Equity Crowdfunding:  
*Success Factors in the German Context*

Cem Kose, Hao Quach, Duyen Dai Chu  
e-mail: dchu@lincoln.ac.uk

**ABSTRACT**  
The emergence of equity crowdfunding has provided ventures at early stages of development with an important alternative source of finance over the past decade. However, it is still relatively under-studied and many equity crowdfunding campaigns are still unsuccessful. This paper aims to make contributions into research on success factors in equity crowdfunding. In this paper, we employ a deductive approach and quantitative methods, and using a sample dataset of 93 campaigns collected from two biggest equity crowdfunding platforms in Germany. Our findings provide evidence that success factors from traditional entrepreneurial finance can be relevant in predicting success in equity crowdfunding context. Our findings also show that numerous campaign characteristics and the use of social media networks can be success drivers in equity crowdfunding. Our findings are supported by rigorous diagnostic tests. The research has both theoretical and practical implications.

**1. INTRODUCTION**  
Over the last decade, crowdfunding has emerged as a new and viable alternative financing method for enterprises at early stages of development (Rossi, 2014). It is a fundraising practice in which small financial contributions are solicited from a “crowd” of investors via an intermediary internet-based platform to finance charity or business projects (Borello et al., 2015). The global crowdfunding industry has been growing fast and impressively. In 2014, $16.2 billion was successfully raised through crowdfunding, which grew dramatically to $34.4 billion in 2015 (Crowdsourcing, 2015). World Bank predicts that crowdfunding will continue to grow dynamically and will surpass $300 billion in funding transactions by 2025 (Meyskens and Bird, 2015).

Crowdfunding is used as an umbrella term which covers different models, including donation crowdfunding, reward crowdfunding, equity crowdfunding and crowdlending. They vary in nature due to the incentives that they offer to the “crowd”. Donation and reward crowdfunding are non-investment models of crowdfunding while lending and equity crowdfunding are investment-based models, involving financial returns. In donation crowdfunding, people contribute their money purely for a charity purpose while contributors in reward crowdfunding receive rewards in return for their contributions. Rewards can be in various forms such as finished products, souvenirs or a small amount of money. Investors in crowdlending lend their money and expect to receive higher returns in comparison to interest rates from savings accounts at banks while investors in equity crowdfunding invest their money and receive shares from ventures.
This research is aimed to focus on equity crowdfunding. Research on crowdfunding in current literature mainly focuses on crowdlending and reward crowdfunding while equity crowdfunding is still understudied (Vismara, 2016). Although equity crowdfunding has become an important alternative source of financing for enterprises at early stages of development, just a small number of campaigns are successful (Mollick, 2014). Despite the immense attention from a wide range of actors, such as policy makers, regulators, practitioners and researchers, little is known about success factors of equity crowdfunding campaigns. Therefore, there is a need for more research to shed more light on this phenomenon (Lukkarinen et al., 2016).

Studies on success factors in crowdfunding in current literature can be divided into two main approaches. Some researchers such as Dorff (2014), Ahlers et al. (2015), Vismara (2016) and Vismara (2017) study equity crowdfunding from the perspective of traditional entrepreneurial finance. Their findings provide initial evidence that success factors in traditional entrepreneurial finance can also be success factors in equity crowdfunding. The second school of researchers including Block et al. (2016), Lukkarinen et al. (2016), Hornuf and Schwienbacher (2017) argue that equity crowdfunding is a close funding method to reward crowdfunding. As a result, they take reward crowdfunding as a proxy to study success factors in equity crowdfunding. Their findings support their arguments. In this paper, we integrate both approaches by carrying out a comprehensive review on the success factors of equity crowdfunding in the current literature, identifying additional factors and test them in the national context of Germany.

Drawing on a hand-collected sample dataset of 93 equity campaigns in the German market, this paper makes two main contributions to the research on equity crowdfunding. First, our findings show that numerous success factors in traditional entrepreneurial finance and reward crowdfunding are relevant in predicting success in equity context. Second, we carry out rigorous diagnostic tests to support our findings. Prior studies on the same topic show little about diagnostic tests, leaving a gap in the literature.

The remainder of this paper is organized into five main parts. In the next section we present our literature review and hypothesis development, which is followed by sample data and variables. We present our main findings and discussion in section 4. Finally, we present our research conclusion and limitations.

2. LITERATURE & HYPOTHESIS DEVELOPMENT

2.1. Success Factors from Traditional Entrepreneurial Finance
As equity crowdfunding is a relatively new, researchers in current literature mainly employ theories from traditional entrepreneurial finance to study the phenomenon. Dorff (2014) argues that investors in equity crowdfunding have common motivations to invest with those in traditional entrepreneurial finance such as business angels and venture capitalists. While they expect to receive financial returns from their investments, they also want to support potential enterprises at early stages of development. Therefore, success factors in traditional entrepreneurial finance may provide some hints about investment decision of investors in equity crowdfunding.

In the US context, Mollick (2013) examines if crowdfunders and venture capitalists respond to project quality signals in the same way. He finds that crowdfunders in reward crowdfunding and venture capitalists assess entrepreneurial quality in similar ways. In the Australian context, Ahlers et al. (2015) apply signal theory to study equity crowdfunding. Drawing on a sample dataset of 106 campaigns posted on the Australia-based equity crowdfunding platform ASSOB between 2006 and 2011, they find that retaining equity and information about risks can be strong success drivers in funding success. Their find-
ings also show that intellectual capital such as patent has little or no impact on funding success in equity crowdfunding. Also using signal theory, Vismara (2016) finds that equity retention is negatively associated with funding success of equity crowdfunding in the UK context. He argues that just like in traditional entrepreneurial finance, offering high percentage of equity to investors implies that entrepreneurs are less confident about the prospect of their ventures. Consequently, high equity offerings can send a negative signal to potential investors.

Ralcheva and Roosenboom (2016) go further by applying both signal theory and certification theory to equity crowdfunding context in the UK. They argue that third party signals such as backing by business angels, winning grants and protecting intellectual property rights can possibly be certification to a campaign, signaling quality of that campaign. Their findings show that companies that are backed by a business angel, win grants and protect their intellectual property can significantly increase chances of funding success. In the national context of Finland, Lukkarinen et al. (2016) employ investment criteria of business angels and venture capitalists to examine success factors in equity crowdfunding. Drawing on a sample dataset of 60 campaigns published on the Finland-based equity crowdfunding platform Invesdor between 2012 and 2014, they find that traditional investment criteria have no impact on success in equity crowdfunding.

Basing on the above studies, in this paper, we carry out a comprehensive examination on success factors of equity crowdfunding in the national context of Germany by employing success factors from traditional entrepreneurial finance. Although prior studies show different findings, we realize that equity crowdfunding is relatively similar to traditional finance in the investment nature, involving financial returns. Therefore, we hypothesize that success factors in traditional entrepreneurial finance can possibly be success factors in equity crowdfunding.

Hypothesis 1: Success factors in traditional entrepreneurial finance can also be success factors in equity crowdfunding.

2.2. Success Factors from Nascent Crowdfunding Theory

In the existing literature on crowdfunding, success factors of crowdfunding campaigns may stem from campaign characteristics, social networks and understandability.

2.2.1. Campaign Characteristics

Some campaign characteristics such as funding target, key investors, provision of financials, number of updates, time of video, year in business can be potential success drivers of online crowdfunding campaigns. Most of these characteristics can be pre-defined by campaign initiators before campaigns are publicly posted on a platform.

Funding target represents the amount of the desired funding set by the entrepreneur before a campaign goes online. Findings on funding target vary with different models of crowdfunding. In reward-based crowdfunding, Mollick (2014) and Frydrych et al. (2014) find that successful campaigns tend to have lower funding targets, which is confirmed in Kuppuswamy and Bayus (2015) and Cumming et al. (2015). Conversely, in equity crowdfunding, studies such as Belleflamme et al. (2014), Hakenes and Schlegel (2014) and Lukkarinen et al. (2016) show that campaigns with higher funding targets have more success probability. However, Ahlers et al. (2015) found no significant relationship between target funding and the number of investors in equity crowdfunding.

Key investors may be high worth individual investors who invest more than €10,000 or institutional investors such as banks, insurance companies or the German government. According to the German small investor protection act, small investors are only allowed to invest a maximum amount of €10,000. Those individuals investing more than €10,000 are not typical small inves-
tors and can be considered as key investors in an equity crowdfunding campaign. Findings in Lin et al. (2013) show that having key investors is positively correlated to the total number of investors of a crowdfunding campaign.

The provision of financial information such as balance sheets, income statements and revenue forecasts are displayed in some campaigns. Recent studies find that providing financial details on the campaign page may be a positive predictor of success in crowdfunding (Mollick, 2014; Ahlers et al., 2015 and Lukkarinen et al., 2016).

During the time that a campaign goes live, the initiator may post various updates about the enterprise or the funding progress of the campaign. Block et al. (2016) find that the number of updates has a significantly positive effect on the final amount raised and the total number of investments made by the crowd in a crowdfunding campaign, which is consistent with Koch and Siering (2015). Hornuf and Schwienbacher (2017) also provide suggestive evidence showing that updates during a campaign can have positive influence on decision making of investors.

Many campaign initiators use videos and pictures as a part of illustration on their campaign pages. Ten Hacken (2014) and Mitra and Gilbert (2014) find that using a video is always better than using no video at all in reward crowdfunding context. Their findings also show that the duration and positive message in videos are positively related to success in reward crowdfunding.

There have been different findings on the relationship between the year in business of a firm and the success of its crowdfunding campaign. Belleflamme et al. (2013) find that the age of a firm does not have any effect on the success likelihood of its crowdfunding campaign, which is confirmed in Ahlers et al. (2015). However, Hornuf and Schwienbacher (2014) find a positive relationship between the age of a firm and the final amount raised in its crowdfunding campaign.

Basing on the above prior research, our second hypothesis argues that pre-determined campaign characteristics can have influence on the success probability in equity crowdfunding.

Hypothesis 2: In advance defined campaign characteristics can be success predictors of equity crowdfunding campaigns.

2.2.2. Social Media Network

In the existent literature, there is a controversy towards the role of online networks and crowdfunding campaign success. Belleflamme et al. (2013) do not find any evidence about the relationship between the use of social media networks and the success likelihood in different models of crowdfunding. However, Giudici et al. (2013), Lin et al. (2013), Zheng et al. (2014) and Mollick (2014) find that social media network is a key success driver in rewards crowdfunding. In equity crowdfunding context, Lukkarinen et al. (2016) and Vismara (2017) provide suggestive evidence that social media networks have a positive relationship with the success of campaigns.

Our third hypothesis argues that there is a positive influence of social networks on equity crowdfunding campaign success.

Hypothesis 3: The use of social media networks has a positive influence on the success of equity crowdfunding campaigns.

2.2.3. Understandability

Belleflamme et al. (2013) examine the relationship between the ability of investors to understand the offering in a crowdfunding campaign and the campaign success. They find that campaigns offering products have higher chances of success than those offering services. Their results are consistent through different models of crowdfunding. They reason that investors are
less likely to contribute to campaigns with intangible offerings like services because products are more tangible, visible and thus the certainty of the quality is perceived more strongly. Venture Bonsai, a Finnish equity crowdfunding platform, conducted a survey in 2013 and their results revealed that an interesting product is the most mentioned reason to invest. Similar findings are found in Belleflamme et al. (2013) and Häkön (2014). Lukkarinen et al. (2016) measure understandability by the orientation of the offerings. They find that offerings with business-to-consumer (B2C) orientation are more understandable and therefore more successful than offerings with business-to-business (B2B) orientation. In this paper, we employ the way of measuring understandability by Lukkarinen et al. (2016) and hypothesize that B2C offerings may have higher success probability than B2B offerings.

Hypothesis 4: Equity crowdfunding campaigns providing more understandable offerings are more successful.

3. SAMPLE DATA AND VARIABLES

3.1. Sample Data

3.1.1. Crowdfunding in Germany

Germany is the third biggest crowdfunding market in the European, after the UK and France respectively (Crowdfunding, 2017). Although crowdfunding has emerged in Germany since 2006, it was not until 2011 that it started to flourish due to substantial regulatory constraints (Hornuf and Schwienbacher, 2014). All four typical models of crowdfunding are present in the German market. Crowdfunding has been growing dramatically in Germany. The total crowdfunding volume in Germany reached €273 million in 2015 (Crowdfunding, 2016). In terms of equity crowdfunding, the average yearly growth rate is 116%, reaching a total amount of €49,8m in 2015 (European Commission, 2016). In Germany, all platforms operate under the “All-Or-Nothing” (AON) funding model. In the AON model, a campaign initiator can only receive proceeds raised if the funding target is met; otherwise all funds are returned to the investors of that campaign.

3.1.2. Sample Data Platforms

We collect our data from Companisto (www.companisto.de) and Seedmatch (www.seedmatch.de). We choose these two equity platforms for two main reasons. First, they are among the very first and biggest equity platforms in Germany. Together they account for nearly 75% of the total market share in Germany. Second, all finished projects stay visible on the website of these platforms and are available to be extracted.

Companisto is the biggest equity crowdfunding platform in Germany, with about 65,000 registered investors and over €33.3 million successfully raised. It was founded in 2012 and accounts for 50.4% of the German equity crowdfunding market share. It has a market coverage in the European Economic Area (EEA) plus Switzerland. The platform sets no restrictions on the location of investors. Seedmatch is the second biggest equity crowdfunding platform in Germany, accounting for 24% market share. It has a community of nearly 53,000 registered funders and an accumulated amount of over €29.5 million has been successfully raised on the platform (Crowdfunding, 2016). It has been in operation since 2011 and has a solely national market coverage. Both platforms follow the AON funding model. Due to the German small investor protection act, the minimum investment amount for an individual funder is €250 which is constant for all campaigns and the maximum amount is limited at €10,000. Institutional funders can invest above this threshold. Campaigns have a standardised duration of 60 days which can be extended up to 120 days if the platforms and project initiators are convinced that the funding thresholds will be reached within the additional time. Their selection process of campaigns are illustrated in Figure 1.
First, entrepreneurs send their applications to the platforms. Second, the platforms pre-screen companies and request additional documents. Third, after checking the additional documents, the platforms meet with the entrepreneurs to get to know them personally. Fourth, if entrepreneurs successfully convince the platforms, the negotiations about the contracts will take place. Finally, only about 1% of all the applicants are accepted for launching a campaign on the platform of interest (Companisto, 2017).

The investment process on both platforms includes four main steps. In step one, investors register on the platforms with personal details. In step two, investors can browse all current investment opportunities. In step three, having decided a campaign to invest in, investors are allowed to invest directly on the pitch page of that campaign with a few simple clicks. In the final step, investors receive share certificates via email.

3.1.3. Sample Data Description

Our sample data consist of 95 campaigns between 2012 and 2017, of which 51 from Companisto and 44 from Seedmatch. We then exclude two campaigns from Companisto because of incomplete information, making the final sample data of 93 campaigns. The data are treated as cross-sectional.
petition, exit strategy, experience, certification, gender, founder investment, stage, and team size. Among these, competition and founder investment are the two new variables that we develop while other six variables are identified in the literature. The awareness about potential competition may imply that the campaign initiators have evaluated the target market carefully. In our sample, many founders invest their money into their current equity crowdfunding campaigns, by which they may want to send a signal to potential investors. Therefore, we develop the two dummy variables named competition and founder investment.

**Competition** is the variable indicating whether a campaign initiator is aware of current or potential competition. In our sample dataset, 78% campaigns mention competition on their campaign pitch pages. This implies that market characteristics, particularly the threat of competition, could be seen as an important factor for the investors from the perspective of the project initiators.

**Exit strategy** is a dummy variable, showing whether an exit strategy is included in the pitch page of a campaign. In our sample, 11% campaigns include a strategy in their pitch pages. Experience is the variable showing the number of years that founders or key management team of campaigns working in the same or related industry. The average experience of the team members in our sample is in the range of 16-20 years. Certification is the variable indicating whether a campaign has won awards or been backed by business angels or featured in official media such as TV programs or professional journals. About 82% of the companies in our sample are with certification, which is higher than the rate of 37% in Ahlers et al. (2015).

**Gender** is a dummy variable representing the gender of founders of enterprises. Most projects in our sample were founded by males and only 16% were founded or co-founded by females. Founder investment is a dummy variable showing whether the founders of enterprises invest their own money into their crowdfunding campaigns. In our sample data, 9% of the entrepreneurs do invest their capital into their campaigns. Stage is a dummy variable representing the stages of development of enterprises when they launch their equity crowdfunding campaigns. In our sample, only 15.81% of enterprises are start-ups while 84.19% are in the expansion phase. Team size is the variable showing the number of members in the management teams of enterprises. The number of team members in our sample ranges from 2 to 20, with an average of 4.66 which is bigger than 3.6 in Ahlers et al. (2015).

The variables stemming from crowdfunding theory consist of three categories: campaign characteristics, social media networks, and understandability. Basing on the current literature, we develop eight variables, including funding target, key investors, number of updates, provision of financials, time of video, year in business, social media networks and understandability (see in table 1).

**Funding target** is the amount of funding that campaign initiators aim to achieve. The average funding target in our sample is well above €357,000 which is much higher than €88,400 in Lukkarinen et al. (2016). Key investors is a dummy variable showing whether campaigns mention key investors in their pitches. Key investors are high worth individuals who invest more than €10,000 or institutional investors. About 62% of all the campaigns mention key investors in their campaign pages. Number of updates is a variable representing the total number of updates posted by entrepreneurs on their campaign pages. The average number of updates is 10 and the maximum of updates posted is 26, which are much higher than those in Block et al. (2016). Time of video is a variable showing the length of videos used on campaign pages. The longest video is 8 minutes 20 seconds, which is nearly 50 seconds more than the longest one on Kickstarter in the study of Ten Hacken (2014). Year in business is the variable representing the
number of years that a venture has been in business before launching their equity crowdfunding campaigns. The average age is 2.54 years compared to 1.54 years in Belleflamme et al. (2013). Provision of financials is a dummy variable representing the levels of financial details provided by campaign initiators. In previous studies, the variable is normally a binomial dummy variable, valued 1 if entrepreneurs do mention financial details and otherwise. In this paper, we also use it as a dummy variable but go further by dividing the financial details into four main levels: (0) if enterprises mention no financial information, (1) basic if financial information is only in form of words, (2) medium if financial information is in forms of words and numbers of past financials or future projections, (3) advanced if information is both past and future financials.

Social media networks is a dummy variable indicating whether entrepreneurs use social media networks in their campaign pages. About 75% of fundraisers post their crowdfunding campaigns on their social media networks, approximately doubling that in Lukkarinen et al. (2016). Understandability is a dummy variable representing the orientation of offerings. About 72% of projects are of B2C orientation, compared to 50% in Lukkarinen et al. (2016).

3.2.2. Regression Models and Diagnostic Tests

In order to test our hypotheses, we use six models. Model 1 includes all independent variables from traditional entrepreneurial finance, aiming to test hypothesis 1. Model 2 is aimed to test hypothesis 2 and thus consists of all variables about campaign characteristics, including funding target, key investors, number of updates, provision of financials, time of video, year in business. Model 3 is aimed to test hypothesis 3 and includes all variables relating to campaign characteristics and social media networks. Model 4 is used to test hypothesis 4, including all variables about campaign characteristics and understandability. Model 5 consists of all variables from nascent crowdfunding theory and Model 6 includes all independent variables. We use these two models to examine the consistency of results. We run OLS regressions of six models for both measures of success: number of investors and amount raised.

Results from multi-regressions are based on some key assumptions such as multivariate normality, no multicollinearity and homoscedasticity and proper model specification. Therefore, it is crucial to conduct relevant diagnostic tests in order to ensure the validity of regression models and the reliability of findings. For each model in this research, we conduct rigorous diagnostic tests: Beusch-Pagan-Godfrey test for checking heteroskedasticity, Jarque-Bera test for checking normality of residuals, variance inflation factor (VIF) test for detecting multicollinearity and Ramsey RESET test for checking the specification of the model. The test results (see in table 3 and table 4) show that our models pass most tests, having no problems with normality, multicollinearity and heteroscedasticity. These results indicate that our findings are strongly supported by statistical tests. However, models 2 to 6 do not pass Ramsey RESET test for model specification, implying that these models may still not capture some success drivers from the nascent crowdfunding.

4. FINDINGS AND DISCUSSION

4.1. Success Factors from Traditional Entrepreneurial Finance

Three out of eight variables are statistically significant in predicting the number of investors: competition, stage and founder investment. Competition is positive and strongly significant (p<0.01) while stage and founder investment are negatively significant (p<0.1 and p<0.05 respectively). No variables are statistically significant in predicting amount raised. These results indicate that showing the awareness of competition can help campaigns attract more investors but play no role in predicting the amount raised. In contrast, campaigns at the expansion stage and
have investments from their owners tend to have smaller numbers of total investors compared to startups and those without investments from owners. Hypothesis 1 is supported.

Our findings are different from those in Lukkarinen et al. (2016). Lukkarinen et al. (2016) find that success factors in traditional entrepreneurial finance play no role in predicting success in equity crowdfunding in Finland. However, Ahlers et al. (2015) show that development stage of ventures has a positive relationship with the success of equity crowdfunding campaigns in the Australian market. Ralcheva and Roosenboom (2016) find that certification is positively associated with success in equity crowdfunding in the German market. However, our findings show that there is no relationship between certification and success in equity crowdfunding in the German market. This implies that investors in Germany may not attach much importance to certification in their decision making.

4.2. Predictors from Nascent Crowdfunding Theory

4.2.1. Campaign Characteristics

Funding Target
Funding target is positively and strongly significant in both measures of success (p<0.01). This means that campaigns having set a higher funding target have the higher probability of success. This finding echoes findings in some prior studies on equity crowdfunding such as Belleflamme et al. (2014) and Lukkarinen et al. (2016) but is different from Ahlers et al. (2015) and findings in reward crowdfunding. Ahlers et al. (2015) find no significant relationship between funding target and the number of investors in equity crowdfunding. Findings in Mollick (2014), Zheng et al. (2014) and Colombo et al. (2014) show a higher funding goal is negatively associated with success of reward crowdfunding. This difference may be due to the difference in the nature of the two models of crowdfunding. Reward crowdfunding is non-investment model while equity crowdfunding is investment-based model, involving financial returns. Therefore, higher funding target may be an implication about the commitment of campaign initiators.

Provision of Financials
Provision of financials is strongly positively significant (p<0.01) in both measures of success. This implies the provision of enhanced and more detailed financials such as balance sheets or income forecasts increases the success likelihood of a campaign. This finding is in line with numerous prior studies in crowdfunding such as Mollick (2014), Ahlers et al. (2015) and Lukkarinen et al. (2016). Companies that do not display such information nor include a financial disclaimer might imply that they want to conceal something or be considered as unprofessional. German equity crowdfunders may place much importance on the financial transparency of the ventures when they make their investment decisions.

### Table 3: Predictors of the natural logarithm of the number of investors

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.27***</td>
<td>0.23***</td>
<td>0.01***</td>
<td>0.01***</td>
<td>0.01***</td>
<td>0.01***</td>
</tr>
<tr>
<td>Competition</td>
<td>0.16</td>
<td>0.36***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit strategy</td>
<td>-0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>-0.04</td>
<td>-0.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification</td>
<td>-0.02</td>
<td>-0.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.04</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founding investment</td>
<td>-0.35***</td>
<td>-0.36***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>-0.04</td>
<td>-0.29**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total size</td>
<td>-0.04</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding target</td>
<td>0.21***</td>
<td>0.22***</td>
<td>0.05***</td>
<td>0.05***</td>
<td>0.05***</td>
<td>0.05***</td>
</tr>
<tr>
<td>Kickstarter</td>
<td>0.18</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>Number of updates</td>
<td>0.01***</td>
<td>0.02***</td>
<td>0.02***</td>
<td>0.02***</td>
<td>0.02***</td>
<td>0.02***</td>
</tr>
<tr>
<td>Social media networks</td>
<td>0.012</td>
<td>0.005</td>
<td>0.073</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of financials</td>
<td>0.14***</td>
<td>0.16***</td>
<td>0.16***</td>
<td>0.16***</td>
<td>0.16***</td>
<td>0.16***</td>
</tr>
<tr>
<td>Time of video</td>
<td>0.01</td>
<td>0.007</td>
<td>0.007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpredictability</td>
<td>-0.54</td>
<td>-0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year in business</td>
<td>0.02</td>
<td>0.03</td>
<td>0.18</td>
<td>0.21</td>
<td>0.18</td>
<td>0.21</td>
</tr>
<tr>
<td>R2</td>
<td>0.087</td>
<td>0.282</td>
<td>0.365</td>
<td>0.365</td>
<td>0.365</td>
<td>0.365</td>
</tr>
<tr>
<td>Diagnostics test</td>
<td>0.72</td>
<td>1.55</td>
<td>1.87</td>
<td>0.74</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>- Bootstrap Pagan-Godfrey</td>
<td>1.33</td>
<td>2.84</td>
<td>0.31</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>- Jack-knife</td>
<td>0.05</td>
<td>1.12</td>
<td>1.23</td>
<td>1.23</td>
<td>1.23</td>
<td>1.23</td>
</tr>
<tr>
<td>- VIF (mean)</td>
<td>0.01</td>
<td>3.33*</td>
<td>4.00**</td>
<td>5.16**</td>
<td>5.36**</td>
<td>5.36**</td>
</tr>
</tbody>
</table>

* p<0.01, ** p<0.05, * p<0.1
1 - Statistic in parentheses
Key Investors

Key investors is positively significant (p<0.05) in predicting amount raised but insignificant in predicting the number of investors. This finding is in line with that in Lin et al. (2013). They find the participation of key investors in peer-to-peer lending has a positive effect on the success probability. Initial financing from the government or business angels may be positive signals to prospective investors, showing that the entrepreneur was able to convince such established investors to invest money into the company. However, our study does not find a significant relationship in attracting the final number of investors which is different of Lin et al. (2013).

Year in Business

Year in business is not statistically significant in forecasting the number of investors. This finding is in line with those of Ahlers et al. (2015) and Belleflamme et al. (2013). Ahlers et al. (2015) find that the number of years a start-up has been in business does not affect the number of investors. However, the number of year in business does have a strong positive relationship in terms of amount raised. It is understandable as prospective investors may be provided with more financial information from a mature venture compared to a start-up. Those mature companies may have already passed the proof-of-concept and thus are able to prove survival over a longer period. This finding echoes that in Hornuf and Schwienbacher (2014).

Number of Updates

Number of updates is positively significant (p<0.05) in the total number of investors. It is in line with previous studies on reward crowdfunding such as Koch et al. (2015) and partially in line with the study of Block et al. (2016) on equity crowdfunding. However, in terms of amount raised, Block et al. (2016) find a positive effect on amount raised while our finding shows a negative, albeit not strong, relationship. Posting updates is a useful communication means for project initiators to communicate their progress and therefore it is understandable that the number of investors increases as the number of updates increase.

Time of Video

Time of video does not play any role in predicting the final amount raised in equity crowdfunding campaigns. Prospective investors who expect a financial return may not pay that much attention to the length of the video and rather pay more attention to additional factors such as a business plan or provision of financials. These results are different from those in Ten Hacken (2014). He concludes that a longer video has a positive influence on reward crowdfunding campaigns.

In general, numerous campaign characteristics are significant in predicting the success of equity crowdfunding. Hypothesis 2 is therefore sup-
4.2.2. **Social Media Network**

Social media networks is not significantly related to the number of investors. It is quite surprisingly because social media networks are useful means of displaying and advertising projects. One possible explanation is that potential investors in our sample may not search via social media when they look for a target company to invest in. This result is different from those in prior studies on crowdfunding such as Lukkarinen et al. (2016) and Mollick (2014).

However, our findings show a significantly positive relationship (p<0.05) between social media networks and amount raised. These findings are in line with Zheng et al. (2014), Ahlers et al. (2015), Lukkarinen et al. (2016) and Vismara (2017) but different from Belleflamme et al. (2013) and Colombo (2014). They found no relationship between the use of social media networks and the funding success. Our hypothesis 3 is supported.

4.2.3. **Understandability**

Understandability is not significant in both measures of success. This implies that project orientation makes no significant difference in success probability of equity crowdfunding campaigns in the German context. This is different from Belleflamme et al. (2013) and Lukkarinen et al. (2016). They find that the orientation of projects does have impact on the success of equity crowdfunding in other national contexts. Our hypothesis 4 is rejected.

5. **CONCLUSION**

The emergence of equity crowdfunding platforms in recent years has enabled ventures to launch their campaigns, attract prospective investors, and seek for alternative funding vital for realizing their projects. However, many equity crowdfunding campaigns are still unsuccessful. Therefore, it is fundamentally important to know which information should be provided to increase the success probability of campaigns.

This research is one of the first studies aiming to examine success factors in equity crowdfunding campaigns. Using a sample size of 93 campaigns collected from the two leading equity crowdfunding platforms in Germany, we find evidence that some factors form traditional entrepreneurial finance such as competition, founder investment and development stage of ventures are relevant in predicting success in the context of equity crowdfunding.

Our findings also show that numerous campaign characteristics like funding target, provision of financials, key investors, year in business, number of updates and social media networks can be success drivers in equity crowdfunding. Conversely, the orientation of the projects turns out not to be a success predictor. Our findings are strongly supported by rigorous diagnostic tests. The research has both theoretical and practical implications. Theoretically, the research sheds more light on success factors of equity crowdfunding which are of limited discussion in the current literature. Practically, the study helps to improve the success rate of equity crowdfunding as entrepreneurs know what they should include in their campaign pitches. Our findings are also useful for equity crowdfunding platforms in the sense that they can issue more informed guidance to entrepreneurs when they develop their campaign pitches.

However, there are still limitations in our research. First, our sample data cannot capture all possible success factors as identified in the literature. For example, duration and equity retention are the two factors that are found to have impact on success likelihood of crowdfunding campaigns. However, they are not available to be collected. Second, the measure of success is not totally in line with in the literature. There is a difference in the way success is measured by the platforms and in literature. A campaign on our platforms is considered successful if a predetermined funding threshold is met. This threshold may be different from funding target. In the literature, a campaign is successful if the
funding target is achieved. In this paper, we follow the measure by our platforms. Third, some of our models do not pass the Ramsey RESET test for model specification, implying that there are still potential success factors that are not captured in our models.

REFERENCES


Hornuf, L. and Schwienbacher, A. (2017) Market mechanisms and funding dynamics in equity crowdfunding. Available from https://poseidon01.ssrn.com/delivery.php?This is an open access article published by the University of Lincoln under a Creative Commons Attribution 4.0 International License (http://creativecommons.org/).