Screening Criteria for Business Angels Investments

Jaume Argerich

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Jaume Argerich (Universitat de Barcelona) – jaume.argerich@gmail.com

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Al meu pare Jaume (1934- 2009), in memoriam

Als meus fills Ariadna (2007) i Jaume (2011)

Screening Criteria for Business Angels Investments

"Més lluny, heu d'anar més lluny

dels arbres caiguts que ara us empresonen,

i quan els haureu guanyat

tingueu ben present no aturar-vos.

Més lluny, sempre aneu més lluny,

més lluny de l'avui que ara us encadena.

I quan sereu deslliurats

torneu a començar els nous passos."[1]

"The truth is rarely pure and never simple"[2]

Foreword

Late in the 1990s, when I took my degree in Economics my father insisted that I pursued a PhD. He was a cultivated man with several university degrees and wide-ranging interests, from landscape architecture to Middle Ages banking, as can be seen by the books he treasured and the numerous collections he left mostly unfinished at our family house.

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[1] Lluís Llach, Viatge a Ítaca (1975), adaptació de Konstandinos Kavafis.
[2] Oscar Wilde. The Importance of Being Earnest (1895).

At the time of the recommendation, I was 23 years old. Still at that age whatever your parents tell not only it is non-binding but it rather pushes one to do the opposite. Accordingly, I found myself a job in Paris, started working and I forgot for a while about studying.

Despite that, I maintained that initial idea and thought that I would take a PhD upon retirement, maybe on modern history.

Years later, in 2003, I first became acquainted with business angels while finishing my MBA at IESE Business School. Professor Juan Roure from the Entrepreneurship department made me a job offer upon graduation and I ended up working at the same school I had been studying just a few weeks before. The transit from one side of the classroom to the other is one of the most enriching and tough experiences I have ever had.

The School had launched at that time a program for business angels, which were an unknown topic in Barcelona at the time. One inevitable demand of the class graduates was to launch a business angel network to help them develop their activity. Therefore, demand pushed the School to launch what today is the leading business angel network in Spain. In the three years I spent there before resuming my professional career in the corporate world, I had the occasion to work extensively with business angels and entrepreneurs in the launch of the network and other initiatives.

When I started the PhD program at Universitat de Barcelona, I hesitated on whether to choose business angels as a topic or not. Back then, it looked like an interesting topic. However, the lack of development in the field

made it difficult to understand and compare findings. Other fields within entrepreneurship looked less promising, but more secure.

At the end, the passion I felt as a practitioner and lecturer when working with business angels won the battle and I started to focus my work on them, taking advantage of the experience built.

Under the free and rigorous direction of Professor Jaume Valls-Pasola, I undertook my research project on business angels. The state of affairs in the topic led us to a particular approach which forced us to revisit the foundation of current research in business angels, starting by the definition of a business angel.

Since I started the PhD program in 2007, seven years have passed which were intense on several fronts. My two children were born during this period and my father passed. Also, I changed jobs and moved forward in my career. The part-time nature of the program has allowed me to organize myself better at the expense of not being as fast as I would have liked to close my dissertation. As a former consultant, I have acquired through the PhD programme a new approach to projects and work, deeper and more thoughtful which require very different methodologies from the consultant and the practitioner' routines. The research project has confirmed that business angels are indeed an interesting and still under researched topic, or in the words of Wetzel, the author of seminal work on the topic 'still second-class research'.

The structure of the present document reflects the need to rethink the foundations of business angels' research in order to make additional

contributions. The main aim of the research project was to investigate business angels' investment criteria (chapter 5). However, the current status of business angels' research forced me to first establish clearly methodological elements, such as the definition of entrepreneurship research or business angels, and investigate the limitations in current literature (chapters 1, 2 and 3). That approach was validated by the increasing number of academic articles since 2008 questioning the foundations of business angels' research.

The current document is structured in 5 chapters plus conclusions, annexes and references. Chapter 1 establishes the status of entrepreneurship research and positions entrepreneurial finance within that field. Chapter 2 discussed the different sources of venture capital, among them business angels. Chapter 3 introduces the current issues in business angels' research and contributes a proposal and a framework to advance towards consensus. It also brings forwards the limitations of working with current studies and convenience samples. Chapter 4 summarizes the information on business angels from literature and structures it. Chapter 5 is the core section of the thesis as it contains the results of the investigation on business angels' investment criteria. Chapter 6 wraps up the conclusions. In the annexes there is a section with the follow on investigation on business angels' investment criteria, which advances a possibility for future research on the topic building on the findings of Chapter 5.

The result is a document that makes two primary contributions. First, it lays out the current issues in the definition of business angels and brings forward a framework for advancing towards consensus. Second, it

provides insight and quantitative evidence in the process by which business angels select ventures, which is a key element for measuring the efficiency of the market for business angels' investment in the interest of investors, entrepreneurs and policy makers.

The main content of chapter 3 was accepted for presentation at the 4th INBAM (International Network of Business and Management Journals) Conference to be held in June 2014, within the Management Decision journal track. The track title is 'Advances in Management Research'.

The main content of chapter 5 was presented at the 2nd INBAM Conference held in March 2012, within the Service Industries Journal track, and it received the award for the best paper in its track. It was published in the Service Industries Journal in September 2013. Reference: Argerich, J., Hormiga, E. and Valls-Pasola, J. (2013). Financial services support for entrepreneurial projects: Key issues in the business angels investment decision process. Services Industries Journal, 33 (9-10), pp. 806 – 819.

Table of contents

Chapter 1. Research on entrepreneurship

1.   What is entrepreneurship?

Entrepreneurship is an engine for economic growth and social welfare, and has gained the attention of decision makers and the general public. The study field has attracted numerous scholars in the last 30 years (Bygrave, 2006) and has expanded in terms of publications, articles, specific journals, awards, university chairs, and conferences. The study of entrepreneurship is relatively recent yet rapidly evolving. Entrepreneurship has developed in many sub-fields within several disciplines – primarily economics, sociology, psychology, strategy, marketing, and finance – thus aggregating different research traditions, perspectives, and methodologies.

There are many definitions of entrepreneurship. The most widely accepted definition of entrepreneurship research is the scholarly examination of how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited (Venkataraman, 1997). Carlsson et al. (2013) built on that and defined entrepreneurship more precisely as 'primarily the economic function that is carried out by individuals, entrepreneurs, acting independently or within organizations, to perceive and create new opportunities and to introduce their ideas into the market, under uncertainty, by making decisions about location, product design, resource use, institutions, and reward systems. The entrepreneurial activity and the entrepreneurial ventures are influenced by the

socioeconomic environment and result ultimately in economic growth and human welfare' (pp. 3).

Initially, the common approach for pioneers of entrepreneurship research was to focus on the characteristics and behavior of the entrepreneur. That approach led to define the entrepreneur as the individual who set up new firms, which proved to be a limited view. Currently, there is consensus around the fact that an individual centric view of entrepreneurship is mistaken and the object of research should not be the individual, but his or her activities - the opportunities. However, some authors (e.g., Acs and Audretsch, 2003) consider that entrepreneurship mainly relates with the exploitation of opportunities and others (Shane and Venkataraman, 2000) argue that it should extend its reach to the detection and exploitation of opportunities. The former leads to study mainly new firms, assuming that opportunities do already exist, have been detected and that the creation of a new firm is the way to exploit them. Advocates of this option argue that new firm formation is more easily measured and delimitated and fits more with the popular perception of entrepreneurship. The later includes the processes by which those new firms are created and alternative ways to exploit opportunities other than creating new firms (i.e. corporate entrepreneurship). Shane (2012) defends the broad option and denounces the coexistence of that, seen as a conceptual definition, and the firm formation as an operational definition. New firm formation would be a 'poor proxy' for entrepreneurship.

In any case, entrepreneurship encompasses the study of two phenomena: opportunities (either the process of its exploitation or including also the

processes of discovery and evaluation) and the individuals who discover, evaluate and exploit them (entrepreneurs).

Figure 1. The domain of entrepreneurship research[3]
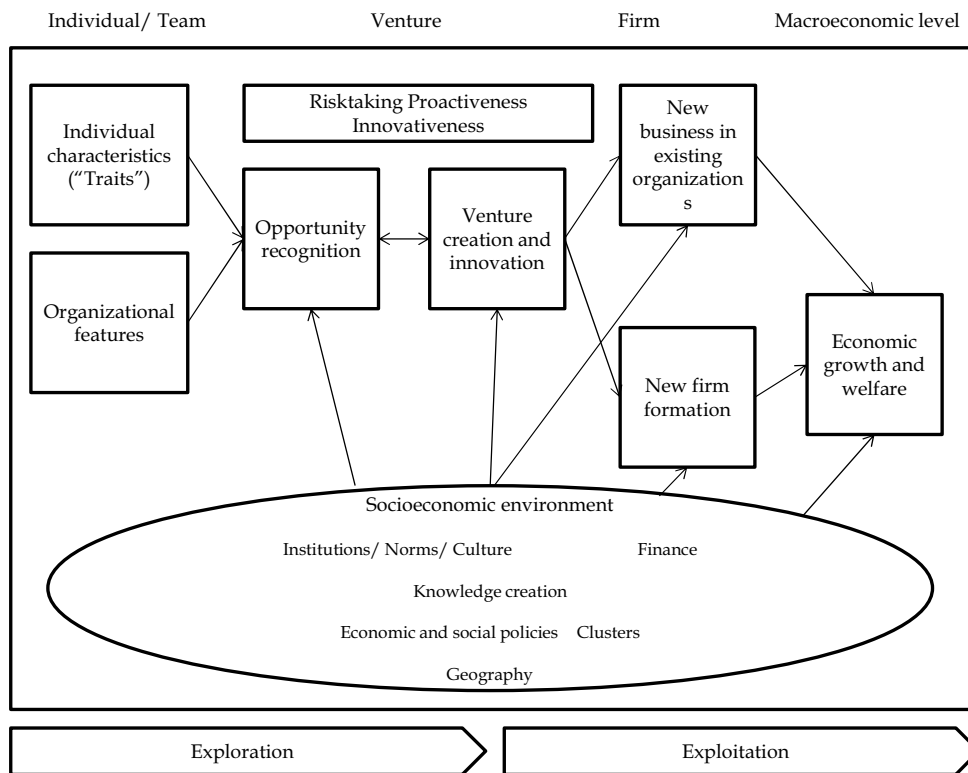
Figure 1 illustrates the main elements of the domain of entrepreneurship research following the broad sense. It allows seeing how the definition has evolved from the narrow sense concerning the entrepreneur and the team (upper left corner) to embody the processes by which the entrepreneur discovers and exploits opportunities, and ultimately contributes to

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[3] Adapted from Carlsson et al. (2013).

economic growth and welfare (right side). In between, there are several themes that relate to other fields of study. For example, the firm perspective is closely linked to strategic management while as the impact of socioeconomic environment can lead to research approaches from psychology, sociology or anthropology.

The shift of entrepreneurship research towards putting the focus on the opportunity as the object of research implies to see entrepreneurship as a set of processes or activities, which ultimately lead to economic growth and social welfare. It also implies taking a evolutionary approach or an unstable equilibrium following Schumpeter (1934) pioneering work. Under equilibrium models, the market functions perfectly. Therefore opportunities either would not exist or would be randomly distributed across the population. The discovery of opportunities would depend only on the attributes of the people. Many people would compete to capture the same opportunities which would ultimately disappear. Entrepreneurship scholars usually work under two premises (Venkataraman, 1997); that most markets are inefficient most of the time and therefore generating opportunities and that even markets might approach temporarily a state of equilibrium, that situation is quickly destroyed by the changes in technology, knowledge and the incentives to make a profit.

2. Entrepreneurship as a distinct field of research

There is an ongoing discussion among scholars about whether entrepreneurship is a distinctive domain. The argument gravitates around two central issues: the links of entrepreneurship with other domains and the lack of a general theory of entrepreneurship.

First, entrepreneurship research shares borders with many other fields. Typically, scholars have approached the study of entrepreneurship from other more established and researched domains. In doing so, they have 'imported' different theoretical frameworks and methodologies. As Shane and Venkataraman (2000) claimed, entrepreneurship 'has become a broad label under which a hodgepodge of research is housed'. It can also be seen as a subfield within different disciplines, each with a diverse perspective on the subject matter. Steyaert (2005) suggests entrepreneurship should be regarded as a 'border zone'.

Second, and partly as a result of the above, there is no distinctive theoretical framework of entrepreneurship that would explain and predict phenomena neither explained nor predicted by other fields. Scholars from strategic management in particular question whether entrepreneurship is a distinct domain from theirs. As a response, Shane (2012) summarized five differential dimensions between entrepreneurship and strategic management (see table 1). Therefore, even though there would be no unique theory of entrepreneurship, the domain would research issues not covered by strategic management from a different viewpoint.

Table 1. Differential dimensions of entrepreneurship[4]

Dimensions	Strategic Management	Entrepreneurship
Outcomes examined	Business performance	Business performance among others (societal wealth, individual happiness)
Level of analysis	Firm	Opportunity (can imply a firm or lower levels of analysis)
Measurement	Performance relative to other firms	Entrepreneur's choices relative his or her alternatives
Driver	Develop and sustain competitive advantage	Identify and develop opportunities
Subject of study	Strategic actions	Strategic and nonstrategic actions

Due to the relative short story of entrepreneurship research, it needs to build upon the foundation of other fields of research before it develops its own distinctive theory. That does not necessarily mean that entrepreneurship is not a distinct domain, as it explains phenomena not covered by other disciplines.

Blackburn and Kovalainen (2009) suggest that 'the desire to set the limits of the frontier of the field is currently misplaced' (pp. 128) and that entrepreneurship will eventually develop its own distinctive theoretical basis due to the permeable frontiers it has with other domains. The opaque limits of the domain require additional efforts from researchers, since the

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[4] Adapted from Shane (2012)

theoretical framework and methodologies are not clear, but ensure that entrepreneurship research is dynamic and challenging.

As entrepreneurship research evolves and more focus is placed on the outcomes, or the connection of the opportunity exploitation with economic and social development, the field will reinforce its own entity.

3.   History of entrepreneurship research

Entrepreneurship research has not followed a continuous development. It has rather evolved by alternating periods of interest from scholars and others of disengagement.   There are three main periods that can be identified: the initial references from pioneering economists of the 18th century, the conceptualization by Schumpeter and Knight in the early 20th century and the 'explosion' of research on entrepreneurship since 1980.

Entrepreneurship derives from the term 'entrepreneur', a Gallicism with roots that can be traced back to Middle Ages French, although the role it defines is much older.   The first use in economics is in the French *Dictionnaire Universel du Commerce* (1723). Very shortly afterwards, the first economic theories on the entrepreneur were formulated by Richard Cantillon (c.1680 – 1734). One of the leading pre-classical economists, Cantillon was an Irish-French economist and author of the posthumous *Essai sur la Nature du Commerce en Général* (1755). The book is considered the seminal work for political economy and influenced later mercantilists and physiocrats.   Cantillon divided society in four classes, one of them

entrepreneurs which were defined as non-fixed income earners who pay known costs of production but earn uncertain incomes. Entrepreneurs would be an equilibrium force by bringing demand and supply together. Cantillon, however did not provide a theory to explain the uncertainty under which entrepreneurs operated.

Cantillon had a strong influence on classical economists, notably on Adam Smith (Cantillon is one of the few economists that Smith cites), considered the founder of classical economics. Nevertheless mainstream economics did not analyze the entrepreneurial function, perhaps because Cantillon's work was largely forgotten until rediscovered in the late 19th century and therefore his influence was filtered through Smith, who did not use that part of Cantillon's theories. Only few of the early economists (such as Jean-Baptiste Say and John Stuart Mill) mentioned the entrepreneur in their works. In his 1803 *Traité d'économie politique* (Treatise in political economics), Say insisted on the notion of the entrepreneur as an agent for equilibrium by defining his activities as shifting economic resources out of an area of lower productivity and into an area of higher productivity and greater yield. Say thought that the entrepreneur fulfilled his role through planning, as opposed to Cantillon's uncertainty and risk-taking approach.

During the 19th century, mainstream economics followed classical political economics or alternatively Marxism, which did not consider the entrepreneur in their theories. In the early 20th century, two great economists, Joseph Schumpeter and Frank Knight, took interest in entrepreneurs and formulated different theories linking them to political economics. Schumpeter, considered a heterodox economist, resumed

research on entrepreneurship and built the first theories around the phenomenon. In his 1912 work 'Theory of Economic Development' Schumpeter defined the entrepreneur as an agent of change converting ideas into innovation, which ultimately leads to economic development. Two contributions stand out in his work on entrepreneurship. First, the idea of the entrepreneur as a change agent, opposed to the notion of equilibrium. The entrepreneur would be a disruptive agent, very much linked to Schumpeter's concept of creative destruction. By driving innovation, the entrepreneur creates new products and new business models ('new combinations') which replace or destroy existing ones. Schumpeter even argued that in an equilibrium situation there would be no entrepreneur. Second, Schumpeter linked entrepreneurship to economic development, thus providing a first theoretical framework for entrepreneurship.

Shortly afterwards, Frank Knight undertook his study of entrepreneurs from microeconomics and saw the entrepreneur as an equilibrium agent. Knight's main contribution to economics was to differentiate risk from true uncertainty. Risk would be the unknown outcome that can be measured, estimated or even insured through decision analysis. True or Knightian uncertainty would be impossible to predict or estimate statistically. Both risk and uncertainty can oppose equilibrium. Risk is insurable and uncertainty is mitigated by entrepreneurial activity. Thus, by taking risks in an area of Knightian uncertainty, the entrepreneur corrects that potential distortion to a situation of equilibrium.

Unfortunately, Schumpeter evolutionary and Knight equilibrium approaches did not lead to an expansion of entrepreneurship research. Academically, the entrepreneur remained a strange figure for political economists. Outside academia, as Schumpeter predicted, innovation in the post-World War II period became concentrated in the hands of corporations such as GE or IBM, and so the interest of the public and policy makers about entrepreneurs declined.

It was not until the 1980s that entrepreneurship research made its last comeback to date. The economic crisis, several institutional reforms in the USA and technological breakthroughs reverted the concentration processes and led to a new wave of entrepreneurs built firms that challenged incumbents and caught the public interest (i.e. Apple, Microsoft, Dell). Scholars turned their attention to topics like small business enterprises (SMEs), innovation and entrepreneurship as potential growth engines and several studies validated their potential. Birch (1981) for example compared the job creation rates for SMEs with large companies and led to several studies comparing the two types of companies.

In the last 30 years, entrepreneurship research has grown according to several metrics (Wiklund et al., 2011 and Carlsson et al., 2013). The number of academic journals related to entrepreneurship has grown to 40, the articles on entrepreneurship published in discipline-based journals have also grown and there are up to 7 handbooks of entrepreneurship research edited in the period. In universities, courses on entrepreneurship are common in business management and economics degrees and there are chairs of entrepreneurship in the leading business schools. As a result, the

knowledge base has expanded but several issues persist. As Gibb (2000) put it, 'despite the increase of academic knowledge, indeed perhaps because of it, there has been a growth in our ignorance' (pp. 13). In an attempt to classify the research in entrepreneurship since the 1980s, Audretsch (2012) defined three approaches taken in the last 30 years. First, the view of entrepreneurship that focuses on the organizational context as the distinguishing feature of entrepreneurial activity, very much linked with SME research. Second, the view of entrepreneurship that focuses on a performance criterion (growth), which takes a more dynamic standpoint close to innovation research. Third, the view concerned with entrepreneurial behavior, more restricted to entrepreneurship and encompassing the process of opportunity identification.

4.   Status of entrepreneurship research

Shane and Venkataraman discussed in 2000 'the promise of entrepreneurship as a field of research'. More than a decade later, it is appropriate to say that entrepreneurship research has fulfilled on that promise, as acknowledged by Shane (2012). The discussion on the limits of the domain and its definition has received valuable contributions. In some cases there is consensus or a shared understanding of the current limitations. The need for a comprehensive theory of entrepreneurship is an area of on-going debate, where some researchers argue for it (Shane, 2012) while other do not find it necessary (Gartner, 2001). Audretsch (2012) claims that 'rather than being a source of weakness, the diversity and

heterogeneity contributes to a rapidly emerging field that is rich and dynamic, and appeals to theory, practice and policy (pp. 762).'

Beyond those general discussions, the current weaknesses of entrepreneurship research can be classified in three interrelated parts (Blackburn and Kovalainen, 2009):

i.   Diverse agendas and mixed stakeholder demands.
ii. Methodological under-developments.
iii. Failure to engage with mainstream literature and disciplines.

First, one of the drivers of the expansion of entrepreneurship research has been the growing interest attention of the general public. Practitioners and policy-makers have lobbied for commissioning research. The result has been that often the interest of those research projects has been in data collection and knowledge diffusion rather than in conceptual and theory development.   Researchers have been pulled around by different stakeholders, thus neglecting questions as: What/ who is this research for? What are the issues? What prior work exists? What is the underlying ideological position of the research? What or who are the objects of study – the units of analysis? Who is the audience? How is the research conducted?

Stakeholder demands for example might explain the relative delay from scholars in shifting the research focus away from the entrepreneur and to the opportunity, since the individual as a unit of analysis might facilitate diffusion of research results. Another issue is the unquestioned positive stance on entrepreneurship (Gartner, 2001). Research on entrepreneurship has taken an implicit ideological position by assuming that

entrepreneurship is positive per se, following practitioners and policy-makers points of view. A more rigorous position should question those stances as a source of potential bias.

Second, entrepreneurship research has been characterized by poor methodologies, due partly to the requirements of 'the customers', as seen above. The need for results especially for policy makers has caused scholars to overlook ontological and epistemological issues in relation to methodology and orient research that fits the need of the customer for consulting work that can be a tool for public policy. Thus, research produces results that have a limited use within academic audiences. An indicator of that would be the prevalence of survey type research based on quantitative data. There is a general lack of studies integrating qualitative and quantitative data. Two examples of that is the limited use of case studies and longitudinal analysis. If entrepreneurship is to be seen as a process, then entrepreneurship researchers need to include longitudinal analysis as a fundamental element in their research toolkit.

Third, due to the ongoing discussion on the distinctiveness of entrepreneurship as a domain of research, there are limited connections with theories and frameworks from other fields. Currently entrepreneurship research is in ambivalent position, as it has neither exported ideas from other fields nor developed a distinct theory.

5.   Entrepreneurship research topics and venture capital

Entrepreneurship research encompasses very different areas, due to the diversity of the domain. There are significant differences between topics in terms of research conducted. Topics are more researched when they border other domains that have shown an interest in entrepreneurship (i.e. strategic management with firm creation or psychology with the entrepreneur traits). Ease to obtain data has also determined relative advances by topic.

The topics within entrepreneurship can be tentatively classified as mature, enduring or novel (Blackburn and Kovalainen, 2009) (see table 2).

Venture capital or, more widely, entrepreneurial finance is considered as a mature topic within entrepreneurship. Its links with finance, the interest of policy-makers and practitioners and the ease to obtain data for the institutional segment led to the topic to be relatively researched. The topic suffers from the three weaknesses reported above. The involvement from non-academic stakeholders has generated 'quick consulting' research. There have been limited advances in building theoretical frameworks to explain the processes by which new firms obtain capital and research is characterized by the use of inconsistent definitions. Within venture capital, the institutional segment has received much more interest from scholars, while as the informal segment, where business angels operate, is a relatively neglected area of entrepreneurship research (Sohl, 1999).

Table 2. Mapping small firms and entrepreneurship research topics[5]

Matured?	Enduring?	Novel?
Picking winners	Ethnic enterprise	Social inclusion
Use of internet	Gender	Ethics
Family business	Marketing	Learning
Financial aspects	Economic development	Knowledge management
Networking	Self-employment	Transitional economies
Psychology of entrepreneurs	Regional development	Third age/ youth
	National comparisons	Environmental practices
	Public policy	Business exit
		Societal perspectives

As a consequence of the weaknesses described above, research on entrepreneurial finance has experienced several shortcomings. The main ones would be the focus on the individual (in this case the investor), at the expense of his or her activities, and an unsupported positivism (assuming that venture capital is positive *per se*). The consequences of that have been an excess of descriptive studies and a certain neglect of those cases in which no venture capital is used (bootstrapping), which appear to be the a significant share of new ventures.

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[5] Adapted from Blackburn and Kovalainen (2009)

Chapter 2. The venture capital market

1.   Definition of venture capital

Entrepreneurial ventures search risk or venture capital to finance their launch and growth. Yet, from the investors' side, the list of potential suppliers is long and diverse. The market for venture capital consists of three major segments (Wetzel 1983):

- The public equity market, where capital can be obtained through an initial public offering (IPO) in a general or specialized trading exchange,
- The professional venture capital market, which is not public and where investors lean on paid middlemen or financial intermediaries (the so-called venture capitalists)that organize investment funds, and
- The market for informal venture capital, also private but characterized by the lack of financial intermediation.

Capital contributed by the entrepreneurs themselves is not considered within the boundaries of the venture capital markets, although they are an extremely important source of financing for new ventures.

Within venture capital markets, the limits between those three segments are not always clear and might overlap in some cases (Wetzel 1983). For

instance, venture groups going public or taking funds public might pose a challenge as to in which category the funds they provide to entrepreneurs can be ultimately classified. Similarly, individual investors acting in syndication or family offices navigate sometimes between the formal and informal market. In any case, the distinctive feature of each of the 3 segments is the decision-maker supplying capital. In public equity markets the allocation decision is spread among all investors playing in the markets (buy-side) together with analysts and brokers (sell-side party). In the professional private market, the venture capitalist takes the investment decisions whilst in the informal private market, the decision rests on the individual investor alone.

The three segments are also categorized by size and stage of development of ventures. Companies with a track record of achievements and higher valuations will tend to raise capital on public equity markets and smaller deals will go to the informal venture capital market. In effect, several authors (Fenn et al 1997 and Sohl 1999) have argued that each venture capital segment tends to specialize in ventures in specific stages of development. Public equity markets would attract established ventures looking for consolidation, venture capital would move on the ample area between early stage and buyouts and finally the informal VC market would be active in only seed and initial growth stages. Although the correlation between venture capital market segments and the stage of development of the ventures they finance does hold some truth, it is a serious oversimplification. The argument fails to explain for instance the venture

capital funds that specialize in seed and start-up phases or the informal investors that have become experts in turnarounds.

Figure 2. Venture evolution and segments of the VC market available[6].
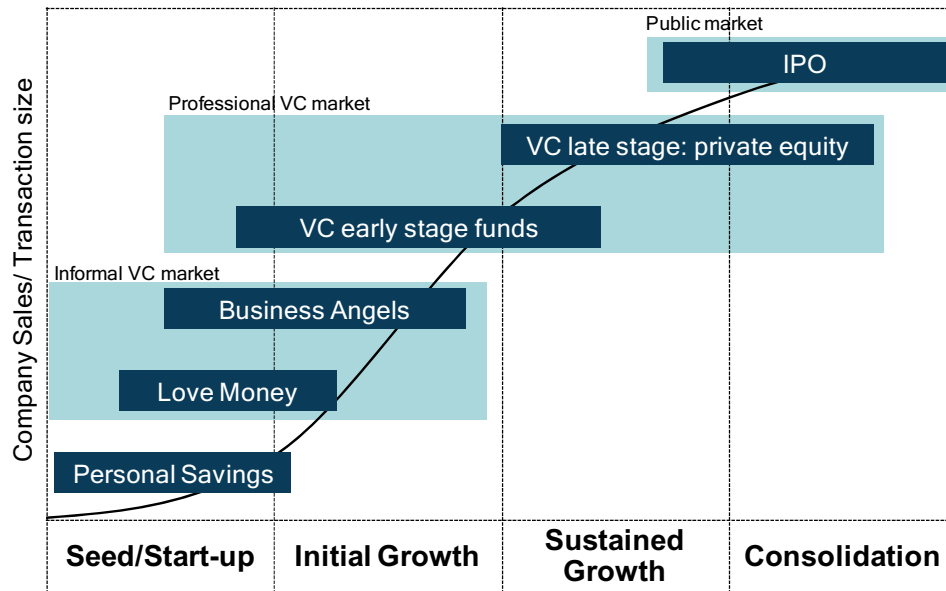
The company might as well bypass one or more of those types of investors in its evolution. At a given stage, it can prefer to raise a further round of financing from current shareholders rather than going to search for new ones. For example, entrepreneurs might inject additional funds and delay the first round of financing with external investors, a practice known as 'bootstrapping'. This is common in sectors with low or even negative working capital needs (i.e. retail or restaurants). Furthermore, some stages

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[6] Adapted from Berger and Udell (1998)

in the growth process might not need external capital financing due to internal cash generation or public sector grants received.

2.   Public equity markets

Public equity markets are the most transparent of the sources of venture capital.   Organized financial markets for equities exist in the most important financial cities. The process by which a company goes public is known as Initial Public Offering (IPO). IPOs can take the form of a capital increase, with the company issuing new shares, a sale of existing capital, with the transmission of the existing shares, or a mixture of both. The price of the shares is set according to demand for the equities on offer, both from institutional or private investors. The price setting mechanism consists usually in a book in which investors put their orders for a given quantity of shares at a maximum price. The United States has been historically the most important country for IPOs, with a total figure of $ 43 billion raised in 2004.

Nevertheless, the structure of mainstream equities markets (main markets), historically discouraged the listing of small companies. The main reasons for that were the strict regulatory requirements and the cost of listing, which represented a relatively heavy burden for small companies.

Still, the tremendous success of some technological start-ups in the 1990s suggested that there was room for smaller companies with potential for

growth and led to the emergence of specialized markets for new or technological ventures, also known as alternative markets.

The most well-known of those markets is NASDAQ, with more than 3.700 listed companies. In Europe, the leading alternative market is AIM (Alternative Investment Market), with 1.323 listed companies. Within Europe, other markets are Alternext and the Mercado Alternativo Bursátil (MAB). Listed companies can use their shares to fund acquisitions or to grant stock options to their employees. They also enjoy incremental coverage from analysts, which should in turn improve the liquidity of their shares.

The requirements of alternative markets in minimum size of companies to go public and regulatory requirements are designed to attract small companies. Compared to main markets, alternative markets present the following advantages:

- **Reduced minimum market capitalization requirements**. In size, AIM has no minimum market capitalization requirement for listing and Alternext sets the minimum IPO amount at €2.5 million.

- **No need of solid previous track record**. On main markets, the regulator requires that the company has a minimum number of years of activity (measured in revenues or profits). Alternative markets waive (AIM doesn't require previous revenues) or

minimize (NASDAQ requires USD 1,000,000 in pre-tax income or two-year operating history) those requirements.

- **No minimum liquidity**. Also there is usually no minimum liquidity requirements that are commonplace in main markets (usually a minimum of 20-25% of the shares must be floated). That can be a disadvantage for investors as liquidity for trading shares is limited.

- **Easier IPO process**. The process of IPO is much easier. On one hand, the admission process can take as short as three to four months from the initial request to the first day of trading. On the other, IPO related workload is a less strict and cumbersome process. Companies need to submit a prospectus, but its content is not subject to negotiations with the regulator, as it is the case in most of main markets.

- **Lower fees and reporting requirements**. The fees required to go and remain public are lower and reporting requirements less wide. Still, the minimum cost of an IPO is estimated to be USD 500,000[7] (or € 335,000).

Finding a middle point in regulatory requirements has proved to be a difficult task. The lowering or simplification of standards compared to

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[7] Express IPO Consulting services. Firm specialized in helping small and medium companies in becoming public.

main markets can attract fraud and ultimately lead to loss of reputation. In 2007, one prominent US securities regulator said AIM felt "like a casino" after a case of serious fraud of one of the companies listed was uncovered.

Also, most of the alternative markets have had difficulties in retaining two of the most attractive attributes of main markets for investors: liquidity and publicity. The amount of transactions in alternative markets is below their main markets peers and some companies delisted from alternative markets on the grounds of the lack of liquidity[8]. On publicity, the validation that represents having its own shares listed is likely to attract further investors. But in the case of alternative markets, with the exception of NASDAQ, they remain rather unknown to investors

As a result, data on listed companies suggests that alternative equity markets appeal to relatively large ventures. Average market capitalization for listed companies was £71.3 million on the AIM[9], €45.2 million on NYSE Alternext[10] and €26.0 million on the MAB[11]. The large average market capitalization could be an indicator of success of companies since listing, as

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[8] On February 2008, Arana directors decided to delist from AIM due to "lack of liquidity and small number of transactions" relative to the associated costs of £ 140,000 per year.

[9] Alternative Investment Market data for March 2014: 1,094 listed companies with aggregate market capitalization of £79,056 million. Source: London Stock Exchange, retrieved online from http://www.londonstockexchange.com/statistics/historic/aim/mar-14.pdf

[10] NYSE Alternext data as of December 2013: 184 listed companies and aggregate market capitalization of €8,325 million. Source: NYSE Euronext, retrieved online from https://www.euronext.com/en/markets/nyse-alternext

[11] MAB data as of November 2012 for the 21 companies listed with market capitalization of €546 million. Source: Bolsas y Mercados Españoles, retrieved online from http://www.bolsasymercados.es/mab/esp/marcos.htm

it includes post-listing revaluation. However, despite the lack of minimum amount requirement for going public, recent IPOs on AIM raised as much as an average of £ 22.4 million per company. In Alternext, the 2 IPOs between January and April 2014 raised €12.8 million (Oncodesign) and €10.9 (Theraclion)[12], but in relatively small stakes, as the resulting average market capitalization was €44.5 and €54.5 million respectively.

According to the figures above, alternative markets are not a viable source of capital for ventures below a certain valuation or capital needs. The fixed minimum cost of listing implies that a company looking for less than € 7 million in capital is going to face more than 5% of transaction costs on that amount.

3.   Professional venture capital market

The professional venture capital market is also referred to as the institutional venture capital or private equity. The market comprises full-time professionals (venture capitalists) who raise finance from pension funds, insurance companies, banks and other financial institutions to invest in entrepreneurial ventures (Wright and Robbie 1998). Institutional venture capital firms take various forms: publicly traded companies, 'captive' subsidiaries of large banks and other financial institutions, and independent limited partnerships.

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[12] Data retrieved from NYSE Alternext notices board.

Venture capitalists (VCs) invest in companies, mostly in equity. The funds invested are from professionally managed pools of money that are raised by VCs from different investors, typically institutional investors. Those investors are limited partners in the investment pool and are not directly involved in investment decisions. Thus their limited liability status is protected. Instead, the VC or general partner manages the fund on behalf of the limited partners, making investments in a portfolio of entrepreneurial ventures (Sahlman, 1990). Sometimes, the general partner also provides a small portion of the funds, as such co-investing is generally perceived by limited partners as a positive sign.

A venture capital firm is a group of VCs who manage one or more VC funds. The VCs act as partners of the VC firm and make investment decisions together. VC firms are relatively flat and small organizations (Wasserman, 2005), made up usually of VCs together with a few analysts. The reason for a VC firm to manage more than one VC fund is related to the limited life of funds (usually 10 years). A firm can have simultaneously multiple funds at different phases (fund-raising, investment, management or harvesting). Very large global VC firms also organize their funds by geography, industry sector or stage of development (Norton and Tenenbaum, 1993). For example, Carlyle group differentiates its funds by geography (Asia, America, Europe), stage (start-up, growth or buyouts) and sector (specific funds related to Real Estate or Biotech, for example).

The funds managed by a VC firm depend on its strategy and reputation. Although the most well-known firms can manage up to several billions of

Euros, most VC firms have between € 70 million and € 300 million in capital under management. The firm gets incomes from an annual management fee and a share of the profits of the fund. The annual management fee, commonly 1 to 2.5 percent of the fund's capital, is paid by the limited partners, is fixed and covers running expenses of the fund (including salaries for VCs) from its limited partners. The share of the profits (usually 20 percent) is variable and depends on the performance of the fund. This 'carried interest' is shared among the VCs and can represent the majority of the VC income. Sometimes, limited partners force a minimum level of profits for the carried interest to be accrued.

Therefore, the income of a VC firm will relate to the size of the assets under management, to the success of the funds (in terms of annualized IRR) and the relative size of those investments (i.e. the carried interest on an investment with a 20 percent IRR will be different if the initial investment was of € 100,000 or € 10 million). That structure of earnings of VC firms is perhaps one of the reasons to explain why most of VC firms tend to invest in more advanced stages (Wright and Robbie 1998). For instance, out of the total funds invested by the VC industry in the USA in 2013 ($ 29.4 bn), only 5.5% were in the start-up or seed phase of development.

VCs exit their investments through an initial public offering (IPO) or a trade sale. Sometimes the trade sale is to another VC firm (the so-called secondary market for VC investments). VCs take into account the exit options when deciding to make an investment and tend to lean on stringent

contracts to limit the agency risk of the entrepreneur (Fiet 1995 and Van Osnabrugge 2000).

As the general market for venture capital, the professional venture capital market can also be divided in sub segments depending on the stage of the investee or issuer[13]. The most important ones are:

- **Seed financing**. The venture is at the 'concept' stage. There are one or two entrepreneurs, but the management team is incomplete. The product or technology is not developed and the business plan has not been validated. Capital is needed to develop the product, to invest in research and, although not mentioned, to refine its concept.

- **Start-up**. The venture has completed its management team and its product or service is ready for the market. Proceeds of a financing round are mainly invested in the commercial side of the business (i.e. to hire salesmen or to develop marketing tools).

- **Development**. The first sale has already occurred and the venture is set to expand. Companies at that stage typically search capital to fund their expansion. Proceeds are typically used to finance capital expenditure to support the growth of operations, to cover

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[13] Fenn, Liang and Prowse (1997). The Private Equity Market: an Overview.

operational losses or, eventually, to acquire other companies (build up or integration strategies).

- **Replacement**. Issuers in this segment are either motivated by current shareholders looking for an exit or by need to restructure the business. In the first case, the trigger of the hunt for venture capital might be the retirement of the owner or a corporate decision to divest from businesses perceived as non-core. In the second case, the company needs an operational turnaround or a financial restructuring. Those latter needs are usually cover by specialized venture capitalist as skills and involvement needed are different from a growth phase.

- **Buyouts**. The target is a developed company, in which the venture capitalist acquires a controlling stake. A significant part of the purchase price is financed by leverage, raised against the collateral of the company assets, hence the name of LBO (leveraged buyout). In some cases, the venture capitalist can act together with the current management of the company (MBO, or management buy-out) or with a team of professionals that will join the acquired company as new management team and minority shareholders (MBI, or management buy-in).

Figure 3. Segments of the professional VC market[14]
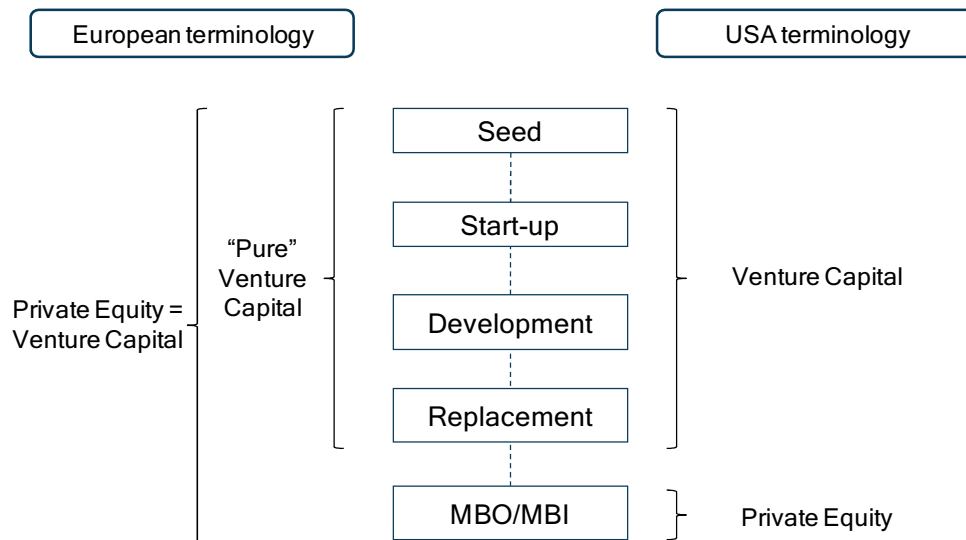
Due to the well-established nature of most of the companies that undergo a buyout process, sometimes buyout are not considered to be part of the professional venture capital market. This is particularly the case in the USA, where venture capital is used only to refer to the seed, start-up, development and replacement deals. Buyouts are considered to be private equity deals. In Europe, all segments are considered together and referred to as 'venture capital' or 'private equity'.

Naturally, as buyouts deals happen in more advanced stages of development, valuations are higher. From the financing side, the extensive use of leverage provides a multiplier effect on the capacity of the venture

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[14] Self-elaboration.

capitalist to target even bigger deals. As a result, the buyout segment accounted for 30% of the $ 29.4 billion invested by venture capitalists in the USA in 2013[15].

Professional venture capital is also a highly cyclical business, dependent on the volatility of financial markets, not only because of the debt needed to finance buyouts, but also due to the fact that a common exit route for professional venture capital investments is an IPO. On a study of the returns of venture capital in the UK for the period from 2004 to 2007, the British Venture Capital Association (BVCA)[16] concluded that the returns generated in the period were 3.3 times the initial investment, or 330%. Out of this total, 100 percentage points came from rising stock markets, 167 points from the use of extra debt over the amount used at comparable companies in the same sector, and 62 points from 'strategic and operational improvements'.

Professional venture capital had an explosive growth in the second half of the 1990s fuelled by easy financing and the Internet bubble. The data for the most developed market for venture capital finance, the United States, show that the sector invested $ 7.4 billion in 1995 and $ 106.4 billion in the year to September 2000, growing more than 14 times over in less than 5 years. The average investment grew significantly from $ 4.0 million to $

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[15] MoneyTree Survey 2013 by PricewaterhouseCoopers, Thomson Venture Economics, and the National Venture Capital Association.
[16] BVCA and Ernst&Young (2009). BVCA Annual Report on the performance of Portfolio Companies, 2009. Available at:
http://admin.bvca.co.uk/library/documents/BVCA_EY_annual_report_2009.pdf

12.7 million, due to the growing weight of the buyout segment, the competitive pressure that drove valuations higher and low interest rates (that facilitated leveraged buyouts).

Figure 4. Evolution of professional VC investments in the USA (1995-2013)[17]
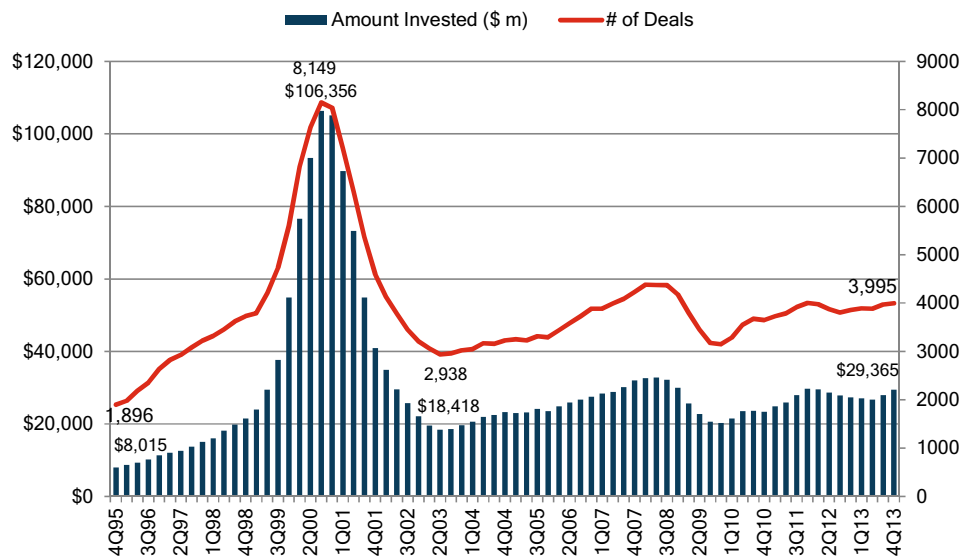
Starting in March 2000, with the burst of the Internet bubble, professional venture capital suffered a reversal of fortunes that reduced the amounts invested by the sector by more than 80% in 3 years. Since the second quarter of 2003, a limited recovery took place but was then shattered in 2008 with the financial crisis. Since then, the sector grew at modest rates.

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[17] Self-elaboration.

In 2013, professional venture capital made 3,995 investments for a combined total of \$ 29,365 million (an average valuation of \$ 7.4 million).

Table 3. Professional VC investments in the USA by stage of venture development (2013)[18]

Stage of Development	Amount Invested		Number of Deals		Avg. Val.
	In \$ m	In %	#	In %	In \$ m
Startup/Seed	943	3.2%	218	5.5%	4.3
Early Stage	9,759	33.2%	2,003	50.1%	4.9
Expansion	9,838	33.5%	984	24.6%	10.0
Later Stage	8,825	30.1%	790	19.8%	11.2
Grand Total	29,365		3,995		7.4

Although professional venture capital encompasses investment in startup or seed phase, most of its activity (94.5% of deals) takes place in more advances stages of development, as seen in table 4. VC funds have a fee structure that encourages maximizing deal size (Murray, 1999). Valuations increase with the development of the venture, going from an average of \$ 4.3 million in start-up or seed phase to \$ 11.2 million for later stage deals. That would explain the relatively low activity of professional venture capital in the initial stages of a new venture.

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[18] Money tree survey (2013) and self-elaboration.

4.   Informal venture capital market

The distinguishing feature of the informal venture capital market is the lack of intermediation between investor and entrepreneur[19]. According to Gaston (1989), the two segments of the formal venture capital market 'can be easily distinguished from informal markets because they are organized by paid middlemen and have shown little effective interest in financing most start-up firms'. Avdeitchikova et al. (2008) summarize the main differences between institutional investors and business angels (see table) identifying traits such as source of income, personal responsibility, investment experience, and time for due diligence. Some of those traits are however of difficult use for definitional purposes.

Table 4. Differences between institutional investors and business angels[20]

Key features	Institutional venture capitalists	Business angels
Source of funds	Primarily institutional investors who act as limited partners invest others' money	Private individuals that invest their own money
Responsibility	Limited personal financial responsibility but responsibility to management and owners	Significant personal financial responsibility
Investment experience and capacity	Considerable investment experience and investment capacity	Little investment experience and limited investment capacity
Time for due diligence	Extensive time for due diligence	Limited time for due diligence

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[19] As Gaston (1989) puts it 'informal risk capital is equity and near-equity dollars invested by private individuals directly (informally) in entrepreneurs without formal intermediation'.

[20] From Avdeitchikova et al. (2008).

Informal private investors interact directly with the entrepreneur and make investment decisions with their own money, in contrast with formal or professional market, where the venture capitalist manages a pool of capital from passive investors or the investor places his money in an organized market with defined and specific rules. In consequence, an informal venture capital investor would be anyone investing his own money in unquoted companies, other than the entrepreneur itself (Mason 2005).

Definition of informal venture capital investors

The broad definition of informal venture capital investors encompasses different types of investors, which can be classified in two categories (Wong and Ho, 2007) depending on the existence of a previous link between investor and entrepreneur:

- Business angels, defined as private individuals who provide capital, either in the form of debt or equity, from their own funds to a private business owned and operated by someone else, who are not a family member.

- Family investors, who are also private individuals investing directly in unlisted companies, but are relatives of the entrepreneur. They are separated from business angels as it is widely believed that the existence of previous emotional link between entrepreneur and

investor is considered to have a big impact on the attributes, behavior and characteristics of those investors.

The definition of informal venture capital market presented above has some 'grey areas', not only with regards to formal venture capital but also between the types of informal investors outlined.

First, if lack of intermediation is what sets apart formal from informal venture capital, then investment vehicles such as family offices or business angels acting together in syndication, in which there is a relative degree of intermediation while the key decision rest with investors pose a dilemma. On the other hand, in some formal venture capital deal, the investors in the venture capital fund that contribute capital might reserve to themselves the option to co-invest directly in order to be overweight in that specific investment. That is also a case of direct investment which in principle would be part of the formal venture capital market and challenge the distinction outlined above. Lately, investors in venture funds have taken a more active role and have even managed to reverse investment decisions taken by the venture capitalist. The diversity of roles investors take and the greater control on venture capitalists suggest that the link between informal venture capital and lack of intermediation needs to be refined, establishing the boundary between formal and informal venture capital depending on the intermediary' degree of control and autonomy.

Second, it might be difficult to assess whether friends and colleagues of the entrepreneur are to be counted as family investors or with business angels.

A friend or a colleague is someone with a previous strong connection with the entrepreneur, and so it is assumed makes investment decision at least partly on emotional grounds. But in many cases the business angel knows the entrepreneur beforehand or decides to investigate the venture based on referrals from personal connections. For example, some studies on business angels have found that the investor had a previous acquaintance with the entrepreneur[21] or that friends were a strong source of deal flow for business angels[22].   According to Bygrave et al. (2002) study on Global Entrepreneurship Monitor (GEM) data for 29 countries, 75% of non-family individual investors are either a friend, neighbor or work colleague of the entrepreneur. That does not necessarily mean that this preexisting link weights on the investment decision to the extent those investors should be considered separately from other informal non-family venture capital investors (Shane, 2009).

Third, many scholars[23] exclude family and friends (or 'love money') from the informal venture capital market. The view taken here is the one followed by the Global Entrepreneurship Monitor (GEM) and other authors (Shane, 2009) who include those investors in the informal venture capital market. Any individual (other than the entrepreneur itself) or institution investing in venture capital is part of the market for venture capital. In the

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[21] In Hindle and Lee (2002) study of Singapore business angels, 52% of the 29 investors interviewed had known the entrepreneur for as long as 5 years before making the investment.

[22] Wetzel (1983) and Haar et al (1988) in the USA and Reitan and Sørheim (2000) in Norway all found friends to be the first or second source of prospective deals for business angels.

[23] Mason and Harrison (2000)

case of love money, investments are done directly without intermediaries so investors with these characteristics should be considered part of the informal venture capital market.

The definition of business angels as informal investors that are not a family member adopted here is also subject to debate, which will be addressed in the following chapter. In any case, it is worth noting that in recognizing the problems with definitions, Avdeitchikova et al. (2008) noted that 'it is not possible, and perhaps not even desirable, to establish a single way of defining the investors on the informal venture capital market'. The next chapter discusses the use of different definitions of business angels and its implications.

Size of informal venture capital market

The size of the informal venture capital market and its segments has been difficult to estimate for researchers. One of the first attempts to estimate the scale of informal venture capital market (Gaston 1989) concluded that in 1984, informal investments in the United States amounted to $ 55.6 billion (1.42% of GDP) split in 489,600 different investments. A significant part of those investments were done in debt ($ 22.9 billion) and a further $ 19.3 billion was available from investors if adequate opportunities could be found. Almost 20 years later, in its analysis of the results of the Global Entrepreneurship Monitor data, Bygrave et al. (2002) found that informal investments in the period from 1997 to 2001 amounted to 1.31% of GDP in

the United States, investing $ 129 billion yearly during the period. Shane (2010) gives a figure of $ 162 billion for 2004, or 1.37% of GDP and the GEM report for 2009 gave the ratio of 1.5% of GDP and a prevalence rate of 3.4%[24].

Table 5. Informal investment per year (1997-2001) in 29 GEM countries[25]

	Prevalence of Informal Investors 18 & older Percent	Annual Informal Investment per investor (1997-2001) US$	Total Informal for country by adults 20 & older US$ million	Total Informal Investment per capita US$	Total Informal Investment per GDP Percent
Argentina	2	2,724	1,323	54	0.45
Australia	3.3	10,573	4,869	347	1.26
Brazil	1.4	690	998	9	0.14
Canada	3	5,953	4,177	178	0.61
Denmark	3.4	6,899	957	235	0.59
Finland	3.6	2,257	315	80	0.26
Germany	3.7	4,506	10,902	167	0.55
Ireland	3.2	7,595	654	243	0.72
Israel	3.8	7,070	1,023	269	0.98
Mexico	4.3	1,370	3,372	59	0.63
New Zealand	6.2	10,476	1,789	653	3.54
Norway	4.1	5,414	732	219	0.5
Singapore	1.5	14,335	702	215	0.79
S. Africa	2.2	1,182	650	26	0.5
S. Korea	3.8	13,391	17,121	506	3.66
Sweden	2.7	3,892	709	105	0.3
UK	2.8	13,860	17,026	381	1.2
USA	6.1	10,628	129,180	648	1.31
All Nations	**3.4**	**8,109**	**196,499**	**314**	**1.13**

This table includes only nations for which we have data from 40 or more informal investors.

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[24] The GEM defines rate of prevalence defined as percentage of total population that has closed an informal investment during the 3 previous years. In the 29 countries surveyed, 3.4% of the 18 years or older population would be active informal investors.
[25] From Bygrave et al. (2002)

Informal capital is therefore a constant and important source of financing for entrepreneurs in the United States (Reynolds, Hay, and Camp 1999; Berger and Udell 1998), especially when comparing the $ 164 billion invested in 2004 with the $ 22 billion invested by formal venture capitalists or the $ 43 billion raised through IPOs in the same year.

Figure 4. Amount of informal capital as a percentage of GDP per capita[26]
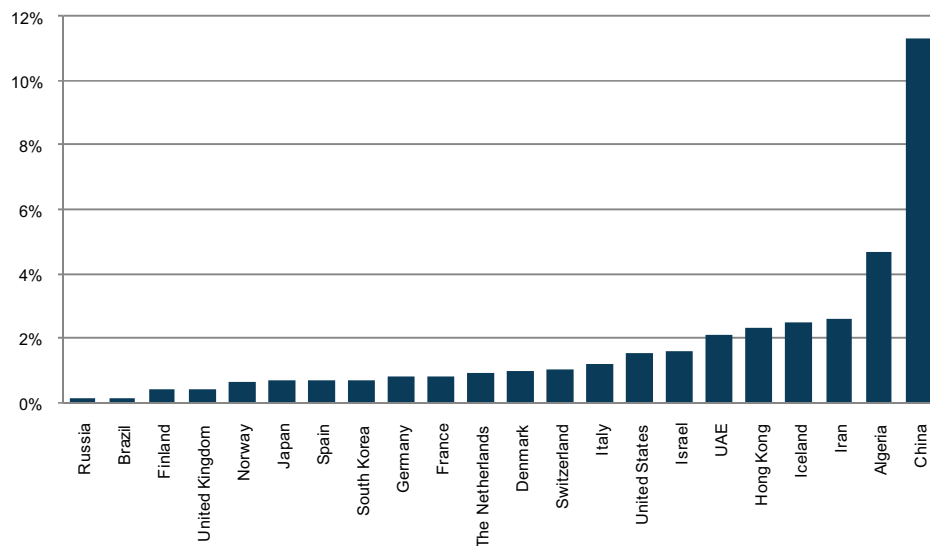
Outside of the United States, the size of the informal venture capital market relative to GDP varies greatly, according to the GEM. In the Bygrave 2002 study, the number of countries was limited to those for which there was a minimum of 40 observations available. Interestingly enough, countries such as France, China, Italy or Spain fell out of the sample. The resulting sample of 29 countries provided a range between 0.30% of GDP (Sweden) and 3.66% (South Korea). Anglo Saxon countries were with few exceptions above the global average while in continental Europe the importance of

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[26] Adapted from the Global Entrepreneurship Monitor (2009).

informal investment was relatively less. A proportion of investors of around 3% of total population were found in all countries, with the USA and New Zealand doubling it and Brazil and Singapore delivering the minimum rate of informal investors. Investment by each investor is correlated with GDP with the exception of Scandinavian countries and Germany.

The 2009 GEM report included more countries due to the elimination of the minimum barrier of 40 observations but mostly because of the expansion of the GEM effort. The figures confirm the finding in previous reports for OCDE countries. Informal investments in China accounted for a surprising 11.3% of GDP, while as data for Spain returned a relatively modest 0.7% of GDP.

As mentioned not all informal venture capital is supplied by business angels. In fact, business angels represent a small fraction of the informal venture capital market. According to Reynolds (2004), 53% of all the capital invested by informal investors in young companies in the USA came from relatives, 38% from friends or colleagues and only 8% from unrelated investors.

Evolution and recent trends in informal investing

Informal investing has expanded since the 1980s. Researchers identified clearly the lack of visibility as the main inefficiency of this market. This led to the creation of angel networks (BANs), which was pointed as a solution

in Wetzel (1983) as a measure to address informal venture capital inefficiencies. It was clear in early studies of business angels that investors suffered from a lack of deal flow and entrepreneurs in search for capital did not know how to find angel investors. Building on that recommendation, policy-makers launched measures to promote BANs, including direct subsidies. BANs have grown at a very rapid pace, particularly after 2000. The European Business Angels Network (EBAN) association represented 101 BANs at the end of 2012, up from 33 at the end of 2004[27]. In the USA, Angel Capital Association (ACA) represents 165 BANs with more than 7,000 individual members. Similar associations gathering BANs exist in Asia and Australia. The increase in BANs has had an impact on angel research, as it has simplified the problems of data collection (see chapter 3). However, BANs do not constitute representative samples of business angels as they tend to include more sophisticated angels than the average and can include non-angels (virgin investors, venture capital fund managers, family investors).

There are different types of angel network depending on the services they provide. Some offer only match-making services between entrepreneurs and associated angels. Others might complement this basic service providing investor-readiness assessment to entrepreneurs, due diligence services to investors or even taking equity stakes in ventures. BANs can also be grouped depending on whether they make their income from registration fees to investors, presentation fees to entrepreneurs, equity

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[27] From EBAN 2012 activity report. http://www.eban.org/wp-content/uploads/2013/07/Activity-Report-2012.pdf

stakes obtained in deals closed through the network, state grants and subsidies or a combination of those.

Most BANs function by gathering periodically to go through several ventures presentations. Pre-selected entrepreneurs make a short presentation to BAN members and then some time for questions and networking is allowed. Some of BANs are organized through the internet and do not require physical gathering (i.e. AngelList in the USA). Those BANs require entrepreneurs to submit their venture in a standardized format and they then circulate it between member investors based on their sector or investment amount preferences through an intranet. On one hand BANs have addressed the market inefficiency identified by first-generation researchers (Collewaert et al., 2010) and have given further visibility and attention to angel investing. On the other, it is not clear that they add value beyond that matchmaking function (Zu Knyphausen-Aufseβ and Westphal, 2008).

Another trend in angel investing is the raise of angel funds. Experienced angels with successful track record have launched angel funds that raise funds from other investors to complement their own funds. The experienced angel acts as a leading partner (albeit, with a very high share of the committed funds being his own) and can leverage his investment activities. In Spain, Luis Martín Cabiedes is a leading angel investor in IT companies that launched an angel fund (Cabiedes & Partners SCR). Such entities combine informal (business angel) and formal (third party investors) investment. In some countries, the term angel fund also refers to

sidecar vehicles that co-invest along entrepreneur. Those vehicles have been launched by the public sector to accompany business angels' investments. Typically such funds follow a business angel investment and add a proportion of the amount committed by the business angel and adhere to the shareholders agreement and other relevant pacts.

A further and recent development are angel funds which are not linked to a single angel investor and propose to bridge the gap between start-ups and small individual investors, as start-up investing either directly (angels) or indirectly (through VC) requires a certain minimum ticket. Those funds function similarly to venture capital funds although they have leaner structures which allow them to operate with less cost than traditional players. Even though they claim to be angel funds, they are in fact more similar to formal venture capital players. AngelList launched in April 2014 a fund for $25 million that aims to be the first step in turning start-up investing to a similar asset class than publicly traded stocks or bonds.

Finally, some platforms for informal investing have started to replicate the crowdfunding mechanisms used for non-profit or lending activities. In this case, there is a crowdfunding platform that includes for a limited time projects that are looking for equity funding. The venture is presented in a standardized manner and information on the legal documentation is made available to investors. Investors commit small stakes per project but some of the important conditions that are subject to negotiation in classical angel investing are pre-closed in crowdfunding (valuation or legal documentation, for example). The crowdfunding platform obtains a fee

from each investment deal closed and can also receive a success fee in equity.

Chapter 3. 10 issues in defining business angels[28]

Abstract

Purpose – *The purpose of this chapter is to consider the methodological issues in 30 years of business angels' research, at a time that research development on the topic is held back by those issues.*

Design/ methodology/ approach – *The chapter reviews 24 studies on business angels and classifies definition inconsistencies found in 10 different issues. Those differences are compared with methodological choices on sampling and with subsequent results.*

Research implications – *Research on business angels needs to introduce more methodological discipline as a prerequisite for further development. The authors propose a framework based on the 10 issues identified to advance towards a consensus definition.*

Practical implications – *Most policies launched on business angels' investment are formulated based on studies done on inconsistent definitions and need to be reassessed.*

Findings – *The diversity of definitions is explained by difficulties to obtain data and leads to different results. The authors propose a framework to advance towards a consensus definition, correctly contextualize the phenomenon of business angel investing and redefine public policies going forward.*

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[28] The main content of this chapter was accepted for presentation to the IV International Network of Business and Management Journals (INBAM) Conference to be held in June in 2014, within the Management Decision journal track ('Advances in Management Research').

Originality/ value – *The chapter highlights the consequences of the lack of definition consistency in a research field of high interest for policy makers and practitioners. It also provides explanations for the apparent disparity of results in business angels' research.*

Keywords: business angels, informal investors, definition, sampling

1.   Introduction

Business angels, individuals investing directly in unquoted companies, are an old phenomenon. Investors lending capital to entrepreneurial merchants in the 13th century in places like Barcelona, Valencia, Venice, or Florence were already business angels. Together with the entrepreneur, they shared risk and reward in a venture of uncertain outcome as a return trip across the Mediterranean was at the time. Despite this long history, research on their impact in economic and social issues is a relatively new trend and there are many questions left unanswered.

Research on business angels dates back from the pioneering study of Wetzel (1983) in New England (USA). Departing from data on private placements and comparing that with the investments done by institutional venture capitalists, Wetzel concluded that business angels 'not only do exist, they may represent the largest pool of risk capital in the country'. He also went a step further by establishing a profile for business angels from a convenience sample.

In the two following decades, 'first generation' studies replicated Wetzel's early work, initially in other parts of the USA, and then after 1992 in other countries, reporting similar demographic profiles. Business angels found through these studies were middle aged men, with high income and a past experience as entrepreneurs, who invested rather large sums per venture. Since 2000, entrepreneurship has drawn further attention and efforts (Wiklund et al., 2011 and Shane, 2012). New data sets, generated by projects like the Global Entrepreneurship Monitor (GEM), appear to contradict the earlier profile established in 'first generation' studies.

New ventures generate growth and jobs. Business angels contribute risk capital and experience to ventures, and they do so at a stage when the entrepreneur has very limited options (Shane, 2009). That role, together with the highly publicized stories of business angels behind the success of internet companies, has spurred wide ranging interest in business angels from public policy makers and researchers.

However, the growth of research articles on business angels has not been matched by the development of methodologies and data sources used in that research (Harrison and Mason, 2008). Notably, the concerns are concentrated on the definitions and sampling methodologies used. The lack of a standard definition and data sources makes it hard to compare findings and advance our knowledge in this field of research. Therefore, a common definition is a prerequisite for further advances in business angels' research.

Following Farrell's et al (2008) call for a standard definition, still untackled, the present article first discusses the current status of research on business

angels and focuses on the methodological problems identified in previous papers. Second, a review of 24 earlier studies leads to identify divergences in 10 definitional aspects, which are discussed. Third, the article explores the link between definition adopted, sampling techniques used and results. Finally, we present a proposal for a potential definition of business angels that solves the 10 issues outlined and highlight the public policy implications of the current lack of consensus on definitions.

This chapter extends our knowledge in the business angels domain since, contrary to previous studies, the current study splits the problem in the definitional issues identified, rather than just comparing definitions. Therefore, we are able to assess where the most significant divergences lie or in which issues there is relative consensus. Furthermore, it facilitates potential contributions towards a standard definition of business angels.

2. Sampling and definitions in business angels' research

Avdeitchikova et al. (2008) identified two obstacles for further development of research on business angels: the difficulty to obtain data and the use of inconsistent definitions. The former are attributable to the desire of business angels to remain anonymous, the lack of a public registry of business angels from which to draw samples (Wetzel, 1987) and the high cost of identifying a large enough cohort of business angels through a random search. Scholars tried to circumvent that problem by using convenience samples rather than random samples of the business angels'

population.   Convenience samples are built by selecting participants because of the ease of their volunteering.

Convenience sampling has been a growing concern in business angels' research.   Different sampling methods restrict or make impossible comparisons between studies and can lead to wrong estimates on the size of the business angel market, by assuming that the practices detected in a convenience sample are representative of the general business angels' population[29].

The risk of drawing conclusions from convenience samples did not go unnoticed. As early as in 1989, Aram warned that comparisons between informal investor studies using convenience samples or using different sampling methods should be made with care. In the following years, the warning resonated in subsequent studies, but the issue subsisted. In 1992, Harrison and Mason claimed that due to the lack of visibility of business angels, 'it is not possible, therefore, to undertake any survey that is based on a representative sample of investors' (pp. 462) and Fiet (1995: pp. 559) cautioned that 'the conclusions of all previous studies, as well as those of the present study, must be limited in their generalizability to the sample that they represent.'

Despite that, much of business angels' research has been based on convenience samples, using mainly four different methods (Harrison and Mason, 1992; Farrell et al., 2008),

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[29] Shane (2010: pp. 145) calculates that if some estimates on % of investment exits via IPO for business angels (7.6%, from Harrison and Mason, 1992) were to be true, not only all the IPOs would be from companies with business angels investors, but the total number of IPOs in the US would need to be more than 13 times higher.

1) Large scale sample survey, built from lists of individuals with high income (for example, MBA Alumni, doctors, or subscribers to business magazines).

2) Contact through investee firms, using a list of businesses that might have had an informal investor.

3) Snowball method, in which initially identified individuals help to enlarge the sample by introducing the researcher to other investors in his network.

4) Contact through existing networks, where the researcher works with a network of investors such as a business angels networks (BAN) or a business introduction service (BIS) that grants him access to its investors.

All four methods have issues in terms of relatively high cost, low response rates and representativeness. The population of business angels is heterogeneous, so convenience samples may be non-representative and subject to unidentifiable bias (Månsson and Landström, 2006). Following the growth of BANs, researchers have tended to favor the fourth approach in recent studies, as it addresses the issues of cost and response rates.

Often the method employed in a particular research project is chosen for convenience (Månsson and Landström, 2006), but the choice influences the conclusions of the study and can lead to error. For example, Wetzel (1983; pp. 25-26) found that angels 'tend to be found in clusters that are linked by informal networks of friends and business associates'. Given that the study used the snowball sampling method, it is possible that the conclusion was driven by the sampling method chosen.

Since 2000, the increased interest on entrepreneurship facilitated alternatives to convenience sampling. First, the Global Entrepreneurship Monitor (GEM) survey, taken annually, includes some questions on informal investors and enables to compare a general sample with a convenience one. It is not without problems; the cost of running the GEM study in one country is high, the information obtained is limited and since informal investors are a small part of the general population from which the survey is taken (~3% according to GEM), data might be subject to significant statistical error.

Second, the increase in regulatory requirements allowed Robinson and Cottrell (2007) to build a relative large and random sample of informal investments using the exemption filings with the Securities regulator. Third, Avdeitchikova et al. (2008) took an interesting approach in Sweden by participating in a general survey on household consumption and including a question in informal investing. That allowed them to work with an initial large sample at a relatively low cost. The fact that 278 valid responses from business angels were obtained out of the 40,320 individuals in the initial random sample should warn researchers to work with large initial samples.

Some authors (Mason and Harrison, 1997; Sørheim and Landström, 2001) argued that the combination of several sampling methods to build a convenience sample or the increase in sample size facilitated by the fourth approach might reduce its biases. However, Farrell et al. (2008) answered that if business angels are a heterogeneous population and there is no evidence that those affiliated to BANs are representative, then the use of

multiple BANs to build a sample would not reduce its inherent bias, as business angels not belonging to a BAN are systematically excluded.

The sampling method choice is also affected by the definition used. For example, Wetzel adapted his definition due to the sample characteristics observed. In his 1983 study, Wetzel initially assimilated business angels to informal risk capital investors and defined both as individual investors contributing their own funds to companies with which they had no previous relation (pp. 23). However, when constructing a convenience sample using the snowball method he ended with 133 individuals that fit the previous description of business angels but had also distinctive traits. The most significant of them was a certain affluence of means which led Wetzel to establish the representativeness of the sample comparing it to the general population of millionaires. In later papers, Wetzel (1987) would then define business angels more narrowly: 'Individual venture investors (business angels) are defined as [individuals with] net worth over $1 million and annual income over $100 thousand'.

There is a close link between the use of convenience samples and the adoption of narrow definitions in studies on business angels. Convenience samples are biased and end up with individuals with certain traits that are not representative of the general population. Those traits are then included in a definition and the resulting definition is used in subsequent studies. Farrell et al. (2008: pp. 331) found that the limitation in identifying business angels 'precipitates narrow definitions of business angels in order to justify the sampling method used. The more narrow definition ultimately results in precluding various cohorts of angels from appearing in the data'. As

research on business angels evolved, definitional issues multiplied, aggravated by the fact that often researchers were not explicit about the definition used.

3.   Definitional choices in current business angels' literature

Research on business angels evolved from 'first generation' to 'second generation' studies (Mason and Harrison, 1999). 'First generation' studies aimed at establishing a demographic profile of business angels and estimating the size of their activity. 'Second generation' studies were focused in the characteristics of angel activity and their comparison to other investors.   We have reviewed 24 different papers on business angels published since 1983 including both types of studies in order to find differences in definitional issues (see Annex A at the end of this chapter). The papers were selected to include the most cited studies on business angels, first-generation studies that have been used to size business angels activity, and recent studies on informal investing done from GEM data.

Farrell et al. (2008) reviewed business angels' literature and found differences in definitions around six issues (1 to 6 here below).   While comparing the results of previous studies and taking into account the considerations by Shane (2010), we identified four additional issues (7 to 10).   Compared to previous studies on business angels' definitions, the current study splits the problem in the definitional issues identified, rather than comparing definitions.   That allows to assess where the most

significant divergences lie or in which issues there is relative consensus. Furthermore, it facilitates potential contributions towards a standard definition of business angels.

(1) Timing of investment. The first issue encountered when defining business angels is the timing of the investment. Some authors set a discretionary time limit since their last investment agreement. Investors that did not close a deal recently would not be considered business angels. The time limit usually ranges between three years (Haar et al., 1988; Fiet, 1995; Van Osnabrugge, 1998; Global Entrepreneurship Monitor) and five years (Wetzel, 1983). The use of this cutoff criterion introduces a certain degree of confusion by assimilating the closure of an investment agreement with the overall activity of a business angel. Business angels' activity encompasses not only finding, analyzing, structuring and closing deals, but also following up investments until exit (Paul et al, 2007). While as the investment process can take about six months to complete, business angels hold the investment for an average of three to four years (Wiltbank, 2009). Given the average holding period for business angels' investments, angels that are currently active but have not entered into an investment agreement recently would be eliminated from studies adopting this criterion. It might be convenient for researchers studying the investment process to limit their samples to investors with recent experience. Investors can forget details that might be essential for analysis of their investment process and typical issues for this type of studies (rationalization bias, for example) can be

exacerbated by including in the sample investments that are distant in the past. However, even though the practice of eliminating past investments is convenient and even recommendable for studies on investment practices, it should not be used as a criterion to define business angels, because it can eliminate investors that are currently holding an investment in which they entered more than three years ago. We suggest that a business angel should be any individual holding at the time of the study an investment that fulfills the rest of the conditions.

(2) Investments in equity and debt. The amount invested can be defined as amounts invested in equity only or include loans from investor to investee. The seminal work of Wetzel (1983) on business angels focused on equity. Later, other studies started to include capital contributed as loans and the trend in more recent studies seems to be in that direction (Shane, 2010). The case for excluding loans is based on the claim that such funds would not have the risk capital element fundamental for venture capital. Nevertheless, business angels use extensively loans and loans guarantees to structure their deals (Gaston, 1989). The ratios of equity to loans contributed by business angels could range from 1:1 (Aram, 1989) to 3:1 (Harrison and Mason, 1992). As institutional venture capitalists, most sophisticated angels use convertible debt as a tool to accommodate entrepreneurs' interests. By doing so, entrepreneurs can get funds without being excessively diluted in terms of equity from the onset. From a definitional point of view, the hybrid nature of some loans, as convertible debt can convert

to equity, poses a challenge to the claim that funds not contributed as equity are not risk capital. To eliminate investors on the basis of how they structure their deals seems not adequate, and can lead easily to several mistakes. From the supply side, estimates of the size of the informal venture capital market or analysis of their deals can be biased as part of the funds channeled into the venture as part of the investment deal are excluded. Even worse, from the demand side or from a public policy perspective it can result in losing visibility over a source of financing for ventures. Therefore, estimates on the size of business angels activity should be calculated on the total capital contributed by the investor, irrespective of whether it is done in equity or debt.

(3) Virgin investors. The inclusion of potential investors is controversial. As the informal venture capital market is inefficient, one of the research themes in business angels' research has been their potential as a source of funds for ventures and the public policy implications. Thus, virgin investors may represent an indicator of market inefficiencies as a pool of untapped capital for ventures, and may drive the call for policies to address such inefficiencies. Also, from a researcher point of view, enlarging the definition to include individuals that have not yet invested is tempting. Potential investors are easier to find than actual investors and therefore its inclusion leads to bigger samples or, as Farrell et al. (2008: pp. 339) put it: 'whether to include virgin angels appears to be an issue of boosting numbers for response rates'. Nevertheless, sample size does not necessarily lead to

sample representativeness and may even be counterproductive as it might increase sample bias. Overall, it seems not reasonable to include potential investors in the definition based on the assumption that they might consider investing in the future. In line with the timing criteria, the two observable events in the investment process for any investor are the investment agreement and exit. In consequence, we defend the idea that business angels should be those that are between those two points of time at the moment of the study.

(4) Corporate angels. The difference between formal and informal risk capital is the existence of financial intermediation (Mason 2005). Informal investors invest their own money directly in unquoted ventures, as opposed to formal investors, that act as intermediaries that raise all or part of their funds with others. Despite this apparently simple criterion, Wetzel (1983) already warned that 'the boundaries separating these segments (of the venture capital market) are indistinct and often overlap'. Since then, the growing sophistication of business angels has introduced additional concerns. Some angels use investment vehicles due to tax reasons, while others use family office structures. A recent phenomenon is the launch of 'angel funds' by experienced angels. Those angels become managers and lead investors in funds that also include contributions from other 'passive' investors. In some cases, small venture capital funds launched by financial institutions (the quintessential institutional venture capitalist) also claim to be 'angel funds'. Månsson and Landström (2006) counted as business angels those investors who had invested via a legal entity

which was wholly owned either by the investor or by his/her family. In their study, individual investors who had invested through a partly-owned company accounted for an additional 10% on top of the business angels in the sample.

The result is that the investor no longer can claim to invest directly in the venture. Those vehicles can also leverage the investment and be relatively sophisticated, which would question further whether funds contributed that way can be considered as a direct investment. Business angels can also co-invest with other angels, with one of them acting in a leading or professional role, conducting the review or follow-up of the venture (Haar et al. 1998). In fact, some business angels' networks go beyond the traditional screening and contact services and may also offer vehicles to co-invest to their network members. Avdeitchikova et al. (2008) identified a grey area between business angels and institutional or formal venture capital caused by the requirements on how the investment was channeled, but advised to take into consideration whether the investor was the 'gatekeeper' that took the final investment decision (pp. 378).

> *Hence, whether the investment is carried out privately or through a company is not of primary interest. It is rather whether the business angel has a decisive influence on the investment decision that is the key.*

The use of that criterion, albeit slightly subjective, should help in differentiating business angels from institutional venture capitalists.

(5) Family investors. Relatives represent a significant proportion of informal investors and a largely under researched topic. From GEM data, it appears family investors invest lower amounts than business angels. Demographically, family investors tend to be younger and have a higher proportion of women than business angels. According to the Global Entrepreneurship Monitor (GEM) study, 48% of informal investors are family members of the entrepreneur (Bygrave et al., 2002). The GEM definition of informal investors is controversial, as some authors dispute the inclusion of family investors as informal investors (Mason and Harrison, 2000) and others do not consider risk capital the amounts they contribute (Wetzel, 1983).

On the other hand, there is consensus among researchers that family investors should be differentiated from business angels. A relative of the entrepreneur is likely to invest driven by more emotional considerations than a stranger (Mason and Harrison, 2008) and would possibly have different attitudes and behavior and lower risk perceptions (Wong and Ho, 2007). Furthermore, family investors do not constitute a market, as their investments are constrained by ties of blood and marriage (Mason, 2005).

The delimitation of business angels and family investors present nevertheless some minor challenges. The most obvious would be the

definition of family to use, from close family to any type of relative, and therefore what individuals could be considered as a family member. That is further complicated by the differences in the definition of family over time and across countries. The concept of family has changed in the last decades, narrowing in the USA and Europe, while in South America, South East Asia, North Africa or the Middle East family is regarded in a broader sense, including distant cousins to the second or third degree. For methodological purposes, it is preferable to exclude from the definition of business angels all those investors that are included in a broad definition of family.

For business angel research, the definitional issue with family investors should be relatively clear. It presents however a methodological problem for many studies that are based on a definition of business angels that excludes those investments but do not count on any filter to exclude those cases from the study. Even though the use of convenience samples is likely to exclude family investors from the study, the high proportion of family investors within the total informal investor population makes it advisable to use filters to specifically ensure investments by family members do not end up being part of the sample of a study on business angels, as in the Månsson and Landström (2006) study on Swedish business angels. We argue that the filters should focus on the investment rather than the individual, since it is possible that the same individual is both a family investor and a business angel in two different investments.

Future research on this area should determine the relative differences with the more professional segments of informal investing, the level of activity and recurrence of those investors, whether family investing is a breeding ground for business angels to be and provide facts to understand the high informal investor prevalence rates reported by the GEM for China and many emerging countries.

(6) Friends and other relations. Investors who are not relatives and have a preexisting connection with the entrepreneur present a similar challenge than family investors. This category includes friends, work colleagues, and neighbors. Bygrave et al. (2002) report that 39.5% of informal investments are done by this type of investor. Nevertheless, that type of connections cannot be assessed with the same clarity as family connections. Coveney and Moore (1998) for example exclude friends from their definition but include other type of acquaintances. Hindle and Lee (2002) define angels as unrelated investors but then report that 62% of investors in their sample had known their entrepreneur investee for more than three years before investing. The definition proposed by Wetzel (1987) (p.301: 'for discussion purposes, individual venture investors (business angels) are defined as ... unaffiliated with portfolio ventures, i.e. excludes founders, friends and relatives') presents implementation problems.

It is possible that investments done in ventures launched by an acquaintance are done by different reasons than investments on strangers' venture, or that the evaluation process is different due to the preexisting knowledge of the entrepreneur. This emotional bias can

explain the lower success rates for investors investing in friends' ventures, as reported by Lumme and Mason (1996). However, it is difficult to justify that business associates of the entrepreneur do not know the venture market and base their investment decision on personal considerations. The researcher trying to differentiate between related and unrelated investors is forced to define the relation and to draw a line between friends, business relations, acquaintances, neighbors, and unaffiliated investors. There are only few studies (Reitan and Sørheim, 2000 and Robinson and Cottrell, 2007) that use a narrow definition for related investors and report how they filter out those cases.

The same issues of comparability across time and regions that appear in differentiating family members are exacerbated with related investors. To complicate matters further, there is evidence suggesting that the boundary is blurred. Most studies (Wetzel, 1983; Gaston and Bell, 1986; Haar et al, 1988; Harrison and Mason, 1992; Reitan and Sørheim, 2000; Stedler and Peters, 2003) report that friends and business associates were the most frequent sources of deal flow for business angels. Business angels use friends as a referral network and its recommendation as an early selection criterion. Furthermore, the investor and the entrepreneur can become friends as they become acquainted with each other during the investment process and it is clear that emotional considerations also play a role in investors that have no preexisting link with the entrepreneur (Clark, 2008; Argerich et al., 2013).

In conclusion, it appears impossible to draw a clear and consistent distinction between friends and unrelated investors which is useful for research purposes. Even authors as Shane (2010) that defend the separation of friends' investors from the general population of business angels admit that 'it is often difficult to separate angel investments from investments made by friends because angels sometimes know the people whose companies they choose to invest in. Therefore, it's useful to consider the size of the market for equity finance that comes from both friends and angels, to ensure that the failure to differentiate investments by friends and angels doesn't cause us to misunderstand the patterns in angel investment activity' (pp. 38). This study supports Farrell's (2000) argument who defends that the exclusion of those investors from the definition of business angels has methodological problems and that 'including individuals of these types in angel research allows room for exploration about differences and similarities that may not have been uncovered otherwise. This is where new insights are gained' (pp.35).

(7) Net worth. In some studies, business angels are defined as high net worth or high income individuals. Usually, researchers don't report how these limits are defined, with some exceptions. Paul et al. (2003) set a barrier of GBP 10,000 available to invest and Wetzel (1987) defined angels as individuals with net worth over $1 million and annual income over $100 thousand. In other studies (Haar, Starr and MacMillan, 1989; Harrison and Mason, 1992; Tashiro, 1999; Robinson and Cottrell, 2007 and Wiltbank and Boeker, 2007), researchers start to

identify potential investors by looking for high net worth and high net income individuals, for example from tax filings, setting a limit in practice. That type of distinction has several problems. First, there is no consensus on where the barrier should be set and how to account for differences across countries, in terms of cost of living or propensity to tax evasion, if using tax filings. Second, the source of the information is not without problems, as individuals are unlikely to report their income and net worth in a transparent manner. Third, it is difficult to sustain that an individual with $ 1 less should be considered differently than another, when there are cases in which both have the same type of activity or even co-invest. In any case, the reasons for which individuals with lower assets or income should not be considered as business angels remain unclear. Defining business angels as millionaires facilitates the construction of a sample, as researchers can use preexisting records (i.e. income revenue tax records) as a first step towards finding a group of business angels. Nevertheless, investors that do not reach the $1 million net worth mark do exist and there is no evidence that they follow different practices as to be considered a different type of investor. Even though defining business angels as high net worth or net income individual investors can simplify data collection, it has no justification and can lead to substantial bias. Therefore, we argue that it would be therefore recommendable not to set any barrier for an investor to be considered a business angel in terms of the investors' net worth or net income.

(8) Investment size. As with the previous issue, investment size experiences similar problems. Furthermore, setting a barrier in investment size can have a major impact in the resulting study as current studies show a significant gap between average and median investment, with the average being significantly higher. Wetzel (1983) for example reported an average investment of $50,000 and a median of $20,000, with 36% of investments below $10,000. Most non-family informal investments tend to be in the €0 to €100,000 range, with a minority above €100,000. Defining business angels' activity as investments for example above €60,000 is likely to exclude most of that activity. Usually, there is no limit defined but the methodology chosen (for instance, constructing a convenience sample through a BAN) results in the exclusion of smaller investments. As Shane (2010; pp. 45) puts it, 'defining a single person's investments in the same company as both angel investments and non-angel investments just because one investment is $20,001, while the other is $19,999, doesn't make much sense'. Besides, the needed amount of investment could significantly vary depending on the type of the new venture and the country where it is performed.

(9) Investment type. Researchers can limit business angel investments to certain sector or growth phases. While there is a consensus around the fact that buying stocks in publicly traded companies does not constitute an informal investment, some studies narrow further within unquoted companies the definition of what a business angel investment is. The most usual limitations are to consider only

investments in the start-up phase or in high-technology sectors. In most cases, authors announce that business angels are those who make this type of investment, but do not ensure that the data they use does not contain those cases that do not comply. Wetzel (1983) found that 44% of investments were in the start-up phase. Therefore the choice to take out investments in other phases, and sectors, could have a significant impact, if effectively applied. Restricting the definition of business angels to those individuals that only invest in start-ups can help gain attention for the topic with researchers and public in general phase, but can lead to strange choices. It disregards for example the fact that the same individuals that do those investments also invest in companies in other stages or sectors. There are informal investors that focus on management or leveraged buyouts (Shane 2010) or even in turnaround situations. Applying a narrow definition to the case of an angel investor that invests in a start-up and then makes a follow-on investment in the same company some years afterwards in the growth stage can lead to strange outcomes. The same individual making the same type of contribution in the same venture would find the first one classified as an angel investment while the second one is not, but it is neither an investment in the institutional venture capital market. Therefore we support a wide definition that includes investments irrespective of the company sector or stage of development.

(10) Involvement. The last issue in defining business angels relates to the involvement that investors assume in the investee firm. Some authors defend that only those investors taking an active or 'hands-on' role

should be considered business angels. While it is tempting to depict business angels as investors contributing equity, knowledge and contacts, the application of that criterion is not without problems. First, the investors' role is not fixed and can change from one investment to the other, or even during the lifetime of one investment. Typically an investor can intervene in a critical phase (i.e. closing of a contract, change of team members) and remain passive during the rest of the time. Second, angel co-investments should be analyzed as two separate investments, those of the lead investor who would be an angel investor and those of the rest. Third, there is no consensus on how to separate active from passive investors. Even authors that choose to consider only 'hands-on' investors as business angels (Avdeitchikova et al. 2008) admit that 'it is not possible to define some general criteria for the level of investment activity and hands-on contribution that would qualify an investor as a business angel' (pp. 379).

It is clear that the active investor represents a more sophisticated type of investor and therefore a more interesting phenomenon for researchers. Nevertheless, defining angel investors as only those who take an active role in the investee firm is not advisable.

Depending on the approach to each of the 10 issues defined above, the business angel population can be very different. In terms of impact on the population under study, the most significant issues are those relating with the treatment of related investors. According to the GEM, for each

unaffiliated investor there would be as many as nine investors with a preexisting relation with the entrepreneur. Using a wide definition, the population under study can be as much as 10 times larger than with a narrow one. Also, setting limits in terms of net worth, investment size, involvement or timing can narrow substantially the target population and lead to conclusions formulated by investigating only the tip of the iceberg. As business angels grow in sophistication, setting the boundaries with corporate investors is likely to become more important.

Reviewing the 10 definitional issues, it appears that some of them are difficult to apply (for example, distinguishing related from unrelated investors), difficult to justify (limits on net worth, investment size or debt contributions) or make limited sense (including non-investors in research on business angels' investors). As a summary, and following the approach of several authors (Mason and Harrison, 1999; O'Gorman and Terjesen, 2006; Wong and Ho, 2007) we propose to define business angels as any individual that currently holds an investment made directly with his or her own money in an unquoted company, and is neither the entrepreneur nor his or her relatives (see proposed standards for the 10 issues in Annex A at the end of this chapter).

4. Definitional and sampling choices and subsequent results

The studies reviewed reveal that there is no standard definition for business angels in current literature and that there are dozens of potential

different definitions by combining different criteria in the 10 issues identified. Even in issues where there is apparent consensus among researchers, such as not excluding any investors because of small investment amount or not being an 'active' investor, the decisions taken to construct the sample are likely to influence the outcome in practice.

The sampling methods used also differ. As observed on Annex B at the end of this chapter, the preferred method among the studies reviewed is the contact through BAN/ BIS, with 9 studies using this method, followed by the snowball method, with 8. There are 6 studies that use a combination of methods. Initial studies used extensively samples built through the snowball method or a mailing list. Lately, most studies are using the contact through BAN/ BIS. Only in the last decade, a few studies were based in a general survey. Highly sophisticated angels (individuals with high-net worth, unrelated to the entrepreneur and networked) represent a small fraction of the informal investment market (Robinson and Cottrell 2007) but they are much easier to find.

The review of studies validates Farrell et al. (2008) claim of a link between the definition and the sampling method used. Studies using the snowball sampling method tend to use narrow definitions, while as studies not using a convenience sample favor wide definitions. Furthermore, as business angels belonging to a network are not representative of the general population (Shane, 2010) sampling techniques such as contact through BAN/BIS imply narrowing the definition even if that choice is not put forward.

The disparity of definitions and sampling methods leads to different results (Reitan and Sørheim, 2000). Most of the existing literature takes the individual investor as the unit analysis and compares demographic profiles. The fact that in most of the studies business angels are middle-aged men with high income is often used to justify that the profile for business angels is similar globally and that studies are comparable. When taking the investment as the unit analysis, the differences between highly sophisticated angels and the rest are very wide. Studies done from general surveys, such as Bygrave et al. (2002), return a different profile for the informal investor that is not a relative.

Average investment ranges from $1,548 to $664,000 in the studies reviewed. Furthermore, studies on business angels in the same country (Singapore, USA and UK) reveal substantial differences. In Singapore, Hindle and Lee (2002) reported an average investment of $210,000. Five years later, using the general survey method with data from the GEM, Wong and Ho (2007) found that Singapore business angels invested only $16,666.

The disparity of results indicates the impact that methodological issues around the definition and the sampling techniques have in business angels' research. By using different definitions and sampling techniques, researchers end up investigating very different investors and concluding that their attitudes, behavior and characteristics are indicative of the general business angels' population, only based on the fact that they are all middle-aged men.

5.   Conclusions

In an interview in 2007[30], Wetzel admitted that as a result of methodological issues, 'research on informal venture capital has always been seen as 'second-class' research'. Our review of 24 studies on business angels shows that researchers use different definitions, they often don't make their choice explicit, use definitions that are not then applied to their studies' sampling methodologies or, vice versa, take sampling options that imply a definitional choice without mentioning that. That renders comparability of results invalid, limits research on the field and can push researchers in need of clarity and rigor away from this field of study.

In order to cope with this current limitation in the literature, this chapter extends Farrell et al. (2008)'s work that identified six definitional issues, and identifies four additional issues in current business angels' literature. That allows us to assess where the most significant divergences lie or in which issues there is relative consensus to make a definition proposal based on these key definitional issues. Based on empirical ant theoretical aspects we suggest that a business angel is any individual that currently holds an investment made directly with his or her own money in an unquoted company, and is neither the entrepreneur nor his or her relatives. This chapter differs from previous studies as it tackles the problem by identifying the definitional issues, rather than just comparing definitions.

The definition proposal advanced here does not intend to be a conclusion, but rather intends to initiate future debate. For the sake of clarity, any

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[30] Handbook of Research on Venture Capital (2007). Edited by H. Landström. pp. 57.

alternative definition should propose a clear position in each of the 10 issues previously described. Researchers looking for a consensus on a definition for business angels should also take into account that some definitional choices are taken based on cross-sectional studies (for example, defining business angels as those who invest only in the venture start-up phase), but pose methodological problems if applied to longitudinal studies, which should be a priority in the agenda for future research on business angels (Kelly, 2007).

In case of doubt, it is preferable to choose a wide definition. Business angels are a relatively new topic of research. It is therefore not advisable to narrow the focus of study before fully understanding the phenomenon from a wider point of view. The market for business angels' investments seems to have a large base of small investments and a minority of large investments done by sophisticated angels (Månsson and Landström, 2006; Robinson and Cottrell 2007). By investigating smaller investments done by entrepreneurs' acquaintances, the business angels' phenomenon is put in context and new insights can be gained on how to promote their development. On the contrary, studying the narrow range of highly sophisticated angels provides evidence of best practices that are not representative of the general population and cannot be extrapolated.

Public policy has been driven by research on sophisticated business angels and has promoted measures addressed at them as establishing BANs or tax breaks for investments done through a specific purpose company (Mason, 2009). Given the low percentage of sophisticated business angels within the general non-family informal investor population, any measure aiming

to foster angel investments should be primarily targeted to those investors that might have a lower income, invest lower amounts, are maybe friends of the entrepreneur, but represent a much larger population than the sophisticated business angels profiled to date. While BANs might be useful in attracting millionaires to angel investing, it might be more effective to promote incremental angel investments from those having already invested a small amount in a friends' venture.

A consensus definition is a prerequisite for contextualizing angel investment and further development of business angels' research, away from descriptive studies. Even estimates on number of investors and the market size can differ by several multiples depending on the definition used, so the foundations of business angels' research need to be revisited. Business angels' scholars face now the challenge to go back to the base and establish the foundations of this field of research.

A. Annex A

Table 6. 10 definitional issues in business angels literature

Author	Wetzel	Gaston and Bell	Haar, Starr and	Aram	Harrison and Ma	Landström	Lumme and Mas	Coveney and M
Date	1983	1986	1988	1989	1992	1993	1996	1998
Area	New England, U	USA	East Coast, USA	Great Lakes, US	UK	Sweden	Finland	UK
Definitional issues								
Timing of investment	Investment done in prior 5 years	Investment done in prior 3 years	Investment done in prior 3 years	Investment done in prior 3 years	Investment done in prior 3 years	Investment done at any point of time	Investors having exited a deal	Investors having exited a deal
Investments in equity and debt	Only equity	Includes loans and loans guarantees	Unclear, but compares amounts to Wetzel (equity-only)	Includes loans and loans guarantees	Equity and loans	Equity and loans	n.a.	Unclear
Virgin investors	No	No	No	No	No	No	Provides results for active and potential investors	Included
Corporate angels	No	No	No	No. Only those investing their own funds	No	No	No	Includes companies doing 'angel-type investments'
Family investors	No: 'angels do not include founders, friends, and relatives' (p.23)	Yes, except entrepreneur's spouse and children	Yes: 'This opaque market consists primarily of friends and business colleagues' (p.11)	Yes	Yes	Yes	Yes, 43% knew the owner previously	Excluded
Friend investors		Yes		Yes	Yes	Yes		Excluded
Investor's net worth	Establishes sample representativity comparing it to the population	No limit	Builds sample looking for individuals with 'high enough discretionary	No limit, but describes initially 'individuals having	No limit, but builds sample looking for high income individuals	No limit	No limit	No limit
Investment size	No limit	No limit	No limit	No limit	No limit	No limit	No limit	No limit
Investment type	All types	Start-up and small business growth	Young start-up companies. It is not clear how other cases are filtered out	All types, distinguishes by growth stage and sector	New and growing ventures	All types, distinguishes by growth stage and sector	All types, but admits sample might be biased towards high-tech sector	Unquoted ventures
Investor's involvement	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	All types, but admits sample might be biased towards active investors	Both active and passive

Table 6 (cont.). 10 definitional issues in business angels literature

Author	Feeney, Haines	Hindle and Wenl	Tashiro	Reitan and Sörh	Bygrave, Hay, N	Hindle and Lee	Brettel	Paul, Whittam an
Date	1999	1999	1999	2000	2002	2002	2003	2003
Area	Canada	Australia	Japan	Norway	29 countries	Singapore	Germany	Scotland
Definitional issues								
Timing of investment	Investments done at any time	Individuals considering to invest in the next 12 months	Currently holding an investment	Investment done in prior three years	Investment done in prior three years	Currently holding an investment	Investment done in prior three years	Availability to invest in the future
Investments in equity and debt	Unclear	Only equity	Equity, debt, warrants and convertible bonds	Amounts invested, apparently including debt	Unclear, apparently included	Amounts invested, apparently including debt	Amounts invested, apparently including debt	Included ('personal exposure')
Virgin investors	Included 10% potential investors and 25% non-investors	Included	Excluded	Specifically excluded from sample	Excluded	Excluded, but provides separate results for potential	Excluded	Investors with funds available ('nascent angels')
Corporate angels	No	Direct investment without intermediaries	Excluded	Only direct investments	Excluded	Excluded	No	No
Family investors	Unclear. Informal investor, private investor and business angel are used as interchangeabl e terms	Unclear. Informal investor and business angel are used as interchangeabl e terms.	Included	Excludes specifically companies with a formal or family-related connection with the investor	Included	Excluded	Apparently included. One of the motivations for business angels is 'to help friends or family members'	Not mentioned in definition nor in sample construction
Friend investors			Included		Included	Excluded		
Investor's net worth	Defines angels as 'wealthy individuals'. It is unclear how this is applied	Defines angels as 'high net worth investors'. It is unclear how	No limit, but builds sample from high income population	No limit, but builds sample from high income population	No limit	No limit	No limit	No limit
Investment size	No limit	No limit	No limit	No limit	No limit	No limit	No limit	10,000 GBP minimum investment
Investment type	Small companies	Entrepreneurial ventures	Entrepreneurial business	Unlisted company	New firms	New registered and established companies	New companies	Private company
Investor's involvement	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive

Table 6 (cont.). 10 definitional issues in business angels literature

Author	Stedler and Peter	Mansson and La	O'Gorman and Te	Robinson and C	Wittbank	Wong and Ho	Wittbank	Shane	Current proposa
Date	2003	2006	2006	2007	2007	2007	2009	2010	
Area	Germany	Sweden	Ireland	Alberta, Canada	USA	Singapore	UK	USA	
Definitional issues									
Timing of investment	Investments done at any time	Investment done in prior five years	Investment done in prior three years	Investments done in 4 months of 2003	Investments done at any time	Investment done in prior three years	Investments done at any time	Unclear	Currently holding an investment
Investments in equity and debt	Unclear	Amounts invested, apparently including debt	Unclear, apparently included	Equity only	'Equity investment'	Unclear, apparently included	'Equity capital'	Equity, debt and warrants	Equity, debt and warrants
Virgin investors	Unclear	Excluded	Excluded	Specifically excluded from sample	Excluded	Excluded	Excluded	Excluded	Excluded
Corporate angels	No	Includes investments by wholly-owned or family-controlled	Excluded	Investments not done by individuals are considered formal VC	Excluded	Excluded	Excluded	Excluded	Excluded
Family investors	Unclear	Excluded	Included	Specifically excludes relationship investors (friends, family, business associates, employees) from sample	Unclear	Excluded	Excluded	Excluded	Excluded
Friend investors	Unclear	Included	Included		Unclear	Included	Included	Excluded	Included
Investor's net worth	No limit	No limit, but admits sample might be biased towards high-income	No limit	Limited to high net worth (< CND 5m) and high income (< CND 0.2m)	High net worth (< $1m) and high income (<$0.2m)	No limit	No limit	No limit	No limit
Investment size	Unclear	No limit	Amounts between €100 and €1,000,000	No limit	No limit	No limit	No limit	No limit	No limit
Investment type	Unquoted companies	Unquoted companies	New firms	Unlisted company	New ventures	New firms	Young unquoted companies, unquoted business	Unlisted company	Unquoted companies
Investor's involvement	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive	Both active and passive

B. Annex B

Table 7. Sample size, sample method and results in business angels literature

Author	Wetzel	Gaston and Bell	Haar, Starr and	Aram	Harrison and Ma	Landström	Lumme and Mas	Coveney and M
Date	1983	1988	1988	1989	1992	1993	1996	1998
Area	New England, U	USA	East Coast, USA	Great Lakes, US	UK	Sweden	Finland	UK
Sample size	133	436	121	55	86	52	38	467
Sampling method								
Mailing list			X		X			
Contact through investees		X		X		X		
Snowball method	X				X	X	X	
Contact through BANs/ BINs								X
General survey								
Investor profile								
Age		47	41-60	47.2	53	54	54	49
Men	95%	98%		99%		95%	98%	
Entrepreneurs	75%	83%		80%	57%	96%	95%	~67%
Investment	50,000 USD	113,656 USD	132,867 USD	98,857 USD	10,000 GBP	500,000 SEK	stments below 1	75,000 GBP

Author	Feeney, Haines and Riding	Hindle and Wenban	Tashiro	Reitan and Sörheim	Bygrave, Hay, Ng and Reynolds	Hindle and Lee	Brettel	Paul, Whittam and Johnston
Date	1999	1999	1999	2000	2002	2002	2003	2003
Area	Canada	Australia	Japan	Norway	29 countries	Singapore	Germany	Scotland
Sample size	194	36	10	425	1440	29	48	140
Sampling method								
Mailing list	X		X	X				
Contact through investees						X	X	
Snowball method	X	X					X	
Contact through BANs/ BINs	X			X				X
General survey					X			
Investor profile								
Age		40	60	47	35-54	40-49	48	~50
Men		100%	100%	97%	68%	90%		92%
Entrepreneurs	32%	n.a.	70%	46%		72%	75%	45%
Investment	225,000 CAD	98,721 USD	664,000 USD	76,300 USD	548 USD per yea	210,000 USD	200,000 USD	50,000 GBP

Author	Stedler and Peters	Mansson and Landstrom	O'Gorman and Terjesen	Robinson and Cottrell	Wiltbank	Wong and Ho	Wiltbank	Shane
Date	2003	2006	2006	2007	2007	2007	2009	2010
Area	Germany	Sweden	Ireland	Alberta, Canada	USA	Singapore	UK	USA
Sample size	232	253	131	1808	539	161	158	
Sampling method								
Mailing list		X						
Contact through investees		X		X				
Snowball method		X						
Contact through BANs/ BINs	X	X			X		X	
General survey			X			X		
Investor profile								
Age	48	56	38.4		57	34.8	53	45-54
Men	95%	96%	69%		86%	78%	93%	
Entrepreneurs	55%	90%	18%		High	30%	73%	88%
Investment	151,515 EUR	303,571 EUR	10,040 EUR	41,324 CAD	191,000 USD	16,666 USD	42,000 GBP	10,000 USD

Chapter 4. Business angels investment practices

1. Demographic profiles for business angels

The knowledge about business angels is based on 'first-generation studies', undertaken following Wetzel (1983) seminal work. Those studies tried to replicate Wetzel initial study in other regions of the USA first and since 1992, in other countries. The research was mainly descriptive, intended to establish the size and importance of the angel investing phenomena and to describe the main traits of angel investors.

The limitations in the methodologies used in those studies, outlined in chapter 3, would lead to take the results with caution. In any case, the conclusion from the analysis of those limitations is that current business angels' research describes and analyzes a small part of the total business angels' population.

Given the current status of research, the results described here should be taken with an additional caveat, as they are likely to represent a fraction of the total population. In all cases where that is possible, a warning is included to contextualize the results.

Business angels found in first-generation studies tend to be middle – aged men with a certain affluence of means and past experience as entrepreneurs. Looking for high-end sophisticated and networked investors leads to find individuals that invest relatively high amounts, which is correlated with higher age, net worth and income. Alternative

studies done with general population samples return a more diverse profile (see table 1 for comparison of demographic profiles).

Age

In terms of age, the average age reported ranges between 34.8 years (Wong and Ho, 2007 for Singapore) and 60 years (Tashiro, 1999 for Japan). Out of the 21 studies reviewed that provide a figure for investors' age, the total is 49 years. There is a correlation between investors' age and narrowness of definition and sample. Thus, studies with small samples and narrow definitions return an average age between 50 and 60 years old (Landström, 1993; Lumme and Mason, 1996 and Tashiro, 1999). On the other hand, studies based on wider samples and definitions give an average age between 35 and 40 (O'Gorman and Terjesen, 2006 and Wong and Ho, 2007). The Global Entrepreneurship Monitor survey found angels between the ages of 18 and 76, with roughly one third between 45 and 54 years old, one third below 45 years and another third above 54. It appears as if the link between age and propensity for angel investing is only valid for high end business angels as there is no link when working with wider samples (Shane, 2010). Nevertheless, young business angels (in their twenties or thirties) do exist and constitute a high proportion of the general business angels' population. Overall, it is reasonable to believe that amounts invested by business angels increase with age and that investments by angels in their late thirties are significantly smaller from investments by angels in their fifties. Thus, younger business angels would be below the radar of studies using convenience samples.

Table 8. Demographic characteristics across studies[31]

Average	Minimum	Maximum	Average	Studies reviewed
Age (years)	34.8	60	49.2	21
	Singapore (Wong and Ho, 2007)	Japan (Tashiro, 1999)		
Men (% of total)	68%	100%	91%	17
	29 countries (Bygrave et al., 2002)	Australia (Hindle and Wenban, 1999) and Japan		
Entrepreneurs (% of total)	18%	96%	66%	19
	Ireland (O'Gorman and Terjesen, 2006)	Sweden (Landström, 1993)		

One of the unexplored areas of research in business angels is their evolution over time. The difficulty in finding representative samples of angel investors is compounded when researchers try to follow them during several years. Longitudinal studies would be needed to understand how angels evolve in their investment activity and to validate whether the well profiled high end business angels are the result of a gradual evolution from small investments.

Gender
Angel investors are mostly male. First-generation studies report that angels found were between 90% and 100% male in all countries. However, studies based on GEM data return a much more balances situation, with a majority of males between 68% (Bygrave et al., 2002) to 78% (Wong and Ho,

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[31] Self-elaboration.

2007). The average of the 19 studies reviewed is 91% of male investors, but most of the studies available are first-generation studies with convenience samples. There is a negative correlation between size of sample and % of men in the sample. The two studies with 100% of men correspond to samples of 10 and 36 individuals. O'Gorman and Terjesen (2006) compared male and female informal investment practices for Ireland and did not find significant differences in amounts invested. However, it turned out that women informal investors were more likely to be close family members. 64.7% of women informal investments were done in ventures by a close relative, while that percentage dropped to 50% for men investors. Also using GEM data, Szerb et al. (2007) found that the % of women investors was negatively correlated to the size of investment. Thus, women investors represented 30% of investments above USD 10,000 and 44% of investments below that limit. Wong and Ho (2007) found that women investors were significantly younger than men, but given the fact the sample was extremely small that evidence was not conclusive.

Based on first-generation studies, policy makers were concerned for the lack of women investors and launched programs to foster business angels' investments by women. That worry might be misplaced given the growing numbers of female investors found when using more representative samples.

Entrepreneurial experience
Investments from business angels are often referred to as 'smart money', as it is widely believed that business angels will contribute their experience as entrepreneurs to the venture and add value through their active

involvement (Kerr et al., 2010). That would make business angels much more valuable investors compared to family investors.

The review of studies on business angels is not conclusive on this. The percentage of angels with entrepreneurial experience ranges from 18% to 96%. Authors refer to 'entrepreneurial experience' in a variety of ways, which might explain the wide range of findings. Depending on the study, an investor with 'entrepreneurial experience' can be someone currently managing a business launched by him or herself or someone having managed a business. Research indicates that a majority of business angels have started a business at some point of time. Although there is a significant proportion of business angels that are currently managing their own venture, it is not clear that they represent a majority. Furthermore, that is not a distinctive trait of business angels, as family investors seem to have similar percentages of individuals managing their own business, according to GEM data. Also, entrepreneurs do not show a higher propensity to become angel investors, compared to the rest of the population (Hamilton, 2004). Duxbury et al. (1996) compared investors to non-investors personality profiles in Canada and found that angels shared certain personality traits with entrepreneurs.

It is also unclear to what extent entrepreneurial experience influences investment activity. In fact, one of the few studies on angel returns found that entrepreneurial experience is not correlated with investment returns (Wiltbank and Boeker, 2007), which would question the connection between entrepreneurial experience, propensity to become angel investor and ultimate success in investing.

Occupation

Contrary to popular belief, most business angels are not retired. Several studies (Reitan and Sørheim, 2000; O'Gorman and Terjesen, 2006; Wong and Ho, 2007) report that business angels not working amount to a minority below 20% of the angels population. That ratio, taking into account the average age reported in the same studies, is low.

The main occupation for business angels is business owner and manager, followed by self-employed (Aram, 1989; Harrison and Mason, 1992; Landström, 1993; Tashiro, 1999; Reitan and Sørheim, 2000; Hindle and Lee, 2002; Paul et al., 2003 and Stedler and Peters, 2003). The latter category encompasses doctors and lawyers mainly. In any case, the involvement with investee companies (see following section on investment profiles) requires that investors hold jobs that are not subject to strict work schedules.

Income and net worth

Profiled angels are relatively well off, but not extraordinarily rich. Annual income reported is around 100,000 USD and net worth is between 1 and 2 million USD in liquid assets, although in some cases is significantly higher (Tashiro, 1999 for Japan and Månsson and Landström, 2006 for Sweden). Angels usually invest 20-25% of their net worth in unquoted ventures.

Geographic distribution

Business angels tend to invest close to the places they live and work. Studies for the USA (Gaston and Bell, 1986; Haar et al., 1988 and Aram, 1989) mention that most investments are done within 50 miles distance. In some cases, venture proximity within 50 miles is a must for some investors

(Wiltbank, 2009). Active investors need to have their investees close by in order to follow them up without losing excessive time in travel. That led to claim that business angels do not have the same issues of regional distribution (regional equity gap) found in institutional venture capital, where most funds are concentrated in relatively few locations. In a study for Sweden, Avdeitchikova (2009) found that business angels' investments were not distributed evenly across regions, but tended to cluster around universities and innovation hubs.

2. Investment profile

Angels invest in many different sectors. O'Gorman and Terjesen (2006) and Shane (2010) report for example investments in the following sectors for Ireland and the USA:

Table 9. Investments by sector of activity[32]

Sector	Ireland	USA
• Services (B2B and B2C)	28.0%	32.9%
• Retail/hotel/restaurant	14.7%	17.3%
• Manufacturing	13.3%	11.1%
• Agriculture/forestry/hunting/fish	10.3%	0.2%
• Mining/construction	8.9%	5.3%

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[32] Adapted from O'Gorman and Terjesen (2006) and Shane (2010).

- Transport/communications/utilities   7.3%   1.9%

- Health/education/social services   7.3%   8.7%

- Finance/insurance/real estate   5.9%   12.4%

- Wholesale/motor veh. sales/repair   4.4%   9.3%

- Other   0.9%

When working with GEM (Ireland) or U.S. Census (USA) data, the profile that emerges in terms of industry distribution of business angels' investment contradicts usual perceptions on business angels. They invest in a variety of sectors and are by no means concentrated in high growth or high margin sectors. They do however show a preference for investing in sectors in which they have experience (Aram, 1989 and Wiltbank, 2009).

In initial studies done in the USA, manufacturing and finance/insurance/ real estate used to be the main sectors in which angels invested. In later studies and especially since 2000, internet companies and new sectors in general have taken over following the changes in the structure of economy. In Germany, Stedler and Peters (2003) found 52% of investments in IT companies and a further 21% in life sciences. The preeminence of services and retail in the Ireland and USA studies might be attributable to the use of a wide definition of business angels. It is highly possible that high-end sophisticated angels tend to concentrate their investments in high-growth sectors, as found in Germany when working with angels from BANs only. That preference dilutes with angels doing smaller and less frequent investments.

Table 10. Average investment by study[33]

| Country	Year	Amount (€)
29 countries	2002	1,122
USA	2010	7,246
Ireland	2006	10,040
Singapore	2007	12,077
UK	1992	12,100
Alberta, Canada	2007	27,257
New England, USA	1983	36,232
Scotland	2003	36,232
UK	2009	50,820
Norway	2000	55,290
Sweden	1993	55,900
Australia	1999	71,537
Great Lakes, USA	1989	71,636
USA	1988	82,359
UK	1998	90,750
East Coast, USA	1988	96,280
Finland	1996	127,000
USA	2007	138,406
Germany	2003	144,928
Canada	1999	148,410
Germany	2003	151,515
Singapore	2002	152,174
Sweden	2006	303,571
Japan	1999	481,159
Mean		**98,502**

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[33] Self-elaboration.

In terms of stage of development, business angels seem to invest mostly in start-ups but not only in start-ups. The percentage of start-up investments ranges from 27% (Landström, 1993) to 83% (Stedler and Peters, 2003).

The amount invested in angel investment is unclear. As highlighted in chapter 3 and illustrated in table 10, current studies give very different numbers, ranging from €1,122 to €481,159. A possible explanation is that angel investments are structured as a pyramid with a very broad base. As the definition of business angel opens up, a higher proportion of that base is included thus changing the average.

In one of the studies that provide information on the distribution of the average investment figures (Månsson and Landström, 2006), it appears that a minority of investors (10%) were investing more than 2.3 times the average, while a vast majority (66%) were investing less than 30% of the average. That skewed distribution, combined with varying definition might impact the findings.

Therefore, it is advisable to refer to studies working with general survey data (O'Gorman and Terjesen, 2006 and Wong and Ho, 2007) or public registries data (Robinson and Cottrell, 2007 and Shane 2010). According to those studies, the average business angel investment ranges between € 7,200 (USA) and € 27,100 (Canada). That is significantly lower than the figures obtained by initial studies (see figure 5).

Figure 5. Average investment compared to sampling methodology[34]
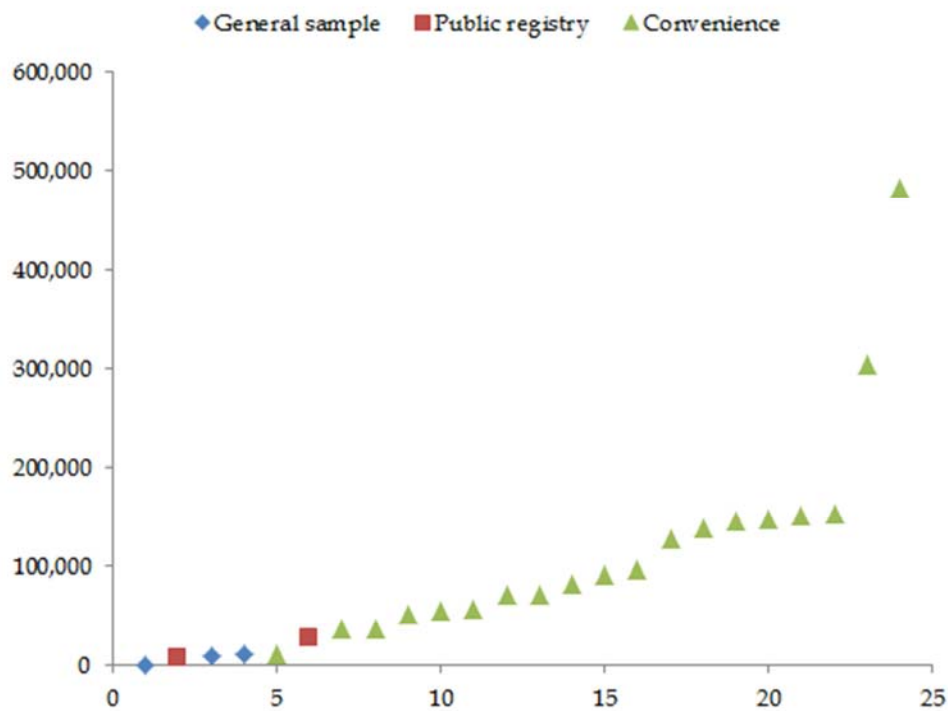
3.   Investment process

According to most studies (Gaston and Bell, 1986; Haar et al., 1988; Harrison and Mason, 1992; Landström, 1993; Tashiro, 1999; Reitan and Sørheim, 2000; Hindle and Lee, 2002; Stedler and Peters, 2003 and Shane, 2010) business angels source their deal flow primarily from friends, acquaintances and business associates. Secondary sources are banks and intermediation services, BANs or newspapers.

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[34] Self-elaboration.

Direct approach from unrelated entrepreneurs is unusual as business angels rely heavily in referral networks. In fact, the majority of angels don't do proactive search and will accept to consider only deals referred to them by a trusted source (Prowse, 1998).

Angels typically study between 3 (Landström, 1993) and 9 (Stedler and Peters, 2003) investment proposals per year. It is not clear how many proposals they actually receive on average, as current studies report proposals considered or studied in-depth and may exclude proposals presented to them or those rejected at very initial stages. Tashiro (1999) provides the ratio of number of investments to number of investigations, which apparently excludes initial phases of screening, where most proposals are rejected. Although studies working with BANs return relatively high numbers of proposals per year, the figures are still far from the presentation flow of an average BAN. That would provide an indication that the projects actually received are much higher.

Despite that, rejection rates or the ratio of investment deals to proposals considered are high, 83% according to 8 studies that provided that information.

The main criterion for investment is the team (Haar et al., 1988; Van Osnabrugge, 1998; Hindle and Wenban, 1999; Paul et al., 2003; Stedler and Peters, 2003 and Sudek, 2007). Then, most authors cite product uniqueness and market growth in the second and third place. However, as discussed in depth in chapter 5, it is unclear to what extent business angels actually follow the criteria they report or whether they follow the same criteria in all phases of the investment process. Financial criteria are consistently not

mentioned among the most important criteria, although valuation is an important reason for calling a deal off.   It appears as if financial considerations are more of a deal-breaker than a deal-maker. No deal would be closed based on an attractive valuation but deals than comply with all the criteria would be discarded due to a high valuation.

Business angels tend to conduct due diligence of potential investments by themselves and rarely rely on external professional services. Usually, the due diligence process takes 20 hours for the business angel (Wiltbank, 2009), that are spent as follows:

- 33% of time on market and customers
- 33% on technology
- 22% on competition
- 12% on references.

Despite that the hours spent on due diligence are correlated with returns (Wiltbank, 2009), there is a significant portion of business angels that does not do any due diligence on the prospective investee (Van Osnabrugge, 2000). Sørheim (2003) found that business angels with industry expertise and focus tended to do less due diligence than generalist or regional-based angels.

There are evidences that the business angels' investment process is less structured and rigorous than that of venture capitalists (Van Osnabrugge, 2000). They meet less with entrepreneurs, spend fewer hours on reviews and are less consistent with criteria employed. In general, angels work with less information than venture capitalists, which has led some authors

to propose that angels place greater emphasis on the entrepreneur (Fiet, 1995). Nevertheless, empirical support for that is contradictory (see chapter 5).

Angels use co-investment as a mechanism to dilute risk. All studies reviewed except that of Harrison and Mason (1992) for the U.K. report that a majority of angels prefer to co-invest. Surveys in the U.S., Sweden, Norway, Germany and Scotland reported that more than 50% of the investment deals had more than 1 investor. It is interesting noting that Aram (1989), that worked by contacting investors through investee companies found the highest % of co-investment, 92% in total, with 4.4 investors per deal. Usual co-investors are other angels from their referral networks. The cases where angels co-invest with venture capitalists are rare.

The involvement in the investee firm is also inconclusive. In some studies, profiled angels have a passive role, limited to receiving reports and attending board meetings (Harrison and Mason, 1992; Tashiro, 1999 and Reitan and Sørheim, 2000). In others, investors take a hands-on role, getting into the operations of the company or doing consulting work (Paul et al. 2003 and Stedler and Peters, 2003). It might be the case where angels that co-invest (as many as 4 or 5 investors per venture) assign the leading role to one of the members of the investment syndicate while the others take a passive stance. On average it appears that angels talk with the entrepreneur once a week and meet personally once a month, for Board meetings or less formal appointments. An average angel spends 41.9 minutes per week following an investee company (Shane, 2010). Politis

(2008) reviewed 14 previous studies on business angels and defined four different roles of value add business angels.

- Sounding board/ strategic role. Adds value by building and protecting the valuable resources of the firm, following resource based theory.

- Supervision and monitoring role. Minimizes conflicts of interests by means of formal control mechanisms, thus reducing agency issues (the entrepreneur pursuing interests that are not aligned with those of the investors).

- Resource acquisition role. The angel would create and maintain a stable flow of critical resources (not only financial), in line with resource dependency theory.

- Mentoring role. The investor minimizes conflicts of interests by means of informal control mechanisms, following the theories of relational governance.

Those four roles are not distinct and are combined by the same investor.

Månsson and Landström (2006) obtained detailed data for follow-up investments, which appeared to be common in business angels. For 5.6 investments in the last 5 years, there were 2.9 follow-up investments.

Most angels expect to hold their investment for a period of 3 to 7 years, with 5 years being the median answer. A trade sale is the most usual expected exit, with only a minority expecting an IPO or sale to the entrepreneur (Lanström, 1993; Mason and Harrison, 2002 and Stedler and

Peters, 2003). Given the high risk of angel investments the most frequent exist route is liquidation.

4. Investment motives

First-generation studies did not focus on the motivations for business angels, as it was implicitly understood that their motivation was financial (Wong and Ho, 2007). In fact, motivation for business angels appears to be a mix of financial and emotional reasons. Financially, business angels expect to make a return through capital gains (see next section). Emotionally, several studies give different reasons, from 'fun' to 'promote entrepreneurship', 'give back to society' or 'personal challenge'. In some studies, personal motives seem to be the most important (Tashiro, 1999; Brettel, 2003 and Stedler and Peters, 2003), while in other the financial ones are predominant (Haar et al, 1988; Harrison and Mason, 1992; Paul et al., 2003).

Sullivan and Miller (1996) divided informal investors according to their motivation and identified three different groups: hedonistic, economic, and altruistic investors. They built those three groups according to the motivations reported by investors.

- Hedonistic investors were driven by motivations such as the enjoyment of entrepreneurial role, fun of having interesting investment, exert influence over an investment, positive community recognition.

- Economic investors quoted tax benefits, income, nonfinancial perks and capital appreciation as the main reasons to invest.

- Altruistic investors mentioned more 'social' motives such as help friend/family member, support new business and support socially beneficial product.

Van Osnabrugge and Robinson (2000) also found similar three different types of motivation in business angels. In general it appears that the richer the business angels are, the more emphasis is put on altruistic motives. Millionaire angels found in Japan or Germany are motivated by non-financial rewards, possibly because only a small percentage of their substantial net worth is allocated to angel investments.

Business angels are not only motivated by financial considerations, but they take into account personal and even social ones. It is unclear to what extent different motivation in individuals translates into different investment processes and criteria.

The determinants of business angel investing have not been explored in depth by researchers. Propensity to invest might be driven by the combination of personality traits, specific motivation, or direct knowledge of an entrepreneur. Freear et al. (1994) compared angels to potential investors and found little differences. Business angels were more comfortable in dealing with risk as they were willing to invest in the start-up phase and make bigger investments per venture. Also, Duxbury et al. (1996) investigated the personality traits of Canadian informal investors and those of a control group of similar individuals that were non-investors.

Compared to non-investors, angels in the study were 'most likely to have an internal locus of control, very high needs for achievement and dominance, and moderately high needs for affiliation and autonomy. They are intrinsically motivated, highly involved with their work and their investments, very satisfied with their jobs, and moderately satisfied with the performance of their investments. Angels report relatively high levels of perceived stress (a significant proportion of which may be attributed to the performance of their investments), and cope with this stress by working harder' (pp. 53). Those traits would lead to believe angels are motivated by a large extent by non-financial considerations, given that they showed high levels of intrinsic motivation.

Maula et al. (2005) studied the drivers for informal investment in family investors and business angels. They found that demographic traits (income, age, location) were not significantly different and identified personal familiarity with entrepreneurs, status as an owner-manager in a firm, perceived skills in starting a new business, and gender (for non-family investments) as drivers.

Mason and Harrison (2002) investigated the barriers to informal investment and identified 15 factors that influenced on the investment activity of business angels, which they classified in three categories: taxation, economic environment, and the stock market. For each factor investors reported to what extent it encouraged or discouraged investment

- Income tax relief on amounts invested in unquoted companies: encouraged, 74% / discouraged, 3% / no influence, 23%
- Higher capital gains tax: 8% / 51% / 41%

- Lower capital gains tax: 52%/ 5% /43%

- Higher tax on dividends: 11% /43% /46%

- Lower tax on dividends: 43% /5% /52%

- Increasing economic growth: 62% /2%/ 36%

- Stable/decreasing economic growth: 11% /27%/ 60%

- Rising interest rates: 9% /36%/ 55%

- Stable/falling interest rates: 36% /3% /61%

- High inflation: 14% / 21% /65%

- Low inflation: 22%/ 7% /72%

- Rising stock market: 28%/ 15%/ 57%

- Stable/falling stock market: 16%/ 17%/ 68%

- Continued presence of Alternative Investment Market [AIM]: 29%/ 3%/ 68%

- Absence of Alternative Investment Market [AIM]: 3%/ 23%/ 74%

The most important factors tended to be linked with taxation while the status of the stock market was relatively irrelevant. Income tax reliefs and lower capital gains for informal investment have a direct impact on the investment net performance and have been adopted in the last decade in several countries. The authors alert that the effectiveness of such incentives might be diluted if regulation is complex. Similarly, tax on dividends did not have such a big influence on the decision to invest, maybe because most of the performance on such investments tends to be made through capital gain.

The economic environment had relative influence on the decision to invest with a environment of low inflation, stable interest rates and economic

growth resulting in a higher propensity to make informal investments. Conversely, high inflation or raises in interest rates had negative impact on informal investing.

Finally, the evolution of the stock market had also a secondary importance for informal investing compared to taxes. The stock market evolution reflects on one side the profitability of investment alternatives or the opportunity cost to make informal investments and on the other the potential for exiting an investment through an IPO.

Given the very limited numbers of business angel investments that exit through an IPO it is probable that the first impact is more important than the second one. In any case, Mason and Harrison asked separately about the main stock market and AIM (in nascent form at the time of the study).

5.   Investment returns

In terms of expectations, angels are relatively well aware of the risk of their investments. They expect to have a 20 to 30% annualized return (IRR: internal rate of return) to compensate for the high percentage of expected losers in their portfolio. According to studies for the USA (Wiltbank and Boeker, 2007) and the UK (Mason and Harrison, 2002 and Wiltbank, 2009), the actual picture is not far from that.

There are few studies on returns on business angels investment. The general difficulty to obtain data for business angels is compounded in this topic. Scholars face the choice either to carry out longitudinal studies

during long-time periods or to rely on recollection of distant memories, as current exited investments can be several years old.

Table 11. Angel returns[35]

Author	Mason and Harrison	Wiltbank and Boeker	Wiltbank
Date	2002	2007	2009
Country	UK	USA	UK
IRR%		27%	22%
Multiples (x)		2.6	2.2
Holding period (years)	4	3.5	3.6
Investments >10x	14%	7%	9%
Investments <1x	47%	52%	56%
Portfolios <1x		39%	

Angel investing seems to be a high risk activity, with around 50% possibilities of exiting at a loss. Furthermore, the cases of total loss outnumber partial losses, with 37% and 15% of the cases respectively in the USA study. That is possibly attributable to the type of investment, mostly in the start-up phase and with many intangible assets.

However, there is a minority of 'stars' or top performing investments that make multiples of 10 times or more and compensate for the losses. In this context a diversification strategy through co-investments and small tickets

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[35] Adapted from Harrison and Mason (1992), Wiltbank and Boeker (2007) and Wiltbank (2009).

is appropriate, as the business angel making only one investment has a high probability of incurring a loss.

Those figures are not comparable with IRR calculations from venture capital funds as they do not factor in the hours spent by the business angel in his or her activity. That is probably attributable to the difficulty of getting accurate reported data for the hours devoted to investment activity. Other issues might be how to identify and allocate for the time spent in reviewing projects in which no investment was finally done. According to Shane (2010), IRR for the USA would be 8 points lower (19% IRR) if the cost of opportunity of the hours devoted to investment evaluation and follow up would be included.

Two further criticisms are made to those calculations by Shane (2010). First, the few available studies on angel returns correspond to samples of sophisticated angels, which allegedly can be more successful than the average business angel. Second, sample construction can lead to bias because successful angels are more likely to report their performance than unsuccessful angels.

Taking into account all of the above, there is no evidence that angel investment is a profitable activity for the investor at all. Although most studies report a moderate level of satisfaction with investments by business angels and their willingness to make further investments of that type, it is unclear to what extent individuals sampled are representative, their answers are not biased towards successful investment and their calculated returns are correct.

Beyond the returns for the investor, the question of economic impact of business angels investing is unclear. It is widely assumed that angel investing has a positive outcome for society and policy-makers working under this assumption have designed and implemented measures to foster the activity. However, there has been no empirical evidence on that. As Baty and Sommer (2002) put it: 'it is very hard (but not impossible) to measure the economic impact of angel investors' actions. We know the impact is huge. Without these people, we [in the USA] would be in the same situation as Japan or Germany: plenty of VCs, but no deals. (pp. 292)'.

The Global Entrepreneurship Monitor survey would be an obvious point of departure for investigations on the matter and could first establish an initial link between macroeconomic and cultural variables and propensity of individuals to make angel investments. The aggregate results by country provide initial indications on some variables might influence angel investment such as GDP per head (positively), banking development (negatively), or the sociocultural prevalence of family ties (positively). With datasets covering several years, the impact of angel investment on subsequent years GDP growth could be investigated.

6. Typology of angels

Business angels are heterogeneous. Despite some broad similarities in the demographic profile (i.e. age, gender), there are important differences when looking one step further to the ABC (attitudes, behavior and characteristics). Hence, several attempts were done to define subcategories

of angel investors. As the general definition of business angels is still controversial, the types of business angels discussed need to be assessed in the light of the definition adopted (or the lack of).

Gaston (1989b) described 10 types of angel investors but did not detail the methodology followed to establish those segments. His work however validated the heterogeneity of the business angels' population. Landström (1992) categorized angels according to their view on the investee venture. On one hand there would be investors that perceived the firm as a 'subject', more driven by emotional considerations, more involved and relying on informal interaction. On the other, investors perceiving the venture as an 'object' would be driven mainly by financial gain, be more likely to take a passive role and rely on formal interactions. Coveney and Moore (1998) classified angels in 6 types according to their background and their investment activity (see figure 6).

- **Entrepreneur Angels**. They make frequent and large-scale investments and are more likely to have entrepreneurial experience than the rest. They tend to get more involved with investee ventures and are wealthier than the rest. They invest for financial gain but consider other motivations.

- **Corporate Angels**. No individual investors, but companies investing for financial gain mainly.

- **Income Seeking Angels**. Individuals that are active (one or two investments every 3 years), but make smaller investments, and are likely to look at investee companies as a source of income and eventual employment.

- **Wealth Maximizing Angels.** Relatively rich, although not as well of as entrepreneurial angels. They invest mostly for financial gain and are not likely to get involved in investee ventures.

- **Latent Angels.** Individuals having made angel investments in the past (not in the last three years), currently inactive. Likely to be driven by location criteria.

- **Virgin Angels.** Individuals that have not made any investment yet and are looking for suitable proposals.

Figure 6. Types of angels[36]
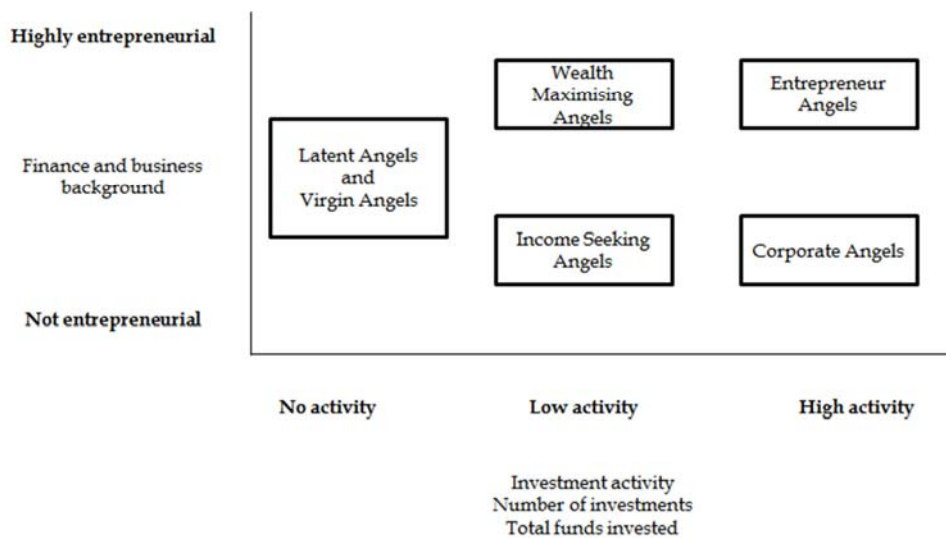
The classification of Coveney and Moore illustrates the need to depart from a clear definition. Within the six types there are three that would not fit in

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[36] Adapted from Coveney and Moore (1998).

the definition of business angel according to most authors. Latent and virgin angels are not investors and corporate angels are not individuals.

Sørheim and Landström (2001) run a cluster analysis on a sample of Norwegian informal investors (defined as unrelated investors, thus excluding friends and family investors). They defined four clusters depending on the level of activity and the entrepreneurial competence of investors, as Coveney and Moore (1998).

- **'Lotto investors'** are characterized by a low investment activity level and a low competence in founding and running entrepreneurial ventures.
- **'Traders'** show a high investment activity level but a low competence in founding and running entrepreneurial ventures.
- **'Analytical investors'** have a low investment activity level, but possess a fairly high competence.
- **'Business angels'** are characterized by a very high investment activity level, in addition to possessing high competence.

The criterion of level of activity is shared with Coveney and Moore and appears to be a relatively objective manner to segment business angels, compared with other criteria.

Farrell (2000) recommended differentiating novice from habitual informal investors. Novice angels invest once and may or may not invest again. Habitual informal investors have decided to re-invest. The impact of habitual investors over time is much bigger than those of novice investors, yet the type of descriptive studies used has failed to measure this. Farrell

theorized that 'it is likely that the motivations, attitudes, and cognitive processes are very different between those who invest once and those who go on to invest, but distinguishing characteristics are not yet recognised. Pursuing understanding of these differences may uncover meaningful insights for future action and policy development (pp. 43).'

Using the same sample as Sørheim and Landström (2001), Erikson (2007) divided investors according to the type of investments they make. Austrian investors would invest in opportunities created due to market differences, while as Schumpeterian investors would prefer ventures based on disruptive innovations (mostly technological).

Settling the issues on business angels' definition should be a prerequisite for segmenting the angels' population. That is relevant when several of the existing classifications include non-investors. Beyond that, the existing classifications provide an indication that activity, investment preferences and involvement might be important variables to segment angels. However, they do not provide objective indicators to implement the proposal operationally.

In terms of activity, it was proposed in chapter 3 that holding an investment should be the indication that an individual is an angel investor. Considering that, the experience and intensity of that activity could be potential measures for segmenting investors in a meaningful way. Experience could be defined in number of past investments, years of investing experience, or number of exits. Research on the life cycle of the investor will provide clearer indications on that. The intensity of the

activity could be measured in the number of investments being held simultaneously.

7. Theories on angel investing

The link of business angel investing to mainstream theories from other fields is a relatively under-researched aspect of business angels' research. In order to explain business angels investing, researchers refer to four different theories: social psychological theory of planned behaviour, sociological theory of social networks, socio-psychological theories of interpersonal trust and economic theory of household portfolio allocation. A brief summary of each one is provided below.

<u>Social psychological theory of planned behaviour</u>, based on Ajzen's work (1991) provides a framework to understand the decision of certain individuals to make an informal investment. The theory of planned behaviour splits the drivers of human behaviour in three beliefs: behavioural beliefs (about the consequences of certain behaviour, which lead to attitudes towards the behaviour), normative beliefs (about the expectations of other people, leading to subjective norms) and control beliefs (about the presence of factors that may affect the performance of the behaviour, which produce perceived behavioural control). Perceived behavioural control would accommodate for those elements that are beyond the individual's control. That would be especially relevant for business angels, given the high risk of their investments and the low level of volitional control they have compared to entrepreneurs. Ajzen (2002)

explained perceived behavioural control as the expectations of people on their own ability to perform a given behaviour and separated in two elements; self-efficacy and controllability. Maula et al. (2005) applied that framework to business angels trying to determine whether individuals comfortable operating on non-volitional control circumstances (i.e. individuals with perceived skills in starting a new business) would be more prone towards making informal investments.

<u>Sociological theory of social networks</u>. Many first-generation studies found that business angels entertained referral networks that were their primary source of deal flow (see section 3 in this chapter). Social capital, as explained in sociological theory of social networks, would be an effective tool to discover and exploit opportunities (Shane and Venkataraman, 2000) in an environment of asymmetrical information. From the perspective of informal investors, several authors (Fiet, 1995; Shane and Cable, 2002; Sørheim, 2003) found that social capital played a key role in business angels' activity, not only in sourcing opportunities but also while holding and exiting the investment.

<u>Socio-psychological theories of interpersonal trust</u>. Social interaction is at the core of entrepreneurial activity and new firm foundation. The key element for that interaction is personal trust, as described by Dubini and Aldrich (1991) as the element that determined the strength and durability of a relationship, reducing the inherent risks for all parties. Dibben (2000) identified four types of interpersonal trust: dependence based, comprenhensible situational cue (CSQ) reliance based, familiarity based and confidence based, the latter being the type that generated the highest

levels of interpersonal trust, as it is based on high level of familiarity between parties and a high situational knowledge. Harrison et al. (1997) and Dibben (2000) studied the role of interpersonal trust in the decision making process by informal investors and how the different types of trust relate with the criteria used by investors to establish their cooperation threshold or the point from which they would be willing to commit to invest.

In those studies, informal investors displayed low levels of situational knowledge and tended to reach their cooperation threshold by relying on familiarity with the entrepreneur. That process to build trust ultimately influences the criteria investors use to select investments.

Economic theory of household portfolio allocation. From the point of view of the business angels, informal investment is a type of risk asset. Researchers in economics and finance have studies for long how economic agents allocate investments into risky assets, modelling risk and returns. Further on, the notion of risk free assets and the capital asset pricing model (CAPM) were introduced. McCarthy (2004) provides a complete literatura review on the field.

The allocation decisions would be based on different variables, among them demographic ones such as age, education, net worth and education. Those factors could therefore determine propensity or willingness of individuals towards making informal investments.

8.   Life cycle of business angels

The evolution of business angel investors during their career is a largely unexplored topic. Politis and Lanström (2002) suggest that business angels gain experience and financial sophistication during their investment career. However, it is unclear how individuals become first acquainted with angel investing and how careers evolve or are interrupted. Månsson and Landström (2006) included some information on business angel experience in their study and found that business angels which were on average 56 years old at the time had started their investment career on average 11 years earlier. Avdeitchikova et al. (2008) advanced the hypothesis that an individual may start his or her investment career by investing small amounts of money in a friend's or colleague's business and, having gained experience, start to invest in ventures by unrelated entrepreneurs. Also, studies that included family investors in the sample (e.g. Farrell 1998; Riding 2005) have consistently demonstrated that individuals who make investments in family-owned businesses are often also involved in other, non-family investments. That might mean that family investors are a breeding ground for business angels (Maula et al. 2005).

Taking into account the lower investment amounts by related investors (family or other) and the high failure rates of business angel investments, it is highly possible that individuals starting their business angel career do not diversify, place their bets in a single investment and face most likely a loss in that first investment. To what extend that leads to abandon the activity as business angel is unknown.

9.   Concluding remarks

Our knowledge of business angels is limited by the methodologies used to date to profile them. On one hand there are studies that give detailed information but might be not representative. On the other, the datasets built from general surveys that could be representative provide information which is limited to demographic characteristics and investment size. For example, Wong and Ho (2007) mentioned that 'the limitations of the GEM dataset have restricted our ability to more thoroughly operationalize the concepts that have been theoretically postulated to shape the expectations and behaviours of informal investors', and proposed to conduct follow-on surveys by re-contacting the business angels detected through the GEM survey.

As a result of those limitations, the soundness of the conclusions dilutes as researchers move from demographic profiles to information on attitudes, behaviors and characteristics of business angels. The differences detected in the investment amount (see chapter 3) provide an indication on how new data from representative samples can end up generating a very different investor profile.

Business angels' research subtopics can be classified in three categories (see table 12); mature aspects in which there are sufficient and sound information, aspects in which there is information but reasonable doubts about it that need to be revisited or aspects that have been researched in a

limited manner or not researched at all to date and should constitute the main trends in future business angels research.

In mature topics, descriptive aspects such as demographic profile and the size of the market seem relatively well established subtopics, where advanced can be achieved by standardizing definitions and methodologies.

Table 12. Subtopics within business angels' research[37]

Mature	To be revisited	Future
Demographic profile	Investment process and returns	Impact on economic and social growth
Size of business angels investment market	Theoretical framework	Life cycle of business angels
Motivations and involvement	Segmentation	Angels and regional development
	Contribution to investee firms	

The second set of subtopics are made of elements in which there is substantial research upon but need to be revisited due to the lack of standards in definitions. It is not therefore clear to what extend those studies describe a minority of sophisticated investors or are representative of the general business angels population. For example, the returns of angel investments are currently unclear.

Studies on sophisticated investors can be taken as studies on best practices that need to be adopted by the general business angels' population. They should not however be taken as representative. To denounce this, Shane (2010) calculated that if the percentages of IPO exits to business angels' investments reported in some studies were true, then there would need to be between two and three times more IPOs in the USA just to accommodate the theoretical amount of IPO exits calculated as a percentage on the total

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[37] Self-elaboration.

number of angel investments. Segmentation and contribution to investee firms are topics on which substantial research has been carried out but need to be revisited as a prerequisite to further advancement in research. Similarly, the efforts of some authors to use theoretical frameworks from other disciplines in business angels research (Fiet, 1995; Harrison et al., 1997; Sørheim, 2003 and Maula et al. 2005, among the most relevant) needs to be continued.

Future business angel trends of research should include the impact on growth of angel investment, which to date has been assumed to be positive despite the lack of empirical evidence. Research on that subtopic, especially if initiated from mainstream economics would give a sense to angel research by providing it with measurable outputs of the activity. The connection with regional development is also related to the mission to provide sense to business angel activity. The oft-repeated claim that angels fill the capital gap and that the capital gap also exists in geographic terms did not meet empirical support in recent studies (Avdeitchikova, 2009). Another subtopic in that group is the evolution or life-cycle of business angels, largely under researched. Gathering evidence on how business angels evolve in their activity over time is of foremost importance to understand and propose measures on angel investing.

Overall, new forms of angel investment (angel funds, online syndication, crowdfunding…) ensure that business angels interest is likely to be sustained in the coming years.

From a research standpoint, angel investing is a very attractive topic and is evolving fast. That evolution presents a challenge to scholars, which

should simultaneously establish the theoretical framework to explain the phenomenon and at the same time develop studies on the new forms of angel investment.

Chapter 5. Key issues in the business angels investment decision process[38]

Abstract

The objective of this chapter is to provide knowledge about the determinants of success in the screening phase of the investment process and to demonstrate its relationship with success in obtaining capital from business angels. Following a review of previous research examining the success factors of the screening phase, this research sets out to achieve this objective by analyzing the impact that the evaluation of the business opportunity, the managing team and the presentation have on success at the screening phase. To do this, the research proposes four main hypotheses that are tested on 215 projects presented at a business angels' network. The data from the analysis is extracted both from the business angels and from the entrepreneurs. The results show that the evaluation of the presentation is the most important factor that influences success at the screening phase, followed by the evaluation of the business opportunity. No significant relationship is found with the evaluation of the managing team.

Keywords: financial services, entrepreneurship, informal investors, business angels, venture capital, investment process, screening phase, investment criteria

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1.   Introduction

Entrepreneurs finance their ventures from a variety of financial service suppliers and among those the market for venture capital is the main source (Sohl 2005). The market for venture capital is split between formal and informal segments. In the formal segment, an agent (the venture capitalist) raises funds among investors and then makes the investment decisions. In the informal segment, the investor decides directly in which ventures to invest. Thus, informal investors include family investors (with a family connection to the entrepreneur) and business angels (Bygrave and Hunt, 2004).

The population of business angels is diverse and their practices may differ substantially compared to venture capitalists (Fiet, 1997). They operate mainly in the seed and start-up stages of development, which are particularly critical for new ventures (Wetzel, 1983). In those stages, entrepreneurs experience the so-called capital gap as they commonly do not fulfill the minimum requirements for most of the mainstream financial service suppliers. Banks are usually reluctant to lend money to a venture with a limited track record and collateral and venture capitalists have a fixed cost structure that makes small investments unattractive (Murray 1999). Even though business angels have a crucial role in supporting entrepreneurial ventures, research on them has been relatively scarce compared to research on other financial service suppliers. The main factor holding back research on business angels is the difficulties faced when

trying to find data on them, and linked to that, inconsistencies in the use of definitions and in sampling issues (Avdeitchikova et al. 2008).

The seminal work of Wetzel (1983) fostered an array of first generation studies on business angels which tried to shed light on the size of the market and the characteristics of its investors. Starting in the 1990s, second generation studies addressed a range of new topics inspired by research on formal venture capital, focusing on policy issues and introducing a theoretical perspective (Mason and Harrison, 1999). One of the new themes that emerged in these second generation studies was the analysis of the investment decision-making process (Feeney et al., 1999). The investment process is a staged process, characterized by a dual-filter of initial screening and evaluation, also referred to as due diligence (Tyebjee and Bruno, 1984; Paul et al., 2007).

Following Feeney et al.'s (1999) call 'to situate more precisely investors' criteria in the contexts in which they are employed', we believe that the initial screening phase plays a determinant role in the business angels' investment process. Thus, the main objective of the study is to provide new knowledge about one of the key stages in the investment process for business angels: the screening phase. To achieve this goal, the following specific objectives are proposed: first, to establish whether there is a link between the number of investors interested after the first presentation and the ultimate success in obtaining capital; second, to discover how success at the screening phase is influenced by the business angels' evaluation of the quality of the opportunity, the team and the presentation, differentiating the relative weight for each factor; third, to determine the

role that external variables, such as the sector of activity or the maturity of the project, can play in success rates. Following this introduction, the next section presents the theoretical framework and hypotheses established. The methodology of the empirical study is then described. The results obtained from the exploratory analysis and the structural equation model are then presented. The study concludes with a summary of the main findings and implications.

2. The importance of the screening phase in the business angels decision process

One of the most important topics in research on business angels is the decision-making process by which business angels make funding decisions. The overall rejection rates for business angels are high, between 75% and 95%, as reported in several studies done in different countries such as the USA (Wetzel, 1983 and Sohl, 2005), Canada (Short and Riding, 1989), UK (Harrison and Mason, 1992), Finland (Lumme and Mason, 1996), Norway (Reitan and Sørheim, 2000), Germany (Stedler and Peters, 2003) or Sweden (Månsson and Landström, 2006). This high rate is attributable to different reasons such as process inefficiencies (Mason and Harrison, 2002) or market inefficiencies, linked to lack of information (Wetzel, 1987; Sohl, 2003) or lack of suitable opportunities (Van Osnabrugge and Robinson, 2000).

However, research on this topic has encountered difficulties that have not helped in the attempt to attain a higher consensus about the phenomenon. First, data is scarce and therefore sample sizes have been relatively small (Landström, 1995; Mason and Starck, 2004). Second, researchers have relied on business angels' recollections rather than on observations of actual behavior; a practice that can lead to rationalization biases. Third, even though 'deal making criteria are not simply the converse of deal breaking criteria', for business angels (Feeney et al., 1999), past research has focused on the reasons for success, rather than comparing criteria in selected and discarded ventures. Finally, researchers have analyzed criteria for the investment process as a whole, even though criteria can be different at different phases of the process (Landström, 1998; Sudek et al., 2008).

Investment criteria can therefore be understood better if analyzed separately for every phase of the investment process (Eckhardt et al. 2006). In order to maximize the number of opportunities in their deal flow without collapsing their agenda, in the initial phases investors must discard the maximum number of uninteresting opportunities in a very limited time. As Tyebjee and Bruno (1984) put it, investors 'must screen the relatively large number of potential deals available and consequently invest in only a fraction of the deals which come to their attention'. Thus, business angels turn down the majority of investment proposals at the screening phase (Dal Cin et al., 1993; Riding et al., 1997). The investment process can work like a funnel in which investors herd around a limited number of 'hot' deals relatively early (Kerr et al. 2010). Given all of the above, for entrepreneurs it is essential to get through the screening. In the following phases, they will have additional time to refute objections and

investors can become emotionally involved in the project (Fried and Hisrich, 1994). At this stage, the main objective of the entrepreneur or entrepreneurial team is to find an investor who understands the project, considers it potentially viable and is attracted by the project in some way. Obviously, quantity is not always synonymous with quality, and an entrepreneur will prefer to pass to the evaluation phase with a single business angel who has a keen interest in their project than to do so with five whose likelihood of closing a final agreement are very low. However, as business angels are heterogeneous in their preferences and investment behavior (Landström, 1995), and given that the investment criteria each business angel uses can be more diverse as the process unfolds (Maxwell et al., 2011), having a higher number of business angels evaluating the deal could maximize the heterogeneity of investment preferences and thus the chance of a 'fit' with an investor. Therefore, the number of business angels that are interested in proceeding to the evaluation phase would be a good indicator of the success in obtaining funding. The following hypothesis is thus proposed in order to demonstrate this relationship:

> *Hypothesis 1: Projects with more business angels starting the evaluation process will have a higher probability of closing an investment agreement.*

3.   Determinants of success in the screening phase

In the screening phase, the entrepreneur meets the investor for the first time and presents the project in a succinct manner. Commonly, this presentation is delivered as an 'elevator pitch' or with the support of powerpoint slides. The length of this phase can range from one minute per pitch to thirty minutes for a formal presentation including questions taken afterwards.

Given the characteristics of this phase, there are three factors that are commonly stressed in the literature as determinants for business angels in deciding whether to continue the process and go to the evaluation phase: a positive evaluation of the team (van Osnabrugge and Robinson, 2000 and Mason and Stark, 2004), the opportunity (Sudek et al., 2008) and the presentation (Stedler and Peters, 2003 and Clark, 2008). Thus, the project is evaluated by business angels as a combination of the opportunity presented and the entrepreneur or the team that is to exploit it (Fiet, 1995). Moreover, given the format of the screening phase, in some cases presentational or delivery aspects can play a key role in the investors' decision even without any written support (Clark, 2008). A theoretical reflection on the importance of the evaluation of these three factors and their relative weight in the success of the screening phase is delivered in the following sections.

The importance of entrepreneur valuation on success at the screening phase

Individuals that become entrepreneurs are not all equally endowed to succeed (Venkataraman 1997). The entrepreneur or team is central to the viability of the venture and is a critical factor in the investors' evaluation (MacMillan et al., 1987). On this line, as Georges F. Doirot, the founder of modern venture capital said, 'always consider investing in a grade-A man with a grade-B idea. Never invest in a grade-B man with a grade-A idea' (Bygrave and Zacharakis, 2011: pp. 57). The attributes that make a grade-A entrepreneur or team can be their career, studies, entrepreneurial experience, management capabilities, age and, in the case of teams, their complementary profiles and skills (van Osnabrugge, 1998; Feeney et al. 1999; Sudek, 2007).

Thus the entrepreneurs' valuation about their competences is an important criterion for the investor, whether in the formal or informal segments of the market for venture capital (van Osnabrugge and Robinson, 2000 and Mason and Stark, 2004). Compared to institutional venture capitalists, business angels have more extensive market knowledge and commonly use less stringent contractual agreements. Based on these assumptions, some authors state that they are more likely to focus even more on the entrepreneur as a source of agency risk rather than on the opportunity and its inherent market risks (Fiet, 1995; Van Osnabrugge, 2000). On the negative side, a poor managerial team can be the primary reason why a business angel may reject a deal (Feeney et al., 1999). Thus, the following hypothesis attempts to demonstrate the importance of the positive relationship between the business angels' valuation of the entrepreneurial team and project success in the screening phase.

Hypothesis 2: The higher the valuation of the entrepreneurial team made by the business angels, the higher the success of the project in the screening phase.

The importance of opportunity valuation on success at the screening phase

Entrepreneurs 'combine existing or potentially available resources, sometimes in the absence of a market for their products and services' (Venkataraman 1997). Therefore, the business opportunity uncovered by the entrepreneur is a sum of resources with observable characteristics for investors. Some of those characteristics are the market in which the venture competes, the product or service attributes and the financial aspects (MacMillan et al., 1987).

In the assessment made by the business angels about the business opportunity that the new venture exploits, it is important to get them interested in the project and eager to hear more about it. Thus, attributes that determine whether the investor fits in relation to the opportunity valuation - such as the project sector, growth perspectives, development stage, location or potential for involvement - can be the primary motives for pursuing the investment process (Feeney et al. 1999). On this line, Sudek et al. (2008) argued that those attributes are easier to identify than those identified by angel investors in relation to the entrepreneur's competences. Investors would therefore put more weight on opportunity related aspects in the screening stage than on other aspects. On the basis of the above discussion, the following hypothesis proposes that:

Hypothesis 3: The business angels' valuation of the opportunity is directly and positively associated with the success of the project at the screening phase.

The importance of presentation valuation on the screening phase success

In the screening phase, the entrepreneur meets investors directly for the first time. The entrepreneur transmits information in written form but also performs, given that the context is one of verbal interaction with investors. The entrepreneur's ability to deliver the project information might influence the investors' decisions. Baron and Markman (2000) identify several social skills that can lead to entrepreneurial success. Among them is impression management or the ability to induce positive reactions in others, in this case investors. As business angels look for deal killers rather than deal makers in the initial stages of the investment process (Mason and Harrison 1996; Maxwell et al. 2011), presentational failings can lead to inability to move on in the evaluation phase, despite a proficient business opportunity and management team. In this vein, some authors (Mason and Harrison, 2003; Stedler and Peters, 2003; Clark, 2008) found that presentational factors such as clarity, understandability and presentational structure had the highest influence on the scoring of an entrepreneur by business angels at the screening stage. More worryingly, Clark (2008) found that angels were not aware of the weight they assigned to presentational factors in their funding decisions. Thus, the last hypothesis of this work is set:

> *Hypothesis 4: The business angels' valuation of the presentation*
> *is directly and positively associated with the success of the project*
> *at the screening phase.*

4.   Methodology

The context of the research, sample and data collection

The IESE business angels' network (IESE BAN) was launched in 2003 by IESE Business School, one of the leading business schools in Europe based in Barcelona. The network organizes investment forums every 2 months in Barcelona and Madrid for their affiliate investors (currently 110). A selection committee decides which projects should present based on the quality of the profiles received, with approximately 40% of the proposals received being turned down for presentation. In a typical investment forum, 7 entrepreneurs present their projects to the audience. Before the meeting, investors receive a standardized profile and then attend a 12 to 15 minute presentation for each project. Afterwards, entrepreneurs answer questions from investors for a maximum of 5 minutes and leave their contact details.   Investors who are interested in learning more about the project contact them outside the forum. In its 8 years of operations, the network has become the leading BAN in Spain, with more than 400 projects presented and more than 50 ventures financed with an aggregate of €11.5 million[39].

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[39] As of December 2011.

In order to test the hypotheses proposed in this research, primary data was gathered from entrepreneurs and business angels by means of a questionnaire. Specifically, investors were asked to evaluate each one of the ventures presented in terms of opportunity, entrepreneur and presentation. Questionnaires were collected at the end of each investment forum. The average attendance was 37 business angels per session. We also contacted all the entrepreneurs that had presented to the IESE BAN to find out about the continuity of the process. One of the key strengths from the data collected lies in the combination of three different elements not found in previous research; the project characteristics contained in the project profiles, the evaluation by the business angels and the information on the process continuity from the entrepreneur. As a result of the fieldwork, we obtained a total of 215 full responses for this analysis. The response rate was thus 60.56%, with a sample error of 4.2% at a 95% confidence level.

Variables

Success of investment process. This variable measures whether the project closed a financial agreement with a business angel of the IESE BAN. The entrepreneurs were asked about this directly and the variable was based on the responses ('yes'/'no') to a statement posed to all. The dummy variable was coded '0' if the response was 'no' and '1' if it was 'yes'.

Success of the screening process. This variable reflects the number of business angels from the network that started the evaluation phase. The project is considered to have started the evaluation phase if the entrepreneurs had at

least one meeting after the presentation at the forum with an investor of the IESE BAN. The entrepreneurs were asked about this directly. The variable was coded '0', if there was no meeting, '1' if the entrepreneur met one investor, '2', '3', '4' and '5', if the entrepreneur met 5 or more investors.

Opportunity evaluation. This variable sought to capture business angel evaluation of the business opportunity. To evaluate the opportunity, the business angels had information about the project in the profile. The profile contains key aspects like market, competitors and product or service advantages –see appendix 1. This variable was measured through a direct question to the business angels: 'Evaluate the business opportunity of this project'. The respondents were asked to indicate their answer on a Likert-type scale ranging from 1 ('low') to 7 ('high').

Team evaluation. This variable sought to capture business angel evaluation of the people managing the project. To evaluate the team, the business angels had information about the team in the profile section 'managing team', that contains key aspects such as team education and experience – see appendix 1. This variable was measured through a direct question to the business angels: 'Evaluate the managing team of this project'. The respondents were asked to indicate their answer on a Likert-type scale ranging from 1 ('low') to 7 ('high').

Presentation evaluation. This variable sought to capture business angel evaluation of the presentation that the team made at the forum. This variable was measured through a direct question to the business angels: 'Evaluate the quality of the presentation of this project'. The respondents were asked to evaluate on a Likert-type scale ranging from 1 ('low') to 7 ('high').

The questionnaire given to the entrepreneurs also addressed their experience presenting the project prior to the IESE BAN presentation. We requested information on two factors: their previous experience presenting the project and their previous knowledge of a business angel. The entrepreneurs were asked about this information directly and the variable was based on the responses ('yes'/'no') to a statement posed to all. The dummy variables were coded '0' if the response was 'no' and '1' if it was 'yes'.

5. Findings

The empirical analysis relies on the following exploratory variables, for which Table 13 and Table 14 present the related summary statistics and the correlation matrix. Out of the 215 projects for which full data is available, 55.3% entered the evaluation stage with at least one investor and 18.6% concluded an investment agreement. For those, it took an average of 5.6 months from presentation at the forum to investment agreement.

Table 13. Summary statistics of the variables

	N	Mean (SD)	Minimum	Maximum
Eval. opportunity	215	4.30 (.60)	1.00	6.01
Eval. team	215	4.53 (.54)	1.00	5.88
Eval. presentation	215	4.56 (.64)	1.00	6.43
Screening success	215	1.18 (1.47)	0	5
Financial accord	215	.18 (.38)	-	-

(Yes=1,No=0)				
Previous presentation (Yes=1,No=0)	215	.71 (.45)	-	-
Knowledge of a BA (Yes=1,No=0)	215	.72 (.44)	-	-

Table 14. Correlation matrix

		1	2	3	4	5	6
1	Eval. opportunity	1					
2	Eval. team	.651**	1				
3	Eval. presentation	.632**	.700**	1			
4	Screening success	.242**	.227**	.281**	1		
5	Financial accord (Yes=1,No=0)	.153*	.161*	.160*	.494*	1	
6	Previous presentation (Yes=1,No=0)	.131	.079	.058	-.093	-.001	1
7	Knowledge of a BA (Yes=1,No=0)	.064	.044	.034	.029	-.018	.425**

** Correlation is significant at the 0.01 level, * significant at the 0.05 level

The descriptive results show that already created companies tend to have better evaluations in the three variables than those not yet created, although opportunity evaluation is the only one with statistically significant differences –see table 15.

Table 15. Comparison between project stage (company creation or not) and sector and the business angels' evaluation in the screening phase[40]

	Number of	Opportunity	Team	Presentation
COMPANY				
Yes	243	4.35	4.55	4.57
No	52	4.11	4.43	4.49
T-student		6.649 *	2.076	.697
SECTOR				
TIC/Mobile/Teleco	54	4.28	4.59	4.60
Biotech	17	4.42	4.50	4.34
Software/Multimedi	61	4.29	4.53	4.39
Creative industries	32	4.18	4.43	4.67
Renewable energy	14	4.71	4.72	4.69
Retail and offline	31	4.32	4.56	4.75
Finance	14	4.32	4.72	4.53
Health	19	4.45	4.59	4.82
Manufacturing	18	4.17	4.37	4.31
Restoration/Food	24	4.40	4.66	4.77
Other	11	4.13	4.35	4.58
F		1.510	1.194	2.310*

** Significant at the 0.05 level

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[40] All the projects with information about evaluation in the screening phase were included in this analysis (295) although some of the data for the other variables (information from the entrepreneurs) were not available for 80 projects.

In terms of the sector, we only find statistical differences in the presentation evaluation. Those projects with a lower evaluation tend to be in biotech, manufacturing and software and multimedia sectors. The case of biotech, where entrepreneurs complain about the inability of investors to understand the business opportunity, shows that investors' evaluation of the opportunity is above average, but that their evaluation of the presentation is very poor. This suggests that the problem with biotech projects obtaining angel funding might be more on the supply than the demand side for biotech projects.

Taking into account that in the second half of 2008 Spain entered an economic recession after a period of sustained GDP growth, it is interesting to note that the change in macroeconomic conditions did not influence business angels' levels of activity in terms of projects considered or invested in. However, there was a noticeable change of sector focus, as the ones powered by private consumption (retail) and government budgets (renewable energies) dropped significantly. Entrepreneurs also adjusted their capital needs downwards.

To test the hypothesis of this research, the relationships were estimated as a path model (structural equation model), by using EQS software (Bentler and Wu, 1998). Regarding the fit of the model, the Tucker Lewis Index (TLI) includes a penalty for adding parameters and the value 1.001 confirms that the items used for measuring performance are a solid construct. The Root Mean Square Error of Approximation (RMSEA) is based on the non-centrality parameter and values of 0.10 or more indicate a

poor fit. In this case, the RMSE is 0.000. Additional measures of fit are presented in Table 16 with values in the acceptable range.

Table 16. Fit indexes for the model

Fit Index	Model
RMSEA	.000
CFI	1.000
TLI	1.001
X²	4.436
P-value	0.4885
Akaike (AIC)	1907.172
Bayesian (BIC)	1991.495
Sample-size adjusted BIC	1915.414

Regarding the first hypothesis, the results obtained from the analysis - see Table 17 - shows that there is a direct and positive impact with regards to the higher the number of investors starting the evaluation and the higher the probability of being in the group that obtains financing. Hypothesis H1 was thus supported. This apparently logical result reveals that success in

the screening stage is really a key factor in achieving a financial agreement with business angels and that the degree of that success measured in terms of the number of investors starting the evaluation process is a good predictor of final success. Projects with 5 or more investors starting evaluation had a 69% probability of getting funding, while those with only one investor had a 16% chance. This supports our assumption about the importance of studying in depth the very early stages of this process.

Regarding the following hypotheses, that try to test the influence that business angels' evaluations of the business opportunity, the managing team and the presentation have on the screening process success, results show that both the evaluation of opportunity and presentation have a significant impact on the number of investors that start evaluation, although business opportunity evaluation is significant at a 10% significance level. So hypothesis 3 and 4 are therefore supported. However, no relationship was found between the evaluation of the team and our dependent variable. Hypothesis 2 is not then supported. These results allow us to analyse which of these three factors have a major influence on the success at this phase. We find that presentation is the most important factor for business angels in the screening phase, followed by opportunity. In the last place we find the evaluation of the team.

Table 17. Standardized coefficients of internal models

Step	Parameter estimation	p-value
Eval.Team → Screening success	.058	.496
Eval. Opportunity→ Screening success	.128	.076*
Eval. Presentation → Screening success	.181	.020**
Previous presentation → Eval. Team	.108	.115
Knowledge of a BA → Eval. Team	.071	.312
Previous presentation → Eval. Opportunity	.173	.013**
Knowledge of a BA → Eval. Opportunity	-.006	.932
Previous presentation → Eval. Presentation	.074	.270
Knowledge of a BA → Eval. Presentation	.081	.254

Previous presentation → Screening phase	-.194	.001***
Knowledge of a BA → Screening phase	.121	.050*
Screening sucess → Financial accord	.548	.000***

(***) Significant relationships at 99% reliability level, (**) Significant relationships at 95% reliability level, (*) Significant relationships at 90% reliability level

While it should be clear that the entrepreneur is the driving force behind putting together a good opportunity and presenting it in a good manner to investors, it is possible that investors may not actually be so interested in considering them in depth when making their screening decision. Investors can assume that a good opportunity and a good presentation are sufficient signals of a qualified entrepreneur at this phase. In fact, projects that move on to the evaluation phase with poor entrepreneur ratings are less likely to receive final funding than those that pass with higher ratings.

Another surprising result is the negative relation found between previous presentation experience and success at the screening phase. Although having presented before has a positive effect on the business opportunity evaluation, and that in turn influences positively the number of investors interested, the direct relation is negative. Projects with only one previous presentation experience had better chances than those with no experience,

but those with two or more previous presentation experiences had worse chances. Thus, it is concluded that extensive presentation experience could be a sign of an unattractive project for investors, even though experience may result in better evaluations.

Finally, previous experience presenting the opportunity is also found to have an influence on the evaluation received of the business opportunity. Curiously, the previous knowledge of a business angel influences success, but is not reflected in any of the evaluations. That is perhaps because in those cases the project that is being presented is already at the evaluation stage with those investors that knew about it previously or because angels accept to meet entrepreneurs because of referrals. Therefore, those projects will very likely meet investors after the forum, regardless of the evaluations of their 'pitch'. Figure 7 summarizes the results extracted from the statistical analysis.

Figure 7. Model of the factors that influence success at the screening phase
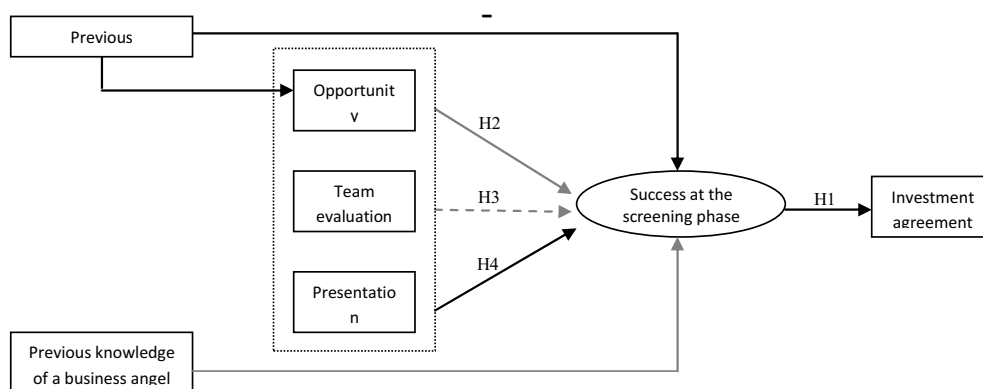
6.   Concluding remarks

Is the screening phase critical for entrepreneurs looking for financing from a business angel? According to the results of our study, the answer is a clear yes. The screening phase could be correctly depicted as a 'death valley' within the investment process, as almost half of the ventures would be discarded after a hearing of 15 to 20 minutes. If we put those minutes in the perspective of the 5.6 months that a successful investment process takes from initial contact to funding, we conclude that the screening phase is the point where most value can be created or destroyed. Moreover, we have shown that the number of investors starting evaluation is a good predictor of final success in the investment process.

Mainly, business angels make their decisions during the screening phase based on their evaluation of the presentation and the business opportunity. The latter improves by training (experience in presenting the project) and the former by advancing the venture development process (creation of the venture). Entrepreneurs would therefore be well advised to pay more attention to the 'soft' presentational aspects of their 'pitch' and to rehearse it as much as possible. Contrary to a generally held view, the evaluation of the entrepreneur does not directly influence the outcome of the screening.

Business angels should be aware of the weight given to presentational aspects in this phase and question to what extent there may be entrepreneurial projects with a good business opportunity and sound management team that are not getting adequate attention due to presentational failings. That seems to be the case in sectors like biotech and

software. The implications for policy makers trying to address the market failures in the market for informal venture capital is that they should allocate more resources to 'investment-readiness' programmes, such as venture academies, focused on presentation coaching. However, this recommendation should be taken with an additional caveat, as presentation practice alone does not guarantee success and can even be counterproductive.

The triangulation of the source of information used is a further contribution of this study. The combination of three elements in the same dataset - the profile data of the projects, the business angels' evaluations and the effective choices investors took which are reported by entrepreneurs – adds additional strength to our conclusions over and above those drawn from datasets with one or two of those elements.

The sample is limited to Spain during the period from 2003 to 2010, but we believe the study results could be generalized to other countries or periods. However, additional research in other countries could be needed to validate this. On a similar note, the sample does not include data on the post-investment evolution of the funded ventures which would provide insight into the efficiency of the process. Also, additional research could investigate the objective elements behind the business angels' evaluation of each factor.

Looking at the supply of projects, we found that business angels are not particularly influenced by sector or development stage considerations and are willing to consider projects in sectors that are technologically complex.

In fact, the difficulties in transmitting the value of such projects seems to lie more on the entrepreneurs side than with investors, providing further evidence that the inefficiencies of the informal venture capital market are due to the lack of adequate projects.

Appendix 1. Data available for business angels before the presentation of the project

Information available related to the entrepreneurial team (extracted from the project profile)

Position of each member of the team within the project

Age of the team members

Previous professional experience

Level and type of studies

Information available related to the business opportunity (extracted from the project profile)

Target market

Business activity

Type of technology

Advantages of the product/service compared to the competitors

Type of distribution and marketing

Key customers

Key alliances/association agreements

Key competitors and expected level of competition

Milestones achieved

Summarized financial projections

Chapter 6. Conclusions

1.   Introduction

The current research set out to analyze the foundations of business angels' research and to explore the criteria that business angels use to screen investments, answering the following questions:

a. How business angels are defined in current literature and to what extent the variety of definitions explains contradictory findings?

b. What criteria those investors use in selecting investment proposals in the early phases of the investment process?

The two questions reflect the current nature of business angels as a field of research, with unclear theoretical frameworks on one hand and potential for future contributions on the other. The study makes its most relevant contribution by answering to the second question. Notwithstanding, the first question is a prerequisite to put that contribution in its adequate context.

The first question intended to establish the theoretical foundations of the field, still weak in definitions and methodologies, as highlighted by several authors (Farrell et al., 2008; Avdeitchikova et al., 2008; Shane, 2010).

The second question sought to advance in our knowledge of business angels in a crucial area. As established in earlier studies, business angels have high rejection rates, concentrated at the screening phase of their

investment process. Nevertheless, the evidence on the criteria used for selection was contradictory.

The study reviewed the definitions used in 24 earlier studies on business angels, identified the differences and connected them to the sampling methodologies used and the results obtained. It also worked with a sample of 215 projects presented to business angel investors to establish the determinants of success at the screening phase.

The chapter is structured as follows. First, the findings from the research are presented as a summary of the conclusions of the previous chapter. Second, the different implications of the findings are discussed, from a theoretical, business and policy point of view. Third, recommendations for future researched are defined grouped in four potential lines of research. Fourth, the limitations of the research are announced. Finally, the closing remarks intend to contextualize the findings in the current status of evolution of angel investing.

2. Empirical findings

The main empirical findings are chapter specific and were summarized within the respective empirical chapters: 10 issues in defining business angels and key issues in the business angels' investment decision process. This section will synthesize the empirical findings to answer two research questions:

a. How business angels are defined in current literature and to what extent the variety of definitions explains contradictory findings?

    i. <u>There is no standard definition for business angels investors and the variety of definitions is high</u>. 'The review of 24 studies on business angels shows that researchers use different definitions, they often don't make their choice explicit, use definitions that are then not applied to their studies' sampling methodologies or, vice versa, take sampling options that imply a definitional choice without mentioning that.'

    ii. <u>The choice of definition is linked with the choice of sampling methodology, which is driven by the difficulty to obtain data</u>. 'There is a close link between the use of convenience samples and the adoption of narrow definitions in studies on business angels. Convenience samples are biased and end up with individuals with certain traits that are not representative of the general population. Those traits are then included in a definition and the resulting definition is used in subsequent studies. Studies using the snowball sampling method tend to use narrow definitions, while as studies not using a convenience sample favor wide definitions.'

    iii. <u>Definitional choices lead to study different populations and to obtain different results</u>. Different studies report business angels' average investment between €1,122 and € 481,159. 'The disparity of results indicates the impact that

methodological issues around the definition and the sampling techniques have in business angels' research. By using different definitions and sampling techniques, researchers end up investigating very different investors and concluding that their attitudes, behavior and characteristics are indicative of the general business angels' population, only based on the fact that they are all middle-aged men.'

iv. <u>As a result of the above, a consensus definition is a prerequisite for further advancement of business angels research</u>. The current study proposes to define angels as 'any individual that currently holds an investment made directly with his or her own money in an unquoted company, and is neither the entrepreneur nor his or her relatives' building on Mason and Harrison (1999) definition. A framework to detect definitional issues is proposed and the most common problems in definition implementation are identified.

b. What criteria those investors use in selecting investment proposals in the early phases of the investment process?

i. <u>The screening phase of the investment process is crucial</u>. 'The screening phase could be correctly depicted as a 'death valley' within the investment process, as almost half of the ventures would be discarded after a hearing of 15 to 20 minutes. If we put those minutes in the perspective of the 5.6 months that a successful investment process takes from

initial contact to funding, we conclude that the screening phase is the point where most value can be created or destroyed. Moreover, we have shown that the number of investors starting evaluation is a good predictor of final success in the investment process.'

ii. <u>The most important factor explaining success in the screening phase is the presentation, and secondarily the opportunity</u>. 'Business angels make their decisions during the screening phase based on their evaluation of the presentation and the business opportunity. The latter improves by training (experience in presenting the project) and the former by advancing the venture development process (creation of the venture). Contrary to a generally held view, the evaluation of the entrepreneur does not directly influence the outcome of the screening'.

iii. <u>Business angels are not biased against early stage or technologically complex projects</u>. 'We found that business angels are not particularly influenced by sector or development stage considerations and are willing to consider projects in sectors that are technologically complex. In fact, the difficulties in transmitting the value of such projects seems to lie more on the entrepreneurs side than with investors, providing further evidence that the inefficiencies of the informal venture capital market are due to the lack of adequate projects.'

iv.   Macroeconomic variables do not impact the market for business angel investments. 'In the second half of 2008 Spain entered an economic recession after a period of sustained GDP growth, it is interesting to note that the change in macroeconomic conditions did not influence business angels' levels of activity in terms of projects considered or invested in.'

3.   Theoretical implications

A consensus definition is a prerequisite for further business angels' research development, given the contradictory results obtained to date and the lack of comparability between studies. In that regard, the current study builds on Farrell et al. (2008) call for a standard definition by proposing to define business angels as 'any individual that currently holds an investment made directly with his or her own money in an unquoted company, and is neither the entrepreneur nor his or her relatives'. Alternatives to that definition are discussed and discarded due to lack of theoretical support or implementation failings. This definition follows Mason and Harrison (1999) proposal and introduces two key elements to facilitate convergence around a standard. First, it identifies definition differences around the ten definitional issues identified and it announces a framework that allows comparing definitions. Second, it highlights contradictions when implementing definitional choices announced (i.e. excluding family investors from the definition of business angels but not

designing any test in data collection to filter such investors outside the sample), which represent an additional element of confusion.

The study highlights the disparity of results that become apparent when focusing on the investment as the unit of analysis, rather than on the investor, extrapolating the calls to move entrepreneurship research focus away from the entrepreneur (Shane and Venkataraman, 2000). That disparity is a consequence of working with convenience samples which return results that are not representative of the general population practices and can be very different from the average business angel investor. Convenience samples might be useful to identify best practices, as they systematically capture more experienced investors. They should not be used however to establish the profile for angel investors nor the size of their activities.

Furthermore, several alternatives to convenience sampling are proposed. General surveys are expensive but recent developments such as the GEM study or datasets emerging from increasing regulation on the topic can help researchers to overcome that difficulty.

Chapter 5 contributes quantitative evidence on how networked business angels screen for their investments. The results bring light to an issue in which there was contradictory evidence in previous research. It does so thanks to a methodology that is more robust.

Building on the issues detected in previous studies on business angels' investment criteria (namely, lack of hard evidence on the results of the process and rationalization and other biases inherent to work with investor

recollections), the study developed a distinct method by using together three different sources of information. The comparison of results leads to validate the claim that studies based on investor recollections on investment criteria are prone to rationalization bias.

The triangulation of the source of information used is a further contribution of the study. The combination of three elements in the same dataset - the profile data of the projects, the business angels' evaluations and the effective choices investors took which are reported by entrepreneurs – adds additional strength to the conclusions over and above those drawn from datasets with one or two of those elements. Another advantage of the method is that it collects data at the beginning and the end of the investment process.

4.   Business implications

The conclusions of this research challenge several established truths about business angels, such as the fact that business angels are sophisticated investors and that they make their investment decisions based on objective, rational decisions.

Research on business angels has focused on the high-end layer of non-family informal investors. That research led to several policies adopted to foster angel investments, which might need to be revisited.

In fact, most of business angels profiled represent a minority of the wider population of non-family informal investors (and even a minority of the

unrelated informal investors' population). The study found no solid reason to sustain that high-end sophisticated investors should be differentiated from other non-family informal investors, other than convenience to gather data. Differentiation is also difficult due to the lack of clear criteria to separate the former from the latter.

The comparison of results, definitions and sampling techniques, leads to validate Shane (2010) claim that, compared to the business angels profiled in previous studies, the general population of business angels is younger and has less entrepreneurial experience on average, is more heterogeneous, involves a higher share of women, makes less and smaller investments, and has a preexisting link (work colleague, friend) with the entrepreneur. Therefore, conclusions on the attitudes, behaviors and characteristics of business angels need to be weighted compared to the definition and methodologies used by each study.

In terms of business angels practices, the study found out that even networked business angels make their investment decisions, at least in the screening phase, based on intuitive aspects (presentation) rather than objective criteria (business opportunity or entrepreneurial team).

For entrepreneurs, the consequences are that business angels are more common than it is perceived but willing to invest less per project. According to the GEM, 1.5% of the adult population is a business angel[41]. Entrepreneurs looking for external equity funding would therefore be advised to try to find those individuals within their network as a parallel

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[41] Has made in the last three years an investment in an unquoted Company managed by someone else who is not a relative.

path to presentation to business angels' networks and other conventional alternatives. Entrepreneurs should also be aware of the success rates of the investment process (55.3% of those who present to a group of investors get past screening, and 18.6% close an investment agreement) and the importance of the presentation in the screening phase. Given that presentation improves with practice, rehearsal is critical to get past the crucial screening phase.

The comparison of the study results with those from previous studies built mainly on investors recollections on their own behaviour allows us to conclude that *de facto* investment criteria for business angels are less objective than the own business angels believe. The implication for business angels is to be aware of that and try to put into practice the criteria they believe they are applying. Taking investment decisions based on intuition is not negative *per se*, but taking them without being aware of doing so should be a cause of concern. Moreover, business angels should be aware of the weight given to presentational aspects in this phase and question to what extent there may be entrepreneurial projects with a good business opportunity and sound management team that are not getting adequate attention due to presentational failings. That seems to be the case in sectors like biotech and software.

5.   Policy implications

Policy-makers and practitioners have pushed interest for business angels' research. On one hand, that has led to growth of the field, measured in

articles published or scholars working on the field. On the other, it has caused a primacy of 'near-consulting' research with several theoretical and methodological issues. Those groups should be aware of that and gradually include methodological rigor as a criterion in their requests to scholars.

As a result of the above, most policies launched on business angels to date were based on several beliefs that are not sustained. First, the implicit belief that business angels investment has a positive aggregate outcome. Second, the idea that business angels are all high-end business angels. Third, the notion that the market for business angels investments is efficient, once the issues of accessibility are solved with measures such as BANs.

Business angels' investment returns have been explored only superficially at the investor and aggregate level. At investor level, not all the costs are factored in current calculations and available estimates are based only on high-end investors, which as a result of experience might have better returns than the average investor. At the aggregate level, the contribution of angel investment to GDP growth is assumed and highly possible, but not empirically proved. Policy-makers need to be aware of the implicit assumptions they are making that business angel investing has both positive returns for the investor and positive aggregate outcome, when it is not clear that this is the case.

Based on the high-end business angels profiled to date, policy measures were launched to promote that type of investor. Tax breaks and business angels networks might be effective in attracting millionaires to informal investing. Nevertheless, it is unclear to what extent they attract other

individuals or develop the investment activity of individuals already making small investments (Carpentier and Suret, 2007). Given the numbers of each segment of informal investors, those small investors might represent the biggest potential source for business angels' investment.

Most of business angels have been neglected by policy measures in as much as they have been neglected by researchers. Policy-makers are therefore advised to focus on this segment of investors which might be less attractive than high-end informal investors, but much more common. Initiatives as crowdfunding, online angel platforms or syndicates can be promoted to address the issues that face those business angels (diversification, learning, limitation of funds) and help them develop into more experienced and therefore efficient angel investors.

Finally, the evidence gathered on the investment criteria for high-end business angels shows that intangible elements of the opportunity and the entrepreneur such as the presentation, might be more important than tangible elements such as the opportunity and the entrepreneur themselves. It appears that at the initial phases of the investment process investors do not establish their behaviour based in objective criteria, but rather based on intuition. Therefore, the assumption that business angels are efficient investors and that their behaviour is similar to institutional venture capitalist might be misplaced. Given that conclusion, measures to train investors could pay additional attention to investment process methodology. That is particularly relevant in sector such as biotechnology, were the failure to go through the screening phase is not related to the lack

of understanding from an investors' viewpoint but to the lack of presentational skills by the entrepreneur.

6.   Limitations of the study

The main limitations of the study relate to the general surveys available and the sample and information used to investigate the investment process.

First, the differences detected between angels from convenience samples and angels from general surveys are interpreted considering the latter are representative samples. Given that angels amount to only 1.5% of the adult population from which general surveys depart, statistical error can be considerable. That should be mitigated by the relatively large scale of those surveys (for example, the GEM survey in Spain departs from 28,000 interviews).

Second, the practices detected in the investment process are representative for a relatively sophisticated group of business angels in Spain. There is no evidence that such practices are representative of the general business angels' population, although there are indications that they correspond to relatively experienced angels. Along the same line, there is no indication that similar angels in other countries do follow the same practices.

Third, the conclusions of chapter 5 highlight that investors prioritize presentation over opportunity and do not consider the team at that stage. This research aimed to settle the contradictory evidence to date on the relative importance of each of those factors. It does not include any

objective indicator to measure what the basis are for good evaluations in any of those three factors, although it explores some elements that could ultimately influence good evaluation. Annex 1 presents a follow-on investigation that intends to shed light on the venture elements that lead to good evaluations from investors. Nevertheless, the fact that presentation is the primary factor could imply that the selection process is not only intuitive but also based in the detection by investors of intangible elements, not captured in the project profile.

7.   Recommendations for future research

The review of previous studies and the contributions of the present study allow the detection of several areas that call for future research on business angels.

1) Investors' definition. Based on the framework of chapter 3, scholars should advance towards a consensus definition. An initial contribution is made in the form of a proposed definition, in line with that of Harrison and Mason (1999), but detailing the issues behind the debate and the implementation problems. The proposal is by no means a conclusion, but future debate should be structured around the ten issues detected. The rapid evolution of informal investing (i.e. the new hybrid forms such as angel funds that gravitate between formal and informal venture capital) poses an additional challenge to scholars.

2) Investors' profile. The limitations detected in studies based on convenience samples lead to rely on general surveys. Yet, the information currently available in those studies is very limited. For example, the GEM just contains demographic information on investors and investment amounts. Building on GEM, tax exemptions filings, or general surveys done for other purposes, researchers should set to establish the profile of the average business angel, based on representative samples. Such profile will probably reflect a more heterogeneous population than the one researched to date, and scholars will need to segment that population based on experience or type of activity, for example, as suggested already by some studies.

3) Investors' life cycle. Business angels' research needs longitudinal studies to determine the dynamics of angel investing. Our understanding of the field is based mostly on descriptive studies that focus on the investor at a given point of time and fail to capture his activity and its evolution. Chapter 5 uses a longitudinal study and obtains data at the beginning and at the end of the investment process. Similarly, additional research is needed to understand how business angels start and develop investment activity during their lifetime. There are some hints that family investors (Maula et al. 2005) might be a breeding ground for business angels or that small investors evolve with time to become high-end investors, but no conclusive evidence. Given the mix of family investors (~50%of

informal investors), other related investors (40%) and unrelated investors (10%) and the fact that our knowledge today is based on a small high-end fraction of the unrelated investors population, studies that address the development of other related and unrelated investors and the potential conversion from family investor to business angel represent an important avenue for future research.

4) Investment process. The current study sheds light on the screening phase of the investment process and provides indication that the effective investment criteria of business angels is more intuitive and less rational than research based on investors recollection suggests. It does not however address in depth the following phases of the process, does not investigate the structure of the process and does not link the criteria and structure of the investment process with ultimate success of the investments. In order to gain predictive power, additional work is needed on determining the project attributes that lead to investors' evaluations in team, opportunity and presentation, as anticipated in annex 1. Further research is needed on that, building on studies that suggest that more due diligence leads to investment success (Wiltbank and Boeker, 2007 and Wiltbank, 2009) or that investment readiness programmes might be counterproductive (Zu Knyphausen-Aufseβ and Westphal, 2008).   Existing literature on business angels has considered that the inefficiencies in the market for informal venture capital were largely linked to lack of information or lack of investment opportunities. Mason and Harrison (2002) enumerated

also inefficiencies from the investment process but thought they were of lesser importance. The findings of the present research found support for the existence of inefficiencies arising from the business angels' practices in the investment process and suggest such inefficiencies might be more important than believed.

In terms of methodology, the current study has highlighted the issues related with some of the methods currently used. Future researchers should favor work with representative samples and include longitudinal studies in their research toolkit. Similarly, shifting the focus from the investor to the investment as a unit of analysis is consistent with the general trend in entrepreneurship research (away from the entrepreneur as an individual and centered on the interaction between entrepreneur and opportunity). It also allows gaining new perspectives and insights into the subject of study. As an example, chapter 3 shows how investors that looked similar when observing their demographic attributes proved to follow different practices when observing the size of the investments they did.

8.   Closing remarks

Business angels are today an interesting topic of research with many challenges for scholars. The evolution of angel investing has been remarkable since 1983, when Wetzel published his seminal paper. During the 1980s and 1990s, angel investing became popular in the USA, helped by the success stories behind several waves of technological innovation. Since

1995, it has also become popular in Europe and other developed countries, with the explosion of hundreds of business angel networks that today cover every important city in OECD countries. That in turn has pushed growth in business angels' research, which has clearly been led by policy makers and practitioners. As a result, the field has grown at a rapid pace but in a disorganized manner and suffers now of a 'teenage crisis', described in recent articles[42]. Within entrepreneurship research, business angels' research is in a privileged position to address those issues. Not only does the topic relate to finance, which is one of the most mature fields within entrepreneurship, it can also build on quantitative evidence.

Business angels represent an interesting topic not only because past growth and current challenges. The application of new technologies to the informal venture capital market and the increased interest of the public in angel investing might result in an even more formidable growth in the coming years. Ultimately, informal investment might become a popular asset class following a process similar to that of stocks in the 1980s.

In this environment, the current research aims to make a small contribution to solving the current issues in business angels' research and to advance in the knowledge of one of the most important areas, the investment process.

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[42] See Venture Capital special issue on the matter (Vol 10, number 2, 2008) and Shane (2010).

Annex 1. Determinants of success in raising capital from business angels

1. Introduction

The screening phase is the most important phase in the investment process for ventures seeking business angels financing, because it has a high rejection rate in a relatively short time (Dal Cin et al., 1993; Riding et al., 1997; Kerr et al. 2010). In Chapter 5, the rejection rate for the screening phase at the IESE BAN was set at 45% of the ventures presented.

Contrary to prior approaches to the issue, the study took a new approach by putting together data from three different sources: the project profile, the investors' evaluation and the entrepreneur's report on the investment process continuity. Two of the sources were factual (the data on the project and the process) and the other was subjective (the investor' evaluation). This methodology of triangulation of sources of information allowed to overcome some of the problems in previous studies and to avoid rationalization bias and other issues inherent to studies based on the recollection of data from the investors only.

The issues in data collection in studies on the informal venture capital investment process can be categorized in four types (see figure 8):

1. Definitional issues with investors, leading to small or not representative samples of investors from which to draw data.

2. Excessive focus on the individual traits (entrepreneur) at the expense of the opportunities attributes.

3. Small samples of opportunities

4. Investment decision information collected only from investors, which might contain biases.

5.

**Figure 8**. Methodological issues in data collection
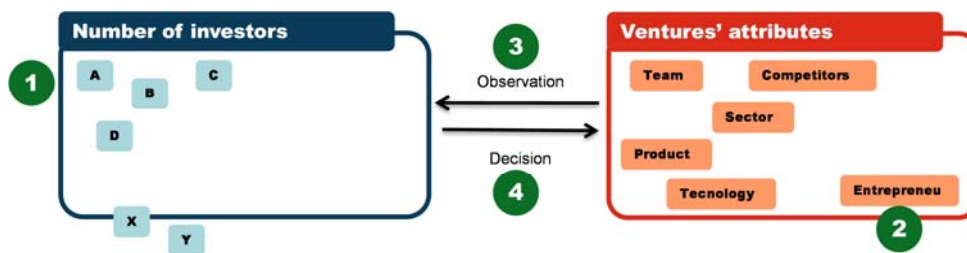
The approach taken tackles the four issues highlighted in the following manner. First, by using data from a business angels network (BAN), there is an initial filter that validates that all the individuals comply with the definition of a business angel. Furthermore, it overcomes the problem of small samples of investors and opportunities. Since business angels belonging to a BAN are not representative of the general business angels population and rather represent the high end individuals operating in informal venture capital, it would be inappropriate to extrapolate the results to estimate the size of the market or to take the practices detected as representative of the general business angels population. In a study about investment practices, it is however an indicator of the best practices in this market. Second, the data of the project profiles allows to have a broader view of the venture beyond the entrepreneur and to explore the fit between

opportunity and entrepreneur that is at the heart of entrepreneurship research. Third, investors' evaluations are checked against their actual behavior, as reported by entrepreneurs. Thus, that eliminates the biases inherent to working with investors reports on their own behavior.

2.   Model I and model II

Using the triangulation methodology outlined above, a dataset was created to compare investors' evaluations, entrepreneurs' reports on the investment process and general descriptive data (sector, stage of development, funding requested). That dataset (model I) was the basis for the research outlined in chapter 5. The study concluded that both the presentation and the opportunity had an impact on success at the screening phase. The evaluation of investors was reported in a survey after meeting with entrepreneurs on a 1 to 5 scale. The study compared evaluations across sector, stage and investment amount data and could not find substantial differences. Nevertheless, it did not explore the attributes that would lead to high evaluations from investors.

Model I proved that good evaluations from angel investors for opportunity and presentation explained success in the screening phase (H2 and H4 were supported). It did not however explain what investors considered good opportunities or good presentations. Shedding light on the objective reasons behind good ratings from investors, if any, would improve the understanding of the screening criteria. It would also add predictive capabilities to the research.

Figure 9. Model I and correlations found
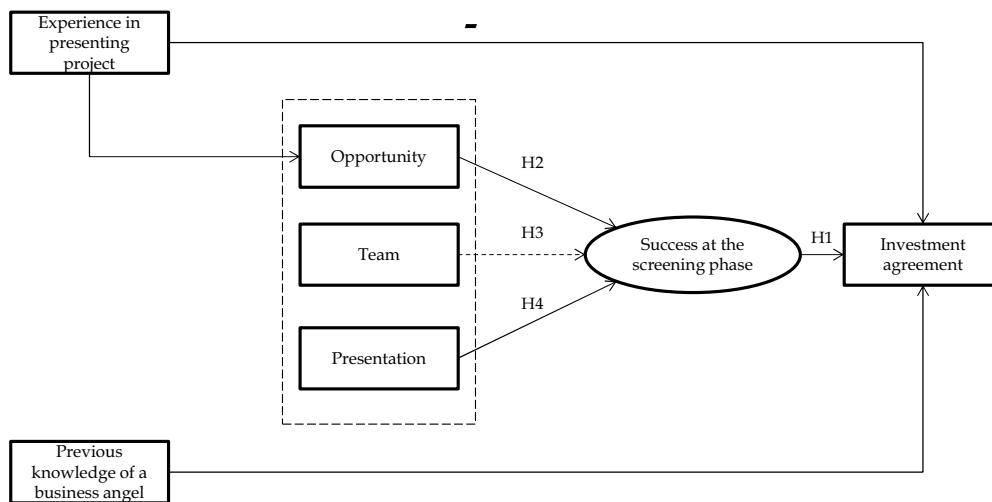
Thus, a second model is being built (model II, see figure 3). Model II would include the same variables than model I and add around 58 new variables. The new variables are generated by the codification of the investment profiles (see profile example and a codification protocol at the end of this chapter).

Model I departed from the investors evaluation to review the relations with the investment process. Model II would depart from a prior step by testing the influence that the project attributes have on investors' evaluation. The profiles summarize the information on the opportunity and the team. Therefore, the aim is to find correlations between the set of new variables and the evaluations in model I.

Model II would try to test different hypotheses (highlighted in red in figure 3), mainly:

- What attributes have the highest impact on investors' evaluation? Are there attributes with negative impact?

- Can attributes be grouped in different vectors that impact specific evaluations?

- It is expected that the attributes will mostly affect the opportunity or the team evaluation (i.e. a good academic record as an attribute can lead to higher team evaluation or providing more information of the competitive landscape would lead to higher opportunity evaluations), but do some attributes can impact the presentation evaluation?

- Do some attributes have a direct impact on success in the screening phase or in the final investment agreement?

- Is the link between previous experience presenting and opportunity evaluation reflected through some attributes?

Compared to model I, model II would provide additional and more objective evidence behind investors' evaluation. It might also find an explanation for the hypotheses refused in model I, specially the lack of significance between team evaluations and success at the screening phase.

In order to do so, a codification protocol was drafted and used to scan the project profiles. The protocol aimed at generating numerical variables from the observation of the profiles. It intends to codify whether information is given to investors in several aspects that are generally deemed to be important in building a business plan and, to

the extent to that is possible, to grade the relative quality of the information transferred.

Figure 10. Model II proposed
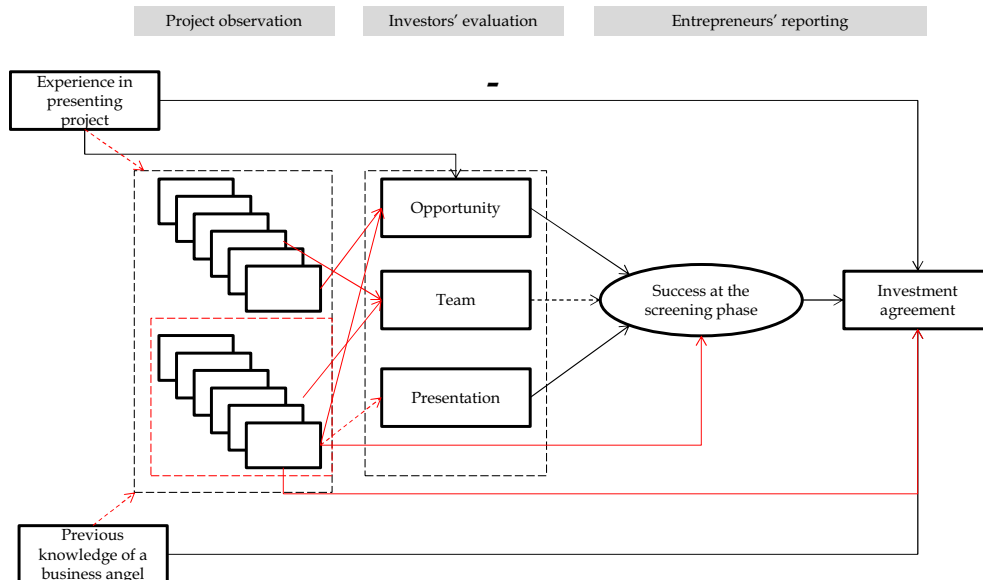
The variables would thus measure to what extent the information provided is complete, but would be an imperfect or indirect measure of the quality of that information.

3.   Codification protocol

The protocol follows the section structure of the profile and tries to identify information provided in each of the sections.

- Section target market – business activity: variables 1 to 8.

- Section technology - advantages of the product / service: variables 9 to 13.

- Section distribution and marketing: variables 14 to 16.

- Section key customers: variables 17 to 20.

- Section alliances/ key cooperation agreements: variables 21 to 26.

- Section competition expected - key competitors: variables 27 to 30.

- Section milestones achieved: variable 31.

- Section management team: variables 32 to 43.

- Section rounds of funding and investors: variables 44 to 47.

- Section main shareholders: variables 48 to 50.

- Section financial projections: variables 51 to 56.

- Section total funding needed, funding requested from the investor and use of proceeds, variables 57 and 58.

The profile is already a step forward in standardizing the projects in a structure of section. Nevertheless, the variety of information within each section is high.

1. Market definition

Search in target market - business activity section of each profile if the project defines the market or market segment that it intends to address. For example: "AWD is a technological company, i.e. we develop technology and own designs to access different markets always within the M2M

market (Machine to Machine)." In cases in which defines the market, code 1. Where not, code 0. In ambiguous cases or questions, leave blank and see next.

2. Market geo scope

Within the target market – business activity section and related to the previous market definition, see if the venture mentions a geographic scope. Following that, it is essential to look for phrases like "Spanish market". Then code as follows, if the venture is local (sub-state level: regions or towns in Spain), code 1. If it competes in all Spain, code 2. For ventures aiming at the European market, code 3 and for global ones, code 4. If the profiles does not mention, then code 0.

3. Market size existence

In the same target market - business activity section, check if market size data is given (in euros, in dollars, in number of users), either on current market size or potential one. Code 0 if no data is given, 1 if economic data is given (measured in euros, dollars...), or 2 if business (number of users or customer) data are given.

4. Market size

Only for those profiles that were coded 1 in previous variable (economic data on market size given), put here the dimension of the market in euro million. In case on non-euro values, then mark in yellow the amount in currency million and then it will be converted to million euros using the exchange rate of the day of the Forum.

5. Market growth existence

See if the profile contains market growth rates in this section. If yes them, code 1, otherwise, code 0.

6. Market growth rate

In the case of 1 in market growth existence, then provide here the percentage of annual growth. In the event that the percentage corresponds to several years, specify the number of year in the reference. In the case of 0 in market growth existence, leave this variable blank.

7. Internationalization

Void since we already collect that information in market scope geo.

8. New market

The market or segment that is defined in the market definition exists (code 1) or is a market or segment to be created in the future (code 0). Due to the subjectivity of the variable, consider to code it after reading all the profile.

9. Key competition variables

In the technology - advantages of the product / service section of the profile see if the key variables on which the venture competes or will compete are identified. Potential variables may be price, quality, level of service, reliability, etc. Code according to the number of identified variables (0 for any identified variables, 1 for 1 variable,...). In separate column, put the variables identified in the descriptive as they appear in the profile (eg: "price", "connection speed").

10. Positioning

From the variables identified in key competition variables, check if the project is positioned. For example, if price is one of the key variables of market competition identified, then it should indicate if the project will be more expensive or cheaper than competitors. If key competition variables is coded 0, leave blank, if he stands in some variables identified, dial 1. If it is positioned in all, code 2.

It might be the case where the venture does not identify the sector parameters explicitly but then it positions itself (i.e., a project does not mention that in the sector competition is on service but then mention as

differential a fast service relative to competitors). In those cases, consider that key competition variables were identified and include in variable 9 accordingly.

11. Competitive advantage

If the variable positioning (#10) is not blank, then check whether the project justifies its positioning or simply announces it. For example: "we give the best service" simply announces it, but "we will give the best service to have more linked customers" justifies it.

12. Technology

The project is based on a specific and owned technology. A technology may be software, a management process or industrial machinery. By specific and owned it means that the technology is controlled by the venture and is not available to competitors (for example, through patents). If there is an specific technology, code 1. If negative, code 0.

13. Technology explained

Cancelled due to the subjectivity involved.

14. Channel definition

In the distribution and marketing section of the profile, identify whether the distribution channels are defined. For example, "there are two distribution channels: direct sales and indirect (through the channel) and there are two distribution groups: corporate sale and sale to end user". In that case code 1. If not, mark 0.

In the profiles from the first forums this section of the profile was not differentiated and the information should be in other sections.

15.   Distribution plan

See if the distribution plan is summarized in the marketing and distribution section. Some indicators of a distribution plan would be objectives, split into actions with quantitative figures and schedules. In case there is a summary of the distribution plan, code 1. If not, code 0.

16.   Marketing actions

In case distribution plan is 1 (#15), then assess whether the venture provides the detailed actions of the plan. For example, "start with advertising and participation and specialized publications, participation in international forums, that annual Congress on this type of technology". In case actions are outlined, code 1. If not, code 0. If variable #15 is 0, then leave #16 blank.

17.   Customer identification

In the key customers section, see if target customers names are mentioned. In case there is one or more name of a customer (current or potential), code 1. If not, code 0.

18.   Current customers

There are existing customers (careful, not potential). Is the company selling to someone? If so, code 1. If not, code 0. If in doubt, leave blank. Check with inconsistencies with stage of development and current sales figures (#51).

19.   Quality customers

Type in different columns the names provided for current customers. Pending to define segmentation between quality customers and others.

20.   Customers fit Void

21.   Alliances identified

In the alliances/ key cooperation agreements section see if the company has identified partnerships and agreements that must close. If so, code 1. If not, cide 0.

22. Alliances contacted

In the alliances/ key cooperation agreements section see if the company has contacted potential allies. If so, code 1. If not, code 0. If the answer is 1, the alliances identified response (#21) has that also be 1 (cannot be have contacted someone who has not been identified).

23. Distribution alliances

In the alliances/ key cooperation agreements section see if the company has closed an agreement or Alliance of commercial distribution of the product or service. If so, code 1. If not, code 0. If the answer is 1, the response in alliances identified (#21) and contacted alliances (#22) must be 1 also.

24. Suppliers alliances

In the alliances/ key cooperation agreements section see if the company has closed an agreement or partnership with any provider of services or materials. If so, code as 1. If not, code 0. If the answer is 1, the response in alliances identified (#21) and contacted alliances (#22) must be 1 also.

25. Outsourcing alliances

In the alliances/ key cooperation agreements section see if the company has closed an agreement or Alliance to outsource part of your business (for example, a software company can have an agreement with a company that is responsible for the phases of lower value added). If so, code as 1. If not, code 0. If the answer is 1 the response in alliances identified (#21) and contacted alliances (#22) must be 1 also.

26. Quality alliances

Names of companies with whom agreements or alliances have been closed. Pending to define segmentation between quality alliances and others.

27. Competitors identified

At the section level of competition expected - key competitors, check for names of current and potential competitors quoted. If they are not cited, dial 0. If it cited only 1 competitor, code 1. 2 competitors, code 2...

28. Competitors value proposition

Does the venture explain what current or potential competitors do or will do differently? If in doubt, see the codification in competitive advantage (#11). If the project explains it, code 1. If it does not explain it, code 0.

29. Barriers of entry

Are any barriers to entry for new competitors mentioned? Possible barriers to entry are patents, economies of scale, cost of customer acquisition for those who arrive second, etc. In case barriers of entry are mentioned, code 1. Otherwise, code 0.

30. Competitors strength

List names of the aforementioned competitors, if any. Potential segmentation depending on the strength of the names provided.

31. Milestones achieved

In a Word document, save the explanations of major achievements / milestones achieved so far. Pending to define potential further codification depending on the outcome (i.e. type of achievements).

32. Entrepreneur alone

In the management team section, indicate whether the entrepreneur is alone or has a team already formed. Advisers, and counselors, should not be considered as part of the team. Code 1 for entrepreneurs alone. Code 2 for a team of 2. Code 3 for a team of 3 and so on.

33. Entrepreneur gender

The entrepreneur or entrepreneurs are men or women? If there is only one entrepreneur and is a man, code 1. If female, code 2. In case there is a team which is composed of men only, code 3. For a women team, code 4. For mixed (men and women) teams, code 5.

34. Entrepreneur advisors

There are advisors involved in the project? Code as 0 if not, code 1 in case there are.

35. Serial entrepreneur

Has any member of the team (careful, not of the advisers) been an entrepreneur before (i.e. has established some other company in his career)? Code 0 if nothing is mentioned. Code 1 if one venture was undertaken before and so on following the number of ventures launched.

36. Entrepreneur studies

Is the main field of studies of the entrepreneur related with the project? (i.e. entrepreneurs in biotech are biologists? Those in the financial sector are economists?). If there is a relationship, code 1. If there isn't, 0.

37. Entrepreneur academic level

Highest level of education of the members of the team (always excluding advisers). Code 0 in the case of primary school, 1 for high school, 2 for university degrees, 3 for master (MBA,...) and 4 for doctorate (PhD in English). One should be careful with expressions such as "engineering studies" (that does not imply a university degree and must be coded as 1).

38. Entrepreneur experience

The entrepreneur has professional experience in the sector of the project? Code 0 if not, code 1 in case any member of the team does.

39. Team fit

As they are a team, have some of them worked together before? Code 0 if not, code 1 if yes. Where there is no team, leave the field blank.

40. Team roles

In case of team, validate if each one of the team members has a role defined in the project (general manager, Sales Manager, CFO)? Code 0 if no roles are mentioned or roles are duplicated, code 1 otherwise. In cases where there is no team, leave blank.

41. Entrepreneur IESE

Is it the entrepreneur or any of the entrepreneurs alumnus of IESE? Code 0 if not, code "MBA" where he is alumnus of that program and similar with other programs (GEMBA, Executive MBA, PDD, PDG, PADE, AMP).

42. Foreign entrepreneur

Is it the entrepreneur or any entrepreneurs of foreign (non-Spanish) nationality? Code 0 if not, code 1 if yes (foreigner).

43. Entrepreneur age

How old is the entrepreneur? Include age in years. If not given, leave blank.

44. Previous rounds

Rounds of funding and investors section (in some profiles is not), see if there has been prior to submitting any previous funding round. You have to compare the date of the Forum with the date of the rounds that put because the money you are looking for in the presentation some included in this section. If there was no previous financing rounds, dial 0. If there have been 1, dial 1. If 2, Mark 2...

45. Amount raised

Total quantities captured in previous rounds in euros ("€amount" column sum). If there is no previous rounds, dial 0.

46. Last valuation

Assessment of the last round. Result of dividing the amount captured in the last round by the participation rate. If for example € 150,000 have captured by 10%, the assessment is 1,500,000.

47.   Time since last round

Time in months elapsed since the last round. If there has been no previous rounds of funding, leave blank. Refer to the column with the month date of each investment forum.

48. External equity share

In the section main shareholders, determine what percentage of the shares are held by members of the team or the entrepreneur. It can be from 0% to 100% (normally should be between 50% and 100%). If there were no previous rounds, code 100%.

49. BA investors

Provide the name of all investors that may appear in this section and the previous one. This variable and the next one will be coded afterwards based after reviewing the results (probably defining some segments).

50. VC investors

See above.

51. Current sales

In the chapter on financial projections, provide the turnover of the previous year. In euros. If it does not appear or no sales were done, code as 0.

52. Future sales

Future sales of the furthest year for which there is information. In euros.

53. Sales years

Number of years between the former and the farthest from the previous variables year (current sales and future sales). For example, if the year earlier was 2006 and the year for which gives further projections is 2012, mark 2012 - 2006 = "6"

54. Current EBIT

The figure for earnings before interest and taxes (EBIT rank) of the previous year. In euros. If you don't, put 0.

55. Future EBIT

Earnings before interest and taxes ("BAII" row) future of the furthest year for which there is financial information. In euros.

56. EBIT years

Number of years between the former and the year farther from the previous variables (current EBIT and EBIT future). For example, if the year earlier was 2006 and the year for which gives further projections is 2012, marked 2012 - 2006 = "6". Should be the same as in #53.

57. Use of proceeds

In the section total funding needed, funding requested from the investor and use of proceeds, check to what extent the profile explains the use that will be given to the quantities applied for. If indicated, code 1. If not explained, code 0.

58. Use of proceeds 2

A list of the descriptions of the use of the investment to be able to encode it afterwards, a possibility might be to define uses such as marketing actions, capex, hiring,….

4.   Project profile

Buyvip.com, an e-commerce project, was presented to investors in 2006. Gustavo Garcia Brusilovsky had just graduated from an executive programme at IESE (PDG) and had previous experience in corporations and as an entrepreneur. Back then the company had had a first round from friends and business school classmates of the entrepreneur and it was in pre-sales phase. 6 months after presenting to investors, Buyvip.com closed an investment agreement with business angels.

In 2010, after several additional financing rounds, the company reached €145 million sales and 6 million registered users. It was sold to Amazon.com for €70 million[43].

The profile that follows as an example is the one presented at investors in 2006 and it is reproduced here with the authorization of Gustavo García Brusilovsky.

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[43] The Wall Street Journal. October 5th, 2010.

RED DE BUSINESS ANGELS – IESE - MADRID
16º FORO DE INVERSORES

Perfil de la compañía

Nombre de la Compañía:	BUYVIP S.L. (www.buyvip.com)
Dirección:	Avenida del Partenón 10. Campo de las Naciones. 28042 Madrid
Teléfono	+34 91 768 0440
Fax	+34 91 768 0441

buy·v!p

Logo de la compañía

Fecha de creación de la empresa :	28 de diciembre de 2005

Presentador del proyecto (nombre y cargo)	Gustavo García Brusilovsky (socio fundador y CEO)	Foto del presentador/emprendedor
Persona de contacto	Gustavo García Brusilovsky	
Teléfono:	609166744. 917680440	
E-mail:	gustavo.garcia@buyvip.com	

DESCRIPCIÓN DEL NEGOCIO EN UNA LÍNEA.

Comunidad de compras on line que organiza sólo para sus miembros ventas de marca rebajadas entre el 30 y 70%

MERCADO OBJETIVO – ACTIVIDAD DEL NEGOCIO

BuyVip se ubica en la categoría de las Ventas Privadas en Internet, que nacieron hace 4 años en Francia de la mano de www.vente-privee.com . Hoy en día vente-privee.com es líder en el mercado francés con unas ventas superiores a 60 millones de euros al año y 2,5 millones de visitantes únicos al mes, lo que les coloca entre las 10 webs más visitadas de Francia. Ya cuenta con decenas de empresas que les imitan circunscritas al mercado francés.
BuyVip nació hace 6 meses con la idea de replicar este modelo de negocio a nivel internacional europeo, y en la actualidad cuenta con presencia física en España, Alemania e Italia y cobertura en Portugal y Austria.

El potencial del mercado es enorme, si tenemos en cuenta que no sólo incluye los más de 20.000 millones de euros que estos países gastan al año en comercio electrónico sino que se solapa con otras actividades clásicas como el outlet físico en grandes ciudades o la venta por catálogo, que llega a duplicar la anterior cifra.

1

TECNOLOGÍA – VENTAJAS DEL PRODUCTO/SERVICIO

Buyvip.com permite a los socios (ser socio es gratuito) de la comunidad tener un acceso on line exclusivo a las campañas (duran de 2 a 4 días) y poder visualizar gracias a una presentación preparada por profesionales el catálogo de los productos con multitud de detalles, fotos ampliadas o explicación de las medidas en las tallas. Al recibir la invitación de la campaña los socios reciben un correo que incluye un vídeo de 2 minutos presentando de forma muy atractiva los productos de la venta privada. Verdadera publicidad on line.

Ventajas para el socio: poder comprar una selección de productos de las mejores marcas de ropa de moda, deportiva, para el hogar, cuidado personal o electrónica con descuentos propios de las Rebajas (de rebajas todo el año, desde el 30% mínimo al 70%) y con la comodidad de hacerlo desde el ordenador sin desplazarse a bulliciosos outlets.

Ventajas para el proveedor (la Marca): contar con un canal adicional para eliminar excesos de stock suyos o de sus distribuidores, que cuida excelentemente su marca realizando verdaderas campañas de comunicación; también les permite testar o lanzar (buzzword) nuevos productos y disfrutar de condiciones de cobro ventajosas (se puede pagar en plazos muy cortos al comprar lo que ya se ha vendido)

A destacar que no existe riesgo financiero por parte de BuyVip, ya que las campañas se ejecutan bloqueando el stock del proveedor y sólo se paga lo vendido y cobrado por anticipado..

CLIENTES CLAVE

El target principal (socio de la comunidad) es mujer/hombre (por este orden) entre 25 y 45 años, urbano, usuario de Internet –ya ha realizado alguna compra on line- de clase media/media-alta que gusta de las marcas y habituado a las rebajas (ya sea de los outlets, showrooms o las estacionales de toda la vida).

ALIANZAS/ACUERDOS DE COOPERACIÓN CLAVE

Una de las bases estratégicas en BuyVip ha sido desde el principio externalizar en partners cualificados todo aquello que se puede hacer mejor fuera: Desarrollo de la plataforma de e-commerce (Media Net Software), diseño de campañas de comunicación on-line (Evoluciona), Gestión de medios en Internet (EvolNet), Gestión de la plataforma logística (GELESA, operador del Grupo Prisa), Sistema de pagos on line (Banco Popular), Call center (Emergia) y RRPP (Aubyn Group). El foco del equipo de BuyVip se orienta a reclutar y crear una relación diferencial con las Marcas a nivel Internacional y gestionar las distintas piezas externalizadas con un claro objetivo de cuidado, casi mimo, del socio de BuyVip.

NIVEL DE COMPETENCIA ESPERADO Y COMPETIDORES CLAVE

El principal competidor a seguir es la misma vente-privee, que ya ha iniciado la captación de comunidad en España y se espera empiecen sus operaciones de venta en septiembre. Existen dos empresas que han nacido al igual que BuyVip con foco europeo que son privateretail.com y outlet2you.com, que todavía no han levantado fondos pero hay que seguirles de cerca. En España y Portugal hay varias empresas (Dreivip.com, privalia.com, vipventa.com, comprasvip.es, clubefashion.com) pero ninguna de ellas tiene foco europeo ni –hasta la fecha- ha levantado fondos de forma notoria. En términos de ventas, relación con las marcas y comunidad BuyVip lleva ya una gran ventaja en dos países.

LOGROS/HITOS ALCANZADOS HASTA EL MOMENTO

BuyVip ya es una realidad en pleno funcionamiento: se está cumpliendo el plan. Tras una primera ronda de Friends&Family donde se levantaron más de 525K€ se encuentra operativo en términos de equipo (España, 5 personas, Alemania 4 personas, e Italia, 2 personas) y ventas (España, desde Abril y Alemania, desde junio). Todos las actividades logísticas y la plataforma de comercio electrónico están funcionando en 2 de los 3 países. Italia comienza sus ventas en septiembre. A la fecha se han realizado más de 10 campañas.

2

EQUIPO DIRECTIVO

Gustavo García Brusilovsky. CEO BuyVip. Fue Director General para España y Francia del marketplace de Siemens portum.com entre los años 2000 y 2005 con responsabilidad directa en la apertura de las operaciones fuera de la Casa Matriz en Alemania. Anteriormente Director de Marketing para EMEA en IBM (París) con responsabilidad directa sobre las campañas de e-business (1998-2000) y Director de Servicios de Marketing para la unidad de PCs de IBM España (1995-1998). Su carrera profesional se inicia en puestos de Marketing en Procter&Gamble y McDonald´s. PDG por el IESE en 2005, MBA por la universidad de Houston, Licenciado en Bioquímica (UAM) e Informática (UPS)
Gerald Heydenreich, CFO BuyVip y Dtor. Gral. BuyVip Alemania. Fue el Fundador y CEO de Portum AG desde su creación en 1999 hasta el año 2005. Anteriormente trabajó en Unilever, Arthur Andersen, Arthur D. Little e IBM Global Services. Uno de los 100 principales expertos en e-business según el Financial Times, recibió el "The Budding Entrepreneur Award" en el año 2002 por el Europe´s 500 company. Estudió Empresariales en la European Business School (Alemania) y se graduó por la Thunderbird / AGSIM University en Phoenix (USA)
Franco Gianera. Director General BuyVip Italia. Desempeñó diversos roles en Adecco, destacando el de CIO. Anteriormente trabajó en Accenture en el sector Moda. Estudió en el Politécnico de Milano
Andrés Fernández-Longo: COO/CTO BuyVip. Responsable de Proyectos en Media Net entre los años 2000 y 2005. Anteriormente trabajó en la principal embotelladora de Argentina (Peñaflor) con responsabilidad directa sobre las marcas Cepita, Schweppes o Crush. Estudió Ingeniería Alimenticia en la UNLu, (Argentina) y es PDD por el IAE/IESE.

RONDAS DE FINANCIACIÓN PREVIAS

Ronda	Fecha	Etapa	Inversor y (Cantidad)	Valoración de la compañía	Cantidad total
PRIMERA	Abril 2006	Lanzamiento operaciones en España y Alemania	+525.000€ aportados por 50 friends and family	2,5Mio€	525.000€

FINANCIACIÓN TOTAL REQUERIDA, FINANCIACIÓN SOLICITADA AL INVERSOR Y DESTINO DE LA INVERSIÓN

En la segunda ronda de financiación buyvip.com tiene como objetivo la venta del 10% del capital actual a una valoración de 3,025Mio€ para levantar 302.500€ que apoyen el lanzamiento de las operaciones italianas y aceleren la captación de comunidad en los 3 países.

ACCIONISTAS

Actualmente BuyVip cuenta con 50 accionistas, entre los que se destaca el equipo directivo, Media Net Software, Digital Assets Deployment (la incubadora de Rodolfo Carpintier, exNetjuice) o Firstream, empresa especializada en externalización de fuerza de ventas con contactos en el sector retail moda y sport

DATOS FINANCIEROS CLAVE

	2006	2007	2008	2009	2010
Cifra de negocios (5 años)	445K€	6Mio€	22,9Mio€	36Mio€	55Mio€
BAII	-650K€	500K€	3,3Mio€	6Mio€	9Mio€
Tamaño comunidad	125.000	300.000	550.000	775.000	1.000.000
Número de ventas	35	150	250	325	375
Aportaciones fundadores y F&F y externas	825K	0	0	0	0
Plantilla (Número de empleados)	10	18	24	30	36

OTRA INFORMACIÓN

BuyVip no es una idea (que ya la tuvieron en Francia) sino un equipo especializado en ejecución que está cumpliendo el plan. Líder en los dos países donde está operativo cuenta con un equipo gestor que ya ha puesto en números negros una operativa multipaís (Portum.com) y ha demostrado que puede llevar a cabo un proyecto de estas características. La red de contactos que proporcionan los 50 inversores del Friends&Family junto a la primera ronda de financiación importante en el sector son recursos diferenciales cara a un entorno pronto muy competitivo.

3

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