# ARTICLE

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# Effects of social influence on crowdfunding performance: implications of the covid-19 pandemic

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By analyzing a comprehensive dataset of 467 crowdfunding campaigns from the Spanish platform Goteo over the period 2019-2020, our article empirically examines the impact of COVID-19 outbreak on the crowdfunding projects performance. In light of the close link between social networks and crowdfunding, we provide evidence that the strength of the social influence on the crowdfunding campaign's performance has changed in this pandemic period. Our results show that the founder's dynamism and the number of comments exchanged between stakeholders had a stronger impact on the crowdfunding performance during the COVID-19 crisis. We also find that investors, during this period, are more inclined to contribute to social projects with small amounts. The study findings can serve as an interesting guide for entrepreneurs, policy makers and platform managers to improve the crowdfunding performance.

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## Introduction

lobal financial and economic crises have adversely affected many parts of the world, severely affecting the ability of governments to respond to the urgent needs of local communities. In this context of crisis, traditional sources of financing are difficult to mobilize where the lack of liquidity affects all agents such as the State, companies, households, and financial institutions. The entrepreneurial experience therefore finds it difficult to raise capital for the realization of its project. Faced with these difficulties in raising funds through traditional funding channels, a new source of funding—called crowdfunding -has emerged as a major force in financing businesses. By soliciting individuals to finance projects via the Internet, this fundraising mechanism contributes to economic empowerment and democratic transformation of the financial sector (Block et al., 2018). Crowdfunding has grown very rapidly during the COVID-19 crisis. As the world grapples with this pandemic, crowdfunding offers a dynamic opportunity to understand relief needs locally and public responses globally. In fact, in 2020, in Europe, 1.02 billion euros was collected on crowdfunding platforms, representing a 62% growth compared to 2019. Crowdfunding platforms were able to mobilize during the crisis with 115,616 financed projects (annual barometer of crowdfunding in France).

Unlike other traditional funding sources, the interactions between entrepreneurs and potential investors in crowdfunding are indirect. Donors fail to assess the reputation of project promoters and the quality of the products offered (Thies et al., 2016). This affirms the importance of the role of social media in building the beliefs of potential investors in the fundraising process. In online investments, social influence via social media could have a crucial role in engaging investors by influencing their financing decisions (Snijders and Helms, 2014; Zhang et al., 2022). The apparent importance of social networks in crowdfunding has been marked in previous work. Some researchers show that the crowdfunding campaigns performance is favored by the number of subscribers on the project leader's social networks. (Zheng et al., 2014; Chung et al., 2021; Zhang et al., 2022). Others suggest that the number of shared project reviews drives funders to invest in projects (Thies et al., 2016; Bi et al., 2017). Based on a dataset of 467 crowdfunding campaigns launched on the Spanish platform Goteo during the pre-pandemic (January 2019-January 2020) and pandemic period (February 2020-December 2020), this research confirms the importance of the role of social influence in fundraising results. We first propose to study the impact of other social influence factors of social networks, such as founder attributes, on fundraising performance. In a second step, we focus on how previously identified relationships changed during the COVID-19 crisis (i.e. Conlon and McGee, 2020; Goodell and Huynh, 2020).

Following this introduction, our article reviews the literature on crowdfunding campaign performance and social influence. On this basis, it presents the research hypotheses to be tested. The research design, data and measures are developed in the third section. Section "Discussion of results" illustrates the results, while the last section presents the main conclusions of this study.

### Literature review and research hypotheses

**Crowdfunding performance**. Crowdfunding campaigns are not equal in terms of their chances of success. Founders must therefore provide attractive information and communicate effectively with potential investors in order to attract audience (Beier and Wagner, 2014). The ability to meet fundraising goals within a limited timeline is considered as crowdfunding performance (Allison et al., 2017). Some previous studies adopt two parameters to measure the performance of crowdfunding namely

the funding rate and the number of donors (Vulkan et al., 2016; Lukkarinen et al., 2017; Vismara, 2016). Crowdfunding campaigns are more likely to succeed in fundraising when they manage to attract both a large number of investors and a large amount of funds (Lukkarinen et al., 2017). Other studies consider the campaigns success (the project has raised at least the funding goal) as a proxy for the crowdfunding performance (Mollick, 2014; Colombo et al., 2015). The factors influencing the performance of crowdfunding are the subject of several in-depth studies (Pyayt et al., 2019; Rose et al., 2021; Zhang et al., 2020a). Indeed, the success of crowdfunding projects is favored by active communications with platform members (Xiao et al., 2014; Zhang et al., 2022), geographic factors (Mollick 2014; Kang et al., 2016), project description (Greenberg et al., 2013), linguistic style (Parhankangas and Renko, 2017), the number of early contributors and the content of project updates (Kuppuswamy and Bayus, 2015). Some studies also claim that semantic text in crowdfunding presentations, leveraged to describe and update campaigns, is associated with greater success (Anglin et al., 2018). Mollick (2014) and Mitra and Gilbert (2014) indicate that certain project characteristics such as the duration of fundraising and the target amount are detrimental factors to campaign performance. The importance of social media in crowdfunding has prompted crowdfunding platforms to develop social media integration functionality. This allows entrepreneurs to expose their projects to more potential investors and join their social media accounts (Hong et al., 2018; Chung et al., 2021).

The role of social influence on the crowdfunding performance is only addressed by a few studies. Its deserves to be studied by further research (Hong et al., 2018).

Social influence. Social influence is defined as "the change in feelings, thoughts, communication or behavior of people resulting from the feelings, thoughts, communication or behavior of one or more other individuals" (Kim and Hollingshead, 2015). It constitutes a process of interaction and negotiation which allows the standardization of behavior and social innovation. It plays a crucial role in investing in forms of general persuasion of respect for social norms and identification with peers (Dahl, 2013). Classical literature classifies social influence as normative and informative influence. The first is to conform to the expectations of others (Deutsch and Gerard, 1955). "Identification is an important process of normative influence, emerging when behavior is assembled into a satisfying self-defining relationship between the adopting influencer and others" (Kelman, 1958). Informative influence consists of influencing a person to accept information obtained from another as proof of reality (Deutsch and Gerard, 1955). When influence is perceived as an improvement in information about services or products, it can work through the process of internalization (Burnkrant and Cousineau, 1975).

Social interaction models assert that individual choices are related to both individual incentives, preferences and expectations of others.

Crowdfunding, as an emerging practice, has led to work on the financing behavior of individuals (Cecere et al., 2017; Chung et al., 2021). These works analyze the influence of the funding decisions of others on the behavior of funders by adopting a dynamic perspective (Chung et al., 2021; Zhang et al., 2022).Crowdfunding thrives in part through social interaction. Social influence thus plays a specific role in shaping donor behavior.

Some studies prove that the number of followers of entrepreneurs (Liu et al., 2021) and the number of project reviews shared on social networks are a significant predictor of crowdfunding performance (Thies et al., 2016).

*Project initiator's digital reputation.* Social influence theories claim that reputation, one of the determinants of social influence, represents a manifestation of source strength (Latane, 1981). Some studies confirm that reputation is particularly critical in online investment applications and transactions (Dellarocas, 2003; Tang et al., 2012). Dellarocas (2001) considers past behavior as a confidence predictor of future behavior. He claims that social profile that mentions indicators of past behavior can constitute a form of "digital reputation". We consider, in our work, the digital reputation of the project initiator as the information recording the founder past actions in his profile of the social network, in particular the number of followers and the dynamism of the founder.

The gain of followers is a motivation for a user's participation in social networks to mark his influence in the virtual environment. Relationships between followers create social bonds between them. "The number of followers of the user can thus reflect his social resources and constitute a signal of notoriety which can have an influence on potential investors" (Chung et al., 2021). By studying the links of campaign owners with social networks, Zhang et al. (2022) argue that campaigns launched by project initiators with more social media connections are more likely to achieve their fundraising goals. Mollick (2014), Zheng et al. (2014) and Chung et al. (2021) reveal, in the context of crowdfunding, that consumer investment decisions are positively affected by the number of subscribers of the project initiator. In line with this work, we expect that project initiators with more subscribers are more likely to have successful crowdfunding campaigns. Thus, we propose our first hypothesis:

H1: A project initiator's number of followers in social networks is positively linked to crowdfunding campaigns performance

Social network users post information to build a better social image which leads to greater "social acceptance" (Toubia and Stephen, 2012). Thanks to the information posted on social networks, the public can read the posters. Individuals tend to trust someone they know before and interact with often. As a result, the sending of messages promotes the shaping of the digital reputation of users and favors their transactions with others (Tan et al., 1998). Previous studies claim that the volume of a user's publications on social networks is used to predict their social influence (Bakshy et al., 2011; Liu et al., 2021). In the context of crowdfunding, the dynamism of the project leader on social networks can shape his digital reputation and thus influence the decisions of potential funders. Liu et al. (2021) argue that potential contributors rely on founder profile attributes as an assessment of the project initiator's digital reputation to make better funding decisions, which could ultimately influence the performance of crowdfunding campaigns. We therefore expect that projects initiators active on social networks are more likely to have campaigns with better performance. Thus, we propose our second hypothesis:

H2: A project initiator's dynamism in social networks is positively linked to crowdfunding campaigns performance

*Communication strategy*. Communication is a possible means of promoting harmonious social and inter-individual relations. It is a source of pressure, influence, and manipulation. This influence is not a passive one-way process but a constructive process in which individuals or groups, who enter into a relationship, influence each other. The social interactions created during crowdfunding motivate visitors to crowdfunding platforms to feel connected to like-minded project initiators. Maintaining interpersonal connectivity will increase the likelihood that the potential funder will identify with the crowdfunding community (Gerber et al., 2012). Tafesse (2021) examines the importance of creator communication strategy on campaign success from a large

sample of rewards-based crowdfunding campaigns hosted on kickstarter. Additionally, interactions between participants in crowdfunding communities foster a sense of community belonging among contributors, which in turn may improve identification (Xu et al., 2016). Crowdfunding platforms drive online interactions between project starters and potential investors in the comments section. The exchange of comments between project promoters and potential investors provides additional information on the projects (Block et al., 2018). Other potential investors can, in turn, improve the interactivity and quality of communication through the additional information shared (Wang et al., 2017). Courtney et al. (2017) specify that the probability of success of a campaign depends on the number of comments exchanged between project leaders and potential investors. Based on these studies, we argue that comments can improve the performance of crowdfunding campaigns and therefore propose to test the following hypothesis:

H3: The number of comments exchanged between project creators and potential investors is positively linked to crowdfund-ing campaigns performance

Epidemic context. COVID-19 is the world's first deadly pandemic after more than a century since the "Spanish flu". This outbreak occurred in late 2019 in China and quickly (in less than three months) it spread across the world, causing large numbers of infections and deaths in more than 200 countries. The novel coronavirus (COVID-19) epidemic has had dramatic economic effects. This context of extreme uncertainty, characterized by market crashes (i.e. Sansa, 2020; Akhtaruzzaman et al., 2020; Aslam et al., 2020; Zhang et al., 2020b; Baker et al., 2020), has affected also the availability of entrepreneurial sources of funding for start-ups and small and medium-sized enterprises (i.e. Wenzel et al., 2020) including our strong crowdfunding community. It has changed the behavior of investors by directing them towards safer types of financial investments (i.e. Ortmann et al., 2020; Papadamou et al., 2020; Bu et al., 2020; Bansal et al., 2019). In order to verify if the social influence that contributed to the improvement of the crowdfunding projects performance before COVID-19 is the same today, we propose our fourth hypothesis:

H4: The COVID-19 pandemic has changed the main drivers of the crowdfunding campaigns performance

### **Research design**

**Research context and data collection**. We conduct our empirical research on Goteo, which is a crowdfunding platform intended primarily for socially engaged projects in Spain. This platform uses individual rewards and shared returns as consideration. It offers two financing rounds of 40 days each. The first is for the essential budget requested by the project initiator, and the second is a trick to collect an optimal sum. Goteo opts for the "all or nothing" model: if the funding objective is not reached, the project is considered a failure and the investors recover their contributions (Lagazio and Querci, 2018).

We have gathered a manually collected dataset of 467 crowdfunding campaigns launched on the Spanish platform Goteo. Projects in our sample are covered for their full life cycle between January 2019 and December 2020. Specifically, our dataset includes 253 projects (i.e. 228 successful projects and 25 unsuccessful funded projects) during the pre-pandemic period (January 2019–January 2020) and 214 projects (i.e. 194 successful projects and 20 unsuccessful funded projects) during the pandemic period (February 2020–December 2020). Our sample is representative since it includes all the projects shared on the Goteo platform during the period of our study (Table 1).

Table 1 Sample characteristics.					
Campaign start period	Number of campaigns	Successful campaigns (%)	Total amount raised (€)		
Pre-COVID-19 period	253	90.11	1,996,562		
COVID-19 period	214	90.65	2,128,943		
Total	467		4,125,505		
Source: Author.					

### Measures

Dependent variables. Referring to previous studies, we measured our dependent variable, namely the performance of crowdfunding campaigns, through three measures (Lukkarinen et al., 2017; Ahlers et al., 2015; Vismara, 2016, 2018; Vulkan et al., 2016). The first dependent variable, the number of investors, is a count variable that mentions the number of contributors at the end of each campaign. Raising a significant number of backers is an essential key to successful crowdfunding (Lukkarinen et al., 2017; Calic and Mosakowski, 2016). We opted for a logarithmic transformation of the number of investors, to compensate for its asymmetry. Fundraising success is our second dependent variable. This is a dummy variable that indicates the outcome of project financing. This variable equals one if the project raised at least the necessary funds on time and zero if the project could not meet the minimum funding goal. The third dependent variable is the funding rate. It represents the amount of money raised by the campaign compared to the amount of money requested by the project initiator.

*Explanatory variables.* The data for our study was collected directly from the goteo.org platform. Data specific to our independent metrics was collected from project presentations shared on the platform. We measured the digital reputation of the project initiator by the number of his followers and his dynamism on social networks. We used the number of followers (H1), the dynamism of the founder on social networks (H2), as a measure of the project initiator's digital reputation and the number of comments (H3) as a measure of the communication strategies of the founder.

*Control variables.* We propose control variables to account for other factors that, through previous studies, may contribute to crowdfunding performance. We propose four control variables in our analyses: size (to measure the target capital), updates (to count the number of updates shared by the founder), covid (to indicate the launch period of the project) and social (to assess the impact of social typology on project performance).

Table 2 presents a description of the variables of our study

## **Discussion of results**

The descriptive statistics of the full sample and the subsample (projects launched only during the epidemic period) are presented in Table 3.

Tables 4a and 4b show the correlation matrix of the independent variables for the full sample and the subsample, respectively. According to these two tables, the coefficients do not seem to have a strong correlation between the variables, whose threshold is <0.8 (Kline, 2011).

As part of the data analysis, we performed a negative binomial regression for the number of investors (the natural logarithm) who funded the project using (Model 1). Next, we estimated the models with logistic regression for the success of crowdfunding campaigns using a dichotomous measure of fundraising success (Model 2), equal to 1 for projects that succeeded in raising at least their fundraising goals and zero otherwise. Finally, we performed

an OLS regression of the funding rate (in %) of a project at the end of its fundraising period (model 3). Table 5 represents the regressions of our three research models.

Our results show that the digital reputation of the project initiator is positively related to the crowdfunding campaign performance. Precisely, in accordance with our H1, the number of followers of the founder has a positive impact on the number of investors (model 1, coefficient = 0.2758, significant at 1%), the probability of campaign success (model 2, coefficient = 1.8220, significant at 5%) and the financing rate (model 3, coefficient = 0.0999, significant at 10%). We find, in addition to the project initiator's number of followers, statistically significant empirical evidence that the founder's social media dynamism, the second measure of the founder's digital reputation, is positively correlated with the crowdfunding campaign performance. More precisely, in all our model specifications, the dynamism of the founder on social networks is always significant (Model 1, coefficient = 0.1654, significant at 5%; Model 2, coefficient = 3.1482; Model 3, coefficient = 0.3205, both significant at 1%). Therefore, H2 is also supported. Communication strategies are also positively related to fundraising performance (H3). The results of our regressions show that the coefficients of the number of comments exchanged between project leaders and potential investors are positively related to the number of investors (model 1, coefficient = 0.0345, significant at 1%), to the probability of success of the campaign (model 2, coefficient = 0.6849, significant at 1%) and the financing rate (model 3, coefficient = 0.0162, significant at 1%).

For the control variables, we find that investors tend to invest in realistic projects, not very complex and therefore have low objectives (model 1). This negative link between the number of investors and the project size is confirmed by Petitjean (2017) and Davies and Giovannetti (2018). In addition, our results reveal that update sharing is positively correlated with the number of investors (model 1). This finding supports the study of Yeh et al. (2019) and Petitjean (2017). From model 2, we find that projects that register during the covid-19 pandemic period are less likely to be successful in fundraising.

Our fourth research hypothesis (H4) concerns only the epidemic period, since we aim to analyze the tangible implications of the COVID-19 pandemic on the crowdfunding campaigns performance. To do this, we re-estimated our research models on a sub-sample made up of projects launched only during the epidemic period (Table 6).

By analyzing the regression coefficients and comparing the pre-COVID-19 period and the COVID-19 period, our results show that the crowdfunding performance no longer depends on the number of the founder's followers. Thus Hypothesis H1 was not supported. Concerning the dynamism of the founder (H2) and the number of comments posted (H3), we notice an increase in the incidence of these variables on the crowdfunding campaigns performance. In this context of uncertainty, investors need additional information on projects. Thus, a dynamic founder in social media increases the chances of having a large number of contributors (Model 1, coefficient = 0.2636, significant at 5%), successful fundraising on time (Model 2, coefficient = 0.3378, significant at 1%) and a high financing rate (Model 3,

Table 2 Variable definition	ns.
Variable	Descriptions
Dependent variable	
Number of Investors	The number of contributors at the end of the fundraising
Success	Dummy variable equal to 1 if the project has collected at least the requested funding, and 0 otherwise
Fundig rate	Amount of money raised by the campaign/the funding objective requested by the founder
Explanatory variables	
Followers	The natural logarithm of the number of the initiator project's followers
Founder's dynamism	Dummy variable equal to 1 if the project initiator was active on social media and 0 otherwise
Comment	Number of comments on the project page
Control variables	
Size	The natural logarithm of the fundraising goal
Updates	Dummy variable equal to 1 if the founder was shared additional information about their project, and 0 otherwise
Covid	Dummy variable equal to 1 if the project has been launched during the outbreak, and 0 otherwise
Social	Dummy variable equal to 1 if the project type is social, and 0 otherwise
Source: Author.	

<b>Table 3 Descriptive</b>	statistics	of the	full	sample and the	
subsample.					

Variable	Full sample			Subsample			
	Mean	Min	Max	Mean	Min	Max	
Dependent varia	ble						
Number of	65.79	0	312	67.22	0	254	
Investors							
Success	0.90	0	1	0.90	0	1	
Fundig rate	1.24	0	3.10	1.23	0	2.5	
Explanatory vari	ables						
Followers	2.60	1.32	3.76	2.58	1.67	3.76	
Founder's	0.82	0	1	0.82	0	1	
dynamism							
Comment	9	0	32	8.97	0	21	
Control variables							
Size	3.36	2.07	4.65	3.40	2.30	4.39	
Updates	0.51	0	1	0.55	0	1	
Covid	0.45	0	1	-	-	-	
Social	0.18	0	1	0.12	0	1	

The first dependent variable, namely the number of investors at the end of the fundraising, varies between 0 and 312 contributors. The success of crowdfunding campaigns, being the second dependent variable, shows that most of urs ample was successful in fundraising (mean = 0.9). Our sample has an average funding rate of 1.24 for the total sample and 1.23 for the sub-sample. Regarding the explanatory variables, urs ample was that the entrepreneur has about 400 Facebook subscribers on average. About 82% of the entrepreneurs in urs ample are dynamic on social networks. The number of comments posted varies between 0 and 32 for our full sample and between 0 and 21 for our sub-sample. For the control variables, the average size is 2290 euros for our overall sample and 2510 euros for our sub-sample. About half of the pandemic period represent 45% of our total sample. Social projects presents 18% of the full sample and 12% of the sub-sample.

coefficient = 0.3682, significant at 1%). By focusing on the communication strategy, we observe an increase in its impact on the performance of crowdfunding campaigns. Indeed, the number of comments exchanged between founders and potential investors is positively related to the three performance measures of crowdfunding (for the number of investors: coefficient = 0.0372, significant at 1%; for success, coefficient = 0.7437, significant at 1%; for financing rate, coefficient = 0.0201, significant at 1%).

For the control variables, our results show that the social projects implemented during a pandemic captivate a large number of contributors. More specifically, there is a positive and significant link between the social category of projects and the number of donors (model 1, coefficient = 0.5640, significant at 1%). This can be explained by the fact that investors, in this time of crisis, are interested in social projects that play an active role in

alleviating the social problems exacerbated by the pandemic (Bacq and Lumpkin, 2020). These results show that entrepreneurs can affect the performance of their campaigns by improving their links with social networks and their interactions.

To summarize, our results highlight that the COVID-19 pandemic has modified the explanatory factors of the crowdfunding performance.

### Conclusions

The sudden and dramatic change in the way we live and work caused by the crisis triggered by COVID-19 is not evident (i.e. Coibion et al., 2020; Painter and Qiu, 2020; Lau et al., 2020; Brooks et al., 2020). On the one hand, social distancing could have increased the use of social media platforms, and this aspect may positively affect the success of the campaign. On the other hand, the growing uncertainty of operating, financial and economic conditions could have modified the investment strategies of contributors, by increasing their aversion to risk (i.e. Baker et al., 2020; Papadamou et al., 2020).

By examining the context of crowdfunding in Spain, our article empirically investigates the impact of the COVID-19 pandemic on the performance of crowdfunding campaigns. While the longterm impact of the Covid-19 pandemic on the economy remains to be seen, we provide evidence that this crisis has altered the strength of social influence through social media on fundraising performance participatory. Comparing the pre-COVID-19 period and the COVID-19 period, our results show that there was a stronger impact of the dynamism of the founder and the number of comments exchanged between stakeholders on the performance of the campaign of crowdfunding, in terms of number of contributors, rate of funding and the success of crowdfunding campaigns. In this time of great uncertainty triggered by COVID-19, investors seem to need more information about projects. Regarding the campaign category, our results suggest that in the aftermath of the COVID-19 pandemic, investors are more inclined to contribute to social projects with small amounts. This is explained by the fact that the redefinition of family priorities imposed by the COVID-19 pandemic has changed the behavior of investors, in the financial markets in general and more specifically in the crowdfunding sector. This pandemic has greatly increased investors' risk aversion (Baker et al., 2020; Papadamou et al., 2020).

Overall, our findings have valuable practical implications for crowdfunding platforms, project founders, and social media. Identifying factors that improve crowdfunding performance can be an interesting guide that helps European businesses and the economy as a whole during and after COVID-19.

Table 4 (a) Correlation matrix (full sample). (b) Correlation matrix (subsample).							
(a)	FOLLOWERS	FOUNDER_S_DYNAMISM	COMMENT	SIZE	SOCIAL	COVID	UPDATES
FOLLOWERS	1						
FOUNDER_S_DYNAMISM	0.09	1					
COMMENT	0.09	0.23	1				
SIZE	-0.01	-0.00	0.00	1			
SOCIAL	0.14	0.03	-0.03	0.06	1		
COVID	-0.04	-0.01	-0.00	0.08	-0.15	1	
UPDATES	-0.05	-0.01	0.10	0.37	-0.06	0.061	1
(b)	FOLLOWERS	FOUNDER_S_DYNAMISM	COMME	NT	SIZE	SOCIAL	UPDATES
(b) FOLLOWERS	<b>FOLLOWERS</b>	FOUNDER_S_DYNAMISM	COMME	NT	SIZE	SOCIAL	UPDATES
(b) FOLLOWERS FOUNDER_S_DYNAMISM	<b>FOLLOWERS</b> 1 0.00	FOUNDER_S_DYNAMISM	COMME	NT	SIZE	SOCIAL	UPDATES
(b) FOLLOWERS FOUNDER_S_DYNAMISM COMMENT	<b>FOLLOWERS</b> 1 0.00 -0.05	FOUNDER_S_DYNAMISM	COMMEI	NT	SIZE	SOCIAL	UPDATES
(b) FOLLOWERS FOUNDER_S_DYNAMISM COMMENT SIZE	FOLLOWERS 1 0.00 -0.05 0.00	FOUNDER_S_DYNAMISM 1 0.34 -0.00	<b>COMME</b> 1 -0.11	NT	<b>SIZE</b>	SOCIAL	UPDATES
(b) FOLLOWERS FOUNDER_S_DYNAMISM COMMENT SIZE SOCIAL	FOLLOWERS 1 0.00 -0.05 0.00 0.01	FOUNDER_S_DYNAMISM 1 0.34 -0.00 0.01	1 -0.11 -0.11	<u>NT</u>	SIZE 1 -0.00	SOCIAL	UPDATES
(b) FOLLOWERS FOUNDER_S_DYNAMISM COMMENT SIZE SOCIAL UPDATES	FOLLOWERS           1           0.00           -0.05           0.00           0.01           0.00	FOUNDER_S_DYNAMISM 1 0.34 -0.00 0.01 -0.00	1 -0.11 -0.11 0.28	<u>NT</u>	1 -0.00 0.07	<b>SOCIAL</b> 1 -0.02	UPDATES

Table 5 Regression results (full sample).					
	Model 1: Number of contributors	Model 2: Success	Model 3: Funding rate		
Explanatory variables					
Followers	0.2758*** (0.077)	1.8220** (0.7387)	0.0999* (0.0518)		
Founder's dynamism	0.1654** (0.0758)	3.1482*** (0.5955)	0.3205*** (0.0518)		
Comment	0.0345*** (0.0059)	0.6849*** (0.1121)	0.0162*** (0.0038)		
Control variables					
Size	-0.4201*** (0.0613)	0.3108 (0.7597)	-0.0289 (0.0485)		
Covid	0.0922 (0.0564)	-0.9735* (0.5873)	-0.0117 (0.0388)		
Social	0.0894 (0.0718)	-0.6871 (0.6697)	0.0654 (0.0500)		
Updates	0.1146** (0.0569)	-0.4949 (0.5866)	-0.0160 (0.0415)		
Constant	4.2495*** (0.3103)	-7.5810** (3.2997)	0.6740*** (0.2100)		
No. of observation	467	467	467		
Adj. R-square	0.046		0.142		
$R^2$ (pseudo)		0.657			

Significance level at 1 % (\*\*\*), 5 % (\*\*), and 10 % (\*); Robust standard errors in parentheses.

# Table 6 Regression results (subsample).

	Model 1 Number of contributors	Model 2 success	Model 3 Funding rate
Explanatory variables			
Followers	0.0772 (0.1153)	0.8382 (0.0934)	0.0854 (0.0785)
Founder's dynamism	0.2636** (0.1063)	3.3378*** (0.5955)	0.3682*** (0.0743)
Comment	0.0372*** (0.0094)	0.7437*** (0.1448)	0.0201*** (0.0060)
Control variables	-0.0224 (0.1017)	0.0090 (1.1518)	0.0379 (0.0710)
Size	0.5640*** (0.1236)	0.4794 (1.1404)	0.0642 (0.0867)
Social	-0.0244 (0.0870)	0.0896 (1.8178)	-0.0290 (0.060)
Updates	3.4412*** (0.4711)	-5.4683 (4.9012)	0.4046 (0.3164)
Constant			
No. of observation	214	214	214
Adj. R-square	0.238		0.142
R <sup>2</sup> (pseudo)		0.603	
Significance level at 1 % (***), 5 % (**), a	and 10 % (*); Robust standard errors in parentheses.		

Our article suggests several avenues to explore for future research. First, the sample of our article is limited to the Spanish crowdfunding market. Future studies could investigate other similar platforms established in other markets. Second, our study treats all social ties as one-way without distinguishing between the types of social ties on the social network (e.g., friends, families, or strangers). Further work could differentiate between relationship types when measuring perceived social influence. Finally, our post facto paper attempts to predefine indices of investors' investment behavior, which deserves further study. Received: 6 December 2021; Accepted: 19 May 2022; Published online: 07 June 2022

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### **Competing interests**

The author declares no competing interests.

### **Ethical approval**

Not applicable.

### Informed consent

This article does not contain any studies with human participants performed by any of the authors.

### Additional information

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