Equity Crowdfunding Investors

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Abstract

Equity crowdfunding is unique in that it carries the potential to be a democratizing force in finance and investment by allowing for a very heterogeneous crowd of investors to participate in the funding of innovative businesses. The goal of this paper is to shed light on this subject by revealing the investment patterns of equity crowdfunding investors who pledge funds on one of the largest investment-based platforms in the United Kingdom, Crowdcube. Our sample consists of 22,830 unique investors who made 43,770 investments in 252 equity crowdfunded companies. We find that the crowd is comprised of both businesses and individuals, who invest diverse amounts, hold different size portfolios and adopt various investment strategies. We define five main types of investors and identify the unique role each type plays for facilitating financing on Crowdcube.

JEL Codes: G23, G24, G28, L26

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1. Introduction

In nearly a decade, equity (or investment-based) crowdfunding has emerged to become an important source of financing for entrepreneurial ventures (see Block et al., 2018). One of the key promises of this disruptive new way to raise capital has been its potential to have a democratizing effect on finance for both entrepreneurs and investors. For entrepreneurs looking to raise funds for their start-up companies, equity crowdfunding provides an alternative to the traditional sources of financing. On the investor side, equity crowdfunding provides an opportunity for anyone to invest regardless of their financial status, thereby including people of modest means and not just the high-net-worth individuals.

Existing literature so far has considered democratization in the context of equity crowdfunding from the perspective of the entrepreneurs (the demand side) aiming to provide some evidence on the financial inclusion of underrepresented categories of business leaders (see Cumming et al., 2019b). However, there has been only limited effort targeted towards understanding the democratizing role of equity crowdfunding for the supply side (i.e. the equity crowdfunding investors).¹ This naturally raises the question of what type of investors engage in equity crowdfunding. Are they indeed the small investors of modest means and little investment experience who are generally assumed to tap the equity crowdfunding market (Ahlers et al., 2015)? Or are there different types of investors present? And if yes, how are the different types of investors then represented in the shareholder base of equity-crowdfunded ventures?

This paper fills this gap by deriving insights from changes in the shareholder base of equitycrowdfunded ventures and providing a better understanding of the type of investors who engage in equity crowdfunding. More specifically, we highlight that the crowd of equity crowdfunding investors is very heterogeneous and is comprised of both businesses and individuals, who pledge diverse amounts, hold different size portfolios and adopt various investment strategies. Based on these findings, we identify and define five types of investors present on the equity crowdfunding market: institutional investors; business angel (BA)-like investors; crowd angels; equity

¹ A notable exception here are studies on gender dynamics in equity crowdfunding that consider both the demand and supply side, and more importantly the match between entrepreneurs and investors (see Bapna and Ganco, 2020). Please note, that the effects of age, gender, ethnicity or geography are out of the scope of this paper. The starting point of this paper when considering the democratizing effect of equity crowdfunding for the investors is the ticket size (access for all).

crowdfunding (ECF) enthusiasts; and family, friends and fans (3Fs). We then discuss their different importance for facilitating financing on equity crowdfunding platforms. Our findings suggest that institutional investors in our setting exhibit somewhat different behavior than in their traditional sense, while BA-like investors on equity crowdfunding platforms share a lot of similarities with traditional business angels. Both groups pledge significantly large amounts in equity crowdfunding campaigns. Equity crowdfunding has also allowed for new important players to emerge, namely crowd angels and ECF enthusiasts, who back many companies and make sizable contributions on equity crowdfunding platforms. Platforms are also used by entrepreneurs as a tool to solicit funding from their own network of family and friends, who in turn help kickstart their campaign and generate funding momentum.

To conduct our exploratory analysis aimed at understanding investor participation on equity crowdfunding platforms, we use hand-collected data on the shareholders of companies that raised financing on Crowdcube, a leading equity crowdfunding platform based in the United Kingdom (the UK), in the period of 2013 to 2016. By considering the changes in the shareholder lists of the companies in question, we are able to identify all investors who became shareholders² after investing on Crowdcube. We collect information such as their names, the amount they invested and the stake and type of shares they acquired. We use this information to construct our dataset on investor behavior. In order to do so, we first identify each unique investor in our sample of investments they made, as well as the average value, the total value and the standard deviation of their investments (when more than one investment was made). Our final sample consists of 252 equity crowdfunded companies³, which attracted 43,770 investments by 22,830 investors, who pledged nearly 70 million in funds.

The main goal of this labor-intensive exercise is to challenge the prevalent binary view of existing literature regarding equity crowdfunding investors. Prior work has indeed indicated the presence of two mutually exclusive groups of investors on equity crowdfunding platforms: small

² Moving forward, the terms equity crowdfunding investor and shareholder will be used interchangeably.

³ Due to the labor intensity of the project and the amount of effort required to identify each campaign's specific investors, we are currently focusing only on first-time campaigns. Therefore, investments by investors who participated in follow-on Crowdcube campaigns are currently excluded from our sample. A potential extension of this project will consider how the shareholder base of companies that launched multiple campaigns has developed over time.

unsophisticated and larger sophisticated investors (e.g. business angels and venture capitalists as in Signori and Vismara, 2018; and Wang et al., 2019). The main limitations of existing literature, however, is that it has heavily relied on the assumption of the presence of particular types of investors (e.g. retail investors vs. business angels) thereby generalizing investors' behavior, while lacking general consensus or a precise definition of these different types of investors in the context of equity crowdfunding. In their paper on the post-campaign outcomes of equity-crowdfunded firms Signori and Vismara (2018) make a distinction between small (restricted) and qualified (sophisticated) investors and suggest that qualified investors possess superior information over small investors that allows them to cherry-pick the more promising businesses. In a similar fashion, Cumming et al. (2019a) highlight the heterogeneity of investors with the aim to investigate how voting and cash-flow rights affect success outcomes for equity crowdfunding campaigns. They discriminate between two particular groups of investors, namely small and professional investors, suggesting that the degree of separation between ownership and control in this context affects the composition of the crowd. Qualified and professional investors in both works are defined as 'selfcertified sophisticated investors and high-net-worth investors', with the rest of the investors falling in the remaining category of small investors. While similar, this view of the composition of investors active on equity crowdfunding platforms (in this case also Crowdcube) is very restrictive and generally relies on self-disclosed information by the investors themselves. In a study of another UK-based leading equity crowdfunding platform, Wang et al. (2019) observe heterogeneity among investors not only in terms of the size of their investments, but also in terms of their portfolio size. Following anecdotal evidence about the presence of angels alongside the crowd, the authors classify the top 1% of investors in terms of total amounts pledged as 'angel' investors and the remaining as 'crowd' investors. However, they are in fact unable to observe the identities of these different groups of investors.

What our paper does differently is take a more agnostic view on the composition of the crowd of equity crowdfunding investors by deriving conclusions about their investor type based on their observed investment behavior. In other words, we take a step back and try to understand what type of investors engage with equity crowdfunding based on the amounts they invest, the number of investments they make and the investment strategy they employ.

The rest of the paper is organized as follows. The next section reviews our research setting and provides some legal background related to what types of investors are allowed to participate in equity crowdfunding. Section 3 discusses how the data was collected and describes our final sample of equity crowdfunded companies. Section 4 contains our exploratory analysis on investor participation and discusses the different investor types we identified, as well as their relative importance. Section 5 concludes the paper.⁴

2. Research Setting

In this section, we are going to discuss our choice of the platform Crowdcube to be the subject of our exploratory analysis on investor participation in equity crowdfunding. Crowdcube is based in the United Kingdom (the UK) and was one of the first pure equity crowdfunding platforms to open their doors. Currently, it is among the largest in the world. To explain its rapid growth and evolution, first, we provide an overview of the relevant regulatory environment in the UK. Then we provide some information on how the platform operates and review those characteristics of Crowdcube that are important for our analysis. Finally, we discuss what type of investors are allowed to participate in UK's equity crowdfunding market.

2.1. Equity crowdfunding in the UK

Equity crowdfunding originally took off in Europe and forced European countries to adapt their existing securities regulation (with the use of exemptions) in order to allow for the solicitation of funds from small non-accredited investors. Some of the exemptions refer to the total amount of the offer, the maximum number of investors to whom the offer is made, the minimum contribution imposed on investors, the minimum denomination of the securities offered, and whether the offer is made to qualified investors only (Hornuf and Schwienbacher, 2017). Within the EU there has been a general effort towards harmonizing prospectus regulation, however, additional individual reforms were undertaken by different countries and jurisdictions (e.g. Austria, Belgium, France, Germany, Italy and the UK).

⁴ A future version of this paper is going to consider how the different types of investors we identified are represented in the shareholder base of our sample of equity-crowdfunded ventures. Furthermore, we are going to estimate the effect of the different types of investors on the ex-post performance of their investee companies.

The investment-based platform Crowdcube, which is the subject of this study, falls under the jurisdiction of the UK, market leader and one of the pioneers in terms of regulation of alternative ways of funding. In the UK, equity crowdfunding has been taking place under the Financial Services and Markets Act 2000. The Financial Conduct Authority (FCA, formerly FSA) defines the regulatory approach to crowdfunding over the internet and is responsible for the implementation of the rules and regulations regarding investment-based crowdfunding. All investment-based platforms in the UK must be authorized by the FCA and are defined as platforms where investors can invest directly in businesses by buying investments such as shares or other securities (FCA, 2019).

In contrast to other countries, the UK has adopted a flexible principles-based approach towards the development of regulatory policies, which involves the collaboration of both platforms and their users. UK regulators additionally support equity crowdfunding by offering significant tax incentives for investing in small businesses. There are two overlapping incentive programs: the Enterprise Investment Scheme (EIS) and the Seed Enterprise Investment Scheme (SEIS), which offer 30% to 50% tax break to individual investors. It is this regulatory environment, among other things, that has led to the rapid development of equity crowdfunding in the UK (Steinhoff, 2015). The top two UK-based equity crowdfunding platforms, Crowdcube and Seeders (who recently announced their plans to merge⁵), are among the largest in the world and have facilitated more than 400 deals and £200 million investments in 2019 alone (Beauhurst, 2020). It is for these reasons combined, that we consider that the UK provides the best avenue for equity crowdfunding research.

2.2. Crowdcube

Crowdcube was the first to facilitate equity crowdfunding investments in 2011, and, since 2013, is authorized by the FCA. In 2020, investors on Crowdcube made nearly 200 thousand investments for more than £150 million, fueling the growth of 242 businesses.⁶ The platform operates in an 'all-or-nothing' manner, which means that investors are only committed to providing their pledged funds in case the campaign is successful and raises its targeted amount. If unsuccessful, the pitch gets closed and the investors' pledges become void. If fully funded, firms

⁵ Source: <u>https://www.crowdcube.com/explore/blog/crowdcube/crowdcube-news</u>, last accessed December 2020.

⁶ Source: <u>https://www.crowdcube.com/year-in-review</u>, last accessed December 2020.

have the choice to keep the campaign open and allow it to overfund or close it at the target amount. Investors who bid during the overfunding phase invest on the same terms.

To be able to submit a pitch application, the entrepreneurs must have a registered company. Additionally, they need to provide a business plan and a financial forecast. Before the pitch can go live, each company is subject to due diligence by members of the Crowdcube team and all financials undergo a full review. After being launched, business pitches on Crowdcube remain private until 20% of the investment target is reached and are then made public for 30 days.⁷ Entrepreneurs pitch their ideas for a fixed amount of funds and a set proportion of shares. The shares could include voting and preemption rights (A-shares) or no rights (B-shares). A-shares are priced the same as B-shares, however, in order to be eligible for A-shares investors are typically required to invest above a certain threshold. Share issues generally qualify for tax relief schemes, such as EIS or SEIS.

These features and characteristics of Crowdcube make it uniquely suited for our exploratory analysis for multiple reasons. First, it has facilitated the largest number of investments and attracted the largest investor base during its 10 years of operation. Second, investors on Crowdcube become direct shareholders in the companies, in which they invest. In comparison, Seedrs, the second largest equity crowdfunding platform in the UK, uses a nominee structure, meaning the platform itself serves as the representative of their investors, thereby providing an additional layer of investor protection.⁸ And SyndicateRoom, another popular equity crowdfunding platform, employs an investor-led model, which requires the commitment by an experienced investor (typically a business angel) who carries out their own due diligence, negotiates the terms of each deal and co-invests with the crowd. Third and final, all companies in the UK are incorporated and registered with Companies House and regularly file specific details as required by the current Companies Act 2006, such as annual financial statements and conformation statements (previously annual return statements). For all companies, the confirmation statement contains details of its directors and shareholders and is a public record. This is important for our paper, as our exploratory

⁷ All these terms and conditions have not always been applicable, but only got introduced and updated as platforms developed over time (e.g. in the 2012-2015 period Crowdcube pitches remained live for 60 days and did not require a lead investment of 20%).

⁸ Since November 2019, Seedrs has also introduced direct investments as a new option to invest on their platform in order to accommodate their different types of investors.

Source: https://www.seedrs.com/learn/blog/introducing-direct-investment, last accessed December 2020.

analysis utilizes this publicly available information in order to understand what types of investors become shareholders in equity crowdfunded companies.

2.3. Equity Crowdfunding Investors in the UK

In principle, equity crowdfunding platforms in the UK are open to almost everyone (as long as they are over 18 years of age and legally entitled to invest and receive financial promotions) and anyone with a valid e-mail address can register on their websites. However, there are some specific rules and regulations in place that define what types of investors are allowed to participate. FCA's Policy Statement PS14/4 defines the following groups: professional investors, corporate finance or venture capital contracts, certified high-net-worth or certified sophisticated investors, advised investors and investors who confirm that they will not invest more than 10% of their net investable assets in investment-based crowdfunding products.

On Crowdcube, upon registration investors are asked to assign themselves into one of four more broader investor categories: everyday investors, advised investors, self-certified sophisticated investors and high-net-worth investors.⁹ High-net-worth investors are individuals who have invested in more than one unlisted company (including via Crowdcube) in the last two years. They regularly declare to have an annual income of £100,000 or more or net assets valued at £250,000 or more. Self-certified sophisticated investors include business angels, professionals in the private equity sector, directors of companies with an annual turnover of at least £1 million. Advised investors are investors who receive FCA regulated investment advice. The rest of the investors fall into the category of everyday investors and are obliged to sign an agreement that they will not put more than 10% of their liquid and near-liquid assets into company shares such as the ones sold on Crowdcube.

3. Data and Sample

In this chapter, we provide a step-by-step overview on how the data was collected and how we arrived at our final sample of equity crowdfunded companies and their shareholders and investors, as well as provide some descriptive statistics for both the population of Crowdcube funded

⁹ Source: <u>https://www.crowdcube.com/explore/investor-categories</u>, last accessed December 2020.

companies and our sample. We constructed our datasets by hand-collecting data from three sources: Crowdcube for data on equity crowdfunding campaigns, Companies House for shareholder information and Beauhurst for information on venture performance.

3.1. Campaign data

We use Crowdcube's website to identify all UK-based limited companies that successfully raised financing on the platform since its inception in 2011 until the end of 2016 (375 firms in total).¹⁰ We then record each company's unique Companies House number and collect detailed data on the (first) campaign each one of these companies launched on Crowdcube, such as the launch date, the target amount, the amount of equity offered, A- or B-shares, etc., but also the amount the campaign raised, the number of investors it attracted and the date of the final investment. Table 1 provides an overview of our variables, including description and data sources. In case a company launched multiple campaigns we only collect information on the original pitch. The reason for that is that the investor dynamics during subsequent campaigns might be quite different as entrepreneurs can take advantage of the social contracts with those investors that backed their previous campaigns (see Butticè et al., 2017). In fact, Ralcheva and Roosenboom (2020) show that follow-on campaigns are much more likely to be successful, while Coakley et al. (2018) provide evidence that the success of follow-on campaigns is positively impacted by the degree of overfunding during the initial campaign and by the related social capital that the initial campaign generates. This suggests that follow-on campaigns are likely to attract significant contributions from their already existing shareholder base. Given that our study is interested in equity crowdfunding investors who ultimately become new shareholders in equity crowdfunded companies and taking into account the labor intensity of this project and the amount of effort required to identify each campaign's specific investors, investors in follow-on campaigns are out of the scope of this study.¹¹

[Insert Table 1 somewhere here]

¹⁰ There were 420 successful raises on Crowdcube between 2011 and 2016. 2 of those did not involve limited companies. 4 were launched by companies not based in the UK (e.g. Sweden or Spain). 39 were follow-on campaigns. ¹¹ However, a potential extension to this study will consider how the shareholder base of companies that launched multiple campaigns has evolved over time.

3.2. Investor data

In order to construct our investor dataset, we first search the Companies House register for each of the companies in our sample (using their unique company numbers) and access all the capital and confirmation statements they filed over their years of operation. Private limited companies are required to file a statement of capital within one month of any allotment of shares (e.g. when issuing new shares after raising additional capital via Crowdcube). They are requested to fill in a 'Return of allotment of shares' form (SH01), which contains information on the shares allotted, including the class, currency and number of shares; the nominal value of each share; and the amount paid or unpaid on each share. Every company must also file a confirmation statement at least once a year in order to confirm that the information held by Companies House is up to date. This implies that if any changes in the company's details occurred since the last statement was filed, they must either be addressed beforehand (such as changes in directors and secretary, people with significant control or the company's registered address) or filed together with the latest confirmation statement. The confirmation statement has an additional information section, which is to be completed if there have been changes to the company's statement of capital or shareholder information, among others. Using the information from both the capital and confirmation statements filed around the date of the final Crowdcube raise we try to distinguish those individuals who became shareholders in our sample companies after making an investment on the platform. For reasons listed below, we were able to correctly identify the equity crowdfunding investors, including their names (first and last name), the amount they invested and the stake and type of shares they acquired, in 271 out of the 375 companies that raised capital on Crowdcube between 2011 and 2016. Table 2 shows the number of companies (with known investors) and their distribution over the sample years. Table 3 lists the three reasons for which investors could not be identified, as well as the number of companies with unknown investors per year. In 55 of the cases there were too many shareholder changes within the span on of a single year (e.g. due to multiple capital raisings usually from different sources). In the majority of the remaining cases no complete list of shareholders was filed with Companies House. That could be due to mostly 2 reasons: investors were listed in bulk (e.g. under 'Crowdcube investors') or there was a nominee structure in place. In a few of the cases the list of shareholders provided was unreadable. Based on Table 2 and 3, there is no reason to believe that the campaigns missing detailed investors' information were unevenly represented over the years. Taking that into account, we then drop the campaigns launched during the first two years of operation of Crowdcube (19 campaigns) to account for the newness of equity crowdfunding and to allow for some learning to occur on the platform.¹² This resulted in a sample of 252 campaigns and 44,005 investments of nearly £70 million. Table 4 provides the yearly distribution of campaigns and investments in our final sample.

[Insert Table 2, 3, 4 somewhere here]

3.3. Descriptive statistics of equity-crowdfunded companies

Table 5 reports the descriptive statistics for both the population and our sample of Crowdcube funded companies between 2013 and 2016. The last column presents the results of a t-test comparing the population and sample means. Companies that successfully raised funds on Crowdcube in our sample period were relatively young when they launched their first campaign (less than 3 years old). On average, they targeted nearly £300,000 and offered 13% of their equity in exchange. Typically, both A- and B-shares (in 80% of the cases) and some type of rewards (in 75% of the cases) were offered in the campaign. The median threshold for the purchase of shares with full voting rights (i.e. A-shares) was £5,000. Companies funded on Crowdcube raised on average a lot more than their initial goal, thereby overfunding their campaigns by an average amount of £140,000. The largest campaign on the platform during our sample period raised nearly £4 million (double their initial target) by more than 2,000 investors. The average single largest investment a campaign attracted was around £80,000, while one campaign was able to attract a single investment as high as £1,000,000.

[Insert Table 5 somewhere here]

Compared to the population of Crowdcube funded companies, the descriptive statistics of our sample of companies (i.e. campaigns with known Crowdcube investors) are quite similar in multiple aspects: they were of similar age at the time of launching a campaign; they offered and issued similar proportions of their equity; they also typically offered both A- and B-shares, as well as rewards. More importantly, the failure rates for the population companies and sample companies are identical (25% of the companies failed in the three to six years after they raised financing on Crowdcube), which alleviates a potential survivorship bias concern. One notable difference,

¹² The way platforms were operating in the early years of equity crowdfunding was substantially different, e.g. see Vismara (2018).

however, is that our sample campaigns are on average much smaller (as evident by their significantly smaller target and funding amounts, therefore also significantly smaller investor bases). For further comparison, Figure 1 plots the histograms of target amount, raised amount, overfunding amount and the number of investors for the population and sample respectively. Figure 1 shows that our sample histogram resembles the histogram of the population. The much longer right tails of the population distribution suggest that the companies that raised the largest amounts of funds, significantly overfunded their campaigns and attracted the highest number of investors (i.e. the extremely successful campaigns) did not make it into our sample. That is also consistent with the reasons for exclusion discussed above, as larger and/or extremely successful campaigns would usually attract multiple investments from different sources (Reason 1), list their investors in bulk due to their large numbers (Reason 2) or employ a nominee structure in order to better manage the anticipated large number of potential investors (Reason 3).

[Insert Figure 1 somewhere here]

4. Investors in Equity-Crowdfunded Companies

To conduct our exploratory analysis of what type of investors become shareholders in equity crowdfunded companies, we first identify each unique investor in our sample and provide some insights into their investment behavior. Investments on Crowdcube are typically made by individuals who invest their own money in their own name and whom we are, therefore, able to uniquely identify based on their specific first and last name combination. Besides the many individual investors, we also recognize the presence of a few investment funds (e.g. the London Co-Investment Fund¹³; the Crowdcube Venture Fund¹⁴), VC and PE firms (e.g. Bethnal Green Ventures LLP; Radius Equity Limited), but also businesses that made direct investments on Crowdcube, all of which we identify based on their company name. We find that the 44,005 investments in our sample are made by 22,831 unique investors, we calculate the total number of investments they made, as well as the average value, the total value and the standard deviation

¹³ The London Co-Investment Fund is a venture capital fund managed by Funding London on behalf of the Mayor of London and the London Enterprise Panel.

¹⁴ The Crowdcube Venture Fund is a private equity fund managed by Braveheart Investment Group.

of their investments (when more than one investment was made). We exclude one investor (Crowdcube Limited) from our sample, as the Crowdcube platform itself made fixed amount investments of £10 in 235 of our sample companies. That led to a final sample of 43,770 investments and 22,830 investors.

4.1. Descriptive statistics and investor behavior

Table 6 provides some descriptive statistics. According to Panel I of Table 6, investments in our sample range from as little as £10 up to £575,000, while the average investment amounts to \pounds 1,500. More than three quarters of the investments are relatively small (less than £1,000), while only 16% of the investments resulted in the purchase of A-type shares. Out of the 22,830 unique investors in our sample (Panel II of Table 6), more than 75% invested only once. The average investor in our sample invested a total of £3,000 in two of our sample companies. The largest investment portfolio holds 149 investments, however, the portfolio of the single largest investor (who invested a total of £575,000) is comprised of a single investment. The average standard deviation of investments for investors who backed more than one company in our sample is quite low (less than £1,000), while more than 25% of these same investors consistently pledged a fixed amount (i.e. the standard deviation of their investments is 0). These observations broadly suggest that the equity crowdfunded companies in our sample are backed by a very diverse crowd of investors who invest different amounts and hold various size portfolios. However, our findings also indicate the presence of distinct groups of investors who adopt similar investment strategies.

[Insert Table 6 somewhere here]

Next, we split our sample of investors into non-mutually exclusive subgroups based on their observed characteristics relating to: 1) their main type (individual vs. institutional investors); 2) the size of their investments (small vs. large investors); 3) the frequency of their investments (occasional vs. recurrent investors); and 4) their investment strategy (fixed vs variable amount investors). Table 7 presents the descriptive statistics and compares the different subgroup pairs of investors. Panel I compares individual investors with institutional investors. We define individual investors as investors who invest in their own name and are, therefore, recorded with a first and last name in the shareholder lists of their investee companies. Government investors. There are 106 institutional investors in our sample, who compared to individual investors, invest less often

(not statistically significant), but significantly larger amounts on average (near $\pounds 40,000$ as compared to only $\pounds 2,000$). This finding is consistent with the general notion that institutional investors trade in larger quantities.

Panel II shows the difference between small and large investors. In the context of equity crowdfunding, we think of large investors as those investors whose investment behavior mimics the one of business angels and define them as investors who pledged at least £5,000 on average (or above the median A-shares threshold)¹⁵. We justify our choice with the fact that according to the UK Business Angels association (UKBAA) an individual business angel invests in a single venture between £5,000 and £500,000 depending on their disposable wealth and the opportunity they identified.¹⁶ Angels also typically subscribe for ordinary shares in their investee companies, which carry the right to vote, receive a dividend and participate in the process of dissolving the company, if necessary.¹⁷ Business angels fall into the category of high-net-worth or sophisticated investors and according to the FCA should self-certify as such in order to be able to invest larger amounts on platforms such as Crowdcube. In comparison, small investors are only allowed to invest up to 10% of their investable income. Given that the average household disposable income (i.e. amount of money available to invest, save or spend after taxes are paid) in the UK according to the UK's Office for National Statistics was around £30,000 in 2016¹⁸, the 10% FCA ruling would imply that the average individual would be able to invest in securities such as the ones offered on Crowdcube much less than £3,000 per year. Accordingly, Panel II of Table 7 shows that small investor in our sample make investments of £500 on average, invest more often and have lower standard deviation of investments as compared to large investors.

Considering the large group of investors who made only one investment, we further differentiate between occasional investors and recurrent investors (i.e. investors who invested more than once). This distinction is important as it highlights the presence of a distinct group of participants who may be tapping the equity crowdfunding market to make targeted investments into specific ventures already known to them from different sources (e.g. family and friends). In fact, before an equity crowdfunding campaign is launched publicly, the entrepreneurs' pitch remains private until

¹⁵ See Wang et al. (2019) for their definition on large/business angel investors in a similar setting.

¹⁶ Source: <u>https://ukbaa.org.uk/entrepreneurs/</u>, last accessed December 2020.

¹⁷ Source: <u>https://ukbaa.org.uk/a-guide-to-angel-investing/</u>, last accessed December 2020.

¹⁸ Source: <u>https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/</u>, last accessed December 2020.

a certain investment milestone is reached (e.g. 20% of the target in the case of Crowdcube). During this private stage the campaign is only visible to those who have been provided with a unique link, typically the entrepreneurs' personal network of customers, followers, fans, friends and family.¹⁹ This is done for a couple of reasons: for one, to test the interest and generate momentum; and second, to give a priority to invest to the members of the entrepreneurs' social network. Indeed, social capital has been deemed very important for the financing of new ventures (Shane and Cable, 2002) and is positively associated with the capital raised by crowdfunding projects (Mollick, 2014; Vismara, 2016), as well as plays a crucial role in attracting backers in the early days of a campaign (Colombo et al., 2015). According to Panel III of Table 7, the average occasional investor in our sample makes significantly larger investments than the rest. The average recurrent investor, however, provides more funds on the platform by making multiple (around 5) albeit smaller investments. This finding is suggestive of the presence of a particular group of wealthy investors looking to diversify their portfolio who may be tapping equity crowdfunding platforms for better access to deal flow.

Within the group of recurrent investors, we further distinguish between investors who consistently invest a fixed amount (0 standard deviation of their investments) and investors who invest variable amounts. When building up an investment portfolio slowly over time by investing one's savings, a controversial yet useful investment strategy to take advantage of is 'dollar-cost averaging', or in our case 'pound-cost averaging' (see Malkiel, 1999). This is a technique that entails dividing the total amount of money to be invested in a market into equal amounts invested at regular intervals, or in other words, repeatedly investing a fixed amount of money. It is a strategy particularly attractive to new investors and investors with lower risk tolerance, as it seeks to reduce the risk of incurring a substantial loss resulting from investing the entire lump into a potentially bad opportunity. According to Panel IV of Table 7, fixed amount investors in our setting make on average 3 investments and contribute small amounts (£600 on average), behavior consistent with that of novice investors who are less focused on correctly evaluating the available investment opportunities. As they invest more and, therefore, become more experienced, these recurrent investors are likely to start deviating from their original fixed-investment strategy. Similarly, variable amount investors in our sample invest significantly larger amounts in total (around £6,000

¹⁹ Source: <u>https://www.seedrs.com/learn/help/what-is-private-launch</u>, last accessed December 2020.

as compared to only £1,500 on average) and significantly more often (more than 5 investments on average).

[Insert Table 7 somewhere here]

4.2. Discussion on investor types

Before we define the different types of investors present in our sample, we consider the intersections of the different sub-groups we identified earlier. Table 8 provides an overview of the number and proportion of all investors who share two characteristics (e.g. the number of investors who are both small and recurrent, or the number of large individual investors), while Table 9 focuses on individual investors specifically. As expected, most institutional investors fall into the categories of large and occasional investors, and among the few who invested more than once (recurrent institutional investors), a vast majority falls into the category of variable amount investors. Given the small number of institutional investors in our sample and considering the lack of sufficient variation among the other characteristics, we do not assign a different type and continue to refer to them as institutional investors in our future discussions.

[Insert Table 8 somewhere here]

Among individual investors, the most prevalent is the group of occasional small individual investors. According to Table 9, 14,961 or around 66% of all investors fall into this category. These are individuals who made a single small investment into a specific company and likely had no intention to invest again on the platform. Most probably, they are individuals who belong to the social network of the entrepreneurs and whose investment was solicited using alternative sources (such as social media or personal e-mails and messages). We define them as the 3Fs (family, friends and fans). The second largest group is the one of recurrent small investors (5,289 or 23% of our sample). We refer to them as equity crowdfunding enthusiasts, as they are investors who consistently tap the equity crowdfunding market and likely browse the available investment opportunities, however, are not large enough to impact financing outcomes on their own unlike more sophisticated larger investors as in Vismara (2018) and Wang et al. (2019). Equity crowdfunding enthusiasts (ECF enthusiast) in our sample fall in one of two subcategories: novice or experienced ECT enthusiasts. To those individuals who employ a fixed amount investment strategy and are, therefore, presumably new to investing, we refer as novice ECF enthusiasts (1,391

or 6% of our sample). To the more experienced ones who make larger and variable investments, we refer as experienced ECF enthusiasts 3,898 or 17% of our sample).

Among the larger individual investors, a majority falls withing the group of occasional large individual investors (2,124 or 9% or our sample). We refer to them as BA-like investors, as these are individuals whose investment behavior most closely resembles the one of business angels in the traditional sense (e.g. they make few larger investments that typically result in the purchase of A-shares). Similar to the 3Fs, they potentially were also solicited off the platform (e.g. as lead investors who are co-investing with the crowd²⁰). A much smaller group is the group of recurrent large individual investors (350 or 1.5% of our sample). These are wealthy individuals whose investment behavior also resembles the behavior or business angels. However, unlike traditional BAs they hold large portfolios of up to 36 investments in our sample of equity crowdfunded companies (unreported results). We label them as crowd angel investors and argue that these are a new type of wealthy business angel-like investors who got enabled by the rise of equity crowdfunding platforms and who actively tap the equity crowdfunding market for deal flow.

[Insert Table 9 somewhere here]

Table 10 describes and compares these different investor types. Institutional investors in our setting invest considerably low amounts of £40,000 on average. In comparison, the average investment by a venture capital fund in a seed to early-stage business in the UK in 2016 is over £700,000 (BVCA, 2017). As compared to institutional investors, BA-like investors pledge significantly smaller amounts of around £15,000 on average. Similar to traditional business angels, BA-like investors in our setting invest in a range of £5,000 to £500,000 and purchase shares with voting rights in 80% of the time. Crowd angel investors invest even lower amounts of around £12,000 on average but hold much larger portfolios of more than 3 equity crowdfunded companies, which is consistent with the notion that ECF platforms are their primary source of deal flow. Their average total value of investments (£38,000) is significantly higher than that of BA-like investors and almost as high as institutional investors in our setting, however, they invest significantly lower amounts as

²⁰ Entrepreneurs sometimes actively advertise in their Crowdcube pitch if a large investor (BA or VC) they solicited 'offline' is co-investing in the campaign (e.g. LocalPropertyIndex mention that a leading venture capital firm had committed £150,000 of investment in their campaign).

Source: https://www.crowdcube.com/investment/localpropertyindex-15442, last accessed December 2020.

compared to BA-like investors or crowd angel investors. Consistent with the notion that they are new to the ECF market and inexperienced in investing, novice ECF enthusiasts invest the lowest amounts in our setting, however, make as many investments as crowd angels (3 on average). Family, friends and fans (the 3Fs) contribute the smallest amounts to the platform (only £465 average total investments).

[Insert Table 10 somewhere here]

4.3. Relative importance of the different investor types

Next, we consider how important each type of investors is for facilitating equity crowdfunding in our setting. Table 11 provides an overview of the number and fraction of investors and their investments, as well as the total value and fraction of investments for each investor category. Even though the third smallest group of investors in our setting, BA-like investors are by far the most valuable as they provide 46% of the total value of pledges or more than £31 million to the platform. With barely 2% of investors, crowd angel investors in our setting are the second smallest group but pledge almost 20% of the total value of investments on the platform (£13 million). Novice and experienced ECF enthusiast combined form 23% of the investor base, however, are responsible for nearly 60% of all investments with a total value pledged comparable to crowd angels (£12 million). The largest group of investors in our setting, the 3Fs, is responsible for only 10% of the investments (£7 million), while the smallest group of institutional investors pledged £5 million to the platform.

Table 12 reviews the number and fraction of investors (per investor category) active on the platform in each of our sample years (2013 - 2016). There were only two institutional investors active on the platform in 2013, however, their presence significantly increased in 2014 and remained steady in the subsequent years, during which they represented around 0.5% of the investor base. Even though their numbers kept increasing for the most part, most other groups of investors (BA-like investors, crowd angels and ECF enthusiasts) became less represented over time. The group of family, friends and fans became increasingly more active from representing 48% of the sample of investors in 2013 to 63% in 2016.

[Insert Table 11 and 12 somewhere here]

These findings combined highlight the unique importance of each type of investors present in our setting, as some investors are responsible for kickstarting equity crowdfunding campaigns (3Fs) and generating traction (ECF enthusiasts), while others more carefully screen and provide the bulk of investments needed to successfully finance an investment opportunity (crowd angel investors). 'Offline' connections to BA-like investors seem to also matter in our 'online' setting and bring in the largest volume of investments to the platform. Over time, equity crowdfunding campaigns have also gotten the attention of institutional investors, who even though least present provide more than 7% of the raised funds to entrepreneurs.

5. Conclusion

This paper provides an overview of the different types of investors who participate in equity crowdfunding entrepreneurial ventures. We identify five main types of investors who differ in the amounts they pledge, the size of their investment portfolio and the investment strategies they adopt: institutional investors; business angel (BA)-like investors; crowd angels; equity crowdfunding (ECF) enthusiasts; and family, friends and fans (3Fs). Our findings indicate that investor participation on equity crowdfunding platforms is much more complex and somewhat misunderstood by previous literature. The crowd of investors is very heterogeneous and not simply comprised by small or sophisticated investors. Each type of investors plays a different role and fulfills a different purpose on the equity crowdfunding market: some investors provide the bulk of investments (e.g. BA-like investors), while others generate momentum by making multiple investments (e.g. ECF enthusiasts).

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Tables and Figures

Variable name	Variable description	Data source
Γarget amount (in £)	The target amount of the campaign.	Crowdcube
Equity offered (in %)	The fraction of equity offered in the campaign.	Crowdcube
Age (in days)	The company age in days at the start of the campaign calcualted as the difference between the starting date of the campaign and the incorporation date of the company.	Crowdcube, Companies House
Dnly A-shares	A dummy variable that equals 1, if only voting shares were offered in the camapign, and 0 otherwise.	Crowdcube
Only B-shares	A dummy variable that equals 1, if only non- voting shares were offered in the camapign, and 0 otherwise.	Crowdcube
A-shares threshold	The minimum investment amount above which investors would receive voting shares.	Crowdcube
Rewards	A dummy variable that equals 1, if the campaign featured rewards, and 0 otherwise.	Crowdcube
Raised amount (in £)	The amount raised by the campaign.	Crowdcube
Overfunding amount (in £)	The amount by which the campaign overfunded calculated as the difference between the raised and target amount.	Crowdcube
equity issued (in %)	The fraction of equity issued to investors.	Crowdcube
lumber of investors	The number of investors who pledged funds in the campaign.	Crowdcube
argest investment (in £)	The largest amount that was pledged during the campaign.	Crowdcube
Active	A dummy variable that equals 1, if the company associated with the equity crowdfunding campaign is active as of the end of 2019, and 0 otherwise.	Companies House
Average value of investments	The mean amount invested per investor.	Companies House
Number of investments	The number of investments made per investor.	Companies House
td. Dev. of investments	The Std. Dev. of investments per investor if more than one investment was made.	Companies House
Total value of investments	The total amount invested per investors.	Companies House

Table 1: Variable definitions and data sources

	Comp	banies	With known investor			
	Number	Fraction	Number	Fraction		
2011	9	2.40%	7	2.58%		
2012	17	4.53%	12	4.43%		
2013	38	10.13%	28	10.33%		
2014	89	23.73%	72	26.57%		
2015	120	32.00%	82	30.26%		
2016	102	27.20%	70	25.83%		
Total	375	100%	271	100%		

Table 2: Yearly distribution of companies with known investors

Table 3: Reasons for excluding and yearly distribution of companies excluded from our sample

	2011	2012	2013	2014	2015	2016	Total
Too many (new) shareholders	2	5	7	14	16	11	55
No complete or unreadable			3	3	14	14	34
Nominee structure in place					8	7	15
Effect of newness	7	12					
Total	9	17	10	17	38	32	123

Table 4: Yearly distribution of campaigns and investments in our sample

	Camp	Campaigns		ments	Investments		
	Number	Fraction	Number	Fraction	Value (in £)	Fraction	
2013	28	11.11%	3,229	7.34%	6,525,330	9.55%	
2014	72	28.57%	9,389	21.34%	16,433,670	24.05%	
2015	82	32.54%	14,403	32.73%	21,979,810	32.17%	
2016	70	27.78%	16,984	38.60%	23,388,050	34.23%	
Total	252	100%	44,005	100%	68,326,860	100%	

	Obs.	Mean	Std. Dev.	Min	Median	Max	t-test
		Pa	nel I: Populatio	n			
Target amount (in £)	349	279,477	325,501	20,000	150,000	2,000,000	
Equity offered (in %)	349	0.132	0.071	0.003	0.120	0.452	
Age (in days)	349	1,022	936	2	756	6,671	
Only A-shares	349	0.158	0.365	0	0	1	
Only B-shares	349	0.037	0.190	0	0	1	
A-shares threshold	281	7,597	7,932	250	5,000	50,000	
Rewards	344	0.747	0.435	0	1	1	
Raised amount (in £)	349	416,238	564,664	25,690	180,770	3,994,890	
Overfunding amount (in £)	349	138,055	320,417	0	40,020	2,514,110	
Equity issued (in %)	348	0.171	0.088	0.011	0.160	0.808	
Number of investors	349	243	330	3	145	2,702	
Largest investment (in £)	348	83,829	120,778	1,000	45,000	1,000,000	
Active	349	0.754	0.432	0	1	1	
		P	anel II: Sample				
Target amount (in £)	252	192,877	177,732	25,000	150,000	1,500,000	-3.831 ***
Equity offered (in %)	252	0.140	0.072	0.024	0.129	0.452	1.459
Age (in days)	252	958	910	19	739	6,671	-0.834
Only A-shares	252	0.091	0.289	0	0	1	-2.395 **
Only B-shares	252	0.036	0.186	0	0	1	-0.099
A-shares threshold	220	6 <i>,</i> 803	6,516	250	5,000	50,000	-1.200
Rewards	251	0.765	0.425	0	1	1	0.561
Raised amount (in £)	252	271,976	284,642	35,380	168,155	1,995,600	-3.728 ***
Overfunding amount (in £)	252	79,562	140,045	0	35,365	1,213,060	-2.716 ***
Equity issued (in %)	252	0.180	0.091	0.035	0.169	0.808	1.317
Number of investors	252	175	138	8	134	1,121	-3.076 ***
Largest investment (in £)	252	59,685	74,639	5,000	35,000	575,000	-2.808 ***
Active	252	0.754	0.432	0	1	1	-0.011

Table 5: Campaign and company descriptive statistics and mean comparison between sample and population

Note: ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively. See Table 1 for variable definitions.

					Max	Mean	Std. Dev.
	Panel I: I	nvestments	5				
43,770	10	40	120	750	575,000	1,561	8,536
43,770	0	0	0	0	1	0.163	0.370
	Panel II	: Investors					
22,830	10	50	200	1,000	575,000	2,167	10,736
22,830	1	1	1	1	149	1.930	3.537
5,656	0	0	64	380	152,028	953	4,450
22,830	10	60	250	1,500	575,000	3,010	13,575
	43,770 22,830 22,830 5,656	43,770 10 43,770 0 <i>Panel II</i> 22,830 10 22,830 1 5,656 0	43,770 10 40 43,770 0 0 Panel II: Investors 22,830 10 50 22,830 1 1 5,656 0 0	43,770 0 0 0 Panel II: Investors 22,830 10 50 200 22,830 1 1 1 5,656 0 0 64	43,770 10 40 120 750 43,770 0 0 0 0 0 0 Panel II: Investors 22,830 10 50 200 1,000 22,830 1 1 1 1 5,656 0 0 64 380	43,770 10 40 120 750 575,000 43,770 0 0 0 0 1 Panel II: Investors 22,830 10 50 200 1,000 575,000 22,830 1 1 1 149 5,656 0 0 64 380 152,028	43,770 10 40 120 750 575,000 1,561 43,770 0 0 0 0 1 0.163 Panel II: Investors 22,830 10 50 200 1,000 575,000 2,167 22,830 1 1 1 149 1.930 5,656 0 0 64 380 152,028 953

Table 6: Investor and investment descriptive statistics

Note: See Table 1 for variable definitions.

	Group	Obs.	Mean	Std. Dev.	Min	Median	Max	t-test
	Pa	nel I: (a) Indiv	vidual vs. (b)	Institutional inv	vestors			
Average value of investments	(a)	22,724	1,994	8,607	10	200	500,000	-36.66 ***
Average value of investments	(b)	106	39,231	87,374	10	10,000	575 <i>,</i> 000	50.00
Number of investments	(a)	22,724	1.933	3.544	1	1	149	1.59
	(b)	106	1.387	1.126	1	1	7	2100
Std. Dev. of investments	(a)	5,639	922	4,247	0	64	152,028	-9.44 ***
sta. Dev. of investments	(b)	17	11,045	23,085	0	1,609	87,069	5.44
Total value of investments	(a)	22,724	2,799	11,045	10	250	500,000	-35.36 ***
	(b)	106	48,299	107,647	10	10,000	575,000	-33.30
		Panel II: (c) Small vs. (d,) Large investo	rs			
Average value of investments	(c)	20,283	486	756	10	133	4,990	-74.43 ***
Average value of investments	(d)	2,547	15,554	28,760	5,000	10,000	575,000	-74.45
Number of investors at	(c)	20,283	2.006	3.714	1	1	149	0 10 ***
Number of investments	(d)	2,547	1.325	1.355	1	1	36	9.18 ***
	(c)	5,299	357	809	0	55	12,882	4F 0F ***
Std. Dev. of investments	(d)	357	9,791	14,872	0	5,745	152,028	-45.25 ***
	(c)	20,283	950	2,852	10	200	141,000	
Total value of investments	(d)	2,547	19,421	35,838	5,000	10,000	575,000	-71.63 ***
	Pa	nel III: (e) Oc	casional vs. (j	f) Recurrent inv	vestors			
	(e)	17,174	2,440	12,008	10	200	575,000	C CO ***
(Average) Value of investment(s)	(f)	5,656	1,340	5,150	10	213	152,500	6.69 ***
Number of investments	(f)	5,656	4.755	6.315	2	3	149	
Std. Dev. of investments	(f)	5,656	953	4,450	0	64	152,028	
Total value of investments	(f)	5,656	4,743	17,381	20	800	510,090	
	Par	nel IV: (g) Fixe	ed vs. (h) Vari	able amount in	ivestors			
A second s	(g)	1,445	597	2,239	10	100	50,000	C ~~ ***
Average value of investments	(b)	4,211	1,595	5,801	10	294	152,500	-6.38 ***
	(g)	, 1,445	2.993	2.386	2	2	37	10.10
Number of investments	(b) (h)	4,211	5.359	7.084	2	3	149	-12.46 ***
	(g)	, 1,445	1,462	4,922	20	200	100,000	
Total value of investments	(b)	4,211	5,869	19,812	30	1,170	510,090	-8.37 ***

Table 7: Descriptive statistics and comparison between investor subgroups

Note: ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively. See Table 1 for variable definitions.

	Individual	Institutional	Small	Large	Occasional	Recurrent
	investors	investors	investors	investors	investors	investors
Small investors	20,250	33				
	88.70%	0.14%				
Large investors	2,474	73				
	10.84%	0.32%				
	17,085	89	14,984	2,190		
Occasional investors	74.84%	0.39%	65.63%	9.59%		
Recurrent investors	5,639	17	5,299	357		
	24.70%	0.07%	23.21%	1.56%		
ived amount investors	1,443	2	1,393	52	-	4,211
Fixed amount investors	6.32%	0.01%	6.10%	0.23%	-	18.45%
/ariable amount investors	4,196	15	3,906	305	-	1,445
variable amount investors	18.38%	0.07%	17.11%	1.34%	-	6.33%

Table 8: Number and fraction of investors who share two characteristics

Table 9: Number and fraction of individual investorswho share two additional characteristics

	Small individual	Large individual
Occasional investors	14,961	2,124
	65.53%	9.30%
Recurrent investors	5,289	350
Recurrent investors	23.17%	1.53%
Fixed amount investors	1,391	52
rixeu amount investors	6.09%	0.23%
Variable amount investors	3,898	298
variable amount investors	17.07%	1.31%

	Institutional investors	BA-like investors	Crowd angel investors	ECF enth	usiasts	3Fs
			-	Experienced	Novice	
Mean value of investments	39,231	14,658 *** (675.59)	12,474 *** (15.87)	635 *** (498.86)	284 (1.40)	465 (0.46)
Min value of investments	10	5,000	5,000	10	10	10
Median value of investments	10,000	10,000	7,525	238	100	100
Max value of investments	575,000	500,000	152,500	4900	4,000	4,980
Mean number of investments	1.39	1.00 (1.58)	3.32 *** (168.96)	5.51 *** (160.69)	3.02 *** (663.14)	1.00 *** (542.58)
Mean std. dev. of investments	11,045	- -	9,469	484 *** (1771.35)	0 ***	- -
Mean total value of investments	48,299	14,658 *** (822.47)	37,918 *** (1170.20)	2,870 ***	765 ***	465 *** (0.83)
Mean proportion of investments in A-shares	0.70	0.78 *** (7.58)	0.68 *** (34.95)	0.14 *** (1067.13)	0.09 *** (28.23)	0.11 ** (6.13)
Observations	106	2,124	350	3,898	1,391	14,961

Table 10: Descriptive statistics and mean comparison of investor types

Note: Each investor type is compared to the type described in the column before (e.g. BA-like investors vs. institutional investors; crowd angel investors vs. BA-backed investors, etc.). T-stats are in brackets. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively. See Table 1 for variable definitions.

	Investors		Invest	ments	Investments		
	Number	Fraction	Number	Fraction	Value (in £)	Fraction	
Institutional investors	106	0.46%	147	0.34%	5,119,740	7.49%	
BA-like investors	2,124	9.30%	2,124	4.85%	31,132,650	45.57%	
Crowd angel investors	350	1.53%	1,147	2.62%	13,113,950	19.19%	
ECF enthusiasts	5,289	23.17%	25,391	58.01%	12,008,230	17.58%	
Experienced	3,898	17.07%	21,212	48.46%	10,953,500	16.03%	
Novice	1,391	6.09%	4,179	9.55%	1,054,730	1.54%	
Family, friends & fans	14,961	65.53%	14,961	34.18%	6,949,940	10.17%	
Total	22,830	100%	43,770	100%	68,324,510	100%	

Table 11: Relative importance of each investor type

Table 12: Yearly distribution of each investor type

	20	13	.3 2014		20)15	2016	
	Number	Fraction	Number	Fraction	Number	Fraction	Number	Fraction
Institutional investors	2	0.10%	25	0.46%	39	0.47%	50	0.48%
BA-like investors	179	9.03%	468	8.70%	746	8.93%	731	7.02%
Crowd angel investors	85	4.29%	157	2.92%	199	2.38%	151	1.45%
ECF enthusiasts	761	38.38%	1,832	34.05%	2,790	33.39%	2,959	28.41%
Experienced	640	32.27%	1,487	27.64%	2,168	25.95%	2,200	21.12%
Novice	121	6.10%	345	6.41%	622	7.44%	759	7.29%
Family, Friends & Fans	956	48.21%	2,898	53.87%	4,581	54.83%	6,526	62.65%
All Investors	1,983	100%	5,380	100%	8,355	100%	10,417	100%

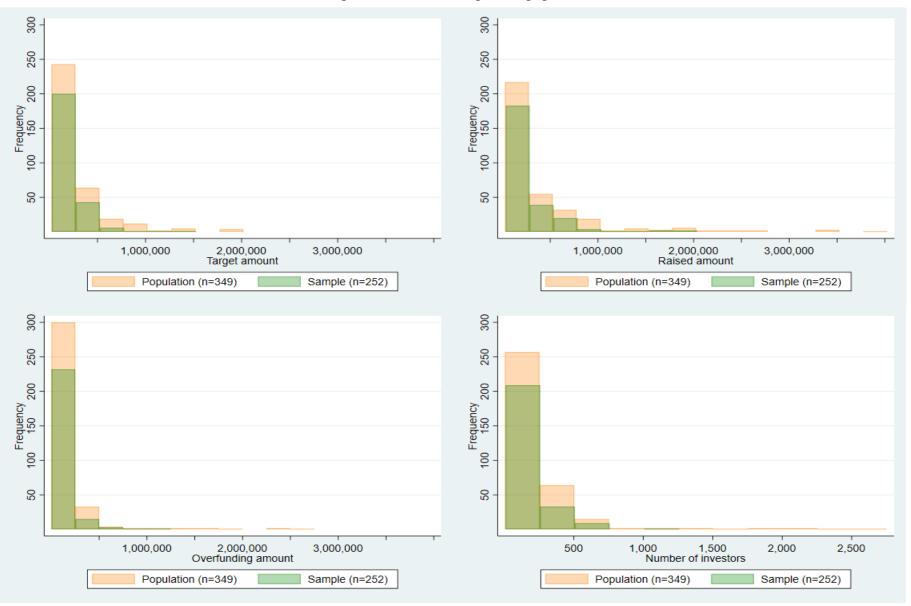


Figure 1: Histograms of target amount, raised amount, overfunding amount and number of investors: Comparison between sample and population