

# **Are crowdfunders active investors? The role of crowdfunders activism in shaping new ventures performance**

Francesca Di Pietro

Department of Management and Business Administration

University “G. d’Annunzio”, 65127 Pescara, Italy

E-mail: f.dipietro@unich.it

## **Abstract**

External knowledge acquisition represents a precondition for young firms survival. The ability to leverage external networks for knowledge acquisition and exploitation might ensure their survival and growth. New ventures that approach crowdfunding to obtain financial support face the same constraints that other ventures approaching other means of financing might face: inexperienced entrepreneurs who resort to crowdfunding need to leverage external knowledge to acquire competences and skills they may lack.

In this paper we introduce a conceptual framework that explains how inexperienced entrepreneurs might overcome the liability of newness by involving their funders. We consider proximity – in its three main facets, i.e. geographical, social and cognitive – as well as funders’ personal traits as relevant factors that may jeopardize or increase funders activism.

**Keywords:** Crowdfunding, Knowledge acquisition, geographical proximity, social proximity, cognitive proximity

## **1. Introduction**

Entrepreneurial firms may lack financial resources and managerial competences that are fundamental for their economic performance (Gans & Stern, 2003). In order to succeed, new ventures need financial, physical, and human resources (Lichtenstein & Brush, 2001). According to the resource-based view of the firm, higher performance results from the combination of idiosyncratic resources and capabilities (Penrose, 1959; Barney, 1986) that must be either acquired externally or developed internally by founders. In the recent years, the competition among new ventures has shifted from natural resources to knowledge assets, since knowledge is considered the main source of sustainable competitive advantage (West & Noel, 2009). The relational-based view of the firm emphasises the importance of external knowledge sources to overcome resource constraints that new ventures face (Dyer & Singh, 1998; Grant & Baden-Fuller, 2004). The acquisition of knowledge opens new opportunities and allows new ventures to exploit them (Grant, 1996). In recent years many scholars have focused their research on the process of knowledge acquisition and exploitation of young firms (Ahuja, 2000; Yli-Renko, Autio, & Sapienza, 2001), claiming that, since resource limitation causes the traditional problem of liability of newness (Stinchcombe, 1965), the ability of new ventures to exploit external network for knowledge acquisition may ensure their survival (West & Noel, 2009).

The present article focuses on a particular category of external knowledge source – investors. Both academics and practitioners have considered investors as one of the key drivers of entrepreneurial firms success. The entrepreneurial finance literature has highlighted the importance of professional investors – i.e. venture capitalists, business angels, etc. – for the growth, productivity, and innovation activities of new ventures (Wright & Robbie, 1998; Colombo & Grilli, 2010), but a meta-analysis assessing the impact of experienced investors on the funded firms has led to inconsistent results. Taken together, findings challenge the assumption that experienced investors add value to funded firms and more research about firms that are in the early stage of their life cycle and are of smaller size are needed to complement existing empirical work (Rosenbush,

Brinckmann, and Müller, 2013).

In the last few years, entrepreneurs have started to rely on the Internet to directly seek seed capital from the crowd instead of approaching traditional forms of financing, (i.e. venture capital, business angels, etc.). Crowdfunding – through equity, lending, or donations – has emerged as an alternative means of addressing the significant financing gap faced by young companies and entrepreneurs by injecting capital from a large pool of previously unengaged participants. The benefits of crowdfunding, however, are more than just financial. The crowd may be actively involved in the management of the company by providing entrepreneurs with knowledge and capabilities critical for company's success. Scholars have recently started to study the phenomenon by analysing the motivations of project initiators and funders to take part in crowdfunding projects (Belleflamme, Lamber, & Schwiendbacher, 2013), and how start-up characteristics (Ahlers, Cumming, Günther, & Schweizer, 2012), project quality (Mollik, 2014), spatial proximity (Agrawal, Catalini, & Goldfarb, 2011), and entrepreneur's internal social capital (Colombo, Franzoni, & Rossi-Lamastra, 2013) influence the success of crowdfunding campaigns. Yet, the crowdfunding literature does not consider the role played by funders in the post-crowdfunding phase. Focusing our attention on equity-crowdfunding phenomenon, and drawing on the resource-base theory of the firm and the relational view of the firm, this article advances a theoretical framework that emphasises the contribution of the crowd, in terms of resources and capabilities, to company's activities. It also considers relevant factors that may influence the relationship between entrepreneurs and their funders.

Our contribution is the advancement of the entrepreneurial finance and crowdfunding literature by proposing that the impact of proximity and crowdfunding investors' personal traits on funders' involvement is crucial in understanding how new ventures might benefit from external knowledge and (thus) moderate their liability of newness.

The article is organized as follow: we first discuss the importance of external knowledge sources for new ventures and, after presenting a review of the literature about crowdfunding, we follow our

model (see Figure 1) with discussion and associated propositions regarding crowdfunders activism, proximity and crowdfunding investors' personal traits. Finally, we discuss the model's implications for future research and practice.

## **2. Resources-based view and investors' knowledge in new ventures**

The resource-based theory of the firm attempts to define the fundamental factors that underlie the competitive advantage of the firm (Penrose, 1959; Barney, 1986). Critical to the theory is the assumption that resources are heterogeneous among firms and that the competitive advantage depends upon that heterogeneity. A recent perspective of resource-based view considers managerial knowledge as a main competitive advantage. Penrose (1959) explicitly mentions entrepreneurial capabilities of management as key to understand how firms achieve growth and competitive position. Intangible resources such as human capital, routines, and knowledge (Grant, 1996) have been linked to enhanced firm performance. These resources are seminal for new ventures for two reasons. First, knowledge resources provide the initial foundation for a competitive advantage. At the outset, entrepreneurs often lack knowledge of their environment, employees' commitment, and relationship with customers and suppliers. These dangers make inexperienced new organizations highly vulnerable (Stinchombe, 1965; Yli-Renko et al., 2001). Second, knowledge resources lead to the development of other important resources, such as financial and physical capital (Brush, Greene, & Hart, 2001). Thus, the ability of new ventures to leverage external networks for knowledge acquisition and exploitation might ensure their survival and growth (Autio, Sapienza, & Almeida, 2000; West & Noel, 2009). In recent years, many empirical studies have contributed to our understanding about the importance of external knowledge sources for new ventures. Focusing our attention on the importance of investors as external knowledge source, the entrepreneurial finance literature gives us an exhaustive understanding about the importance of investors as "specialists" in providing value-adding services to new ventures. This literature, focusing on venture capital investors – the main source of seed financing for new ventures – has highlighted

different ways through which investors positively affect the growth of their portfolio firms. Venture capitalists provide portfolio companies with consultancy services in different fields such as strategic planning, marketing, finance, accounting, or human resource management (Baum & Silverman, 2004; MacMillan, Kulow, & Khoylian, 1989; Sapienza, 1992; Barney, Busenitz, Fiet, & Moesel, 1996; Sapienza, Manigart, & Vermeir, 1996; Lerner, 1995). New ventures may also take advantage of venture capitalists' networks including potential customers, suppliers, and alliance partners (Bertoni, Colombo, & Grilli, 2011). Therefore, portfolio firms may find it easier to get access to external resources and competencies that are out of reach for other new ventures (Colombo, Grilli, & Piva, 2006; Hsu, 2006; Bottazzi, Da Rin, & Hellmann, 2008). Such value-adding services are especially desirable in early stage firms and high-tech industries (Aspelund, Berg-Utby, & Skjvedal, 2005).

Bertoni et al. (2011) analyse the impact of venture capitalists on the growth of Italian new ventures. Their results clearly support the view that venture capitalists have a large positive effect on the growth of firm's employment and sales that is not attributable to the ability of venture capital investors to select firms with superior growth prospects. Colombo and Grilli (2010), demonstrate that founders knowledge and skills are a fundamental ingredient of the growth of new ventures and that venture capitalists are an important source of additional resources and capabilities that goes beyond the provision of financing. Many other empirical studies demonstrate the importance of the investors' involvement in day-to-day managerial decisions and its impact on new ventures financial performance (Croce, Marti, & Murtinu, 2013; Jackson, Bates, & Bradford, 2012; Bottazzi et al., 2008). Even though empirical studies have demonstrated the effect of experienced investors on portfolio firm performance, a meta-analysis assessing the impact of experienced investors on funded firms suggests inconclusive results. Overall, findings challenge the assumption that experienced investors add value to funded firms, and claim that most of the positive performance effects are due to industry selection effect (Rosenbush et al., 2013). Moreover, the majority of the studies focus on firms that are in the growth phase. More research about firms that are in the early

stage of their life cycle and are of smaller size is needed to complement existing empirical work. Equity-crowdfunding, in this sense, might be of interest to fill this literature gap.

### **3. Conceptual background**

Crowdfunding draws inspiration from the concept of micro-finance and crowdsourcing, but it represents a unique form of fundraising. Even though this is a new phenomenon from an academic perspective, from a practical view point, the first crowdfunding project dates back to 1884 when the American Committee for the Statue of Liberty ran out of funds for the Statue's pedestal and searched for public donations.

Recently, entrepreneurs and new ventures have started to approach this form of financing to directly seek financial capital from the crowd instead of from other traditional financial investors (i.e. venture capitalists, business angels, etc.). Scholars have defined crowdfunding in different ways: Schwienbacher and Larralde (2010) define it as “an open call, essentially through the internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes”; Mollik (2014), narrowing the definition of the term in an entrepreneurial context, defines crowdfunding as “the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contribution from a relatively large number of individuals using internet, without standard financial intermediaries”.

Some empirical studies have started to map the phenomenon of crowdfunding in order to understand its main characteristics. Giudici, Nava, Rossi-Lamastra and Verecondo (2012) argue that crowdfunding platforms share the characteristics of multi-sided markets such as organizations that create value by enabling direct interactions between two (or more) distinct types of affiliated customers (as defined by Hagiú & Wright, 2011). Giudici, Guerini and Rossi-Lamastra (2013) propose four different typologies of projects – business, cooperation, mecenatism, and donation – according to initiators objectives (i.e. personal or social) and the contribution that is offered to the

crowdfunders (i.e. monetary or non-monetary). Other empirical studies have analysed funders and initiators motivations for starting and taking part in a crowdfunding project. On the one hand, results show that raising funds is not the only goal of entrepreneurs who engage in crowdfunding. In fact, they consider it as an opportunity to get public attention and to obtain feedback on product/service offered to fine-tune their initial project (Belleflamme et al., 2013; Gerber, Hui, & Kuo, 2012). On the other hand, research show that the crowd is willing to finance crowdfunding campaigns mainly to support an attractive idea, help others to realize their dreams, obtain rewards, and get credits for their own future project (Zhang, 2012).

Based on a dataset of over 48,500 projects on Kickstarter from 2009 to 2012, Mollik (2014) analyses the dynamics of crowdfunding success and failure. He suggests that personal network and project quality are important determinants of crowdfunding success. Geography also appears to be linked to the success rate of crowdfunding campaigns. Accordingly, Agrawal et al. (2011), by studying the impact of spatial proximity on the success of crowdfunding campaigns, suggest that although the role of geography appears to be greatly diminished, distance does still play a role: local investors invest relatively early, and they appear less responsive to other investors decision.

Ahlers et al. (2012), analysing Australian equity-crowdfunding projects, highlight the importance of financial roadmaps, risk factors, as well as internal governance, for successful equity-crowdfunding campaigns. Also entrepreneurs' internal social capital, defined as "the social capital that a proponent has developed inside the crowdfunding platform", appears to be crucial in attracting both early capital and early backers (Colombo et al., 2013). From a qualitative perspective some strengths and weaknesses of crowdfunding have been highlighted. On the one hand, crowdfunding platforms are easily accessible, they represent a chance to test the marketability of the idea or the project, and to receive suggestions. On the other hand, some drawbacks of crowdfunding can also be perceived. As internet-based approach, virtual meeting replace real life encounters, making more difficult for the crowd to understand which business and which intermediary are worthy and can be trusted (Schwienbacher & Larralde, 2010).

Like other new ventures, companies that approach crowdfunding to obtain seed capital have limited managerial, human, and financial resources that can hamper their growth and even threaten their survival (Gans & Stern, 2003). To overcome these constraints, entrepreneurs who resort to crowdfunding might rely on their investors to obtain additional resources and capabilities that go beyond the provision of financing.

Some entrepreneurs have already stressed the importance of the crowd, considering it as an important source of information. For instance, some companies that sought financial capital through the US equity-crowdfunding platform CircleUp have been able to draw benefits from their funders. In particular, the start-up 18Rabbits received important feedback about packaging and site design from experienced investors to help enhance the sales of its products; Willa Sinkcare received help from investors to hire an external qualified CFO; NativeFlow, through its investors community, was introduced to a potential strategic partner in Japan (Forbes, 2014). These are some examples that help us to understand the role of funders and the benefits that they can provide to entrepreneurs.

So far it is unclear whether equity-crowdfunding will substitute other forms of early financing (i.e. venture capital, angel investors, etc.) since institutional investors add an invaluable element of professionalism that can guide a young company towards profitability (Bertoni et al., 2011).

#### **4. Conceptual model**

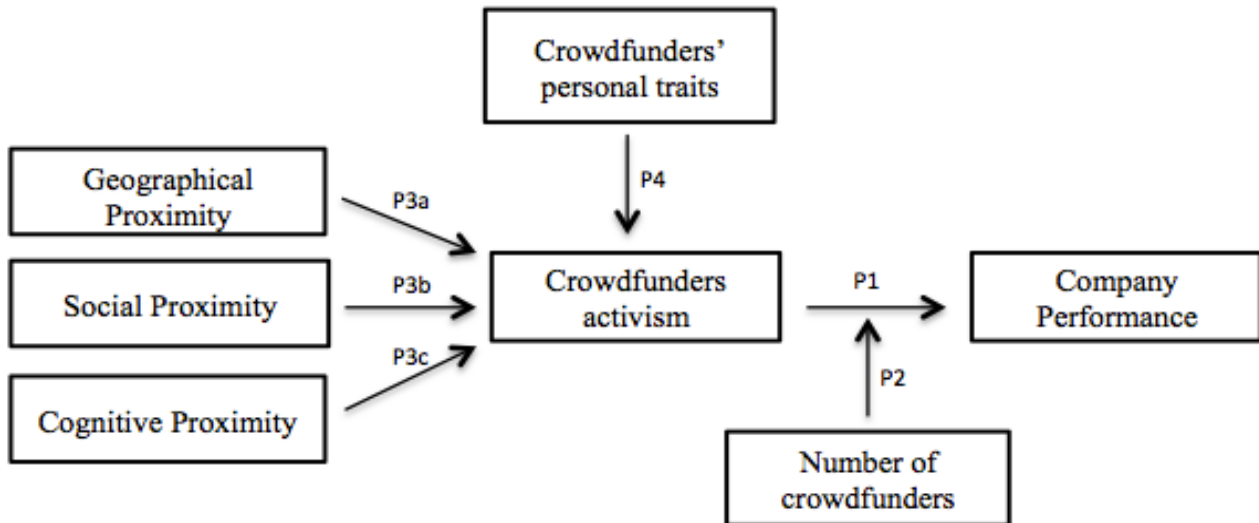
The hypothesized model examines how different forms of proximity and crowdfunders' personal traits affect the crowd activism and thus new ventures performance.

We rely on the resource-based view (Penrose, 1959; Barney, 1986) and on the relational-based view of the firm to emphasise the importance of external knowledge sources to overcome resource constraints that new ventures face (Dyer & Singh, 1998). Since resource limitations cause the traditional problems of liability of newness and adolescence (Stinchcombe, 1965; Yli-Renko et al., 2001), the ability of start-ups to leverage external networks for knowledge acquisition and exploitation may ensure their survival and growth (West & Noel, 2009). The model takes also into



account elements that can hamper or facilitate knowledge transfer between entrepreneurs and the crowd. The conceptual model we rely on is exhibited in figure 1 and is detailed as follows:

Figure 1: Proximity, crowdfunders’ personal traits, and company performance.



*Crowdfunders activism*

Consistent with the entrepreneurial finance literature, the main explanatory variable “crowdfunders activism” refers to “day-to-day involvement in operational decision of the company” (Jackson et al., 2012).

Scholars have identified different forms of activism: (1) assist with recruiting, (2) help in obtaining additional financing, (3) advise on long-term planning, (4) assist with hiring, and (5) assist in day-to-day operation (Bottazzi et al., 2008; Jackson et al., 2012).

*Geographical, spatial, and cognitive proximity*

Proximity, as suggested by Boshma (2005), is a multidimensional concept. Geographical proximity between new ventures and their partners have been considered the key parameter that new ventures can use to exploit external knowledge (Alcacer & Chung, 2007; Audretsch & Lehmann, 2006). However, recent studies suggest that geographical proximity cannot be assessed in isolation.

Geographical proximity per se is neither a necessary nor a sufficient condition for the process of knowledge acquisition (Boshma, 2005; Antonelli, 2000) since other nontangible dimension of proximity may act as a substitute for geographical proximity (Boshma, 2005; Rallet & Torre, 2000; Boshma & Lambooy, 1999). In particular, these frameworks argue that the importance of geographical proximity can be weakened if the partners share the same cognitive experience (cognitive proximity) and if the relationship between partners are socially embedded and, thus, characterised by a high level of trust (social proximity) especially in the case of tacit knowledge. This justifies the interest for the other two dimensions of proximity.

The notion of cognitive proximity involves that people sharing the same knowledge base and expertise may learn from each other (Boshma, 2005). The effective transfer of knowledge requires an absorptive capacity to identify, interpret, and exploit new knowledge (Cohen & Levinthal, 1990). For this reason, the capacity of actors or firms to absorb new knowledge requires cognitive proximity as it facilitates effective communication (Boshma, 2005).

The concept of social proximity derives from the literature on embeddedness (Granovetter, 1985), which states that relationships between partners are socially embedded when they involve a high level of trust. Indeed, the presence of trust in relationships makes the communication more effective, reduces the risk of opportunistic behaviours, making relations more informal and (thus) more effective in acquiring external knowledge (Nahapiet & Ghoshal, 1998).

#### *Crowdfunders' personal traits*

Entrepreneurs will benefit from external knowledge only if partners can provide knowledge that entrepreneurs need in order to complete a particular task. In other words, entrepreneurs will be willing to involve external partners based on the assumption that their selected partners will bring necessary missing knowledge to the table (Grant & Baden-Fuller, 2004). Funders' personal traits, such as business/industry experience, competences, entrepreneurial experience, or any other skills or knowledge relevant for the business, represent the first element entrepreneurs shall consider

before involving them in company's activities. These constraints can jeopardise the active participation of the crowd in company's activities.

#### *Number of crowdfunders*

The "number of crowdfunders" variable represents the number of people who invest in a certain crowdfunding campaign. The number of investors can be influenced by two factors: the maximum amount investable by each funder, if the online platform or the country regulations impose it, and the amount of money that entrepreneurs seek to raise.

#### *Company performance*

For new ventures, objective financial indicators are not appropriate to evaluate performance. Most start-ups do not have formal financial reports, they are too young, or they might not have commercialised their products or services yet. Previous research suggests using multiple measures to capture the multidimensionality of new venture performance, by combining objective indicators – i.e. sales growth – and subjective indicators of performance – i.e. comparing new venture performance with that of its main competitors – (Stam & Elfring, 2008; Wiklund & Sheperd, 2005).

### **4.1 Model development**

#### *Crowdfunders activism, number of crowdfunders, and company performance*

Particularly in innovative sectors, the early development process of young firms is heavily influenced by knowledge and learning. Indeed, knowledge is arguably the single most important resource for such firms, and therefore, learning and knowledge acquisition are key processes that determine their organizational performance (Autio et al., 2000; Cefis & Marsili, 2005). The term "liability of newness", in fact, is used to describe the higher likelihood of failure of young firms compared to that of older firms due to external and internal challenges associated with learning problem, lack of knowledge and reliable routines, need to learn about the environment, and lack of legitimacy and reputation (Baum, 1996; George, 2005; Stinchcombe, 1965; Choi & Shepherd,

2005). Young firms must rely on “social relations among stranger” within the firm and with external organizations to overcome the liability of newness that may compromise their survival (Stinchcombe, 1965). Crowd-funded firms face all these internal and external challenges.

Studies in the entrepreneurial finance literature highlight the importance of investors in providing additional resources and capabilities that are critical for company survival (Baum & Silverman, 2004; MacMillan et al., 1989; Sapienza, 1992; Barney et al., 1996; Sapienza et al., 1996; Lerner, 1995; Bertoni et al., 2011; Colombo and Grilli, 2010; Croce et al., 2013; Jackson et al., 2012).

In the light of previous studies, we expect that crowdfunders are an important source of learning for entrepreneurs and that, if actively involved, they can help entrepreneurs overcome initial resource constraints and other liabilities of newness.

In sum, previous empirical studies give support to the following proposition:

***Proposition 1:*** *Crowdfunders’ involvement in day-to-day company’s activities is positively related to company performance.*

Additionally, crowdfunding projects attract a large number of investors. This for two reasons: equity-crowdfunding regulation might pose limitations on the maximum amount investable by a single investor and entrepreneurs themselves can set the minimum investment amount for each investor. As attention-based theory suggests (Ocasio, 1997), too many communication channels and, thus, a large amount of information to process, can be detrimental for company’s performance. Entrepreneurs might face difficulties to manage relationships with a large number of investors, and this can be costly and time-consuming. Even though entrepreneurs might decide to screen investors profile before getting them involved, this process would require time and valuable resources that entrepreneurs do not possess. Thus, we expect that a large pool of investors can jeopardize the possibility for entrepreneurs to actively involve their investors.

Therefore, we more formally propose:

***Proposition 2:*** *The number of crowdfunders negatively moderates the relationship between*

*crowdfunders activism and company performance.*

*Proximity and crowdfunders activism*

Knowledge is difficult to transfer, especially when it is tacit and thus not readily communicated in a written form (Easterby-Smith, Lyles, & Tsang, 2008; Szulanski, 1996). Proximity may help knowledge transfer (Maula, Autio, & Murray, 2003; Molina-Morales, García-Villaverde, & Parra-Requena, 2011). First, geographical proximity influences the exchange of information, by increasing the probability of collaboration, by producing spontaneous social and professional interactions, and by increasing the probability of face-to-face interactions (Dyer & Nobeoka, 2000). Additionally, cognitive proximity, defined as agents' common knowledge base and expertise, is necessary for acquiring information and knowledge from other people (Cohen & Levinthal, 1990). Similarities in current knowledge stocks enhance the transfer of knowledge, whereas differences tend to delay or prevent the absorption of new knowledge from a partner (Lane & Lubatkin, 1998). Empirical studies have confirmed the positive effect of cognitive proximity on knowledge exploitation (Huber, 2012; Molina-Morales et al., 2011; Dakhli & de Clercq, 2004; Presutti, Boari, & Majocchi, 2011; Agrawal, Kapur, & McHale, 2008). Lastly, social proximity refers to socially embedded relations between agents that involve trust based on friendship, kinship and experience (Boschma, 2005). The presence of trust inside business relationships makes reciprocal knowledge acquisition more efficient, by reducing the risk of opportunistic behaviour and by encouraging informal relations considered more effective for acquiring external knowledge (Nahapiet & Ghoshal, 1998). A tie based on high reciprocal trust reinforces the process of knowledge exploitation (Presutti et al., 2011). Accordingly, we expect that geographical, social, and cognitive proximity positively influence crowdfunders activism and (thus) new ventures performance.

Therefore, we suggest:

***Proposition 3a:*** *Geographical proximity will positively influence crowdfunders activism.*

***Proposition 3b:*** *Social proximity will positively influence crowdfunders activism.*

***Proposition 3c:*** *Cognitive proximity will positively influence crowdfunders activism.*

*Crowdfunders' personal traits and crowdfunders activism*

Funders' knowledge, experiences, and competences represent the first element entrepreneurs shall take into account before involving their funders in company's activities. Entrepreneurs will consider the possibility to involve funders only if they possess missing skills and knowledge relevant for the business (Grant & Baden-Fuller, 2004).

Thus, funders' personal traits might influence crowdfunders' involvement in day-to-day company's activities and (thus) firm performance.

Hence, we propose:

***Proposition 4:*** *Crowdfunders' business-related knowledge and experience will positively influence crowdfunders activism.*

## **5. Discussion**

Understanding how new ventures exploit external knowledge to moderate the liability of newness is an important focus in the study of entrepreneurship (Rosenbush et al., 2013). Our model contributes to this field and to the crowdfunding literature by proposing that the "crowd" may be a critical source of information and knowledge for inexperienced entrepreneurs.

This argument is consistent with those of others who have highlighted the role of investors in providing value-adding services to new ventures and to inexperienced entrepreneurs (Baum & Silverman, 2004; MacMillan et al., 1989; Sapienza, 1992; Barney et al., 1996; Sapienza et al., 1996; Lerner, 1995; Bertoni et al., 2011; Colombo & Grilli, 2010; Croce et al., 2013; Jackson et al., 2012). We also consider some relevant factors that can hamper the involvement of the "crowd". Specifically, we consider the role of geographical proximity along with other nontangible dimensions of proximity – social proximity and cognitive proximity – that may act as a substitute for geographical proximity (Boshma, 2005; Boshma & Lambooy, 1999), the influence of funders'

personal traits, and their numerousness.

We argued that funders, if involved, could give valuable contributions such as knowledge, skills, and network, to inexperienced entrepreneurs. Proximity, in all aspects considered here, can definitely play a crucial role, by positively influencing the involvement of the crowd. An important aspect that can negatively moderate the effect of crowdfunders activism on new ventures performance is the large number of funders. The more they are, the less time and resources entrepreneurs will have to build business relationships with them. A last aspect we think might influence funders' involvement is related to their personal traits. Entrepreneurs will be more willing to involve their funders if the latter can contribute to the business by providing competences and knowledge they may lack. To do so, funders shall be knowledgeable about the business in which they invest and shall possess skills and competences that entrepreneurs can recognise and exploit.

Our model contributes to the entrepreneurial finance and the crowdfunding literature by proposing that the impact of proximity and crowdfunders' personal traits on funders' involvement is crucial in understanding how new ventures might benefit from external knowledge and (thus) moderate their liability of newness. Several opportunities for empirical research are related to the model. Many of the constructs have already been operationalized in prior research, in particular geographical, social, and cognitive proximity and new venture performance. Although the concept of "activism" has been measured by some studies in the entrepreneurial finance literature, testing out its dimensions in a new empirical context and for new ventures represents a challenge for future research. Future empirical research could look deeper into this direct effect by understanding the post-crowdfunding phase, the role of investors as a source of knowledge and information, and under which conditions their contribution can be crucial for young and innovative start-ups.

## **6. Managerial implications**

The model we develop in this paper has important practical implications for individuals and policy makers. Empirical research will help to shed new light on the emerging phenomenon of

crowdfunding, a phenomenon that can play a crucial role for the development of entrepreneurial activities and for the long-term employment and economic gains, in particular in Europe where the venture capital market is not as mature as in the US. For individuals, research can help inexperienced entrepreneurs who want to start a new venture to understand the benefits they can gain from external knowledge sources and be aware of the difficulties they will have to handle. Moreover, empirical research can help policy makers to have a better understanding of the relevance of the phenomenon and to act accordingly to support its expansion.

## **7. Conclusion**

By focusing on the relationships between proximity, investors' personal traits, crowdfunders activism, and new ventures performance, our model lays the groundwork for further theory development and empirical research. It also suggests the importance of the "crowd" in stimulating new venture performance. However, it is by no means a comprehensive explanation of the crowdfunding phenomenon. Rather, it is an attempt to explore and specify the relationships among particular dimensions of proximity and investors' personal traits on new venture performance. Further, the model makes no assumptions that its predictions will lead to successful ventures. Rather, our focus is on the exploitation of external sources to acquire knowledge and capabilities imperative for young firms, which remain the essence of entrepreneurship.



## References

- Agrawal, A., Kapur, D., & McHale, J. (2008). How do spatial and social proximity influence knowledge flows? Evidence from patent data. *Journal of urban economics*, 64(2), 258-269.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2011). Friends, family, and the flat world: The geography of crowdfunding. *NBER Working Paper*, 16820.
- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. (2012). Signaling in equity crowdfunding. Available at SSRN, 2161587.
- Alcacer, J., & Chung, W. (2007). Location Strategies and Knowledge Spillovers. *Management Science*, 53(5), 760-776.
- Antonelli, C. (2000). Collective Knowledge Communication and Innovation: The Evidence of Technological Districts. *Regional Studies*, 34, 535-547.
- Aspelund, A., Berg-Utby, T., & Skjevdal, R. (2005). Initial resources' influence on new venture survival: a longitudinal study of new technology-based firms. *Technovation*, 25(11), 1337-1347.
- Audretsch, D., & Lehmann, E. (2006). Entrepreneurial Access and Absorption of Knowledge Spillovers: Strategic Board and Managerial Composition. *Journal of Small Business Management*, 44, 155-166.
- Ahuja, G. (2000). Collaboration networks, structural holes and innovation: A longitudinal study. *Administrative Science Quarterly*, 45, 425-457.
- Autio, E., Sapienza, H., & Almeida, J. (2000). Effects of time to internationalization, knowledge-intensity, and imitability on growth. *Academy of Management Journal*, 43(5), 909-924.
- Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management science*, 32(10), 1231-1241.
- Barney, J. B., Busenitz, L. W., Fiet, J. O., & Moesel, D. D. (1996). New venture teams' assessment of learning assistance from venture capital firms. *Journal of Business Venturing*, 11(4), 257-272.
- Baum, J. A. (1996). Organizational ecology. *Studying Organization: Theory and Method*, 71-108.
- Baum, J., Silverman, B. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing* 19, 411-436.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*.
- Bertoni, F., Colombo, M. G., & Grilli, L. (2011). Venture capital financing and the growth of high-tech startups: Disentangling treatment from selection effects. *Research Policy*, 40(7), 1028-1043.
- Boschma, R. A., & Lambooy, J. G. (1999). Evolutionary economics and economic geography. *Journal of evolutionary economics*, 9(4), 411-429.
- Boschma, R. (2005). Proximity and innovation: a critical assessment. *Regional studies*, 39(1), 61-74.
- Bottazzi, L., Da Rin, M., & Hellmann, T. (2008). Who are the active investors? Evidence from venture capital. *Journal of Financial Economics*, 89, 488-512.
- Brush, C. G., Greene, P. G., & Hart, M. M. (2001). From Initial Idea to Unique Advantage: The Entrepreneurial Challenge of Constructing a Resource Base. *Academy of Management Executive*, 15(1), 64-78.
- Cefis, E., & Marsili, O. (2005). A matter of life and death: innovation and firm survival. *Industrial and Corporate Change*, 14(6), 1167-1192.
- Choi, Y. R., & Shepherd, D. A. (2005). Stakeholder perceptions of age and other dimensions of newness. *Journal of Management*, 31(4), 573-596.

- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative science quarterly*, 35(1).
- Colombo, M. G., Grilli, L., & Piva, E. (2006). In search of complementary assets: The determinants of alliance formation of high-tech start-ups. *Research Policy*, 35(8), 1166-1199.
- Colombo, M. G., & Grilli, L. (2010). On growth drivers of high-tech start-ups: Exploring the role of founders' human capital and venture capital. *Journal of Business Venturing*, 25(6), 610-626.
- Colombo, M. G., Franzoni, C., & Rossi Lamastra, C. (2013). Internal Social Capital and the Attraction of Early Contributions in Crowdfunding Projects. *Available at SSRN 2319320*.
- Croce A., Martí, J., & Murtinu, S. (2013). The impact of venture capital on the productivity growth of European entrepreneurial firms: 'Screening' or 'value added' effect?. *Journal of Business Venturing*, 28, 489–510.
- Dakhli, M., & de Clercq, D. (2004). Human capital, social capital, and innovation: a multicountry study. *Entrepreneurship & Regional Development*, 16, 107–128.
- Dyer, J. H., & Singh, H. (1998). The relational view: cooperative strategy and sources of interorganizational competitive advantage. *Academy of management review*, 23(4), 660-679.
- Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: the Toyota case. *Strategic Management Journal*, 21(3), 345-367.
- Easterby-Smith, M., Lyles, M. A., & Tsang, E. W. (2008). Inter-organizational knowledge transfer: Current themes and future prospects. *Journal of management studies*, 45(4), 677-690.
- Forbes (2014), Crowdfunding: The Real Story Behind Crowdfunding That No One's Telling, January 13.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. *Research policy*, 32(2), 333-350.
- George, G. (2005). Slack resources and the performance of privately held firms. *Academy of Management Journal*, 48(4), 661-676.
- Gerber, E. M., Hui, J. S., & Kuo, P. Y. (2012). Crowdfunding: why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*.
- Giudici, G., Nava, R., Rossi Lamastra, C., & Verecondo, C. (2012). Crowdfunding: The new frontier for financing entrepreneurship?. *Available at SSRN 2157429*.
- Giudici, G., Guerini, M., & Rossi Lamastra, C. (2013). Crowdfunding in Italy: state of the art and future prospects. *Economia e Politica Industriale-Journal of Industrial and Business Economics*, 40(4), 173-188.
- Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American journal of sociology*, 481-510.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17, 109-122.
- Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of management studies*, 41(1), 61-84.
- Hagi, A., & Wright, J. (2011). *Multi-sided platforms*. Harvard Business School.
- Hsu, D. H. (2006). Venture capitalists and cooperative start-up commercialization strategy. *Management Science*, 52(2), 204-219.
- Huber, F. (2012). On the role and interrelationship of spatial, social and cognitive proximity: personal knowledge relationships of R&D workers in the Cambridge information technology cluster. *Regional Studies*, 46(9), 1169-1182.
- Jackson III W.E., Bates, W., and Bradford, W.D. (2012). Does venture capitalist activism improve investment performance? *Journal of Business Venturing*, 27, 342–354.

- Lane, P. J., & Lubatkin, M. (1998). Relative absorptive capacity and interorganizational learning. *Strategic management journal*, 19(5), 461-477.
- Lerner, J. (1995). Venture capitalists and the oversight of private firms. *Journal of Finance*, 50, 301-318.
- Lichtenstein, B. M. B., & Brush, C. G. (2001). How Do 'Resource Bundles' Develop and Change in New Ventures? A Dynamic Model and Longitudinal Exploration. *Entrepreneurship Theory and Practice*, 25(3), 37-58.
- MacMillan, I.C., Kulow, D.M., & Khoylean, R. (1989). Venture capitalists' involvement in their investments: extent and performance. *Journal of Business Venturing*, 4, 27-47.
- Maula, M., Autio, E., & Murray, G. (2003). Prerequisites for the creation of social capital and subsequent knowledge acquisition in corporate venture capital. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5(2), 117-134.
- Molina-Morales, F. X., García-Villaverde, P. M., & Parra-Requena, G. (2011). Geographical and cognitive proximity effects on innovation performance in SMEs: a way through knowledge acquisition. *International Entrepreneurship and Management Journal*, 1-21.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1-16.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic management journal*, 18(S1), 187-206.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York: John Wiley & Sons.
- Presutti, M., Boari, C., & Majocchi, A. (2011). The Importance of Proximity for the Start-Ups' Knowledge Acquisition and Exploitation. *Journal of Small Business Management*, 49(3), 361-389.
- Rallet, A., & Torre, A. (2000). Is Geographical Proximity Necessary in the Innovation Networks in the Era of Global Economy? *GeoJournal*, 49, 373-380
- Rosenbusch, N., Brinckmann, J., & Müller, V. (2013). Does acquiring venture capital pay off for the funded firms? A meta-analysis on the relationship between venture capital investment and funded firm financial performance. *Journal of business venturing*, 28(3), 335-353.
- Sapienza, H.J. (1992). When do venture capitalists add value? *Journal of Business Venturing*, 7, 9-27.
- Sapienza, H.J., Manigart, S., & Vermeir, W. (1996). Venture capital governance and value added in four countries. *Journal of Business Venturing*, 11, 439-469.
- Schwiebacher, A., & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. *SSRN Electronic Journal*.
- Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new venture performance: the moderating role of intra- and extra industry social capital. *Academy of Management Journal*, 51(1), 97-111.
- Stinchcombe, A.L., (1965). Social structure and organizations. In: March, J.G. (Ed.), *Handbook of Organizations*. Rand McNally, Chicago.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic management journal*, 17(WINTER), 27-43.
- West, G. P., & Noel, T. W. (2009). The impact of knowledge resources on new venture performance. *Journal of Small Business Management*, 47(1), 1-22.
- Wiklund, J., & Sheperd, D. (2005). Entrepreneurial orientation and small business performance. *Journal of Business Venturing*, 20, 71-91.
- Wright, M., & Robbie, K. (1998). Venture capital and private equity: a review and synthesis. *Journal of Business Finance Accounting*, 25(5/6), 521-570.

- Yli-Renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic management journal*, 22(6-7), 587-613.
- Zhang, Y. (2012) An Empirical Study into the Field of Crowdfunding. Master thesis dissertation.