

Why Business Angels Reject Investment Opportunities: it is personal?

Colin Mason¹, Tiago Botelho² and Justyna Zygmunt³

¹ Adam Smith Business School, University of Glasgow, Glasgow G12 8QQ.

colin.mason@glasgow.ac.uk

² Norwich Business School, University of East Anglia

³ Faculty of Economics and Management, Opole University of Technology, Opole, Poland

ABSTRACT

Objectives. The paper has two objectives. First, it examines the reasons why business angels reject invest opportunities. Second, it examines whether the number of reasons for rejection and the actual reasons that angels give for rejecting opportunities are influenced by their characteristics and experience.

Prior Work. A major focus of research on business angels has examined their decision-making processes and investment criteria. As business angels reject most of the opportunities that they review several studies have looked specifically at their reasons for saying ‘no’. In view of the heterogeneity of business angels it has been suggested that they may reject investment opportunities for different reasons. We examine this proposition.

Approach. We draw upon two sources of data to examine this issue. The first is face-to-face interviews with 30 business angels in Scotland and Northern Ireland who were asked who were asked what was their typical deal killer. The second is an internet survey of UK business angels under taken in mid-2014. The survey attracted responses from 238 business angels representing a total of 148 rejections. These investors were members of a total of 73 angel groups based throughout the UK.

Results. The findings confirm that the main reasons why business angels reject opportunities are associated with the entrepreneur /management team. They also show that the majority of angels reject opportunities for just one or two reasons. However, angel characteristics do not explain the number of reasons given for rejecting an opportunity and there were only a handful of significant relationships between rejection reasons and investor characteristics. We offer two speculations to explain why angel characteristics do not influence rejection reasons. First, the heterogeneity of angels need not necessarily result in divergent investment behaviour. Second, the majority of respondents were members of angel groups which may encourage a common approach to investing.

Implications. The findings may suggest that the recent emphasis on angel diversity and its implications for their investment behaviour has been overdone. Instead it can be hypothesized that as business angels increasingly join organized angel groups they should be seen as community of practice with shared repertoire of approaches to investing.

Value. This study extends the literature on the rejection decision and reassesses the emphasis that is given to angel diversity.

KEY WORDS: entrepreneurial finance, business angels, investment decision, rejection

1. INTRODUCTION

It is now widely accepted that business angels are the main source of funding for new and early growth businesses seeking risk capital (Sohl, 2012). The businesses that they invest in are typically innovative, technology-oriented and growth-oriented. For these reasons business angels play a key

role in underpinning an entrepreneurial economy. In the past the upper limit of angel investments was around £250,000, with most investments substantially below this figure. However, angels are increasingly organising themselves into managed angel groups which can make larger investments alongside investment partners, notably public sector co-investment funds (Mason et al, 2013; Baldock and Mason, 2014). Angels therefore may invest on their own or as part of a managed angel group where the initial screening process is typically undertaken by the manager (Mason et al, 2013; Carpentier and Suret, 2015) – often termed the ‘gatekeeper’ (Paul and Whittam, 2010).

Angels reject a very high proportion of the deal flow that they consider. One Canadian study reports that angels invest in only one in 40 of the deals that they review (Riding et al., 1995). According to the same research 73% of opportunities get rejected at the start of the process (first impressions), another 16% at initial screening, and another 6% at the due diligence stage leaving just 3% that are consummated. A study of UK angel networks noted that only 30% of funding proposals got beyond the initial screening process and overall fewer than 3% attracted funding (Mason and Harrison, 2015). A study of an angels group in Quebec reported that they have invested in only 2.4% of the proposals received (Carpentier and Suret, 2015).

These high rejection rates have prompted substantial research on the investment criteria of business angels – the factors that they consider (or not) when evaluating investment opportunities. Recent studies have shown that the emphasis changes over the process, as those opportunities which pass the initial screening stage (typically less than 1 in 10) are subject to closer scrutiny (Duxbury et al., 1997; Haines Jr et al., 2003; Amatucci and Sohl, 2004; Paul et al., 2007; Maxwell et al., 2011; Mitteness et al., 2012; Brush et al., 2012). However, these studies generally do not focus specifically on the reasons why angels say ‘no’ to specific deals. But, as Feeney et al (1999) have noted, the reasons for investing in an opportunity (i.e. saying yes) are not the mirror image of the reasons for saying no. But it is the reasons for saying no that are most relevant to entrepreneurs.

By looking specifically at the rejection reasons – or ‘deal killers’ - this paper is therefore positioned differently from much of the literature on business angel decision-making. It addresses three issues. First, what are the reasons why business angels say no to investment opportunities? Second, how many reasons do business angels give for rejecting investment opportunities – does a single deal killer typically dominate? Third, and reflecting the growing recognition of the diversity of business to what extent do business angels reject opportunities for the same reasons. Specifically, how much variation is there between angels in the number of reasons for rejecting investment opportunities and the reasons given? And to what extent can the attributes of business angels explain these variations?

2. LITERATURE REVIEW

There is a considerable volume of research on the investment criteria of business angels. These studies cover a variety of different countries. In most cases they are based on questionnaire surveys with check-lists of factors and which generate *post hoc* responses. The actual phrasing of the questions vary across studies. For example, Brettel (2003) asked for “factors which are taken into account” in an investment decision, Paul et al (2003) asked for the “factors influencing angel investment decisions”, and Mason and Harrison (1994) asked for “factors taken into account making informal investment decisions”. In other studies, investors were asked for their most important investment criterion (Haar et al., 1988) or to indicate using a Likert scale the importance of list of criteria to (e.g., Sudek, 2006). Rather fewer studies have been based on interviews with angels. These included Lumme et al (1998) who asked angels what factors influenced them to invest in an opportunity and Feeney et al (1999) who asked “what are the essential factors that prompted you to invest in the firms you choose?” Recognising the growing importance of angel groups, both Mason et al (2013) and Carpentier and Suret (2015) have investigated how they undertake the decision-making process, noting how it differs from the process used by independent angels.

There is considerable agreement amongst these various studies that the entrepreneur/management team is the most important factor, with the growth potential of the market and product/service attributes ranked second and third, but of considerably less importance (e.g. Mason and Harrison, 1994; Hindle and Wenban, 1999; Brettel, 2003; Stedler and Peters, 2003; Sudek, 2006). Qualitative studies have been able to drill down further, highlighting the importance of the competence, motivation and integrity of the entrepreneur (Lumme et al, 1998). Trust emerges as a significant issue in some studies (Harrison, et al, 1997; Maxwell et al, 2014). Moreover, it would appear that angels use a non-compensatory approach to deal evaluation. In other words, they do not allow weaknesses in some aspects of the business to be offset by strengths elsewhere. However, Sullivan (1994) does show that angels are willing to trade off some financial return for firms with socially beneficial products. It is also important to note that most angels do only limited research and due diligence before investing and spend relatively little time on deliberation and negotiation (Mason and Harrison, 1996a), making their decisions more on “feelings than analysis” Shane (2009).

There is somewhat less evidence on reasons why angels reject investment opportunities. Again, the evidence is weighted towards evidence from questionnaire surveys and there are differences in the precise question that is asked. However, there is a clear consensus from such evidence that the reasons for rejecting investment opportunities are overwhelmingly associated with perceived weaknesses in the entrepreneur and management team (e.g. Haar et al, 1988; Mason and Harrison, 1994). Riding et al (1995) suggest that 80% of rejection decisions are linked to the angel’s lack of confidence in the managerial abilities of the principals. Finnish angels overwhelmingly report management deficiencies as the dominant reason for rejecting investment opportunities (e.g. poor personal chemistry, lack of trust, incompetence, unreasonable expectations, reluctance to share ownership and accept the involvement by the investor). However, Feeney et al (1999) noted that the shortcomings of an opportunity and the desirable attributes of an opportunity, while overlapping are not the mirror image of each other. They note that “while investors’ perceptions of poor management was the primary ‘deal killer’, management ability (while important) is not the primary ‘deal maker’. Rather, investors place primary emphasis on the growth potential of the opportunity and the owners(s) capability to realise the potential of the business. Being able to realise the potential of a business ... is not simply the converse of bad management” (Feeney et al, 1999: 139-140).

Subsequent research has noted that changes occur in the significance of specific investment criteria as the opportunity passes through the different stages in the investment process, from pre-screen, through screening and on to due diligence (Riding et al, 1995; Feeney et al, 1999; Mitteness et al, 2012). It has been suggested that the source of the investment opportunity has a significant initial influence on the angel’s decision whether to consider the opportunity further (Mason and Rogers, 1997; Riding et al., 1997), with referrals from close associates having lower rejection rates than those that came from sources that are not known to the angel. This reflects the fact that angels will put greater value on referrals from people that they know because the referral source is putting his or her own credibility with the angel on the line when they refer the proposal. Angels will then consider how well the proposal ‘fits’ their knowledge domain and personal investment criteria (Mason and Rogers, 1997; Mitteness et al, 2012). It is only from this point that the attributes of the opportunity are considered. In terms of criteria, Riding et al (1995) report that after the initial screen the importance of the entrepreneur/team increases dramatically while the importance of the product’s potential declines (although not by much). The importance of perceived financial rewards also increases, especially at the due diligence stage. However, Mitteness et al (2012) report that the entrepreneur is strongest at the screening stage; this weakens when angels consider whether to move to due diligence. It has also been noted that whereas the initial screening is based on quantifiable criteria, in the later stages when angels increase their scrutiny, they focus on less quantifiable intangibles, such as the trustworthiness of the entrepreneur, their commitment and passion (Brush et al, 2012). It has also been noted that opportunities that failed to get past the initial screening stage tended to be rejected because of an accumulation of deficiencies (‘three strikes and you’re out’ – Mason and Rogers, 1997) whereas rejections later in the process tended to be associated with a single deal killer (Mason and Harrison, 1996b).

The emphasis that angels place on the entrepreneur as both the most significant investment criterion and the dominant deal killer reflects the presence of agency problems. This has two causes. First, agency theory assumes that there is potential goal conflict between the principal, in this case the investor, and the agent, in this case the entrepreneur, with the agent seeking to pursue opportunistic behaviour that will damage the principal's financial interests. Second, there are information asymmetries, with certain information either expensive for the principal to obtain, or even unavailable, or difficult to interpret. This creates the risk of adverse selection by the principal, investing in a business in which they have been unable to verify the agent's competences or where the agent may have misrepresented themselves. These problems can be addressed by means of contracting. However, as van Osnabrugge (2000) argues, this creates transaction costs. Moreover, contracts will always be incomplete since it is impossible for them to cover every eventuality. And it may not be possible to enforce contracts. Moreover, goal conflicts may not be as important as originally believed. Landström (1992) finds no evidence that the interaction between angels and entrepreneurs is characterised by opportunistic behaviour. Indeed, Kelly (2007: 321) argues that contrary to agency theory, the "relationship between investors and entrepreneurs appears to be infused with high levels of interpersonal trust from the outset". So, from an agency theory perspective the key problems for angels is the existence of information asymmetries. It is hard for angels to verify the information provided by the entrepreneur even with extensive due diligence. This explains the entrepreneur-centred emphasis of the investment decision, with the human capital of the entrepreneur central to the decision: angel investors want to find the 'right' entrepreneur' (Hsu et al, 2014). Fiet (1995) interprets the angel's emphasis on the entrepreneur as follows. Unlike VCs, angels make relatively few investments and do not have the capacity to undertake detailed market research on industry and market trends, hence they rely on the entrepreneur to manage the market risk. Accordingly, angels focus on agency risk on the basis that investing in a business that is run by a competent and trustworthy entrepreneur is the best way to reduce market risks.

One of the unresolved issues is the extent to which angel investors differ in how they evaluate investment opportunities and whether they reject investment opportunities for different reasons. It is known that angel are not homogeneous, hence differences in human capital may be a source of variance in their decision to make an investment. Indeed, based on a conjoint analysis Landström (1998: 325) suggests that "the decision-making criteria seems to be specific to the individual and that the investors appears to use different decision-making criteria in their assessment of new investment prospects." Mitteness et al (2012) find that differences between angels, notably in terms of their industry experience, have a moderating impact on their investment criteria and evaluation of funding investment opportunities. Hsu et al (2014: 19) therefore comment that "conceivably heterogeneity in angel types may affect the nature of the decision criteria that they use."

3. DATA SOURCES AND ANALYSIS

3.1 Data sources

The paper draws on two sources of data to address these issues. The first source is face-to-face interviews with 30 business angels based in Scotland and Northern Ireland. The recruitment process had the support of the gatekeepers (Paul and Whittam, 2010) of several angel groups that were publicly listed as members of LINC Scotland, the business angel trade association. The initial approach was made by the gatekeeper who invited some of their members to take part of the research. These approaches were made in three ways: (i) emails (ii) in group meetings (iii) phone calls. The importance of groups is reflected by the high number of members of syndicates in the sample (80%). The additional six business angels were recruited by snowballing from the initial contacts. Snowball is commonly known as the way to "contact one participant via the other" (Biernacki and Waldorf, 1981 p. 151). This technique is particularly useful in the context of research with hidden populations (Browne, 2005).

The participants were mid-aged (average of 56 years), exclusively male, 90% of whom had a university degree and 60% had a professional qualification. Participants had considerable entrepreneurial experience. Of the 30 angel investors 17 (57%) had previously been involved in starting a new business. On average, participants had 12 years of investment experience during which time they had invested in a median of 10 completed deals. In aggregate these 30 investors had invested in 473 deals, ranging from 1 to 77 investments. When compared with two recent UK surveys on the angel market (Mason and Botelho, 2014; Wright, Hart and Fu, 2014) – which, of course, have their own sources of bias - it can be noted that the sample of interviewees lacks female angels and are more experienced in terms of the investment made.¹ However, neither of these differences should be considered as sufficiently significant to question the reliability of the sample. First, Harrison and Mason (2007 p.464) suggest that “the informal venture capital market is not differentiated on gender lines”. Hence, the lack of gender diversity is not a problem. Second, although scholars have identified that investment experience has an impact on the way angel assess the opportunities (Van Osnabrugge, 1998; Smith et al, 2010; Harrison et al, 2016) the sample contains sufficient variation in the level of investment experience: one-third of the participants had made 5 or less investments while another one-third had completed 15 or more deals.

The second source of data is a survey that was completed on-line by 238 business angels. Because the survey was promoted through various angel groups (as is the case with most studies) it is biased to the visible market, with 86% of respondents being members of one or more angel groups (Mason and Botelho, 2014). However, as previously noted (Mason and Harrison, 2010; 2011), many angels who operate in the visible market as members of angel groups also operate in the invisible market, making investments privately in deals that they have sourced themselves. Just under half were members of more than one group and the respondents represented a total of 73 angel groups. Because we do not know how many investors were invited to complete the survey it is not possible to calculate a response rate. However, it is one of the largest-ever surveys of angels in the UK.² We draw on responses to the question on factors for rejecting an opportunity – respondents could give multiple reasons from a drop-down list.

3.2 Analysis

Interviews were transcribed and the question on ‘typical deal killer’ was coded independently by two authors. The data were coded following an axial coding (Miles & Huberman, 1994). In this type of coding “categories are systematically developed and linked with subcategories” (Strauss & Corbin, 1998, p. 143). The objective of coding was to identify the number of deal killers reported and the specificities of each deal killer. The coding scheme consisted of two levels. An initial coding level considered the investment criteria³ and a second level reflected specific details of the investment criteria. This process was particularly useful to get a deeper understanding of the reasons to reject.

On the second data set two procedures were applied. (i) Post hoc comparisons: a Scheffe analysis was conducted to assess if angels that give one reason differ from others that give two and three or more reasons to reject. The Scheffe test is particularly useful with groups of unequal size since the assumption of homogeneity of variance is weaker. (ii) Independent t-test where the mean for investments rejected with a specific reason is compared with the investment rejected for any other reason. Levene’s tests of homogeneous variance were performed in both procedures to examine the assumption of equal variance between groups (Hair et al. 1998). Three significance levels are reported, 1%, 5% and 10%. Labovitz (2006) defends the use of higher significance levels than 5% in the presence of exploratory research.

¹ The median for Mason and Botelho (2014) was between 4 and 6 investments which is very similar to Wright, Hart and Fu (2014) with 5 investments per investor.

² In fact, it is the second largest ever survey of business angels in the UK, being exceeded only by the 2014 National of Angels Survey undertaken by the Enterprise Research Centre, University of Warwick on behalf of the UKBAA. This survey was undertaken with substantially more resources than our own.

³ Used the same coding scheme of Mason and Botelho (2016) for the initial coding level.

4. WHY DO ANGELS REJECT INVESTMENT OPPORTUNITIES?

On the first data set, the 30 respondents collectively provided 47 deal killers. Just one investor was unable to offer any deal killers, so the average was 1.6 deal killers per investor. Indeed, only one investor identified more than two deal killers. As Table 1 shows, people factors are the dominant deal killer, mentioned by 27 of the 30 angels. Other deal killers to attract more than one mention were product/market, financial attributes and, investor fit.

Table 1. Is there a typical ‘deal killer’?

1 st level	Number of investors citing this factor	% of investors	2 nd level	Number of investors citing this factor
Business plan	1	3	<ul style="list-style-type: none"> • Unrealistic business plan 	1
Investor fit	3	10	<ul style="list-style-type: none"> • Not interested in the business • Lack of interest in the business • Doesn't meet investor's criteria 	1 1 1
Financial attributes	4	13	<ul style="list-style-type: none"> • Inflated Valuation • Unwilling to discuss valuation/equity share 	2 2
Product/market	12	40	<ul style="list-style-type: none"> • Product: sufficiently differentiated/unique • Quality of product • Intellectual property protection • Scalable technology • Lack of confidence in the technology • Solving problems • Size of market • Market potential • Changing market conditions • Regulation 	1 1 2 1 1 1 2 1 1 1
People	27	90	<ul style="list-style-type: none"> • Character: straightforward, honest, open, believable, trustworthy • Level of knowledge, capability • Lack of realism • Personal rapport • Attitude (arrogant, aggressive, nervous, inflexible) • Controlling, inflexible in negotiation 	11 6 4 3 3 2

Note: investors could give more than one deal killer

Looking in more detail at the interview responses, there are a number of aspects of 'the people' that are deal killers. Four themes dominate. First, by far the most frequently mentioned was the concern that the entrepreneur was not open and straightforward, believable, trustworthy and honest.

- "You just don't believe in the people, don't feel you trust them or they may be not open and honest. That is always worrying.
- "It's usually the discovery that people are not what they seem. They've either lied or covered the truth, half-truth, that makes me very, very uncomfortable."
- "Honesty. In what they have told you or should have told you. Quite often people won't lie to you directly but if they haven't told you a material fact, that they've answered the question as opposed to what you need to know, I just wouldn't be bothered with it."
- "If there's any dishonesty, any sign of duplicitous behaviour ... that's really, really important, that's a big deal killer."

Second, angels are looking to invest in entrepreneurs who come across as being knowledgeable competent and on the ball.

- "A deal killer for me is guys who come in here and ... do not demonstrate a decent understanding of the market or the competition that they're focused on."
- "I don't trust an amateur. I don't mind that they get stuff wrong but they had best be straight and open and answer questions without ducking the issue."
- "I would ask lots of questions and if the answers I got ...were not prompt and clear and lucid and transparent then I would be concerned. I would ask leading difficult questions and I would expect very prompt answers, I would not expect then to have to research the answers. I would expect then to know the answers."
- "So often I come across inventors, promoters who have their idea of what the world is like. And they are inflexible to having that modified in order to fit better with investors, then that is it."
- "People who are talking to you and you can sense they don't understand what a profit is, they don't understand the basics of commerce. You just ask a simple couple of questions and they get things all wrong, they don't understand anything, they haven't a clue about what they are talking about."

Third, entrepreneurs have to exhibit realism, in particular about valuation and size of equity share.

- "Another deal killer is being unrealistic. ...You get people who are very hung up about having to sell equity. You have to do that. It's a fact of life. And you get people who are very hung up about having 51% of whatever. It's a nonsense argument."
- "People not being open and honest about the valuation."
- "People who are unrealistic about the growth projects, aren't aware of the completion... if people are realistic about the risks that's a big plus for me. If people are trying to do a sales job which ignores the pitfalls and risks then that's a big negative. I don't like that. I would far rather people were realistic about the risks around the business and the obstacles they have to success."
- "Lack of realism is the main [deal killer]"

Finally, the angel has to feel that there is a personal rapport with the entrepreneur.

- "If I don't have a personal rapport with the individual it will never get off the ground... I think to myself 'do I want to be dealing with this guy for the next two or three years in an investment. And irrespective of how good he is I just think I will not do the investment. .. That is a potentially very irrational way of looking at things. But it is a deal killer."
- "... If you don't like them. Sometimes you come across people that you can't stand."

The internet survey asked participants to recall the latest investment opportunity they have rejected and to inform what the reasons for this decision were. Respondents were given a list of seven investment criteria and could provide more than one reason to justify the final verdict (Table 2). This

list was used by the authors in previous investment decision studies (Botelho and Mason, 2013; Botelho et al., 2015a; Botelho et al., 2015b).

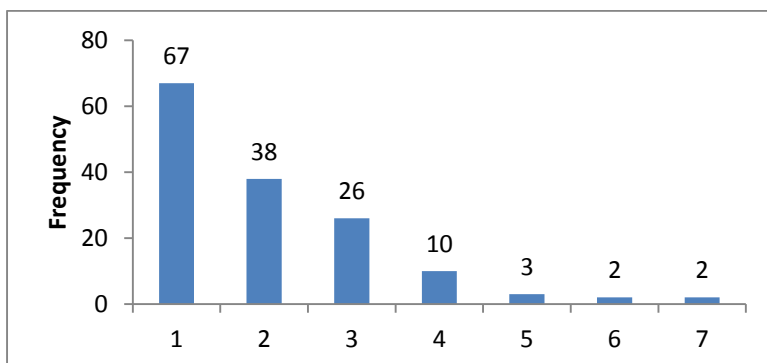
Table 2 – Reasons to reject

Reason to reject	Number of investors citing this factor	Percentage of investors
Investor Attributes	11	7
Exit	19	13
Business Plan	35	24
Financial Attributes	37	25
Attributes of the Business	39	26
Product/Market	73	49
People	88	59

Note: respondents could give up to seven reasons

Similar to the interview responses the internet survey indicates that the two most common reasons to reject an investment opportunity are associated with the people and product/market. The people category, which included all of those involved with the investment opportunity (entrepreneur, management team, etc...) was the most frequently cited. Although the percentage of investors highlighting the importance of people in a rejection decision is lower than in the interview study it is important to notice that the interview had a generic question while the online survey question related to a specific investment opportunity (their most recent). The second most frequently given reason for angel investors to reject an opportunity was the product/market, offered by 49% of respondents. Another three criteria (attributes of the business, financial attributes and business plan) were each cited by 1 out of 4 as a rejection decision. The most surprising result is that respondents did not give greater emphasize to investor attributes as a reason to reject. A possible reason for this might be linked with the growth of syndication. Investing in groups exposes angels to a wider range of opportunities, enabling them to invest in businesses on the ‘coat tails’ of other investors in the group who do have the relevant knowledge (Mason et al., 2013). The effect is to reduce the importance of investment fit.

Figure 1. Number of reasons given for rejecting investment opportunities



Source: internet survey. 148 rejected investment opportunities.

5. HOW MANY REASONS DO ANGELS GIVE FOR REJECTING INVESTMENT OPPORTUNITIES?

We noted above that the vast majority of angels identify only one or two deal killers. This is confirmed in the internet survey (Figure 1) which indicates that some 71% of rejections were based on just one or two reasons. The average number of reasons for rejecting the opportunity was two. This supports Maxwell et al (2011) who suggested that angels use an elimination-by-aspect approach to deal evaluation decision heuristic in which they focus on a small number of reasons that are objective and can be observed relatively quickly in which to reject an opportunity. This enables them to reject a large number of opportunities that have ‘fatal flaws’ and hence are not investable and to focus on their time on the small number of promising investment opportunities.

6. THE INFLUENCE OF ANGEL CHARACTERISTICS

6.1 On the number of reasons for rejecting

As Figure 1 shows, most angel investors appear to reject investments on the basis of just one or two fatal flaws. However, the level of scepticism differs between business angels, with some offering multiple rejection reasons. This raises the question whether the sensibility to one or two flaws, and the converse, is investor-related. Three groups of angels were identified: those giving one reason for rejection; those giving two reasons and those giving three or more reasons. Table 3 provides the results for the Scheffe tests. Surprisingly, the results show no statistical differences between the groups in terms of their average scores for 14 control variables reflecting angel characteristics. These control variables reflect demographics, education, entrepreneurial experience, investment experience and syndication. We therefore cannot differentiate between business angels on the basis of the number of rejection factors that they give.

Table 3 – Scheffe tests

	Group 1	Group 2	Group 3
	1 reason to reject	2 reasons to reject	3 or more reasons to reject
Number of investors	67	38	43
Gender	1.07	1.13	1.02
Age	3.66	3.39	3.74
University Degree	1.27	1.13	1.28
Professional Qualifications	1.30	1.42	1.30
Involved in a Management Buyout	1.63	1.68	1.51
CEO of an SME	1.37	1.34	1.37
Board Member of a median to large Company	1.37	1.47	1.44
Years investing	10.36	8.87	10.24
Number of Investments	3.81	4.03	3.74
Part of an angel group	1.07	1.03	1.09
Years to join a group	7.67	6.28	5.41
Invest with others	4.13	4.14	4.51
Number of angel groups	1.81	2.05	1.90
Crowdfunding investor	1.76	1.76	1.81

Average score for each group. No statistical significance was found.
Source: internet survey. 148 rejected investment opportunities.

6.2 On their reasons for saying 'no'

The final analysis was developed to test whether angel characteristics could explain differences in the reasons to reject. To conduct these tests dummy variables were constructed to measure if the investment criterion was referred as a reason to reject. This enabled a comparison between investment decisions that were rejected for a particular reason versus others that which did not include that reason. Table 4 reports all the T-tests. The analysis will only report on those where statistical significance was found.

The results show that investors who rejected projects because of the people have a low level of professional qualification and greater entrepreneurial experience (measured as CEO of a SME) when compared with their counterparts. This second difference suggests that business angels with entrepreneurial experience are the most sensitive to the importance of the people in a start-up. Angel investors who rejected projects for the product/market had more experience of involvement in management buyouts. Angels with no experience of leading a management buyouts were more likely to reject an opportunity on account of its financial attributes. The exit is particularly important for investors with a long investment history. The most obvious interpretation is that over time experienced angels become more exit-centric in their approach to investing because they have learnt from their investment experience how hard it is to get an exit. Angels with professional qualifications are also more likely to reject an opportunity based on the exit. Membership of an angel group is associated with investors who are less likely to reject opportunities on the basis of the attributes of the business. This may be because individual investors are able to access the collective knowledge and resources of the group to overcome limitations in their knowledge of specific sectors and markets. Specifically, angels who invested on their own for some time before joining a group are less likely to give the attributes of the business as a reason to reject. These results point to the distinctiveness of angels who invest as part of angel groups. Two investment criteria (business plan and investor attributes) showed no statistical differences for any of the control variables. This indicates that investors who rejected an opportunity because of these two criteria do not differ from their counterparts who did not give these reasons for rejecting an investment.

7. CONCLUSION

Business angels reject the vast majority of the investment opportunities that they receive. This paper has drawn on both interview and survey data to examine the reasons why business angels say no to investment opportunities. There is considerable research on the investment criteria of business angels but rather fewer that look specifically at rejection reasons. Moreover, it is potentially misleading to infer the reasons for rejection from the investment criteria used to appraise deals. The paper shows that the entrepreneur/team is the key reason for rejecting investment opportunities; specifically, they are not open and straightforward, believable, trustworthy and honest, they do not come across as being knowledgeable and lack realism, especially regarding valuation and equity share. The paper also shows that rejection is generally made on the basis of just one or two reasons. However, contrary to our expectations we found no evidence that the number of reasons for rejecting investment opportunities are associated with angel characteristics and very limited evidence that the reasons for rejecting opportunities are associated with angel characteristics as several authors have speculated. We offer two possible reasons for this. The first is that both samples are dominated by experienced angels. It can be argued that the most significant differences in the approach to investing are based on investment experience (Smith et al, 2010; Harrison et al, 2016), and neither sample included significant numbers of novice and nascent angels. Second, diversity in angel characteristics may not be reflected in their investment processes. Harrison et al, (2016) suggest that business angels learn

from the experience of others. The growth of angel groups Sohl, 2012; (Botelho et al, 2013) could therefore be argued as creating a unique opportunity for situated learning (Lave and Wenger, 1991), potentially resulting in the emergence of a 'community of practice' (Lave and Wenger, 1991) with

Table 4. T-test for rejection criteria differences.

		The People	Product Market	Exit	Business Plan	Investor Attributes	Attributes of the Business	Financial attributes
Gender	G ₁	1.10	1.08	1.08	1.07	1.07	1.06	1.09
	G ₂	1.06	1.07	1.05	1.09	1.18	1.13	1.03
Age	G ₁	3.57	3.64	3.61	3.57	3.60	3.67	3.59
	G ₂	3.65	3.59	3.63	3.77	3.82	3.46	3.68
University Degree	G ₁	1.28	1.24	1.23	1.22	1.23	1.24	1.23
	G ₂	1.20	1.23	1.26	1.29	1.27	1.23	1.24
Professional Qualifications	G ₁	1.22*	1.37	1.36**	1.34	1.32	1.32	1.32
	G ₂	1.41*	1.29	1.16**	1.31	1.45	1.36	1.35
Involved in a Management Buyout	G ₁	1.60	1.68***	1.61	1.64	1.61	1.60	1.59***
	G ₂	1.61	1.53***	1.58	1.51	1.64	1.64	1.65***
CEO of an SME	G ₁	1.45***	1.37	1.36	1.36	1.35	1.33	1.33
	G ₂	1.31***	1.36	1.37	1.37	1.55	1.46	1.46
Board Member of a median to large Company	G ₁	1.40	1.39	1.43	1.45	1.42	1.42	1.38
	G ₂	1.43	1.45	1.37	1.31	1.45	1.41	1.54
Years investing	G ₁	9.2	10.55	9.33**	10.19	10.86	10.35	10.65
	G ₂	10.43	9.93	14.74**	8.49	11.27	9.84	8
Number of Investments	G ₁	3.73	3.96	3.81	3.90	3.84	3.89	3.84
	G ₂	3.92	3.73	4.05	3.66	3.91	3.72	3.86
Part of an angel group	G ₁	1.05	1.08	1.06	1.07	1.06	1.05***	1.06
	G ₂	1.08	1.05	1.11	1.06	1.18	1.13***	1.08
Yeards to join a group	G ₁	6.25	7.67	7.97	7.86	6.21	7.7***	7.92
	G ₂	7.94	6.46	6.71	6.7	7	5.21***	6.52
Invest with others	G ₁	4.09	4.10	4.19	4.19	4.21	4.24	4.20
	G ₂	4.35	4.38	4.65	4.42	4.67	4.27	4.38
Number of angel groups	G ₁	1.93	1.91	1.93	1.95	1.91	1.83	1.91
	G ₂	1.88	1.88	1.71	1.73	1.78	2.12	1.85
Crowdfundin g investor	G ₁	1.80	1.80	1.78	1.77	1.78	1.77	1.76
	G ₂	1.76	1.75	1.78	1.80	1.73	1.79	1.81

1% significance - *

5% significance - **

10% significance - ***

a shared repertoire of approaches to investing, resulting in a growing standardisation of investment assessment.

In summary whereas the angel's investment decision is personal in the sense that it is very much influenced by the entrepreneur, there is no evidence that the personal characteristics of angels influences their investment decision. This suggests that differences in the reasons for rejecting investment opportunities are associated with the characteristics of the investment and not the investor.

REFERENCES

- Avdeitchikova, S. (2008) On the structure of the informal venture capital market in Sweden: developing investment roles. *Venture Capital*, 10, (1) 55-85
- Baldock, R and Mason, C (2014) Government Intervention in the Entrepreneurial Finance Market: the case of the UK's Angel Co-Fund. *Paper to the 2014 ISBE conference, Manchester*.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological methods & research*, 10(2), 141-163.
- Brettel, M., 2003, Business Angels In Germany: A Research Note. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5: 251-268.
- Botelho, T and Mason, C (2013) Methodologies for examining the investment criteria of business angels: a comparative approach. ISBE Conference 2013, Cardiff, UK, 2013
- Botelho, T. Mason, C. and Tagg, S. (2015a) Can we group business angels who have the same investment criteria? ISBE Conference 2015, Glasgow, UK, 2015.
- Botelho, T. Mason, C. and Tagg, S. (2015b) Do business angels change their investment criteria? ISBE Conference 2015, Glasgow, UK, 2015.
- Browne, K. (2005). Snowball sampling: using social networks to research non-heterosexual women. *International Journal of Social Research Methodology*, 8(1), 47-60.
- Brush, C, Edelman, L F and Manolova, T S (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.
- Carpentier, C and Suret, J-M (2015) Angel group members' decision process and rejection criteria: A longitudinal analysis, *Journal of Business Venturing*, in press.
- Dal Cin, P. Duxbury, L, Haines, G and Riding, A (1993) An alternative view of the Canadian capital market gap: decision-making by Canadian informal investors. paper to the Six Countries Program Montreal Workshop, November.
- Feeney, L, Haines, G H and Riding A L (1999) Private investors' investment criteria: insights from qualitative data. *Venture Capital: An International Journal of Entrepreneurial Finance*, 1: 121-145.
- Fiet, J O (1995) Risk avoidance strategies in venture capital markets, *Journal of Management Studies*, 32, 551-574.
- Haar, N. E., Starr, J. and MacMillan, I C. (1988) Informal Risk Capital Investors: Investment Patterns On The East Coast Of The USA. *Journal of Business Venturing*, 3: 11-29.
- Hair, J.F. Jr., R.E. Anderson, R.L. Tatham, and W.C. Black. (1998) *Multivariate data analysis*. Englewood Cliffs, NJ: Prentice Hall International.
- Harrison, R.T., Dibben, M.R., & Mason, C.M. (1997) The role of trust in the informal investor's investment decision: An exploratory analysis. *Entrepreneurship Theory and Practice*, 21, 63-82
- Harrison, R.T. & Mason, C.M. (2007) Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31, (3) 445-472
- Harrison, R T, Smith, D and Mason, C M (2016) Heuristics, learning and the business angel investment decision making process, *Entrepreneurship Theory and Practice*, in press.
- Hindle, K. and Wenban, R. (1999) Australia's Informal Venture Capitalists: An Exploratory Profile. *Venture Capital: An International Journal of Entrepreneurial Finance*, 1: 169-186.
- Hse, D K, Haynie, M, Simmons, S and McKelvie, A (2014) What matters, matters differently: a conjoint analysis of the decision policies of angel and venture capitalists, *Venture Capital: An International Journal of Entrepreneurial Finance*, 16 (1), 1-25.

- Kelly, P. (2007), 'Business angel research: the road traveled and the journey ahead', in H Landström (ed) *Handbook of Research on Venture Capital*. Edward Elgar: Cheltenham
- Labovitz, S. (2006). Criteria for selecting a significance level: a note on the sacredness of. 05. *The significance test controversy*. New Brunswick, NJ, USA: Aldine Transaction, 166-171.
- Lahti, T. (2011) Categorization of angel investments: an explorative analysis of risk reduction strategies in Finland. *Venture Capital*, 13, (1) 49-74
- Landström, H. (1992) The relationship between private investors and small firms: an agency theory approach. *Entrepreneurship & Regional Development*, 4, (3) 199-223
- Landström, H., (1998) Informal Investors As Entrepreneurs. *Technovation*, 18: 321-33.
- Lave, J and Wenger, E (1991) *Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lumme, A, Mason, C and Suomi, M (1998) *Informal Venture Capital: Investors, Investments and Policy Issues in Finland*, Dordrecht, NL, Kluwer.
- Mason, C and Botelho, T (2014) *The 2014 Survey Of Business Angel Investing in the UK: A Changing Market Place*, Adam Smith Business School, University of Glasgow
- Mason, C and Botelho, T, (2016) The role of the exit in the initial screening of investment opportunities: the case of business angel syndicate gatekeepers, *International Small Business Journal*, forthcoming
- Mason, C. M. and Harrison, R. T. (1994) The informal venture capital market in the UK. In A. Hughes and D.J. Storey (eds.) *Financing Small Firms*. Routledge, London, pp 64-111
- Mason, C. M. and Harrison, R. T., (1996a), Informal Venture Capital: A Study Of The Investment Process And Post-Investment Experience. *Entrepreneurship and Regional Development*, 8: 105-126.
- Mason, C M and Harrison, R T (1996b) Why business angels say no: a case study of opportunities rejected by an informal investor syndicate, *International Small Business Journal*, 14 (2) 35-51.
- Mason C M, Harrison R T, (2010) *Annual Report on the Business Angel Market in the United Kingdom: 2008/09* Department of Business, Innovation and Skills, London
- Mason C M, Harrison R T, (2011) *Annual Report on the Business Angel Market in the United Kingdom: 2009/10* Department for Business, Innovation and Skills, London
- Mason, C.M. & Harrison, R.T. (2015) Business angel investment activity in the financial crisis: UK evidence and policy implications. *Environment and Planning C: Government and Policy*,
- Mason, C and Rogers, A (1997) The business angel's investment decision: an exploratory analysis, in D Deakins, P Jennings and C Mason (eds.) *Entrepreneurship in the 1990s* (Paul Chapman Publishing) pp 29-46.
- Mason, C, Botelho, T and Harrison, R (2013) *The Transformation of the Business Angel Market: Evidence from Scotland*. Working Paper, Adam Smith Business School, University of Glasgow.
- Maxwell, A, Jeffrey, S A and Lévesque, M (2011) Business angel early stage decision making, *Journal of Business Venturing*, 26, 212-225.
- Maxwell, A OL, Jeffrey, S A and Lévesque, M (2014) Trustworthiness: a critical ingredient for entrepreneurs seeking investors, *Entrepreneurship Theory and Practice*, 38 (5), 1057-1080.
- Miles, M. B., & Huberman, A. M. (1994) *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Mittiness, C R, Baucus, M S and Sudek, R (2012) Horse vs. jockey? How stage of funding process and industry experience affect the evaluations of angel investors, *Venture Capital: An International Journal of Entrepreneurial Finance*, 14 (4), 241-267.
- Paul, S and Whittam, G (2010) Business angel syndicates: an exploratory study of gatekeepers, *Venture Capital: an international journal of entrepreneurial finance*, 12 (4), 241-256.
- Paul, S, Whittam, G and Johnston, J (2003) The operation of the informal venture capital market in Scotland, *Venture Capital: an international journal of entrepreneurial finance*, 5 (4), 313-335
- Riding, A. L., Dal Cin, P., Duxbury, L., Haines, G. and Safrata, R., (1993) *Informal Investors in Canada: The Identification of Salient Characteristics*. Carleton University, Ottawa.
- Shane, S (2009) *Fool's Gold: The Truth Behind Angel Investing in America*, Oxford University Press
- Stedler, H. R. and Peters, H. H., (2003) Business Angels In Germany: An Empirical Study. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5: 269-276.

- Smith, D J, Harrison, R T and Mason, C M (2010) Experience, heuristics and learning: the angel investment process, *Frontiers of Entrepreneurship Research 2010*, Babson College.
- Sohl, J (2012) The changing nature of the angel market. In H Landström and C Mason (eds) *The Handbook of Research on Venture Capital: Volume II*. Edward Elgar: Cheltenham, pp 17-41.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Procedures and techniques for developing grounded theory. ed: Thousand Oaks, CA: Sage.
- Sudek, R (2006) Angel investment criteria, *Journal of Small Business Strategy*, 17 (2-3), 89-103.
- Sullivan, M.K., (1994) Altruism And Entrepreneurship. In *Frontiers of Entrepreneurship Research*, edited by W.D. Bygrave, S. Birley, N.C. Churchill, E. Gatewood, F. Hoy, R.H. Keeley and W.E. Wetzel jr., pp. 373-380. Babson College: Babson Park, MA.
- von Osnabrugge, M (1998) Do serial and non-serial investors behave differently? An empirical and theoretical analysis, *Entrepreneurship Theory and Practice*, 22 (4) 23-42
- von Osnabrugge, M (2000) A comparison of business angel and venture capitalist investment procedures: an agency theory-based analysis, *Venture Capital: An International Journal of Entrepreneurial Finance*, 2 (2) 91-109.
- Wright, Mike, Hart, Mark and Kun, Fu. (2015). "A Nation of Angels": Assessing the impact of angel investing across the UK.
http://www.ukbusinessangelsassociation.org.uk/sites/default/files/media/files/erc_nation_of_angels_full_report_0.pdf