europe (EBAN (2011)). These sources suggest over 200,000 may be active Business Angels in the US and about half in Europe.

finance. In particular, we want to study how different organizational structures of angels' networks affect how finance is provided.

In fact, angel networks are organized in a variety of ways. These range from less sophisticated, government-sponsored ones that mainly aim at putting in contact investors and entrepreneurs, to more sophisticated networks where there is specialization between 'active' Angels, who engage in due diligence and monitoring, and 'passive' Angels that provide only money. Some angel networks also choose to remain less visible and work by co-optation. Other Angels even choose to work independently without any publicity.

We think that understanding the consequences of such heterogeneity can shed light on which organizational structures are more effective in supporting companies that need early stage finance and in facilitating access to additional sources of later stage finance, including venture capital.

Specifically, we will study three research questions.
(i) First, we will ask how different network structures attract angels with different characteristics, like experience, education, and approach to investing.
(ii) We will then look at how networks differ in terms of due diligence, contracting, and monitoring of companies. We will exploit variation across networks but possibly also across individual angels (with different characteristics) within networks, in order to understand the relative importance of organizational structure and individual characteristics.
(iii) Finally, we will look at how network structures relate to different paths of follow-on financing and company outcomes.

We believe the results of this study would also have important policy implications, in terms of assessing the effectiveness of public involvement with angel networks.

Data description
We plan to do this by means of an online survey that we have designed and implemented on a pilot basis with four prominent UK angel networks with different organizational structures and degree of sophistication. The survey is user-friendly. It can be easily and quickly answered anonymously, and consists of three main parts: (i) the business angels' profile, (ii) the investment process and (iii) the contracting, monitoring, and outcome of portfolio companies. Up to now we have collected 62 usable answers from individual angels, including details of 99 of their portfolio companies.

Even at this very preliminary stage, we can document some new, interesting stylized facts about respondents, investment practices, follow-on financing patterns, and portfolio company performance:

1) Angels are middle aged, well educated, and fairly active investors. They are more often entrepreneurs and businessmen than technology people. They often venture outside the sector they have experience in.

2) Syndication is practiced by half of the angels in our sample. In most cases this is done on a deal-by-deal basis, but some angels also use investment clubs. Sharing risk and providing companies with adequate financing are the main motivations for syndication, while a relevant minority of angels prefers not to syndicate to preserve anonymity. Syndication within clubs is associated with the use of contracts specifically drawn for each deal, and with a more active involvement with companies. Syndication also has implications for deal outcomes: syndicated deals are riskier and possibly less successful, but we need more data to reach a firm conclusion.

3) Angels often co-invest with venture firms, among other co-investors. The presence of these professional investors has tangible effects, as it is associated with more protection from dilution, probably reflecting angels' fears, more rights to control the company, probably reflecting venture firms' desire for control, and also a less active involvement of angels.

4) Interestingly, networks' organizational structure is associated with different types of follow-on financing. If a company is financed by a sophisticated network, it is more likely that a venture capitalist will provide financing in the next stage.

Most of our respondents provided the names of most of the companies they financed, so we can obtain more detailed company-level information, including company accounts. We are already matching the survey data with company-level information from the Scottish Investment bank and the British Company House.

Current state of the project

We have already conducted our survey on a group of angel investors that belong to four prominent UK angel networks. So far we have 62 usable answers from individual angels, including details of 99 of their portfolio companies. We are currently involving several more networks in Scotland with the help from LINC Scotland, the association of Scottish networks. We already met with 6 Scottish angel groups who committed to answer our survey. We have also contacted the Scottish Investment Bank, and they have agreed to share with us the company level information they have. In this way we will be able to match company level information from our survey with follow-up company-level information from the Scottish Investment Bank.

We are also involving more networks in the UK and Germany. For the UK we are contacting the BBAA through one of their directors. For Germany, we are contacting the German Business Angel Association (Angels Netzwerk Deutschland e.V., BAND) through the European Investment Fund, which supported financially our initial data collection. We are going to meet with them soon to define the implementation of the survey.

We hope to be able to collect additional data and to provide a preliminiary analysis in time for the December conference. As we plan to start collecting data from the Scottish networks next week, we are hopeful. However, we acknowledge that we may not be able to do so in time, should any delay occur in the data collection.

References

EBAN (2011) "European Early Stage Impact Investing," EBAN White Paper.

Chemmanur, Thomas, and Zhaohui Chen (2006) "Venture capitalists versus angels: the dynamics of private firm financing contracts". Unpublished working paper.

Kauffman Foundation (2012) "We Have Met the Enemy … and He is US," Research Report, Kauffman Foundation.

Kerr, William, Josh Lerner, and Antoinette Schoar (2011) "The Consequences of Entrepreneurial Finance: Evidence from Angel Financings," *Review of Financial Studies*, forthcoming.

Goldfarb, Brent, Gerard Hoberg, David Kirsch, and Alex Triantis (2012) "Does Angel Participation Matter? An Analysis of Early Venture Financing," mimeo.

Schwienbacher, Armin (2007) "A theoretical analysis of optimal financing strategies for different types of capital-constrained entrepreneurs". Journal of Business Venturing 22, 753-781.

Schwienbacher, Armin (2009) "Financing commitments and investors incentives in entrepreneurial firms". Unpublished working paper.

Shane, Scott (2008) *Fool's Gold?: The Truth Behind Angel Investing in America*, New York, OUP.

Sohl, Jeffrey (2011) "The Angel Investor Market in 2010: A Market on the Rebound," Center for Venture Research. University of New Hampshire.