



Is Equity Crowdfunding a Good Tool for Social Enterprises?

*Stefano Cosma, Alessandro Giovanni Grasso, Francesco
Pagliacci and Alessia Pedrazzoli*

Abstract Equity crowdfunding is an emerging financing tool that can help social start-ups and firms to collect people and resources around a project. This paper focuses on equity crowdfunding. We look at this as a complementary financing channel useful for promoting innovation and social change by cutting down the traditional features of financial investment. Our unique data set regards all the 104 Italian equity crowdfunding campaigns, launched by different platforms on the Italian equity crowdfunding market from 2013 to 2017. Our aim is twofold: (a) to describe the characteristics of the social firms which have had resource to equity crowdfunding and (b) with a logit model, to investigate which factors influence the success of the campaign, in particular by the social orientation of the issuers. The results suggest that social firms' investment offerings are not different

S. Cosma · F. Pagliacci · A. Pedrazzoli (✉)
Department of Economics, University of Modena and Reggio Emilia,
Modena, Italy
e-mail: alessia.pedrazzoli@unimore.it

A. G. Grasso
Department of Economics and Law, University of Macerata, Macerata, Italy

© The Author(s) 2019
M. La Torre and H. Chiappini (eds.), *Socially Responsible Investments*,
Palgrave Studies in Impact Finance,
https://doi.org/10.1007/978-3-030-05014-6_8

from those of non-social ones, but so far, the Italian equity crowdfunding market does not seem suitable for supporting the financial needs of this type of firms, on the side of either investors or firms.

Keywords Equity crowdfunding · Sustainability · Social enterprises · Entrepreneurial finance

1 INTRODUCTION

Due to major changes in socio-economic and political contexts, academics and policymakers are paying increasing attention to social enterprises and social innovation, and the rate of growth in research and studies in this field has also accelerated (Nicholls 2008; Bacq and Janssen 2011). The question of what exactly constitutes a social enterprise has been the subject of a rigorous, lengthy debate in the academic literature, but so far no consensus on the exact definition has been reached. At the same time, there is a growing need to meet the financing needs of social enterprises and sustainability-oriented ventures.

Studies on the financing decisions of social enterprises are unanimous that social enterprises lack sufficient access to finance (Miller et al. 2010; Nicholls 2010). This financing gap is due to a small group of factors: (a) the presence of information asymmetries and the lack of collateral; (b) a problem of scale, with high fixed costs and small average investments; and (c) a local dimension that means that these enterprises are predominantly found in economically and socially deprived areas, where the need for their services is highest (Santos 2012). Because of these features, it is clear that conventional finance does not always offer the types of capital needed by this growing sector. Alternative forms of financing have been on the rise in the last ten years, including microfinance, peer to peer lending and crowdfunding (Giudici et al. 2012; Bruton et al. 2015).

In particular, crowdfunding is a collective call to a heterogeneous crowd able to make small financial pledges to an entrepreneurial project, issued using new form of intermediary institution (Belleflamme et al. 2014; Lehner 2013; Lehner 2014). The financial pledges can be donations, prepayment for a product not yet marketed, or debt and equity investments (Mollick 2014). Specifically, equity crowdfunding allows backers to become shareholders in the firm, and entrepreneurs may obtain the capital they need, which is not available from more traditional

sources. Moreover, crowdfunding in general offers other potential benefits to entrepreneurs, such as more information from the target market and early feedback for products, while also attracting public and social media attention at the same time (Giudici et al. 2012; Agrawal et al. 2014; Gerber and Hui 2013; Belleflamme et al. 2014).

Crowdfunding is particularly relevant today because it is viewed as an alternative means of financing sustainability-oriented ventures and environmental technologies (Lehner et al. 2015; Hörisch 2015; Calic and Mosakowski 2016). In particular, Goodman and Polycarpou (2013) maintain that crowdfunding is a potentially revolutionary application of social networking with direct consequences for sustainability. Crowdfunding is an opportunity to create forms of economic growth that answer to social and environmental needs (Calic and Mosakowski 2016).

Policymakers and regulators have been focusing an increasing amount of attention on this theme and there is a need for closer study of the phenomenon. There is an established body of works that refer to the financing of social enterprises but, to the best of our knowledge, none of them has investigated the equity crowdfunding tool. More specifically, our study sought to address the following research question: Is equity crowdfunding a good tool for social enterprises? We investigate this research question in a unique data set—comprising all funded and non-funded projects—from the Italian equity crowdfunding market.

This paper therefore sets out to explore social enterprise-related aspects of equity crowdfunding through an in-depth look at the Italian equity crowdfunding market. In fact, Italian legislation has just recently recognized crowdfunding as a financial instrument for sustaining their growth (Law 6/06/2016, n. 106). Given the lack of a universally accepted definition, in our work we define social enterprises in two ways: the first based on the definition used in Italian legislation, and the second expands this social dimension, following the broader European Commission guidelines.

This research contributes to crowdfunding literature by empirically examining the characteristics of social enterprises in the Italian equity crowdfunding market. In addition, it sheds light on the key debate within the area of social entrepreneurship financing.

This article proceeds as follows: firstly, we introduce the phenomenon of social enterprises and the financing problems related to their development. Next, we review the literature on crowdfunding for social

enterprises. We follow with a discussion of the sample and descriptive used in the study. Finally, we conclude by reviewing and discussing the results and providing future directions.

2 THEORETICAL FRAMEWORK

With reference to our research question, we focus our literature review on three main parts: the first regards the definition of social enterprises; the second is about social enterprises' financing problems; and the last one concerns equity crowdfunding as a tool for meeting social enterprises' financial needs.

2.1 *Definition of Social Enterprises*

The definition of social enterprises has evolved and benefited from the injection of ideas derived from a broad array of theories and research fields. These have allowed economics researchers to develop a multiple perspective on social enterprises with regard to both their definition and the measurement of their social impact. Some definitions of social enterprise build from a focus on social change for communities or client groups, others on business and revenue-generation aspects, and others on the organization's structure.

Due to the fact that the field of social enterprise research is highly fragmented across disciplines, many studies accept that there is no clear definition of the concept and try to review all perspectives. (Kerlin 2006; Peredo and McLean 2006; Dacin et al. 2011; Huybrechts and Nicholls 2012, Lehner, and Nicholls 2014). Dacin et al. (2011) identify 37 different definitions of social enterprises in the literature from 1998 to 2010. Young and Lecy (2014), using a zoo animal metaphor, restrict the classification to six major kinds of organizational entities.

Most scholars and practitioners agree that social enterprises are hybrids, with characteristics of both commercial and non-profit organizations, and that they combine social values with pursuit of financial success in the private marketplace (Dart 2004; Di Domenico et al. 2010; Mair and Martí 2006; Esposito 2012). Social enterprises put into practice the triple bottom line principle, which identifies three areas of focus: profit, people and the planet, instead of profit alone. Pearce (2003) names the prevalent areas of business of social enterprises: trading; service delivery contracts; cross-sector partnerships; culture and the arts,

community development, education and employment skills training; child-care provision; community safety schemes; low-cost transport; recycling; and infrastructure and subsidized housing.

Definitions of social enterprise vary between countries and are a product of the different political regimes and traditions of the countries from which they originate (Kerlin 2006). Bacq and Janssen (2011) compare researchers from different geographical origins, who use different approaches to define the concepts. American studies focus their attention on the importance of the social entrepreneur as an individual and on his/her characteristics, and therefore they argue that social enterprises will survive by conducting profit-generating activities in order to finance social value creation. They do not impose any constraints regarding legal form and profit distribution. Conversely, European studies create a specific legal framework for social enterprises to protect the primacy of the social mission.

In this field, the Italian definition of social enterprises is provided by the Law on Social Enterprises (Legislative Decree no. 155/2006) and the Law on Social Cooperatives (Decree no. 381/1991), which set out specific requirements. For example, the Law on Social Enterprises (Law no. 155/2006) stipulates that a social enterprise must generate at least 70% of its income from entrepreneurial activities—for example, the production and sale of socially useful goods and services. Therefore, to be a social enterprise in the eyes of the law, a business can only operate within certain defined sectors. These include: social services; health care; education; environmental conservation; cultural heritage; social tourism; and support services to social enterprises supplied by entities which are at least 70% owned by social enterprises. Its operations are restricted to the furthering of its social purpose and it cannot distribute profit. Profits must be used to either further the primary activity of the organization or to increase its capital.

In contrast, the European Commission does not restrict social enterprises to a single legal form and defines a social enterprise as an operator in the social economy whose main objective is to have a social impact rather than to make a profit for its owners or shareholders. It operates by providing goods and services for the market in an innovative entrepreneurial way and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involves employees, consumers and stakeholders affected by its commercial activities. The interpretation of what constitutes a social aim varies from a

narrow focus on work integration to broader societal and environmental goals including such areas as renewable energy and fair trade. In particular, on the basis of existing sectorial classification, social enterprises' activities are (European Commission 2015, p. 5):

- social and economic integration of the disadvantaged and excluded (such as work integration and sheltered employment);
- social services of general interest (such as long-term care for the elderly and for people with disabilities; education and child care; employment and training services; social housing; health care and medical services);
- other social and community services: for example, counselling, youth outreach, microfinance, temporary housing for homeless;
- public services: for example, maintenance of public spaces, transport services, refuse collection, rehabilitation of ex-offenders;
- land-based industries and the environment: for example, reducing emissions and waste, recycling, renewable energy;
- cultural, tourism, sport and recreational activities;
- practising solidarity with developing countries (such as promoting fair trade).

Even if the object of this study is not to provide a review of all academic and legal definitions of what constitutes a social enterprise, it is clear that broader criteria need to be used to identify the characteristics of a social enterprise.

2.2 Financing of Social Enterprises

Despite their efforts to make changes in society, social entrepreneurs stand at disadvantage in bridging the financing gap in their seeding stage (Lehner 2013; Miller et al. 2010). Financial needs vary according to their level of development (conceptual support, development of pilot projects or prototypes, large-scale development) and sector. Also, financing instruments for social enterprises range from grants and debt capital, common for non-profit organizations but also available for social enterprises, to equity capital, debt capital and mezzanine capital, common for for-profit companies but available for social enterprises as well. Social enterprises are typically less grant-dependent than their traditional third sector counterparts. They rely on external financing markets to pursue a

self-sustainable financing strategy. Hence, the growth and development of the sector is crucially dependent on well-functioning finance markets. Unfortunately, access to finance has been identified as one of the biggest obstacles to the continuous development of the sector (Brown and Murphy 2003; Perrini and Marino 2006; Bugg-Levine et al. 2012).

Social enterprises appear to be less attractive to traditional capital providers, such as banks, venture capitalists or private equity investors. Literature highlights different ways for social enterprises to raise money and various subjects involved in this process. Reviewing Larralde and Schwienbacher (2012), Lehner (2013) identified different types of investors: social banks, government agencies, bootstrapping techniques and donations. Other intermediaries are hybrid partnerships of ethically and environmentally oriented banks and mainstream financial institutions: impact investment funds that explicitly aim to create a positive impact beyond financial returns, or social impact bonds that pioneer new ways of combining public and private funding.

On the demand side of the social finance market, there are a growing number of investors who seek to use their capital to achieve economic, social, cultural and environmental objectives. The decision-making criterion for investment is social return on investment (SROI) but social impact value is actually the most important principle. Usually social investors are patient and generally willing to accept below-market financial returns, at least over the short term, because they expect their money to generate a social benefit before yielding returns. Spiess-Knafl and Jansen (2013) categorize three types of potential investors from which social enterprises can raise funds: investors with market-rate financial return expectations, focused almost exclusively on financial returns but considering social issues as a constraint in their investment decisions; investors with reduced financial return expectations, for example clients of ethically oriented banks using special saving accounts; and investors without financial return expectations, who focus on the social mission and do not demand financial returns in exchange for their investment.

Crowdfunding investors' motivations could be the same as those of these last two types of investors. Social investors range from angel investors or high-net-worth individuals to funders of large-scale initiatives. Crowdfunding in all its models has enlarged the audience for social investment.

2.3 *Equity Crowdfunding and Social Enterprises' Needs*

Funding of companies and sustaining innovation through the crowd has been discussed intensively since 2010 and explored in practice and theory. A group of studies have aimed to define and classify the crowdfunding model. In fact, it is widely accepted now that there are four crowdfunding models: reward-based crowdfunding, lending-based crowdfunding, donation-based crowdfunding and finally equity-based crowdfunding. The donation-based model, in particular, provides a large number of financial instruments for social enterprises (Larralde and Schwenbacher 2012), but in view of investors' motivations and the characteristics of crowdfunding, other models cannot be marginalized.

The nature of social enterprises is closely related to the motivations of crowdfunding investors and proponents. From the investors' perspective, Lehner (2013) maintains that crowd investors typically do not pay much attention to business plans, concentrating instead on the firm's ideas and core values, and thus its legitimacy: this is why crowdfunding could be an answer to the financing needs of social ventures. In particular, crowdfunding investors enjoy some additional utility over other regular consumers and they value the feeling of belonging to a group of "special" individuals who contributed to the very existence of the product (Belleflamme et al. 2014). Gerber and Hui (2013) identify the motivations for participation in crowdfunding campaigns: to support creators and causes by confirming values, and to seek rewards and strengthen connections with people in their social networks. From the proponents' perspective, Bernardino and Santos (2016) highlight that proponents' personality traits influence the decision to finance social projects through crowdfunding, especially the conscientiousness personality trait that refers to responsibility and reliability.

Given the fact that entrepreneurial financing is characterized by a relationship where external investors possess incomplete and imperfect information compared to the entrepreneur, one solution for the better informed party is to disclose information about unobservable characteristics and send signals of quality to the less informed one. A group of crowdfunding studies have investigated which signals can facilitate fund-raising success (Agrawal et al. 2014; Mollick 2014; Marelli and Ordanini 2016; Ralcheva and Roosenboom 2016; Courtney et al. 2017). In particular, equity crowdfunding research highlights the presence of a professional investor, the percentage of equity offered, and the planned exit strategies (Ahlers et al. 2015; Moritz et al. 2015;

Hornuf and Neuenkirch 2016; Vismara 2016; Lukkarinen et al. 2016). Sustainability orientation in projects is also a signal of additional legitimacy for the crowd and influences campaign success (Dart 2004; Lehner and Nicholls 2014). Calic and Mosakowski (2016) show that sustainability-oriented projects experience greater levels of crowdfunding success, relative to commercial-only entrepreneurs. Therefore, they are likely to receive higher total pledge amounts. The study was conducted on Kickstarter, the most famous, widely used international reward-based platform. Another important signal in some forms of social enterprises is the limit on monetary motivation for owners, which can be seen as a strong signal that the owners give significant weight to quality of outcome and less to monetary gains (Lehner 2013).

The connection between social enterprises and crowdfunding in the literature continues to be very limited, and although the reward-based model and donation are known, nobody has explored the equity crowdfunding model for social enterprises as yet. Equity crowdfunding could be an opportunity for financing social ventures.

One reason lies in the large number of shareholders participating, which may bring benefits for social ventures, by improving external legitimacy and refining the approach to the social needs, generating greater effectiveness (Lehner 2013). Another reason is that equity crowdfunding may amplify and extend social change through the business scalability of social entrepreneurial ventures. In fact, crowdfunding is not only a means of bridging the equity gap but also has other advantages for firms, such as expanding awareness of their work, attracting media attention and providing connections (Gerber and Hui 2013). In the case of social enterprises, shareholders could be also consumers and thus enlarge the firm's market base, increasing the diffusion of social innovation. Finally, social enterprises make extensive use of social networking strategy to increase stakeholders' participation as a means of expanding their governance structures, to generate new contacts and links with key market players (Haobai et al. 2007; Johannisson and Olaison 2007). Also in the crowdfunding context, social networking and the entrepreneur's social capital are two key factors that influence campaigns' success, helping to fill the asymmetry gap and facilitating fund-raising (Mollick 2014; Colombo et al. 2015; Marelli and Ordanini 2016; Skirnevskiy 2017; Butticiè et al. 2017). Crowdfunding may be an instrument not only for strengthening social entrepreneurs' strategic tools and improving their networks but also for promoting business scalability.

3 THE ITALIAN EQUITY CROWDFUNDING MARKET

The Italian equity crowdfunding market has grown rapidly since 2013, with an average growth rate of 73%. There were more than 40 campaigns in 2016 and we recorded 45 campaigns during January–August 2017: 31 of them have already been completed and 14 campaigns are currently still open.

In the Italian equity crowdfunding market 22 portals have been authorized, but only 15 have operated in the market: 2 have shut down, 6 are authorized but still not operating and 1 portal closed without presenting a campaign. Although the number of platforms is high, some of them have run more than 20 campaigns each, while others have held far fewer campaigns. The equity crowdfunding market appears to be concentrated: the Herfindahl-Hirschman Index for campaigns per portal is 0.34. The target amount for the 104 initial crowd offerings closed is almost €32 million. About 60% of campaigns have been successful and have raised €14.4 million.

The characteristics of the 101 issuers vary widely. More than 50% of them operate in the ICT sector (using a broad definition of ICT). On a geographical basis, 60.3% of issuers are from northern Italian regions, 20.3 of issuers are located in central Italy and only 15.8% of them are located in the South. In most cases, issuers are start-ups: 93 out of 101 cases are five years old and less. On average, when issuers decide to undertake a crowd offering campaign, they are relatively young: the average time between the year of the crowd offering and the year of the establishment of the business is 2.33 years.

Campaign types vary. On average, campaigns last about three months (93 days). The average target amount (which also includes the share premium) observed on the Italian equity crowdfunding market is € 297,976.

4 DATA AND RESULTS

4.1 *Sample*

This research focuses on the Italian equity crowdfunding market. The major novelty of this work lies in the original data set it adopts. Data about Italian equity crowdfunding campaigns were collected by the authors in an ongoing process which has lasted since 2013, constantly monitoring the campaigns published on all Italian platforms. Previously,

collecting data about equity crowdfunding projects was a major hurdle in this field, because platforms generally delete information about past projects, especially in the case of non-funded ones. Thus, our data set is unique and generates an updated picture of the state of the art of the Italian equity crowdfunding market, with data referring to the whole set of campaigns that have taken place in Italy.

As of August 2017, 118 campaigns had been published and 104 of them had been completed: these campaigns are the sample for our analysis. However, in the rest of the paper, we will consider only 101 out of the 104 total campaigns due to the fact that two issuers completed more than one campaign each (three and two campaigns, respectively).

Out of the sample of 101 issuers, we identified issuers with a socially oriented business. In defining social enterprises, we refer to two different descriptions: strictly social issuers (SSIs), corresponding to the Italian legislation's definition, and broadly social issuers (BSIs), or firms that engage in socially oriented business as defined by the European Commission's broader guidelines. We checked issuers' areas of business by examining the articles of association, trade register extracts and business plans of every company in the sample.

According to the company profiles, only 6 out of 101 cases can be classified as SSIs. Under our broader definition, the number of issuers with a socially oriented business significantly increases: actually 23 out of 101 (namely, 22.8% of the total). Thus, Table 1 singles out three different types of enterprises: non-social, broadly social and strictly social. This classification will be adopted in the rest of the analysis. Table 1 also reports the distribution of issuers by geographical area. Across the northern regions, there are a large proportion of non-social issuers, while in central and southern regions the relative share of social issuers is larger.

Our concept of social enterprise does not seek to replace the concepts of the non-profit sector *strictu sensu*; rather, it is intended to bridge these two concepts, by focusing on enterprises that pursue social aims.

In our selection, we do not consider a harsh distinction between commercial and social enterprises, because traditional business companies are incorporating social impact aims in their strategies and non-profit organizations are also increasingly adopting strategies and behaviours from the business sector (Maurer et al. 2011; Wilson and Post 2013). In addition, institutional theory analysis suggests that social enterprise is likely to continue its evolution with a more narrow focus on market-based solutions

Table 1 Social and non-social issuers, according to different definitions, by geographical area

<i>Number</i>				
<i>Issuers</i>	<i>Total</i>	<i>North</i>	<i>Centre</i>	<i>South</i>
Non-social issuers (NSIs)	72	48	14	10
Broadly social issuers (BSIs)	23	11	7	5
Strictly social issuers (SSIs)	6	2	3	1

and with a pro-market approach, because of the broader validity of this business model in the social environment (Dart 2004). Ownership and legal status are also not the defining criteria.

By socially oriented business, we refer to corporate missions and activities: for example, we consider whether the project benefits and operates in those sectors that can improve social and economic integration, health care, environment, cultural, tourism, sport and recreational activities as the European Commission states. Environmental purposes are also considered as closely linked to social orientation (Thompson et al. 2011).

4.2 Variables

We focus on several key variables related to the issuers and the campaigns. The selection of the variables follows the studies by Vismara (2016) and Lukkarinen et al. (2016).

The share capital before the issue (SHARE CAPITAL) is the nominal face value of total outstanding shares.

The number of shareholders (SHAREHOLDERS) is the number of shareholders before the issue.

The number of administrators (ADMINISTRATORS) is the number of shareholders involved in the company's administration.

The target amount (TARGET AMOUNT) is the capital outstanding offered (the sum of nominal face value and share premium).

The share premium account (SHARE PREMIUM) is the difference between the value at which the shares were issued by the company and their nominal face value.

The percentage of share capital offered post-campaign (% SHARE CAPITAL POST-CAMPAIGN) is the ratio of the amount of shares offered to total share capital after campaign.

The minimum investment (MINIMUM INVESTMENT) is the minimum amount of money (in euros) that an individual can invest to participate in the campaign.

The number of non-professional investors (NON-PROFESSIONAL INVESTORS) is the number of backers that participate in the campaign.

4.3 *Characteristics of Broadly Social Issuers and Strictly Social Issuers*

BSIs and SSIs represent more than a quarter of the total number of issuers. Table 2 returns some important features that characterize these types within the Italian equity crowdfunding market.

Almost all SSIs and BSIs are start-ups and their level of share capital is close to the minimum set by law. Even though the level of share capital is low, the target amount is high, averaging eight times share capital value, due to a high premium share. Indeed, the share capital of the equity crowdfunding campaign is, on average, about 25% of the share capital after the campaign. The specific feature pinpoints the request for a price premium from the market in recognition of the quality of the business idea owned by the enterprise. Even if the minimum investment is low to encourage the widest participation of investors in the campaign,

Table 2 Summary statistics of broadly social issuers (BSIs) and strictly social issuers (SSIs)

	<i>BSIs (23)</i>		<i>SSIs (6)</i>	
	<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>
Share capital before the issue	42,962	11,194	3037	10,7928
Shareholders	6.43	5.00	5.17	2.50
Administrators	2.52	3.00	1.67	1.00
Target amount	295,537	240	247,383	175
% of share capital post-campaign	21.50	16.00	28.71	17.15
Share premium	130.74	39.00	88.08	61.00
Minimum investment	569.72	460.00	276.94	150.00
Non-professional investors	27.75	15.50	31.40	17.00
Average investment	9704	3201	33,750.75	4264

especially for SSIs, neither type of issuers attracts a high level of participation from non-professional investors.

When considering each single variable, we performed One-Way ANOVA (Analysis of Variance) tests to assess whether average values are statistically different among non-social issuers, BSIs and SSIs. Preliminarily, Levene's test is computed to test whether groups' variances are equal.¹ Data suggest that no significant differences are found across the number of issuers considered here. The Kruskal–Wallis test was also estimated with regard to median values, to allow a statistical comparison of the median values among observed groups. Unfortunately, no significant differences are identified among the groups.

The limited sample and the high level of heterogeneity of the enterprises having recourse to equity crowdfunding affect the statistical significance of the mean and median values.

4.4 *Equity Crowdfunding and Social Orientation Effect*

The second aim of our analysis is to assess the relevance of some variables for the campaign's success. In particular, we try to verify whether the success of the campaign is influenced by the characteristics of the issuers, and in particular by the social orientation of the issuers.

Table 3 returns the main results of two logit models, computed on the whole set of campaigns run in the Italian equity crowdfunding market. In both models, the dependent binary variable is represented by the success of the campaign. Among the selected independent variables, the models control for some of the most traditionally used characteristics in equity crowdfunding literature. In particular, two models are defined as follows:

$$\begin{aligned} \text{logit } p(\text{success}) = & \beta_0 + \beta_1 \log(\text{Share capital}) + \beta_2 \text{Shareholders} + \beta_3 \log(\text{Target amount}) \\ & + \beta_4 \text{Age of the issuer} + D_{\text{geo}} + D_{\text{type of issuer}} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{logit } p(\text{success}) = & \beta_0 + \beta_1 \log(\text{Share capital}) + \beta_2 \text{Administrators} \\ & + \beta_3 \log(\text{Target amount}) + \beta_4 \text{Age of the issuer} + D_{\text{geo}} + D_{\text{type of issuer}} \end{aligned} \quad (2)$$

¹If groups' variances are equal, simple F test for the equality of means in a One-Way ANOVA is performed; otherwise, Welch (1951) method is adopted.

Table 3 Success of the issuers: logit models

	<i>Model_1</i>	<i>Model_2</i>
Intercept	3.311	2.679
	-3.825	-3.955
Log (SHARE CAPITAL)	-0.261*	-0.243*
	(0.142)	(0.129)
SHAREHOLDERS	0.059	
	(0.044)	
ADMINISTRATORS		0.426**
		(0.184)
Log (TARGET AMOUNT)	-0.021	-0.036
	(0.329)	(0.334)
AGE of the issuer (in years)	0.083	0.041
	(0.082)	(0.083)
GEOGRAPHICAL LOCATION (Centre+South)	-0.606	-0.491
	(0.451)	(0.454)
DTYPE OF ISSUERS:	-0.758	-1.017*
Diff. BSIs—NSIs		
	(0.528)	(0.553)
Diff. SSIs—NSIs	0.481	0.507
	(0.955)	(0.959)
Deleted obs.	1	1

Standard errors in parentheses

Signif. codes: ****0.001, ***0.01, **0.05, *0.10

where:

D_{geo} is a dummy, which is equal to 0 for issuers located in northern regions and to 1 for issuers located in central and southern regions;

$D_{type\ of\ issuer}$ is a categorical variable, which assumes three levels, disentangling NSIs, BSIs and SSIs.

The number of shareholders is not significant in Model 1, while in Model 2 the number of administrators is positively associated with the success of the campaign. The presence of a team or more than one administrator in the board of the company seems to reassure investors and to influence the likelihood of the campaign's success.

As specific variables, both models also include the degree of social orientation of the issuers, here considered as categorical variables, with three levels: NSIs, BSIs and SSIs.²

²In Table 3 both models do not show the non-social issuers level. Coefficients for BSIs and SSIs refer to the respective differences with that level.

When controlling for the aforementioned variables, the social orientation of the issuer seems to play a role in explaining the success of the campaign.³ Especially in Model 2, BSIs show a lower rate of campaign success than NSIs, although statistical significance is weak. No significant results are returned when considering SSIs. According to these findings, we may assume that equity crowdfunding is not particularly suitable for social issuers.

When considering other control variables, one unexpected finding is linked with the share capital. In contrast to the financial literature (Ross 1977; Leland and Pyle 1977), a lower equity value increases the likelihood of the campaign's success. The negative sign here seems to be associated with the fact that equity crowdfunding is a particularly useful tool for start-ups, which have a low amount of share capital. In fact in a large number of cases (41 out of 101 observations), the share capital is close to the minimum amount required (€10,000).⁴

In both models, the other control variables—geographical location, age of the issuers and target amount—are not significant.

5 CONCLUSIONS AND RESEARCH IMPLICATIONS

Equity crowdfunding is an emerging financing tool that can help social start-ups and firms to collect people and resources around a project. This study is one of the first to explore equity crowdfunding for social enterprises. In this paper, we look on the one hand at the characteristics of social firms which have had recourse to equity crowdfunding and on the other hand consider whether equity crowdfunding could help social firms to bridge their equity gap. We view crowdfunding as a complementary financing channel useful for promoting innovation and social change by cutting down the traditional features of financial investment. Although the Italian equity crowdfunding market is in its infancy, the growth rate has been increasing since 2013.

³In Annex 1, correlation coefficients of the selected variables are returned (Table 4).

⁴The number of issuers with capital above €100,000 is 28 out of 104. The remaining number of issuers has capital between €10,000 and €100,000.

About one quarter of equity crowdfunding campaigns have concerned social enterprises, both BSIs e SSIs. The results suggest that, so far, the Italian equity crowdfunding market does not seem appropriate to support the financial needs of this type of firms. Given that the market is still in its initial phase, it is not yet possible to understand whether this derives from the characteristics of social enterprises or from the characteristics of the market. In fact, differences between social issuers, both BSIs and SSIs, and NSIs, are not significant.

In our study, we confirm results reported by other researchers that pinpoint the difficulties for social enterprises in raising money. Therefore, from a practical perspective, consistent with previous studies, our research may suggest that equity crowdfunding is not suitable for this kind of firms, so other models may be considered, for example donation and reward-based crowdfunding models (Calic and Mosakowski 2016).

Moreover, even if equity crowd investors' motivations are also include the desire for better financial returns on their investments, financial aspects do not influence the likelihood of campaign success. We do not rule out the possibility that non-financial aspects may also play a role in this decision such as: the presence of a video, proponent's sympathy and authenticity. Private equity investments and business angels' decisions are also driven by other factors apart from financial ones. For example, personal factors, enjoyment and fun, rather than return (Hall and Hofer 1993; Mason and Rogers 1997; Mason and Harrison 2008). In this vein, future research could extend the aspects of campaigns studied to include non-financial ones and test their effects on funding success.

From a theoretical perspective, these results encourage future research into improving the potential of equity crowdfunding for social enterprises, extending both the size of the data set and the number of countries considered. Future research could also shed light on platforms' characteristics and the financing objectives of social investors, in particular how investors' willingness to support the same social project changes on reward-based and equity-based platforms or on a dedicated socially oriented platform.

ANNEX 1

Table 4 Correlation coefficients: selection of variables

	<i>Share capital</i>	<i>Shareholders</i>	<i>Administrators</i>	<i>Target amount</i>	<i>% of social capital offered</i>	<i>Share premium</i>	<i>Minimum investment</i>
Share capital	1	0.059	0.094	0.098	-0.145	-0.038	0.026
Shareholders		1	0.326	0.050	-0.247	0.006	-0.091
Administrators			1	0.201	-0.114	-0.113	0.142
Target amount				1	0.233	0.008	0.132
% of social capital offered					1	-0.079	0.292
Share premium						1	0.235
Minimum investment							1

REFERENCES

- Agrawal, A., Catalini, C., & Goldfarb, A. (2014). Some simple economics of crowdfunding. *Innovation Policy and the Economy*, 14(1), 63–97.
- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980.
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23(5–6), 373–403.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing: Entrepreneurship, Entrepreneurial Finance, Innovation and Regional Development*, 29(5), 585–609.
- Bernardino, S., & Santos, J. F. (2016). Financing social ventures by crowdfunding. *The International Journal of Entrepreneurship and Innovation*, 17(3), 173–183. <https://doi.org/10.1007/s10551-012-1413-4>.
- Brown, H., & Murphy, E. (2003). The financing of Social Enterprises: A special report by the Bank of England. In *Bank of England domestic finance division*. London: Bank of England.
- Bruton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations. *Entrepreneurship Theory and Practice*, 39(1), 9–26.
- Bugg-Levine, A., Kogut, B., & Kulatilaka, N. (2012). A new approach to funding social enterprises. *Harvard Business Review*, 90(1/2), 118–123.

- Butticè, V., Colombo, M. G., & Wright, M. (2017). Serial crowdfunding, social capital, and project success. *Entrepreneurship Theory and Practice*, 41(2), 183–207.
- Calic, G., & Mosakowski, E. (2016). Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. *Journal of Management Studies*, 53(5), 738–767.
- Colombo, M. G., Franzoni, C., & Rossi Lamastra, C. (2015). Internal social capital and the attraction of early contributions in crowdfunding. *Entrepreneurship Theory and Practice*, 39(1), 75–100.
- Courtney, C., Dutta, S., & Li, Y. (2017). Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrepreneurship Theory and Practice*, 41(2), 265–290.
- Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social entrepreneurship: A critique and future directions. *Organization Science*, 22(5), 1203–1213. <https://doi.org/10.1287/orsc.1100.0620>.
- Dart, R. (2004). The legitimacy of social enterprise. *Non-profit Management and Leadership*, 14(4), 411–424.
- Di Domenico, M. L., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34, 681–703.
- European Commission. (2015). *A map of social enterprises and their eco-systems in Europe: Synthesis Report*. Brussels.
- Espósito, R. T. (2012). The social enterprise revolution in corporate law: A primer on emerging corporate entities in Europe and the United States and the case for the benefit corporation. *William & Mary Business Law Review*, 4, 639.
- Gerber, E. M., & Hui, J. (2013). Crowdfunding: Motivations and deterrents for participation. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 20(6), 34.
- Giudici, G., Nava, R., Rossi Lamastra, C., & Verecondo, C., (2012). *Crowdfunding: The new frontier for financing entrepreneurship?* Available at SSRN <https://ssrn.com/abstract=2157429>.
- Goodman, A., & Polycarpou, L. (2013). The sustainability-social networking nexus. *Sustainability: The Journal of Record*, 6(1), 26–32.
- Hall, J., & Hofer, C. W. (1993). Venture capitalists' decision criteria in new venture evaluation. *Journal of Business Venturing*, 8(1), 25–42.
- Haobai, W., Luzhuang, W., & Jiming, L. (2007). *The effect of social network in social entrepreneurship: An empirical Chinese case study*. In 2007 International Conference on Wireless Communications, Networking and Mobile Computing (Vols. 1–15, pp. 4213–4216).
- Hörisch, J. (2015). Crowdfunding for environmental ventures: An empirical analysis of the influence of environmental orientation on the success of crowdfunding initiatives. *Journal of Cleaner Production*, 107, 636–645.

- Hornuf, L., & Neuenkirch, M. (2016). Pricing shares in equity crowdfunding. *Small Business Economics*, 48, 1–17.
- Huybrechts, B., & Nicholls, A. (2012). Social entrepreneurship: Definitions, drivers and challenges. In C. K. Volkmann, K. O. Tokarski, & K. Ernst (Eds.), *Social entrepreneurship and social business* (pp. 31–48). Cham: Springer.
- Johannisson, B., & Olaison, L. (2007). The moment of truth—Reconstructing entrepreneurship and social capital in the eye of the storm. *Review of Social Economy*, 65(1), 55–78.
- Kerlin, J. A. (2006). Social enterprise in the United States and Europe: Understanding and learning from the differences. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 17(3), 246.
- Larralde, B., & Schwienbacher, A. (2012). Crowdfunding of small entrepreneurial ventures. In D. Cumming (Ed.), *The Oxford handbook of entrepreneurial finance* (Vol. 369). New York: Oxford University Press.
- Lehner, O. M. (2013). Crowdfunding social ventures: A model and research agenda. *Venture Capital*, 15(4), 289–311.
- Lehner, O. M. (2014). The formation and interplay of social capital in crowd funded social ventures. *Entrepreneurship and Regional Development*, 26, 5–6.
- Lehner, O. M., & Kansikas, J. (2013). Pre-paradigmatic status of social entrepreneurship research: A systematic literature review. *Journal of Social Entrepreneurship*. <https://doi.org/10.1080/19420676.2013.777360>.
- Lehner, O. M., & Nicholls, A. (2014). Social finance and crowdfunding for social enterprises: A public–private case study providing legitimacy and leverage. *Venture Capital*, 16(3), 271–286.
- Lehner, O. M., Grabmann, E., & Ennsgraber, C. (2015). Entrepreneurial implications of crowdfunding as alternative funding source for innovations. *Venture Capital*, 17(1–2), 171–189.
- Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance*, 32(2), 371–387.
- Lukkarinen, A., Teich, J. E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. *Decision Support Systems*, 87, 26–38.
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44.
- Marelli, A., & Ordanini, A. (2016). What makes crowdfunding projects successful ‘before’ and ‘during’ the Campaign? In *Crowdfunding in Europe* (pp. 175–192). Cham: Springer.
- Mason, C., & Rogers, A. (1997). *The business angel’s investment decision: An exploratory analysis*. Paper presented at the National Small Firms Policy and Research Conference.
- Mason, C. M., & Harrison, R. T. (2008). Measuring business angel investment activity in the United Kingdom: A review of potential data sources. *Venture Capital*, 10(4), 309–330.

- Maurer, C. C., Bansal, P., & Crossan, M. M. (2011). Creating economic value through social values: Introducing a culturally informed resource-based view. *Organization Science*, 22, 432–448.
- Miller, T. L., Wesley, I. I., & Curtis, L. (2010). Assessing mission and resources for social change: An organizational identity perspective on social venture capitalists' decision criteria. *Entrepreneurship Theory and Practice*, 34(4), 705–733.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16.
- Moritz, A., Block, J., & Lutz, E. (2015). Investor communication in equity-based crowdfunding: A qualitative-empirical study. *Qualitative Research in Financial Markets*, 7(3), 309–342. <https://doi.org/10.1108/QRFM-07-2014-0021>.
- Nicholls, A. (2008). *Social entrepreneurship: New models of sustainable social change*. Oxford: Oxford University Press.
- Nicholls, A. (2010). The institutionalization of social investment: The interplay of investment logics and investor rationalities. *Journal of Social Entrepreneurship*, 1(1), 70–100.
- Pearce, J., & Kay, A. (2003). *Social enterprise in any town*. Lisbon: Calouste Gulbenkian Foundation.
- Perrini, F., & Marino, A. (2006). The basis for launching a new social entrepreneurial venture. In *The new SOCIAL entrepreneurship: What awaits social entrepreneurial ventures* (pp. 46–64). Cheltenham: Edward Elgar Publishing.
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41, 56–65.
- Ralcheva, A., & Roosenboom, P. (2016). *On the road to success in equity crowdfunding*. Available at SSRN 2727742.
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*, 1, 23–40.
- Santos, F. M. (2012). A positive theory of social entrepreneurship. *Journal of Business Ethics*, 111(3), 335–351. <https://doi.org/10.1007/s10551-012-1413-4>.
- Skirnevskiy, V., Bendig, D., & Brettel, M. (2017). The influence of internal social capital on serial creators' success in crowdfunding. *Entrepreneurship Theory and Practice*, 41(2), 209–236.
- Spieß-Knafl, W., & Jansen, S. A. (2013). Imperfections in the social investment market and options on how to address them. In *ex-ante evaluation for the european commission*. Friedrichshafen: Zeppelin University.
- Thompson, N., Kiefer, K., & York, J. G. (2011). Distinctions not dichotomies: Exploring social, sustainable, and environmental entrepreneurship. In G. T. Lumpkin & J. A. Katz (Eds.), *Social and sustainable entrepreneurship* (pp. 201–229). Bingley: Emerald.

- Vismara, S. (2016). Equity retention and social network theory in equity crowd-funding. *Small Business Economics*, 46(4), 579–590.
- Welch, B. L. (1951). On the comparison of several mean values: An alternative approach. *Biometrika*, 38, 330–336.
- Wilson, F., & Post, J. E. (2013). Business models for people, planet (& profits): Exploring the phenomena of social business, a market-based approach to social value creation. *Small Business Economics*, 40, 715–737.
- Young, D. R., & Lecy, J. D. (2014). Defining the universe of social enterprise: Competing metaphors. *VOLUNTAS: International Journal of Voluntary and Non-profit Organizations*, 25(5), 1307–1332.