Why Don't You Like Me?

Exploring the Social Venture Funding Gap in Angel Investing

Abstract

While many studies on the social venture funding gap have focused on venture-level factors to explain why social ventures receive less funding, the role of investors and their characteristics has received less attention. In this study, we propose that the reason for much of the funding gap is that many angel investors lack the analytical capabilities required to assess double bottom lines. Drawing on the literature on human capital in angel investing, we use data on 19,757 investment decisions by 1,428 angel investors from a large angel investment network to investigate the relationship between venture type, angel investor analytical capability, and investment likelihood. We find that the reluctance to invest into social ventures disappears for analytically capable angel investors (those who are relatively educated, experienced, and connected). These findings demonstrate the importance of investor human capital in social venture funding and closing the funding gap.

Keywords: angel investments, social ventures, impact investing, fundraising, human capital

1. Introduction

Social ventures—enterprises with a dual mission of generating positive social and financial returns (Croce et al., 2021)—have assumed a pivotal role in addressing today's global challenges (Saebi et al., 2019). However, social ventures frequently grapple with securing early-stage funding that would help them advance their causes (Hand et al., 2023). Although recent studies suggest that angel investors—high-net worth individuals that invest their own money in entrepreneurial ventures (Drover et al., 2017)—would accept lower returns from social ventures (Barber et al., 2021), they have largely remained on the sidelines of social investments (Hand et al., 2023), leaving a considerable funding gap (Zhan & Santos-Paulino, 2021). Key to solving this dilemma is to understand why angel investors do not invest at higher rates into social ventures (Ormiston et al., 2015).

We propose that angel investors rarely invest in social ventures because they struggle to assess social ventures' double bottom lines, which combine financial and social goals (Battilana et al., 2022; Van der Auwera et al., 2023). Angel investors are well-equipped to assess financial aspects but have little experience assessing social aspects (Lall et al., 2020). The different logics of social investments therefore force angel investors to apply new analysis tools that seem both unfamiliar (Gupta et al., 2020) and risky (Giacomantonio, 2017). The result is an apparent dissonance in investors' perceptions: even when financial targets seem solid, angel investors may struggle to assess the social targets, leading them to withdraw from the investment opportunity. We therefore propose that angel investments into social ventures hinge upon whether the angel investors have the required analytical capabilities to evaluate both facets of the double bottom line. Our research question is: *Do analytical capabilities increase angel investor likelihood to invest in social ventures?*

We tested our theory using a unique sample of 19,757 angel investment decisions (8,539 on social ventures; 11,218 on profit ventures). The data were collected from a European angel

investment network that represents 1,428 members and facilitates their investments in both "traditional" for-profit ventures and social ventures. This structure allowed us to make direct comparisons of investment behaviors in social and for-profit ventures. We show that while angel investors are indeed less likely to invest into social ventures, their investment likelihood increases when they possess more analytical capabilities. Specifically, angel investors are more likely to invest in social ventures if they are more educated, more experienced, and have a stronger network. In the following sections, we first outline the funding challenges of social ventures. Next, we present hypotheses on how angel investors' analytical capabilities impact investment likelihood before testing them with the investment decision data. The paper concludes with a discussion of our findings and their implications for research and practice.

2. Background and Hypotheses

Social ventures usually require external funding to launch and grow (Anglin et al., 2022). Over the past decade, this funding has often come from the public sector (Sunley & Pinch, 2012; Tjornbo & Westley, 2012), social impact competitions (Chandra et al., 2021), and philanthropic accelerators (Lall et al., 2020). However, as these sources of funding become more competitive or even depleted (Bhardwaj et al., 2023), early-stage social ventures often face considerable challenges when acquiring funding for their businesses (Hand et al., 2023; Ormiston et al., 2015; Saebi et al., 2019). This makes the question of how social ventures can be more successful in raising funds from early-stage investors, where they have traditionally struggled, vitally important (Lortie et al., 2022).

2.1. Challenges while assessing the attractiveness of social ventures

One potential explanation for the challenges social ventures face when seeking early-stage funding is their dual mission. This dual mission diverts attention from a singular objective, be it achieving maximum social impact or generating maximum financial returns, in favor of pursuing a blend of objectives that might not yield optimal results in either dimension

individually. On the one hand, social missions conflict with profit maximization in that social ventures often have lower profitability ratings and growth prospects (Croce et al., 2021), putting off investors who choose their investments solely on expected returns (Battilana et al., 2022; Gupta et al., 2020). On the other hand, the for-profit models of social ventures exclude them from the large charity market (Gupta et al., 2020).

The most likely investor group for early-stage social ventures is therefore socially motivated for-profit investors. Best-suited for this appears to be angel investors, the biggest source of early-stage venture funding (Capizzi, 2015; EBAN, 2022). As opposed to institutional venture funds, angel investors do not have any return requirements by limited partners but instead decide independently which ventures to support. While they largely support for-profit ventures, they also accept lower returns from social ventures that they care about (Barber et al., 2021; Morrissette, 2007). Despite this suitability, research into social venture financing activities of investors remains rare.

We argue that angel investors do not lack interest in social causes or demand high returns; rather, they struggle to assess social ventures. There are two reasons for this. First, angel investors lack tools with which to assess double bottom lines (Nicholls, 2013). They are competent at assessing financial but not social bottom lines, making judging social missions difficult (Giacomantonio, 2017). An angel investor with experience in for-profit sectors may therefore find it easier to understand the goals and priorities of a purely profit-oriented venture than a similar venture that aims for *some* profit while also seeking to employ disadvantaged groups. The resulting difficulty in assessing dual missions increases uncertainty about social venture opportunities (Grassi & Toschi, 2021). Second, angel investors are unfamiliar with the way social entrepreneurs express themselves. Recent research has shown that the rhetoric of social entrepreneurs differs significantly from that of other entrepreneurs (Ruebottom, 2013). Perhaps most notably, social entrepreneurs talk less about themselves and more about others

than purely profit-oriented entrepreneurs, creating representations of more complex stakeholder structures that must be considered (Chandra, 2016). Moreover, social entrepreneurs tend to reason differently and often attempt to convince investors with moral arguments that are fundamentally different from the logics of regular for-profit ventures (Nayır & Shinnar, 2020). Unable to test the veracity of all elements of a social venture, investors may simply come to the conclusion that the communicated goals are unrealistic or too complex and dismiss the opportunity (Barton & Muñoz, 2023). Ultimately, this makes social ventures more difficult to assess for angel investors. We hypothesize that:

H1: *Investors are more likely to invest in profit ventures than in social ventures.*

2.2. The role of analytical capabilities in assessing social venture's attractiveness

We proposed that angel investors' limited ability to assess the double bottom line of social ventures leads them to withdraw from investment opportunities. This would also suggest that their assessments of ventures' attractiveness may change as they develop greater knowledge and analytical capabilities (Collewaert & Manigart, 2016). Investors with greater analytical capabilities may struggle less in assessing the complexities of social ventures and therefore feel less uncertain about them. As a result, more robust human capital, which can come in the form of education, experience, and networks, could be associated with a higher propensity to invest in social ventures.

Investor education. We expect that investors' formal education develops their analytical capabilities in ways that allow them to assess the attractiveness of social ventures. Highly educated individuals have a broader knowledge base, which allows them to assimilate new knowledge more quickly and in a more meaningful way (Collewaert & Manigart, 2016). Thus, educational achievements provide deeper knowledge of different industries that can be deployed across a broader range of investments (Mitteness et al., 2012). The resulting reduced cognitive distance between investors and ventures can facilitate investment decisions

(Guenther et al., 2018). Furthermore, more educated angel investors see more value-creation potential in entrepreneurial opportunities, which leads them to negotiate higher valuations (Collewaert & Manigart, 2016). Consequently, we anticipate that formal education equips angel investors with a more extensive knowledge foundation, thereby enhancing their ability to evaluate opportunities in the realm of social venture investments (Liivamägi, 2016). We hypothesize that:

> ***H2:*** *Investor education moderates the relationship between venture type and fundraising outcomes such that more educated angel investors are more likely to invest in social ventures than less educated angel investors.*

Investor experience. Another important measure of analytical capabilities is prior social investment experience—the number of social investments they already made. The more an individual's knowledge relates to the task at hand, the more efficient they become at accumulating and interpreting new knowledge related to that task, and the more refined their mental schemata become (Dimov & Shepherd, 2005). Through prior social investments, angel investors can learn about the investment process and make better decisions (Botelho et al., 2021). Having analyzed social ventures before, experienced investors can cognitively link new investment opportunities to existing social venture evaluation schemes (Huang & Pearce, 2015) and use their developed human capital to take the lead on future investments (Bonnet et al., 2021). These improved analytical capabilities have also been linked to higher angel investment returns (Capizzi, 2015). Given these arguments, we hypothesize that:

> ***H3:*** *Investor experience moderates the relationship between venture type and fundraising outcomes such that more experienced angel investors are more likely to invest in social ventures than less experienced angel investors.*

Investor network. A broader network allows investors to compare their analyses with those of others (Mason et al., 2019) and learn from other investors' behavior and mistakes (Antretter et al., 2020; Croce et al., 2017). Furthermore, angel investors often offer mutual support, which strengthens their knowledge base and lowers transaction costs (Wesemann &

Antretter, 2022). In fact, previous studies have shown that a well-used network "transforms distant search into local search" (Afuah & Tucci, 2012, p. 369). Optimally employed, a strong network can become the catalyst that connects investor human capital to better investment decisions (Zhang et al., 2023). In the context of angel investing, Bonini et al. (2018) argued that network partnerships impact angel investors' returns because they generate valuable knowledge and a sense of assurance as more than one investor either individually or jointly conducts due diligence on every investment. We therefore expect a broader network to provide assurance and collective analytical capabilities. As such, we hypothesize that:

> ***H4:*** *Investor network moderates the relationship between venture type and fundraising outcomes such that angel investors with stronger networks are more likely to invest in social ventures than those with weaker networks.*

Insert Figure 1 around here.

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3. Analysis and Results

3.1. Sample

We used a unique dataset of 19,757 investment decisions by 1,428 angel investors made via a large angel network, where investors review deals and make decisions to invest through an online platform. In total, 3,859 (19.53%) decisions resulted in investments while the remaining 15,898 (80.47%) were decisions not to invest. The network's management company resides in Germany and was founded in 2012. Specially trained gatekeepers review all company submissions, evaluating their documents such as video pitches, slide decks, and financials, before disseminating this information to the network's members. Such initial screening ensures that the investment opportunities presented meet members' overall investment criteria (e.g., geography, stage of development, investment size).

We had access to the platform's deal monitoring system and were able to retrieve data on each member's individual investments as well as details on the target companies, including business model descriptions, which allowed us to assess whether a company had a social

mission or not. We included all cases for which data on the investor, venture, and the investment were available. The 3,859 investments by 1,428 angel investors in our final sample amounted to a total value of $7.96 million, suggesting that each angel investor invested $5,574 through the angel investment network. While this contribution is smaller than the average angel investment ($27,669 in Europe; EBAN, 2022), it is in line with the recent trend to far smaller but more networked investments (Blohm et al., 2022) and still many times larger than the average contribution of $70 in crowdfunding (Kuppuswamy & Bayus, 2017). These relatively small ticket sizes for angel investors are in line with recent developments of angel investments being increasingly diversified, i.e., angels trying to make more investments into different industries with the same amount of money (Antretter et al., 2020). Of all included investment decisions, 42.94% (8,539) concerned social ventures.

3.2. Methods

We followed previous research in entrepreneurship and use fixed effects models (e.g., Ahn & Winters, 2022; Li et al., 2022; Patel & Wolfe, 2023). We used the *reghdfe* procedure in Stata (Correia, 2016), which efficiently calculates multiple sets of fixed effects for large samples (Anglin et al., 2022). This approach is preferable to other estimation approaches because simply modeling large numbers of dummy variables cannot adjust the standard errors of fixed effects (Li et al., 2022). Model 1 (effect of social mission on investment likelihood) accounts for the fixed effects of investors but not ventures (as we are measuring their effect); all other models account for the fixed effects of both investors and ventures. The results for regular logistic regression models and Heckman models were equally significant.

Investment likelihood. We coded the binary investment decision outcome as "1" if the angel invested and "0" if not, which is in line with prior research (Balachandra et al., 2021; Wesemann & Wincent, 2021).

Venture type. We coded venture type as a binary variable ("0" for for-profit ventures or "1" for ventures that also have a social mission). We followed Anglin et al. (2022) and searched ventures' business model summaries for the keywords "social," "social justice," "human rights," "economic development," "health," "education," "hunger," and "environment" (list source: Parhankangas & Renko, 2017 with the addition of "environment") before manually validating the coding structure with two independent coders (IRR $\alpha = 0.94$). Linguistic analyses of the business model summaries are appropriate in this context as they also form the basis of the decisions that investors make.

Investor education. We coded education based on a six-point scale for the educational achievement of the investor: 1 = no formal education to 6 = doctoral degree. This is in line with recent research publications in the field (e.g., Blohm et al., 2022).

Investor experience. We measured investor experience as the number of previous social venture investments made by the angel investor. This approach is a commonly used and widely recognized practice within the field (e.g., Boulton et al., 2019).

Investor network. The studied angel group has an exclusive inner circle of investors. When elevated to this exclusive inner circle, angels gain access to regular networking events such as roundtable discussions with other investors and founders. We coded the variable "1" if angels are part of this inner network and "0" if they are not.

Control variables. Control variables are largely unnecessary in our model as we controlled for the fixed effects on both the venture and the investor level. Among the models under consideration, only Model 1, which examines the venture mission's direct impact, lacks the ability to account for company-level fixed effects, and consequently, necessitates the inclusion of control variables. Specifically, the model controls for *venture valuation* to account for the venture's stage of development and associated risk profile (Jeffrey et al., 2016), the planned *time to exit* of the venture to account for different investment time horizons

(Gerasymenko & Arthurs, 2014), and the venture *fundraising goal* as it is linked to investment likelihood (Sanchez-Ruiz et al., 2021).

3.3. Results

Table 1 reports the descriptive statistics and correlations for the main variables as well as a series of control variables. We included the controls here to show the general sample dynamics but note that the fixed effects models drop the investor control variables in all models and the venture control variables in all models except for Model 1. Table 2 reports the results for the *reghdfe* models. Model 1 includes only the main effects of all variables. It shows that social ventures are indeed linked to lower investment likelihood than profit ventures (β = −0.028; p = 0.000), supporting Hypothesis 1. Model 2 introduces the interaction between *venture type* (*social venture* vs. *for-profit venture*) and *investor education*, which is positive and significant (β = 0.010; p = 0.040). These results support Hypothesis 2, suggesting that angel investors with higher educational achievements are more likely to invest in social ventures than investors with less educational achievements. Model 3 introduces the interaction between *venture type* and *investor experience*, which is also positive and significant (β = 0.070; p = 0.000), supporting Hypothesis 3. In other words, more experienced investors are more likely to invest in social ventures than less experienced investors. Lastly, Model 4 introduces the interaction between *venture type* and *investor network*, which is also positive and significant (β = 0.066; p = 0.000). As such, angel investors with a superior network are more likely to invest in social ventures than angel investors with an inferior network. These results support Hypothesis 4. Model 5 combines all moderations. It shows that moderation by education becomes non-significant while those of experience and network maintain their strength.

Insert Tables 1 and 2 around here.

We further assessed the economic significance of our findings by quantifying the extent to which investment behaviors varied between social ventures and profit ventures among angel investors, using a conventional logistic regression analysis. Binary variables are compared according to their categories while continuous variable comparisons use low scores (−1SD) and high scores (+1SD). On average, investors had a 19.54% likelihood to invest in any given investment opportunity. Regarding funding rates (H1), we find that social venture investments are 5.92% less likely than purely for-profit venture investments. Regarding investor education (H2), our findings reveal that individuals with lower educational attainment are 12.89% less inclined to invest in a venture if it has a social mission (compared to profit ventures). For more highly educated investors, this disparity effectively disappears (0.93% difference). On the topic of investor experience (H3), we find experienced investors are 23.93% more likely to invest in ventures with a social mission than those without prior experience in social finance. Lastly, concerning investor network (H4), we find that investors who are not members of the elite inner angel club are 8.79% less likely to invest in social ventures than in profit ventures, whereas the elite members are 15.13% *more* likely to invest in social ventures than in profit ventures.

3.4. Supplementary analyses and robustness tests

Heckman models. It is also possible that angel investors are more likely to invest in certain ventures but provide them with less money. To exclude this possibility, we reran all our models using Heckman two-stage specifications, which combines the question of whether people invested (investment = yes/no) with the question of how much those that invested contributed (if yes, how much?). The results hold: investment likelihoods are higher in the hypothesized directions and there were no significant differences for investment amounts.

Overall investment experience. We also tested our model with angel investors' overall investment experience as a moderator (rather than just social venture investment experience)

and found that the effect maintains its direction and significance. This suggests that some analytical capabilities can be transferred from the evaluation of for-profit to social ventures.

Gender. Other studies find gender differences in social investing. For example, female managers care more about corporate social responsibility activities than male managers (Reig-Aleixandre et al., 2023), female entrepreneurs care more about social impact (Hechavarria et al., 2012), and female representation on family firm boards is associated with increased social activity (Cruz et al., 2019). We tested a gender effect (are women more likely to invest in social ventures than men?) but, contrary to the insights from other fields, find no significant gender moderation in the investment likelihood into social ventures ($\beta = 0.256$; $p = 0.325$).

4. Discussion

Our results show that angel investors' likelihood to invest into social ventures depends on their analytical capabilities. Specifically, we find that angel investors' education, experience, and network are key moderators that affect investment likelihood. This suggests that cognitive difficulties assessing a social venture's attractiveness rather than the lower expected return of social ventures cause much of the social venture funding gap. Further, it highlights the importance of ongoing efforts to formalize social impact measurement to facilitate its communication (also see Muñoz et al., 2022). To attract increased investment, social ventures may not necessarily need to alter their social mission; instead, they may focus on refining their communication strategies to make their mission more understandable and appealing to angel investors. In the immediate future, social ventures should prioritize tailoring their approach to match the profiles of the angel investors with whom they engage. In the longer term, efforts within the community should aim to eliminate barriers that currently hinder less educated, less experienced, and less networked angel investors from participating in social ventures, potentially narrowing the substantial funding gap faced by social enterprises.

The matter of effective communication for social ventures may be even more important in the context of developing economies as social investments are often made across national and cultural divides. While all ventures in our study focus on the European market and most investors are from OECD nations, this is uncommon in the social venturing sector. Instead, social investments are often made intercontinentally. For example, recent studies feature social investments from the United States to Indonesia (Chandra, 2017) and from Europe to India (Di Lorenzo & Scarlata, 2019). As the associated distance introduces additional communication challenges, we expect the social investment gap to be even wider in the case of geographically distant ventures. Identified moderators like investor network connections may thus prove to be even more important in these contexts, as they can facilitate communication and reduce uncertainty (Wesemann & Antretter, 2022). Analytically capable investors may be better at removing these coinciding uncertainties of distance and business structure. Identifying effective ways to bridge the social investment gap in these cases is also particularly important because social ventures in developing economies most urgently need support (Lall et al., 2020; Tirumalsety & Gurtoo, 2021) and securing funds from abroad for local social ventures remains a major challenge (Lall et al., 2019).

Our findings offer several contributions. First, this study contributes to the literature on angel investor human capital (Bonnet et al., 2021; Collewaert & Manigart, 2016) by providing evidence for a *capability gap* that can prevent angel investors from investing in social ventures. This also adds to the recent literature that develops theory to connect rhetoric and social capital in social venture research (e.g., Chandra, 2016). Second, our findings shed new light on the social venture funding gap by building on recent theoretical developments on the double bottom lines of social ventures (e.g., Gupta et al., 2020; Saebi et al., 2019). We shift the focus from internal venture qualities to investor communication to show that the lack of attractiveness of social ventures as an investment opportunity may not be rooted in intrinsic shortcomings of

social ventures (like lower returns) but simply in insufficient communication. Third, our work offers advice to social entrepreneurs who struggle to raise funding. We show that while social ventures commonly respond to these challenges by drifting to more financial metrics (Muñoz & Kimmitt, 2019), much of the social venture funding gap may already be overcome with effective investor selection and communication.

This study does not come without limitations that offer opportunities for future research. Most notably, our study relies exclusively on field data, making it difficult to isolate the underlying mechanisms. For example, we cannot make sure that every investor has reviewed every piece of available information for every opportunity. We therefore recommend future research to investigate this using experimental designs to test whether investors do indeed reject social investment opportunities because of their analytical capabilities. For example, we recommend studies that test how long investors contemplate an investment decision or how many pieces of information are assessed before a decision.

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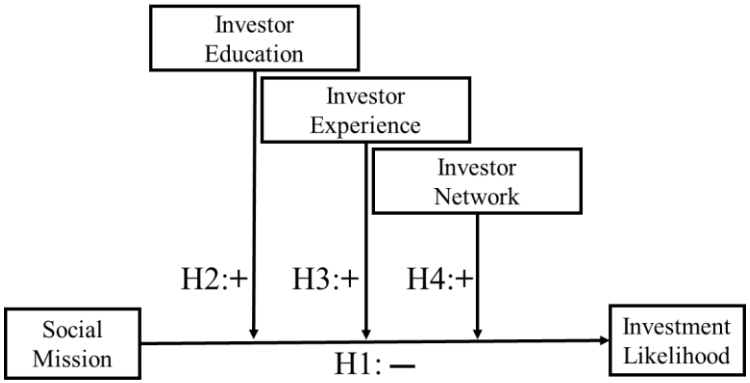
6. Figures and Tables

6.1. Figure 1: Research model



6.2. Table 1: Descriptive statistics and correlations

Variable	Obs.	Mean	SD	Min	Max	1	2	3	4	5	6	7	8
Investment (1=yes; 0=no)	19,757	0.195	0.396	0.000	1.000	1.000							
Venture type	19,757	0.432	0.495	0.000	1.000	-0.003	1.000						
Investor education	19,757	3.377	1.104	1.000	6.000	0.028	0.000	1.000					
Investor experience	19,757	0.963	1.423	0.000	9.000	0.320	0.015	0.059	1.000				
Investor network	19,757	0.098	0.298	0.000	1.000	0.020	0.020	0.052	0.106	1.000			
Investor gender	19,757	0.039	0.194	0.000	1.000	-0.001	0.004	-0.011	-0.003	0.012	1.000		
Venture time to exit	19,757	45.222	9.029	18.000	67.160	-0.018	0.278	0.008	0.025	-0.046	-0.002	1.000	
Venture fundraising goal (log)	19,757	13.785	0.635	12.612	15.895	0.018	0.036	-0.007	-0.014	0.030	0.006	0.068	1.000
Venture valuation (log)	19,757	15.609	0.796	14.648	18.245	-0.005	-0.235	-0.006	-0.003	0.042	0.005	-0.184	0.810

Note: All correlations >|0.014| are significant at the 5% level.

6.3. Table 2: High-dimensional fixed effects regression models

DV: Investment likelihood	Model 1	Model 2	Model 3	Model 4	Model 5
Venture type	-0.028***				
	(0.006)				
Venture type × investor education		0.010*			0.005
		(0.005)			(0.005)
Venture type × investor experience			0.070***		0.068***
			(0.004)		(0.005)
Venture type × investor network				0.066***	0.037***
				(0.017)	(0.017)
Constant	0.199***	0.195***	0.190***	0.192***	0.188***
	(0.004)	(0.002)	(0.002)	(0.003)	(0.003)
Venture controls	Yes	No	No	No	No
Venture fixed effects	No	Yes	Yes	Yes	Yes
Investor fixed effects	Yes	Yes	Yes	Yes	Yes
F-statistic	20.350***	4.220*	246.300***	14.650***	84.160***
Observations	19,757	19,757	19,757	19,757	19,757
Adj. R-squared	0.110	0.246	0.256	0.246	0.256

*Standard errors in parentheses, *** p<0.001, ** p<0.01, *p<0.05*