FUNDING AND OVERFUNDING PHENOMENA IN CROWDFUNDING: RELEVANCE OF PLATFORM CHOICE AND VARYING INDUSTRY DYNAMICS

DOMINIKA P. GAŁKIEWICZ^{1*}, MICHAŁ GAŁKIEWICZ²

- 1. University of Applied Sciences Kufstein, Austria
- 2. University of Szczecin, Poland
- * Corresponding Author: Dominika P. Gałkiewicz, Finance, Accounting & Auditing, University of Applied Sciences Kufstein, Andreas Hofer-Str. 7, 6330 Kufstein, Austria
 - 🖀 +43 (53) 7271819181 🖂 dominika.galkiewicz@fh-kufstein.ac.at

Abstract

This study provides new evidence on factors relevant to the success of crowdfunding campaigns run in Europe between 2015 and 2017 on the most popular crowdfunding platforms in Germany/Austria – Kickstarter.com and Startnext.com. In particular, for this study, a sample of 10,514 campaigns from Germany and Austria for the first time serves as a basis for identifying the determinants of the level of projects' (over-)funding. For crowdfunding projects, an increase in a project's funding goal results in higher funding on both platforms, but this does not guarantee success, i.e. reaching the relevant funding goal. Projects with a higher success probability show lower funding goals, especially if launched on Startnext.com. In contrast, a longer duration negligibly increases the amount raised on Startnext and slightly decreases on Kickstarter. On Startnext, projects from the Art cluster have a higher chance to succeed, while those from the Technology cluster show smaller success probabilities as they regularly get less funding. On Kickstarter, projects from the Art, Technology, or Lifestyle field reach higher financing as compared to the Sustainability area. We show that the uncertainty about market size and project/founder quality leads to diverging over- and underfunding levels across platforms and industry clusters, which is of core importance to interested stakeholder groups.

Keywords: crowdfunding, crowd, reward, Kickstarter, Startnext

1. Introduction

Crowdsourcing offers the possibility for individuals and founders to fund their projects, products, non-profit and business ideas with small contributions of money from many individuals using internet platforms. As a financing option, it is especially important for those who lack savings or have only limited access to funds from family, friends, or traditional forms of financing such as bank lending, business angel (BA), and venture capital (VC) investments. The popularity of crowdfunding considerably increased – in 2017 a total of 34 billion was raised globally by crowdsourcing projects with 10.4 billion EUR only in Europe (Startnext (2020)).

The rise of interest in this form of financing also resulted in an increased amount of research on the factors leading to the success of crowdfunding campaigns, e.g. Mollick (2014), Crosetto and Regner (2014)), Koch and Siering (2015), Gierczak at el., (2016), Barbi and Bigelli (2017) and Rossi and Vismara (2018). This study focuses on donation- and reward-based crowdfunding which, in contrast to equity-and lending-based crowdsourcing, does not provide an incentive for making a financial return. In particular, this research aims to describe the size of crowdfunding projects' overfunding in different industries spanning from arts to technology. Overfunding describes the amount of money provided

by the crowd above the – project realization required – funding goal the project initiator was asking for. Moreover, the associated determinants of the level of overfunding for crowdfunding campaigns run in Europe on the Kickstarter and Startnext platforms between 2015-2017 based on the population of more than 10,000 projects are shown. The drivers of success may have a changing impact in several industry categories or/and this effect might be also different across the two analysed platforms, e.g. due to unknown market size (Strausz (2017)). Crowdfunding literature neither controls for industry-specific effects, nor for platform-specific dynamics. We want to close this research gap.

Kickstarter.com is the world's largest platform for crowdfunding based on the amounts pledged (Kickstarter.com), while Startnext.com remains its' main counterpart in German-speaking countries (Startnext.com). For this study, a hand-collected sample of 10,514 crowdfunding campaigns from Germany and Austria for the first time serves as a basis for identifying the determinants of the level of projects' (over-)funding, i.e. success, through OLS, Logit, Probit, and ML regressions including the Heckman correction for sample selection.

In sum, we find evidence that the choice of a particular platform affects the chances for success of a project seeking crowdfunding in Germany or/and Austria. The main reasons for diverging levels of funding remain the uncertainty about the final demand or/and project quality as suggested by Strausz (2017). Kickstarter and Startnext act as the most important crowdfunding platforms for German and Austrian projects, thus, understanding the differences between success factors is important for regionally and internationally active founders, supporters or funders, SMEs, investors, and their advisors.

In the following, we present a background on crowdsourcing in section 2, a literature review on success factors in crowdfunding in section 3, and data in section 4. In section 5, the levels of (over-)funding across various industry categories and platforms are documented. Finally, the determinants leading to successful crowdfunding of European projects stemming from two popular platforms are discussed, before the conclusion follows in section 6.

2. Background on Crowdfunding

Crowdfunding can be seen as an informal pre-BA or VC financing form. It allows project founders to directly ask a broad public to support their innovative ideas, projects, or product developments and sales (Kuppuswamy and Bayus (2013)). However, the idea of crowdfunding is to obtain, i.e. funds, money, goods, or time, from a broad public where each individual provides an affordable or minimal amount instead of raising the money from a small group of sophisticated investors (Belleflamme et al. (2012)). It can, therefore, be defined as an open call for collecting resources from the population via an online platform. In return for the contributions, the crowd can receive several tangible or intangible assets like experiences, which depend on the type of crowdfunding (Delivorias (2017)). Strausz (2017) adds that interaction between initiators and investors before investment screening for valuable projects on crowdfunding platforms is improved under aggregate demand uncertainty. Generally, several types of crowdfunding campaigns differ in their purpose and are either non-profit or for-profit projects. Four categories of campaigns are most commonly observed (Delivorias (2017)):

- donation-based (crowdsponsoring or crowdfunding) where supporters do not receive any rewards for their contributions,
- reward-based (crowdfunding) where backers receive gifts, experiences, goods, or services in exchange for their monetary support,
- lending-based (crowdlending) where funders receive at least an attractive interest payment in exchange for financing an idea or project.

- equity-based (crowdinvesting) where investors typically receive shares in the financed venture in exchange for their contributions.

Given the variety of launched projects, the supporters and investors in crowdfunding often have different motivations for supporting them. According to Gierczak et al. (2016), these motivations can be described as altruistic (focused on projects benefitting the society, mainly non-profit), hedonistic (associated with projects delivering essential goods, also creative and innovative, or/and satisfying the needs for pleasure) and profiting (guaranteeing a return for financial investments via, i.e. interests, revenue/profit-sharing arrangements or equity stakes). In this study, we focus on donationand reward-based crowdfunding as these two forms do not provide incentives for financial investment returns to occur but have reached a high level of popularity and serve an important role for the broad audience. Most of the research carried out on the topic was published in the last ten years as data became available and will be presented next.

3. Research on Success Factors in Crowdfunding

Prior studies provide support to the notion that there are important factors leading to success – reaching the funding goal or/and building up overfunding. Table 1 summarises the major findings in a concise manner.

In crowdfunding, many campaigns fail by significant amounts, while those that succeed mainly succeed by small amounts. According to Mollick (2014), the project itself needs to be convincing and the popularity of the entrepreneur through social networks is impacting success (e.g. Aleksina, Akulenka and Lubloy (2019), Dalla Chiesa (2021) and Tosetto, Cox and Ngyuen (2022)). Additionally, project quality can be inferred on Kickstarter.com from the project description that is offered on the campaign webpage, especially its depth (Koch and Siering (2015)). In this context, information relevance and comprehensiveness are influencing information usefulness and adoption by an online consumer community (Cheung et al. (2008)). The use of specific phrases, e.g. emotional text passages, on the campaign page profoundly influences project success (Mitra and Gilbert (2014), Koch and Siering (2019) and Song et al. (2019)). Furthermore, project presentation – including videos and pictures about the underlying idea – is paramount to the success of a crowdfunding project. According to Kuppuswamy and Bayus (2013), videos play a pivotal role in increasing the success of a crowdfunding campaign which is also confirmed by research conducted by Barbi and Bigelli (2017). This is because supporters want as much information as quickly as possible. Offering more details lowers the information asymmetry and reduces the perceived riskiness of a project. This means that high-quality projects are identified easily by the supporters, who prefer projects with superior return/risk profiles (Bento, Gianfrate and Groppo (2019)).

In addition, the consensus from different authors is that setting a high funding goal decreases the probability of a project being funded (Crosetto and Regner (2014), Cordova and Gianfrate (2015) and Barbi and Bigelli (2017)) or leads to project failure (Patel and Devaraj (2016)). In general, successful projects tend to have a much lower funding target in comparison to unsuccessful or cancelled projects (Frydrych et al. (2014)). According to Forbes and Schaefer (2017) beyond campaign failure also a second problem arises if the funding goal is reached and results in unachievable expectations that the entrepreneur cannot meet. Thus, the founders should be motivated to choose a funding goal for the campaign reflecting the activities that will be carried out and the management capabilities of the respective team. Self-pledges decrease the amount of available money (Crosetto and Regner (2018), but lead to better post-campaign performance (Crosetto and Regner (2021)). Research has found conflicting results when it comes to the duration of a campaign. The longer (shorter) the fundraising timeframe is, the higher (higher) the likelihood that contributions will add up to an amount equal to or above the funding goal according to Cordova et al. (2015) and Mendes-Da-Silva (2016) (Frydrych et al. (2014)). Kuppuswamy and Bayus (2013), Crosetto and Regner (2014) and Barbi and Bigelli (2017) also conclude that a shorter

campaign increases success chances. However, nonlinear relationships, e.g. U-shape, could explain the existing differences.

Table 1: An Overview of Previous Crowdfunding Research

Author(s)	Dimensions Discussed	Correlation to Success
Mollick (2014)	project itself	Positive
Koch and Siering (2015)	higher depth of the project description	Positive
Cheung, Lee, and Rabjohn (2008)	relevant and comprehensive information	Positive
Mitra and Gilbert (2014)	using specific language phrases	Positive
Kuppuswamy and Bayus (2013), Barbi and Bigelli (2017)	presence of a video presentation	Positive
Xu et al. 2014, Rossi and Vismara (2018)	more updates (especially in crowdinvesting)	Positive
Crosetto and Regner (2014), Frydrych, Bock, Kinder, and Koeck (2014), Cordova and Gianfrate (2015), Patel and Devaraj (2016), Barbi and Bigelli (2017) and Forbes and Schaefer (2017).	relatively low/appropriate funding goal	positive
Cordova et al. (2015)	higher duration	positive
Kuppuswamy and Bayus (2013), Crosetto and Regne (2014), Frydrych et al. (2014) and Barbi and Bigelli (2017)	rshorter duration	positive
Kuppuswamy and Bayus (2013) and Barbi and Bigelli (2017) versus opposite finding Shengsheng, Xue, Ming, and Jiayin, (2014)	more reward levels	positive
Crosetto and Regner (2014) and Forbes and Schaefer (2017)	pre-selling of products/rewards	positive
Koch (2016) and Borst, Moser and Ferguson (2018)	highlighted on a crowdfunding platform	positive
Mollick (2014), Lu, Xie, Kong and Yu (2014), Koch (2016) and Borst, Moser and Ferguson (2018)	the popularity of the initiator and social media impact on crowdfunding	positive
Zvilichovsky, Inbar and Barzilay (2013), Siering and Koch (2015)	initiator's engagement in other crowdfunding projects	positive
Belleflamme, Lambert and Schwienbacher (2010)	non-profit projects versus for-profit ideas	spositive
Aleksina, Akulenka and Lublóy (2019)	Professional contact, tweet, retweet	positive
Bento, Gianfrate and Groppo (2019)	projects with superior return/risk profiles.	positive
Berns, Jia and Gondo (2022)	communication	positive
Dalla Chiesa (2021)	Social networks	positive
Crosetto and Regner (2018), Crosetto and Regner (2021)	Self-pledges	positive
Song et al. (2019)	Text passages	positive
Tosetto, Cox and Ngyuen (2022)	Social ties (Email, Facebook, Twitter) and project description	positive
Koch and Siering (2019)	Text emotionality	positive
Koch, Lausen and Kohlhase (2021)	funding redistribution mechanism	positive
Mendes-Da-Silva et al. (2016)	Longer duration, shorter distance (close network)	positive
Otte and Maehle (2022)	Combinations of factors	positive
Rykkja, Munim and Bonet (2020)	Less complex cultural projects choose local Platforms	

Note: This table shows a selection of past studies discussing various success determinants.

Belleflamme et al. (2010) state that non-profit organizations and ideas tend to be more successful compared to their for-profit counterparts. Another important crowdfunding success factor is the use of various reward levels when presenting a project. Successful projects tend to have a larger number of reward levels (Kuppuswamy and Bayus (2013) and Barbi and Bigelli (2017)). Most probably, investors fund projects in exchange for the primary outcome, i.e. a product or service, and each reward level attracts a different group of investors. However, one can also be overdue as

Shengsheng et al. (2014). In the year 2014, Crosetto and Regner analysed funding dynamics, motivation, and success determinants based on Startnext data (October 2012 till February 2014) and found that offering product pre-sellings is key to a project's success. Backers are incentivized by the product that they will receive, thus, founders can price discriminate against different groups (Crosetto and Regner (2014)). The pre-selling and reward options should, however, be limited to avoid confusion during the campaign or delivery phase and managing obligations versus expectations (Forbes and Schaefer (2017)). Galkiewicz (2018) states that for Startnext and Kickstarter a comparably strong and medium effect of product offerings on the level of (over-)funding is only observable for projects from the Technology and Fashion category, respectively. The most common success factors highlighted in the literature are the choice of the funding goal, duration of a crowdfunding campaign, presentation of a video, reward levels, and the number of backed projects by the entrepreneur. The following empirical analysis aims to clarify whether the same factors matter on two popular crowdfunding platforms across different industries.

4. Data

Data Description. For this study a sample of 10,514 crowdfunding campaigns from Germany and Austria launched on the world's biggest crowdfunding platform Kickstarter and Startnext (the largest crowdfunding platform in Germany and Austria) serves as a basis for comparing the level of overfunding (Kickstarter.com, Startnext.com, and Galkiewicz and Galkiewicz (2018)). In particular, the information on the following variables is hand-collected as the webpage structure changes over time: project category (i.e. Art. Technology, etc.), subcategory (i.e. 3-D Printing), location of project's founders, currency in which a project can be funded, total funding amount, initial funding goal (all successful projects obtain at least a funding as high as the funding goal), funding threshold, funding period start and end (funding period length for money collection), type of support (the means of reimbursement for backers for their contribution, e.g. no reward, gift, product), number of backers, number of new backers (those who contributed to the founder's project for the first time), number of returning backers (those who already backed a project of the founder), and number of comments on the project. The funding goals and funding amounts of projects from the Kickstarter platform are translated into EUR amounts by applying the respective average exchange rate in a year. Overfunding describes the amount of additional funding founders can use beyond the pre-specified funding goal of the project and is calculated by subtracting the funding goal amount from the finally obtained funding (overfunding = funding – funding goal).

Projects from both platforms belong to one of the following 25 categories: Agriculture, Art, Audio Book, Comics, Community, Crafts, Dance, Design, Education, Environment, Event, Fashion, Film & Video, Food, Games, Innovation, Journalism, Music, Photography, Publishing, Technology, Social Business, Sport, Technology or Theater. These categories are clustered into five different industry groups for the first time based on similarities presented by Galkiewicz and Galkiewicz (2018, 2019):

- 1. Art cluster: Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, Theater
- 2. Technology cluster: Education, Science, Innovation, Technology,
- 3. Sustainability cluster: Agriculture, Crafts, Community, Environment, Social Business,
- 4. Publishing cluster: Audio book, Comics, Journalism, Publishing,
- 5. Lifestyle cluster: Food, Games, Sport,

The collected and clustered variables are transformed for the purposes of the analysis in the following way: a dummy variable successful is created with values of 1 in case funding equals at least the funding goal, overfunding is created by subtracting the funding goal from the funding and for the cluster dummy variables are created. Table 2 and Table 3 shows the variables used in the study with the remaining definitions and descriptive statistics.

Table 2: An Overview of Variable Names Used in the Study

Variable Name – Part I	Variable Name – Part II
Successful (dummy variable with 1=success, 0 otherwise)	Funding (In) (logarithmic value, dep. var.)
Funding Goal in EUR	Overfunding (In) (logarithmic value, dep. var.)
Funding n EUR	Backers (In) (logarithmic value, dep. var.)
Overfunding in EUR	Funding/Backer (In) (logarithmic value, dep. var.)
Duration (in days)	Art_cluster_dv (dummy variable with 1=Art, 0 otherwise)
Backers (number)	Technology_cluster_dv (dummy variable with 1=Technology, 0 otherwise)
Funding/Backer (funding per backer)	Sustainability_cluster_dv (dummy variable with 1=Sustainability, 0 otherwise)
Austrian Location (dummy variable with 1=Austria, 0 otherwise)	Publishing_cluster_dv (dummy variable with 1=Publishing, 0 otherwise)
Platform (dummy variable with 1=Startnext (SN), 0=Kickstarter (KS))	Lifestyle_cluster_dv (dummy variable with 1=Lifestyle, 0 otherwise)
Funding Goal (In) (logarithmic value, indep. var.)	

Advanced econometric techniques like Wilcoxon-Rank-Sum-Testing, Ordinary Least Squares (OLS), Logit, and Probit regression analyses allow identifying correlations between the aforementioned variables and the level of a project's overfunding, i.e. success, on the Startnext and Kickstarter platforms between 2015 and 2017 for the first time in such an extensive manner.

Table 3 presents a general overview of the data for each platform individually and in total. Reaching crowdfunding success is indicated by the dummy variable successful_dv, which shows a value of one for all the projects that reached their funding goal and a value of zero otherwise. For OLS regressions, the dependent variables are included in the form of the natural logarithm of the (over-)funding received or of the number of backers to enhance the quality of the results.

Table 3: Startnext and Kickstarter Projects – A General Overview of the Sample

Platform	Variables	N	sd	min	p25	mean	p50	p75	max
SN (1)	Successful	5747	0.50	0.00	0.00	0.55	1.00	1.00	1.00
	Funding Goal	5748	28212.61	15.00	2500.00	10378.73	5000.00	10000.00	1000000.00
	Funding	5748	17947.37	0.00	377.50	5487.69	2023.50	5660.00	801250.00
	Overfunding	3079	11182.52	1.00	120.00	2071.27	381.00	1208.00	417359.00
	Duration	5748	18.93	1.00	31.00	44.34	41.00	54.00	184.00
	Backers	5748	171.91	0.00	8.00	71.73	29.00	74.00	5504.00
	Funding/Backer	5748	210.14	0.00	33.48	84.04	53.90	90.40	11952.50
	Austrian Location	5748	0.27	0.00	0.00	0.08	0.00	0.00	1.00
	Platform (1=SN)	5748	0.00	1.00	1.00	1.00	1.00	1.00	1.00
	Funding Goal (In)	5748	1.20	2.71	7.82	8.49	8.52	9.21	13.82
	Funding (In)	5748	2.43	0.00	5.93	7.01	7.61	8.64	13.59
	Overfunding (In)	3079	1.83	0.00	4.79	5.91	5.94	7.10	12.94
	Backers (In)	5748	1.65	0.00	2.08	3.14	3.37	4.30	8.61
	Funding/Backer (In)	5748	1.19	0.00	3.51	3.87	3.99	4.50	9.39

Platform	Variables	N	sd	min	p25	mean	p50	p75	max	
KS (2)	Successful	4765	0.42	0.00	0.00	0.22	0.00	0.00	1.00	•
	Funding Goal	4766	1474893.00	1.00	2800.00	64791.10	10000.00	25000.00	100000000.00	
	Funding	4766	61937.74	0.00	10.00	9248.05	251.00	2764.00	3198516.00	
	Overfunding	1046	118479.40	1.00	205.00	23866.32	1196.00	6728.00	3148516.00	
	Duration	4766	11.67	3.00	30.00	34.56	30.00	38.00	61.00	
	Backers	4766	608.54	0.00	1.00	99.73	6.00	38.00	26832.00	
	Funding/Backer	4766	160.53	0.00	5.00	67.18	30.70	69.61	6000.00	
	Austrian Location	4766	0.33	0.00	0.00	0.13	0.00	0.00	1.00	
	Platform (1=SN)	4766	0.00	2.00	2.00	2.00	2.00	2.00	2.00	
	Funding Goal (In)	4766	1.79	0.00	7.94	8.99	9.21	10.13	18.42	
	Funding (In)	4766	3.53	0.00	2.30	5.12	5.53	7.92	14.98	
	Overfunding (In)	1046	2.59	0.00	5.32	7.14	7.09	8.81	14.96	
	Backers (In)	4766	2.03	0.00	0.00	2.17	1.79	3.64	10.20	
	Funding/Backer (In)	4766	1.86	0.00	1.61	2.94	3.42	4.24	8.70	
	Variables	N	sd	min	p25	mean	p50	p75	max	W
Total	Successful	10512	0.49	0.00	0.00	0.40	0.00	1.00	1.00	
	Funding Goal	10514	993541.60	1.00	2500.00	35043.88	6000.00	15000.00	10000000.00	
	Funding	10514	43799.27	0.00	84.00	7192.26	1040.00	4898.00	3198516.00	
	Overfunding	4125	61157.65	1.00	135.00	7597.97	480.00	1684.00	3148516.00	
	Duration	10514	16.77	1.00	30.00	39.90	34.00	47.00	184.00	
	Backers	10514	429.18	0.00	3.00	84.42	17.00	62.00	26832.00	
	Funding/Backer	10514	189.45	0.00	20.49	76.40	45.42	83.33	11952.50	
	Austrian Location	10514	0.30	0.00	0.00	0.10	0.00	0.00	1.00	
	Platform (1=SN)	10514	0.50	1.00	1.00	1.45	1.00	2.00	2.00	
	Funding Goal (In)	10514	1.52	0.00	7.82	8.72	8.70	9.62	18.42	
	Funding (In)	10514	3.12	0.00	4.43	6.15	6.95	8.50	14.98	
	ronaing (in)									
	Overfunding (In)	4125	2.12	0.00	4.91	6.22	6.17	7.43	14.96	
				0.00	4.91 1.10	6.22 2.70	6.17 2.83	7.43 4.13	14.96 10.20	

Note: This table shows the summary statistics for all variables referred to in the study which are defined following the cited literature. First, descriptive statistics are shown for characteristics of campaigns from the Startnext.com (SN) platform, before those for the Kickstarter.com (KS) are shown. Finally, a table with the total for all projects stemming from both platforms follows. All amounts are translated into EUR values. The last column in the third table reports the results, i.e. p-values, for Wilcoxson-rank-sum-tests performed for several independent project characteristics common for projects stemming from both platforms. The analysed project characteristics are funding goal (in \in), funding (in \in), overfunding (in \in), campaign duration (in days), number of backers, funding per backer and Austrian location, platform (1=SN, 2=KS), and the aforementioned variables, for which the natural logarithm was determined for regression analysis.

Summing up, 40.46% (4,253) of the launched projects are successful. From the 10,514 projects, 5,747 and 4,765 campaigns were initiated on the platform Startnext (1) and Kickstarter (2), respectively. Surprisingly, on Startnext (1) 3,182 equaling 55.4% of 5,747 projects launched between 2015 and 2017 at least reached their funding goal, while on Kickstarter (2) there were 1,071 out of 4,765 successful campaigns, which is only 22.5%. Out of the 10,512 campaigns 9,453 are initiated in Germany and 1,059 in Austria which reflects the fact that Germany is 10 times as big as Austria. As indicated in Table 3 by the p-values from Wilcoxon-Rank-Sum-Tests (WRST), we see that all variables differ across the two platforms when compared; a fact often overseen in crowdfunding research where data from many platforms are regularly added.

We observe positive overfunding amounts for 4,125 out of 10,512 projects (1,046 on Startnext (SN) and 3,079 on Kickstarter (KS)), while 6259 projects show no overfunding as they are underfunded. Another 130 projects exactly reach the required funding goal, thus overfunding equals zero in these cases. The amount of overfunding varies to a high degree, which is reflected by the upward skewed mean of 23,866 EUR driven by a maximum of 3,148,516 EUR on KS gained by a teeth brush project versus the upward skewed mean of 2,071 EUR by a maximum of 417,359 EUR on SN earned for a higher education refugee project. For regression analysis, logarithmic values will be used as they are closer to the median, which in crowdfunding samples is most representative of standard projects. Crowdfunding sample means and medians often differ a lot – this, however, is seldom recognized in relevant research.

It is also important to differentiate between output and input variables because the latter are all 100% controlled for and decided by the project initiator ex-ante compared to the variables reflecting the campaign outcomes. Output variables like the number of backers, funding received, and number of comments/updates are all dependent on the input variables like funding goal, duration of the project, number of pictures, and the inclusion of a video set ex-ante. The mixing of input with output variables is a common mistake in crowdfunding research. For example, the number of backers is often used as an input variable, even though this is an ex-post-developed measure.

5. Data Analysis

5.1 Univariate Analysis and Summary Statistics

Table 4: Full Sample Pearson Rank Sum Correlations

Pearson Corr.	Success_dv	Overfunding	Funding_goal	Duration	Platform	Backers	Funding_PerB	Austrian_loc
Success_dv	1							
	10512							
Overfunding		1						
	4125	4125						
Funding_goal	-0.0221	0.2500*	1					
	0.0235	0						
	10512	4125	10514					
Duration	0.0550*	-0.0214	0.0157	1				
	0	0.1695	0.1075					
	10512	4125	10514	10514				
Platform	-0.3336*	0.1551*	0.0273*	-0.2903*	1			
	0	0	0.0052	0				
	10512	4125	10514	10514	10514			
Backers	0.1911*	0.7752*	0.0007	0.0014	0.0325*	1		
	0	0	0.9414	0.885	0.0009			
	10512	4125	10514	10514	10514	10514		
Funding_Pe~r	0.0956*	0.1371*	-0.0006	0.0469*	-0.0443*	0.0091	1	
	0	0	0.9527	0	0	0.349		
	10512	4125	10514	10514	10514	10514	10514	
Austrian_I~v	-0.0439*	0.0525*	-0.0028	-0.0263*	0.0736*	0.0025	0.0520*	1
	0	0.0007	0.7777	0.007	0	0.7964	0	
	10512	4125	10514	10514	10514	10514	10514	10514

Note: This table reports Pearson rank sum correlation coefficients for several project characteristics, p-values and numbers of observations, while * indicates significance at the 1% level. Success is reflected by the dummy variable success_dv and the occurrence of overfunding. The analysed project characteristics are funding goal (in €), campaign duration (in days), number of backers, funding per backer and Austrian location.

Table 4 reports Pearson rank sum correlation coefficients, p-values, and numbers of observations, while * indicates significance at the 1% level. As further shown in Table 5, Wilcoxon-Rank-Sum-Tests confirm significant differences regarding the levels of overfunding and between many input variables on both platforms in all clusters. However, no differences between the two platforms seem to exist in the Lifestyle sector concerning the pre-set funding goal, in the Sustainability area regarding the amount of realizable overfunding, and in the case of projects launched in Austria for the aforementioned two industry categories in the period 2015-2017. Table 5, Panels B and C show that the highest median funding goals are observable in the Technology, Lifestyle, and Sustainability cluster where also the highest overfunding amounts are realizable as suggested by the skewed mean funding figures. The highest median funding is raised by Sustainability, Art, and Publishing projects – for these projects larger groups of backers pay the largest amounts of money. The Appendix shows the differences between means and medians of the main variables of interest for individual category clusters. In the Appendix, we observe that in most of the categories, the funding goals set by initiators on the KS platform are higher than on SN leading, most probably, to smaller crowdfunding amounts and failure on this all-or-nothing platform. The supporters may find the pre-set funding goals to be inappropriately high and refrain from investing their money.

Table 5: Results (p-values) of Wilcoxon-Rank-Sum-Tests Applied to Projects from Grouped Industry Categories for the Startnext and Kickstarter Platforms

Panel A/ Industry Cluster	Art	Technology	Sustainability	Publishing	Lifestyle
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Successful	0	0	0	0	0
Funding Goal in EUR	0	0	0	0	0.3998
Funding in EUR	0	0	0	0	0
Overfunding in EUR	0	0	0.1564	0.0007	0
Duration in days	0	0	0	0	0
Backers	0	0	0	0	0
Funding per Backer	0	0	0	0	0
Austrian Location	0	0.0001	0.6725	0.0410	0.2980
Panel B / Industry Cluster	Art	Technology	Sustainability	Publishing	Lifestyle
		Mean			
Funding Goal in EUR	34340.10	51781.06	16999.19	22163.83	38177.35
Funding in EUR	6307.36	11696.04	7742.45	3131.17	7707.92
Overfunding in EUR	5527.59	25003.61	4096.86	2105.12	10525.67
Duration in days	39.58	39.96	44.99	40.52	37.66
Backers	72.35	79.09	102.77	61.25	134.89
Funding per Backer	77.36	106.35	93.98	45.26	51.87
Austrian Location	0.10	0.11	0.11	0.10	0.11
Panel C / Industry Cluster	Art	Technology	Sustainability	Publishing	Lifestyle
		Median			
Funding Goal in EUR	5000	10000	8500	4500	10000
Funding in EUR	1393	543	1595	602	558
Overfunding in EUR	370	839	873	337	1024
Duration in days	34	34	42	35	31
Backers	22	9	25	14	13
Funding per Backer	50	45	51	33	35

Note: This table reports the results, i.e. p-values, for Wilcoxon-rank-sum-tests performed for several independent project characteristics common for projects stemming from both platforms in Panel A. The analyzed project characteristics are funding goal (in €), funding (in €), overfunding (in €), campaign duration (in days), number of backers, funding per backer and Austrian location. Panel B and C show the mean and median values, respectively, for the aforementioned variables for both platforms in total for the industry clusters Art, Technology, Sustainability, Publishing and Lifestyle. The Appendix provides more details.

5.2 Multivariate Analysis of Funding and Overfunding Dynamics in Crowdfunding

In the following, OLS regressions of various project characteristics on the level of project funding and Logit and Probit regressions of those on success probability are performed to gain more precise insights into the underlying dynamics.

5.2.1 The Drivers Helping to Reach Higher Funding

Table 6 reports the results of OLS regressions of various project characteristics on the level of project funding (In_Funding). As compared to columns (1)-(4), columns (5)-(6) separately focus on the SN and KS project campaigns.

Table 6: Determinants Affecting Raised Funding Amounts (Ln_Funding)

Variable	T4_c1	T4_c2	T4_c3	T4_c4	T4_c5	T4_c6
Data	All	All	All	All	Startnext	Kickstarter
Dep. Variable	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding
Funding Goal (In)	0.2866***	0.2278***	0.2495***	0.2224***	0.4632***	0.2224***
Duration	0.0012	-0.0160***	-0.0159***	-0.0156***	0.0056***	-0.0156***
Austrian Location	-0.071	-0.0739	-0.0825	-0.0824	-0.0346	-0.0824
Startnext_SN_dv	2.0207***	-0.3645	-0.4959	0.0716		
Funding Goal (In)*SN_dv		0.1850***	0.1958***	0.2407***		
Duration*SN_dv		0.0215***	0.0218***	0.0212***		
Austrian Location*SNdv		0.0317	0.0634	0.0478		
Art_cluster_dv			0.7176***	1.3482***	0.1683*	1.3482***
Technology_cluster_dv			0.0975	0.9793***	-0.7974***	0.9793***
Sustainability_cluster_dv			0.2528*	(omitted)	-0.1603	(omitted)
Publishing_cluster_dv			(omitted)	-0.0607	(omitted)	-0.0607
Lifestyle_cluster_dv			0.3504***	0.9336***	-0.1699	0.9336***
Art_cluster*SN_dv				-1.0196***		
Technology_cluster*SN_dv				-1.6164***		
Sustainability_cluster*SN_dv				(omitted)		
Publishing_cluster*\$N_dv				0.221		
Lifestyle_cluster*SN_dv				-0.9432***		
Constant	2.5080***	3.6325***	2.9983***	2.6477***	2.8796***	2.6477***
	10514	10514	10514	10514	57.40	47//
N	10514	10514	10514	10514	5748	4766
R2	0.1101	0.1147	0.1227	0.1287	0.0625	0.0295
Adj. R2	0.1097	0.1141	0.1218	0.1274	0.0613	0.0281

Note: This table reports the results of OLS regressions of various project characteristics on the level of funding (Ln_funding) collected in a crowdfunding campaign for the 10,514 sample projects excluding and including interaction terms consisting of platform choice between Startnext and Kickstarter represented by the dummy variable SN_dv (becoming 1 for Startnext and 0 for Kickstarter) and industry category dummy variables (the omitted category – baseline – is Sustainability in column (4), (6) and Publishing in column (5)). These interactions, along with all project characteristics, are regressed on the funding amount. Standard errors are robust and *, **, *** indicate significance at the 10, 5, and 1% level, respectively.

Columns (4)-(6) show that, even though we have more projects from Startnext.com than from Kickstarter.com, projects from KS dominate the results for the whole sample of 10,514 observations. Thus, it is essential to distinguish between different platforms to gain representative results. Furthermore, there are some common patterns observable. In Table 6, column 4 we face the problem of heteroscedasticity according to White's test with a p-value=0.000, (not reported) where the hypothesis of homogenous residuals is rejected. In order to avoid arising problems we use for all OLS regressions that follow White's robust standard errors in STATA as they are variations of Table 6, column 4. We also perform a link test for the misspecification of the model and find no indication of misspecification as the hatsa p-value=0.107 (not reported).

The higher the funding goal, the higher the final funding amount on both platforms, however, a 1% change in the funding goal amount increases the funding on KS only by 0.22%, while on SN more than double this amount with 0.46%. This stands in contrast to most of the previously performed studies, e.g. Frydrych et al. (2014), Patel and Devaraj (2016), and Barbi and Bigelli (2017). Hence, the choices of particular samples (sample size, period, country/region, platform choice) or/and Ushaped or other non-linear relationships might be the driving forces behind most results. One must consider that sometimes founders are allowed to do self pledges up to 1.6% on SN (Corsetto and Regner (2018, 2021)) and that the funding goal should be in a range, which is typical for a particular industry (Galkiewicz and Galkiewicz (2018)). The longer the duration, the higher the final funding amount on SN and lower on KS - the mixed results confirm contrasting findings from literature (e.g. Frydrych et al. (2014) and Cordova et al. (2015)), which might be the outcomes of nonlinear relationships, e.g. U-shape. However, the impact of duration is only statistically significant, while its economic relevance is negligible on both platforms. On SN, projects from the Technology cluster get significantly less funding as compared to those from the Publishing area. On KS, projects from the clusters: Art, Technology, and Lifestyle get significantly more financing than those from the Sustainability field. These differences imply that different groups of initiators and investors visit various platforms and invest in specific projects.

Strausz (2017) suggests that the higher the uncertainty about the market size, the larger the difference between funding and funding goal may be, hence resulting in over- or underfunding. The latter is also increased if potential supporters become doubtful about the project or the founder's quality. For example, the funding goal may seem to be inappropriately high for project realization. We also think that backers in donation- and reward-based crowdfunding are less professional with their altruistic and hedonistic (Gierczak et al. (2016)) motivations than those engaged in crowdlending or equityinvesting focusing on profiting. This might further increase the level of over- or underfunding across different platforms and industries. The next analysis provides a more differentiated picture of the impact of project characteristics on funding levels in various industries on both platforms.

Funding Success Drivers Identifiable in Various Industries on Different Platforms. As shown by Table 7, a funding goal increase of 1% significantly increases the final funding amount in the Art cluster by an economically relatively low 0.55% on SN and 0.35% on KS. The regressions in Table 7a focus on SN's sample projects, while KS's projects are utilized in Table 7b. In the Technology cluster, projects get on both platforms 0.21% more of funding with a 1% increase in the funding goal. However, only on SN, a 1% higher funding goal amount increases significantly the funding of projects from the Sustainability and Publishing cluster by 0.38% and 0.64%, respectively. A 10-day longer duration significantly (in statistical terms only) increases the funding of projects from the field of Art by 0.05% and Technology by 0.16% on SN, while on KS in Lifestyle by 0.57%.

Table 7: The Determinants of Funding (Ln_Funding) in Various Industry Clusters on Two Platforms

Table 7a

Variable Data	T5a_c1 Startnext	T5a_c2 Startnext	T5a_c3 Startnext	T5a_c4 Startnext	T5a_c5 Startnext
Dep. Variable	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding
Funding Goal (In)	0.5495***	0.2124***	0.3830***	0.6358***	0.3504***
Duration	0.0049**	0.0160***	0.0018	-0.001	0.0061
Austrian Location	-0.1327	0.2709	-0.0128	0.0655	0.099
Constant	2.3751***	3.7890***	3.6183***	1.7784**	3.6954***
N	3087	710	786	571	594
R2	0.079	0.0288	0.0299	0.1007	0.028
Adj. R2	0.0781	0.0247	0.0262	0.096	0.023

Table 7b

Variable	T5b_c1	T5b_c2	T5b_c3	T5b_c4	T5b_c5
Data	Kickstarter	Kickstarter	Kickstarter	Kickstarter	Kickstarter
Dep. Variable	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding	Ln_Funding
Funding Goal (In)	0.3479***	0.2123***	-0.1071	-0.0282	0.1509***
Duration	-0.0009	-0.0134	-0.0319	-0.008	-0.0568***
Austrian Location	-0.2168	0.4761	-0.9261	0.2819	-0.467
Constant	2.4077***	3.5729***	5.9556***	4.4361***	5.6443***
N	2231	969	108	456	1002
R2	0.0275	0.0127	0.0335	0.0019	0.0366
Adj. R2	0.0262	0.0097	0.0056	0.0017	0.0337

Note: This table reports the factors affecting the amount of funding (Ln_Funding) collected in a crowdfunding campaign for various industry cluster samples on two platforms in an OLS setting in. The following industry groups are created for the first time based on project similarities and shown in columns (1) to (5), respectively: (1) Art cluster: Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, Theater, (2) Technology cluster: Education, Technology, Innovation, Technology, (3) Sustainability cluster: Agriculture, Crafts, Community, Environment, Social Business, (4) Publishing cluster: Audio book, Comics, Journalism, Literature, Publishing, and (5) Lifestyle cluster: Food, Games, Sport. The regression in Table 7a focuses on Startnext's sample projects, while Kickstarter's projects are utilized in Table 7b. Standard errors are robust and *,**,**** indicate significance at the 10, 5, and 1% level, respectively.

We perform an additional robustness test on which factors affect the number of backers as funding is the outcome of backers' financial engagement in a project. Thus, by replacing Ln_Funding with Ln_Backers_No we obtain the following OLS results in Table 8. Even though the analysis provides only a partial picture, it confirms previously obtained findings and reveals interesting patterns. For example, in all clusters, except for Technology, an increase in the funding goal amount attracts more backers on SN. This holds similarly for projects from the clusters Art, Technology, and Lifestyle on KS. In SN's Technology cluster, only a longer duration slightly increases the number of supporters and this is also the case for KS's Sustainability, Publishing, and Lifestyle projects. Finally, projects promoted in Austria attract significantly fewer backers, but those who engage provide higher amounts of money

through crowdfunding. In consequence, the final funding amounts remain unaffected by the country of origin as previously presented in Table 7. Overall, our results indicate that different levels of over- or underfunding depend on platform choice and the belonging of projects to a particular industry. The main reason for diverging levels of funding remains the uncertainty about the underlying market size/final demand and project quality as suggested by Strausz (2017).

Table 8: Factors Influencing the Attention of Backers in Various Industry Clusters on Different Platforms

n	×	a
	n	

Table 64					
Variable	T6a_c1	T6a_c2	T6a_c3	T6a_c4	T6a_c5
Data	Startnext	Startnext	Startnext	Startnext	Startnext
Dep. Variable	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No
Funding Goal (In)	0.3155***	0.0286	0.2170***	0.3609***	0.2056***
Duration	0.0016	0.0059**	0.0017	-0.0052	0.0022
Austrian Location	-0.2314**	-0.1474	-0.0366	-0.0173	-0.0036
Constant	0.5164**	2.0728***	1.2464**	0.5583	1.3693**
Ν	3087	710	786	571	594
R2	0.057	0.0069	0.0204	0.063	0.0181
Adj. R2	0.0561	0.0027	0.0166	0.058	0.0131

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Variable	T6b_c1	T6b_c2	T6b_c3	T6b_c4	T6b_c5
Data	Kickstarter	Kickstarter	Kickstarter	Kickstarter	Kickstarter
Dep. Variable	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No	Ln_Backers_No
Funding Goal (In)		0.0865**	-0.1248	-0.0049	0.0794**
Duration	0.0008	-0.0088*	-0.0226*	-0.0146**	-0.0363***
Austrian Location	-0.2465**	0.1002	-0.8629**	0.0812	-0.4630**
Constant	0.7500***	1.5589***	3.3937***	2.2138***	2.8764***
Ν	2231	969	108	456	1002
R2	0.023	0.0071	0.0908	0.0093	0.0383
Adj. R2	0.0217	0.004	0.0646	0.0027	0.0354

Note: This table reports the factors affecting the number of backers (Ln_Backers_No) providing money in a crowdfunding campaign for various industry cluster samples on two platforms in an OLS setting. The following industry groups are created for the first time based on project similarities and shown in columns (1) to (5), respectively: (1) Art cluster: Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, Theater, (2) Technology cluster: Education, Technology, Innovation, Technology, (3) Sustainability cluster: Agriculture, Crafts, Community, Environment, Social Business, (4) Publishing cluster: Audio book, Comics, Journalism, Literature, Publishing, and (5) Lifestyle cluster: Food, Games, Sport. The regression in Table 8a focuses on Startnext's sample projects, while Kickstarter's projects are utilized in Table 8b. Standard errors are robust and *,**,*** indicate significance at the 10, 5, and 1% level, respectively.

5.2.2 The Determinants of Success

Table 9 and Table 10 report the marginal probabilities of logit and probit regressions, respectively, for reaching funding as high as the funding goal, i.e. success with the dummy variable success dv

becoming 1, evaluating all independent variables at their means which are provided in Table 3 or Table 5 and dummy variables when switching from 0 to 1.

Table 9: The Drivers of Success Determined via Logit Regressions (Success dv)

Variable	T4_c1	T4_c2	T4_c3	T4_c4	T4_c5	T4_c6
Data	All	All	All	All	Startnext	Kickstarter
Dependent variable	success_dv	success_dv	success_dv	success_dv	success_dv	success_dv
Funding Goal (In)	-0.0715***	-0.0565***	-0.0523***	-0.0544***	-0.0939***	-0.0448***
Duration	-0.0002	-0.0018***	-0.0019***	-0.0019***	0.0004	-0.0015***
Austrian Location	-0.0183	-0.0319	-0.0344	-0.0339	-0.0065	-0.0279
Startnext_SN_dv	0.2832***	0.4973***	0.4540***	0.4255***		
Funding Goal (In)*SN_dv		-0.0345***	-0.0311***	-0.0275***		
Duration*\$N_dv		0.0021***	0.0022***	0.0022***		
Austrian Location*SNdv		0.0243	0.0294	0.0282		
Art_cluster_dv			0.0877***	0.0873***	0.1009***	0.0719***
Technology_cluster_dv			-0.0339**	0.0058	-0.0705***	0.0048
Sustainability_cluster_dv			0.0323*	0.0083	0.0388	0.0068
Publishing_cluster_dv			0.0059	-0.0454	0.037	-0.0374
Lifestyle_cluster_dv			(omitted)	(omitted)	(omitted)	(omitted)
Art_cluster*SN_dv				0.0007		
Technology_cluster*SN_dv				-0.0673**		
Sustainability_cluster*SN_dv				0.0256		
Publishing_cluster*SN_dv				0.0777**		
Lifestyle_cluster*SN_dv				(omitted)		
N	10512	10512	10512	10512	5747	4765
R2 (pseudo)	0.1239	0.1263	0.1345	0.1355	0.0564	0.053

Note: This table reports the marginal probabilities of logit regressions for reaching funding as high as the funding goal, i.e. success with the dummy variable success_dv becoming 1 (or remaining 0 otherwise), evaluating all independent variables at their means which are provided in **Table 3** or the **Appendix** and dummy variables when switching from 0 to 1. Standard errors are clustered at the industry category level and *,**,*** indicate significance at the 10, 5, and 1% level, respectively.

Columns (1)-(3) show that after the inclusion of additional project characteristics, the explanatory power of the model increases, as indicated by the reported pseudo-R-squared figures. Thus, we consider these variables in all specifications that follow. In the specification containing the extended set of variables in column (4) of Table 9, the probability of a campaign reaching success is significantly negatively affected by a higher funding goal amount, longer duration, and choosing the KS platform for the launch.

Columns 5 to 6 of Table 9 show individual results for the SN and KS platforms, respectively. If In Funding_goal increases by 1 (from mean 8.72 equalling 6124 EUR to 9.72 equalling 16647 EUR), the success probability decreases by 9.4% on SN and 4.5% on KS. This is in line with the crowdfunding literature, e.g. Crosetto and Regner (2014), Frydrych et al. (2014), Cordova and Gianfrate (2015), Patel and Devaraj (2016) and Barbie and Bigelli (2017) and Forbes and Schaefer (2017). It further indicates that founders get more punished on the SN than on the KS platform for pre-setting the funding goal too high. Moreover, 10 days increase in duration as compared to the mean of 40 days, decreases the success probability on KS only by a negligible 1.5%. Launching projects from the broader Art category (Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, and Theater) increases the success probability as compared to the Lifestyle cluster by 7.2% on KS and 10.1% on SN. In contrast, initiating projects from the Technology cluster decreases the success

probability as compared to the Lifestyle cluster by 7.1% on SN – in Table 6 it was previously shown that Startnext's Technology cluster projects get significantly less funding. Patterns observable from unreported Probit regressions are qualitatively and quantitatively comparable to those observed from Logit regressions. In sum, these findings confirm that the choice of a particular platform affects a crowdfunding project's chances for success.

In additional tests considering the Heckman correction (Heckman (1976, 1979)) based on maximum likelihood estimation for non-random self-selection of campaigns into specific platforms we also obtain interesting results. For instance, having an ex-ante Art project in place significantly increases the probability to use the SN platform and positively affects the success probability as shown in column 4 of Table 10. In contrast, while a Technology project increases the probability to use the SN platform, having this type of project decreases the chances for success. The findings in columns 1 and 4 confirm that a higher funding goal decreases the chances for success. This is comparable to previously obtained results. Column 5 shows that an overfunding amount higher than 150% of the funding goal can be obtained if projects from the Sustainability area are launched. Finally, column 6 of Table 10 shows that the general level of overfunding (represented by Ln_Overfunding) is significantly positively affected by a longer duration and negatively by projects from the Art, Technology, or Publishing category. Thus, an industry category of a project and the platform choice matter.

Table 10: The Relevance of Platform Choice for Success and Higher Amounts of Funding

	T8_c1	T8_c2	T8_c3	T8_c4	T8_c5	T8_c6
Dep. variable 1st stage	Startnext_dv	Startnext_dv	Startnext_dv	Startnext_dv	Startnext_dv	Startnext_dv
Art_cluster_dv	0.5292***	0.5286***	0.7057***	0.5292***	0.5286***	0.7057***
Technology_cluster_dv	0.1315***	0.1315***	0.0389	0.1315***	0.1315***	0.0389
Sustainability_cluster_dv	1.4964***	1.4971***	1.5710***	1.4964***	1.4971***	1.5710***
Publishing_cluster_dv	0.4669***	0.4669***	0.6047***	0.4669***	0.4669***	0.6047***
Liefestyle_cluster_dv	(omitted)	(omitted)	(omitted)	(omitted)	(omitted)	(omitted)
_cons	-0.3261***	-0.3261***	-0.8203***	-0.3261***	-0.3261***	-0.8203***
mills lambda	-0.1082***	-0.0574***	-0.1937	0	0	0
Dep. variable 2nd stage	Success_dv	High_Overfun_dv	In_Overfunding	Success_dv	High_Overfun_dv	In_Overfunding
Funding Goal (In)	-0.1034***	-0.0348***		-0.0925***	-0.0312	
Duration	0.0003	0	0.0111***	0.0004	0	0.0101***
Austrian Location	-0.0105	-0.0007	0.1387	-0.006	-0.0028	0.0485
Art_cluster_dv				0.1075***	-0.0215*	-0.8844***
Technology_cluster_dv				-0.0692***	-0.0074	-0.6109***
Sustainability_cluster_dv				0.0403	0.0422***	0.0842
Publishing_cluster_dv				0.0432	0.0013	-0.8250***
Liefestyle_cluster_dv				(omitted)	(omitted)	(omitted)
_cons	1.4924***	0.3804***	5.5947***	1.2649***	0.3794***	6.1340***
N	10513	10511	7845	10513	10511	7845
R2	0.0542	0.0542	0.0693	0.0542	0.0542	0.0693
Wald test (p-value)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: This table reports the results for the relevance of various project characteristics for reaching the funding goal or/and high amounts of (over-)funding. For the latter the "success_dv" is replaced the dummy variable "high_overfun_dv" and by the variable "Ln_Overfunding" equal to [Ln(Funding – Funding goal)]. However, for the high overfunding dummy variable the threshold is chosen randomly. It is defined as obtained funding equal to or higher than 150% of the funding goal (i.e.

high_overfun_dv = 1). The analyses performed in this table are extended by applying the Heckman correction (Heckman (1976, 1979)) based on maximum likelihood estimation for non-random self-selection of campaigns into specific platform. For the latter the inverse of the Mill's ratio and the p-value of the Wald test are also reported; the results from the selection equation are shown in the upper part of the table. In the selection regression (first stage) the focus lies on the impact of industry categories on a founder's general decision to choose a platform like Startnext versus Kickstarter (represented by Startnext_dv). In the bottom part of Table 9 the remaining impact of project characteristics on the extent of funding, i.e. for reaching the funding goal/success, increasing overfunding or gaining higher overfunding (second stage) is shown. The following industry groups are considered: (1) Art cluster: Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, Theater, (2) Technology cluster: Education, Technology, Innovation, Technology, (3) Sustainability cluster: Agriculture, Crafts, Community, Environment, Social Business, (4) Publishing cluster: Audio book, Comics, Journalism, Literature, Publishing, and (5) Lifestyle cluster: Food, Games, Sport. *,**,*** indicate significance at the 10, 5, and 1% level.

6. Conclusions

This study provides unique results on factors relevant to the success of crowdfunding campaigns run in Europe between 2015 and 2017 on the platforms Kickstarter.com and Startnext.com. Our goal is to offer practical guidance to founders about general and industry-specific dynamics on which platform to choose for their projects to reach the highest funding.

In the main analyses, significant differences between the drivers of success depending on platform choice or whether launched projects belong ex-ante to a particular industry category are identified. It is documented that an increase in the project's funding goal from ca. 6000 EUR to ca. 16000 EUR results in a lower probability of a campaign's success, defined as reaching the funding goal, i.e. decreases it by 9% on Startnext and 4.5% on Kickstarter. On Startnext, projects from the Technology cluster get less funding than those from the Publishing counterpart, while on Kickstarter, projects from Art, Technology, or Lifestyle field reach higher financing as compared to the Sustainability area. Finally, launching a project from the broader Art category, instead of Lifestyle, has a 10.1% and 7.2% higher chance of success on Startnext and Kickstarter, respectively. The diverging drivers of success documented for projects launched in Germany are equally important for projects initiated in Austria. The aforementioned comparisons reveal significant differences between groups of initiators and investors visiting various platforms and industry clusters which might be potentially interesting for founders, funders, and its advisors.

We add to the growing body of literature on drivers of success determining the level of funding originating from Frydrych et al. (2014), Mollick (2014), and Koch (2016) by showing how the sample choice (size, period, industry, region/country, platform) leads to diverging results in the literature. Future research should focus on larger samples of successful and unsuccessful projects stemming from various platforms and covering different industry clusters to identify more precisely – and universally representative – patterns.

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References

- Agrawal, A., C. Catalini and A. Goldfarb (2015) Crowdfunding: Geography, Social Networks and the Timing of Investment Decisions, Journal of Economics & Management Strategy, 24 (2), 253-274.
- Aleksina, Anna., S. Akulenka and A. Lubloy (2019) Success Factors of Crowdfunding Campaigns in Medical Research: Perceptions and Reality. Drug Discovery Today, 24(7), 1413-1420.
- Aldrich, J.H., and F.D. Nelson (1984) Linear Probability, Logit, and Probit Models, Sage University Press, Beverly Hills.
- Barbi, M. and M. Bigelli (2017) Crowdfunding Practices In and Outside the US, Research in International Business and Finance, 42, 208-223.
- Belleflamme, P., T. Lambert and A. Schwienbacher (2014) Crowdfunding: Tapping the Right Crowd, Journal of Business Venturing 29 (5), 585-609.
- Bento, N., G. Gianfrate, and S. V. Groppo (2019), Do Crowdfunding Returns Reward Risk? Evidences from clean-tech projects, Technological Forecasting and Social Change 141, 107-116.
- Borst, I., C. Moser and J. Ferguson (2017) Start-up Funding via Equity Crowdfunding in Germany A Qualitative Analysis of Success Factors, The Journal of Entrepreneurial Finance, 19 (1), 1-34.
- Berns, J. P., J. Yankun and M. Gondo (2022) Crowdfunding Success in Sustainability-oriented Projects: An Exploratory Examination of the Crowdfunding of 3D-Printers, Technology in Society 71, 102099.
- Cheung, C.M.K., M.K.O. Lee and N. Rabjohn (2008) The Impact of Electronic Word-of-mouth, Internet Research, 18 (3), 229-247.
- Cordova, A., J. Dolci and G. Gianfrate (2015) The Determinants of Crowdfunding Success: Evidence from Technology Projects, Procedia Social and Behavioral Sciences, 181, 115-124.
- Corsetto, P and T. Regner (2014) Crowdfunding: Determinants of Success and Funding Dynamics, Jena Economic Research Papers, 2014-035.
- Crosetto, P., and T. Regner (2018) It's Never Too Late: Funding Dynamics and Self Pledges in Reward-based Crowdfunding, Research Policy 47(8), 1463-1477.
- Cumming, D. G. Leboeuf and A. Schwienbacher (2019). Crowdfunding models: Keep-It-All vs. All-Or-Nothing, Financial Management 49 (2), 331-360.
- Dalla Chiesa, C. (2021) The Artists' Critique on Crowdfunding and Online Gift-giving, The Journal of Arts Management Law and Society 52(1), 20-36.
- Forbes, H. and D. Schaefer (2017) Guidelines for Successful Crowdfunding, Procedia CIRP, 60, 398-403.
- Frydrych, D., A. J. Bock and T. Kinder (2014) Exploring Entrepreneurial Legitimacy in Reward-Based Crowdfunding, Venture Capital 16 (3), 247-269.
- Galkiewicz, D. P. and M. Galkiewicz (2019) Crowdfunding Monitor 2019: Überfinanzierungspotentiale der auf Spenden und Gegenleistungen basierenden Schwarmfinanzierungen veranschaulicht anhand von Startnext- und Kickstarter-Projekten, Szczecin: Bermag.
- Galkiewicz, D. P. and M. Galkiewicz (2018) Crowdfunding Monitor 2018: An Overview of European Projects Financed on Startnext and Kickstarter Platforms between 2010 and mid-2017, Szczecin: Bermag.
- Gałkiewicz, M. (2018) First Evidence on Differences in Major Characteristics of Successfully Crowdfunded European Projects via Startnext and Kickstarter Platforms, Proceedings of the 2nd International Scientific Conference ITEMA 2018 (Graz).
- Gierczak, M.M., U. Bretschneider, P. Haas, I. Blohm and J.M. Leimeister (2016) Crowdfunding: Outlining the New Era of Fundraising, in D. Brüntje and O. Gajda (Eds.), FGF Studies in Small Business and

- Entrepreneurship, Crowdfunding in Europe (Vol. 41), 7-23. Cham: Springer International Publishing.
- Heckman, J. (1976) The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables and a Simple Estimator for Such Models, Annals of Economic and Social Measurement 5, 475-492.
- Heckman, J. (1979) Sample Selection Bias as a Specification Error, Econometrica 47, 153-161.
- Koch, J. (2016) The Phenomenon of Project Overfunding on Online Crowdfunding Platforms Analyzing the Drivers od Overfunding, Proceedings of the 24th European Conference on Information Systems (ECIS, Istanbul).
- Koch, J.-A., J. Lausen and M. Kohlhase (2021) Internalizing the Externalities of Overfunding: an Agent-based Model Approach for Analyzing the Market Dynamics on Crowdfunding Platforms, Journal of Business Economics 91(9), 1387-1430.
- Koch, J.-A. and M. Siering (2015) Crowdfunding Success Factors: The Characteristics of Successfully Funded Projects on Crowdfunding Platforms, Twenty-Third European Conference on Information Systems (ECIS), Munster: Germany
- Koch, J. A., & Siering, M. (2019). The Recipe of Successful Crowdfunding Campaigns: An Analysis of Crowdfunding Success Factors and Their Interrelations, Electronic Markets, 29(4), 661-679. Kuppuswamy, V. and B. Bayus (2013) Crowdfunding Creative Ideas: The Dynamics of Project Backers in Kickstarter, Working Paper.
- Lu, C.-T., S. Xie, X. Kong and P. S. Yu (2014) Inferring the Impacts of Social Media on Crowdfunding, in B. Carterette, F. Diaz, C. Castillo and D. Metzler (Eds.) Proceedings of the 7th ACM international Conference on Web Search and Data Mining WSDM 14, New York: ACM Press
- Mendes-Da-Silva W., L. Rossoni, B.S. Conte, C.C. Gattaz and E.R. Francisco (2016) The Impacts of Fundraising Periods and Geographic Distance on Financing Music Production via Crowdfunding in Brazil, Journal of Cultural Economics 40, 75-99.
- Mitra, T. and E. Gilbert (2014) The Language That Gets People to Give, in S. Fussell W. Lutters, M.R. Morris and M. Reddy (Eds.) Proceedings of the 17th ACM conference on Computer supported cooperative work& social computing CSCW14, 49-61. NewYork: ACM Press
- Mollick, E. (2014) The Dynamics of Crowdfunding: An Exploratory Study, Journal of Business Venturing 29 (1), 1-16.
- Otte, P. P., and N. Maehle (2022) The Combined Effect of Success Factors in Crowdfunding of Cleantech Projects. Journal of Cleaner Production 366, 132921.
- Patel, P. and S. Devaraj (2016) Influence of Number of Backers, Goal Amount and Project Duration on Meeting Funding Goals of Crowdfunding Projects, Economics Bulletin, 36 (2), 1242-1249.
- Regner, T. and P. Crosetto (2021) The Long-term Effects of Self Pledging in Reward Crowdfunding. Technological Forecasting and Social Change 165, 120514.
- Rossi, A. and S. Vismara (2018) What Do Crowdfunding Platforms Do? A Comparison Between Investment-based Platforms in Europe, Eurasian Business Review, 8 (1), 93-118.
- Rykkja, A., Z. H. Munim, and L. Bonet (2020) Varieties of Cultural Crowdfunding: The Relationship Between Cultural Production Types and Platform Choice, Baltic Journal of Management 15(2), 261-280.
- Shengsheng, X., T. Xue, D. Ming and Q. Jiayin (2014) How to Design Your Project in the Online Crowdfunding Market? Evidence from Kickstarter, ICIS 2014.
- Song, Y., Berger, R., Yosipof, A., and B. R. Barnes (2019) Mining and Investigating the Factors Influencing Crowdfunding Success. Technological Forecasting and Social Change 148, 119723.

- Strausz, R. (2017) A Theory of Crowdfunding: A Mechanism Design Approach with Demand Uncertainty and Moral Hazard, American Economic Review 107(6), 1430-1476,
- Tosatto, J., Cox, J., and T. Nguyen (2022) With a Little Help from My Friends: The Role of Online Creator-fan Communication Channels in the Success of Creative Crowdfunding Campaigns, Computers in Human Behavior 127, 107005.
- Xu, A., X. Yang, H. Rao, W.-T. Fu, S.-W. Huang and B.P. Bailey (2014) Show Me the Money! In M. Jones, P. Palanque, A. Schmidt and T. Grossman (Eds.) Proceedings of the 32nd annual ACM conference on Human factors in computing systems CHI14, 591-600. New York: ACM Press
- Zvilichowsky, D., Y. Inbar and O. Barzilay (2013) Playing Both Sides of the Market: Success and Reciprocity on Crowdfunding Platforms. SSRN Electronic Journal 4.

Web sources:

Delivorias, A. (2017) Crowdfunding in Europe: Introduction and state of play, retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595882/EPRS_BRI(2017)595882_EN.p df visited on 03.03.2019]

Kickstarter.com website [https://www.kickstarter.com/about?ref=global-footer visited on 15.11.2020] Startnext.com website [https://www.startnext.com/info/startnext.html visited on 15.11.2020] Fundly.com website [https://blog.fundly.com/ visited on 03.12.2020]

Appendix: Startnext and Kickstarter Projects – Differences Between Means and Medians of the Main Variables of Interest for Individual Categories

Industry Cluster	Art		Technology		Sustai	Sustainability		Publishing		Lifestyle	
Platform	Startnex t	Kickstart er	Startnex t	Kickstart er	Startnex t	Kickstart er	Startnex t	Kickstart er	Startnex t	Kickstart er	
					M	ean					
Funding Goal in EUR	7127	71995	14640	78995	18012	9626	5747	42721	16537	51006	
Funding in EUR	4526	8773	5338	16355	8626	1311	3614	2526	8315	7348	
Overfunding in EUR	1346	18477	3902	62104	4261	1677	1368	5195	3126	20598	
Duration (days)	43	34	46	36	46	34	45	35	45	33	
Backers (number)	60	90	51	99	114	23	71	50	103	154	
Industry Cluster	Art		Technolo	gy	Sustainal	oility	Publishin	g	Lifestyle		
Platform	Startnex t	Kickstart er	Startnex t	Kickstart er	Sustainal Startnex t	Kickstart er	Startnex t	Kickstart er	Startnex t	Kickstart er	
-	Startnex			Kickstart	Startnex t	Kickstart	Startnex	Kickstart	•		
-	Startnex			Kickstart	Startnex t	Kickstart er	Startnex	Kickstart	•		
Platform Funding Goal in	Startnex t	er	Startnex t	Kickstart er	Startnex t Me	Kickstart er edian	Startnex t	Kickstart er	Startnex t	er	
Platform Funding Goal in EUR	Startnex t	er 7000	Startnex t	Kickstart er 20000	Startnex t Me	Kickstart er edian 3250	Startnex t	Kickstart er 5500	Startnex t	er 10000	
Platform Funding Goal in EUR Funding in EUR Overfunding in	Startnex t 4000 2160	er 7000 465	Startnex t 6783	Kickstart er 20000 251	Startnex t Me 9700 2359	Kickstart er edian 3250 70.5	Startnex t 3500 1683	Kickstart er 5500 46.5	Startnex t 10000 2334	er 10000 182	

Note: This table reports the means and medians of individual project characteristics of 10 514 Startnext.com and Kickstarter.com campaigns launched between 2015 and 2017 belonging to specific industry categories. The means of the variables are relevant for the interpretation of the marginal probabilities from Logit and Probit regressions reported in Tables 7-8. The following industry groups are created for the first time based on project similarities and shown in columns (1) to (5), respectively: (1) Art cluster: Art, Dance, Design, Event, Fashion, Film & Video, Music, Photography, Theater, (2) Technology cluster: Education, Technology, Innovation, Technology, (3) Sustainability cluster: Agriculture, Crafts, Community, Environment, Social Business, (4) Publishing cluster: Audiobook, Comics, Journalism, Literature, Publishing, and (5) Lifestyle cluster: Food, Games, Sport.