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# The emerging crowdfunding market in Italy:

# Are "the crowd" friends of mine?

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**Abstract** Emerging literature on crowdfunding, until now, is missing detailed empirical analyses on profiles of "crowdfunders". Our paper aims to address this shortage, analyzing geographical and socio-economic characteristics of crowdfunders, looking at how crowdfunding influences the nature of geography and social contacts in new ventures. Our analysis concentrates on Italy, a country suffering for a huge economic crisis but that, at the same time, is showing a strong dynamism in crowdfunding. We collect data on donors of about 350 projects, estimating with a micro-econometric model not only which donors' characteristics increase the likelihood of an investment, but also the role played by social media in the crowdfunding process. Our results give some remarkable indications about crowdfunding in different countries and cultural contexts.

#### Intro

Crowdfunding platforms can be considered as "intentional organisations" (Coleman, 1990, p. 312): the use of online platforms facilitates the transformation of social networks into financial capital available for realising ideas, projects and new ventures. Whereas social media removes barriers to the access (and production) of information, crowdfunding removes barriers to the access

(and sharing) of capital, usually involving people who are not finance or technology experts. The interesting feature of crowdfunding is thus the possibility of involving a potentially enormous number of backers in the process of financing ideas, eliminating the need for a financial intermediary.

The removal of barriers to investment that characterises crowdfunding constitutes the possibility of overcoming the well-known difficulties that new initiatives face in attracting external finance during their start-up phase (see, among others, Aghion & Bolton, 1992; Lerner, 1995; Berger & Udell, 2002; Agrawal, Catalini, & Goldfarb, 2013). Literature on crowdfunding is an emerging field of study that, until now, has investigated structures and profiles of projects and platforms, concentrating on the problem of information asymmetry, trying to understand the signals given off by project-owners to donors/investors (the *backers*) through the platforms, and whether these signals are somewhat different to the ones already analysed in financial literature.

Still missing from crowdfunding literature are detailed empirical analyses on the profiles of "crowdfunders". This paper aims to address this lacuna, analysing the geographical and socioeconomic characteristics of crowdfunders and their relations with the project-owner. The main focus of the paper will be to highlight the role of geographical distance and of personal contact, looking at their possible interaction.

Our analysis will concentrate on Italy, one of the countries suffering the most from the global economic crisis and one that presents the most critical levels of access to credit. However, at the same time, Italy shows a strong dynamism in the crowdfunding sector: there are 52 crowdfunding platforms (43 that are active and 9 being launched), as of May 2014, with strong growth in recent months (there were only 16 in November 2012) and some interesting processes of institutional innovation, with the introduction of equity crowdfunding regulation.

### 1 The literature on "crowdfunders"

Only a few works in management and economic theory have empirically addressed the increasing role of crowdfunding with a clear focus on crowdfunders. Some contributions have investigated the role of geographical distance, to test the irrelevance hypothesis, due to the technological characteristics of Internet crowdfunding platforms. The findings confirm the irrelevance of geographical distance, but show an important role for family and friends as the first backers of projects, as well as for the characteristics of the place in which a project is located.

Research carried out by Mollick (2014) on Kickstarter shows direct proportionality between the number of Facebook friends the project-owner has and the project's probability of success. He also tested the effect of the proportion of creative individuals in a project-owner's city on the success of a crowdfunding effort. Economic geographers argue that the underlying success of creative endeavours is dependent on the characteristics of the project-owners' location (Knudsen, Florida, Stolarick, & Gates, 2008; Saxenian, 1996). One geographic effect theorised by researchers, in particular Florida (2002, 2004), is that the underlying talent of an area's population can affect its relative creative productivity. The results of Mollick (2014) show that a proportionally greater creative population was associated with a greater likelihood of success for project-owners, examining the size of the city, the network of the project-owner, and the number of other Kickstarter project-owners in that city.

Agrawal et al. (2011) show that a significant distinction can be made between local and distant investors on investment patterns over time within a single round of financing. They employed a difference-in-differences-like approach to compare first the difference between local and distant investors in terms of their propensity to invest during a given period, and then how this difference changes with the publicly visible investment decisions of others. They have found that the timing of distant, but not local, investments is very responsive to the investment decisions of others. In addition, "family and friends" investors seem to be disproportionately co-located with the project-owner, and the distance effect disappears when comparing the effect of other investors' investment decisions on the propensity to invest during a given period, mediated by distance after testing for family and friends. Agrawal et al. (2011) interpret this result as implying that the crowdfunding platform eliminates most distance-related economic frictions normally associated with financing early-stage projects, such as acquiring information (e.g. local reputation, stage presence), monitoring progress, and providing input.

Although distant investors are common for publicly traded companies, theory suggests that investors in early-stage entrepreneurial ventures will tend to be local. The characteristics of crowdfunding are consistent with the view that the online setting allows people to overcome offline barriers to market transactions (Goldfarb & Tucker 2011), because Internet platforms can help reduce market frictions associated with geographical distance.

When the relationship is not based on direct knowledge, social ties can signal to the public that a project is worthy. This is known as social proof (Rainie, Rainie, & Wellman, 2012; Masum & Tovey, 2011). The first people to help out a project, building trust and providing proof of

legitimacy, validate it for later supporters. Research carried out on Prosper, a social-lending platform (Lin, Prabhala, & Viswanathan, 2009) shows that if friends are among the lenders the probability of the debt being repaid more than doubles. Moreover, social capital becomes even more influential in the case of weak financial profiles.

On the one hand, the literature on this issue shows a research gap in addressing crowdfunders' characteristics and, on the other hand, suggests that geographical distance, as well as the relational distance between the project-owner and the crowdfunders, should be taken into careful consideration. Based on these perceptions, our paper examines a dataset of crowdfunders and places a particular emphasis on how crowdfunding influences the nature of geography and social contacts in new ventures.

# 2 Data and Empirical Strategy

We aim to describe some determinants of a crowdfunder's investment choices as dependent on his/her own characteristics (such as demographic and socio-economic characteristics, personal beliefs, etc.) and the characteristics of the financed project (type, size, rewards mechanism, etc.). In particular, in this contribution, both geographical and relational distance from the crowdfunder to the project merits specific attention.

For this purpose we collect data via a survey of crowdfunders' characteristics and motivations, using the crowdfunding platforms' mailing list of crowdfunders. Contextually, from the same platforms we gather data on the projects financed by each crowdfunder and we match the two datasets. For reasons of the platforms' privacy preferences, we could only contact the crowdfunders directly in one case. Five platforms agreed instead to send a request to respond to the survey to their mailing list of people who had financed at least one project.

The unit of the analysis is the investment of a crowdfunder i in the project j via a crowdfunding platform and we examine why a given project is preferred to others as the result of the interaction of the characteristics of crowdfunders and projects.

In the survey we asked three sets of questions. The first set generated demographic variables such as gender, income, and level of studies. The second set attempts to elicit the motivation behind the funding of a project. We ask them what kind of projects they have funded, whether they expect a reward and, if so, what kind of reward. Finally, the last part aims to understand the connection of

<sup>&</sup>lt;sup>1</sup> Only Italian crowdfunding platforms active for at least one year.

the respondent to specific projects. Specifically, we map both the geographical and relational distance of the crowdfunder from the project in terms of family relations and social acquaintances and assess whether any interaction on social media took place.

So far we have obtained 351 responses. Table 1 shows descriptive statistics for the variables we use. For dummy variables, the mean can be interpreted as the percentage of positive cases. For two categorical variables (social acquaintance and geocontact), Fig. 1 and Fig. 2 depict the distribution across levels. Education is also a categorical variable ranging from 1, primary school education, to 5 for postgraduate education. The variable social media source elicits whether an individual is connected on social media with the project leader or a project member. The variables generosity, innovation, award and connection describe the motives for financing the project: respectively an individual can finance the project for generosity, for supporting an innovative venture, for an expected profit, or because he/she knows the project leader and would like to help him/her. The variable social source takes the value 1 when the information about the project originates on social media and 0 otherwise. Gender is well balanced and, as expected, people with a good educational background are overrepresented in comparison to the Italian population as a whole. Surprisingly, the distribution of respondents over income classes is rather homogeneous (see Table 1). This might be well explained by the poor economic performance of the Italian younger generations, but is still an issue to be considered in further analysis.

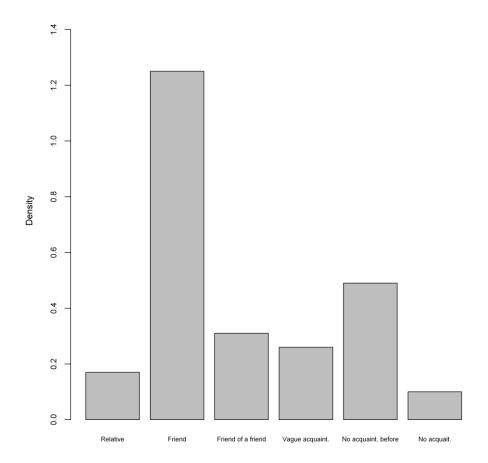
**Table 1** Descriptive Statistics

Variable	Obs	Mean	Min	Max
gender	177	0.519774	0	1
education	177	3.711864	1	5
income	173	4.052023	1	7
social acquaintance	178	3.016854	1	7
social media contact	178	0.5786517	0	1
geocontact	178	2.724719	1	7
generosity	178	0.6404494	0	1

innovation	178	0.1629213	0	1
award	178	0.1966292	0	1
connection	178	0.488764	0	1
socialsource	178	0.3146067	0	1

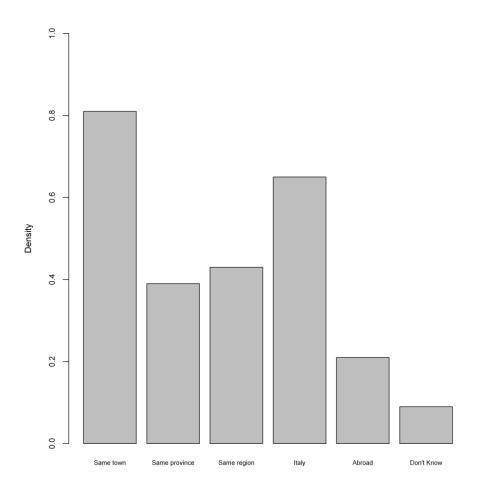
If we look at the motivation of the crowdfunders, we see that most of them do not finance a project because they expect a reward. About a third of the respondents base their decision to finance a project on whether they like the idea behind it or not. It is evident from the data that knowing the promoter of projects has a significant impact. This confirms a well-established belief. 48% of the respondents answer that they financed the project in order to help the promoters. It is worth noting that in a third of the cases the respondent is a relative of the project-owner (see Fig. 1), in about half of the cases they come from the same town (see Fig. 2) and in 57% of the cases they are connected via social media. These preliminary results indicate that a mechanism such as "family and friends" plays an important role in funding projects. Agrawal et al. (2011) suggests that this might be a spurious effect mainly generated by the geographical co-location of the project-owner and the crowdfunder, which explains both their acquaintance and the likelihood of discovering a specific project.

Fig. 1 Social Acquaintance



Here we aim to analyse whether crowdfunding platforms help in overcoming geographical distance. Ideally, we should expect that crowdfunding platforms, by leveraging on social media connections rather than connections in person and social acquaintances, should allow the project-owner to raise funds from elsewhere other than his close proximity (see Fig. 2).

Fig. 2 Geographical Distance



In order to verify this mechanism, we investigate whether the source of information about a project comes from social media or not. We thus asked crowdfunders if they are connected to project leaders through social media alone, or also in person, and if they are located geographically near to the project leader. We also asked them whether information on the project originated from social media or not. These questions were useful to investigate the following three main research issues:

- I1: Geographical co-location between project-owner and crowdfunder.
- **I2**: Social acquaintance and social media contact of project-owner and crowdfunder.
- **I3**: Social media contact with the project-owner as a source of information about the project.

In order to investigate the three issues we run a set of different logit regressions to estimate which factors affect the probability that the donor had a previous contact with the project leader on social media.

Concerning I1 and I2, we observe that most crowdfunders are located in the same town as the funder, that they are connected on social media and that they have strong ties in person (see Table 2).

**Table 2** Regression results for I1 and I2

VARIABLES	Dep. Var:	contact on se	ocial media
	Model 1	Model 2	Model 3
geo distance	0.819*	1.062	1.088
social acquaintance		0.503***	0.512***
gender	0.694	0.695	0.77
education	1.283*	1.225	1.21
income	0.926	0.891	0.888
motive reward			1.376
motive connection			1.198
motive innovation			0.541
motive generosity			1.148
Constant	1.57	8.784***	6.915**
Observations	172	172	172
Log likelihood	-112.4	-99.31	-98.06
Chi2	9.691	35.87	38.37

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

However, multivariate analysis shows that co-location and friendship on social media seem to be a reflection of social acquaintance, defined along different levels, from the strongest (family) to the weakest: we found that the stronger the social acquaintance between crowdfunder and project-owner, the stronger the probability that they are connected on social media. If we omit the variable social acquaintance (Model 1), there is also a significant and positive correlation between geographical distance and the probability of being connected on social media. However, as expected, we find that this is a spurious relation since when in Model 2 we add also social acquaintance, geographical distance is not significant any longer: family and friends in person mostly live in the same area. Concerning I3, we explain the factors, which affect the probability that the donor acquired information on the project in real life vs. in social media. In this case, the previous dependent variable, social contact with the project leader, is considered as an independent variable. Table 3 presents the results expressed as odd ratios, i.e. values smaller (larger) than 1.0 are associated with lower (higher) odds of the outcome real live vs. social media.

**Table 3** Regression results for I3

VARIABLES	odd ratio (Real life vs. Social media)

social contact with the project leader	0.309**
geographical distance	0.883
social distance	0.536***
motive reward	1.521
motive connection	0.404**
motive innovation	0.973
motive generosity	0.712
controls	YES
Constant	10.08*
Observations	170
Log likelihood	-199.1
DF	30
Chi2	59.51

Considering the previous evidence discussed in this contribution, this result was unexpected: although crowdfunders usually live in the same area as the project-owner and have a strong social liaison with him/her, they became aware of the project over social media.

As a control, we analysed whether results change when we take into account either the motives<sup>2</sup> behind the funding projects or the socio-demographic characteristics of the crowdfunder. Regressions suggest that the distribution of motives does not vary along any proximity dimension. Results are also robust to changes along any socio-demographic characteristics.

All in all, crowdfunders are likely to be relatives, friends and acquaintances and, for this reason, we observe the evidence that they are both also connected by social media and located in the same geographical area. With regard to the third hypothesis, we find that contact on social media is the primary source of information about a project.

### 3 Conclusions

empirical

Although our database is limited to one country, we think that this research represents a first step towards an original analysis of crowdfunding dynamics in a small emerging market, with an empirical and systematic examination of "crowdfunders", and on their funding selection process.

<sup>&</sup>lt;sup>2</sup> Respondents could specify three out of the following eight motives: it is useful project; it is an innovative idea; I expect a reward; I expect to have a share of the profits; I appreciated past initiatives of the project-owner; I want to help the project-owner; I trust the project-owner; other.

Family and friends often live in the same area: it seems that proximity remains crucial, as it is for traditional start-up financing. However, a first result from our analysis is that, within the close network of family and friends, information on crowdfunding projects diffuses primarily through social media. Indeed, we observe that the source of information about a project for most of the crowdfunders is social media, even when the project is funded by acquaintances.

This preliminary evidence show us that – through local platforms – the digital nature of the crowdfunding facilitates the speed and the capillarity of the diffusion process, more than reaching out to new individuals.

Our analysis is still ongoing, but we think that the results can give useful indications of management and policy around crowdfunding in different countries and cultural contexts.

### References

Aghion, P., & Bolton, P. (1992). An incomplete contracts approach to financial contracting. *Review of Economic Studies*, 77, 338–401.

Agrawal A. K., Catalini C., & Goldfarb A. (2013). *Some Simple Economics Of Crowdfunding* (Working Paper No. 19133). Retrieved from National Bureau of Economic Research website: http://www.nber.org/papers/w19133

Agrawal A. K., Catalini C., & Goldfarb A. (2011). *The Geography Of Crowdfunding* (Working Paper No. 16820). Retrieved from National Bureau of Economic Research website: http://www.nber.org/papers/w16820

Berger, A., & Udell G. (2002). Small Business Credit Availability and Relationship Lending: The Importance of Bank Organisational Structure. *Economic Journal*, 112, 32–53.

Coleman, J. (1990). Foundations of Social theory. Cambridge (US): Harvard University Press.

Florida, R. (2002). The economic geography of talent. *Annals of the Association of American Geographers*, 92(4), 743–755.

Florida, R. (2004). Cities and the Creative Class. New York: Routledge.

Goldfarb, A., & Tucker, C. (2011). Advertising Bans and the Substitutability of Online and Offline Advertising. *Journal of Marketing Research*, 48, 207–227.

Knudsen, B., Florida, R., Stolarick, K., & Gates, G. (2008). Density and creativity in US regions. *Annals of the Association of American Geographers*, 98(2), 461–478.

Lerner, J. (1995). Venture Capitalists and the Oversight of Private Firms. *Journal of Finance*, 50, 301–318.

Lin, M., Prabhala, N. R., & Viswanathan, S. (2009). *Judging Borrowers by the company they keep:* social networks and adverse selection in online Peer-to-Peer lending (SSRN Working Paper). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1355679

McFadden, D. (1980). Econometric models for probabilistic choice among products. *Journal of Business*, 53(3), 13–29.

Masum, H., & M. Tovey (2011). *The Reputation Society: How Online Opinions are Reshaping the Offline World*. Cambridge (US): MIT Press.

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29, 1–16.

Rainie, H., Rainie, L., & Wellman, B. (2012). *Networked: The new social operating system*. Cambridge (US): MIT Press.

Saxenian, A. (1996). Regional Advantage: Culture and Competition in Silicon Valley and Route 128. Cambridge (US): Harvard University Press.