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Peer to peer lending to businesses: investors' characteristics, investment criteria and motivation

Abstract

Online peer-to-peer (P2P) business lending, where individual investors provide unsecured loans directly to individual business-borrowers without the intermediation of banks, has experienced rapid growth in recent years. However, very little is currently known about the individuals who lend money through the online P2P lending platforms. Drawing on the cognitive evaluation theory (CET) and responses to a survey from 630 investors of the Funding Circle platform, the largest P2P business-lending platform in the UK, this paper describes their personal characteristics, investment criteria and their motivation to invest. A typical P2P business lender is male, highly educated and relatively wealthy with a science, business or finance degree. According to the factor analysis, variables related to company quality and associated risks are importance investment criteria while the expectation of making a financial return is the main motivation behind individuals' decision to lend money to companies. In contrast, intrinsic motives such as geographical location, personal relationship or knowledge of the company, are of significantly less importance.

Keywords

Alternative finance, P2P business lending, crowdfunding, innovation

1. Introduction

As banks retrench in the wake of the great financial crisis (GFC), small businesses and start-ups have found it increasingly hard to access the finance they need to grow (Pierrakis and Westlake, 2009; Baldock and North, 2015; Mac an Bhaird, 2013). New providers of business finance are stepping into the space left by banks and are devising innovative business models, often taking advantage of new technologies and different sources of capital. One such model that has grown rapidly in recent years is new form of crowdfunding, namely peer-to-peer financing via online intermediaries.

The concept of crowdfunding finds its root in the broader concept of crowdsourcing, which uses the 'crowd' to obtain ideas, feedback and solutions in order to develop activities (Belleflamme et al., 2014). In the case of crowdfunding, the objective is – also – to collect money from the crowd who can often participate in strategic decisions or even having voting rights (in the case of equity crowdfunding) in a business (Lambert and Schwiendbacher, 2010). While reward and donation based crowdfunding has quickly become popular due to Indiegogo in 2008 and Kickstarter in 2009 (Agrawal et al., 2014; Cumming et al., 2015; Belleflamme et al., 2014; Mollick, 2014), more recently, another form of crowdfunding, which enables the crowd to lend money to companies, has emerged. The term P2P lending has its origins in the facilitation of unsecured personal lending between individuals. A relatively new application of the P2P lending model allows the crowd (individual lenders) to lend money to companies (instead of individuals) seeking debt finance. Unlike traditional lending which is coordinated by a centralized institution (e.g. banks), online P2P lending is largely decentralized with individual lenders making lending decisions independently or as part of a network of lenders (Lin, 2009). The platform facilitating the funding serves as an intermediary between the

individual lender and the company seeking a loan. In most cases, the loan is an agreement between the borrower and the lender and not with the intermediary.

Research on crowdfunding remains scattered and partial, mainly restrained by the limited access to the information, especially on the side of capital providers (Lin, 2009; Culkin et al., 2016). Several researchers have studied the factors that lead to campaign success (Greenberg, 2013; Mitra and Gilbert, 2014; Mollick, 2013), but very little work has been done on the individuals who participate in crowdfunding (Agrawal et al., 2011) and their motivations for participation (Gerber and Hui, 2016) especially for those seeking to invest in businesses (Bretschneider et al., 2014). This paper draws upon cognitive evaluation theory (CET) (Deci and Ryan, 1985) to assess how P2P lenders respond to both intrinsic and extrinsic cues embedded within investment opportunities.

According to Gerber and Hui (2016) the key motivation for crowdfunding supporters includes to collect rewards, help others, be part of the community and support a cause. But these findings are mainly based on reward based crowdfunding. In equity based crowdfunding, key motivations for investors include potential financial return (Vismara, 2018) and fun (Bretschneider et al., 2014). We know very little about the motivations of P2P business lending investors as the P2P business lending model is largely undiscovered by academics. There is some emerging literature on P2P lending between individuals (Iyer et al., 2009; Lin and Viswanathan, 2015; Hildebrand et al., 2016) and on lending-based prosocial crowdfunding (Allison et al., 2015; Berns, 2018) but lending from people to commercial for profit businesses has received considerably less attention. Therefore, this paper attempts to fill this gap in our knowledge, by providing a detailed examination of lending-based crowdfunding choices, which involve small, non-accredited investors. This study provides first time evidence of investor motivations and their characteristics on one of the largest P2P platforms for business loans. It is an explanatory and descriptive analysis which investigates questions related to the personal and behavioural characteristics of individuals and their motivations for investing.

More particularly, this research seeks to make a first step towards developing an understanding of P2P lending to businesses by using a large set of data collected through the Funding Circle, the largest P2P business lending site in the UK today. A distinguishing feature of this research is the focus on characteristics of the lenders and enables the examination of their investment criteria and their motivation to lend to small businesses. The data collected for this study included responses to a questionnaire from 630 different lenders who lent £4,143,000 through 34,700 individual loans (transactions), members of the Funding Circle platform. The novelty of this study is that, to the best of our knowledge, it is the only empirical study looking at investment criteria and motivation of lenders in P2P lending crowdfunding for commercial businesses.

Therefore, the contribution of this research is twofold. First, it investigates the P2P lending model and provides insights on participant and investment characteristics. Second, it examines the investment criteria and motivations behind the decisions made by lenders. As a result, for the first time we are able to understand what type of investors use P2P business lending platforms and the main reasons behind their decisions to invest. Overall, the findings of this research contribute to our understanding of how lending based crowdfunding can be a viable source of business finance and how certain factors affect investor participation. By understanding the how and why people participate, we can identify opportunities to refine and redesign crowdfunding platforms to improve the user experience and to better recruit and

sustain participation in this rapidly growing community (Gerber and Hui, 2013; Kraut and Resnick, 2012).

The remainder of the paper is organized as follows: Section 2 reviews the academic literature related to P2P lending platforms and the motivation of individuals to invest. Section 3 describes the research methodology and data sources while section 4 presents the results of the survey. Finally, section 5 discusses key findings and limitations of the study and provides questions for future research.

2. Literature review

Crowdfunding

Online crowdfunding, a relatively new form of financing for projects, people and businesses has recently received considerable attention by both academics and practitioners (Mollick, 2014; Belleflamme et al., 2014). The model, which allows many people to contribute small amounts in the hope of achieving a combined total that meets or surpasses a predetermined funding target, has its roots in the creative industries where it was successfully pioneered in the financing of albums and concerts (Gamble et al., 2017). Crowdfunding sites or ‘platforms’ sprung up that facilitated the sourcing of capital from large numbers of people for one-off projects. Schwienbacher and Larralde (2012) define crowdfunding as an open call, essentially through internet, for the provision of financial resource either in the form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes. However, such definition leaves out internet based P2P lending (Mollick, 2014, Lin and Viswanathan, 2015). A more inclusive definition is provided by Mollick (2014, p.2): ‘Crowdfunding refers to the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries.’

From its beginning funding music, the model expanded into the creative industries more broadly and into product design and development helped by the growth of large platforms such as Kickstarter and Indiegogo (Gerber and Hui, 2016). In recent years, the model has been adapted further to fund projects with a specifically social aim and also into the financing of businesses. There are four key distinct models under the umbrella term of crowdfunding: (1) Donation-based crowdfunding, i.e. without any reward besides benevolence. (2) Reward-based crowdfunding, i.e. with non-financial rewards like products, services, promotion or others. (3) Lending-based crowdfunding, i.e. with financial returns like interest. (4) Equity-based crowdfunding, i.e. with financial returns such as equity, equity-like shares or dividends (Collins and Pierrakis, 2012; Griffin, 2012; Bretschneider, et al., 2014).

Lending-based crowdfunding (P2P lending)

While similar to crowdfunding, P2P lending is very distinct and this tool for providing loans is often considered separately from crowdfunding, although adopting the same business model (Herzenstein et al., 2011; Lin et al., 2013). The term P2P lending has its origins in the facilitation of unsecured personal lending between individuals (i.e. loans are made to an

individual rather than a company and borrowers do not provide collateral as a protection to the lender against default) via online sites such as Zopa, Lending Club and Prosper. There has been explosive growth in P2P personal lending across the world in the last decade, driven by the many-to-many communication paradigm, and various reports have looked at several aspects of this model such as the borrowers and lenders characteristics, motivations and strategies (Iyer et al., 2009).

A relatively new application of the P2P lending model allows the crowd (individual lenders) to lend money to companies (instead of individuals) seeking debt finance. Crowdfunded lending to businesses has grown in recent years as an evolution of the more established model of P2P lending between individuals. Platforms give credit scores to businesses seeking loans and lenders can buy loan parts at an interest rate which is often adapted to the market demand. With the exception of pro-social lending, peer-to-peer lending is largely for profit but rests on uncollateralized loans (Bruton et al., 2015).

The platform facilitating the funding serves as an intermediary between the individual lender and the company seeking a loan. P2P lending platforms all adopt all-or-nothing funding model, that is, the funds are returned to the funder unless the funding goal is reached (Gerber et al., 2012). There is an expectation of some rate of return on capital invested (Mollick, 2014). The increase in the quality and volume of data available on individuals and businesses finances allow for the creation of accurate credit scores, which allow lenders to set suitable interest rates on the finance they offer.

Iyer et al., (2009) examine whether lenders participating in P2P lending platforms are able to effectively screen for borrower creditworthiness and thus improving small borrowers' credit access, complementing and adding value to traditional lending models. Their findings highlight the screening ability of P2P lenders and suggest that the P2P lending market may provide a viable complement to traditional lending markets, especially for smaller borrowers.

Funding Circle

Funding Circle was founded in August 2010 and was the first company in the world to allow individuals to lend to companies.¹ Businesses with a minimum of £100,000 turnover and two or more years of accounts filed with Companies House, can approach Funding Circle for the opportunity to borrow between £10,000 and £1m from its crowd of members. Currently there are more than 75,000 people registered and Funding Circle has facilitated over £3.8b of lending to 39,000 UK companies.² Once a loan application meets Funding Circle's criteria, it is reviewed by Funding Circle's Credit Assessment team. Businesses that pass this stage are assigned a risk rating based on Funding Circle's risk model that uses information from a number of sources including credit-rating agencies and is posted onto the site.

Until August 2017, each loan request had its own dedicated page where potential lenders could see the financial details of the business and the reasons they are seeking finance.

¹ Patrick Collinson (18 September 2010). "Peer-to-peer lending and saving: Making everyone happy". *The Guardian*. Retrieved 2-10-2018.

² Funding Circle website, accessed on 29 September 2018

Lenders were able to bid for small pieces or ‘loan parts’ of the overall amount being sought, indicating how much they would like to lend and what interest rate they would like to receive. Since September 2017 however, Funding Circle does no longer allow investors to select what loans they invest in and must instead cede this decision to an autobid system (by choosing a level of investment risk they are willing to accept). Funding Circle charge fees to businesses ranging from 2–4 per cent depending on the loan amount. They also offer an asset– purchase option for a 5 per cent fee, using said asset as a guarantee. Lenders are charged an annual servicing fee of 1 per cent. Funding Circle also enables loan parts to be sold between lenders to provide liquidity. Participants can sell loan parts either for a premium or at a discount.

Currently, Funding Circle has presence in the UK, US, Germany and the Netherlands and facilitates loans from institutional investors such as retail investors, banks, asset management companies, insurance companies, government-backed entities and funds. In September 2018 announced that it will seek to raise £300 million via an IPO and its current value is estimated at £1.65BN.³

Other peer to peer platforms

Funding circle is the largest but not the only player in the market for P2P business lending in the UK. Thincats operates as an investment club for experienced investors seeking to lend directly to UK businesses. Launched in 2011, it uses an auction model to decide on interest rates. Lenders, who are required to lend a minimum of £1,000 per loan, are not charged any fees with businesses charged 1.5 per cent of the loan amount. Thincats investors choose which loans they want to invest in themselves. To date Thincats has lent around £293 million across 941 loans.⁴

Motivation of investors and investment criteria

Knowledge on what motivates the crowd to invest in companies or projects is very limited and there are calls to investigate crowd’s motivation for crowdfunding (Lehner, 2013; Moritz and Block, 2016; McKenny et al., 2017). To investigate the interplay between financial and nonfinancial incentives, we draw upon the cognitive evaluation theory (CET) (Deci et al., 1999; Deci and Ryan, 1985). Deci and Ryan, (1985) distinguish between different types of motivation based on the different reasons or goals that give rise to an action. The most basic distinction is between intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome Deci and Ryan, (1985). Cognitive evaluation theory maintains that if individuals are given external incentives to perform a task they would have wanted to perform anyway, their intrinsic motivation to perform this task may decrease (Nyborg and Rege, 2003). Allison et al. (2015) introduced CET in the context of micro-lending by showing that the narratives that entrepreneurs use can affect whether backers have a financial or a social focus when evaluating the loans. Cholakova and Clarysse (2015) extended the application of CET in the setting of crowdfunding and use it as a lens to explain investors’ motivations to back projects on reward-based and equity-based platforms. They found that the

³ Natasha Lomas, (2 September 2018): “Funding Circle, a P2P SME lending platform, steps towards an IPO”. Crunchbase.com. Retrieved 2 October 2018

⁴ Thincats.com website accessed on 1st October 2018

decision to pledge to a project was positively predicted by individuals' interest in receiving rewards, as well as by their need to trust the entrepreneur, whereas nonfinancial motives such as help others and support ideas or be a part of a community were not significant. However, the decision to invest in equity crowdfunding was positively predicted only by financial return motivations.

At present, the popular assumption is that individuals on reward-based platforms are predominantly driven by intrinsic motivation to fund projects, whereas those on equity-based platforms are driven by extrinsic (financial) motivation (Collins and Pierrakis, 2012; Cholakova and Clarysse, 2015). However, we still have limited understanding of the relative role of intrinsic and extrinsic motives in P2P business lending crowdfunding. Existing, albeit limited, literature from other forms of crowdfunding, mainly equity and reward crowdfunding and research on business angel investment criteria, indicate a few possible motivations for P2P lenders.

Schwienbacher and Larralde (2012) suggest that innovative projects attract investors. Fun has also been identified as one a key motivation for crowdfunding (Bretschneider et al., 2014) but also for business angel investing (Brettel, 2003). Another plausible explanation of why crowdfundees invest in a start-up is the obvious goal to obtain a financial profit on the invested capital (Bretschneider et al., 2014). In addition to the financial rewards, Bretschneider and Leimeister (2017) also emphasize the importance of various non-financial motives in equity crowdfunding such as receiving recognition from others, the 'liking' of specific projects and to influence the fruition of specific projects.

Agrawal et al. (2011) found that family and friends are an important group for funding reward-based crowdfunding projects as crowdfundees tend to support projects to which they have an emotional relationship and familiar or friendship identification with the project initiators. Regional identification is another intrinsic motive based on the proximity between the start-up and a crowdfundee. Lin and Viswanathan (2015) identified a home bias in the award of a loan. Mollick (2013) indicates that geographic effects in different ways can play an important role in the success of crowdfunding projects. In contrast, Agrawal et al. (2011) and Mollick (2013) found that the geographical distance as well as the location of a venture have none or little relevance for an investment.

Drawing on insights of business angel research, the team, the market potential and the product have been identified as investment criteria and situational factors by various crowdfunding scholars. For example, Ahlers et al. (2015) and Mollick (2013) found that the idea and the team are crucial positive signals for the investment decision and a successful funding of start-ups in crowdfunding. Guenther et al. (2015) argue that a higher degree of industry and financial expertise of equity crowdfunding investors positively affects the amount invested. Ahlers et al. (2015) examine start-ups signals that may have an influence on investor's decisions to invest in equity crowdfunding and found that retaining equity and providing more detailed information about risks can be interpreted as effective signals and can therefore strongly impact the probability of investors to invest. Social capital and intellectual capital, by contrast, have little or no impact on funding success Ahlers et al. (2015).

Burtch et al. (2013) identified crowd's herding behaviour as a possible influencing factor for participation in crowdfunding. Banerjee (1992, p. 798) describes herding behavior as 'everyone doing what everyone else is doing, even when their private information suggests doing something quite different'. As a result, the decisions of other investors who have already

invested in a specific business are thus influenced by the behavior of others (Herzenstein et al., 2011; Burtch et al., 2013). Zhang and Liu (2012) found that investors infer the solvency of borrowers by observing decision of other investors, in the case of Prosper, a P2P consumer lending platform.

3. Data and methodology

Funding Circle included the survey invitation to its monthly newsletter on June 2012.⁵ These individuals that received the survey had voluntarily registered on the Funding Circle marketplace. The questionnaire was also sent out via personalised emails to members⁶ by the Funding Circle team. At the time when the survey took place, there were approximately 40,000 people registered as investors with Funding Circle.

All participating investors have been exposed to the same market-related factors: there is only one type of financial product, same investment rules apply for every one and all participants have access to the same information. Therefore, it can be argued that differences in the observed investment choices stem exclusively from investor-related factors (Barasinska and Schäfer, 2014). The data collected for this study included responses to a survey from 630 different lenders who lent £4,143,000 through 34,700 individual loans (transactions). The reliability of the survey instrument was deemed satisfactory since the Cronbach alphas coefficients were relatively high for the motivation items (the alpha coefficient for the motivation variables was 0.804). The survey was conducted in 2012, when investors could select individual loans, a feature which, as previously mentioned, is no longer available in the platform, and from this perspective, this dataset is unique as it provides insights on the Funding Circle investors' motivation that may not be possible to capture any longer.

The questions related on investors' motives have been developed based on the findings of the literature examined in the previous section of this paper. The strengths of the motivation variables were measured using five-point Likert scale: 5 was 'extremely important', 4 was 'important', 3 was 'neutral', 2 was 'not very important' and 1 was 'unimportant'. Among others, the questionnaire included a question on gender identification and a question related to the total amounts of money invested in all assets by the survey participant. Therefore it was possible to test whether gender and level of wealth influence investors' motivation. The median value of the total wealth reported was used to create a variable that takes the value 1 if the investor reported a total wealth invested of £80k or over and the value 0 if the investor reported a total wealth invested of less than £80k.

To determine whether the score given on one variable is significantly different from the score on another variable based on gender and level of wealth, the Wilcoxon rank sum test was used. The Wilcoxon rank sum test was used instead of t-test because the scores were not normally distributed and it provides a more powerful test of the differences between two population medians (Hollander and Wolfe, 1999).

⁵ The research project was a collaborative project between Nesta and Funding Circle led by the author of this paper

⁶ At the time of the survey Funding Circle did not have any institutional investors, so all survey respondents were individual investors

The item by item analysis was followed by a factor analysis to determine whether motivations group together on significant factors. Principle component analysis (PCA) with an Equamax rotation was used to establish the factors, the factor loadings and communalities. A summated scale was calculated for each factor to determine which factor had the greatest influence on investors. Each summative scale is an average of the Likert scores on the variables included in each particular factor. Finally, the Wilcoxon rank sum test was used to determine if one summative scale was significant different from another.

4. Results

Table 1: Sample characteristics of investors in FC

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|--|-----|---------|-----------|-----|--------|
| Male | 630 | 0.827 | 0.379 | 0 | 1 |
| Age | 617 | 50.073 | 13.148 | 20 | 85 |
| SMEs experience | 608 | 0.824 | 0.381 | 0 | 1 |
| Founding experience | 581 | 0.470 | 0.500 | 0 | 1 |
| Experience in accessing external capital | 620 | 0.295 | 0.456 | 0 | 1 |
| Business Angels | 623 | 0.088 | 0.284 | 0 | 1 |
| Investments in shares and bonds | 627 | 0.879 | 0.327 | 0 | 1 |
| Has lent money outside FC | 639 | 0.319 | 0.466 | 0 | 1 |
| Total amount invested in FC | 565 | 7,333 | 16,294 | 0 | 135000 |
| Average per loan | 501 | 157.467 | 608.697 | 10 | 12500 |
| Proportion of wealth | 560 | 8.958 | 16.959 | 0 | 100 |
| Total capital invested in all assets | 498 | 339,504 | 2358262 | 100 | 50m |
| Time spent for DD | 514 | 11.836 | 13.904 | 0 | 80 |
| Use of Q&A | 564 | 0.238 | 0.424 | 0 | 1 |
| Use of the autobid function | 561 | 0.45 | 0.497 | 0 | 1 |
| Proportion of money invested using autobid | 561 | 32.49 | 43.58 | 0 | 100 |

| Level of education | Freq. | Percent | Region | Freq. | Percent |
|---|-------|---------|--------------------|-------|---------|
| Secondary level | 86 | 13.63 | East Midlands | 40 | 6.32 |
| Graduate degree or professional qualification | 317 | 50.24 | East of England | 35 | 5.53 |
| Postgraduate qualification | 155 | 24.56 | London | 138 | 21.8 |
| MBA | 34 | 5.39 | North East England | 19 | 3 |
| PhD | 39 | 6.18 | North West England | 61 | 9.64 |
| Discipline | Freq. | Percent | Northern Ireland | 7 | 1.11 |
| Computer science | 50 | 8.85 | Scotland | 34 | 5.37 |
| Economics | 20 | 3.54 | South East England | 137 | 21.64 |
| Finance | 61 | 10.8 | South West England | 79 | 12.48 |

| | | | | | |
|--------------------------------|-----|-------|--------------------------|----|------|
| Math | 22 | 3.89 | Wales | 16 | 2.53 |
| Science (e.g. engineering) | 186 | 32.92 | West Midlands | 35 | 5.53 |
| Social science (e.g. business) | 226 | 40 | Yorkshire and the Humber | 32 | 5.06 |

Demographic characteristics

The average lender in the surveyed sample was around 50 years old, while 83 percent of all lenders that took part in the survey were males. 82 percent have experience working with SMEs while 47 percent have established one or more companies in the past. Six per cent of the lenders surveyed have a PhD and 5 percent have an MBA degree. One quarter of lenders have another form of postgraduate qualification and around have of them hold a professional qualification or a graduate degree. Looking at the field of qualification, social science (e.g. business and management) and science (e.g. engineering) were the most common responses. 21.8 percent of the respondents are located in London and 21.64 percent in South East England.

Investment background

29.5 percent of surveyed lenders have some experience in accessing external capital while 8.8 percent identified themselves as Business Angels. 87.9 percent of them have invested in bonds or shares, while 31.9 percent have lent money to companies outside FC.

Investment behavior

Table 1 shows that the respondents of the survey have lent on average £7,333 to businesses. However, there is large heterogeneity between individual lenders which is evident from the median values. The median amount of money that individuals lent was £2,000.

The total amount of capital that individuals have on average invested through funding circle as a proportion of their total financial wealth (savings and investment) is 8.96 percent, which similar to business angels who tend to invest around 10 per cent of their wealth into ventures (Wiltbank, 2009). The total amount of savings and investment of the average lender is £340,000 (and the median £80,000). The average time that a lender spends doing research on an individual business before bidding is 15 minutes. Only one-quarter of the surveyed lenders have used the Q&A facility. Interestingly, 45 percent of the investors used the autobid function⁷ and on average they invested 32.49 percent of their overall investment through this function.

Investment criteria and investors' motivation

⁷ The lender sets the average interest rate they require, the level of diversification they want and the risk bands the loans they are willing to fund must be in. The autobid tool then bids on loan parts that meet these criteria and add successful bids to the lenders portfolio. The benefit of this is that those looking to lend to a large number of businesses can do so without having to go through them one-by-one.

Survey respondents were asked to rate 8 variables related to investment criteria and 5 variables related to investment motivation identified in the literature, on a five-point Likert scale: five (5) being ‘extremely important’ to 1 being ‘unimportant’.

Table 2: Mean score for investment criteria and motivation of peer-to-peer investors

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|--------------------------------------|-----|-------|-----------|-----|-----|
| Investment criteria | | | | | |
| Great product | 557 | 3.438 | 0.961 | 1 | 5 |
| Business model | 556 | 3.531 | 0.934 | 1 | 5 |
| Management team | 554 | 3.374 | 1.004 | 1 | 5 |
| Customer and market potential | 554 | 3.440 | 0.979 | 1 | 5 |
| Risk rating | 557 | 4.070 | 0.869 | 1 | 5 |
| Popularity with other lenders | 556 | 2.874 | 1.018 | 1 | 5 |
| Financial track record | 557 | 3.989 | 0.848 | 1 | 5 |
| Personal expertise in the industry | 556 | 2.689 | 1.068 | 1 | 5 |
| Motivation to lend | | | | | |
| Interest offered | 563 | 4.384 | 0.671 | 1 | 5 |
| Security | 558 | 4.186 | 0.756 | 1 | 5 |
| Personal knowledge of the company | 553 | 2.134 | 1.050 | 1 | 5 |
| Family relationship or friendship | 554 | 1.735 | 0.964 | 1 | 5 |
| Region in which the company is based | 553 | 2.119 | 1.115 | 1 | 5 |

Note: 5= extremely important; 4= important; 3=neutral; 2= not so important; 1= unimportant.

Table 2 illustrates the results of the survey responses to the question on ‘*how different factors influence your decision to lend money*’. The risk rating given by the Funding Circle, is ranked top within the investment criteria by the survey respondents (4.07). Relatively highly ranked is also the variable on financial track record of the company (3.98). The company characteristics associated with the product or service offered by the company, its business model, the management team and the customer and market potential received average scores of 3.43, 3.53, 3.37 and 3.44 respectively by the surveyed lenders. The variables related to the popularity of the company amongst other lenders and personal expertise of the industry received relatively lower scores (2.87 and 2.68 respectively).

The average score for the variable interest rate offered is 4.38, the highest average score among motivation rated variables. The second most popular motivation variable for lenders, was the security offered (4.18). The variables associated with intrinsic motivations such as personal knowledge of the company, family relationship or friendship and region in which the company is based, have received the lowest average scores by the survey respondents with 2.13, 1.73 and 2.11 respectively.

Table 3: Two-sample Wilcoxon rank-sum (Mann-Whitney) test

| | Gender (f-m) | | Wealth (p-r) | |
|--------------------------------------|---------------|--------------|--------------|--------------|
| | Z | p value | Z | p value |
| Investment criteria | | | | |
| Great product | 1.991 | 0.046 | 0.44 | 0.658 |
| Business model | -0.27 | 0.784 | 0.816 | 0.414 |
| Management team | -1.367 | 0.17 | -0.539 | 0.59 |
| Customer and market potential | 0.88 | 0.3856 | -0.209 | 0.834 |
| Risk rating | 0.634 | 0.523 | 0.841 | 0.401 |
| Popularity with other lenders | 0.991 | 0.319 | 2.877 | 0.004 |
| Financial track record | 0.031 | 0.97 | 0.511 | 0.606 |
| Personal expertise in the industry | -0.278 | 0.774 | 1.625 | 0.104 |
| Motivation to lend | | | | |
| Interest offered | -1.652 | 0.098 | -0.574 | 0.566 |
| Security | 1.345 | 0.166 | 1.376 | 0.168 |
| Personal knowledge of the company | 0.856 | 0.395 | 0.367 | 0.714 |
| Family relationship or friendship | 2.144 | 0.032 | -0.48 | 0.631 |
| Region in which the company is based | 2.749 | 0.006 | -0.23 | 0.81 |

Table 3 suggests that females are less motivated by the interest rate offered but more motivated by the product quality compared with males, indicating that they are more risk averse compared with male investors. This is in line with Mohammadi and Shafi (2018) findings in the case of equity crowdfunding.

In addition, female lender seems to exhibit higher level of intrinsic motivation as they regard family and region as more important motives compared with male investors (although their relatives and friends are likely to be based in the same region). Interestingly, herding seems to be important only for lenders with less than £80k invested.

Table 4A: Principal component factor analysis for investment criteria variables

| | Investment criteria variables | Factor 1 | Factor 2 | Uniqueness |
|------------------------|--------------------------------------|-----------------|-----------------|-------------------|
| 1 | Great product | 0.721 | 0.211 | 0.436 |
| 2 | Business model | 0.799 | 0.287 | 0.280 |
| 3 | Management team | 0.767 | 0.303 | 0.320 |
| 4 | Customer and market potential | 0.739 | 0.368 | 0.319 |
| 5 | Risk rating | -0.199 | 0.775 | 0.360 |
| 6 | Popularity with other lenders | 0.014 | 0.689 | 0.525 |
| 7 | Financial track record | 0.406 | 0.574 | 0.506 |
| 8 | Personal expertise in the industry | 0.497 | 0.377 | 0.611 |
| Variance | | 2.743 | 1.899 | |
| Percentage of variance | | 0.343 | 0.237 | |

Number of observations: 541

Table 4B: Principal component factor analysis for motivation variables

| Motivation variables | Factor 1 | Factor 2 | Uniqueness |
|--|--------------|--------------|------------|
| 1 Interest offered | -0.129 | 0.741 | 0.435 |
| 2 Security | 0.146 | 0.754 | 0.410 |
| 3 Personal knowledge of the company | 0.871 | 0.070 | 0.236 |
| 4 Family relationship or friendship | 0.881 | 0.025 | 0.224 |
| 5 Region in which the company is based | 0.752 | -0.186 | 0.400 |
| Variance | 2.138 | 1.157 | |
| Percentage of variance | 0.427 | 0.231 | |
| Number of observations: 544 | | | |

Figure 1A: Factor loadings, investment criteria

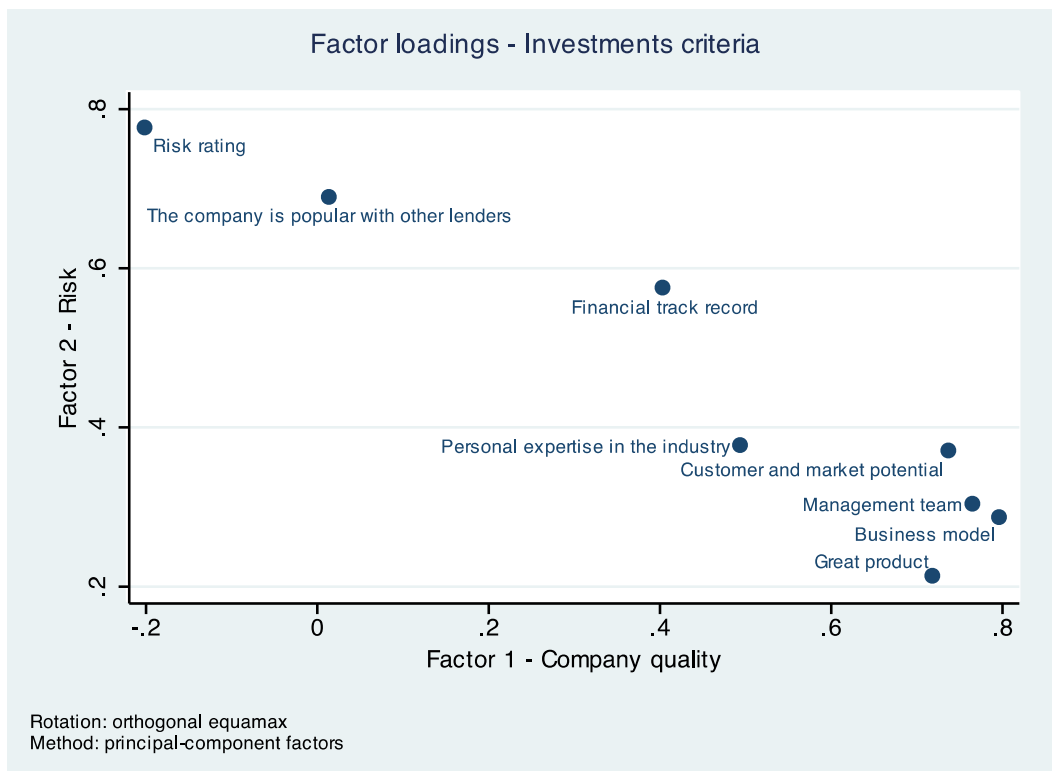
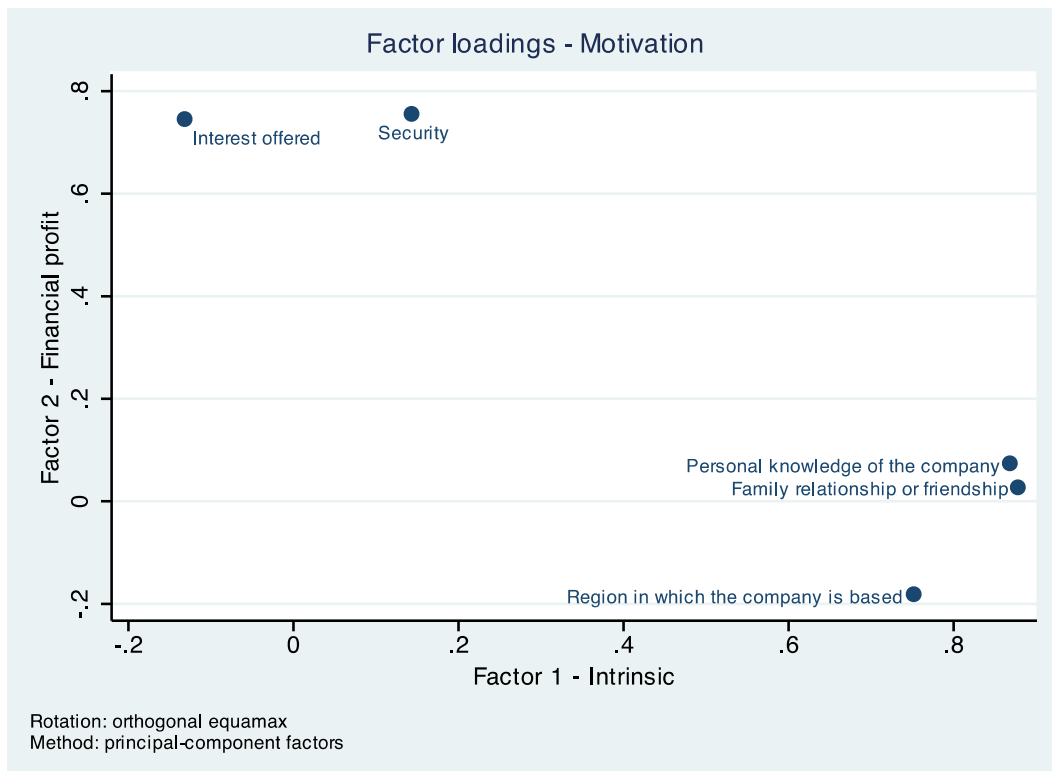


Figure 2A: Factor loading, motivation



Tables 4A and 4B and Figures 1A and 2A present the results of the factor analysis. The best fit factor analysis accounts for 61.1 percent and 66 percent of variance for the investment criteria and investors’ motivation respectively and was obtained by using Principle Component Factor (PCF) analysis with an orthogonal Equamax rotation. As shown in Table 4A, a factor analysis of the investors’ criteria led to two factors. The first factor is referred to as a “company quality factor” and contains motives 1 to 4. These variables include product quality, business model, management team and customer and market potential and explain 43.3 percent of the variability. The second factor is referred to as a ‘risk factor’ and consists of motives risk rating, popularity with other lenders and financial track record. This factor accounts for 23.7 percent of the variability.

Table A2 presents the results of factor analysis of the investors’ motivation related variables and it has led to two factors. The first factor is referred to as an ‘intrinsic factor’ and consists of motives 3, 4 and 5, which are personal knowledge of the company, family relationship or friendship and region in which the company is based. This factor accounts for 42.7 percent of the variability. The second factor is referred to as a ‘financial profit factor’ and consists of motive 1 and 2 which are interest offered and security. This factor accounts for 23.1 percent of the variability.

Table 5: Mean score of investors by factors

| Investment criteria factors | Total | | Male | | Female | |
|--|-------|-----------|-------|-----------|--------|-----------|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| Scale 1 - Factor 1: Company quality factor | 3.445 | 0.064 | 3.436 | 0.066 | 3.473 | 0.160 |

| | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| Scale 2 - Factor 2: Risk factor | 3.644 | 0.668 | 3.634 | 0.680 | 3.682 | 0.634 |
|---------------------------------|-------|-------|-------|-------|-------|-------|

Motivation to lend factors

| | | | | | | |
|---|--------------|-------|--------------|-------|--------------|-------|
| Scale 1 - Factor 1: Intrinsic factor | 1.996 | 0.226 | 1.952 | 0.230 | 2.189 | 0.234 |
| Scale 2 - Factor 2: Financial profit factor | 4.285 | 0.14 | 4.285 | 0.157 | 4.275 | 0.024 |

Factor 1 (company quality factor) has the highest explanatory value (34.3 percent) among the investment criteria factors, but factor 2 (risk factor) is the most important investment criteria (mean score 3.644) according to summated scale scores shown in Table 5. Similarly, although factor 1 (intrinsic factor) has the highest explanatory value (42.7 percent) among motivational factors, that does not mean that factor 1 is the most important motivation for investors. According to summated scale scores, the highest mean score (4.285) was for factor 2 (financial profit). This indicates that investors are most motivated by financial return rather than intrinsic factors.

Although the Wilcoxon rank sum test in Table 3 shows that female investors are more motivated by intrinsic motives than male investors, Table 5 suggests, that overall, the ranking of the motivation variables does not differ between male and female investors.

Robustness checks

As a robustness check, the factor analysis was repeated for two restricted samples. The first sample included only lenders that used the autobid function (see Table A1.A). The second sample included only lenders that invested over 70 percent of their money using the autobid function (see Table A1.B). In both cases the results were very similar to the factor analysis based on the original sample, implying that there should not be significant differences between the investors that used the autobid function (passive investors) and those that did not.

5. Discussion

In general, it appears that P2P business lenders are sophisticated individuals, highly-educated with investments in other assets. Limited data currently available on the characteristics of participants in other forms of crowdfunding suggests that reward or donation crowdfunders (those donating or seeking a non-financial return from their contributions) are from more varied backgrounds and are unlikely to have as much financial or investment experience (Pierrakis and Collins, 2013). In contrast, P2P lenders seem to share several personal characteristics with business angels in terms of background and wealth invested (see for example Wiltbank, 2009).

The actual goals of crowdfunding funders or investors are extremely heterogeneous and motivations may be complex for different approaches to crowdfunding (Mollick, 2014). In many cases non-financial motivation is the main driver of an individual's decision to fund a project or business. This can be due to a number of factors, for example the project may be delivering a social benefit that the funder wishes to support, the project may be developing a product that is of interest or the entrepreneur themselves may be in some way connected to the funder. In their study on investors in crowdfunded projects Ordanini et al. (2011) conclude that there are three main factors that can be seen as the motivating factors for investors: A feeling

of being at least partly responsible for the success of others' initiatives (desire for patronage); striving to be part of a communal social initiative (desire for social participation); seeking a payoff from monetary contributions (desire for investment). Within a traditional investment context, the quality of the company or project would be an additional investment criterion and motive (Spence, 1978). In the case of P2P business-lending, the weight of these different motives to the lenders' investment decision varies significantly.

First, in the case of crowdfunding it is not obvious that quality need be an important determinant in funding (Mollick, 2014) and project quality may not be as clear or as influential to funders in crowdfunding settings compared with more traditional investments (Bogost, 2012). Indeed, our research shows that in the case of P2P lending to businesses the quality of the business ('company quality factor', mean 3.445) is important to investors but to a much lesser extent compared with the financial return ('financial return factor', mean 4.285).

Second, Iyer et al. (2009) suggests that the P2P markets may have participants who are skilled at judging particular aspects of the borrower that banks are unable to gauge, for example, a lender who works in the sector where the borrower proposes an entrepreneurial business idea may better assess the viability of the proposal. However, our research results show that personal expertise in the industry is relatively a less important factor in the decision of the investors to lend money to a business (mean score: 2.66, Table 1).

Third, in the case of reward crowdfunding, Mollick (2014) found that personal networks and geography is related to both the type of projects proposed and successful fundraising. Van Wingerden and Ryan (2011) suggest that individuals engage in the activity of crowdfunding for intrinsic reasons, mimicking a relationship also existing in the neighboring fields of crowdsourcing. While in many cases, non-financial motives are the main drivers behind people's decision to invest or donate money, our research shows that P2P business lending significantly differs from other forms of crowdfunding and intrinsic motivations such as 'region in which the company is based', 'personal knowledge of the company' and 'family relationship' are by and large of very low relevance to the vast majority of the P2P business lenders.

Overall, the relatively low ranking of intrinsic motivations and provided by P2P business-lending providers, indicate that they mainly base their decision to invest on financial investment criteria as the financial return factor is ranked most prominently. This observation is also supported by the fact that the average time that a lender spends doing research on an individual business before bidding is 15 minutes and only 1 in 4 uses the Q&A facility to communicate with the borrower (see Table 1).

The implication of this finding is that within the P2P lending model investors do not significantly contribute to the due diligence and validation process of the investment opportunity. Instead, they mainly rely on the actual investment risk assigned by Funding Circle and the associated interest offered. This is perhaps the reason behind Funding Circle's decision in September 2017 to stop allowing individual investors to select in which company they will invest but instead they can now only select a range of interest rate bands within which their investment will be allocated. This practically mean that P2P lending to businesses is often a silent or passive investment process and may be inefficient in mobilizing the 'wisdom of the crowd' to select appropriate businesses to back. The investment decision is essentially left to the managers of the P2P platform and the associated investment risk they assign to each business. From a cognitive evaluation theory perspective, lenders that are given extrinsic

incentives to perform a task (investment) they would have wanted to perform anyway, their intrinsic motivation to perform this task decreases.

6. Conclusions

Overall, our research shows that both the characteristics of P2P business-lending investors and their motivations are different to those operating in other forms of crowdfunding. In essence, it seems that the P2P lending to business industry has become more ‘professionalized’ compared with other types of crowdfunding industry. Investors simply invest their money in a similar way they often invest in bonds (i.e. select a risk band range acceptable to them) and fully trust the risk assessment of investment professionals. On one hand, perhaps this is one of the main reasons that P2P is growing at a higher speed than other types of crowdfunding and facilitates over three times more investments than the equity crowdfunding which is the second most popular type of business crowdfunding in the UK (Zhang et al., 2016). On the other hand, it appears that P2P lending to businesses gradually moves away from the principles of what is currently considered as ‘crowdfunding’ supporting previous observations of Herzenstein et al (2011) and Lin et al. (2013) that although it uses the same business model, P2P lending to businesses is a very distinct financial tool and it should be considered separately from crowdfunding.

6.1 Limitations and future research questions

A potential limitation of this research is that the survey was conducted in 2012, when the concept of P2P lending was still at its infancy stage. However, there are no reasons to believe that the motivations of the lenders to join a P2P platform have changed since 2012, and financial returns is still the key motive of individuals to lend money through the Funding Circle. There are two factors contributing to this belief. First, the modus operandi of Funding Circle has changed and loans are now automatically allocated to borrowers, based on risk bands of investment selected by lenders. The continuous increase in the number of investors lending through Funding Circle implies that their key motivation remains a financial return. Second, during the survey, individuals were asked to indicate whether they use the autobid function (when Funding Circle automatically allocates loans to lenders) and 45 percent of them responded they did (Table 1). As a robustness check, the factor analysis was repeated with the inclusion of only lenders that used the autobid function and the results were very similar to the lenders that did not use such function, implying that there should not be significant differences between the responders of 2012 with current users of the platform.

A further limitation of this research is that the survey did not capture data at the loan level but at the lenders’ aggregated level. Therefore it was not possible to perform analysis based on individual loans as the unit of analysis (for example, how likely it is that Funding Circle loans provide lenders with supernormal profits which would have required information on the maturity of each loan, when they were issued, the coupon, and whether they’ve defaulted). Because crowdfunding can take several forms, an understanding of the investor's motivation to invest in different forms of crowdfunding is important, especially when considering the rapid expansion of crowdfunding initiatives in recent years. Future research should seek to further explore differences between personal characteristics and investment motivation between the different types of crowdfunding investors. Do these factors differ among cultures and countries? To what extent investors’ characteristics and investment motivation predict the likelihood of a campaign to be funded? Iyer et al. (2009) found that multiple lenders can collectively infer borrowers’ underlying creditworthiness by exploiting the potentially rich

information setting that peer-to-peer lending websites allow. However, Funding Circle does no longer allow lenders to decide in which company to invest. A future research could investigate whether letting the crowd to decide where to invest results in better or worse financial return compared to when the platform managers make such investment decisions. Finally, research on the relationship between (i) the type of compensation offered by the campaign and the extent to which such compensation influences individuals' decision to invest, and (ii) the type of motivation (extrinsic and intrinsic) and the likelihood of the investor to adopt a passive investment role, would further our knowledge on investment motivation in this rapidly growing industry.

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Appendices

Table A1.A: Principal component factor analysis for investment criteria variables for investors using the autobid function

| | Investment criteria variables | Factor 1 | Factor 2 | Uniqueness |
|---|--------------------------------------|-----------------|-----------------|-------------------|
| 1 | Great product | 0.745 | 0.279 | 0.368 |
| 2 | Business model | 0.776 | 0.382 | 0.253 |
| 3 | Management team | 0.736 | 0.423 | 0.280 |
| 4 | Customer and market potential | 0.763 | 0.369 | 0.282 |
| 5 | Risk rating | -0.282 | 0.796 | 0.287 |
| 6 | Popularity with other lenders | 0.089 | 0.634 | 0.590 |
| 7 | Financial track record | 0.413 | 0.631 | 0.431 |
| 8 | Personal expertise in the industry | 0.587 | 0.296 | 0.568 |
| | Variance | 2.881 | 2.060 | |
| | Percentage of variance | 0.360 | 0.257 | |
| | Number of observations: 236 | | | |

Table A2.B: Principal component factor analysis for motivation variables for investors using the autobid function

| | Motivation variables | Factor 1 | Factor 2 | Uniqueness |
|---|-----------------------------|-----------------|-----------------|-------------------|
| 1 | Interest offered | -0.082 | 0.794 | 0.362 |
| 2 | Security | 0.064 | 0.797 | 0.361 |

| | | | | |
|-------|--------------------------------------|--------------|--------|-------|
| 3 | Personal knowledge of the company | 0.859 | 0.012 | 0.262 |
| 4 | Family relationship or friendship | 0.895 | -0.014 | 0.200 |
| 5 | Region in which the company is based | 0.838 | -0.080 | 0.292 |
| <hr/> | | | | |
| | Variance | 2.250 | 1.272 | |
| | Percentage of variance | 0.450 | 0.254 | |
| | Number of observations: 236 | | | |

Table A2.A: Principal component factor analysis for investment criteria variables for investors lending over 70 percent of their money using the autobid function

| | Investment criteria variables | Factor 1 | Factor 2 | Uniqueness |
|-------|--------------------------------------|-----------------|-----------------|-------------------|
| 1 | Great product | 0.724 | 0.369 | 0.339 |
| 2 | Business model | 0.782 | 0.388 | 0.239 |
| 3 | Management team | 0.778 | 0.382 | 0.249 |
| 4 | Customer and market potential | 0.799 | 0.281 | 0.282 |
| 5 | Risk rating | -0.269 | 0.814 | 0.265 |
| 6 | Popularity with other lenders | 0.056 | 0.678 | 0.537 |
| 7 | Financial track record | 0.475 | 0.649 | 0.354 |
| 8 | Personal expertise in the industry | 0.580 | 0.332 | 0.553 |
| <hr/> | | | | |
| | Variance | 3.016 | 2.165 | |
| | Percentage of variance | 0.377 | 0.277 | |
| | Number of observations: 165 | | | |

Table A2.B: Principal component factor analysis for motivation variables for investors lending over 70 percent of their money using the autobid function

| | Motivation variables | Factor 1 | Factor 2 | Uniqueness |
|-------|--------------------------------------|-----------------|-----------------|-------------------|
| 1 | Interest offered | -0.042 | 0.806 | 0.348 |
| 2 | Security | 0.055 | 0.804 | 0.351 |
| 3 | Personal knowledge of the company | 0.851 | 0.026 | 0.274 |
| 4 | Family relationship or friendship | 0.881 | 0.005 | 0.224 |
| 5 | Region in which the company is based | 0.874 | 0.021 | 0.236 |
| <hr/> | | | | |
| | Variance | 2.269 | 1.296 | |
| | Percentage of variance | 0.453 | 0.259 | |
| | Number of observations: 165 | | | |