On the Motivation of Funders When Financing Firms with Social Goals Through Crowdfunding Platforms



J. M. Fernández-Angulo, G. Morales-Alonso, Y. Núñez, and A. Hidalgo

Abstract The world is currently governed by the economic principles of capitalism, free trade economy, and private property. However, a new economic paradigm is shaking the foundations of the capitalist model: The Sharing Economy. An individual can now act as a funds provider through crowdfunding platforms, which he can do for extrinsic motivation (i.e. in exchange for equity or an interest rate). But intrinsic motivations can also be present through reward-based crowdfunding and crowdonation, in which the incentives for funding go beyond the extrinsic. A survey on 123 individuals who have acted as crowdfunders has been conducted. The results highlight the existence and importance of intrinsic motivators for crowdfunding with social goals.

Keywords Collaborative economy · Alternative financing · Third sector

1 Introduction

Sharing Economy refers to the ability to use idle resources for improving the match between demand and supply with respect to the match provided by the capitalist system [8]. There is an increasing consensus within the scientific community on the idea that this new phenomenon will change the pre-established economic model in the coming centuries [9].

Nowadays, the Sharing Economy is established in several sectors, where it is disruptively transforming a wide variety of business models, providing more sustainable and efficient ideas. Because of its global condition and its big potential, it threatens many traditional capitalist mechanisms. Revenues from the five key sectors where the Sharing Economy appears—travel, car sharing, finance, recruiting, and

J. M. Fernández-Angulo McKinsey & Company, c/Sagasta, 33, 28004 Madrid, Spain

G. Morales-Alonso (☒) · Y. Núñez · A. Hidalgo Department of Industrial Engineering, Business Administration and Statistics, Universidad Politécnica de Madrid, C/José Gutiérrez Abascal, 2, 28006 Madrid, Spain e-mail: gustavo.morales@upm.es

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D. De la Fuente et al. (eds.), *Organizational Engineering in Industry 4.0*, Lecture Notes in Management and Industrial Engineering, https://doi.org/10.1007/978-3-030-67708-4_3

streaming of music and video—are expected to grow at about 35% per year, reaching more than \$ 335 billion by 2025, which means a growth of about ten times faster the growth of traditional economy in these sectors [7].

Finance is among the sectors that are being disrupted, allowing new funding possibilities by means of individuals that act as financial actors (funds providers), supporting and investing in new ventures. Therefore, companies gain access to a new source of funding, the crowdfunding. Crowdfunding stands out as an alternative form of collective financing. It allows the crowd to support projects of any kind on a global scale.

In crowdfunding, the incentive for lenders is usually of an extrinsic type: the expected return of their investment. In this vein, the motivations to participate in the funding of social projects should be sought after. The aim of this research is to characterize investors acting on social platforms according to whether they are guided by extrinsic or intrinsic motivations, as well as to characterize how each type reacts to external influences. Lastly, research also seeks to discover how secondary parameters (such as age, investment frequency, and the amount invested) affect the motivations of the investors.

2 Theoretical Framework

The crowdfunding sector raised 34,400 M\$ in 2015, with annual increases that doubled the total funds of the previous year. Thus, in 2012, the world raised \$ 2,700 million, which increased to \$ 6,100 million in 2013 and \$ 16,200 million in 2014. Following this trend, it is expected to exceed \$ 100,000 million by the end of 2019 [6].

The outlook for the next decade at a global level foresees that crowdfunding will continue to grow with rates as high as it has been until now. After the crisis, the existing low interest rates allow crowdfunding to continue growing in a consolidated way. According to a World Bank study [11], this growth will be heavily influenced by certain factors, such as the penetration of social networks, as well as the existence of support regulation and other cultural or technological factors. With all this, it is estimated that the total market potential for 2025 will be up to \$90–96 billion per year.

There are four types of crowdfunding, namely (i) crowdinvesting, (ii) crowdlending, (iii) reward-based crowdfunding, and (iv) crowdonation, all of which are defined in the following. Crowdinvesting is an alternative financing method in which the investor receives equity in exchange of his funds, becoming a shareholder of the company in question. Crowdlending, on the other hand, are microloans offered by fund providers to entrepreneurs in terms of unsecured loans. Third, reward-based crowdfunding focuses on a pre-sale of a product or service, in which the sponsor deposits funds and in exchange, receives a reward. Last, crowdonation is donation-based microfinance used primarily by non-profit organizations or charities. Both crowdonation and reward-based crowdfunding can be identified as providing funds for social goals.

3 Methodology

Crowdfunding is a topic that has not been thoroughly addressed in the literature due to its recent nature, and for this reason, this research has been considered as an exploratory study. A questionnaire targeting a group of investors and potential users of the crowdfunding platforms has been developed, anchored on a Master Thesis realized in the School of Business and Economics of the University of Lund [10].

The focus of this study is on social crowdfunding, which is barely unexplored to date. We started building from the questionnaire designed by Van Wingerden and Ryan [10], to craft a final survey composed by 20 items. Out of them, 14 come from the mentioned previous questionnaire (in order to maintain the reliability of the scale), while the rest have been newly created for this study. All questions are formulated on a Likert 1 to 7 scale and have been randomly placed to ensure that the respondents did not observe the groups of factors that were investigated. Respondents were asked to rank the intensity with which they agree or disagree with the questionnaire statements.

The final questionnaire is composed of 20 items, divided as follows. Two items deal with the characteristics of the investor, namely asking for age and the extent to which the investor is familiar with crowdfunding. Seven items are related to investor motivations, replicated from the survey of the University of Lund but adapted from an original study on intrinsic and extrinsic motivations in participation in activities [4].

In order to obtain data on the influence of the other investors, the other seven questions replicated in Lund's research have been adapted from several studies to gather the required data. First, a study on the influence of the purchase of products was adapted to obtain a vision of the individuals influenced on their investment decisions. Secondly, a scale was adapted that measures to what extent the consumer has been influenced by the information presented in an advertisement [2].

For the collection of data, online questionnaires have been used through the Google Forms web application. Various methods of dissemination of the survey have been used. Among the most prominent are blogs and social networks, specifically LinkedIn, Twitter, WhatsApp, and Facebook. Data collection took place in spring 2017. After collection, several analysis methods were performed using the statistical software SPSS Statistics 2017.

In terms of the variables defined, 4 different items have been created to express the intrinsic motivations, while 3 are used for the extrinsic motivations, in accordance with Van Wingerden and Ryan [10]. The reliability of the measurement scale is then diagnosed by calculating Cronbach's Alpha, observing then the normality of the sample. Later, concrete tests are performed to find significant differences between variables. Since the sample does not follow a normal distribution, nonparametric tests will be used, which compare medians instead of means. When looking for relationships between two groups of responses, the Mann–Whitney U test is used, whereas if there are k groups of independent answers, the Kruskal–Wallis H test is used.

4 Results

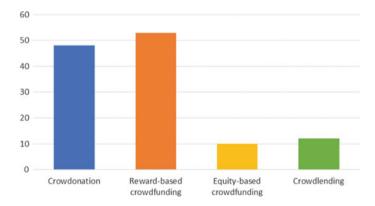
A total of 153 respondents did the questionnaire in a period of 26 days. There was a discriminatory question that cataloged the answers according to their interest for the study, referring to how familiar the respondent is with crowdfunding. Among the 153 respondents, a number of 123 were familiar with crowdfunding, and they have been taken as the sample for this study. Of this group, 54 of them were investors in crowdfunding projects or had invested at some time, representing 35% of the total number of respondents.

The reliability of the scale has been sought after with the Cronbach alpha value for all the variables under study in the sample of 123 respondents. A value of 0.649 has been obtained, which calls for a good reliability of the scale in use. Following this, the normality of the sample was analyzed, using the Kolmogorov–Smirnov test, where a p-value lower than 0.05 is found and therefore the sample has a non-normal distribution. For this reason, nonparametric tests will be applied to do the analyses.

Regarding the descriptive statistics, in terms of the age of the respondents, it is important to note that 72.4% of them are under 35 years of age, with the average age being 29.1 years. It is then observed that the sample is especially displaced toward younger people, as expected by the environment in which the survey was disseminated.

In terms of frequency, 62.6% of respondents familiar with crowdfunding or investors have not invested any time in the last 6 months. Only 2.4% of the respondents could be considered habitual investors in the short term, having invested more than 6 times in the last half year. As for the amount invested, 43.1% invested between 1 and $5 \in$, and 34.1% invested between 6 and $25 \in$. There is also a decreasing trend as the amount invested increases (Fig. 1).

As for the questions related to motivation, the following descriptive characteristics are observed. Analyzing the extrinsic motivations, it is observed that the majority of respondents (58.8%) indicated that they do not finance a project just to receive a



 $\textbf{Fig. 1} \quad \text{Frequency of use of the different crowdfunding types among the respondents}$

financial return, leaving only 25.5% of the respondents in favor with this affirmation. This is in line with the fact that only 26.1% of respondents believe that financial profitability is most important when financing a project. However, non-monetary incentives do not seem as influential as the non-financial nature of the respondents might seem, and only 22.2% of individuals agree that they only finance when they expect to receive a non-monetary incentive in exchange.

If the intrinsic motivations are studied, interesting characteristics of mentioning in the total sample are observed. 50.3% of respondents believe that helping someone reach their goal is more important than receiving a reward. Interestingly, the same percentage of people said they see financing a project as if it were a donation, leaving only 29.4% against this claim. 66.7% of people agreed that participating in the creation process by financing a project was a reward in itself while only 32% agreed that they fund for the fun it entails. In fact, the variable that analyzes being involved is the one with the highest average of all the variables studied (4.95), which shows the importance that investors give to this motivation.

In general, the data seem to suggest that crowdfunding participants were intrinsically motivated rather than extrinsically. If the means of the descriptive statistics that support intrinsic motivations are observed, it is observed that they are higher than the means of those variables that involve extrinsic motivations.

These aspects do not agree with some authors who affirm that once the extrinsic motivators are introduced, the intrinsic motivation decreases [1]. However, these trends are well known in the Human Resources domain. Likewise, they have also been observed in open source programming [5] or in investment decisions [3].

If the variables related to the influences of others are observed, interesting results of mentation are also observed. When making a decision to invest through crowdfunding, only 26.1% of respondents do not take into account the opinions or actions of other investors, although it is true that it is not an affirmation with an excessively high average (4.38), so it is understood that it is not a priority factor. While 50.3% of investors take into account the opinions and actions of others, 45.8% of respondents take into account the amount of funds they have received and that project. In addition, 42.5% prefer to finance projects that have received substantial funds from other investors recently, and 49.7% prefer to invest in projects that many other investors have. Being close to the target goal is also important, according to 46.4% of the surveyed population and only 17.3% of respondents are interested in investing in projects that have little funding to date. Regarding the campaign terms of the project, 41.8% prefer to finance a project when it is close to meeting its financing term, however, only 3.3% fully agree with this statement, so it does not it is a decisive factor in making the decision.

These trends are also analyzed by grouping respondents. A group is created dividing investors in those who invest in social projects and those who do not (see Table 1). As can be seen, there are significant differences within all the extrinsic motivational variables and three out of four intrinsic variables.

	Int_1	Int_2	Int_3	Int_4	Ext_1	Ext_2	Ext_3
Mann-Whitney U	1406	1746	1194	1096	1288	1332	1226
Z	-1.871	-0.051	-2.992	-3.511	-2.487	-2.257	-2.824
Sig. (billateral)	0.061*	0.959	0.003	0.000	0.013	0.024	0.005

Table 1 Mann–Whitney U test results for the value variables with the SOCIAL grouping variable (Group 1: Investors in Social Projects; Group 2: Investors in Non-Social Projects)

5 Discussion, Conclusions, Limitations, and Further Research

The rise of the Sharing Economy has had a remarkable importance in the last years, and its repercussions across different economic sectors throughout the next decades will mark their future. The platform that supports this paradigm, the Internet of Things, is beginning to become a reality. Due to its collaborative nature, horizontal and open, it has great growing potential, partly because of the change of mentality among consumers, who step from "having" to "disposing of", allowing for the rise of the service economy.

Finance is one of the sectors in which the Sharing Economy has impacted in a disruptive manner, allowing for alternative financing sources, via the use of crowdfunding. Crowdfunding allows diversifying traditional financing methods and connecting people with parallel interests, allowing synergies to be made for the benefit of both parties.

In spite of the academic contributions made in the last years in the field of crowdfunding, the part of it that focuses on social contributions has received little attention. Social crowdfunding allows for a triple win-to-win, since (i) it helps promoters to carry out their social projects, (ii) provides good financial returns to investors, and (iii) profits the stakeholders that receive the positive impacts from these projects.

In this study, a questionnaire has been designed, aiming at shedding light on the motivations of the investors to participate in social crowdfunding. The results of this research are supported by 123 respondents. The data shows that, in terms of respondents' motivations when investing, there are two types of investors: those who use crowdfunding platforms hoping to receive monetary incentives in exchange, and those who use platforms that do not provide financial returns. The crowdfunding platforms in which it is expected to receive a financial return are those that are dedicated to crowdlending or crowdinvesting, while the types of crowdfunding in which this economic return is not expected are crowdonation and crowdfunding based on non-monetary rewards. That is, individuals who expect to receive a monetary incentive are statistically more motivated by extrinsic reasons such as financial return or financial profitability. In contrast, users who finance projects without expecting a monetary reward are significantly more motivated by intrinsic aspects such as helping someone or seeing their investments as donations.

In terms of how the attitudes of other investors influence respondents' decisions, it can be noted that, in spite of the existing differences in motivational incentives,

these are not translated into the influence from other investors. In spite of the results provided by this study, it is not without limitations. First, a limited number of variables have been controlled, which does not allow to discriminate in terms of other factors which are known to be relevant, such as gender or purchasing power of the investor. Last, the lack of normality of the sample calls for analyzing the results with other tools, such as artificial neural networks.

Statement on Compliance with Ethical Standards The Research Ethics Committee of Universidad Politécnica de Madrid approved the protocol and procedure followed by the authors in this research work, by means of its declaration issued on January 31, 2020. All the data used for this study has been anonymized. The authors also declare that they have no conflict of interest.

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