

## Roles of Individual- and Country-level Social Capital in Entrepreneurial Activities of Crowdfunding\*

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### I. Introduction

As crowdfunding gains popularity as a new way of raising financial resources, practitioners and academic researchers have started paying attention to this concept, which facilitates the raising of funds from the crowd. From the perspective of project founders, backers, and intermediaries, there has been a lot of research on crowdfunding (Moritz & Block, 2016).

Particularly, previous studies have focused on the motivation behind participation (Belleflamme *et al.*, 2013; Cholakova & Clarysse, 2015; Fisk *et al.*, 2011; Ryu & Kim, 2016), determinants of successful crowdfunding (Chen *et al.*, 2016; Josefy *et al.*, 2016; Oh & Baek, 2016; Thies *et al.*, 2016), and roles of intermediaries (Greiner & Wang, 2010).

However, researchers have not paid much attention to what affects entrepreneurial

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activities in terms of creating new crowdfunding projects. From the perspective of the social capital theory, this study attempts to investigate the role of social capital in the entrepreneurial activities of crowdfunding. In general, social capital can be defined as “resources embedded in a social structure” (Lin, 2002, p. 29). Researchers have showed that social capital can make contributions in various contexts, such as economic growth, innovation, knowledge sharing, and entrepreneurship (Anderson & Jack, 2002; Estrin *et al.*, 2013; Knack & Keefer, 1997; Laursen *et al.*, 2012; Wasko & Faraj, 2005; Westlund & Bolton, 2003).

Particularly, with regard to the role of social capital in entrepreneurship, previous studies have found that social capital affects the intention to start new businesses and the success of start-ups (Batjargal, 2007; Liñán & Santos, 2007; Westlund & Bolton, 2003; Witt, 2004). For example, some studies have explored the effects of individual- and country-level social capital on entrepreneurial activities (Kwon & Arenius, 2010; Tatarko & Schmidt, 2016).

As such, this study guesses that social capital at the individual and the country level affects entrepreneurial activities on crowdfunding platforms. Besides overcoming the limitations of current research on crowdfunding, the purpose of this study is to address research questions as follows: (1) *Does the social capital of a crowdfunding project founder have a positive influence on the entrepreneurial*

*activities for launching crowdfunding projects?*

(2) *Does the social capital of the country where a crowdfunding project founder resides have a positive influence on the entrepreneurial activities for launching crowdfunding projects?*

From the context of crowdfunding, this research attempts to investigate the role of individual- and country-level social capital in achieving entrepreneurial goals in terms of creating crowdfunding projects. The manuscript is structured as follows. In Section 2, the related literature is reviewed, while Section 3 develops the hypotheses. In Sections 4 and 5, this paper presents the research methodology and results of the analysis. Lastly, Section 6 addresses the discussion and conclusions.

## II. Literature Review

### 2.1 Crowdfunding

Inspired by micro-financing (Mollick, 2014) and crowdsourcing (Lehner, 2013), crowdfunding has emerged as a novel way for raising funds in the current Internet environment. As this concept has recently emerged, definitions of crowdfunding have been evolving. Crowdfunding can generally be defined as “an open call, essentially through the Internet, for the provision of financial resources either in the form of donation or in exchange for some form of reward and/or voting rights in order to

support initiatives for specific purposes” (Schwienbacher & Larralde, 2012). Generally, crowdfunding emerges as a form of financing, which facilitates the raising of funds from the crowd via online platforms (Agrawal *et al.*, 2015; Cholakova & Clarysse, 2015; Mollick, 2014).

Regarding types of crowdfunding, there are some variations in classification. Particularly, depending on the incentives offered to the crowd, previous studies have categorized crowdfunding into four types: donation-based crowdfunding, reward-based crowdfunding, lending-based crowdfunding, and equity-based crowdfunding (Cholakova & Clarysse, 2015). Of these, this study focuses on reward-based crowdfunding, because it is the most prevalent type of crowdfunding. Kickstarter and Indiegogo are notable examples of this type of crowdfunding.

Initial studies espoused an exploratory approach towards crowdfunding (Mollick, 2014). Particularly, the studies focused on the motivation behind participating in crowdfunding from the perspective of both founders and backers (Belleflamme *et al.*, 2013; Cholakova & Clarysse, 2015; Fisk *et al.*, 2011; Ryu & Kim, 2016), influencing factors for successful crowdfunding (Chen *et al.*, 2016; Josefy *et al.*, 2016; Oh & Baek, 2016; Thies *et al.*, 2016), and roles of intermediaries (Greiner & Wang, 2010).

However, the studies did not pay much

attention to entrepreneurial activities and their antecedents on crowdfunding platforms (Moritz & Block, 2016). To foster entrepreneurship through crowdfunding, it is important to encourage entrepreneurs to start new crowdfunding projects multiple times, and not just once. In this regard, it is critical to understand the factors influencing entrepreneurial activities in terms of starting multiple crowdfunding projects.

## 2.2 Social Capital and Entrepreneurship

Different academic disciplines have offered various definitions of social capital. Nahapiet and Ghoshal (1998) defined social capital as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit.” Focusing on the function of social capital, Coleman (1988) argued that the various forms of social capital have two common elements: (1) some aspect of social structures, and (2) facilitating certain actions of individual or corporate actors within the structure. Furthermore, it has been argued that social capital encompasses both the network and the assets that may be accessed through such a network (Burt, 1992).

Conceptualizing social capital, researchers have focused on its multidimensional characteristics. For example, Nahapiet and Ghoshal (1998) suggested three dimensions of

social capital: structural dimension, relational dimension, and cognitive dimension. While the structural dimension of social capital captures the connections between actors with network ties and network configuration, the relational dimension focuses on specific relationships and trust people have. The third cognitive dimension of social capital refers to the resources providing shared language and schema among parties.

Meanwhile, with regard to the benefits of social capital, Adler and Kwon (2002) suggested three benefits, namely information, influence, and solidarity. Social capital enables better access to a wide range of information sources and aids focal actors in achieving their goals. Furthermore, community solidarity with strong social norms can reduce inefficient formal controls. It has been argued that networks are important sources for firms to access additional and complementary resources (Baum & Silverman, 2004). Researchers have revealed contributions of social capital from various contexts such as economic growth, innovation, knowledge sharing, project management, and entrepreneurship (Anderson & Jack, 2002; Chua *et al.*, 2012; Estrin *et al.*, 2013; Knack & Keefer, 1997; Laursen *et al.*, 2012; Wasko & Faraj, 2005; Westlund & Bolton, 2003).

Especially, several studies have been conducted with regard to the relationship between social capital and entrepreneurship. It

has been argued that social capital affects the intention to start new businesses and the success of start-ups (Batjargal, 2007; Liñán & Santos, 2007; Westlund & Bolton, 2003; Witt, 2004). For example, examining individual-level social capital, Tatarko and Schmidt (2016) showed that it facilitates the execution of an individual's intention to start a business. Besides social capital at the individual level, Kwon and Arenius (2010) examined social capital at the country level and showed how it impacts entrepreneurial opportunity perception.

### III. Hypotheses Development

#### 3.1 Individual-level Social Capital in Entrepreneurial Activities

From the context of crowdfunding, earlier studies have focused on the role of social capital, especially in the relationship between social capital and crowdfunding performance. Colombo *et al.* (2015) showed that internal social capital, which is measured by the number of projects backed by the crowdfunding project founder, affects early contributions to crowdfunding. Employing the multidimensional concept of social capital, Zheng *et al.* (2014) found that a crowdfunding project founder's social network ties (structural dimension of social capital), obligations to fund other crowdfunding projects (relational dimension of

social capital), and the shared meaning of the crowdfunding project between the crowdfunding project founder and the backers (cognitive dimension of social capital) are positively associated with crowdfunding performance in China and the U.S. as well.

However, most of the previous studies have focused on whether social capital has a positive effect on crowdfunding performance. A wide range of studies have shown that social capital affects entrepreneurial activities in terms of starting new businesses and their success (Batjargal, 2007; Liñán & Santos, 2007; Westlund & Bolton, 2003; Witt, 2004). Therefore, in addition to the role of social capital in crowdfunding performance, this study proposes that the crowdfunding founder's social capital has a positive impact on his/her entrepreneurial activities in the creation of new crowdfunding projects.

As crowdfunding platforms emerge as a new avenue of fundraising for start-ups, this study contends that a crowdfunding project founder's social capital influences his/her entrepreneurial activities on crowdfunding platforms. Specifically, employing the multidimensional concept of social capital, this study argues that the structural dimension, relational dimension, and cognitive dimension of founders' social capital have a positive impact on launching crowdfunding projects. Therefore, the study sets up hypotheses as follows.

*<H1a> A crowdfunding project founder's social network ties are positively associated with entrepreneurial activities for launching crowdfunding projects.*

*<H1b> The obligation to support other crowdfunding projects is positively associated with entrepreneurial activities for launching crowdfunding projects.*

*<H1c> Shared meaning in a crowdfunding project is positively associated with entrepreneurial activities for launching crowdfunding projects.*

### 3.2 Country-level Social Capital in Entrepreneurial Activities

Previous studies have attempted to explore the influence of country-level social capital on entrepreneurial activities. National social capital can be defined as "a resource reflecting the character of social relations with the nation" (Kwon & Arenius, 2010). Arguing that country-level social capital contributes to entrepreneurship activities, Kwon and Arenius (2010) showed the positive impact of national social capital on entrepreneurial opportunity perception. Examining social capital at the regional level, Laursen *et al.* (2012) showed that geographically localized social capital plays a role in fostering firm-level innovation.

From the context of crowdfunding, previous studies have shown that the founder's location

influences crowdfunding performance. Showing the geographic concentration of new crowdfunding project activities, Mollick (2014) found that the success of crowdfunding projects is dependent on the location of the project founder. Josefy *et al.* (2016) showed that the characteristics of the community's culture play an important role in crowdfunding success. In the same vein, this research proposes that the social capital of the country where a crowdfunding project founder resides has a positive impact on entrepreneurial activities on crowdfunding platforms. Therefore, this paper sets up the following hypothesis.

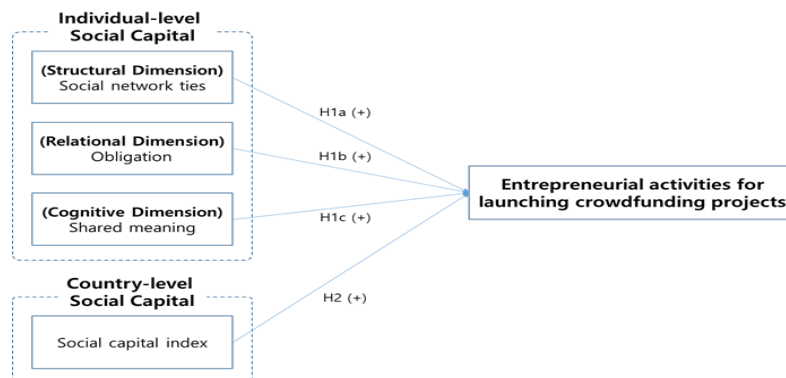
<H2> *Social capital of the country where a crowdfunding project founder resides is positively associated with entrepreneurial activities for launching crowdfunding projects.*

In summary, the conceptual model of this study can be depicted as shown in Figure 1.

## IV. Methodology

### 4.1 Data Collection

Two sources were used for data collection in this study. First, with regard to entrepreneurial activities on crowdfunding platforms and social capital at the individual level, this research collected data from Kickstarter (www.kickstarter.com), the largest US-based crowdfunding platform. Established in 2009, Kickstarter has promoted diverse kinds of crowdfunding projects pertaining to arts, comics, craft, dance, technology, games, publication, etc. According to a press release by Kickstarter, it has helped launch 118,743 crowdfunding projects successfully, while over USD 2.8 billion were pledged to crowdfunding projects as of 2017 (Kickstarter.com, 2017). Acknowledging the representativeness of Kickstarter as a crowdfunding platform, a lot of previous research on crowdfunding used data from Kickstarter (Colombo *et al.*, 2015;



<Figure 1> Research model

<Table 1> Collected data

Variable	Definition	Source
<i>NumOfCreated</i>	Number of crowdfunding projects created by a founder	Kickstarter
<i>FacebookFriends</i>	Number of Facebook friends of a founder	Kickstarter
<i>NumOfBacked</i>	Number of projects supported by a founder	Kickstarter
<i>WordCount</i>	Number of words in the project description	Kickstarter
<i>Category</i>	Categories of crowdfunding projects	Kickstarter
<i>GoalAmount</i>	Targeted amount of crowdfunding projects	Kickstarter
<i>NationSocialCapital</i>	Social capital index at the country level	Legatum osperity Index

Mollick, 2014; Zheng et al., 2014). For this research, a Java-based web crawler collected data of crowdfunding projects that concluded during the period August 2016 to January 2017.

Second, to examine the role of country-level social capital in crowdfunding, this study uses the social capital index from the 2016 Legatum Prosperity Index (Legatum Institute, 2016), which was also referred by previous studies on social capital at the country level (Doh, 2014). The Legatum Prosperity Index is a framework to assess country-level wealth and wellbeing, consisting of nine sub-indexes including the social capital index (Legatum Institute, 2016). While it ranks 148 countries and 1 special administrative region of Hong Kong in terms of prosperity, the social capital sub-index measures the strength of personal relationships, social network support, social norms, and civic participation (Legatum Institute, 2016).

As the first step, this study collected the location information of individual founders from Kickstarter. For each crowdfunding project, there is an “introduction” web page about the crowdfunding project founder (“About

the creator”), which presents the location information at the country level. Then, this location information was matched with the country-level social capital index from the 2016 Legatum Prosperity Index for each crowdfunding project. To summarize, the collected data are shown in Table 1.

## 4.2 Measures

For the dependent variable, entrepreneurial activities in crowdfunding are measured based on the number of crowdfunding projects that a crowdfunding project founder has launched. Regarding the individual-level social capital, this study focuses on multidimensional characteristics of social capital. Investigating the role of social capital in crowdfunding performance, Zheng *et al.* (2014) adopted the dimensions of social capital by Nahapiet and Ghoshal (1998) and developed related measures.

In their study, the structured dimension of social capital was measured against the extent of social network ties of a crowdfunding project founder—for example, the number of Facebook

friends (Zheng *et al.*, 2014). In addition, the relational dimension of social capital was measured against the number of other crowdfunding projects that a crowdfunding project founder has invested in. The cognitive dimension of social capital was measured against the word count of the description of a crowdfunding project (Zheng *et al.*, 2014). Following this approach, the present study employs the same measures for structural, relational, and cognitive social capital at the individual level.

With regard to social capital at the country level, this study refers to the aggregated social capital index from the 2016 Legatum Prosperity Index (Doh, 2014; Legatum Institute, 2016). Meanwhile, depending on the categories of crowdfunding projects and the overall size of the funding goal amount, the entrepreneurial activities may have different aspects. Therefore, the categories of each crowdfunding project and

the target amount of each crowdfunding project are considered as control variables. The measures for this study are summarized in Table 2.

### 4.3 Descriptive Statistics

In this research, we targeted crowdfunding projects that concluded during the period August 2016 to January 2017. After data collection, 15,716 crowdfunding projects were finally identified in the sample. By category, games had the largest number of projects (2,037), followed by design (1,824), technology (1,757), film (1,734), publishing (1,687), and music (1,651). Table 3 presents the descriptive statistics and correlation of key variables. While the average number of crowdfunding projects created by founders (*NumOfCreated*) is 1.65, the average number of Facebook friends of founders (*FacebookFriends*) is 483. The average

<Table 2> Measures

Category	Construct	Measure	Variable
Dependent variable	Entrepreneurial activities	Number of projects created by the founder	<i>NumOfCreated</i>
Independent variables	Structural social capital	Number of Facebook friends of the founder	<i>FacebookFriends</i>
	Relational social capital	Number of projects supported by the founder	<i>NumOfBacked</i>
	Cognitive social capital	Number of words in the project description	<i>WordCount</i>
	Country-level social capital	Social capital index of the 2016 Legatum Prosperity Index	<i>NationSocialCapital</i>
Control Variables		Categories of a crowdfunding project (dummy variables for 15 categories in total)	<i>Category</i>
		Goal amount of a crowdfunding project	<i>GoalAmount</i>



<Table 3> Descriptive statistics and correlations between variables

Variable	Mean	S.D.	[1]	[2]	[3]	[4]	[5]	[6]
[1] <i>NumOfCreated</i>	1.65	2.43	1.000					
[2] <i>FacebookFriends</i>	483.29	874.70	0.071***	1.000				
[3] <i>NumOfBacked</i>	5.54	23.51	0.277***	0.075***	1.000			
[4] <i>WordCount</i>	608.56	588.71	0.075***	0.007	0.148***	1.000		
[5] <i>NationSocialCapital</i>	63.75	4.3	0.052***	0.025***	0.042***	-0.049***	1.000	
[6] <i>GoalAmount</i>	8.78	1.76	-0.144***	0.008	-0.071***	0.207***	-0.084***	1.000

\*\*\* p < 0.01, \*\* p < 0.05

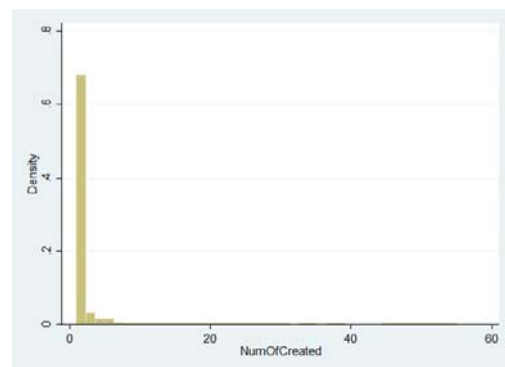
number of projects backed by founders (*NumOfBacked*) is 5.54, which indicates that there is active participation toward supporting other crowdfunding projects. The average word count of the project description (*WordCount*) is 608.56. Meanwhile, to control for the size effect and streamline the distribution of large values, this study employs log-transformation for the goal amount of crowdfunding projects.

With regard to correlations between key variables, the number of crowdfunding projects created by founders (*NumOfCreated*) is positively correlated with the number of Facebook friends of founders (*FacebookFriends*; corr.=0.071), number of projects backed by founders (*NumOfBacked*; corr.=0.277), word count of project description (*WordCount*; corr.=0.075), and the nation’s social capital (*NationSocialCapital*; corr.=0.052). Meanwhile, the average variance inflation factor (VIF) is 1.04 and the maximum VIF is 1.08, which are below the conventional threshold (Hair, Anderson, Tatham, & Black, 1998; McDonald & Moffitt, 1980). Therefore, it seems that this study has no concern when it comes to the

multicollinearity of the measures.

#### 4.4 Analysis Model

In this research, the dependent variable, *NumOfCreated*, exhibits the characteristics of non-negative integers or count data and is highly skewed, as shown in Figure 2. Therefore, for estimation, this study starts with the Poisson regression, which assumes the dependent variable has a Poisson distribution.



<Figure 2> Histogram of the dependent variable *NumOfCreated*

However, the Poisson distribution has a strict assumption that the mean is equal to the

variance. In most empirical studies, the variance is usually greater than the mean, which is known as overdispersion. In this study, the mean for *NumOfCreated* is 1.65 and its variance of  $5.9 = 2.43^2$ , which is about 3.6 times greater. To address this overdispersion issue effectively, negative binomial regression, which is a generalization of Poisson regression, is often employed. In this regard, for the robustness of estimation, this study also utilizes negative binomial regression to test hypotheses. The base model for this research is shown in Equation (1) below.

$$\begin{aligned}
 \text{NumOfCreated} = & \exp(\beta_0 + \beta_1 * \\
 & \text{FacebookFriends} + \beta_2 * \text{NumOfBacked} \\
 & + \beta_3 * \text{WordCount} + \beta_4 * \\
 & \text{NationSocialCapital} + \beta_5 * \ln(\text{GoalAmount}) \\
 & + \sum_{k=1}^{n-1} \gamma_k * \text{Category}_k)
 \end{aligned}
 \tag{1}$$

## V. Results

Table 4 presents the estimation results through both Poisson regression and negative binomial regression. In each approach, this study starts with estimating the impact of individual-level social capital and then the effect of country-level social capital on entrepreneurial activities for launching crowdfunding projects. First, columns (1) and

(2) present the analysis results using the Poisson regression. In column (1), this study estimates the impact of individual-level social capital on crowdfunding-founding activities. As hypothesized, it shows that structural social capital (*FacebookFriends*; coef. = 0.0001), relational social capital (*NumOfBacked*; coef. = 0.0035), and cognitive social capital (*WordCount*; coef. = 0.0001) are significant at the 0.01 level and positively associated with entrepreneurial activities for launching crowdfunding projects.

Additionally, in column (2), this study estimates the impact of both individual- and country-level social capital on crowdfunding-founding activities. In addition to the positive impact of individual-level social capital, it shows that social capital at the country level (*NationSocialCapital*; coef. = 0.0188) is significant at the 0.01 level and positively associated with entrepreneurial activities for launching crowdfunding projects. In summary, through the Poisson regression estimation, hypotheses 1a~1c and hypothesis 2 are all supported.

Second, easing the assumption of the Poisson regression, columns (3) and (4) show the estimation results using the negative binomial regression. Overall, the estimation results are consistent with those of the Poisson regression. In column (3), structural social capital (*FacebookFriends*; coef. = 0.0001), relational social capital (*NumOfBacked*; coef. = 0.0082),

and cognitive social capital (*WordCount*; coef. = 0.0001) are significant at the 0.01 level and positively associated with entrepreneurial activities for launching crowdfunding projects.

Next, column (4) presents the impact of both individual- and country-level social capital on crowdfunding-founding activities. Similarly, in addition to the positive impact of the individual-level social capital, it shows that social capital at the country level (*NationSocialCapital*; coef. = 0.0150) is significant at the 0.01 level and positively associated with entrepreneurial activities for launching crowdfunding projects. In summary,

the estimation results derived using the negative binomial regression confirm the analysis results obtained by the Poisson regression. Thus, all hypotheses are supported.

To check the robustness of the analysis results mentioned above, this study sub-samples crowdfunding projects whose founders created more than one crowdfunding projects and tests the hypotheses. Based on sub-samples of 3,569 crowdfunding projects, Table 5 presents further estimation results using the Poisson regression and negative binomial regression, which is consistent with the estimation results shown in Table 4.

<Table 4> Analysis results

	DV: <i>NumOfCreated</i>			
	Poisson regression		Negative binomial regression	
	(1)	(2)	(3)	(4)
<i>FacebookFriends</i>	0.0001*** (0.000)	0.0001*** (0.000)	0.0001*** (0.000)	0.0001*** (0.000)
<i>NumOfBacked</i>	0.0035*** (0.000)	0.0034*** (0.000)	0.0082*** (0.001)	0.0080*** (0.001)
<i>WordCount</i>	0.0001*** (0.000)	0.0001*** (0.000)	0.0001*** (0.000)	0.0001*** (0.000)
<i>NationSocialCapital</i>	-	0.0188*** (0.002)	-	0.0150*** (0.002)
<i>ln(GoalAmount)</i>	-0.1154*** (0.007)	-0.1141*** (0.007)	-0.1095*** (0.006)	-0.1077*** (0.006)
<i>Category Dummy</i>	Yes	Yes	Yes	Yes
<i>Constant</i>	1.2511*** (0.068)	0.0428 (0.123)	1.185*** (0.061)	0.2158* (0.112)
<i>N</i>	15,716	15,716	15,716	15,716
<i>Prob &gt; chi2</i>	0.0000	0.0000	0.0000	0.0000
<i>Pseudo R<sup>2</sup></i>	0.0845	0.0870	0.0683	0.0696

Standard errors are presented in parentheses.

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

<Table 5> Analysis results with sub-sampled 3,569 projects

	DV: <i>NumOfCreated</i>	
	Poisson regression	Negative binomial regression
<i>FacebookFriends</i>	0.0001*** (0.000)	0.0001*** (0.000)
<i>NumOfBacked</i>	0.0018*** (0.000)	0.0033*** (0.003)
<i>WordCount</i>	0.0001*** (0.000)	0.0001*** (0.000)
<i>NationSocialCapital</i>	0.0260*** (0.003)	0.0208*** (0.004)
<i>ln(GoalAmount)</i>	-0.0870*** (0.005)	-0.0845*** (0.007)
<i>Category Dummy</i>	Yes	Yes
<i>Constant</i>	0.1258 (0.183)	0.4206* (0.240)
<i>N</i>	3,569	3,569
<i>Prob &gt; chi2</i>	0.0000	0.0000
<i>Pseudo R<sup>2</sup></i>	0.1005	0.0541

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

## VI. Discussion and Conclusions

From the context of crowdfunding, this study examines the role of individual- and country-level social capital in entrepreneurial activities. The study shows that the crowdfunding founder's social capital has a positive impact on the creation of new crowdfunding projects. Particularly, employing the multidimensional concept of social capital, this study noted the positive role of structural dimension, relational dimension, and cognitive dimension of the founder's social capital in launching crowdfunding projects. In other words, the number of Facebook friends (i.e., structural social capital), the number of other

crowdfunding projects which a crowdfunding project founder has invested in (i.e., relational social capital), and word count of the description of a crowdfunding project (i.e., cognitive social capital) are positively associated with the number of crowdfunding projects created by founders. In addition, this research shows that social capital at the country level is positively associated with entrepreneurial activities for launching crowdfunding projects.

While there has been limited research on the recent phenomenon of crowdfunding, this study makes multifaceted contributions. From an academic perspective, first, this study enhances our understanding of entrepreneurial activities on crowdfunding. Most of the previous studies on crowdfunding focused on the motivations

behind participating in crowdfunding, determinants of successful crowdfunding, or roles of the intermediaries. To encourage entrepreneurship through crowdfunding, it is critical to understand the determining factors of entrepreneurial activities in terms of starting multiple crowdfunding projects.

Second, this research attempts to examine the role of social capital at both individual- and country-level in crowdfunding-founding activities. From the research context of crowdfunding, most previous studies focused more on the impact of social capital on crowdfunding performance. Particularly, there has been no research examining the impact of country-level social capital from the context of crowdfunding. In this regard, this study attempts to expand the current body of knowledge by examining the role of social capital at the individual and the country level in entrepreneurial activities.

From a practical perspective, this study suggests implications for policy makers. In terms of job creation and boosting economic growth, fostering entrepreneurship in a nation's economy is now one of the priorities of policy makers. In this regard, crowdfunding platforms can play an important role in enhancing entrepreneurship and creating new businesses. Given how this study shows the influence of social capital at the country level on crowdfunding-founding activities, government officials need to carefully think of ways to promote social capital by developing effective

policies and thereby raising entrepreneurship.

Second, as founders' social capital has a positive impact on entrepreneurial activities, system developers and administrators of crowdfunding platforms also need to pay attention to measures for enhancing founders' social capital on their platforms. For example, making features for expanding social network ties through various social media channels much easier can be a strategic option for them. Furthermore, if crowdfunding project founders are able to share their visions in multiple ways, it can contribute to founders' activities toward creating more crowdfunding projects.

In terms of generalizability, this research has some limitations. First, with regard to crowdfunding platforms, this study focuses on only one such platform: Kickstarter. However, there are several other crowdfunding platforms in operation. Though Kickstarter is a representative crowdfunding platform, future research can generalize the analysis results by considering diverse crowdfunding platforms from other countries. Second, unlike the individual-level social capital, this study adopts aggregated social capital index for country-level social capital. Due to the difficulty in data collection, although this study employs the aggregated social capital index from a third-party source, future research may consider country-level social capital from various dimensions. Third, owing to limitations of data collection, this research is not able to consider

various aspects of the founders in terms of control variables. Future research may enhance the accuracy of analysis results, reflecting further control variables, including the demographic factors of founders such as education, gender, and age. Fourth, this research does not consider the qualitative aspect in entrepreneurial activities by founders. Though it is difficult to capture the qualitative factors in entrepreneurial activities for launching crowdfunding projects, researchers may attempt to examine this issue for future research.

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#### 오 세 환 (Sehwan Oh)



현재 경북대학교 경영학 부에서 조교수로 재직 중이다. 서울대학교 경제학부(학사)를 졸업했으며 미 카네기 멜론대에서 e-Business 석사, 서울대학교에서 경영정보학 박사 학위를 받았다. *International Journal of Mobile Communications*, *Journal of Electronic Commerce Research*, *ETRI Journal* 등에 논문을 게재했으며 주요 연구 관심분야는 소셜미디어, 크라우드펀딩, 온라인구전, 전자상거래, 정보기술 역량 등이다.

#### 노 성 호 (Sungho Rho)



현재 세종대학교 국제학 부에서 조교수로 재직 중이다. 서울대학교 경제학부(학사)를 졸업했으며 중국 淸華 대학교에서 기술경제경영학 석사와 박사 학위를 받았다. *Seoul Journal of Economics*, *Millennial Asia* 등 학술지에 논문을 게재했으며 주요 연구 관심분야는 혁신, 산업추격, 개발경제학 등이다.

<Abstract>

## **Roles of Individual- and Country-level Social Capital in Entrepreneurial Activities of Crowdfunding**

Sehwan Oh · Sungho Rho

### **Purpose**

This study examines the roles of individual- and country-level social capital in entrepreneurial activities from the context of crowdfunding.

### **Design/methodology/approach**

Two primary sources were used for data collection. From Kickstarter, the largest U.S.-based crowdfunding platform, this study obtained 15,716 crowdfunding projects and individual-level social capital. For country-level social capital, the social capital index from the 2016 Legatum Prosperity Index was utilized. By matching individual- and country-level social capital for each crowdfunding project, this research estimates the role of social capital in entrepreneurial activities at the individual and country level using the Poisson regression and the negative binomial regression.

### **Findings**

Individual-level social capital measured by the number of Facebook friends, the number of other crowdfunding projects that a crowdfunding project founder invested in, and the word count of the description of a crowdfunding project are positively associated with the number of crowdfunding projects created by founders. The country-level social capital measured by aggregated social capital index is also positively associated with the number of crowdfunding projects created by founders. Both individual- and country-level social capital have a positive impact on entrepreneurial activities in terms of the creation of new crowdfunding projects.

**Keyword:** Social Capital, Crowdfunding, Entrepreneurial Activities, Kickstarter

<국문초록>

## 크라우드펀딩 창업 활동에서 개인 및 국가 수준 사회적 자본의 역할

오세환 · 노성호

### 연구목적

본 연구는 크라우드펀딩 맥락에서 개인 및 국가 수준의 사회적 자본이 창업 활동에 미치는 영향에 대해 분석하고자 한다.

### 연구설계/방법론/접근법

본 연구는 두 가지 주요한 자료원을 활용했다. 먼저 미국의 대표적인 크라우드펀딩 플랫폼인 킥스타터(Kickstarter)에서 15,716개의 크라우드펀딩 프로젝트 및 개인 수준의 사회적 자본 관련 자료를 수집하는 한편 레카툼 번영지수(Legatum Prosperity Index)를 참조하여 국가 수준의 사회적 자본 관련 자료를 수집했다. 크라우드펀딩 프로젝트별로 개인 및 국가 수준의 사회적 자본을 측정 후 사회적 자본이 창업 활동에 미치는 영향에 대해 포아송 회귀분석 및 음이항 회귀분석을 실시했다.

### 결과

분석결과에 따르면 페이스북 친구수, 다른 프로젝트 후원 횟수, 프로젝트 소개글 수 등 창업가 개인 수준의 사회적 자본은 크라우드펀딩내 창업 활동과 긍정적으로 유의한 관계에 있는 것으로 나타났다. 또한 국가별 사회적 자본 지수로 측정한 국가 수준의 사회적 자본도 크라우드펀딩내 창업 활동과 긍정적으로 유의하게 나타났다.

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