



# Venture Capital

An International Journal of Entrepreneurial Finance

ISSN: 1369-1066 (Print) 1464-5343 (Online) Journal homepage: <https://www.tandfonline.com/loi/tvec20>

## The ivory tower of business angel research

Hans Landström & Roger Sørheim

To cite this article: Hans Landström & Roger Sørheim (2019) The ivory tower of business angel research, Venture Capital, 21:1, 97-119, DOI: [10.1080/13691066.2019.1559879](https://doi.org/10.1080/13691066.2019.1559879)

To link to this article: <https://doi.org/10.1080/13691066.2019.1559879>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 21 Mar 2019.



Submit your article to this journal [↗](#)



Article views: 1230



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 2 View citing articles [↗](#)

ARTICLE



## The ivory tower of business angel research

Hans Landström<sup>a,b</sup> and Roger Sørheim<sup>b</sup>

<sup>a</sup>Sten K. Johnson Centre for Entrepreneurship, Lund University, Lund, Sweden; <sup>b</sup>Engage, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

### ABSTRACT

As researchers we need to be relevant, not only to our peers, but also to external stakeholders. We need to make a societal impact. In this study we explore the extent and characteristics of the implications for external stakeholders identified in articles on Business Angels published in *Venture Capital: An International Journal of Entrepreneurial Finance* between 1999 and 2017. We identified 75 articles on Business Angels. The number of articles on Business Angels has declined over time. Many do not provide any implications for external stakeholders. When researchers provide implications for external stakeholders they are usually vague and in some cases fairly obvious to external stakeholders. We conclude that most of the implications provided will probably never have a large impact on external stakeholders. We suggest that there should be less focus on those scholars who do not have anything to say about policy and practice. Instead, scholars who possess the knowledge to write relevant and insightful implications should be encouraged to increase their contributions.

### ARTICLE HISTORY

Received 16 September 2018  
Accepted 5 December 2018

### KEYWORDS

Business angel research;  
rigour vs relevance;  
literature review

## 1. Introduction

One requirement of good research is that the knowledge that is generated should not only attract interest among our peers, but also be useful for external stakeholders, for example, policy-makers, politicians, entrepreneurs, business angels and other investors, the media and students. If our research fails to address relevant issues and lacks contributions that capture the interest of practitioners and policy-makers, it can be argued that we have failed in our social responsibility as researchers to stimulate societal progress. This aim was also explicitly stated when *Venture Capital: An International Journal of Entrepreneurial Finance* was launched 20 years ago (Mason and Harrison 1999): “However, there is very limited dialogue between the academic researchers on the one hand, and practitioners and policy-makers on the other hand. This can be attributed to the lack of ‘delivery mechanisms’, or common media, for debate and information exchange between the academic and practitioner communities” (p. 14). There is no doubt that the journal has been instrumental in the development of research within the field as one of the major outlets for research on entrepreneurial finance. However, to what extent have the practical and policy implications sections of the

**CONTACT** Hans Landström  [hans.landstrom@fek.lu.se](mailto:hans.landstrom@fek.lu.se)  Sten K. Johnson Centre for Entrepreneurship, Lund University, Lund, Sweden

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Journal contributed to fulfilling the aim of stimulating the dialogue between academic researchers and external stakeholders?

Business Angel (BA) research constitutes a topic of particular relevance for practitioners and policy makers. In the 1980s, the BA market emerged as a “new” financial vehicle to provide capital for new ventures. The BA market was not well understood at that time and researchers as well as policy makers and entrepreneurs were “operating in the dark”. Thus, there was a strong need amongst external stakeholders to learn more about BAs. In particular, policy-makers at both national and regional levels had a strong interest in understanding the BA market in order to develop measures to stimulate BA investment activity. The interest of entrepreneurs was in learning how to access this large but unfamiliar market.

As researchers, it is assumed that our articles address issues of relevance to external stakeholders, particularly as the journal explicitly states the importance of such outcomes in the articles published. However, there is an ongoing discussion within the field of management whether such implications are really meaningful or merely a part of the checklist of reviewers and editors. In this debate, some scholars argue that management studies is a strongly “reality-oriented” academic field that aims to support business practice (Wolf and Rosenberg 2012). Such scholars consider it to be necessary, as well as possible, to bridge the gap between rigorous research and relevance in the implications offered to external stakeholders. In this respect, different parts of the rigor-relevance gap has been addressed (Frank and Landström 2016): (1) the “problem formulation gap”, which indicates that researchers and practitioners experience different kinds of problems and formulate problems in different ways; (2) the “research process gap”, which states that there is a lack of collaboration between researchers and practitioners in the knowledge production process; and (3) the “dissemination gap”, which has to do with limitations in the translation of research findings into practice. Many different solutions have been presented on how to bridge these different parts of the rigor-relevance gap, for example, in terms of engaged scholarship (Pettigrew 2001; Van de Ven and Johnson 2006), narrative studies (Gartner 2007), interactive research approaches (Aagaard-Nielsen and Svensson 2006), and enactive research (Johannisson 2018).

However, other scholars are more pessimistic, arguing that the rigour-relevance gap is unbridgeable (Kieser and Leiner 2009). Practitioners and researchers belong to different “systems” that are largely self-referential and focus on their own logic. The difficulty of bridging the two systems is caused by different goal criteria, with the systems stabilized by peer reviews and reputational mechanisms, which leads to a disconnection to other social structures and a social community that adheres to its own logic (Flickinger et al. 2014). Scholars even argue that scholars do not have anything to say to practitioners (e.g., Alvensson 2012). As the vast majority of articles are incremental, narrowly defined and based on the same assumptions, most ideas are already taken-for-granted and reproduced.

Nevertheless, a situation where other researchers are the only end-users is hardly ideal for us as scholars (Adler and Harzing 2009). We risk creating an “ivory tower” with our research by ignoring the fact that an important role of academic scholars is to address complex questions of relevance to society and that articles without or with only vague practical implications may have little potential to influence the thinking and actions of external stakeholders (Fuetsch and Suess-Reyes 2017). Therefore, if an article

lacks practical relevance, the audience may question its value, asking “what good does it do?” or “who cares?” (Davis 1971; Frank and Landström 2016)

In this article we attempt to describe how implications for practice and policy makers are typically constructed. We do so by exploring the extent and the characteristics of the practical implications presented in articles on BA published in *Venture Capital: An International Journal of Entrepreneurial Finance* between 1999 and 2017. To address this issue, we have conducted a literature review that focusing on the following research questions:

**RQ 1:** To what extent and at what depth do BA researchers generate practical implications for practitioners and policy makers with an interest in business angels?

**RQ 2:** What can practitioners and policy makers learn from the research on BA?

In the study we review 75 articles on BAs published in the Journal. Our findings indicate that the number of articles on BAs has declined over time and many articles do not provide any implications for external stakeholders, and when implications for external stakeholders are provided they are usually vague and in some cases fairly obvious. Instead of encouraging those scholars who do not have a lot to say to external stakeholders, we must stimulate those scholars who do have something of practical value to say to improve and disseminate their knowledge even more. We also suggest that *Venture Capital* should strengthen its role as an intermediary between researchers and practitioners/policy-makers. Thus, the intention of this article is to contribute to the debate on rigor and relevance in management research and provide some suggestions for improving the relevance of BA research.

The remainder of this article is organized as follows. In the next section we provide a brief overview of the research on BAs. This is followed by a methodological section in which we describe how we conducted the literature review for this article, including a description of the sample of articles that we analyse in the study. Thereafter, the descriptive and analytical results are presented, along with a discussion of our results. The paper concludes with a discussion of the implications of our analysis for overcoming this disconnect between research and practice.

## 2. Development of BA research

In the 1980s, the interest in BAs, who have been defined as high net worth individuals who make equity investments in non-quoted ventures in which they have no family relationship (Mason and Harrison 1999), developed amongst academic scholars (Landström 2017). This research on BAs emerged from a seminal article by William Wetzel jr. at the University of New Hampshire in the USA titled “Angels and informal risk capital” and published in *Sloan Management Review* (1983).<sup>1</sup> In the article Wetzel concluded that BAs probably represented the largest pool of risk capital for entrepreneurial ventures and played an essential role in the growth of high-tech sectors. By the end of the 1980s and into the 1990s Wetzel’s study had stimulated an increasing research interest in BAs (Landström and Mason 2016). Initially, Wetzel’s study was replicated in different parts of the US, for example, in California (Tymes and Krasner

1983), the Sunbelt region (Gaston and Bell 1986), the Great Lake region (Aram 1987) and on the East Coast (Haar, Starr, and Macmillan 1988). In this so-called “first generation” of BA studies, researchers focused their attention on two main questions. How large is the BA market? And what characterizes BAs? The key objective was to identify the types of individuals making the investments and to describe their attitudes, behaviour and characteristics (the “ABC” of business angels). These early studies showed that the “typical” angel investor was a middle-aged male with a reasonable net income and net worth, who has previous start-up experience and makes about one investment a year, usually close to home.

These pioneering US studies encouraged researchers in other countries to undertake studies of their own BA markets and make international comparisons. Studies were conducted in Canada (Riding and Short 1987), the UK (Mason and Harrison 1994), Sweden (Landström 1993), Finland (Lumme, Mason, and Suomi 1998), Australia (Hindle and Wenbam 1999), Japan (Tashiro 1999), Norway (Reitan and Sørheim 2000) and Germany (Brettel 2003; Stadler and Peters 2003). Although the conditions for an active BA market differed from country to country, the conclusion from these international studies was that there were many similarities in the attitudes, behaviour and characteristics of BAs irrespective of geographical context (Kelly 2007) as well as over time (Månsson and Landström 2005).

These early studies of BAs were important, not only because they made the BA market visible, which, in turn, stimulated an interest amongst entrepreneurs, high net worth individuals and policy makers in many countries, but also because they posed questions for policy makers on “how to stimulate the BA market” and for entrepreneurs on “how to access the BA market”. This also provided the basis for further research. On the back of these demographic studies researchers increasingly started to take the next step in deepening our understanding of the BA market. These “second generation” studies focused on two main issues: (1) the investment decision-making process of BAs: to understand the way in which BAs made their investments and the investment criteria they used for selecting investments (e.g., Riding, Duxbury, and Haines 1994; Landström 1995, 1998; Mason and Rogers 1997) and (2) policy issues to improve the BA market: the BA market became a major focus for policy intervention – starting in the UK in the early 1990s and around ten years later in the rest of Western Europe (Mason 2009; OECD 2011). Obviously, these studies had great potential to contribute to increased knowledge among policy-makers as well as entrepreneurs searching for capital.

A third generation of rather eclectic BA studies emerged in the 2000s. First, a considerable amount of research continued to investigate investment decision-making by BAs but with a much narrower focus, for example, paying attention to the trust between the entrepreneur and the BA, but also the conflicts that may arise between the actors (e.g., Mitteness, Sudek, and Cardon 2012; Parhankangas and Ehrlich 2014; Maxwell, Jeffrey, and Lévesque 2011, 2014). A second theme has been the notion that the BA market shows great heterogeneity (Avdeitchikova 2009) and studies have therefore focused on specific types of angel – notably founder angels (Festel and De Cleyn 2013), super angels and women angels (Harrison and Mason 2007; Sohl and Hill 2007). Third, some studies have sought to introduce a time dimension, examining angel investment trends over time and specifically following the global financial crisis (Månsson and Landström 2005; Sohl 2006; Mason and Harrison 2015).

In the 2010s there has been a slow-down in BA research. There are several reasons for this decrease in the number of studies. First, BAs are a difficult and time-consuming topic to study. The respondents are difficult to identify on account of their high degree of anonymity, which means that the samples are small and lack representativeness. With increased emphasis on quantitative studies and an increased requirements on researchers to publish in high-ranked journals, BAs are not an attractive research topic. Second, the financial markets have changed rapidly over the last decade. BA markets have matured in many countries and new forms of BA investing have emerged (e.g., angel groups and syndicates). Third, the digitalization process has created new arenas for relationships between entrepreneurs and investors with the consequence that the interest in data-rich “crowdfunding” platforms has more or less “knocked-out” BA research.

It can be concluded that over time research on BAs has focused on issues that are of great importance for external stakeholders, that *Venture Capital: An International Journal of Entrepreneurial Finance* has been instrumental as one of the main outlets for BA researchers and that it could therefore play an important role in disseminating BA research to external stakeholders. To what extent has this occurred?

### 3. Method

#### 3.1. Research process

In this study we review articles on BAs published in *Venture Capital: An International Journal of Entrepreneurial Finance* from the first issue of the journal in 1999 to the end of 2017. The search strategy included the search terms “private equity capital”, “angel(s)”, “private investors”, “informal venture capital”, “business angel(s)”, “informal investors”, “angel groups”, “angel funds”, “angel networks” OR “angel investors” in the title or keywords of the article. We excluded editorial articles, executive forum articles and book reviews. We also excluded a Special Issue on business angels in 2002 that included articles that could not be considered research articles. This resulted in 75 articles (see [Appendix](#)). We operationalized implications for policy makers and practitioners as the explicit suggestions made by scholars, mainly discussed in the “Implications for Practice” section of the articles or in the “Conclusion”.

The review of the articles focused on their implications for external stakeholders, such as entrepreneurs, business angels, policy makers and politicians. Assessing the extent and depth to which implications for external stakeholders were presented in the articles was not an easy task. We used a scale developed by Fuetsch and Suess-Reyes (2017) based on a three-point classification: (0) low or non-explicit implications, (1) medium and (2) high practical relevance. Fuetsch and Suess-Reyes define articles with “low or non-explicit implications” as contributing to a better understanding of the investigated topic without stating specific implications. The “medium” category includes articles that indicate desirable goals but do not offer concrete guidance for how to achieve them. Finally, articles defined having “high practical relevance” provide concrete guidance for action and application-oriented recommendations. In addition to the extent that scholars paid focused on implications for external stakeholders, we also analysed to whom their recommendations were addressed and what were the most common recommendations given to external stakeholders.

**Table 1.** BA articles over time.

	1999–2003		2004–2008		2009–2013		2014–2017		Total	
	No	Average/year	No	Average/year	No	Average/year	No	Average/year	No	Average/year
BA articles	24	4.8	23	4.6	17	3.4	11	2.75	75	3.9

### 3.2. Sample description

We divided the time frame into four sub-periods (1999–2003, 2004–2008, 2009–2013 and 2014–2017). Over time, on average 3.9 articles on BA have been published each year in the Journal (Table 1). There has been a slight decrease in the average number of articles over time – in the first period an average of 4.8 articles per year were published, whereas 2.75 articles/year were published during the last period between 2014 and 2017. The noticeable decrease in the number of articles on BAs published in the time period 2014–2017 might reflect the increased attention devoted to crowdfunding as an important source of capital for new firms, and which has become the “hot topic” in entrepreneurial finance research (Landström, Parhankangas, and Mason 2019).

## 4. Results

### 4.1. BA research in the *Venture Capital journal* over time

In our analysis we classified articles according to the extent and depth of the implications presented for external stakeholders using a three-point scale from low or non-explicit implications (level 0) to high practical relevance (level 2). The results of the analysis are presented in Table 2.

It is important to emphasise that the number of articles in the sample is small and the results are partly dependent on the division of the time periods. However, the results show that:

- Almost four out of ten articles (or 36%) do not provide any (or only limited) explicit implications for external stakeholders. The proportion of articles with low or non-explicit implications for external stakeholders decreased in the period 2009–2013 in favour of more general practical and policy implications on level 1. Moreover, the proportion of articles lacking external policy implications increased substantially during the period 2014–2017. It is too early to say whether this is only a variation or a trend. It could be argued that research on BA has now become more theoretical in character and as a consequence is mainly restricted to an academic audience.

**Table 2.** Policy and practical implications in BA articles (in % with number of articles in brackets).

	1999–2003	2004–2008	2009–2013	2014–2017	Total
Total number of BA articles	24	23	17	11	75
No policy or practical implications (level 0)	37.5 (9)	39.1 (9)	23.5 (4)	45.5 (5)	36.0 (27)
Articles suggesting only general practical and policy advice (level 1)	45.8 (11)	52.2 (12)	53.0 (9)	36.3 (4)	48.0 (36)
Articles suggesting general practical and policy advice (level 1) as well as concrete actions (level 2)	16.7 (4)	8.7 (2)	23.5 (4)	18.2 (2)	16.0 (12)



- Most articles published in *Venture Capital* (almost 5 out of 10 articles or 48%) present general implications for external stakeholders (level 1). The proportion of articles increased slightly in the third period (2009–2013), but the number of level 1 implications decreased substantially during the last period (2014–2017) in favour of articles without or with only limited implications for external stakeholders.
- We note that only a few articles (less than 2 out of 10 articles or 16%) focus on implications for external stakeholders in general as well as in concrete terms (levels 1 and 2). The number of articles of this type has been fairly constant over time.

We can conclude that many articles on BAs published in *Venture Capital* contain no implications for external stakeholders. In addition, we note that only 17 articles (or 27%) explicitly stated aims that indicated that the author(s) will provide implications for external stakeholders. The number of articles of this type with explicit aims has decreased over time. However, despite the ambition to provide external implications, the outcomes are not always impressive. Of the 17 articles, only 4 actually provided implications at level 2, suggesting that implications for external stakeholders might be regarded as something thought to be necessary for publication in the journal or that the authors did not understand what it means to make implications that will attract attention among external stakeholders, resulting in fairly vague and general implications.

Thus, the majority of articles only include rather general implications for external stakeholders (level 1). Very few provide far-reaching implications with concrete implications on level 2. We can argue that such vague implications will seldom influence external stakeholders – policy makers and practitioners usually demand concrete suggestions that they can act upon.

However, taking a closer look at the authors who provide implications for external stakeholders in their articles (on levels 1 and 2), we find that there are a few who frequently present external implications and that many of them have a long track-record of BA research (e.g., Mason, Harrison, Sohl, Riding and Aernoudt). The field of BA research has a high degree of mobility – scholars publish one or two articles on the topic and then leave the field. Of course this calls into question knowledge accumulation in BA research in general, but might also explain the lack of more insightful implications for external stakeholders. Thus, there seem to be only a few BA researchers who have a sufficiently deep knowledge of the BA market and strong relationships to external stakeholders to be confident about providing implications for external stakeholders.

Next, we analyse the articles on levels 1 (medium degree of policy and practical implications) and 2 (high degree). This comprises the 36 articles on level 1 and the 12 articles that in addition to level 1 implications also give implications on level 2. We ask the question: to whom are the implications directed? In this respect, we can identify the following stakeholders: policy makers and politicians (defined as “policy focus”), entrepreneurs (defined as “demand focus”) and investors (defined as “supply focus”). Our results are presented in [Table 3](#).

Our analysis reveals the following results:

- Policy focus: Not surprisingly, a large number of articles (20 articles) focus on implications for politicians and policy makers. This is particularly the case in early BA research (1999–2003) that focuses on the UK experiences of tax initiatives and business angel networks (e.g., Harrison and Mason [2000](#); Kelly and Hay [2000](#)), but



**Table 3.** Focus of implications (number of articles).

	1999–2003	2004–2008	2009–2013	2014–2017	Total
Number of articles on levels 1 and 2	15	14	13	6	48
No. of articles with only policy focus	8	5	5	2	20
No. of articles with only demand focus	1	3	3	0	7
No. of articles with only supply focus	2	2	0	2	6
No. of articles with a “combination”	4	4	5	2	15

also includes papers that highlight the need to stimulate the BA markets in other countries, such as Argentina (Pereiro 2001), Norway (Reitan and Sørheim 2000) and Japan (Tashiro 1999).

- Demand focus: Some attention has been devoted to implications for entrepreneurs (7 articles), in particular how they should attract BAs. This was an important focus in 2004–2008 and 2009–2013, during which a total of six articles solely explored the demand for finance. The “investment readiness” concept emerged with several articles discussing the importance of improving the competence and skills of entrepreneurs to attract BAs (e.g., Paul et al. 2007; Clark 2008; Mitteness, Sudek, and Cardon 2012). There was also an acknowledgement of the fact that entrepreneurs are heterogeneous, with suggestions offered, for example, to women entrepreneurs searching for BA capital (Sohl and Hill 2007; Brush et al. 2012).
- Supply focus: It is somewhat surprising that although investors constitute the empirical basis of many studies, few articles (in total 6) direct their implications specifically to BAs and even among the articles with a combined focus few of the implications have a supply focus. When such implications are provided, they concern improving the competences and skills of BAs (e.g., Sørheim 2003; Lindsay 2004) and the selection criteria used when investing in different kinds of venture (e.g., Levie and Gimmons 2008; Capizzi 2015; Jeffrey et al. 2016).
- Combination focus: Researchers are inclined to give a broad range of implications – even though their empirical basis is rather narrowly focused – which also means that many implications are fairly general (on level 1) and not always directly linked to the study conducted by the authors.

Not surprisingly, most of the implications for external stakeholders are directed towards politicians and policy makers, with researchers giving a broad range of advice and suggestions to different stakeholders. We obviously see the rationale for conducting empirical studies on investors (BAs) and entrepreneurs in order to provide practical implications for politicians and policy makers, but we would expect a stronger link between the empirical object of the studies and the implications provided. For example, although many studies use BAs as the object of study, very few implications are directed towards BAs.

#### 4.2. Implications given to external stakeholders

In our analysis we focused on the implications for different external stakeholders (e.g., entrepreneurs, BAs and policy-makers) during different periods of time. Therefore, we ask the question: What implications have been given to different stakeholders in different time-periods?

#### 4.2.1. *Implications given to policy makers over time*

The main target of the implications presented in the articles has been policy makers and politicians. In our analysis we find that the characteristics of the implications have changed somewhat over time and that the number of articles with implications for policy has decreased. Taking a closer look at the implications that can be found in these articles, what can policy makers and politicians learn from them? The implications can be summarized in the following ways:

- In the first period (1999–2003) most implications focused on the inefficiency of the BA-market and mainly discussed the need to improve BA networks. For example, Aernoudt (1999) suggests that policy makers should help to set up such BA networks, disseminate information about how to run them, while avoiding a “wild” growth of networks and instead focus on a small number of those that are high quality. Similarly, Sohl (1999) highlights the lack of information about BA networks and the need for a directory on BA networks, BA alliances and BA clubs.

In several articles the authors elaborate on the need to improve BA networks, for example, by enhancing the quality control of the BAs registered in the networks, increasing the deal flow by becoming more proactive in searching for growth-oriented ventures (Harrison and Mason 2000), facilitating the formation of BA syndicates, becoming more active in sharing their deal-making experiences and involving serial entrepreneurs who want to make informal investments (Kelly and Hay 2003), attracting managers in various positions to make informal investments (Politis and Landström 2002) and developing education and training material for BAs and entrepreneurs (Kelly and Hay 2003; Wong and Ho 2007). A second topic in early articles on BAs concerns the need for tax incentives and regulation for BA markets in general (e.g., Aernoudt 1999; Paul et al. 2003; Riding 2008; Szerb et al. 2007). Most of these implications were rather general and few concrete implications emerged.

- Over time we can also identify an increased interest in the BA market from scholars outside the UK and the US, who conducted ABC-studies on BAs in their countries and provided suggestions for stimulating their BA markets. A study of Argentina (Pereiro 2001) suggested changes in the business law in order to provide proper protection for minority shareholders, and the launch of different business introduction services. In Norway, Reitan and Sørheim (2000) suggesting the need to increase the number of good business ideas and the introduction of various forms of “match-making” organizations with regional anchoring. In Japan, Tashiro (1999) argues that tax incentives would not be sufficient to motivate potential BAs and therefore reliable advisory services to evaluate the business plans and monitor the entrepreneurs are necessary, while Katsuna and Harada (2004) also emphasize the importance of BA network activities and argue that BAs in Japan need to improve their support skills, but also that the matching process needs to be improved. In Finland, Lahti (2011b) suggested tax incentives targeting the upside gain (i.e., capital gains tax), the introduction of BA networks and the provision of adequate exit markets for BA investments. In Chile, Romani et al. (2013) emphasize the need for a legal and tax framework that contributes to strengthening the supply of BA capital, but also the need to support and educate entrepreneurs as well as BAs in order to improve their BA investment competencies. In the Philippines and Thailand, Scheela and

Jittrapanun (2012) highlight the importance of investment networks. A similar argument is made in Denmark on the importance of BA networks but also emphasizing the importance of flexibility and patience on the part of policy makers when it comes to the development of BA networks (Christensen 2011).

- A recurring theme over time, but to a lesser extent, is the recognition that the main problem is not the supply of BA capital, but a lack of demand from ventures with growth potential that are attractive to BAs and venture capital firms (Harding 2000; San José et al. 2005; Gorman and Terjesen 2006; Harrison et al. 2010). However, the suggestions on how to improve the demand are rather limited. Harding (2000) suggests that European policy-makers should learn from the US (and Germany) in building clusters, integrate universities in the entrepreneurial eco-system to a larger extent and develop regional growth policies. Gorman and Terjesen (2006) suggest policies that encourage women to become entrepreneurs and BAs. Having identified shortage of finance in the £2-£10 million range of the Scottish risk capital market, Harrison et al. (2010) argue for an increase sources of follow-on funding.
- In later time periods we can identify some significant changes in the implications presented in the BA articles. One key issue is recognition of the heterogeneity of the BA market. Lahti (2011a) and Szerb et al. (2007) argue that policy makers need to understand the heterogeneity of the market and design appropriate initiatives that attract each of these groups of BAs. In this respect we can find a recurring theme in the implications. Building on Lerner (2009), several authors emphasize that policy makers should avoid encouraging “amateur investors” to enter the market (Riding 2008; Avdeitchikova 2008) and instead focus policy measures on larger stakeholders. A second key issue is an understanding that the BA market is changing and that more mature markets now exhibit greater professionalization in terms of more of BA clubs and BA alliances and fewer BAs investing on their own. Several articles focus on stimulating and supporting “investors clubs” (Sørheim 2003), “angel groups” (Riding 2008; Mason et al. 2016), making use of the experience of the gatekeepers in the syndicates and angel groups (Paul and Whittam 2010), and also stimulating the collaboration between different types of investors, for example, through co-investment schemes (Riding 2008) and linking experienced and novice BAs (Riding 2008). Finally, in the most recent period (2014–2017) it is interesting to note that authors focus on the need for policies that will maintain the longevity of the instruments that have already been implemented, for example, supporting BA networks through subsidized due diligence costs and administrative support (Gregson et al. 2017), as well as the recognition that governments need to develop coherent policy platforms covering the BA market (White and Dumay 2017).

The conclusion that we draw is that progress has been made in the implications offered to policy makers and politicians concerning the BA market that relate to the two main BA market problems: (1) how to increase the pool of investors and (2) how to improve the efficiency of the market, recognising that BA markets are very heterogeneous and have changed over time. The need for a long-term policy commitment is also emphasised. Thus, we can conclude that many of the implications suggested by BA researchers are appropriate. However, it appears to be increasingly difficult to provide politicians and policy makers with adequate implications – as the “simple” solutions have already been given. We observe that the number of articles with

policy implications has decreased significantly over time and fewer scholars seem to have something to say to policy makers and politicians. Many of the initial studies of BAs were commissioned or supported by governments. A possible reason for this decrease could be related to a lower interest in BAs by policy makers, resulting in reduced public support for research on BAs. Indeed, there seems to be a shift in public sector support from BA studies to studies of the crowdfunding phenomena. But whether this shift in policy makers focus is appropriate is questionable since BAs seem to play a much more significant role than crowdfunding in supporting and developing new growth firms.

#### 4.2.2. *Implications for investors (BA) over time*

As already mentioned, despite the fact that the empirical focus of most studies is BAs, few implications are directed towards them, and we were unable to identify any particular change in the number of articles with implications for BAs over time. Looking at the implications that have been identified for BAs, what can BAs learn from them?

- It was recognized at an early stage that BAs are a heterogeneous group of investors who make investments in many different kinds of ventures. For example, novice BAs who enter the market learn a great deal by co-investing with more experienced investors (Saetre 2003). Sørheim (2003) develops this argument by suggesting that novice BAs should try to identify potential co-investors by focusing on Business Introduction Services and structured angel groups. In addition, when BAs invest in women entrepreneurs, they need to be more “relational”: in other words, the BA should be more easily accessible to the entrepreneur, and the negotiations require to be more wide-ranging (Brush et al. 2002). Implications are also offered with regard to the need for BAs to improve their professional skills, for example, concerning due diligence and deal structuring (Wong and Ho 2007; Lindsay 2004; Macht 2011).
- In the most recent period (articles published between 2014 and 2017) we can identify a stronger focus on the investment process of BAs and their decision criteria. For example, Jeffrey et al. (2016) argue that BAs need to better understand their decision-making process and suggest that BAs who are time-constrained need to focus on gathering the right information, which is related to the decision criteria used. If BAs are aware of the criteria they are using, the better their chances of obtaining relevant information. A similar argument is made by Capizzi (2015) who states that BAs with stringent “deal killer” criteria will generate higher returns, and that syndications and investor network membership will lead to more refined decision criteria. In this respect, Cox et al. (2017) suggest that decision criteria need to be divided between those that have a direct effect on the evaluation and those with moderating effects (e.g., industry and entrepreneurial fit).

The conclusion that we can draw is that even though there are very few articles with implications for BAs, there has been a development in the various topics over time: from recognition of the heterogeneity of the market to the need for improving their professional skills and experience, especially in relation to the investment process and decision-making criteria. Many of the suggestions appear to be relevant and well rooted in

the studies from which they are derived, but as some implications are fairly obvious and not particularly concrete, they may not be particularly helpful for BAs.

#### 4.2.3. *Implications for entrepreneurs over time*

There are relatively few articles including implications for entrepreneurs (the demand for capital) and the number has decreased over time. For example, the most recent period in our analysis (2014–2017) did not include any articles with implications for entrepreneurs. What can entrepreneurs learn from reading these articles? The implications provided can be summarized as follows:

- Investment readiness is important (Paul et al. 2003; Paul et al. 2007): ensuring that entrepreneurs are technologically, organizationally and strategically prepared (Brush et al. 2012) to raise finance from BAs, and the timing of establishing the relationship with BA is crucial (Bonnet and Wirtz 2012).
- Entrepreneurs need to improve their presentation skills (Paul et al. 2003; Feeney et al. 1999; Clark 2008; Mitteness, Sudek, and Cardon 2012) in order to successfully demonstrate the potential for rapid growth of the venture (Madill et al. 2005) as well as the opportunity and market potential (Mitteness, Sudek, and Cardon 2012).
- Entrepreneurs should improve their knowledge and make use of their social networks when approaching the BA market (Sohl and Hill 2007; Wong and Ho 2007). In particular, they should seek help from other entrepreneurs who are already connected to BAs (Wong and Ho 2007) and experienced advisors (Lahti 2011a). Entrepreneurs should target BAs with prior management and start-up skills (Wong and Ho 2007; Lahti 2011a).
- Entrepreneurs should be aware that the psychological and written contracts will set out the expectations of both parties and it is important to include the expectations of both parties in the contract (Macht 2011). In order to find a good match, entrepreneurs need to consider the post-investment role that they wish BAs to play in their ventures (Paul et al. 2003; Paul et al. 2007).

More specific implications are given by Heuven and Groen (2012), focusing on the importance of the entrepreneur's experience of approaching the BA market. The authors argue that all entrepreneurs will benefit from networks that are open and rich in structural holes (e.g., to visit trade shows, join business groups, etc.). Experienced entrepreneurs might be able to access financial resources directly, whereas less experienced entrepreneurs are advised to link up with referral sources to access finance, particularly when the venture involves high risk or requires to raise large amounts of capital.

The conclusion that we can draw is that the focus of the implications is on the investment readiness of entrepreneurs and their presentation skills and the importance of using their social networks when approaching the BA investors. However, some implications are rather general and fairly obvious, as well as not always being strongly linked to the studies from which they are drawn. Over time, we find that the number of articles with implications for entrepreneurs has decreased and the topics raised by the authors are quite similar. However, the implications have become slightly more nuanced.

## 5. Conclusion and implications

Returning to our introductory discussion on the rigour-relevance gap in management studies, we strongly believe that the gap is both possible and desirable to overcome. Of course, there are many solutions to bridge the gap (Frank and Landström 2016), but based on our analysis of the BA articles in *Venture Capital: An International Journal of Entrepreneurial Finance* we want to highlight two issues that can improve the relevance of our research and thereby help prevent it from being perceived to be conducted in an “ivory tower”. First, implications for external stakeholders should be given by scholars who actually have something meaningful to say to this audience. Second, the Journal needs to improve its role in connecting the two system and encourage the dialogue between research and practice.

In general, our results show that a large proportion of articles on BAs either have no explicit or only vague practical implications, and that the number of articles with implications for external stakeholders has decreased over time. In addition, when external implications are offered they are usually rather broad and focus on the “what” question, for example, using terms such as “improve”, “stimulate”, “encourage”, “facilitate” and “support”, but seldom go into any detail on the “how” question. We also argue that in many cases the implications given are rather obvious to external stakeholders and therefore have limited potential to influence their behaviour. Having said that, we acknowledge that several of the implications in the articles are well developed, insightful and built on good scholarly research and so are likely to be helpful to external stakeholders.

Thus, we draw the conclusion that it is not necessary for all articles on BAs to provide implications for external stakeholders but there is a need to make a distinction between those articles which do have implications for external stakeholders and those which do not. In our review, we identified a large number of BA articles that did not have any implications for external stakeholders. For various reasons the authors may have lack the confidence to provide implications for external stakeholders, or were not interested in doing so – and if one has nothing to say to external stakeholders there is no point in trying to do so. More problematic is the large group of articles in which the authors try to say something to external stakeholders, but the implications are rather vague and obvious and so will probably have little impact on their behaviour. In our view, the authors would have done a better job if these implications had been deleted by removing the section on implications for practice and policy from the articles. However, we also found a group of insightful articles that seem useful for external stakeholders – often written by researchers with a long track record within the field who work close to the BA market. Our argument is that we should not urge researchers who have nothing to say to external stakeholders, but instead encourage those who have the knowledge to write relevant and insightful implications for external stakeholders to formulate even better implications and reach out to the stakeholders with their suggestions. This also implies that we need to encourage scholars to stay within the field of BA research for a longer period of time (and not regard their research on BAs as an one-off activity). It is only through long-term effort and the development of trusting relationships with external stakeholders in the BA market and in the policy sphere that scholars can develop knowledge that will overcome the “ivory divide” in our research.

How can we improve the conditions for those researchers who actually have something to say to external stakeholders? A basic assumption in our argument is that science and practice constitute two self-referential systems that function according to different logics, have different languages and time horizons (Kieser and Leiner 2009). If there is no structural coupling between the two systems there will be no mutual influence and no way of connecting them. Thus, we need to find ways of connecting the systems and the quality of our implications for external stakeholders may be of importance in this respect.

First, to improve the quality of the implications in the journal of *Venture Capital* even further, we suggest that those articles with an explicit aim of providing implications to external stakeholders should go through a review by external stakeholders, who should read, assess and comment on the articles in terms of their practical and policy usefulness, specifically, the Journal should set-up a review panel of practitioners and policy makers who could serve as reviewers. Second, we know that a scientific journal will never be read by external stakeholders. Therefore, those articles that aim to provide implications for external stakeholders should be disseminated in different ways and make use of new technology to reach out, such as YouTube interviews with the authors. Third, there is need for arenas where key researchers and policy makers meet on a more regular basis. Editors and publishers could play a key role in initiating this and setting the agenda for developing and disseminating BA research towards policy makers. This will, of course, involve more work and extra pressure for the editors of the Journal but this effort will achieve greater impact.

## Note

1. See Sohl, Harrison, and Mason (2018) for an appreciation of William Wetzel's influence on business angel research.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## References

- Aagaard-Nielsen, K., and L. Svensson. 2006. *Action and Interactive Research. Beyond Practice and Theory*. Maastricht: Shaker Publishing.
- Adler, N. J., and A. Harzing. 2009. "When Knowledge Wins: Transcending the Sense and Nonsense of Academic Rankings." *Academy of Management Learning and Education* 8: 72–95.
- Aernoudt, R. 1999. "Business Angels: Should They Fly on Their Own Wings?." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (2): 187–195. doi:10.1080/136910699295965.
- Alvesson, M. 2012. "Do We Have Something to Say? from Re-Search to Roi-Search and Back Again." *Organization* 20 (1): 79–90. doi:10.1177/1350508412460996.
- Aram, J. D. 1987. *Informal Risk Capital in the Great Lakes Region*. Washington, DC: Small Business Administration.
- Avdeitchikova, S. 2008. "On The Structure of The Informal Venture Capital Market in Sweden." *Venture Capital: an International Journal of Entrepreneurial Finance* 10 (1): 55–85. doi:10.1080/13691060701605504.



- Avdeitchikova, S. 2009. "False Expectations: Reconsider the Role of Informal Venture Capital in Closing the Regional Equity Gap." *Entrepreneurship and Regional Development* 21 (2): 99–130. doi:[10.1080/08985620802025962](https://doi.org/10.1080/08985620802025962).
- Bonnet, C., and P. Wirtz. 2012. "Raising Capital for Rapid Growth in Young Technology Ventures." *Venture Capital: an International Journal of Entrepreneurial Finance* 14 (2–3): 91–110. doi:[10.1080/13691066.2012.654603](https://doi.org/10.1080/13691066.2012.654603).
- Brettel, M. 2003. "Business Angels in Germany: A Research Note." *Venture Capital: an International Journal of Entrepreneurial Finance* 5 (3): 251–268. doi:[10.1080/1369106032000122095](https://doi.org/10.1080/1369106032000122095).
- Brush, C. G., L. F. Edelman, and T. S. Manolova. 2012. "Ready for Funding? Entrepreneurial Ventures and The Pursuit of Angel Financing." *Venture Capital: an International Journal of Entrepreneurial Finance* 14 (2–3): 111–129. doi: 14 doi:[10.1080/13691066.2012.654604](https://doi.org/10.1080/13691066.2012.654604).
- Brush, C. G., N. M. Carter, P. G. Greene, M. Hart, and L. Gatewood. 2002. "The Role of Social Capital and Gender in Linking Financial Suppliers and Entrepreneurial Firm." *Venture Capital: an International Journal of Entrepreneurial Finance* 4 (4): 305–323. doi:[10.1080/1369106022000024897](https://doi.org/10.1080/1369106022000024897).
- Capizzi, V. 2015. "The Returns of Business Angel Investments and Their Major Determinants." *Venture Capital: an International Journal of Entrepreneurial Finance* 17 (4): 271–298. doi:[10.1080/13691066.2015.1092264](https://doi.org/10.1080/13691066.2015.1092264).
- Christensen, J. L. 2011. "Should Government Support Business Angel Networks? The Tale of Danish Business Angel Network." *Venture Capital: an International Journal of Entrepreneurial Finance* 13 (4): 337–356. doi:[10.1080/13691066.2011.642513](https://doi.org/10.1080/13691066.2011.642513).
- Clark, C. 2008. "The Impact of Entrepreneurs' Oral "pitch" Presentation Skills on Business Angels' Initial Screening Investment Decisions." *Venture Capital* 10 (3): 257–279. doi:[10.1080/13691060802151945](https://doi.org/10.1080/13691060802151945).
- Cox, K. C., J. Lortie, and K. Gramm. 2017. "The Investment Paradox: Why Attractive New Ventures Exhibit Relatively Poor Investment Potential." *Venture Capital: an International Journal of Entrepreneurial Finance* 19 (3): 163–181. doi:[10.1080/13691066.2016.1247982](https://doi.org/10.1080/13691066.2016.1247982).
- Davis, M. 1971. "That's Interesting! Towards a Phenomenology of Sociology and a Sociology of Phenomenology." *Philosophy of the Social Sciences* 1 (4): 309–344. doi:[10.1177/004839317100100211](https://doi.org/10.1177/004839317100100211).
- Feeney, L., G. H. Haines, and A. L. Riding. 1999. "Private Investors' Investment Criteria: Insights From Qualitative Data." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (2): 121–145. doi:[10.1080/136910699295938](https://doi.org/10.1080/136910699295938).
- Festel, G. W., and S. H. DeCleyn. 2013. "Founding Angels as an Emerging Subtype of Angel Investment Model in High-Tech Businesses." *Venture Capital: an International Journal of Entrepreneurial Finance* 15 (3): 261–282. doi:[10.1080/13691066.2013.807059](https://doi.org/10.1080/13691066.2013.807059).
- Flickinger, M., A. Tuschke, T. Gruber-Muecke, and M. Fiedler. 2014. "In Search of Rigor, Relevance, and Legitimacy: What Drives the Impact of Publications." *Journal of Business Economics* 84 (1): 99–128. doi:[10.1007/s11573-013-0692-2](https://doi.org/10.1007/s11573-013-0692-2).
- Frank, H., and H. Landström. 2016. "What Makes Entrepreneurship Research Interesting? Reflections on Strategies to Overcome the Rigour-Relevance Gap." *Entrepreneurship and Regional Development* 28 (1–2): 51–75. doi:[10.1080/08985626.2015.1100687](https://doi.org/10.1080/08985626.2015.1100687).
- Fuetsch, E., and J. Suess-Reyes. 2017. "Research on Innovation in Family Businesses: Are We Building an Ivory Tower?" *Journal of Family Business Management* 7 (1): 44–92. doi:[10.1108/JFBM-02-2016-0003](https://doi.org/10.1108/JFBM-02-2016-0003).
- Gartner, W. B. 2007. "Entrepreneurial Narrative and a Science of the Imagination." *Journal of Business Venturing* 22 (5): 613–627. doi:[10.1016/j.jbusvent.2006.10.003](https://doi.org/10.1016/j.jbusvent.2006.10.003).
- Gaston, R., and S. E. Bell. 1986. *Informal Risk Capital in the Sunbelt*. Washington, DC: Small Business Administration.
- Gregson, G., A. J. Bock, and R. T. Harrison. 2017. "A Review and Simulation of Business Angel Investment Returns." *Venture Capital: an International Journal of Entrepreneurial Finance* 19 (4): 285–311. doi:[10.1080/13691066.2017.1332546](https://doi.org/10.1080/13691066.2017.1332546).
- Haar, N., J. Starr, and I. Macmillan. 1988. "Informal Risk Capital Investors: Investment Patterns on the East Coast of the USA." *Journal of Business Venturing* 3: 11–29. doi:[10.1016/0883-9026\(88\)90027-4](https://doi.org/10.1016/0883-9026(88)90027-4).

- Harding, R. 2000. "Venture Capital and Regional Development: Towards a Venture Capital System." *Venture Capital: an International Journal of Entrepreneurial Finance* 2 (4): 287–311. doi:[10.1080/13691060050177004](https://doi.org/10.1080/13691060050177004).
- Harrison, R. T., and C. M. Mason. 2000. "Venture Capital Market Complementarities: The Links Between Business Angels and Venture Capital Funds in the United Kingdom." *Venture Capital: an International Journal of Entrepreneurial Finance* 2 (3): 223–242.
- Harrison, R. T., and C. M. Mason. 2007. "Does Gender Matter? Women Business Angels and the Supply of Entrepreneurial Finance." *Entrepreneurship Theory and Practice* 31 (3): 445–472. doi:[10.1111/etap.2007.31.issue-3](https://doi.org/10.1111/etap.2007.31.issue-3).
- Harrison, R. T., G. Don, K. G. Johnston, and M. Greig. 2010. "The Early-stage Risk Capital Market in Scotland Since 2000." *Venture Capital: an International Journal of Entrepreneurial Finance* 12 (3): 211–239. doi:[10.1080/13691066.2010.486149](https://doi.org/10.1080/13691066.2010.486149).
- Heuven, J., and A. Groen. 2012. "The Role of Social Networks in Financing Technology-based Ventures." *Venture Capital: an International Journal of Entrepreneurial Finance* 14 (2–3): 131–149. doi:[10.1080/13691066.2012.659473](https://doi.org/10.1080/13691066.2012.659473).
- Hindle, K., and R. Wenban. 1999. "Informal Venture Capitalists: An Explorative Profile." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (2): 169–186. doi:[10.1080/136910699295956](https://doi.org/10.1080/136910699295956).
- Jeffrey, S.A., M. Lévesque, and A.L. Maxwell. 2016. "The Non-compensatory Relationship Between Risk and Return in Business Angel Investment Decision Making." *Venture Capital: an International Journal Of Entrepreneurial Finance* 18 (3): 189–209. doi:[10.1080/13691066.2016.1172748](https://doi.org/10.1080/13691066.2016.1172748).
- Johannisson, B. 2018. *Disclosing Entrepreneurship as Practice. The Enactive Approach*. Cheltenham: Edward Elgar.
- Kelly, P. 2007. "Business Angels Research: The Road Traveled and the Journey Ahead." In *Handbook of Research on Venture Capital*, edited by H. Landström, 315–331. Vol. 1. Cheltenham: Edward Elgar.
- Kelly, P., and M. Hay. 2000. "Deal-makers: Reputation Attracts Quality." *Venture Capital: an International Journal Of Entrepreneurial Finance* 2 (3): 183–202.
- Kelly, P., and M. Hay. 2003. "Business Angel Contracts: The Influence Of Context." *Venture Capital: an International Journal Of Entrepreneurial Finance* 5 (4): 287–312. doi:[10.1080/1369106032000141940](https://doi.org/10.1080/1369106032000141940).
- Kieser, A., and L. Leiner. 2009. "Why the Rigor-Relevance Gap in Management Research Is Unbridgeable." *Journal of Management Studies* 46 (3): 516–533. doi:[10.1111/j.1467-6486.2009.00831.x](https://doi.org/10.1111/j.1467-6486.2009.00831.x).
- Kutsuna, K., and N. Harada. 2004. "Small Business Owner-managers as Latent Informal Investors in Japan." *Venture Capital: an International Journal Of Entrepreneurial Finance* 6 (4): 283–311. doi:[10.1080/1369106042000282574](https://doi.org/10.1080/1369106042000282574).
- Lahti, T. 2011a. "Categorization Of Angel Investments: an Explorative Analysis Of Risk Reduction Strategies in Finland." *Venture Capital: an International Journal Of Entrepreneurial Finance* 13 (1): 49–74. doi:[10.1080/13691066.2010.543322](https://doi.org/10.1080/13691066.2010.543322).
- Lahti, T. 2011b. "Angel Investing: an Examination Of The Evolution Of The Finnish Market." *Venture Capital: an International Journal Of Entrepreneurial Finance* 13 (2): 147–173. doi:[10.1080/13691066.2011.600282](https://doi.org/10.1080/13691066.2011.600282).
- Landström, H. 1993. "Informal Risk Capital in Sweden and Some International Comparisons." *Journal of Business Venturing* 8: 525–540. doi:[10.1016/0883-9026\(93\)90037-6](https://doi.org/10.1016/0883-9026(93)90037-6).
- Landström, H. 1995. "A Pilot Study on the Investment Decision-Making Behavior of Informal Investors in Sweden." *Journal of Small Business Management* 33 (3): 67–76.
- Landström, H. 1998. "Informal Investors as Entrepreneurs." *Technovation* 18: 321–333. doi:[10.1016/S0166-4972\(98\)00001-7](https://doi.org/10.1016/S0166-4972(98)00001-7).
- Landström, H. 2017. *Advanced Introduction to Entrepreneurial Finance*. Cheltenham: Edward Elgar.
- Landström, H., A.-L. Parhankangas, and C. Mason, eds. 2019. *Handbook on Research on Venture Capital. Volume 4: Crowdfunding*. Cheltenham: Edward Elgar.

- Landström, H., and C. Mason. 2016. *Handbook of Research on Business Angels. Volume 3*. Cheltenham: Edward Elgar.
- Lerner, J. 2009. *Boulevard of Broken Dreams*. Princeton, NJ: Princeton University Press.
- Levie, J., and E. Gimmon. 2008. "Mixed Signals: Why Investors May Misjudge First Time High Technology Venture Founders." *Venture Capital: an International Journal of Entrepreneurial Finance* 10 (3): 233–256. doi:[10.1080/13691060802151820](https://doi.org/10.1080/13691060802151820).
- Lindsay, N.J. 2004. "Do Business Angels Have an Entrepreneurial Orientation?." *Venture Capital: an International Journal of Entrepreneurial Finance* 6 (2–3): 197–210. doi:[10.1080/13691060420001675983](https://doi.org/10.1080/13691060420001675983).
- Lumme, A., C. M. Mason, and M. Suomi. 1998. *Informal Venture Capital: Investors, Investments and Policy Issues in Finland*. Boston, MA: Kluwer Academic Publishers.
- Macht, S.A. 2011. "The Role of Investee Company Managers in Business Angels' Involvement." *Venture Capital: an International Journal of Entrepreneurial Finance* 13 (3): 267–293. doi:[10.1080/13691066.2011.622864](https://doi.org/10.1080/13691066.2011.622864).
- Madill, J., G.H. Haines, and A.L. Riding. 2005. "The Role of Angels in Technology Smes: A Link to Venture Capital." *Venture Capital: an International Journal of Entrepreneurial Finance* 7 (2): 107–129. doi:[10.1080/1369106042000316341](https://doi.org/10.1080/1369106042000316341).
- Månsson, N., and H. Landström. 2005. "Business Angels in a Changing Economy: The Case of Sweden." *Venture Capital: an International Journal of Entrepreneurial Finance* 8 (4): 281–301. doi:[10.1080/13691060600836275](https://doi.org/10.1080/13691060600836275).
- Mason, C., T. Bothelho, and R. Harrison. 2016. "The Transformation of the Business Angel Market: Empirical Evidence and Research Implications." *Venture Capital: an International Journal of Entrepreneurial Finance* 18 (4): 321–344. doi:[10.1080/13691066.2016.1229470](https://doi.org/10.1080/13691066.2016.1229470).
- Mason, C. M., and R. T. Harrison. 1994. "The Informal Venture Capital Market in the UK." In *Financing Small Firms*, edited by A. Hughes and D. J. Storey, 64–111. London: Routledge.
- Mason, C. M. 2009. "Public Policy Support for the Informal Venture Capital Market: A Critical Review." *International Small Business Journal* 27 (5): 536–556. doi:[10.1177/0266242609338754](https://doi.org/10.1177/0266242609338754).
- Mason, C. M., and A. Rogers 1997. Understanding the Business Angel's Investment Decision. Venture Finance Research Project, Working Paper No. 14, Southampton University.
- Mason, C. M., and R. T. Harrison. 1999. "Editorial: Venture Capital: Rationale, Aims and Scope." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (1): 1–46. doi:[10.1080/136910699295974](https://doi.org/10.1080/136910699295974).
- Mason, C. M., and R. T. Harrison. 2015. "Business Angel Investment Activity in the Financial Crisis: UK Evidence and Policy Implications." *Environment and Planning C: Government and Policy* 33 (1): 43–60. doi:[10.1068/c12324b](https://doi.org/10.1068/c12324b).
- Maxwell, A., M. Lévesque, and S. Jeffrey. 2014. "The Non-Compensatory Relationship between Risk and Return in Business Angel Investment Decisions." *Academy of Management Proceedings* 1: 10463. doi:[10.5465/ambpp.2014.10463abstract](https://doi.org/10.5465/ambpp.2014.10463abstract).
- Maxwell, A., S. A. Jeffrey, and M. Lévesque. 2011. "Business Angels Early Stage Decision Making." *Journal of Business Venturing* 26: 21–225. doi:[10.1016/j.jbusvent.2009.09.002](https://doi.org/10.1016/j.jbusvent.2009.09.002).
- Mitteness, C., R. Sudek, and M. S. Cardon. 2012. "Angel Investor Characteristics that Determine whether Perceived Passion Leads to Higher Evaluations of Funding Potential." *Journal of Business Venturing* 27 (5): 592–606. doi:[10.1016/j.jbusvent.2011.11.003](https://doi.org/10.1016/j.jbusvent.2011.11.003).
- O'Gorman, C., and S. Terjesen. 2006. "Financing the Celtic Tigress: Venture Financing and Informal Investment in Ireland." *Venture Capital: an International Journal of Entrepreneurial Finance* 8 (1): 69–88. doi:[10.1080/13691060500453742](https://doi.org/10.1080/13691060500453742).
- OECD. 2011. *Financing High Growth Firms. The Role of Angel Investors*. Paris: OECD.
- Parhankangas, A.-L., and M. Ehrlich. 2014. "How Entrepreneurs Seduce Business Angels: An Impression Management Approach." *Journal of Business Venturing* 29 (4): 543–564. doi:[10.1016/j.jbusvent.2013.08.001](https://doi.org/10.1016/j.jbusvent.2013.08.001).
- Paul, S., and G. Whittam. 2010. "Business Angel Syndicates: An Explorative Study of Gatekeepers." *Venture Capital: an International Journal of Entrepreneurial Finance* 12 (3): 241–256. doi:[10.1080/13691061003711438](https://doi.org/10.1080/13691061003711438).

- Paul, S., G. Whittam, and J. Wyper. 2007. "Towards A Model of the Business Angel Investment Process." *Venture Capital: an International Journal of Entrepreneurial Finance* 9 (2): 107–125. doi:[10.1080/13691060601185425](https://doi.org/10.1080/13691060601185425).
- Paul, S., G. Whittam, and J.B. Johnston. 2003. "The Operation of The Informal Venture Capital Market in Scotland." *Venture Capital: an International Journal of Entrepreneurial Finance* 5 (4): 313–335. doi:[10.1080/1369106032000141931](https://doi.org/10.1080/1369106032000141931).
- Pereiro, L. E. 2001. "Tango And Cash: Entrepreneurial Finance and Venture Capital in Argentina." *Venture Capital: an International Journal of Entrepreneurial Finance* 3 (4): 291–308.
- Pettigrew, A. M. 2001. "Management Research after Modernism." *British Journal of Management* 12 (1): 61–70. doi:[10.1111/1467-8551.12.s1.8](https://doi.org/10.1111/1467-8551.12.s1.8).
- Politis, D., and H. Landström. 2002. "Informal Investors as Entrepreneurs – The Development of An Entrepreneurial Career." *Venture Capital: an International Journal of Entrepreneurial Finance* 4 (2): 78–101. doi:[10.1080/13691060210816](https://doi.org/10.1080/13691060210816).
- Reitan, B., and R. Sørheim. 2000. "The Informal Venture Capital Market in Norway: Investor Characteristics, Behavior and Investment Preferences." *Venture Capital: an International Journal of Entrepreneurial Finance* 2 (2): 129–141. doi:[10.1080/136910600295747](https://doi.org/10.1080/136910600295747).
- Riding, A., and D. Short. 1987. "On The Estimation Of Investment Potential of Informal Investors: A Capture/recapture Approach." *Journal of Small Business and Entrepreneurship* 5 (4): 26–40.
- Riding, A., L. Duxbury, and G. Haines. 1994. *Financing Enterprise Development: Decision-Making by Canadian Angels*. Ottawa: Carleton University.
- Riding, A.L. 2008. "Business Angels and Love Money Investors: Segments of the Informal Market for Risk Capital." *Venture Capital: an International Journal of Entrepreneurial Finance* 10 (4): 355–369. doi:[10.1080/13691060802351222](https://doi.org/10.1080/13691060802351222).
- Romaní, G., M. Atienza, and J.E. Amorós. 2013. "The Development Of Business Angel Networks in Latin American Countries: The case of Chile." *Venture Capital: an International Journal of Entrepreneurial Finance* 15 (2): 95–113. doi:[10.1080/13691066.2013.788822](https://doi.org/10.1080/13691066.2013.788822).
- Saetre, A.S. 2003. "Entrepreneurial Perspectives on Informal Venture Capital." *Venture Capital: an International Journal of Entrepreneurial Finance* 5 (1): 71–94. doi:[10.1080/1369106032000062731](https://doi.org/10.1080/1369106032000062731).
- San José, A., J. Roure, and R. Aernoudt. 2005. "Business Angel Academies: Unleashing the Potential for Business Angel Investment." *Venture Capital: an International Journal of Entrepreneurial Finance* 7 (2): 149–165. doi:[10.1080/13691060500063392](https://doi.org/10.1080/13691060500063392).
- Scheela, W., and T. Jittrapanun. 2012. "Do Institutions Matter for Business Angel Investing in Emerging Asian Markets?." *Venture Capital: an International Journal of Entrepreneurial Finance* 14 (4): 289–308. doi:[10.1080/13691066.2012.672020](https://doi.org/10.1080/13691066.2012.672020).
- Sohl, J., R. T. Harrison, and C. M. Mason. 2018. "In Memory: William E Wetzel Jr." *Venture Capital: an International Journal of Entrepreneurial Finance* 20 (3): 233–235. doi:[10.1080/13691066.2018.1496591](https://doi.org/10.1080/13691066.2018.1496591).
- Sohl, J. E. 2006. "Angel Investing: Changing Strategies During Volatile Times." *Journal of Entrepreneurial Finance* 11 (2): 27–47.
- Sohl, J. E., and L. Hill. 2007. "Women Business Angels: Insights from Angel Groups." *Venture Capital: an International Journal of Entrepreneurial Finance* 9 (3): 207–222. doi:[10.1080/13691060701324536](https://doi.org/10.1080/13691060701324536).
- Sohl, J.E. 1999. "The Early-stage Equity Market in the USA." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (2): 101–120. doi:[10.1080/136910699295929](https://doi.org/10.1080/136910699295929).
- Sohl, J.E., and L. Hill. 2007. "Women Business Angels: Insights from Angel Groups." *Venture Capital: an International Journal of Entrepreneurial Finance* 9 (3): 207–222. doi:[10.1080/13691060701324536](https://doi.org/10.1080/13691060701324536).
- Sørheim, R. 2003. "The Pre-investment Behavior of Business Angels: A Social Capital Approach." *Venture Capital: an International Journal of Entrepreneurial Finance* 5 (4): 337–364. doi:[10.1080/1369106032000152443](https://doi.org/10.1080/1369106032000152443).
- Stadler, H., and H. H. Peters. 2003. "Business Angels in Germany: An Empirical Study." *Venture Capital: an International Journal of Entrepreneurial Finance* 5 (3): 269–276. doi:[10.1080/1369106032000126596](https://doi.org/10.1080/1369106032000126596).

- Szerb, L., S. Terjesen, and G. Rappai. 2007. "Seeding New Venture-green Thumbs and Fertile Fields: Individual and Environmental Drivers of Informal Investment." *Venture Capital: an International Journal of Entrepreneurial Finance* 9 (4): 257–284. doi:[10.1080/13691060701414949](https://doi.org/10.1080/13691060701414949).
- Tashiro, Y. 1999. "Business Angels in Japan." *Venture Capital: an International Journal of Entrepreneurial Finance* 1 (3): 259–273. doi:[10.1080/136910699295893](https://doi.org/10.1080/136910699295893).
- Tymes, E., and O. Krasner. 1983. "Informal Risk Capital in California." In *Frontiers of Entrepreneurship Research*, edited by J. Hornaday, J. Timmons, and K. Vesper, 347–368. Wellesley, MA: Babson College.
- Van de Ven, A. H., and P. E. Johnson. 2006. "Knowledge for Theory and Practice." *Academy of Management Review* 31 (4): 802–821. doi:[10.5465/amr.2006.22527385](https://doi.org/10.5465/amr.2006.22527385).
- Wetzel, W. E., Jr. 1983. "Angels and Informal Venture Capital." *Sloan Management Review* 24 (4): 23–34.
- White, B. A., and J. Dumay. 2017. "Business Angels: A Research Review and New Agenda." *Venture Capital: an International Journal of Entrepreneurial Finance* 19 (3): 183–216. doi:[10.1080/13691066.2017.1290889](https://doi.org/10.1080/13691066.2017.1290889).
- Wolf, J., and T. Rosenberg. 2012. "How Individual Scholars Can Reduce the Rigor-Relevance Gap in Management Research." *BuR-Business Research* 5 (2): 178–196. doi:[10.1007/BF03342737](https://doi.org/10.1007/BF03342737).
- Wong, P. K., and Y. P. Ho. 2007. "Characteristics and Determinants of Informal Investment in Singapore." *Venture Capital: an International Journal of Entrepreneurial Finance* 9 (1): 43–70. doi:[10.1080/13691060600996772](https://doi.org/10.1080/13691060600996772).

## Appendix Overview of the articles reviewed

Author(s)	Title	Pages	Volume	Issue	Year
White, B. A., Dumay, J.	Business angels: a research review and new agenda	183–216	19	3	2017
Gregson, G., Bock, A. J., Harrison, R. T.	A review and simulation of business angel investment returns	285–311	19	4	2017
Cox, K. C., Lortie, J., Gramm, K.	The investment paradox: why attractive new ventures exhibit relatively poor investment potential	163–181	19	3	2017
Söderblom, A., Samuelsson, M., Mårtensson, P.	Opening the black box: triggers for shifts in business angels' risk mitigation strategies within investments	211–236	18	3	2016
Mason, C., Bothelho, T., Harrison, R.	The transformation of the business angel market: empirical evidence and research implications	321–344	18	4	2016
Jeffrey, S. A., Lévesque, M., Maxwell, A. L.	The non-compensatory relationship between risk and return in business angel investment decision making	189–209	18	3	2016
Capizzi, V.	The returns of business angel investments and their major determinants	271–298	17	4	2015
Baldock, R., Mason, C.	Establishing a new UK finance escalator for innovative SMEs: the roles of the Enterprise Capital Funds and Angel Co-Investment Fund	59–86	17	1–2	2015
Li, Y., Jiang, S., Long, D., Tang, H., Wu, J.	An exploratory study of business angels in China: a research note	69–83	16	1	2014
Hsu, D. K., Haynie, J. M., Simmons, S., McKelvie, A.	What matters, matters differently: a conjoint analysis of the decision policies of angel and venture capital investors	1–25	16	1	2014
Fili, A.	Business angel–venture negotiation in the post-investment relationship: the use of the good cop, bad cop strategy	309–325	16	4	2014
Romaní, G., Atienza, M., Amorós, J. E.	The development of business angel networks in Latin American countries: the case of Chile	95–113	15	2	2013
Florin, J., Dino, R., Huvaj, M. N.	Research on angel investing: A multilevel framework for an emerging domain of inquiry	1–27	15	1	2013
Festel, G. W., De Cleyn, S. H.	Founding angels as an emerging subtype of the angel investment model in high-tech businesses	261–282	15	3	2013
Scheela, W., Jittrapanun, T.	Do institutions matter for business angel investing in emerging Asian markets?	289–308	14	4	2012
Mitteness, C. R., Baucus, M. S., Sudek, R.	Horse vs. Jockey? How stage of funding process and industry experience affect the evaluations of angel investors	241–267	14	4	2012
Johnson, W. C., Sohl, J.	Angels and venture capitalists in the initial public offering market	27–42	14	1	2012
Heuven, J., Groen, A.	The role of social networks in financing technology-based ventures: An empirical exploration	131–149	14	2–3	2012
Brush, C. G., Edelman, L. F., Manolova, T. S.	Ready for funding? Entrepreneurial ventures and the pursuit of angel financing	111–129	14	2–3	2012
Bonnet, C., Wirtz, P.	Raising capital for rapid growth in young technology ventures: When business angels and venture capitalists co-invest	91–110	14	2–3	2012
Macht, S. A.	The role of investee company managers in business angels' involvement: Empirical insights from dyadic data	267–293	13	3	2011

(Continued)

(Continued).

Author(s)	Title	Pages	Volume	Issue	Year
Lahti, T.	Angel investing: An examination of the evolution of the Finnish market	147–173	13	2	2011
Lahti, T.	Categorization of angel investments: An explorative analysis of risk reduction strategies in Finland	49–74	13	1	2011
Christensen, J. L.	Should government support business angel networks? The tale of Danish business angels network	337–356	13	4	2011
Roach, G.	Is angel investing worth the effort? A study of Keiretsu Forum	153–166	12	2	2010
Paul, S., Whittam, G.	Business angel syndicates: An exploratory study of gatekeepers	241–256	12	3	2010
Harrison, R. T., Don, G., Johnston, K. G., Greig, M.	The early-stage risk capital market in Scotland since 2000: Issues of scale, characteristics and market efficiency	211–239	12	3	2010
Burke, A., Hartog, C., van Stel, A., Suddle, K.	How does entrepreneurial activity affect the supply of informal investors?	21–47	12	1	2010
Riding, A. L.	Business angels and love money investors: Segments of the informal market for risk capital	355–369	10	4	2008
Politis, D.	Business angels and value added: What do we know and where do we go?	127–147	10	2	2008
Mason, C. M., Harrison, R. T.	Measuring business angel investment activity in the United Kingdom: A review of potential data sources	309–330	10	4	2008
Levie, J., Gimmon, E.	Mixed signals: Why investors may misjudge first time high technology venture founders	233–256	10	3	2008
Knyphausen-Aufse, D., Westphal, R.	Do business angel networks deliver value to business angels?	149–169	10	2	2008
Farrell, E., Howorth, C., Wright, M.	A review of sampling and definitional issues in informal venture capital research	331–353	10	4	2008
Clark, C.	The impact of entrepreneurs' oral "pitch" presentation skills on business angels' initial screening investment decisions	257–279	10	3	2008
Avdeitchikova, S.	On the structure of the informal venture capital market in Sweden: Developing investment roles	55–85	10	1	2008
Avdeitchikova, S., Landström, H., Månsson, N.	What do we mean when we talk about business angels? Some reflections on definitions and sampling	371–394	10	4	2008
Wong, P. K., Ho, Y. P.	Characteristics and determinants of informal investment in Singapore	43–70	9	1	2007
Szerb, L., Terjesen, S., Rappai, G.	Seeding new ventures-green thumbs and fertile fields: Individual and environmental drivers of informal investment	257–284	9	4	2007
Sohl, J. E., Hill, L.	Women business angels: Insights from angel groups	207–222	9	3	2007
Paul, S., Whittam, G., Wyper, J.	Towards a model of the business angel investment process	107–125	9	2	2007
Carpentier, C., Suret, J. M.	On the usefulness of tax incentives for informal investors	1–22	9	1	2007
O'Gorman, C., Terjesen, S.	Financing the Celtic Tigress: Venture financing and informal investment in Ireland	69–88	8	1	2006

(Continued)



(Continued).

Author(s)	Title	Pages	Volume	Issue	Year
Månsson, N., Landström, H.	Business angels in a changing economy: The case of Sweden	281–301	8	4	2006
Wiltbank, R.	Investment practices and outcomes of informal venture investors	343–357	7	4	2005
Madill, J., Haines, G. H., Riding, A. L.	The role of angels in technology SMEs: A link to venture capital	107–129	7	2	2005
José, A. S., Roure, J., Aernoudt, R.	Business angel academies: Unleashing the potential for business angel investment	149–165	7	2	2005
Mason, C. M., Harrison, R. T.	Does investing in technology-based firms involve higher risk? An exploratory study of the performance of technology and non-technology investments by business angels	313–332	6	4	2004
Lindsay, N. J.	Do business angels have an entrepreneurial orientation?	197–210	6	2–3	2004
Kutsuna, K., Harada, N.	Small business owner-managers as latent informal investors in Japan: Evidence from a country with a bank-based financial system	283–311	6	4	2004
Amatucci, F. M., Sohl, J. E.	Women entrepreneurs securing business angel financing: Tales from the field	181–196	6	2–3	2004
Sørheim, R.	The pre-investment behaviour of business angels: A social capital approach	337–364	5	4	2003
Sætre, A. S.	Entrepreneurial perspectives on informal venture capital	71–94	5	1	2003
Stedler, H. R., Peters, H.	Business angels in Germany: An empirical study	269–276	5	3	2003
Sohl, J., Rosenberg, W.	The private equity market in the USA: Lessons from volatility	29–46	5	1	2003
Paul, S., Whittam, G., Johnston, J. B.	The operation of the informal venture capital market in Scotland	313–335	5	4	2003
Kelly, P., Hay, M.	Business angel contracts: The influence of context	287–312	5	4	2003
Politis, D., Landström, H.	Informal investors as entrepreneurs – the development of an entrepreneurial career	78–101	4	2	2002
Hindle, K., Lee, L.	An exploratory investigation of informal venture capitalists in Singapore	169–181	4	2	2002
Brush, C. G., Carter, N. M., Greene, P. G., Hart, M., Gatewood, L.	The role of social capital and gender in linking financial suppliers and entrepreneurial firms: A framework for future research	305–323	4	4	2002
Visser, R., Williams, R.	Prospecting for gold: How Dutch informal investors appraise small businesses in trouble	1–24	3	1	2001
Pereiro, L. E.	Tango and cash: Entrepreneurial finance and venture capital in Argentina	291–308	3	4	2001
Lindström, G., Olofsson, C.	Early stage financing of NTBFs: An analysis of contributions from support actors	151–168	3	2	2001
Van Osnabrugge, M.	A comparison of business angel and venture capitalist investment procedures: An agency theory-based analysis	91–109	2	2	2000
Reitan, B., Sørheim, R.	The informal venture capital market in Norway – investor characteristics, behaviour and investment preferences	129–141	2	2	2000
Prasad, D., Bruton, G. D., Vozikis, G.	Signaling value to business angels: The proportion of the entrepreneur's net worth invested in a new venture as a decision signal	167–182	2	3	2000
Kelly, P., Hay, M.	Deal-makers: Reputation attracts quality	183–202	2	3	2000

(Continued)

(Continued).

Author(s)	Title	Pages	Volume	Issue	Year
Harrison, R. T., Mason, C. M.	Venture capital market complementarities: The links between business angels and venture capital funds in the United Kingdom	223–242	2	3	2000
Harding, R.	Venture capital and regional development: Towards a venture capital “system”	287–311	2	4	2000
Tashiro, Y.	Business angels in Japan	259–273	1	3	1999
Steier, L., Greenwood, R.	Newly created firms and informal angel investors: A four-stage model of network development	147–167	1	2	1999
Sohl, J. E.	The early-stage equity market in the USA	101–120	1	2	1999
Hindle, K., Wenban, R	Australia’s informal venture capitalists: An exploratory profile	169–189	1	2	1999
Feeney, L, Haines, G. H., Riding, A. L.	Private investors’ investment criteria: Insights from qualitative data	121–145	1	2	1999
Aernoudt, Rudy	Business angels: Should they fly on their own wings?	187–195	1	2	1999