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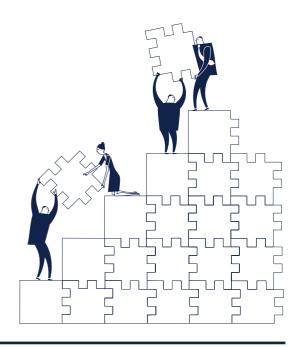
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Equity crowdfunding: A new phenomena¹

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Abstract

Crowdfunding has recently become available for entrepreneurs. Most academic studies analyse data from rewards-based (pre-selling) campaigns. In contrast, in this paper we analyse 636 campaigns, encompassing 17,188 investors and 64,831 investments between 2012 and 2015, from one of the leading European equity crowdfunding platforms. We provide descriptive statistics and carry out cross-campaign regression analysis. The descriptive statistics address its size, growth and geographic distributions in the UK. The regressions analyse which factors are associated with the probability of a successful campaign. We find some similarities and some interesting dissimilarities in both descriptives and regression results compared to research on rewards-based crowdfunding. Practically, the data show that equity crowdfunding will likely pose great challenges to VC and business angel financiers in the near future. We discuss some research challenges and opportunities with these kind of data.

Keywords: equity crowdfunding, U.K., campaign success.

¹ We are grateful to Carlos Silva, Duarte Henriques and especially Jeff Lynn from SEEDRS for their support and patience. We are also grateful to Ella Halmari from Beauhurst for providing us with their latest research.

1. Introduction

In recent years crowdfunding has emerged as a viable and popular alternative channel for entrepreneurs to fund their early stage businesses. The consultancy Massolution recently reported that funds raised via global crowdfunding expanded by 167 percent in 2014 to reach \$16.2 billion, up from \$6.1 billion in 2013 (Massolution, 2015). Massolution predicts that the industry is set to raise \$34.4 billion in 2015. A number of high profile campaigns and an increasing appetite to "cut out the middleman" mean crowdfunding is likely to remain an important part of early stage finance for some years to come.

Broadly speaking crowdfunding can be divided into four main categories: donations, rewards-based (also called pre-selling), lending, and equity crowdfunding. Rewards-based campaigns have proved extremely popular among entrepreneurs, and have grown in volume and number by an amazing 524% annually since 2009 according to The World Bank (2013). The focus of this paper in contrast is equity crowdfunding. Here, the crowd, typically via an online platform, take an equity stake in the business in much the same way VC funding works. Equity crowdfunding might be considered, *a priori*, to have a more difficult time catching on because in the past, contracts associated with equity funding have been considerably more complicated than other types of funding; the due diligence process is often extensive; and the levels of associated investments have been so high that there is a strong preference for funders to intimately know the entrepreneur and her business (Gompers, P. (1995), Cumming et al. (2010)). None of these characteristics seem at first blush to make equity investment amenable to online investing by the crowd. Reflecting these difficulties, equity crowdfunding was not permitted in the United States in 2013, and was relatively rare worldwide, making up less than 5% of all crowdfunding investment at that time (Massolution, 2013).

Nevertheless, data from Beauhurst, a leading consultancy on early stage investments in the UK, show that around 21% of all early stage investment and as much as 35.5% of all seed-stage investment deals in the UK went through equity crowdfunding sites in 2015 (Beauhurst 2015). These data reflect a rapid recent growth and equity crowdfunding is now providing a challenge to existing Angel networks and even some VCs.

The UK is the fastest growing country for equity crowdfunding campaigns in the world, both for the number and size of campaigns. This is because the UK has, since the end of 2011, had in place clear regulations to define the rules for equity crowdfunding. Investors of start-ups in the U.K. also benefit from a very generous tax incentive via the *Seed Enterprise Investment Scheme*, SEIS, and the *Enterprise Investment Scheme*, EIS. Both schemes are designed to help small UK-based companies raise finance by offering tax relief on new shares in those companies. The EIS is aimed at wealthier investors who receive 30% tax relief but whose investments cannot be sold or transferred for a minimum lock-in period of three years. The SEIS is more generous and provides tax relief of up to 50% on investments of up to £100,000, and capital gains tax exemption. The maximum investment that can be raised by a company under this scheme is limited to £150,000. (See https://www.gov.uk/topic/business-tax/investment-schemes for more details).

For all these reasons recent experience in the UK provides us with a unique opportunity to explore the properties of equity crowdfunding. Since clear regulation has been in place for 4 years in the U.K., while the detailed regulation associated with the U.S. J.O.B.S. Act was only recently settled (Fall 2015), one may use data from the U.K. to make some preliminary forecasts about what will likely happen in the U.S. in the near future.

In this paper we study a unique dataset kindly shared with us by SEEDRS, one of the leading UK equity crowdfunding platforms. SEEDRS was founded in 2012 by Jeff Lynn and Carlos Silva. It is based in London and Lisbon. In 2012 SEEDRS became the first equity crowdfunding platform to be accepted as a member of the UK Business Angels Association. More recently SEEDRS has announced their expansion to the US market via the acquisition of Junction Investments in California. SEEDRS business model is based on taking a one-off fee of up to 7.5% from successfully funded businesses. In addition, SEEDRS takes a success fee from investors equal to 7.5% of the profits made as a result of their investment.

SEEDRS platform allows the companies who succeed in meeting their target to accept more funds at the same rate of equity as originally offered. This particular feature is proving popular with roughly 61.3% of companies.

In this paper we analyse 636 equity crowdfunding campaigns, encompassing 17,188 investors (also called "backers") and 64,831 investments (often termed "pledges") between 2012 and 2015. We provide descriptive statistics and carry out various regression exercises to analyse which factors are associated with the probability of a successful equity crowdfunding campaign. Such analysis has been performed before (e.g. Mollick, 2014), but mostly on rewards-based campaigns. The latter focus has been driven mainly because it is relatively easy to collect and analyse data from sites such as Kickstarter and Indigogo (see Agrawal et al (2011, 2014), Belleflamme et al (2014), Mollick (2014), Zhang and Liu (2012) to name a few), and because as discussed above, regulation in the U.S. for equity based crowdfunding has, until very recently, been lacking.

Making some cautious predictions about the nature of crowdfunding across the four different categories, Mollick (2014) states: "...to some degree, all crowdfunding funders may be thought of as investors, making decisions about which projects to support based on their expectations for success... Further ...the dynamics of crowdfunding may be stable across some contexts. (p. 4)." In this paper we provide contrasting information to Mollick's data from Kickstarter to address these predictions in a way not possible before.

We find that equity crowdfunding differs from the typical rewards-based crowdfunding in a number of important respects: a) a much higher average amount pledged; b) a much higher average campaign goal, steadily increasing over time and lately approaching the size of first round investments for VCs; c) the existence of (pre-money) valuation of each of the projects, and d) the clear goal of the backers to obtain a positive monetary return on their investment. In terms of the geographical distribution, we find that the largest share of the investors using the platform are located in the London area. There is however also considerable geographical dispersion of backers across the country, suggesting that equity crowdfunding could plausibly mitigate the effect that distance has on traditional fundraising efforts (see, for example, Agrawal (2011)). The data from SEEDRS, while limited to one platform, albeit a very important European one, suggests that equity

 $^{^2}$ In the recent literature review by Belleflamme et al (2015) we found 13 references to papers on rewards-based crowdfunding, 12 papers on lending, 3 on donations, and finally 2 on equity crowdfunding.

crowdfunding will become a significant phenomenon for early stage fundraising in the U.S. in years to come, potentially surpassing rewards-based crowdfunding.

We further discover that the dynamics of a campaign and in particular the kind of herding behaviour observed in the early stages of a campaign do seem to be similar in both equity and rewards-based crowdfunding. After we present the data and analysis, we provide a more detailed discussion of the similarities and differences between the different types of crowdfunding.

2. Data Description and Variables

The data used for the analysis comes from the equity crowdfunding platform SEEDRS. The information was made available directly from their CTO and comprises the full universe of campaigns from the launch of the platform in July 2012 up until September 2015. In total, there are 636 campaigns, 17,188 investors and 64,831 pledges.

For each project, the raw data contains information about the date the campaign started raising funds, the declared investment target, the pre-money valuation of the company, the number of entrepreneurs, and the timing and value of each of the pledges received while the campaign was running. Each pledge is also matched to a specific investor with a unique identifier, so we are able to analyse the behaviour of both individual campaigns and individual investors. The key variables of interest at the campaign level are summarized in Table 1, where the variables are defined in Table 2.

3. Results

The descriptive statistics presented in Table 1 provide a first glimpse into the characteristics of the projects aiming to raise capital using SEEDRS. Out of the 636 campaigns for which information is available, 216 (33.9%) ended up being successful in raising the declared investment goal. We divide the summary statistics for the variables used for the analysis into three groups, corresponding to the overall mean across all campaigns, and the averages within the group of successful and unsuccessful campaigns separately.

The average campaign goal was £138,228, but there is a large heterogeneity in the amounts asked by individual projects, with values that range from £2,500 to more than £1,000,000. Moreover, the amount of capital sought by individual campaigns has grown considerably as SEEDRS has consolidated since their beginning in 2012. During the first year of operation, the average desired investment was close to £68,000, but this number was more than £200,000 during the last 12 months for which data is available (see Figure 1). This desired investment corresponds to an average equity offered (in pre-money valuation terms) of about 12.6%. The level of the investment target and pre-money valuations of the campaigns in SEEDRS present a first sharp contrast with other non-equity crowdfunding schemes. For example, Mollick (2014), in a study of more than 48,500 projects raising funds in Kickstarter, shows that the average goal is less than 10,000 USD, much lower than what is observed in our sample.

Although there are substantial differences in the scale of the campaigns between equity and non-equity crowdfunding platforms, we do find that the some of the dynamics of investment behaviour

are consistent with what has been found in other studies of non-equity crowdfunding (see, for example, Agrawal et al., 2011; Agrawal et al., 2014; Mollick, 2014): We find that funding is highly skewed, with successful campaigns receiving almost all of the total amount pledged each month (see Figure 2). Campaigns that fail to raise the desired capital tend to do so by a large margin, while most successful campaigns overfund, going up to 138 percent of the target.

Also consistent with previous analysis of non-equity crowdfunding platforms is the importance of early investments in determining the chance that a campaign has of reaching the goal. Successful campaigns accumulate, on average, 17.5% of the total amount at the end of the first day, and this number increases to 51.2% after the first week. Failed campaigns, on the other hand, never really get started. Halfway through the time limit these projects have only covered about 11.1% of the total. This pattern is better illustrated in Figure 3, where we plot the timing it takes for campaigns to reach a given share of the target within the first 30 of a maximum allowed 60 day campaign period. The Figure is divided in 4 parts, each corresponding to a different distributional statistic (10th, 50th, 90th percentiles, and the mean). It is clear that even the most successful group within failed campaigns barley managed to raise half of the desired capital by day 30.

The ability of successful campaigns to attract a large number of investors contrasts with the lack of supporters for campaigns that end up failing the mark (see Figure 4). Successful campaigns have an average of 158 backers, more than five times the average number of investors in failed campaigns. The difference is not limited to the number of investors. The typical contribution made by each backer is larger for successful campaigns, with a median pledge of £368 compared to £233 for failed campaigns. Average individual contributions have also increased substantially in time. The average pledge in 2012 was £400, while in the first 7 months of 2015 the same number is close £1,400 (see Figure 5).

Moreover, a few large investments appear to have a major role in driving the success. The largest pledge in a successful campaign accounts for about 30% of the total investment sought, which is significantly larger than the 5.4% contribution of the highest pledge in an unsuccessful project. Large pledges can be important in two ways: by contributing to the accumulated capital stock of the campaign, and by their indirect effect in incentivizing other backers into investing in a particular project. Each individual campaign raising capital through SEEDRS provides information about both the cumulative amount of funds raised up to that point in time and their top investors in terms of the value of the pledges³. Having backers willing to invest large sums in a campaign can act as a positive signal to undecided investors about the potential quality of a project, and this indirect effect is more relevant in the context of high uncertainty that is intrinsic to crowdfunding markets.

In terms of the characteristics of the supporters of the campaigns, about half of the investors making a pledge to a project decide not to allow their profiles to be seen by others. Investor profiles vary in their information content, but they include their geographic location, previous investments in other campaigns, and, on some occasions, social media contacts or short biographic descriptions. The lack of information about who is supporting a project can add to the uncertainty, but it appears to make

³ Each campaign reports *all* the pledges made to the project, but investments are organized by their magnitude, so that top pledges are shown first in the campaign's page.

little difference in determining the probability of success⁴. Apart from this, projects that end up reaching the target do tend to attract investors with a better success history within the platform, as well as those that have invested high amounts in previous projects.

In each calendar month, about 8.5% percent of the running campaigns reach their target, but the success rate has doubled in time from 5% in the first year of operation of SEEDRS to more than 11 percent in the last 12 months (see Figure 6). In order to get a better sense of the relative importance of different campaign characteristics for the probability of success, we estimate a linear probability model⁵ using the dichotomous success indicator as a dependent variable, and the campaign characteristics as covariates. Results of the regression exercise are shown in Table 3. The four factors that have the strongest effect on the probability of success are: (1) the share accumulated in the first week of the campaign⁶; (2) the investment goal set by the promoters; (3) the largest amount pledged by a single backer; and (4) the number of backers in the campaign. An increase of one standard deviation in any of these indicators increases (or decreases in the case of the investment target) the probability of success by between 11 and 18 percentage points. Given a baseline success share of 33.9%, these results suggest that the dynamics of any of these four variables is crucial for the end result of the campaign.

It is not easy to disentangle the underlying mechanism driving these reduced form results. For example, it is likely that a good start of a campaign can be interpreted by other backers as a positive signal about the unobserved underlying quality of the project, driving other investors into the campaign. This herd type of behaviour has been extensively analysed in theoretical models and empirical work on financial markets (see, among others, Banerjee (1992), Welch (1992), Chari and Kehoe (2004), Zhang and Liu (2012)), and can be important in a market with such large information asymmetries as equity crowdfunding. A complementary explanation is that promoters that have early success are those that put a larger effort into finding investors, even before the official start of the campaign. SEEDRS explicitly advises promoters to do extensive pre-launch marketing, and allows a campaign to have a web page with a private URL before the campaign goes public.

In any case, the type and quality of the information that investors can infer from the campaign, and from the actions of other backers, is central to the story. As we discussed before, having individuals willing to commit large sums of money can help a campaign by signalling to other investors about the willingness to participate in a project. It is interesting that variables like the previous relative success rate of the backers, and having investors in the campaign from the top 1% of overall successful investors are both statistically significant, but of second order importance in driving overall campaign success. Both of these variables might act as visible proxies of the type of backers that the campaign is attracting, which in turn can trigger and reinforce positive dynamics. Their impacts on herding behaviour might be better analysed within campaigns over time instead of across campaigns.

⁴ Kim and Viswanathan (2014), studying an online crowdfunding market for mobile applications, find that the identity of early investors, especially information about their previous experience, can positively influence the subsequent behavior of other investors.

⁵ Results are unchanged if instead we fit a probit or logit model.

⁶ Results are robust to using other time spans in the regressions (e.g. percent covered in a day or in a month).

4. Discussion

In this paper we provide the first detailed study of equity crowdfunding in the UK. Equity crowdfunding is an important and fast growing economic phenomenon. It has already had a significant impact on early stage funding in the UK, and is likely to become an important avenue for entrepreneurial finance in years to come in the U.S.

Our data shows that on one leading U.K. platform, significantly more and substantially larger projects are funded via equity crowdfunding in 2015 than at the start in 2012. Overall market data show less detail, but the same trends are visible there as well (e.g. Beauhurst, 2015). Our data show that a large number of successful campaigns are overfunded – sometimes by more than twice the amount originally requested. We find that, in order to succeed in reaching the project's target on time, it is particularly important to start strong, to have many backers, and especially to have (at least) one backer who provides a large pledge.

Our findings are largely consistent with Agrawal et al.'s (2014) seven-point characterization of the economics of crowdfunding (at least those that our data allow us to test), in particular the idea that "funding propensity increases with accumulated capital and may lead to herding". Our data combined with the data collected by Beauhurst (2015) are also consistent with their suggestion that crowdfunding will substitute traditional sources of financing.

Our paper's most immediate comparison is Mollick (2014), which studies the underlying dynamics of rewards-based and patronage crowdfunding, using data from Kickstarter. We find that (a) the average investment goal is substantially lower in Kickstarter: \$9,866 U.S. dollars compared with 138,000 pounds sterling among SEEDRS projects; (b) the average pledge, in particular on the successfully completed campaigns, is substantially greater on SEEDRS (1,370 pounds) than on Kickstarter (\$80); (c) Mollick found that funded projects achieve 1.5 times their goal on average, which is very close to our figure of 138%; (d) unsuccessful campaigns fail by large margins on both Kickstarter and SEEDRS; (e) projects on SEEDRS have a lower success rate compared with Kickstarter: 33.9 percent success rate on SEEDRS versus almost 50 percent in Kickstarter; (f) the average number of backers per campaign is approximately the same, 67 on Kickstarter and 71 on SEEDRS, although SEEDRS have somewhat more backers on the successful campaigns than Kickstarter and finally (g) increasing goal size is negatively related with success probability on both platforms. Similarly to Agrawal et al. (2011) and Mollick (2014), we find significant geographical dispersion among investors using the SEEDRS platform in the UK (see Table 4). Close to 25 percent of both backers and pledges, and 38.58 percent of the funds, originate in the London region. But the rest of investors and funds are largely dispersed across the country, proving further evidence to the assertion that crowdfunding platforms can overcome the distance related frictions that characterize venture capital financing.

Although there are indeed some similarities across Kickstarter and SEEDRS as representatives of prominent rewards-based and equity crowdfunding platforms, the differences observed nevertheless lead us to conclude that equity crowdfunding is going to be a new and substantially different fundraising phenomena than rewards-based crowdfunding. Equity crowdfunding has some commonalities in data more similar to business angel and early stage venture capital than to rewards

based crowdfunding, in particular: the average size of the more recent campaigns; the presence of a pre-money valuation; and the fact that there is an expressed equity sharing deal for each pledge. Nevertheless, crowdfunding is distinctly different from both traditional forms of financing in that the contracts are standardized and considerably simpler, the information provision is less, the number of investors are much larger, and the fundraising process is much shorter. Given the increases in efficiency of the fundraising process from the entrepreneurs' perspective, it is not surprising that equity crowdfunding has gathered such a momentum in recent years.

Herding is common in all types of crowdfunding. It is what we expect in a situation with so much uncertainty: the decisions of the crowd provide some information in the absence of much else. There have been a number of recent studies which use data from crowdfunding to specifically study the dynamics of herding in these markets: Zhang and Liu (2012) who use P2P lending data and more recently Kim et al (2015) who use rewards-based crowdfunding data.

In a companion paper (Astebro et al., 2015) we look in more detail at the question of herding. For a given campaign we study the reaction of investors to high value pledges (over 1000 pounds) and the rank ordering of the pledges on the platform. This allows us to separate rational from irrational herding and test which is more persistent. More research on this topic is sorely needed.

Another line of research we are exploring with these data is overfunding. Entrepreneurs are clearly under pressure to set a realistic target, one that they can achieve. But accepting additional monies is expensive compared to closing the campaign at the goal and obtaining the same funds in the next financing round, if they make it. In a future paper we build a simple model which captures this dilemma and tests it against the SEEDRS data.

The data from the U.K. at large so far has not indicated spectacular lawsuits or other clear signs of market failures, although detailed analysis of new microdata may conclude that additional regulatory adjustments could still be warranted. For example, if irrational herding tendencies appear too strong, regulators might consider tightening requirements for investor's financial knowledge, given the size and development of the sector. Regulators are keeping a keen eye on further developments.

5. Conclusions

Equity crowdfunding is likely to be the subject of many research papers in finance and management in the coming years, and rightly so given the amounts involved and the impact on early stage financing. We hope this paper can provide the first useful evidence for researches working in this space.

Tables and Figures.

Table 1: Summary statistics

<u> </u>	Mean values across campaigns						
	All	Successful (33.9%)	Unsuccessful	Difference			
Campaigns							
Pre-money valuation	1,446,685 (4,954,847)	2,235,405 (7,523,961)	1,044,741 (2,798,181)	1,190,664			
Equity offered	12.6 (8.12)	9.7 (6.99)	14 (8.26)	-4.35			
Campaign goal (\pounds)	138,228 (282,465)	160,307 (285,140)	126,874 (280,745)	33,433			
% Raised	56.5 (70.3)	138 (62)	15.2 (20.7)	123			
# Entrepreneurs	2.86 (1.75)	3.42 (1.99)	2.57 (1.54)	.852			
EIS tax relief	.269 (.444)	.398 (.491)	.202 (.402)	.196			
SEIS tax relief	.649 (.478)	.528 (.5)	.712 (.453)	184			
# Backers	71 (114)	158 (157)	27 (35.6)	131			
# Pledges	80.5 (131)	179 (180)	29.7 (39.2)	149			
Investments in Project			, ,				
Share public pledges	.511 (.202)	.474 (.101)	.53 (.235)	056			
Backer success share	.304 (.198)	.395 (.185)	.258 (.189)	.137			
Backer in top 1%	.0456 (.209)	.12 (.326)	.00714 (.0843)	.113			
Pledges (£)	895 (2,184)	1,370 (2,470)	655 (1,984)	715			
Pledges / goal	.01 (.0416)	.0189 (.0696)	.00554 (.00977)	.0133			
Max pledge (\pounds)	22,798 (68,420)	48,755 (103,253)	9,634 (33,920)	39,121			
Max pledge / goal	.135 (.193)	.296 (.24)	.0537 (.0852)	.242			
Median pledge (£)	279 (1,861)	368 (1,996)	233 (1,790)	135			
Timing							
% Covered in day 1	7.2 (17.8)	17.5 (26.7)	1.9 (5.8)	15.6			
% Covered in week 1	20.8 (36.6)	51.2 (48.7)	5.13 (9.69)	46.1			
% Covered in month 1	39.2 (56.2)	93.8 (65.3)	11.1 (16.2)	82.8			
Observations	636	216	420				

Table 2: Definitions of Variables

Variable	Definition
Successful	=1 if the campaign goal was met, zero otherwise. SEEDRS is an "all or nothing" platform in
campaign	which projects have up to 60 days to raise investment, so companies only receive funding if
	they reach the declared investment goal within the time limit.
Pre-money	The self-reported pre-money valuation of the project.
valuation:	
Equity Offered	Percentage of equity that the campaign managers are offering.
Campaign goal	Declared desired investment by the campaign promoters.
% Raised	Total amount raised by the campaign divided by the campaign goal. SEEDRS allows
	campaign promoters to accept more capital than what they had originally asked for, so they
	can "overfund" the projects once the target is reached. In cases in which there is
	overfunding, the variable takes a value that is greater than 100 percent.
# Entrepreneur	Number of entrepreneurs in charge of the project.
EIS tax relief	=1 if investors in the campaign have access to the Enterprise Investment Scheme (EIS) tax
	relief, zero otherwise.
SEIS tax relief	=1 if investors in the campaign have access to the Seed Enterprise Investment Scheme
	(SEIS) tax relief, zero otherwise.
# Backers	Number of different investors that have made pledges to the campaign.
# Pledges	Number of different pledges made to the campaign.
Share of public	Investors can choose to share their SEEDRS' profile with other members of the platform.
pledges	Each profile includes information about the investor location, the amount they have
	invested in different projects within the platform, campaigns in which they are promoters,
	and, occasionally, social media contacts or short biographic descriptions. Each pledge made
	is recorded in the campaign's page in order of magnitude, and investors are asked if they
	want their profiles to be seen next to the value of the investment. The variable is then
	constructed as the ratio between investments that are public, that is, investments in which
	the backer profile is available to the public, and total investments made in a given
	campaign.
Backer success	For each investor making a pledge in a project, we calculate the ratio between previous
share	successful campaigns in which the backer has invested and the total number of previous
	campaigns (successful or not) in which he or she made pledges. In cases in which the
	investor has not made pledges in previous projects the ratio takes the value of zero. The
	variable is then constructed as the average success share across all backers in the campaign.
Backer in top	Before the start date of each campaign, we rank investors into percentiles according to the
1%	average value of the pledges they have made in all previous successful campaigns. If an
	investor that is ranked in the top 1% makes a pledge in the campaign, the variable takes a
	value of one, if not, the variable takes a value of zero.
Pledges	Average value in pounds of the pledges made to the campaign.
Pledges/goal	Average campaign pledge in pounds divided by the campaign goal.
Max pledge	Maximum single pledge made in each campaign.
Max pledge /	Maximum single pledge made divided by campaign goal.
goal	
Self-	=1 if the project promoters made an investment to the project, zero otherwise.
investment	
% Covered X	The share of the campaign goal that was raised during a given period (X) of time.

Table 3: Probability of success. Linear Probability Model

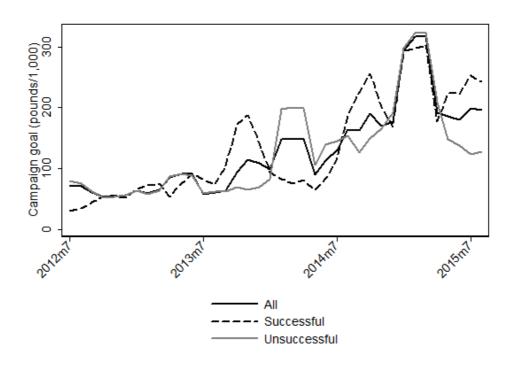
	Dependent Var: success dummy							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Covered in week 1	0.679***	0.640***	0.638***	0.609***	0.545***	0.439***	0.376***	0.318**
Coroled III Week 2	(0.070)	(0.075)	(0.069)	(0.074)	(0.072)	(0.061)	(0.069)	(0.060)
Share private pledges	-0.014	-0.013	-0.013	-0.013	0.006	0.027	0.002	0.020
	(0.052)	(0.053)	(0.051)	(0.052)	(0.047)	(0.052)	(0.043)	(0.050)
Log campaign goal	-0.069**	-0.062**	-0.087***					
	(0.023)	(0.022)	(0.023)	(0.022)	(0.022)	(0.021)	(0.021)	(0.020)
Log valuation	0.042*	0.038	0.043*	0.040	0.033	0.024	0.019	0.014
	(0.025)	(0.025)	(0.025)	(0.024)	(0.023)	(0.021)	(0.020)	(0.018)
# Entrepreneurs	0.019*	0.020*	0.022*	0.022**	0.021*	0.007	-0.002	-0.009
	(0.012)	(0.012)	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)	(0.009)
EIS tax relief	0.068	0.063	0.050	0.046	0.057	-0.012	0.011	-0.038
	(0.065)	(0.065)	(0.065)	(0.065)	(0.062)	(0.058)	(0.054)	(0.052)
SEIS tax relief	0.013	0.008	-0.001	-0.005	-0.012	-0.040	-0.024	-0.044
	(0.059)	(0.058)	(0.059)	(0.059)	(0.056)	(0.053)	(0.049)	(0.048)
Backer success share		0.193**		0.151*	0.206**	0.085	0.233**	0.129**
		(0.081)		(0.080)	(0.078)	(0.068)	(0.076)	(0.065)
Backer in top 1%			0.384***	0.371***	0.351***	0.286***	0.170*	0.146*
			(0.075)	(0.076)	(0.075)	(0.064)	(0.101)	(0.082)
Log median pledge					0.071***	0.015	0.069***	0.023*
					(0.014)	(0.013)	(0.012)	(0.012)
Log max pledge						0.094***		0.077**
						(0.009)		(0.010)
# Backers							0.002**	0.001**
Observations	600	600	600	606	605	605	(0.001)	(0.000)
Observations R ²	628 0.396	628 0.401	628 0.422	628 0.425	625 0.456	625 0.542	625 0.547	625 0.603
Standardized Effect	0.000	0.401	0.422	0.420	0.400	0.042	0.041	0.000
Covered in Week 1	24.85	23.44	23.35	22.30	19.96	16.10	13.79	11.63
Share private pledges	-0.28	-0.27	-0.26	-0.25	0.12	0.54	0.05	0.40
Log campaign goal	-6.70	-5.99	-8.44	-7.83	-9.42	-13.81	-13.74	-16.64
Log valuation	4.50	4.08	4.52	4.19	3.54	2.54	2.01	1.44
# entrepreneurs	3.40	3.56	3.78	3.90	3.63	1.30	-0.39	-1.65
EIS	3.04	2.77	2.22	2.04	2.52	-0.54	0.51	-1.68
SEIS	0.64	0.37	-0.06	-0.25	-0.59	-1.91	-1.13	-2.12
Backer success share	0.01	3.84	-0.00	3.00	4.09	1.68	4.63	2.55
Backer in top 1%		3.01	8.01	7.74	7.33	5.98	3.55	3.06
Log median pledge			0.01		7.55	1.62	7.27	2.44
Log median pledge Log max pledge					7.00	21.64	1.21	17.78
# backers						21.01	20.12	16.81
# Dackers							20.12	10.01

Notes: robust standard errors in parenthesis. Year-quarter Fixed Effects included in all models, but not reported. The standardized effects are computed as the effect of an increase of one standard deviation of the relevant variable on the probability of success (in percentage points).

Table 4: Geographical distribution of backers

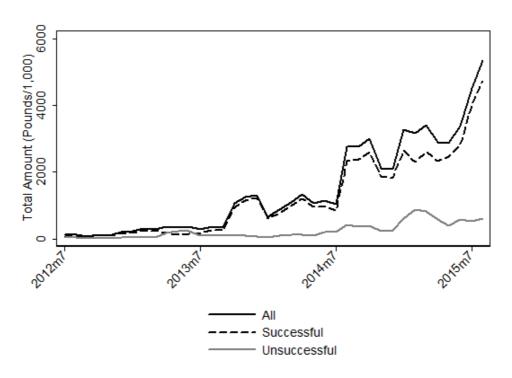
City	Country	Share of Investors	Share of Pledges (£)	Share of Pledges (#)	
London	United Kingdom	24.49	38.58	25.94	
N/A	United Kingdom	6.63	7.03	2.33	
Bristol	United Kingdom	1.26	0.91	1.22	
Cardiff	United Kingdom	0.69	0.31	0.37	
Manchester	United Kingdom	0.68	0.27	0.45	
Edinburgh	United Kingdom	0.62	0.35	0.39	
Reading	United Kingdom	0.59	0.35	0.73	
Maidstone	United Kingdom	0.58	0.38	0,32	
Cambridge	United Kingdom	0.55	0.36	0.70	
Ashford	United Kingdom	0.52	0.14	0.45	
Tunbridge Wells	United Kingdom	0.52	2.24	0.37	
Nottingham	United Kingdom	0.47	0,48	0.55	
Southampton	United Kingdom	0.42	0,10	0.44	
Leeds	United Kingdom	0.42	0.17	0.40	
Brighton	United Kingdom	0.41	0.21	0.31	
Milton Keynes	United Kingdom	0.40	0.96	0.43	
Birmingham	United Kingdom	0.37	0.21	0.45	
Bath	United Kingdom	0.37	1.01	0.29	

Figure 1: Mean campaign goal for new campaigns



Notes: Series correspond to a 3-month moving average.

Figure 2: Total amount pledged per month



Notes: Series correspond to a 3-month moving average.

Figure 3: Timing of Cumulative Investments

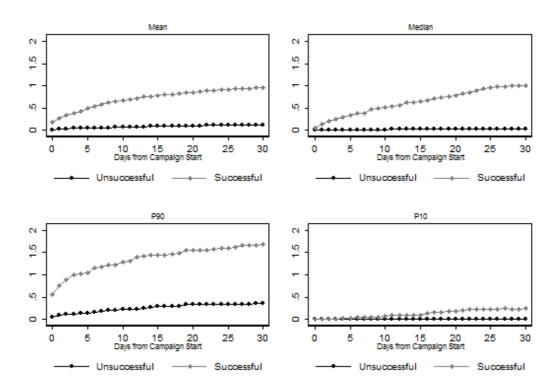
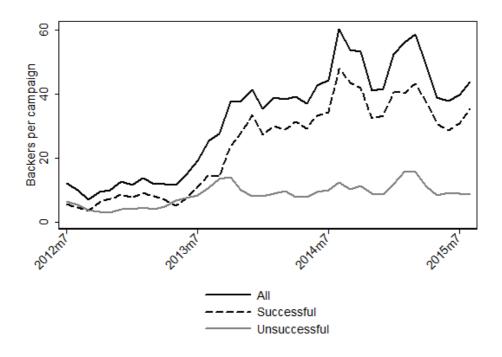
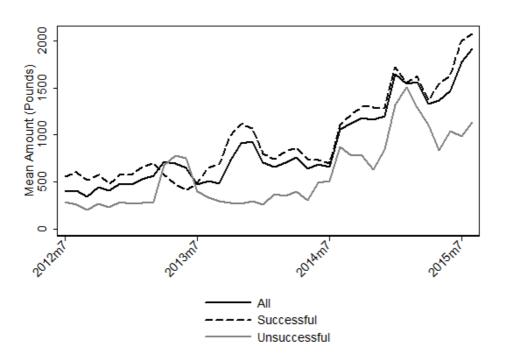


Figure 4: Backers per campaign by calendar month



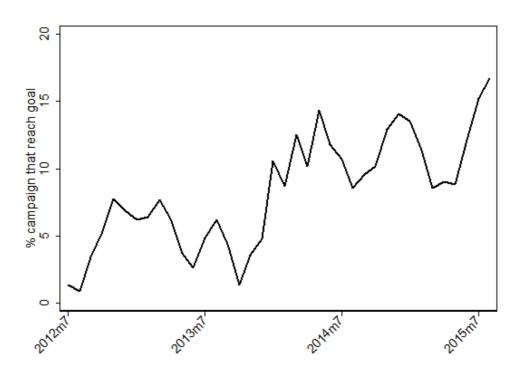
Notes: Series correspond to a 3-month moving average.

Figure 5: Mean amount pledged per month



Notes: Series correspond to a 3-month moving average.

Figure 6: Percentage of campaigns that reach the goal each month



Notes: Series correspond to a 3-month moving average.

References

Agrawal, A., Catalini, C. and Goldfarb, A. (2011). The Geography of Crowdfunding. *NBER Working Paper Series* 16820.

Agrawal, A., Catalini, C. and Goldfarb, A. (2014). Some Simple Economics of Crowdfunding. *NBER Innovation Policy & the Economy* 14(1): pp. 63-97.

Åstebro, T., M. Fernandez Sierra, and N. Vulkan (2015). "Herding in Equity Crowdfunding", working paper, HEC Paris.

Banerjee, A. (1992). A Simple Model of Herd Behavior. *The Quarterly Journal of Economics* 107: pp. 797-817.

Beauhurst, (2015). "The Deal, Q3 2015, review of the UK equity landscape" www.beauhurst.com

Belleflamme, P. N. Omrani and M. Peitz (2015). *The Economics of Crowdfunding Platforms*. CORE DISCUSSION PAPER, 2015/15, Université catholique de Louvain.

Belleflamme, P., Lambert, T. and Schwienbacher, A. (2014). Crowdfunding: Tapping the Right Crowd. *Journal of Business Venturing* 29(14): pp. 585-609.

Chari, V. and Kehoe, P. (2004). Financial Crisis as Herds: Overturning the Critiques. *Journal of Economic Theory* 119(1): pp. 128-150.

Cumming, Douglas, and Na Dai. (2010). Local Bias in Venture Capital Investments. *Journal of Empirical Finance* 17(3): 362-380.

Gompers, P. (1995). Optimal Investment, Monitoring, and the Staging of Venture Capital. *Journal of Finance* 50, 1461–1489.

Kim, K. and Viswanathan, S. (2014). "The Experts in the Crowd: The Role of Reputable Investors in a Crowdfunding Market." The 41st Research Conference on Communication, Information and Internet Policy.

Kim, Jin-Hyuk, P. W. Newberry, and C. Qiu (2015). "An Empirical Analysis of a Crowdfunding Platform." *Available at SSRN.*

Massolution, 2013. 2013 Crowdfunding Report.

Massolution (2015). 2015CF Crowdfunding Industry Report, see http://reports.crowdsourcing.org/index.php?route=product/product&product_id=54#oid=1001_23 banner 38

Mollick, E. (2014). The Dynamics of Crowdfunding: An Exploratory Study. *Journal of Business Venturing* 29(1): pp. 1-16.

The World Bank (2013). *Crowdfunding's Potential for the Developing World*. infoDev, Finance and Private Sector Development Department. Washington, DC: World Bank.

Welch, I. (1992). Sequential Sales, Learning, and Cascades. *The Journal of Finance* 47(2): pp. 695-732.

Zhang, J. and Liu, P. (2012). Rational Herding in Microloan Markets. *Management Science* 58(5): pp. 892-912.

