Sustainable projects in crowdfunding campaigns: an explorative study in Italy[1]

Received
12th March 2024
Revised
27th July 2024
Accepted
3rd September 2024

Luca Ferrucci - Marina Gigliotti - Antonio Picciotti

Abstract

Frame of the research: *In recent years, crowdfunding platforms have emerged as a viable form of financing for innovative startups. In this context, numerous sustainable projects have been funded through online equity crowdfunding campaigns, highlighting potential advantages for enterprises with social and environmental goals.*

Purpose of the paper: *The paper aims to define whether the sustainability orientation of projects (social or environmental) positively influences the possibility of succeeding in online equity crowdfunding campaigns.*

Methodology*: Data were acquired from a sample of 240 investment projects on one of the main Italian online crowdfunding platforms. This led to the initial construction of a database and the subsequent testing of the research hypotheses.*

Findings*: Projects with a sustainable orientation attract more investors and offer more significant participation in the company. However, there are no significant differences compared to business-oriented projects regarding exceeding the financing target and the average investment.*

Research limits*: The research considers only one crowdfunding platform and is based on limited information that can be easily gathered. Further, it does not consider how companies employ the funds obtained to reached the project goals.*

Practical implications*: This study highlights the existence of high-growth opportunities in the field of online equity crowdfunding. This represents an opportunity for both sustainability-oriented companies that wish to raise funds and for online platforms that can develop new services and achieve market differentiation.*

Originality of the paper*: Considering the Italian context, the research compares sustainable and business-oriented projects within crowdfunding campaigns. It represents an explorative study that provides some first insights to trigger a future debate on crowdfunding and social entrepreneurship in Italy.*

Key words: *crowdfunding; equity; online platform; sustainable enterprise; social entrepreneurship; Italy*

1. Introduction

In Western capitalist countries, financing has historically been developed to support profit-oriented businesses. The nature of all financial institutions, from traditional banks to merchant banks, venture capitalists, and stock exchange mechanisms, tends to favor the gathering of financial resources and their use in favor of for-profit companies. However, in recent decades, we have witnessed the emergence of companies that present investment projects linked to social and environmental issues, or even new companies that are born with an entrepreneurial mission aimed at creating products and services that have social or environmental value (Cucino *et al.*, 2021) exclusively. How is the issue of financial needs resolved beyond the founding members of these start-ups and innovative companies?

Over the years, the responses to this need have led to the development of various solutions. Ethical finance has been developing in the national banking system, with institutions becoming protagonists in supporting investment projects and entrepreneurial start-ups. In addition to these so-called ethical banks, investment funds limit the channeling of savings toward companies that present these characteristics. In other cases, the regulations of some countries relating to the outsourcing of services by public authorities, tend to offer a higher score to companies with specific statutory profiles (e.g., social enterprises and benefit companies).

Crowdfunding platforms represent a significant innovation for raising and financing startups. These platforms have spread throughout the country. According to the latest Italian report on crowdfunding (Giudici *et al.*, 2023), in the first half of 2023, 48 portals in Italy raised capital online. Considering only equity crowdfunding operations, the cumulative risk capital over time was €571,68 million. The platform which has finalized and raised the most capital is Mamacrowd with €130,65 million, followed by Walliance with €105,04, while the platform that has published the most campaigns is CrowdFundMe (227).

The affirmation of this new financing method produces many advantages. First, it develops in the digital sphere, helping expand the audience of potential investors significantly. Second, using digital tools reduces the distance between investors and companies, thereby establishing direct and immediate communication channels. Finally, the time necessary to conduct the operation is reduced, thereby generating greater speed in raising funds.

Therefore, crowdfunding platforms could offer new and essential fundraising opportunities for social or environmentally oriented start-ups, representing an alternative channel to traditional intermediaries who tend to favor for-profit companies. Thus, crowdfunding platforms are innovative tools that can support the transformation of capitalism.

This study aims to determine whether the success of online equity crowdfunding campaigns is influenced by the sustainability orientation (social or environmental) of projects. The external financing of social venturing is a highly debated topic analyzed by numerous existing studies examining it at the individual, organizational, and institutional levels (Schätzlein *et al.*, 2023). Following this categorization, our paper aims to position itself at the organizational level, with particular reference to the "*Impact of social enterprises' characteristics and strategies on funding success*" (Schätzlein *et al.*, 2023) applied to the specific case of crowdfunding. The role that a social venture's "dual logic" plays in attracting funds remains ambiguous, even in the specific case of crowdfunding campaigns (Bento *et* *al.*, 2019). The literature is, in fact, still scant and sometimes disagrees. While some studies confirm that a sustainability orientation positively influences the possibility of succeeding in raising funds through crowdfunding (Calic and Mosakowski, 2016), other studies do not confirm these results (Hörisch, 2015). Further research, such as this study, will provide new insights into the dynamics of this relationship.

Moreover, recent studies (Estrin *et al.*, 2024) have confirmed that the characteristics of crowdfunding campaigns are influenced by the country in which they are conducted, highlighting the need for more country-specific research. The Italian context has already been considered for analyzing crowdfunding campaigns to understand, for example, entrepreneurial decision-making (Troise and Trani, 2020), the link between crowdfunding and firm innovativeness (Valenza *et al.*, 2023) and the role of human capital in campaign success (D'Agostino *et al.*, 2024). However, to the best of our knowledge, no papers compare projects with or without a sustainability orientation within crowdfunding campaigns when considering the Italian context. This could help trigger future debates on crowdfunding and social entrepreneurship in Italy and other countries with similar characteristics in terms of crowdfunding culture and platforms.

We analyzed a sample of 235 projects from the CrowdFundMe platform, dividing them by their sustainability orientation.

The remainder of this paper is structured as follows: next section reviews the literature and presents the hypotheses of the empirical research. Section 3 presents the detailed methodology. Section 4 presents and discusses the main results and the hypotheses tested. The conclusion section contains the theoretical and managerial implications, limitations, and future research.

2. Theoretical background and hypotheses development

2.1 Sustainability orientation: from social entrepreneurship to hybrid organization

Several studies have traced the experiences of companies pursuing environmental and social sustainability in relation to social entrepreneurship (Diaz-Sarachaga and Ariza-Montes, 2022; Ramadani *et al.*, 2022; Kamaludin *et al.*, 2024; van Lunenburg *et al.*, 2020; Rahdari *et al.*, 2016; Haugh, 2007). In fact, interest in creating social values pursued by a company, or in other words, in organizations able to combine social aims and entrepreneurial approaches, has emerged since the nineties. This phenomenon was initially identified and is still generally defined with the term social entrepreneurship (Mair and Martí, 2006; Seelos and Mair, 2005), finding widespread diffusion, especially within the disciplines and theoretical approaches concerning the theme of entrepreneurship (Okpara and Halkias, 2011). However, even in the face of growing attention and a significantly broad scientific literature, social entrepreneurship continues to be a problematic concept for which scholars have not yet defined a coherent and complete theoretical framework (Certo and Miller, 2008; Weerawardena and Sullivan Mort, 2006).

Considering the different definitions provided by the scientific literature (Zahra *et al.*, 2009; Mair and Martí, 2006; Sharir e Lerner, 2006; Seelos and Mair, 2005), an individual or an organization that provides entrepreneurial responses to social and environmental needs is a subject that aims to combine the economic dimension, represented by the entrepreneurial approach, with the social dimension, relating to the attitude to solve social or environmental problems (Grieco *et al.*, 2013). Therefore, a substantial link between the entrepreneurial and social dimensions is necessary for an enterprise to be considered social. This means that entrepreneurial behavior is aimed primarily at pursuing social or environmental goals. From this perspective, social purpose represents a distinctive element of a company, and entrepreneurial activity plays an instrumental role in pursuing these objectives.

In order to frame the concept of social entrepreneurship in relation to other entities that pursue social goals, we can consider the classification proposed by Peredo and McLean (2006), which includes a double dimension: "Place of social goals," i.e. the role that the social objectives play concerning the overall objectives of the company and "Role of commercial exchange," i.e. the degree of openness of the company to the market and the possibility to distribute profits. Social entrepreneurship is placed in an intermediate position. It balances these dimensions: on the one hand, the company's aims are exclusively or mainly social, while on the other hand, the company conducts market activities, and profits are partly distributed to the entrepreneur and the subjects involved.

The consequences of this vision on company governance are highly significant. Social change is not implemented exclusively by nonprofit organizations. Indeed, the innovativeness of social entrepreneurship arises from the ability to design and implement hybrid organizational architectures-between profit, non-profit, and public actors-that are capable of providing solutions to social and environmental problems (Austin *et al.*, 2006). In fact, more and more companies are not adopting a pure non-profit model or form to pursue social or environmental objectives (Pache and Santos, 2013), bringing to light the so-called phenomenon of "hybrid organizations", which must navigate between different institutional logics, notably profit and non-profit motives (Mair *et al.*, 2015). Despite the primary goals of hybrid organizations being environmentally and socially oriented, hybrid entrepreneurs often perceive themselves as "business people" (Reynolds and Holt, 2021).

We know that most of the companies we analyze in our empirical research can be considered hybrid organizations with both business and sustainable orientations. Nevertheless, when comparing socially or environmentally oriented companies with those without this orientation, we identify the first group as sustainability-oriented (SO) companies and the second group as business-oriented (BO) companies. We want to highlight again that this labelling is due to the need to facilitate understanding, but SO ventures also have a business orientation.

2.2 Crowdfunding and social entrepreneurship: the theoretical framework

One of the main issues faced by organizations with a social orientation is their ability to raise financial resources (Schätzlein *et al.*, 2023). If, in the initial phases of starting the business, these organizations can rely on internal resources, it is in the growth phase, when new investments are necessary, that great difficulties in accessing the financial markets appear, compared to traditional or commercial enterprises (Siqueira *et al.*, 2018). The reasons for this criticality can be traced back to their identity profiles. Their predominantly or exclusively social purpose results, in fact, in a lack of tendency to maximize profits, which leads to a low capability to attract investors (Austin *et al.*, 2006). To answer the financial needs and support the logic of these organizations, both new institutions, such as social banks and social venture capital, and new financial instruments, such as social impact bonds, have emerged over time (Schätzlein *et al.*, 2023). In the context of these financial innovations, crowdfunding undoubtedly plays an important role (Allison *et al.*, 2015; Belleflamme *et al.*, 2014).

Recent studies have analyzed the role of crowdfunding platforms in social entrepreneurship, particularly for new ventures. There is no doubt that crowdfunding can compensate for financing problems typically new ventures (Mollick, 2014), especially sustainability-oriented ones (Bento *et al.*, 2019), can encounter and have to face.

Crowdfunding platforms can help social entrepreneurs, more than others, overcome the obstacles related to raising funds. This kind of company can face more difficulties in mobilizing financial resources because of the absence of or limited potential returns (Certo and Miller, 2008). As Certo and Miller (2008) pointed out, social ventures can benefit from enriching their social capital and enlarging their networks to gather resources. In other words, the more extensive the network, the higher the possibility of finding backers who sustain the social mission. From this perspective, crowdfunding platforms guarantee access to a significant number of people potentially interested in supporting social causes.

Moreover, crowdfunding platforms appear to represent a valid alternative because of their ability to lend legitimacy to new ventures (Taeuscher *et al.*, 2021). Taeuscher *et al.* (2021) pointed out that legitimacy is an issue upstream of gathering resources for all new ventures, not only for those with a social mission. New ventures are perceived as riskier, implying more difficulty earning trust when seeking resources (Fisher, 2020). In addition, social entrepreneurs generally need, more than others, to be legitimate in operating in the market (Dart, 2004), following "business rules." Companies with social missions must reassure and demonstrate their professional abilities to survive and develop (Gigliotti and Runfola, 2022). Crowdfunding platforms help companies gain legitimacy thanks to the information (Estrin *et al.*, 2022; Hoos, 2022) they spread to a large number of people (the "crowd") and the positive effect of succeeding in a crowdfunding campaign on consumer acceptance and brand attitude (Maier *et al.*, 2023). In this context, social entrepreneurs can benefit significantly from crowdfunding platforms, considering that they generally exploit fewer sources of financing than other companies. Despite these premises, it remains unclear whether these interests are reciprocal. In other words, while the benefit of crowdfunding campaigns for social ventures is quite evident, whether crowdfunders recognize the advantages of these companies in their investment decisions needs further investigation. As Bento *et al.* (2019) highlighted, the literature is still ambiguous in providing evidence of the relationship between a company's sustainable orientation and the success of its crowdfunding campaign.

Based on these considerations, we developed our empirical research and formulated hypotheses (presented in the following paragraph) to contribute to this ongoing debate.

2.3 Hypotheses development

The extant literature provides some initial insights into the possibility that SO companies succeed more than other companies in crowdfunding campaigns. Hörisch (2015) founded no positive connection between environmental orientation and crowdfunding success, whereas Calic and Mosakowski (2016) found that projects with a social orientation are more likely to succeed in crowdfunding than projects with no sustainability orientation. Similarly, Bento *et al.* (2019) suggested that a perceived sustainable mission positively influences a campaign's outcome and post-campaign survival. However, the literature does not agree on this relationship; therefore, it merits further analysis. The study's first objective is to evaluate whether companies' sustainability orientation can give them an advantage in succeeding in a crowdfunding campaign in terms of the percentage of the target reached (Hörisch, 2015; Calic and Mosakowski, 2016). Since the percentage funded depends on the total preset funding target, it might be incomplete. Therefore, we also considered the number of backers (regardless of how much they invested) to assess the advantage of raising funds.

Based on the previous considerations, we theorized the following hypothesis.

H1: SO companies have an advantage over BO companies in raising funds through crowdfunding campaigns

Some of the literature on crowdfunding campaigns focuses on the characteristics and motivations of crowdfunders (Estrin *et al.*, 2018). Interestingly, the literature provides findings on how people's psychographics and value orientation (i.e., egoistic versus altruistic orientation) can affect their investment decisions on crowdfunding platforms (Jiang *et al.*, 2021).

Mitra *et al.* (2022) find that material rewards (typical of equity crowdfunding) are negatively related to the willingness to contribute to a social entrepreneurship crowdfunding campaign. That is, crowdfunders who choose equity crowdfunding are more interested in material than natural rewards, which are typical of supporting prosocial causes (Mitra *et al.*, 2022). Moreover, Zhang and Chen (2019) point out the prevalence of self-orientation over orientation towards others when investing in crowdfunding campaigns, irrespective of the typology of projects and new ventures.

Thus, based on these results, we can hypothesize that SO can receive fewer funds from each investor who wants to minimize risk or maximize the material reward. The second hypothesis is as follows:

H2: The average investment raised through crowdfunding campaigns is lower for SO companies than for BO companies.

A final aspect that can be considered is the ability of social entrepreneurship experiences to involve many stakeholders (people, other organizations, local governments, etc.). These initiatives were created to respond to newly emerging needs or pre-existing social or environmental needs that could not be adequately satisfied by traditional or commercial companies. Thus, the ability to dialogue and include multiple stakeholders at the decision-making and operational levels represents a founding element of social entrepreneurship (McDermott, 2018; Lubberink *et al.*, 2018; Smith and Woods, 2015). The experiences of this particular orientation are numerous (Argyrou *et al.*, 2017; Bura and Reazania, 2016; Smith and Woods, 2015). This aspect is also reflected in sustainability-oriented companies' attitudes toward equity crowdfunding operations. In particular, the percentage of capital guaranteed to investors (often those with voting power) varied. Some initiatives may show greater closure to external investors and establish a low share of the overall capital allocated to similar operations. In this case, the company's control remains strictly in the hands of its founders. However, other initiatives may be more open to crowds, thus ensuring a higher share of capital. In the latter case, the company's governance becomes more participatory because of the people interested in the initiative. Therefore, considering the overall percentage of equity guaranteed to investors, we can hypothesize that the degree of openness of sustainability-oriented projects is more remarkable than that of business-oriented projects. Therefore, the third hypothesis is as follows:

H3: The percentage of equity offered is higher for SO companies than for BO companies.

3. Methodology

3.1 Sample

To answer these research questions and verify the related hypotheses, an empirical investigation was conducted by identifying a sample of Italian companies that used equity-based crowdfunding platforms to acquire financial resources. The decision to choose Italy as a field of observation comes from the diffusion and growth of financing operations and, most importantly, from the pioneering role played by this country in the regulation of equity-based crowdfunding compared to other national contexts (Cicchiello, 2020). Italy was the first country to introduce a specific regulatory framework for equity-based crowdfunding, and there are currently 48 portals authorized by Consob to conduct online fundraising activities (Giudici *et al.*, 2023).

Given the exploratory nature of the research, only the platform that has managed the largest number of fundraising operations in Italy thus far was selected (Giudici *et al.*, 2023). This platform was CrowdFundMe, which was founded in 2013, and became operational in 2016. It is currently one of the leading Italian crowdfunding platforms (Equity Crowdfunding, Real Estate Crowdfunding and Private Debt) and the only platform listed on the Italian Stock Exchange.

Considering the platform's structure, data were extracted from the crowdfunding project archive, which contains information related to funded and unfunded projects. Overall, 240 initiatives were consulted, which appeared to be "closed" on the date the database was created (February 2024). As five of these did not have complete information, the final sample consisted of 235 projects.

3.2 Measures and data gathering

For each project, the information available on the platform was acquired and organized into a database divided into different sections. The first section contained general data on the company's name, type, and location. The second section refers to the characteristics of the individual projects to be financed. It contains the following data: the closing date of the campaign, total funds raised, total number of investors, minimum subscription amount (i.e., minimum investment quota), pre-established financing target (i.e., objective that the company planned to achieve with the fundraising campaign), and the overall percentage of equity distributed to investors. The final section provides information on the contents of the proposed project.

From an in-depth analysis of the previous section, it was possible to distinguish between projects with purely market orientation and projects that were more oriented towards sustainability, with environmental or social values. The former are classified as business-oriented (BO), whereas the latter are sustainability-oriented (SO). Among these, a distinction was finally made between projects with environmental value (SOe) and those with social value (Sos). These labels were assigned according to the methodology adopted by Calic and Mosakowski (2016). In particular, they considered the Well-being Index (World Conservation Union), which is divided into human and ecosystem well-being. Human well-being considers the impact on "*health and population, wealth, knowledge and culture, community, and equity*". The enterprises that claimed to have an impact on one of these aspects of their project were considered SOs. The ecosystem's well-being considers the impact on "*land, water, air, species and genes, and resource use*". In these cases, we considered the companies in the sample to be SOe.

In particular, two authors analyzed the contents of the single projects separately, deciding on the nature of the proposal and defining the related labels (BO or SO). In the second phase, the results of this process were cross-referenced. When the decisions matched, the established label was maintained, whereas when discrepancies emerged, the third author decided on the classification of the projects and assigned the final label. In this process, only two projects had environmental and social values. Based on environmental prevalence, they were assigned to this subgroup.

Regarding the hypotheses, we identified variables suitable for measurement and testing (Tab. 1).

To measure the advantage of raising funds through crowdfunding campaigns (H1), we considered two variables: % funded (funds received/ funds target) and the number of investors for each project. Considering that the % funded could contain some bias related to dependence on the total pre-established financing target (the goal), we decided to add a second variable related to the crowdfunders who supported the project (irrespective of the subscription amount).

To test H2, we calculate the average investment, that is, the ratio between the funds received and the number of investors.

To validate H3, we consider the percentage of equity offered. The platform provides this value, which is the percentage of equity distributed to investors.

Tab. 1: Variables and measures for hypothesis testing

Hypothesis	Variable	Measure
H1	% founded	Funds received/funds target
	N. investors	The total number of investors
H2	Average investment	Funds received/total number of investors
H3	% Equity	Percentage of equity distributed to investors

Source: our elaboration

4. Results and discussion

4.1 Descriptive statistics

As highlighted above, the collected data referred to 235 equity crowdfunding projects with different characteristics. It is possible to identify at least three descriptive dimensions that outline the profile of similar initiatives: the nature of the company that developed the projects, the period during which these campaigns were closed, and the performance they achieved.

First, companies that use equity crowdfunding are innovative start-ups or SMEs. These typologies represented over 85% of the samples (Table 2).

Tab. 2: The number of projects by type of company

Company Type	Total		BO		SO	
Innovative Startup	139	59,1%	95	56,2%	44	66,7%
Innovative SME	61	26,0%	43	25,4%	18	27,3%
SME	20	8,5%	18	10,7%	2	3,0%
Startup	14	6,0%	12	7,1%	2	3,0%
Certified Incubator	1	0,4%	1	0,6%	0	0,0%
Total	235	100,0%	169	100,0%	66	100,0%

Source: our elaboration

The reason for this distribution can be found in the nature of the companies. First of all, the aggregation between startups and innovative SMEs is generally recognized, as the latter can be considered as a "second evolutionary stage" of innovative startups and having already passed the initial start-up phase, they are projected towards economic and organizational growth (Concetti *et al.*, 2023). Furthermore, several studies support the marked propensity of these companies to use similar financing approaches, highlighting the relationship between the identity characteristics of entrepreneurial initiatives and the activation of equity crowdfunding campaigns (Troise and Tani, 2020; Giraudo *et al.*, 2019). Finally, considering the nature of the proposed project, it is possible to underline, consistently with the literature (Horne and Fichter, 2022; Trautwein, 2021), how there is a greater propensity of startups and innovative SMEs to launch sustainability-oriented initiatives (SO). The data obtained confirmed these general trends.

With regard to the second aspect, the overall number of funded projects has shown substantial stability over the past few years (see Table 3).

Tab. 3: The number of projects by the closing date of the fundraising campaign

Year	Total		BO		SO	
2015	1	0,5%	0	0,0%	1	1,6%
2016	2	1,0%	2	1,5%	0	0,0%
2017	14	7,1%	11	8,1%	3	4,9%
2018	25	12,8%	21	15,6%	4	6,6%
2019	21	10,7%	11	8,1%	10	16,4%
2020	30	15,3%	22	16,3%	8	13,1%
2021	31	15,8%	18	13,3%	13	21,3%
2022	35	17,9%	23	17,0%	12	19,7%
2023	32	16,3%	23	17,0%	9	14,8%
2024(**)	5	2,6%	4	3,0%	1	1,6%
Total (*)	196	100,0%	135	100,0%	61	100,0%

(*) The overall number considers funded projects and does not include projects that have not reached the minimum funding target.
(**) The findings refer to January.

Source: our elaboration

In particular, after the initial start-up phase of the platform, from 2020 onwards, equity crowdfunding initiatives tend to remain stable. This trend may be due to two reasons: on the one hand, the continuous growth of startups and innovative SMEs, mainly due to the policies that have been introduced and supported by national governments (Biancalani *et al.*, 2022); on the other hand, the diffusion and relevance of this financing approach is assumed and will probably continue in the future, especially for startups and innovative SMEs (Tiberius and Hauptmeijer, 2021).

A final aspect that is explored in depth is the aggregate performance achieved by the equity crowdfunding projects present on the analyzed platform, regardless of whether they reach the financing target (Table 4).

Tab. 4: The performance indexes of equity crowdfunding projects

Index	BO	SO	SOe	SOs
Average funds raised (in euro)	353.316	562.226	657.059	239.795
Average number of investors (n.)	103	150	175	63
Average individual investment (in euro)	3.444	3.756	3.752	3.790
Average minimum investment quota (in euro)	645	990	968	1.067
Average investment target (in euro)	168.519	258.011	285.465	164.667
Average value financed on target (in %)	210%	218%	230%	146%
Average equity (in %)	7,17%	7,27%	7,45%	6,66%

Source: our elaboration

Overall, the best results are achieved by projects oriented towards sustainability (SO) and, in particular, by initiatives that show environmental value (SOe). On an average, these projects had the highest amount of funds raised (over 650 million) and the highest number of investors (175). Furthermore, despite having a higher average investment target, they present a level that exceeds this target (overfinancing), which is higher than that of the other types (230%). Finally, these projects ensure that investors have higher average corporate capital share (equity). Conversely, projects with social value (SOs) are at the opposite extreme; despite receiving a higher average individual investment and setting a more limited average target, they raise fewer funds, involve fewer investors, show the lowest rate of the financing target, and have a lower degree of capital openness (equity). In summary, based on the data presented, it is possible to state that sustainability-oriented (SO) projects achieve better performance than business-oriented (BO) projects, even if they show significant differentiation within them.

4.2 Hypotheses verification

To verify the research hypotheses, we performed all preliminary tests for the ANOVA analysis to check for significant differences between the two groups (SO vs. BO) in terms of the advantage of raising funds through crowdfunding campaigns (H1), average investment (H2), and the percentage of equity offered (H3). The variables did not follow a normal distribution. Therefore, we performed the Wilcoxon rank-sum (Mann-Whitney) test on Stata, a nonparametric test that allows us to compare two samples when the distribution is not normal.

Table 5 shows the test results comparing the four variables considered in the SO and BO companies.

These results indicate that a company's sustainable orientation can influence its pursuit of financial resources through crowdfunding platforms.

Tab. 5: Results of the Wilcoxon rank-sum (Mann-Whitney) test for the entire sample (grouping variable=sustainability or business orientation)

	Orientation	Rank sum	z	Prob > |z|
% Funded	SO	8,472.5	-1.462	0.1439
	BO	19,257.5		
N. investors	SO	8,886.5	-2.346	0.0190**
	BO	18,843.5		
Average investment	SO	8,305	-1.104	0.2697
	BO	19,425		
% Equity	SO	8,566	-1.661	0.0966*
	BO	19,164		

* p < 0.10, ** p < 0.05, *** p < 0.01

Source: our elaboration

H1 *(SO companies have an advantage over BO companies in raising funds through crowdfunding campaigns)* is confirmed when we consider the number of investors (p=0.0190), rather than the % funded (p =0.1439). Overfunded projects or the inability to reach a pre-established financial goal are not explainable by the sustainability orientation of the initiatives. Obviously, the percentage of the goal reached depends on the amount required (i.e., it is easier to reach 100% of 1,000 euros than 10,000 euros). Therefore, we also check H1 by examining the number of investors. In this case, the two groups differed significantly. SO companies are able to attract more people to support their projects than BO companies. This finding is consistent with those in the literature on crowdfunding and social entrepreneurship. These projects, in fact, can capture the investment intention of the "crowd" who expect to obtain a financial benefit through an equity investment in an innovative startup or SME. Simultaneously, they add to this effect (typical of SO and BO companies present on crowdfunding platforms) the engagement people can have in the social or environmental causes they propose. In other words, SO companies seem to offer investors both the financial advantages of equity crowdfunding and the advantages of contributing to social or eco-friendly projects. This explains why they had the highest number of backers.

However, we propose a second hypothesis related to the amount of money invested in each project *(H2: The average investment raised through crowdfunding campaigns is lower for SO companies than for BO companies)*: We tested whether SO companies attract more investors, but hypothesized that the average investment is inferior due to a possible higher perception of risk or a lower perception of revenue maximization. Nevertheless, this second hypothesis was not confirmed, and no significant difference was observed between the two groups (p=0.2697). This can be attributed to several factors. Among them, we assume that investors may not perceive a difference in the risk of investing in SO or BO or that an altruistic value has compensated for this perception. With the available information, it is difficult to draw conclusions; thus, this result merits further investigation in future research.

The test is significant (p=0.0966) for the third hypothesis *(H3: the percentage of equity offered is higher for SO companies than for BO companies)*. This result confirms that SO companies can engage more with crowds. These companies have a greater ability to open their capital to more comprehensive forms of participation. This is relevant when considering financing sources, such as crowdfunding, because it is the first sign of these companies' readiness for this alternative tool.

Although the proposed hypotheses did not concern the distinction between SOs and SOe, we also performed the Wilcoxon rank-sum (Mann-Whitney) test within SO companies, considering these two groups (Table 6).

The only significant result is related to the difference between the two groups regarding the number of investors (which, as seen in the descriptive statistics, is higher in the SOe).

This is consistent with the literature on sustainability, which confirms a greater focus on environmental issues than on social ones. Environmental issues have always received much more scientific and media coverage than social issues. This has captured more of the general public's attention and has led to greater awareness on the part of people, even when making investment choices in crowdfunding platforms.

Tab. 6: Results of the Wilcoxon rank-sum (Mann-Whitney) test for the SO sub-sample (grouping variable=social or environmental orientation)

	Orientation	Rank sum	z	Prob > |z|
% Founded	SOs	445	0.880	0.1439
	SOe	1,766		
N. investors	SOs	295.5	3.168	0.0015***
	SOe	1915.5		
Average investment	SOs	512	-0.145	0.8844
	SOe	1699		
% Equity	SOs	532	-0.452	0.6516
	SOe	1679		

* p < 0.10, ** p < 0.05, *** p < 0.01

Source: our elaboration

5. Conclusions

5.1 Theoretical implications

From a theoretical point of view, this article is placed in an organizational dimension (Schätzlein *et al.*, 2023) as it aims to investigate whether and how the characteristics of start-ups with a sustainability orientation influence their ability to fundraise through crowdfunding platforms. Considering the results obtained, at least three implications can be highlighted.

Firstly, in a logic of transnational comparison, the research brings new knowledge relating to the Italian context, highlighting the current role of crowdfunding platforms in financing organizations with a sustainable orientation (Estrin *et al.*, 2024; 2013).

Secondly, going into more detail, the results obtained place this research in the line of studies that consider the "*dual logic*" of organizations with an orientation towards sustainability (Schätzlein *et al.*, 2023) as an aspect that supports and favors the ability to raise financial resources through crowdfunding campaigns.

Finally, at a more in-depth level, the most original element is the evidence that initiatives oriented towards social and/or environmental sustainability benefit from an amplified "crowd effect" (a more significant number of investors), which appears to be composed, however, by people with a propensity to contribute fewer financial resources (less capital). In other words, if, on the one hand, it can be considered correct to say that these initiatives manage to raise awareness and involve a higher number of investors, on the other hand, the lower propensity of the latter to invest large amounts of financial resources must be recognized.

In summary, if, in the past, there was a tendency to relegate organizations with a sustainability orientation to a marginal position, the results of this study show that they currently represent an established reality, capable of raising financial resources and competing with "traditional" companies. Equity crowdfunding platforms have an extremely positive value in supporting these dynamics. Owing to the advantages they provide for both businesses and investors (expansion of the market, reduction of financing times, less bureaucratization, and direct relationships), these tools could become a concrete alternative to institutional financing channels. Therefore, combining these two dynamics could contribute to changing capitalism, with a greater centrality of investors and the recognition of fair rewards for projects that are capable of generating social change.

5.2 Managerial implications

In managerial terms, the implications are different. First, this study shows that for companies with a sustainability orientation, there are high growth opportunities in the field of online equity crowdfunding. It is therefore undoubtedly appropriate to increase orientation towards this financing approach by introducing adequate skills for managing relations with investors and intermediaries. Online platforms can develop this market simultaneously. For example, it would be appropriate to create specific sections addressing sustainability-oriented projects, differentiate current offers in the market, and obtain competitive advantages. Creating spaces for these initiatives could also be accompanied by the offering of specific services, leading to increased performance in terms of managed projects and funds raised. Finally, the last indication is aimed at business associations that could support companies in their fundraising journey through the development of specific assistance programs or even through the promotion of their proprietary platforms on which to place the offers of their associated companies.

5.3 Limitations and future research

Our explorative study can be a good starting point for future research, both because it provides the first insights into the topic analyzed and because of the limitations of empirical research.

Firstly, we considered only one crowdfunding platform, and this could have influenced our results because some of the platform's characteristics could have attracted specific kinds of investors or new ventures or "imposed" some limits or features. Future research could include the creation of a richer database fed by projects on other crowdfunding platforms.

Our research is based on the limited information that can be easily gathered on crowdfunding platforms. Research on funded companies and investors can be conducted to strengthen the results obtained or investigate the underlying dynamics more deeply.

It would be interesting to understand whether SO companies are able not only to raise funds through crowdfunding platforms but also to employ the funds effectively over time. Future research could analyze not only the survivor rate of these initiatives, but also all the organizational changes that have occurred since obtaining these funds (such as changes in business model, in the managerial skills needed and acquired, in the communication abilities towards investors and customers, and so on).

Finally, we ascertain that further studies on investors' motivation and demographic, psychographic, and wealth characteristics are needed to better understand the mechanisms underlying some investment decisions of crowdfunders.

References

ALLISON T.H., DAVIS B.C., SHORT J.C., WEBB J.W. (2015), "Crowdfunding in a prosocial microlending environment: Examining the role of intrinsic versus extrinsic cues", *Entrepreneurship Theory and Practice*, vol. 39, n. 1, pp. 53-73.

ARGYROU A., BLOMME R.J., LAMBOOY T., KIEVIT H. (2017), "Unravelling the participation of stakeholders in the governance models of social enterprises in Greece", *Corporate Governance: The International Journal of Business in Society,* vol. 17, n. 4, pp. 661-677.

AUSTIN J., STEVENSON H., WEI-SKILLERN J. (2006), "Social and commercial entrepreneurship: Same, different, or both?", *Entrepreneurship Theory and Practice*, vol. 31, n. 1, pp. 1-22.

BELLEFLAMME P., LAMBERT T., SCHWIENBACHER A. (2014), "Crowdfunding: Tapping the right crowd", *Journal of Business Venturing,* vol. 29, n. 5, pp. 585-609.

BENTO N., GIANFRATE G., THONI M.H. (2019), "Crowdfunding for sustainability ventures", *Journal of Cleaner Production*, vol. 237, 117751.

BIANCALANI F., CZARNITZKI D., RICCABONI M. (2022), "The Italian start up act: A microeconometric program evaluation", *Small Business Economics,* vol. 58, n. 3, pp. 1699-1720.

BURGA R., REZANIA D. (2016), "Stakeholder theory in social entrepreneurship: a descriptive case study", *Journal of Global Entrepreneurship Research*, n. 6, pp. 1-15.

CALIC G., MOSAKOWSKI E. (2016), "Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success", *Journal of Management Studies*, vol. 53, n. 5, pp.738-767.

CERTO S.T., MILLER T. (2008), "Social entrepreneurship: Key issues and concepts", *Business Horizons*, vol. 51, n. 4, pp. 267-271.

CICCHIELLO A.F. (2020), "Harmonizing the crowdfunding regulation in Europe: need, challenges, and risks", *Journal of Small Business and Entrepreneurship*, vol. 32, n. 6, pp. 585-606.

CONCETTI A., AURILIA M., AVERSANO A.M., DANEI M.V., FORESTIERI S., GIGANTE E.A., GIORGIO F., PARISINI E., SANAPO I. (2023), *Relazione Annuale al Parlamento sullo stato di attuazione delle policy in favore delle startup e PMI innovative,* Edizione 2023.

CUCINO V., DI MININ A., FERRUCCI L., PICCALUGA A. (2021), "L'intraprendenza contagiosa", in Cucino V., Di Minin A., Ferrucci L., Piccaluga A., (edited by), *La buona impresa. Storie di startup per un mondo migliore,* Il Sole 24 Ore.

D'AGOSTINO L.M., ILBEIGI A., TORRISI S. (2024), "The role of human capital in Italian equity crowdfunding campaigns", *The International Journal of Entrepreneurship and Innovation*, vol. 25, n. 1, pp. 45-55.

DART R. (2004), "The legitimacy of social enterprise", *Nonprofit management and leadership,* vol. 14, n. 4, pp. 411-424.

DIAZ-SARACHAGA J.M., ARIZA-MONTES A. (2022), "The role of social entrepreneurship in the attainment of the sustainable development goals", *Journal of Business Research,* n. 152, pp. 242-250.

ESTRIN S., KHAVUL S., KRITIKOS A.S., LÖHER J. (2024), "Access to digital finance: Equity crowdfunding across countries and platforms", *Plos one,* vol. 19, n. 1, e0293292.

ESTRIN S., KHAVUL S., WRIGHT M. (2022), "Soft and hard information in equity crowdfunding: network effects in the digitalization of entrepreneurial finance", *Small Business Economics,* vol. 58, n. 4, pp. 1761-1781.

ESTRIN S., GOZMAN D., KHAVUL S. (2018), "The evolution and adoption of equity crowdfunding: entrepreneur and investor entry into a new market", *Small Business Economics,* vol. 51, pp. 425-439.

ESTRIN S., MICKIEWICZ T., STEPHAN U. (2013), "Entrepreneurship, social capital, and institutions: Social and commercial entrepreneurship across nations", *Entrepreneurship Theory and Practice*, vol. 37, n. 3, pp. 479-504.

FISHER G. (2020), "The complexities of new venture legitimacy", *Organization Theory*, vol. 1, n. 2, 2631787720913881.

GIGLIOTTI M., RUNFOLA A. (2022), "A stakeholder perspective on managing tensions in hybrid organizations: Analyzing fair trade for a sustainable development", *Business Strategy and the Environment,* vol. 31, n. 7, pp. 3198-3215.

GIRAUDO E., GIUDICI G., GRILLI L. (2019), "Entrepreneurship policy and the financing of young innovative companies: Evidence from the Italian Startup Act", *Research Policy*, vol. 48, n. 9, 103801.

GIUDICI G., CONTI M., AROSIO F., BARTOLI N., CORBARI N., DECIO F., FIGARI BARBERIS G., ITALIANO D., MAZZINI M., MOR I., MUSSO A., VRANA C. (2023), "8° Report italiano sul CrowdInvesting", Politecnico di Milano.

GRIECO C., IASEVOLI G., MICHELINI L. (2013), "Impresa sociale e creazione di valore: una tassonomia dei modelli di misurazione dell'impatto sociale sul territorio (Social enterprise and value creation: a taxonomy of models for measuring impact on the ecosystem)", *Sinergie Italian Journal of Management*, n. 31, May-Aug, pp. 61-82.

HAUGH H. (2007), "New strategies for a sustainable society: The growing contribution of social entrepreneurship", *Business Ethics Quarterly*, vol. 17, n. 4, pp. 743-749.

HOOS F. (2022). "Showing off or showing impact? The joint signalling effect of reputation and accountability on social entrepreneurs' crowdfunding success", *Management Accounting Research*, vol. 54, 100778.

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*, vol. 107, pp. 636-645.

HORNE J., FICHTER K. (2022), "Growing for sustainability: Enablers for the growth of impact startups-A conceptual framework, taxonomy, and systematic literature review", *Journal of Cleaner Production,* vol. 349, 131163.

JIANG H., WANG Z., YANG L., SHEN J., HAHN J. (2021), "How rewarding are your rewards? A value-based view of crowdfunding rewards and crowdfunding performance", *Entrepreneurship Theory and Practice,* vol. 45, n. 3, pp. 562-599.

KAMALUDIN M.F., XAVIER J.A., AMIN M. (2024), "Social entrepreneurship and sustainability: A conceptual framework", *Journal of Social Entrepreneurship*, vol. 15, n. 1, pp. 26-49.

LUBBERINK R., BLOK V., VAN OPHEM J., VAN DER VELDE G., OMTA O. (2018), "Innovation for society: Towards a typology of developing innovations by social entrepreneurs", *Journal of Social Entrepreneurship,* vol. 9, n. 1, pp. 52-78.

VAN LUNENBURG M., GEUIJEN K., MEIJER A. (2020), "How and why do social and sustainable initiatives scale? A systematic review of the literature on social entrepreneurship and grassroots innovation", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations,* vol. 31, n. 5, pp. 1013-1024.

MAIER L., BACCARELLA C.V., BLOCK J.H., WAGNER T.F., VOIGT K.I. (2023), "The legitimization effect of crowdfunding success: a consumer perspective", *Entrepreneurship Theory and Practice,* vol. 47, n. 4, pp. 1389-1420.

MAIR J., MAYER J., LUTZ E. (2015), "Navigating institutional plurality: Organizational governance in hybrid organizations", *Organization Studies,* vol. 36, n. 6, pp. 713-739.

MAIR J., MARTÍ I. (2006), "Social entrepreneurship research: A source of explanation, prediction and delight", *Journal of World Business*, vol. 41, n. 1, pp. 36-44.

McDERMOTT K., KURUCZ E.C., COLBERT B.A. (2018), "Social entrepreneurial opportunity and active stakeholder participation: Resource mobilization in enterprising conveners of cross-sector social partnerships", *Journal of Cleaner Production,* vol. 183, pp. 121-131.

MITRA P., JANSSEN F., HERMANS J., KICKUL J. (2022), "Social entrepreneurial crowdfunding: Influence of the type of rewards and of prosocial motivation on the crowds' willingness to contribute", *Entrepreneurship and Regional Development*, vol. 34, n. 9-10, pp. 1001-1024.

MOLLICK E. (2014), "The dynamics of crowdfunding: An exploratory study", *Journal of Business Venturing*, vol. 29, n. 1, pp. 1-16.

OKPARA J.O., HALKIAS D. (2011), "Social entrepreunership: an overview of its theoretical evolution and proposed research model", *International Journal of Social Entrepreunership and Innovation*, vol. 1, n. 1, pp. 4-20.

PACHE A.C., SANTOS F. (2013), "Inside the hybrid organization: Selective coupling as a response to competing institutional logics", *Academy of Management Journal*, vol. 56, n. 4, pp. 972-1001.

PEREDO A.M., McLEAN M. (2006), "Social entrepreneurship: A critical review of the concept", *Journal of World Business*, vol. 41, n. 1, pp. 56-65.

RAHDARI A., SEPASI S., MORADI M. (2016), "Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises", *Journal of Cleaner Production,* vol. 137, pp. 347-360.

RAMADANI V., AGARWAL S., CAPUTO A., AGRAWAL V., DIXIT J.K. (2022), "Sustainable competencies of social entrepreneurship for sustainable development: Exploratory analysis from a developing economy", *Business Strategy and the Environment*, vol. 31, n. 7, pp. 3437-3453.

REYNOLDS N.S., HOLT D. (2021), "Sustainable development and profit? A sensemaking perspective on hybrid organisations and their founders", *Business Strategy and the Environment*, vol. 30, n. 4, pp. 2147-2159.

SCHÄTZLEIN L., SCHLÜTTER D., HAHN R. (2023), "Managing the external financing constraints of social enterprises: A systematic review of a diversified research landscape", *International Journal of Management Reviews*, vol. 25, n. 1, pp.176-199.

SEELOS C., MAIR J. (2005), "Social entrepreneurship: Creating new business models to serve the poor", *Business Horizons*, n. 48, pp. 241-246.

SHARIR M., LERNER M. (2006), "Gauging the success of social ventures initiated by individual social entrepreneurs", *Journal of World Business,* vol. 41, n. 1, pp. 6-20.

SIQUEIRA A.C.O., GUENSTER N., VANACKER T., CRUCKE S. (2018), "A longitudinal comparison of capital structure between young for-profit social and commercial enterprises", *Journal of Business Venturing*, vol. 33, n. 2, pp. 225-240.

SMITH L., WOODS C. (2015), "Stakeholder engagement in the social entrepreneurship process: identity, governance and legitimacy", *Journal of Social Entrepreneurship*, vol. 6, n. 2, pp. 186-217.

TAEUSCHER K., BOUNCKEN R., PESCH R. (2021), "Gaining legitimacy by being different: Optimal distinctiveness in crowdfunding platforms", *Academy of Management Journal*, vol. 64, n. 1, pp. 149-179.

TIBERIUS V., HAUPTMEIJER R. (2021), "Equity crowdfunding: Forecasting market development, platform evolution, and regulation", *Journal of Small Business Management,* vol. 59, n. 2, pp. 337-369.

TRAUTWEIN C. (2021), "Sustainability impact assessment of start-ups-Key insights on relevant assessment challenges and approaches based on an inclusive, systematic literature review" *Journal of Cleaner Production*, vol. 281, 125330.

TROISE C., TANI M. (2020), "Exploring entrepreneurial characteristics, motivations and behaviours in equity crowdfunding: some evidence from Italy", *Management Decision*, vol. 59, n. 5, pp. 995-1024.

VALENZA G., BALZANO M., TANI M., CAPUTO A. (2023), "The role of equity crowdfunding campaigns in shaping firm innovativeness: evidence from Italy", *European Journal of Innovation Management*, vol. 26, n. 7, pp.86-109.

WEERAWARDENA J., SULLIVAN MORT G. (2006), "Investigating social entrepreneur-ship: A multidimensional model", *Journal of World Business,* vol. 41, n. 1, pp. 21-35.

ZAHRA S.A., GEDAJLOVIC E., NEUBAUM D.O., SHULMAN J.M. (2009), "A typology of social entrepreneurs: Motives, search processes and ethical challenges", *Journal of Business Venturing*, n. 24, pp. 519-532.

ZHANG H., CHEN W. (2019), "Backer motivation in crowdfunding new product ideas: is it about you or is it about me?", *Journal of Product Innovation Management,* vol. 36, n. 2, pp. 241-262.

Academic or professional position and contacts

Luca Ferrucci
Full Professor of Management
University of Perugia - Italy
e-mail: luca.ferrucci@unipg.it

Marina Gigliotti
Associate Professor of Management
University of Perugia - Italy
e-mail: marina.gigliotti@unipg.it

Antonio Picciotti
Associate Professor of Management
University of Perugia - Italy
e-mail: antonio.picciotti@unipg.it

sinergie
italian journal of management

ISSN print 0393-5108
ISSN online 2785-549X
DOI 10.7433/s126.2025.07
pp. 145-163

FONDAZIONE CUEIM

S I M A
Italian Society of MANAGEMENT