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## The Emergence of Crowdfunding in Europe

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Department of Economics  
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# The Emergence of Crowdfunding in Europe

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## ABSTRACT

This paper first presents the development of the crowdfunding market in Europe since its start in 2007. Then, using hand-collected data on the complete set of crowdfunding campaigns run in Germany, the paper shows that successful campaigns tend to be launched by new startups and when the minimum ticket size is small so that more crowd investors can participate. Moreover, the use of the *partiarisches Darlehen* (a specific form of equity-linked notes not subject to prospectus regulation) adopted at the end of 2012 in Germany (as a response to alleviating regulatory constraints) has led to larger amounts being raised but also campaigns becoming more likely to achieve their targets. These two results combined indicate that contractual arrangements that enable more participation from the crowd tend to work best. Finally, campaigns launched on portals already having some experience are more likely to raise larger amounts. These findings should be of use to entrepreneurs who need to choose among a larger range of different crowdfunding portals.

Keywords: entrepreneurial finance, business finance, crowdfunding, equity crowdfunding

JEL Classification: G3, L26, M13, K22

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## 1. INTRODUCTION

With different standardized online portals available nowadays, the sale of shares by young, entrepreneurial startups has become a viable alternative to more traditional equity investors such as business angels and venture capitalists (Hornuf and Schwienbacher, 2014a). Many entrepreneurs have used this new opportunity to raise seed and early-stage capital to finance their growth and R&D activities and to ask for less restrictive regulation to facilitate fundraising (Cumming and Johan, 2013). Crowdfunding might fill the equity gap of innovative startups that have capital needs too large for friends and family (so-called 2Fs) and too small for professional investors (e.g., business angels, venture capitalists). From an entrepreneur's perspective, the question as to what works best in crowdfunding is an important one that we address in this paper.

In Europe, crowdfunding (sometimes referred to as “equity crowdfunding”) did develop with crowd participation, due to the existence of exemptions from the prospectus requirement, which represents an expensive hurdle for entrepreneurs aiming to tap the capital market. This is in contrast with the United States, in which crowdfunding is still limited to accredited investors and thus still takes place without the “regular crowd” (Bradford , 2012; Knight, Leo and Ohmer, 2012). The past years therefore have witnessed an active period of experimentation of “true” crowdfunding in Europe, in which portals have adopted different business models and contract forms. Existing portals differentiate themselves along several dimensions, including the form of securities offered to the crowd (ranging from ordinary shares to equity-type notes), whether the investment is made directly in the startup or pooled through a special purpose vehicle, the minimum investment required (which ranges from €1 to several thousands of euro), and fee structure.

Using unique data on different crowdfunding portals, this paper documents the development of crowdfunding in Europe since its start in 2007. Using more detailed information on the full set of successful and unsuccessful crowdfunding campaigns that have taken place in Germany since then, it further addresses the following research question: which contract and portal characteristics affect the

fundraising capacity of startups in crowdfunding? More specifically, we examine which contract forms and portal structures enable entrepreneurs to successfully achieve their funding goals. These findings are relevant for entrepreneurs who need to choose among a larger range of different portals. In addition, our analysis sheds some light on ways the crowdfunding market may develop in the United States after implementation of the CROWDFUND Act of the JOBS Act by the Securities and Exchange Commission, which will allow the "regular" crowd to participate as well.

Crowdfunding is a specific form of crowdfunding, which involves selling securities to the crowd. Several recent studies have examined other forms of crowdfunding, especially reward-based crowdfunding (e.g., Agrawal, Catalini and Goldfarb, 2011; Belleflamme, Lambert and Schwienbacher, 2014, Colombo, Franzoni and Rossi-Lamastra, 2014; Cumming, Leboeuf and Schwienbacher, 2014; Kuppuswamy and Bayus, 2014; Mollick, 2014). In contrast, crowdfunding remains an under-researched area of entrepreneurial finance, mostly due to the short history of the phenomenon and the lack of micro-level data on entrepreneurial decisions. A noticeable exception is the study by Ahlers et al. (2013), who use data of the Australian equity portals ASSOB. While (to the best of our knowledge) their article is the first to examine crowdfunding, it only considers a single portal. In addition, this particular portal is more a small market segment of a stock exchange, in which shares sold can be traded immediately after the crowdfunding campaign. We expand the analysis by considering campaigns run on different portals, which enables us to observe variations in contracts as well as portal structures.

We obtain the following results. First, campaigns launched by new startups are more likely to be successful. Second, campaigns with a small minimum ticket size are also more successful. Third, the use of the *partiarisches Darlehen* (a specific form of equity-linked notes not subject to prospectus regulation; Klöhn and Hornuf, 2012) adopted by the end of 2012 in Germany as a response to alleviating regulatory constraints has led to larger amounts being raised. Furthermore, it has helped campaigns more easily achieve their targets. Both of these contractual mechanisms help democratize crowdfunding participation because they enable smaller investments and, thereby, more participation. Overall, these results indicate

that arrangements allowing for broad participation tend to work best. Finally, campaigns launched on portals already having some experience are more likely to raise larger amounts.

We contribute to the literature on entrepreneurial finance and economics in two ways. First, given our data set, which covers many portals from different European countries, we are the first to empirically document the emergence of crowdfunding in Europe. Other studies are limited to a single portal or other types of crowdfunding. Second, by examining successful and unsuccessful campaigns run on various portals, we can draw conclusions about which contract and portal characteristics contribute to entrepreneurial fundraising success on crowdfunding portals.

The remainder of the paper is structured as follows. Section 2 describes the development of the crowdfunding market in Europe since the emergence of the first platforms. For the analysis, we use hand-collected data of major platforms located in different European countries. Section 3 presents the structure of contracts and platforms, emphasizing the broad range of investment structures proposed by platforms to the crowd (and entrepreneurial firms). Section 4 then analyzes determinants of campaign outcomes. Section 5 concludes.

## 2. THE DEVELOPMENT OF THE CROWDFUNDING MARKET IN EUROPE

In this section, we first describe our method of data collection and the information available. We then present how the crowdfunding market has developed in Europe since its emergence. In particular, we provide a discussion on Europe as a whole and on Germany separately. The multivariate analysis provided in Section 4 is limited to German portals, for which we could obtain more detailed information on all the campaigns started, including the failed ones.

### 2.1 Description of Data Collection

There are different forms of crowdfunding, with each having its own drivers and offering different forms of compensation to the crowd (Mollick, 2014; Schwienbacher and Larralde, 2012). It is thus important to consider each form separately rather than mixing different ones together. Our study is limited to crowdfunding portals—that is, those offering the crowd investments in startups in the form of securities such as ordinary shares and various equity-linked notes. This means that crowdfunding is an investment in which the investor obtains rights on future cash flows of a firm. Thus, we exclude campaigns run on other portals, such as reward-based, donation-based, and loan-based ones. Crowdfunding portals offer long-term investment opportunities and therefore allow participation in value creation realized by the entrepreneurial startups. Thus, the motivation of the crowd is primarily based on financial returns.

Our hand-collected data come from various sources. For Germany, for which we have significantly more details for successful and unsuccessful campaigns, all the information was collected over time since the German portals' start. Thus, we have the complete set of campaigns as well as all the contracts offered. Our sample includes the following German portals (in alphabetical order, not size): Bankless24, Bergfürst, Berlin Crowd, BestBC, Companisto, Crowdfunder, Deutsche Mikroinvest, Devexo, Fundsters, Gründerplus, Innvestment, MyBusinessBacker, Power4Projects, Seedmatch, Startkapital Online, and United Equity. The information allows us to construct different variables, as described in Table 1, that offer unique insights into contract and portal characteristics.

--- Table 1 About Here ---

For the other European countries (Austria, Belgium, France, the Netherlands, Switzerland, and the United Kingdom), data were first collected in October 2013 and then updated in July 2014 for any additional campaigns that took place until the end of 2013, using the information available on the portals' websites for registered users. Several portals were also willing to provide the needed information directly. We collected campaign information on successfully completed campaigns announced on the following crowdfunding portals (ranked in alphabetical order, not size) and the country of location (in parentheses):

1000x1000 (Austria), Anaxago (France), Angels Den (United Kingdom), C-Crowd (Switzerland), Conda (Austria), Crowdcube (United Kingdom), Fondatio (France), Happy Capital (France), InvestingZone (United Kingdom), MyMicroInvest (Belgium), Particeep (France), Seedrs (United Kingdom), SiamoSoci (Italy), Symbid (the Netherlands), Syndicate Room (the United Kingdom), and Wiseed (France).<sup>1</sup>

For these portals, we could only obtain basic information on their campaigns. Most crucially, no information is generally available for unsuccessful campaigns on the portals' websites, so we limited this sample to successful ones. However, these portals represent the bulk of the crowdfunding activities in their countries. To the best of our knowledge, these were also the complete set of portals active at the time of data collection. However, the market evolves quickly, with some portals having already shut down or changed their business model and others likely to enter the market at any time in the near future. In addition, we have much less information available on campaigns outside Germany, so we use this larger sample to present the emergence of the crowdfunding market in Europe but not in the multivariate analysis. Still, the data offer us the opportunity to describe the emergence of the crowdfunding market in Europe until the end of 2013, identify trends, and illustrate the great heterogeneity in portal and contract practices.

## 2.2 Market Development

Table 2 presents statistics on the number of crowdfunding portals covered in our study that began operating in a given year. It further shows the number of successful campaigns that have taken place in a given year (aggregated for all the portals). Columns (3) and (4) provide values for the German market only. The first portals we could identify are Angels Den (UK), which began operating in 2007, and Wiseed (France), which began in 2009. However, Angels Den was initially mainly oriented toward

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<sup>1</sup> We identified a few other portals, especially in the United Kingdom, that we considered in the general statistics of market entry (Table 2) but for which we could obtain no campaign data. These portals do not appear successful and thus may not want to communicate with regard to any successful campaigns.



business angels and less to the crowd. The bulk of the portals, however, entered the market in 2012 and 2013 only, with a total of 11 new portals in 2012 and 21 in 2013. The same holds for Germany, in which most portals began launching campaigns in 2012 and 2013, which is also the period in which most of the campaigns took place. As of the end of 2013, we identified 168 campaigns in Germany and 412 in Europe (including Germany).

Table 2 also documents trends for the 2007–2013 period. The amounts raised have been steadily growing, while the average number of investors has also increased. The average contribution by an investor, in turn, decreased, especially in Germany. However, the observed trends should be considered with care, because we take the crowdfunding market at its earliest development period, with some of the values in Table 2 being calculated with very small numbers of observations. Moreover, it is worthwhile to note that the average amounts raised are smaller in Germany than in other European countries. This is largely driven by the United Kingdom and Italy, in which very large campaigns occur more often. Such large campaigns have taken place in Germany only in the past year. Last, the average contribution per investor in Germany is roughly half the amount raised on crowdfunding portals in Europe overall, suggesting that the "regular" crowd tends to participate more in Germany, in which wealthy and professional investors (in part business angels) contribute more significantly.

--- Table 2 About Here ---

Panel B of Table 2 shows additional statistics for Germany (Columns (6) and (7)). First, Column (6) shows an important change that occurred in Germany at the end of 2012 (i.e., the use of a specific equity-linked note called *partiarisches Darlehen*). This type of security is currently not subject to any regulatory limits on the maximum amount that can be raised without any formal prospectus (Hornuf and Schwienbacher, 2014b; Klöhn and Hornuf, 2012). Therefore, several portals adapted their contracts by the end of 2012 and have now proposed this type of contract to crowd investors and startups as a way to increase campaign size beyond the previous limit of €100,000. In 2013, 42.11% of the German campaigns offered *partiarisches Darlehen*. However, when equity-linked notes are used in other European countries,

they generally fall under the definition of securities under the prospectus directive. This is certainly the case in the countries considered in our study. A final observation is that the average minimum ticket size decreased (Column (7)). This reduction was most likely triggered by the adoption of the *partiarisches Darlehen*, as this specific type of security allows startups to raise larger amounts overall and thus enables more investors to participate. Indeed, because *partiarisches Darlehen* represent notes, the crowd has no voting rights and therefore does not have a say in corporate governance issues after a successful campaign. This, in turn, also facilitates follow-up financing, which requires the entry of professional investors.

### 3. PORTAL AND CONTRACT STRUCTURES

Portals adopt a broad range of structures. One possible explanation to the heterogeneity in business models is experimentation due to the novelty of the market. Crowdfunding can be regarded as a financial innovation. As in any other form of innovation, there is uncertainty about how to implement it best. Eventually, remaining portals could then converge toward a limited number of business models. Another possible reason is market differentiation. Portals differentiate from each other as a way to reduce competition and attract different parts of the crowd. Indeed, recent research has shown that the crowd itself is not a homogeneous group either (Hornuf and Schwienbacher, 2014b). By differentiating from other competitors, portals may capture specific segments of the population. Finally, some of the dimensions of portal structure are affected by national regulatory constraints, for example, with respect to the maximum offer for a campaign without a formal prospectus (Hornuf and Schwienbacher [2014b] offer a discussion regarding the prospectus regulation). This helps explain part of the variation, especially but not exclusively across countries.

The first dimension of differentiation is the minimum ticket size imposed by the portal to the crowd. While some portals allow investments as little as €1 or €5, others impose minimum tickets of €1,000 and even higher. Portals imposing very high minimum tickets therefore voluntarily restrict investor participation to the wealthier crowd. We then expect a smaller investor base for these campaigns (because

the "regular" crowd is excluded), unless campaigns are overall much larger on these portals. Whether this is the case is an empirical question that we address in the next section.

Another differentiation among crowdfunding portals is whether the investments take place directly or indirectly. Crowd investors make a direct investment when they hold the securities issued by the startup. Most portals in Germany structure their offers in that way, except Companisto, which has set up a special purpose vehicle called Companisto Venture Capital GmbH. Crowd investors buy securities from this company, which in turn invests the capital raised in the startup. These pooled investments lead to indirect investments because the crowd does not hold securities directly from the startup. In Europe, many other portals have adopted pooling, including Wiseed (France), MyMicroInvest (Belgium), and Symbid (the Netherlands). In the latter case, the financial vehicle is a cooperative and the crowd buys cooperative certificates.

Moreover, in contrast with the general perception, the crowd rarely purchases common shares. The usage of the term equity crowdfunding is in fact misleading and crowdfunding generally more suitable. While some portals offer common shares, such as Bergfürst (Germany) and Anaxago (France), most others rely on other types of securities. These include participating notes, cooperative certificates, convertible bonds, and (in Germany) *partiarisches Darlehen*. By using these types of securities, German portals avoid the involvement of a costly notary, which is required to sell the shares of a German limited liability company (Braun, Eidenmüller, Engert and Hornuf, 2013). Common shares are only used for the very large campaigns by Bergfürst (Germany), which enables the portal to run a secondary market, in which securities can be freely traded.

Finally, the adoption of different business models leads to different levels of fees charged by the portals to entrepreneurs and crowd investors. While some portals charge a 5% success fee, others charge up to a 10% flat rate. The highest fees in our sample tend to be for portals that facilitate the participation of a larger crowd using the *partiarisches Darlehen* and smaller minimum tickets. This is consistent with the intuition that managing a larger crowd is more time consuming for the portal.

## 4. EMPIRICAL ANALYSIS OF FACTORS AFFECTING CROWDINVESTING OUTCOMES

As mentioned previously, we restrict our analysis in this section to Germany because it is the only country for which we have information on successful and unsuccessful campaigns as well as detailed contract information. This allows us to test the impact of contract and portal characteristics.

### 4.1 The Sample

Table 3 presents summary statistics (Panel A) and a correlation matrix (Panel B) of the different variables. The summary statistics offer insights into the average campaigns that have taken place so far in Germany. Overall, 84.3% of the campaigns could reach their pre-announced minimum target (the dummy *Successful Campaign*). The average amount pledged per campaign is €154,328 (with an average target of €72,057) from an average of 215 crowd investors. However, there is great variation among campaigns, with two having achieved €3 million (Urbanara on Bergfürst and Protonet on Seedmatch).<sup>2</sup> Startups are generally very young, with an average age of 1.84 years (median of 1 year) at the time they undertook their campaign. This suggests that the startups proposed to the crowd are typically at the early stage of development. A closer examination of recent campaigns in Germany, however, indicates that a few startups raised follow-up funding in crowdinvesting portals. Although this is still rare, more second-round financing in the form of crowdinvesting could occur in the future.

--- Table 3 (Panel A & B) About Here ---

In terms of contract and portal characteristics, 73.1% of the campaigns had a minimum ticket size (i.e., the minimum that crowd investors need to invest to participate) smaller than or equal to €250. In addition, 16.4% of the investment opportunities were pooled investments. However, because only Companisto structures investments in this form in Germany, this percentage also represents Companisto's market share. Therefore, caution must be taken when interpreting the impact of this variable. It is similar to a dummy variable for the portal Companisto. Furthermore, 29.1% of the campaigns used *partiarisches*

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<sup>2</sup> Because Protonet raised the €3 million in June 2014, it is not included in our sample.

*Darlehen*, which are offered by Seedmatch, Companisto, and Deutsche Mikroinvest for part of their campaigns. Moreover, the three portals use *partiarisches Darlehen* in different forms; for example, Companisto uses it in the form of pooled investments, while the others allow for direct investments. The average fee is 8.0%, which also corresponds to the median fee.

Panel B of Table 3 presents the correlation matrix of the different variables. Although some pairwise correlations are statistically significant at the 1% level, these correlations do not create severe multicollinearity among the different explanatory variables in the multivariate analysis (based on values of variance inflation factor [VIF]). However, Table 3 offers preliminary evidence of the impact of these variables on campaign outcomes. More specifically, the dummy variable *Successful Campaign* is positively correlated with larger amounts raised (the variable *Ln(Amount Raised)*), the number of investors, and the use of *partiarisches Darlehen* but negatively correlated with the size of the minimum ticket. Moreover, the correlation matrix indicates that some of the explanatory variables are strongly correlated (especially those pertaining to contract characteristics) and thus should be included separately.

#### 4.2 Multivariate Analysis

We now turn to the regression analysis to examine which factors affect campaign outcomes. We specify the following dependent variables measuring funding success: The first is a dummy variable (the variable *Successful Campaign*), which takes the value of 1 if the target amount was reached and 0 otherwise. The second variable is the total amount raised for a given campaign, regardless of whether the campaign was successful or not (the variable *Ln(Amount Raised)*). We consider this alternative variable with care because it is bounded at the small issuance exemption for all the securities offered, except the *partiarisches Darlehen*. Campaigns based on securities other than the *partiarisches Darlehen* are limited to €100,000 in Germany. Many of the successful campaigns in our sample were stopped when this upper limit was reached, suggesting that these startups could have raised more but were restricted from doing so by legal constraints. While this does not cause biases for the first measure, it does for the second one. The third variable is not a direct measure of campaign performance but offers additional insights into crowd

participation. We consider the number of investors having participated in the campaign (*Nbr. Investors*) as our third variable of interest. We use Probit regressions for the first measure and ordinary least squares (OLS) for the two other measures. Regressions all include year fixed effects. We cannot include portal fixed effects, because our portal characteristics are mostly constant within portals; however, standard errors are clustered at the portal level. We also report mean and maximum of VIF to show a lack of collinearity among the explanatory variables in the different specifications. Finally, we consider the following explanatory factors that we showed in Section 3 to vary across portals and contracts: age of the startup at time of campaign launch, which captures the startup's stage of development (variable *Startup Age*); contract characteristics (the variables *Pooled Investment*, *Partiarisches Darlehen*, *Minimum Ticket*, and *Small Ticket* as alternative proxies); minimum amount requested by the startup (*Target*); and specific portal characteristics (*Portal Fees* and *Portal Experience*).

Table 4 presents the results for the first measure—the dummy variable *Successful Campaign*. First, younger startups are often successful. This finding is robust across most of the specifications considered and is consistent with the view that crowdfunding is most effective for seed capital. Second, offers requesting larger tickets are less successful (also confirmed by the *Small Ticket* dummy), possibly because they attract fewer and potentially more specialized and wealthier investors. Third, pooled investments have a positive impact on the likelihood of achieving the target amount (but again they are used by only one portal, not across all campaigns). One possible reason is that, similar to the previous finding, pooled investments reduce the minimum ticket and therefore grant access to a broader range of investors. This is confirmed by the strong negative correlation of  $-0.4389$  (see Table 3) between *Minimum Ticket* and *Pooled Investment*. Fourth, use of *partiarisches Darlehen* has a positive impact, consistent with the notion that it alleviates regulatory constraints. Fifth, fee level has no impact, but there is some weak evidence that the portal's experience has a positive effect.

--- Table 4 About Here ---

Table 5 shows the results for the second measure—*Ln(Amount Raised)*. This alternative measure gives insights into the overall size of the campaign outcome. Several of the findings observed for our first measure are also observed here; however, because these two measures capture different perspectives of outcome, differences in findings are possible. While Table 4 provides evidence that younger startups are more successful, we find here that they also tend to raise larger amounts. While this finding is not robust across all the specifications, coefficients have consistently the same sign. We also find similar results for other contract characteristics: those facilitating broader participation (i.e., lower minimum tickets) result in larger amounts being raised. As expected, the use of *partiarisches Darlehen* has a positive impact on the amounts raised. Moreover, portals charging higher fees and having greater experience tend to offer better chances of achieving higher amounts. This suggests that the more successful portals attract more potential investors and that portals charging higher fees offer better services to entrepreneurs during their campaign but also allow contractual arrangements that permit more crowd participation. Indeed, the correlation between *Portal Fee* and *Pooled Investment* is strong (0.6315; see Table 3).

--- Table 5 About Here ---

Finally, Table 6 presents the results for the third measure—*Nbr. Investors*—for which we again use the same specifications. Many of the strong and significant results are consistent with our previous findings in Tables 4 and 5. Requesting smaller minimum tickets attracts more investors, with each investor presumably investing smaller amounts. As discussed previously, the overall amount a startup can raise is then larger. Similarly, pooling investments leads to more investors (see Table 5) because of a lower minimum ticket. The positive impact of portal fees is also in line with that in Table 5.

--- Table 6 About Here ---

## 5. CONCLUSIONS

This paper uses a large European data set that offers insights into the development of crowdfinancing, a recent phenomenon that has experienced strong growth and may become an additional source of finance for startup entrepreneurs. This study contributes to knowledge of entrepreneurial finance and crowdfinancing in several ways. In contrast with other studies, our data set covers many portals from different European countries in which crowdfinancing could develop. Thus, we are able to empirically document the emergence of crowdfinancing in Europe. Moreover, our German data set is unique in that we include successful and unsuccessful campaigns, which allows us to draw conclusions about which contract and portal characteristics contribute to entrepreneurial fundraising success on crowdfinancing portals.

At the same time, these findings offer research avenues for entrepreneurship scholars. One immediate research question is whether successful crowdfinancing affects the viability of the crowd-funded startups. While crowdfinancing offers funds that enable entrepreneurs to develop their business ideas, crowd investors are likely to offer less value-add than business angels or venture capitalists. The latter may also be more skilled than the crowd in screening business opportunities. Thus, the question as to whether crowdfinancing is a worthwhile alternative to other sources of entrepreneurial finance for innovative startups is a research question worth exploring empirically. Another area for entrepreneurship scholars is how entrepreneurs can best make use of the crowd as potential idea-bringing stakeholders and how this use may be affected by the form of investment proposed during the crowdfinancing campaign. Indeed, the different securities do not offer the same form of incentives or compensation to the participating crowd. Gaining a better understanding of how the design of crowdfinancing campaigns affects the participation of the crowd *after* the campaign may help entrepreneurs make the best use of this novel form of finance.



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**TABLE 1: Definition of Variables Used in the Multivariate Analysis (German Sample)**

Variable Name	Definition
<i><u>Dependent Variables:</u></i>	
Successful Campaign	Dummy variable equal to 1 if target amount set by the entrepreneur is achieved; that is, the ratio of "Amount Raised" to "Target" is greater than or equal to 1.
Ln(Amount Raised)	Natural logarithm of the total amount raised (in euros) during the campaign.
Nbr. Investors	Number of crowd investors having invested during the campaign.
<i><u>Startup Characteristics:</u></i>	
Target	Minimum target amount (in thousands of euros) set by the entrepreneur before the start of the campaign. In general, the entrepreneur also sets a maximum target amount, which at times may be the same as the minimum.
Startup Age	Age in years of the startup at time of the crowdfunding campaign.
<i><u>Portal and Contract Characteristics:</u></i>	
Minimum Ticket	The minimum amount (in euros) that any crowd investor needs to invest to be allowed to participate.
Small Ticket	Dummy variable equal to 1 if "Minimum Ticket" is smaller than or equal to €250 and 0 otherwise.
Pooled Investment	Dummy variable equal to 1 if the portal pools crowd investors in a specific financial vehicle and 0 otherwise. In a pooled investment, the crowd does not hold securities directly from the startup but from the financial vehicle. The vehicle then invests the crowd investors' money in the startup.
<i>Partiarisches Darlehen</i>	Dummy variable equal to 1 if crowd investors are offered an investment in the form of a <i>partiarisches Darlehen</i> and 0 otherwise.
Portal Fee	Fee (in percentage) charged by the portal in the event of a successful campaign; for portals that report a range (e.g., 5%–10%), we take the average.
Portal Experience	Number of campaigns publicized by the portal before the considered campaign.

**TABLE 2: Development of the European Crowdfunding Market, by Year**

This table presents summary statistics on portals and crowdfunding campaigns, by year. Panel A considers the full sample, and Panel B only the German sample. Column (1) gives the number of portals that have begun operating and launched their first campaign. Column (2) gives the number of successful campaigns. Column (3) gives the average amount raised (in euros), where we apply an exchange rate of €1 = £0.8 for the campaigns promoted in the United Kingdom. Column (4) gives the number of investors participating in the campaigns. Column (5) is the ratio of the two previous columns. The last line (denoted "All Years") gives the average value across all the years, except for Columns (1) and (2), which provide the sum. For the sample of German portals in Panel B, we further provide summary statistics for the relative use of the *partiarisches Darlehen* (Column (6)) and the minimum ticket size for investments (Column (7)).

**Panel A: Summary Statistics for the full Sample of Countries**

YEAR	EUROPEAN SAMPLE				
	[1] Nbr. Portals Started	[2] Nbr. Successful Campaigns	[3] Amount Raised	[4] Nbr. Investors	[5] Investor Contribution
2007-2009	2	1	€ 60,000	11.00	€ 5,455
2010	1	9	€ 100,589	61.56	€ 1,634
2011	6	21	€ 162,530	88.12	€ 1,844
2012	11	120	€ 100,270	115.12	€ 871
2013	21	261	€ 224,400	164.23	€ 1,366
All Years	41	412	€ 179,464	139.71	€ 1,284

**Panel B: Summary Statistics for the German Sample Only**

YEAR	GERMAN SAMPLE						
	[1] Nbr. Portals Started	[2] Nbr. Successful Campaigns	[3] Amount Raised	[4] Nbr. Investors	[5] Investor Contribution	[6] Use of <i>Partiarisches Darlehen</i>	[7] Minimum Ticket Size
2007-2009	0	0	--	--	--	--	--
2010	0	0	--	--	--	--	--
2011	2	6	€ 86,729	116.40	€ 745	0.00%	€ 500
2012	5	57	€ 80,581	139.63	€ 577	3.51%	€ 492
2013	9	95	€ 194,006	267.81	€ 724	42.11%	€ 316
All Years	16	158	€ 146,214	207.95	€ 703	26.58%	€ 391

**TABLE 3: Summary Statistics and Correlation Matrix of Main Variables (German Sample)**

Panel A reports summary statistics of different variables (number of observations, arithmetic mean, median, standard deviation, minimum value, maximum value). Panel B reports pair-wise correlations among the main variables. Significance level: \* < 1%.

**Panel A: Summary Statistics**

Variable	Nbr. Obs.	Mean	Median	Std. Dev.	Minimum	Maximum
Successful Campaign	134	0.843	1	0.3649	0	1
Ln(Amount Raised)	131	11.346	11.513	1.097	7.601	14.911
Amount Raised (in €)	131	154,328	100,000	299,311	2,000	2,992,000
Nbr. Investors	133	72.057	50	256.615	0	3,000
Target (in €1000)	119	215.387	166	225.917	2	1,000
Startup Age	134	1.843	1	3.602	0	34
Minimum Ticket (in €)	134	384.851	250	385.073	1	1,000
Small Ticket	134	0.7313	1	0.445	0	1
Pooled Investment	134	0.1642	0	0.372	0	1
<i>Partiarisches Darlehen</i>	134	0.291	0	0.456	0	1
Portal Fee (in %)	130	8.031	8	0.695	7.5	10
Portal Experience	134	17.246	14.5	13.695	1	50

**Panel B: Correlation Matrix**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
[1] Successful Campaign	1.0000						
[2] Ln(Amount Raised)	0.6754*	1.0000					
[3] Target	0.0386	0.3039*	1.0000				
[4] Nbr. Investors	0.3413*	0.6713*	0.3118*	1.0000			
[5] Startup Age	-0.0760	-0.1034	-0.0019	-0.0078	1.0000		
[6] Minimum Ticket	-0.2765*	-0.3142*	-0.0584	-0.6354*	-0.1244	1.0000	
[7] Pooled Investment	0.1911	0.1411	-0.0721	0.6134*	-0.0705	-0.4389*	1.0000
[8] <i>Partiarisches Darlehen</i>	0.2310*	0.5063*	-0.0543	0.5895*	-0.0544	-0.3785*	0.3369*
[9] Portal Fee	-0.0888	-0.0414	-0.3858*	0.3780*	-0.1203	-0.1719	0.6315*
[10] Portal Experience	0.1137	0.3768*	-0.0735	0.1011	-0.1328	0.2060	-0.1857
	[8]	[9]					
[8] <i>Partiarisches Darlehen</i>	1.0000						
[9] Portal Fee	0.0679	1.0000					
[10] Portal Experience	0.5666*	-0.3365*					

**TABLE 4: Determinants of Campaign Success**

The dependent variable is *Successful Campaign*, a dummy variable equal to 1 if the minimum target amount is achieved during the campaign and 0 otherwise. We report marginal effects of Probit regressions. Standard errors are clustered at the portal level. Significance levels: \* < 10%, \*\* < 5%, and \*\*\* < 1%. The last row reports average value of VIFs (maximum value in parentheses).

Explanatory Variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Startup Age	-0.045***	-0.044***	-0.020	-0.018	-0.044***	-0.025	-0.034**	-0.035**	-0.033***
Minimum Ticket	-0.001***						-0.002***		
Small Ticket		1.146***						1.306***	
Pooled Investment			4.790***						
<i>Partiarisches Darlehen</i>				1.170***					1.238***
Portal Fee					-0.178		-0.017	0.013	-0.191
Portal Experience						0.012	0.026**	0.020*	-0.011
Target	0.012	0.010	0.010	0.001	-0.002	0.001	0.008	0.008	0.000
Year dummies Included?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nbr. Observations	133	133	133	133	129	133	129	129	129
Average VIF (max.)	1.06 (1.13)	1.05 (1.11)	1.05 (1.10)	1.23 (1.50)	1.17 (1.29)	1.15 (1.25)	1.54 (2.06)	1.52 (2.01)	1.72 (2.60)

**TABLE 5: Determinants of Campaign Size Investors**

The dependent variable is  $\ln(\text{Amount Raised})$ , the natural logarithm of the amount (in euros) raised during the campaign. We report OLS regressions. Standard errors are clustered at the portal level. Significance levels: \* < 10%, \*\* < 5%, and \*\*\* < 1%. The last row reports average value of VIFs (maximum value in parentheses).

Explanatory Variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Startup Age	-0.049**	-0.051**	-0.038	-0.013	-0.043**	-0.017	-0.010	-0.010	-0.008
Minimum Ticket	-0.001***						-0.001***		
Small Ticket		0.827***						1.195***	
Pooled Investment			0.378						
<i>Partiarisches Darlehen</i>				1.422***					1.319***
Portal Fee					-0.059		0.294**	0.395**	0.013
Portal Experience						0.031**	0.040***	0.036***	0.004
Target	0.001***	0.001***	0.001***	0.001***	0.011**	0.001***	0.015***	0.015***	0.012***
Year dummies Included?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nbr. Observations	131	131	131	131	127	131	127	127	127
Average VIF (max.)	1.06 (1.13)	1.05 (1.11)	1.05 (1.1.0)	1.23 (1.50)	1.17 (1.29)	1.14 (1.24)	1.52 (1.99)	1.49 (1.95)	1.69 (2.52)

**TABLE 6: Determinants of Number of Investors**

The dependent variable is *Nbr. Investors*, the number of investors having pledged capital during the campaign. We report OLS regressions, though the variable is a count variable because the distribution is widely spread. Standard errors are clustered at the portal level. Significance levels: \* < 10%, \*\* < 5%, and \*\*\* < 1%. The last row reports average value of VIFs (maximum value in parentheses).

Explanatory Variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Startup Age	-6.695	-6.468	-0.329	1.563	-2.229	-4.358	2.397	3.263	3.806
Minimum Ticket	-0.335***						-0.368***		
Small Ticket		261.151***						300.405***	
Pooled Investment			350.759***						
<i>Partiarisches Darlehen</i>				326.305***					332.123***
Portal Fee					107.170		174.971***	219.892***	110.930
Portal Experience						-0.651	6.702**	6.198**	-0.864
Target	0.213***	0.225***	0.286***	0.305***	-0.532	0.232***	1.288	1.124	0.280
Year dummies Included?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nbr. Observations	119	119	119	119	115	119	115	115	115
Average VIF (max.)	1.06 (1.13)	1.05 (1.11)	1.05 (1.1.0)	1.23 (1.50)	1.17 (1.29)	1.15 (1.24)	1.52 (2.01)	1.50 (1.96)	1.70 (2.54)