

Does the crowd forgive?

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Abstract:

In the literature about serial entrepreneurs, experience and network gained from previous entrepreneurial projects is considered having a positive impact on the outcome of following ventures, offsetting the negatives effects of past failures. In this paper, we show that serial entrepreneurs with a first failed crowdfunding campaign are unable to reverse the negative opinion of the crowd on their ability to lead a project. Despite the adjustments made by the entrepreneurs on their new crowdfunding campaigns based on what they have learned from previous experience, we show that their new campaigns, despite an increase in the number of backers and in the money raised, still show lower success rate than for first timers or for entrepreneurs with a successful previous campaign.

Keywords: Crowdfunding, Serial Entrepreneur, Self-Efficacy, Reputation

JEL Classification: G21, G24, G32, L26

1. Introduction

“Failure is a step to success” said William Whewell¹. By the way, when a project's success depends on others' faith in the leaders capacities, to recover their confidence after a first failure may be much more difficult than succeeding the project in itself.

In entrepreneurial finance, serial entrepreneurs are entrepreneurs reentering a new project after the success or the failure of a previous entrepreneurial project. In this paper, we analyze the process of serial crowdfunding: the fact for an entrepreneur to start a new campaign after a successful or failed previous crowdfunding's experience².

Our analysis focuses on the reward-based crowdfunding. In this type of crowdfunding, the entrepreneur asks to the crowd for a donation and promises a reward if the project is successful. The reward is most of the time the product created or produced by the entrepreneur with the funds collected during the campaign. Some extra features are generally added to create various “super-rewards” in order to induce the backers to give more money than the value of the basic product (for instance a limited collector edition of the product).

Here we use the term “new project” instead of “new venture” to account for various forms that an entrepreneurial activity can take (Wright, Robbie, & Ennew, 1997a). Moreover, in crowdfunding, and more specifically in the reward-based crowdfunding, a new project is not necessarily a new venture.

For instance, a music band can create a crowdfunding campaign to finance the recording of a new album without creating a new venture. In the same way, a new music album can in some way be seen as a new entrepreneurial activity since it involve a “new combination of resources” (Guth & Ginsberg, 1990). In our case, we talk about the new funding. The band creates a new product, which is different from previous one, with new funding coming from the crowdfunding campaign.

1. Nineteenth century's British polymath from University of Cambridge.

2. Crowdfunding is the fact to finance a project by making a call to many individuals – the crowd, to provide money in the form of small contributions compared to the project size. This call is made most of the time through the Internet, on a crowdfunding platform – some kind of “market place” where entrepreneur present their project and individuals choose to participate or not (Schwienbacher & Larralde, 2012).

In crowdfunding, when an entrepreneur decides to launch a second campaign, he already knows the first opinion of the crowd toward his project, positive or negative. If the first campaign failed, and even if he is able to use the first campaign's feedbacks to improve his project and to match his new project with the crowd's expectations, we think that a harder work may be needed to tackle the reputation of "loser" that he inherited from his first public failure. Crowdfunding campaigns led by serial entrepreneurs offer us a unique opportunity to analyze the ability of an entrepreneur to adapt his offer to the market. At the same time, we are able to observe the reaction of the crowd to these second funding attempts, taking into account the reputation gained from a first campaign. Moreover, due to the fee mechanism of the crowdfunding's platforms (fees are proportional to amount raised), launching a new crowdfunding campaign has almost no other friction than the will of the entrepreneur.

This study is based on a database of more than 22,000 crowdfunding projects including 687 second campaigns. We show that, when the entrepreneurs are persevering in the crowdfunding after a first failure, and even if they adjust the characteristics of the campaign to mimic the successful projects, they are unable to regain the faith of the crowd in their ability to succeed. As expected, the outcome of a second campaign led by an entrepreneur with a first failed experience is lower than the second campaigns of successful entrepreneurs. Moreover, this paper shows that it is even inferior to the results of first-timers, involving that they are unable to circumvent the bad reputation inherited from the first public failure. Based on these results, we show that a crowdfunding campaign needs to be highly prepared because the entrepreneurs won't be able to get a second chance to seduce the crowd. Like the adage said : You never get a second chance to make a first impression.

The rest of this paper is structured as follows: in the following chapter, we review the literature about crowdfunding and about serial entrepreneurship in order to construct our hypotheses about the existence of a second crowdfunding campaign and about the characteristics and the outcome of that new attempt to raise funding. The third chapter describes our database and the variables used in our models. The fourth chapter presents our results which will be discussed in the last chapter.

2. Literature and Hypothesis

Previous empirical research on crowdfunding does not distinguish between projects led by serial, and thus more experienced, entrepreneurs or by first-timers (Agrawal, Catalini, & Goldfarb, 2015; Cumming, Leboeuf, & Schwienbacher, 2015; Mollick, 2014).

Despite that the size of the network increases with experience (Starr & Bygrave, 1991) it is not a good indicator of the experience in crowdfunding. On the Internet, network size is more associated to community activities than to experience in a field. Many crowdfunding guides recommend to entrepreneurs interested in crowdfunding to create a community around their project, on Facebook or similar website, before launching a crowdfunding campaign (Lawton & Marom, 2013). As far as we know, no previous research takes into account the impact of the experience of the entrepreneur in crowdfunding on the strategy set up for his campaign (goal, funding model, disclosure) nor in the reaction of the crowd and on the success or failure of the new crowdfunding campaign.

On the other side, research on serial entrepreneurs shows the importance of experience and reputation for the entrepreneur in the success of his new project. Two main theories discuss the consequences of a venture success or failure on the entrepreneurs behavior. On one hand, the prospect theory, applied to serial entrepreneurs, propose that entrepreneurs with past unsuccessful experience will more likely be risk-takers, will “play again” and will even play bigger, trying to recover their losses until they succeed (Hsu, Wiklund, & Cotton, 2015). On the other hand, the literature on self-efficacy shows that successful entrepreneur will gain confidence in their ability to reach their goals and to overcome difficulties, leading to a positive effect on outcome (Bandura, 1982).

Hypothesis on the launch of a second campaign

Based on Hsu et al.'s research, we should expect to find, at least at short term, more second campaigns by entrepreneurs with unsuccessful first experience than by entrepreneurs with successful fundraising. Indeed, assuming that entrepreneur with successful campaign had fixed their first campaign's goal at the right level, no extra

funding should be needed to complete the project and they should be working at completing their first project before launching a new one. By the way, overall, on a long enough period and based on Bandura's conclusions, a successful entrepreneur should be more prone to re-enter a new crowdfunding campaign. So we can conclude that based on self-efficacy literature, the success will increase the entrepreneurs self-efficacy and their motivation to pursue new projects in the future. Our first hypothesis on the launch of a second crowdfunding campaign can then be formulated as:

→ H1: Overall, entrepreneurs with a successful first crowdfunding campaign will more likely launch a second campaign to finance a new project.

Hypotheses on the characteristics of a second campaign

As shown in Cumming et al. (2015), the outcome of a crowdfunding campaign is linked to a risk/return trade-off faced by the entrepreneur when he set the goal and the funding model of his crowdfunding campaign. We can assume that the entrepreneur sets the goal of his campaign based, of course, on his financial needs but also by taking into account the price of the product he is offering as reward and the potential number of backers he is able to attract.

Concomitantly to the goal, he chooses a funding models, “Keep-It-All” (KIA) or “All-or-Nothing” (AON). On the AON funding model, the entrepreneur receive the money if, and only if, the total amount offered by the backers reaches the goal set at the beginning of the campaign. On the other hand, in the KIA funding model, he can choose to keep the money offered by the backers even if the goal is not reached. Thus, he starts the project underfunded and relies on a future fundraising (through crowdfunding or not) to complete his project³.

To construct our hypotheses on the choices made by the entrepreneurs based on their previous experience, we can rely on prospect theory (Sitkin & Pablo, 1992). This theory shows us that failures increase attractiveness of risky option to gain back the losses and that entrepreneurs exposed to gains have the feeling that they have more to lose so they are less likely to take risks. In our crowdfunding context, it can be translated as choosing less risk for entrepreneurs with previous success: lower goal

3. The choice between crowdfunding models is discussed in detail in Cumming et al. (2015).

and/or KIA funding model and more risk for entrepreneurs with previous failure: higher goal and/or AON funding model. As exposed in previous reward-based crowdfunding's research (Cumming et al., 2015; Mollick, 2014), choosing the AON funding model and setting a high goal can be interpreted as a measure of the risk for the entrepreneur. He bear the risk not to receive any money from the crowdfunding campaign. Indeed, the higher the goal, the more backers the entrepreneur will need to convince to reach his goal, thus increasing the risk of failure.

We can thus write the following hypothesis:

→ *H2: Entrepreneurs with previously failed campaign will most likely take risk by setting higher goal and by opting for AON funding model.*

Since the entrepreneur presents his project on an internet website, he is able decide freely of the soft information (text, pictures, video,...) he will publicly disclose to attract backers and to arouse enough confidence in his project to induce crowd participation. Based on previous research, we can assume that the amount of disclosed information is positively impacting success (Cumming et al., 2015; Mollick, 2014) and that experience will increase the amount of disclosure (Yamakawa, Peng, & Deeds, 2015). Our third hypothesis can be formulated as:

→ *H3: Second campaign will disclose more information.*

Hypotheses on the outcome of a second campaign

The literature about entrepreneurial finance is almost unanimous on the benefits from a previous entrepreneurial experience on subsequent projects, either the previous experience has been a success or a failure (Chandler & Hanks, 1998; Macmillan, Siegel, & Narasimha, 1985; Stuart & Abetti, 1990; Ucbasaran, Westhead, Wright, & Binks, 2003) . We can assume this should be the same for crowdfunding.

We observe also that VCs tend to prefer serial entrepreneurs (Wright, Robbie, & Ennew, 1997b) since experience is a good signal for outcome of new ventures. Here also, we can expect that the crowd see experience as a good signal and that previous experience is positive for crowdfunding.

The main reasons for these benefits come essentially from two factors. The first factor is

the reputation. Winners gain good reputation which is important to attract investors (Ebbbers & Wijnberg, 2012) and the lack of reputation may be a cause of failure (Nicolò, 2015). The second factor is the experience. By providing network (Starr & Bygrave, 1991), it permit to find more investors (Mahto & Khanin, 2013). Here, a previous campaign already attracted some viewers and backers. The entrepreneur is able to recontact them easily, creating a first pool of potential backers for the new project, even before the campaign launch.

Thus, even if we can expect the effect to be more pronounced for entrepreneurs with a successful first campaign, overall, we can hypothesize that:

→ *H4: A second crowdfunding campaign will always be more likely successful.*

3. Methodology

Database

The dataset used in this study is the same as used in Cumming et al. (2015). Data includes all finished crowdfunding campaigns presented on Indiegogo website until October 2013. This dataset includes campaigns with a goal of at least \$5,000. Since Indiegogo allow to raise money in other currencies, we converted all amount in USD using the yearly average exchange rate. This lower bound of \$5,000 is used in most other research about reward-based crowdfunding (Cumming et al., 2015; Mollick, 2014) to avoid projects that rely mostly on money from family, friends and relatives. The dataset was also truncated for goals above the 99th percentile (i.e. above \$200,000). Computer-based data collection led to a loss of less than 5% of observations due to inconsistency in the HTML tags across indigogo website. As far as we are able to investigate, the loss seems randomly distributed and should not lead to any corruption of our results. Since all entrepreneurs are identified by a unique number, we were able to classify campaigns in 3 categories: a “unique campaign” if the entrepreneur's identifier is unique in the dataset, a “first campaign” if the entrepreneur is the leader of more than one campaign and if the campaign was the first to start (based on the campaign's launch date) and a “second campaign” if the campaign was leaded by an entrepreneur with already a first campaign. It is important to notice that since the database is observed at a defined date, some serial entrepreneurs may not have entered a second campaign but will do in

the future. In our sample he is considered in the pool of first-projects but does not account as a serial. This can have some issues that will be discussed further in the chapter and that we will take into account. We dropped all campaigns after the second (if an entrepreneur has three or more campaigns, we dropped all campaigns starting from the third). Our final sample is composed of 22,739 crowdfunding campaigns.

Variables

Most of the control variables used in our analysis were previously used in Cumming et al. (2015). We will here describe all the new variables generated for this paper and all the variables of interest useful for our analysis. All other control variables are fully described in appendix A1.

All variables constructed on entrepreneur's identifier are based on the campaign leader. When there are several team members for a project, we assume that the first presented on Indiegogo is the team leader. For the rest of this paper we will assume that “the entrepreneur” refers to the team leader.

The variable “First was successful” is a dummy that identifies serial entrepreneurs with a first successful campaign. It is equal to 1 for serial entrepreneurs with a first success and zero if the first campaign failed. It allows us to take into account the reputation of the entrepreneur.

The variable “Time between project 1 & 2” is the number of days between the start of the first and the start of the second campaign for a serial entrepreneur. It allows us to gauge the preparation of the entrepreneur for his second campaign.

The variable “New category” identifies an entrepreneur that switches from the category of the first project to another category for his second campaign. Since we can think that the crowd will more likely forgive an entrepreneur when he starts a totally new project, this variable allows us to control for this case.

We also created four variables comparing the characteristics of the second campaign with the characteristics of the first campaign led by the same entrepreneur. These variables are “2nd have higher goal”, “2nd changes funding model”, “2nd shows more text” and “2nd shows more pics”. These are dummy variables and these account respectively for an increase in the goal of the campaign, a switch of funding model (from

KIA to AON or from AON to KIA), an increase in text length and a increase in the number of pictures or graphics provided.

We finally created 2 variables comparing outcome between both campaigns of the serial entrepreneur : “Raise more money” and “Attract more backers”. Both are dummy variables equal to one if the money or the number of backers increased between the first and the second project.

The other variables of interest are goal, flexible dummy, full text length, video, gallery's items, success dummy and percentage of completion. “Goal” is the amount that the entrepreneur sets as the campaign's target. “Flexible dummy” is equal to 1 if the funding model is KIA and to 0 otherwise. “Full text length” is the length, in number of characters, of the text describing the campaign on the projects presentation page. “Gallery's items” gives the number of pictures presented by the entrepreneur. “Video” is a dummy variable equal to one if the project's page presents a videopitch introducing the project. “Success dummy” is equal to 1 if the amount raised during the campaign from backers is at least equal to the goal and “Percentage of Completion” is the ratio between the amount raised and the goal sets by the entrepreneur.

Summary Statistics

Table I presents the summary statistics for our full sample and for two subsamples, one showing only the firsts campaigns and the other only the second campaigns. A mean difference test between both subsamples is also provided.

[Table I about here]

In line with our hypothesis 1, we observe that 18% of the first campaigns succeeded in fund raising. We also observe that 20% of second campaigns succeeded as well, showing a significant increase in outcome (even if it is low). The table shows that, if the average goal of a second campaign is lower, it is weakly significant and that the median goal is the same for both subsamples. Overall, a second campaign will more likely use the Keep-It-All funding model, will be more used by non-profit organizations and will disclose approximately the same amount of information: on average, the full text length and the median number of pictures in the gallery are similar.

In table II, we compare the second campaigns led by an entrepreneur with a first

successful experience with those having an unsuccessful first experience. Here also, a mean difference test is provided between the both subsamples.

[Table II about here]

We can observe that the second campaigns led by an entrepreneur with an unsuccessful first experience, despite similar goals and disclosures (full text length), show lower success rates and lower percentages of completion compared with campaigns with a first success. It is also interesting to note that these outcomes are lower than values for first campaigns in table I. Overall, first campaigns show 18% of success rate. This success rate drops to 13% for second campaigns of entrepreneur with past failure and raises up to 43% for the entrepreneurs with previous success. The results are similar for the percentage of completion. The first campaigns reach an average completion of 44% where second campaigns reach, on average, 36% or 100% depending on whether the first campaign was a failure or a success.

[Table III about here]

In the correlation matrix (see Table III-B), we can observe high correlation for the second campaigns between a first success (variable “First was successful”) and the outcome variables “Success Dummy” and “Percentage of Completion”. Moreover, the first campaign's outcome seems to have also impact on second campaign characteristics. The variable “First was successful” shows positive and significant correlations with “2nd have higher goal” and “2nd shows more text”. Nevertheless, a first success seems to have negative correlation with the amount raised and the number of backers.

4. Empirical Results

About the launch of a second campaign

The table IV shows the determinants of the launch of a second crowdfunding campaign by an entrepreneur. The dependent variable for this table is a dummy equal to 1 if the entrepreneur is a serial entrepreneur and equal to 0 if the entrepreneur didn't start a new campaign during the observed period. For all the models in this table, we used probit regressions and we reported the marginal effects. The standard errors are clustered by category. All models show a positive and highly significant coefficient for

the success dummy. The entrepreneurs with a first successful crowdfunding campaign are thus more likely to launch second campaign. This validates our hypothesis 1 and is in accordance with self-efficacy theory's predictions. When an entrepreneur succeeds in a first campaign, self-efficacy feelings will increase and he will gain motivation and self-confidence to launch a new campaign.

[Table IV about here]

In the models 2, 3 and 4, we introduce also the characteristics of the project as independent variables. We observe that the goal of the first campaign shows also a positive and highly significant impact on the existence of a second campaign by the same entrepreneur. This new result can be formulated as follow: an entrepreneur leading a first campaign with a high goal is more likely to launch a second campaign. This is in line with the idea that financial needs for large projects are quite complicated to evaluate before to start the project. Such type of projects may need several funding rounds to be fully funded. Since the crowdfunding has low barriers to entry, this process allows entrepreneurs to launch easily a second campaign to complete the funding of their project. Our conclusions are robust to project's category, semester and country fixed effects (see model 4).

A problem still remains in these models : we are unable to observe entrepreneurs that will reenter a new campaign in the future, especially for first campaigns starting very close of our observation date. Intuitively, we may think that entrepreneur will need some time to launch a second campaign and that after a too long time, he will not be willing to launch a new campaign (if the venture goes well or if he finds another job). Thus we can expect a distribution of delay with a first low period, then a period with high rate of reentrant and again declining at the end. Figure 1 shows the distribution of delay between first and second campaigns and figure 2 shows the estimated cumulative hazard function.

[Figure 1 & 2 about here]

We observe that if the overall shape of the distribution is declining, the very first period is a little lower and that we have two major peaks, a first after 30/60 days and a second after 350/400 days. These results seems quite similar for second campaigns with a first

success or with a first failure. The cumulative hazard function shows similar results (convex-concave-convex). To account for the lack of information about serial entrepreneurs that are going to reenter but that we are unable to observe at the time of the extraction, we use survival analysis (Hosmer, Lemeshow, & May, 2008) to estimate hazard rate by taking into account for these. Many hazard models exist depending on the expected shape of the distribution. By plotting our hazard function with several models, we observe that each of them have specific interest in our case.

[Figure 3 about here]

Cox's model takes into account our two peaks, Weibull model fit more closely the highly declining rate of events and the gamma and log-normal models take into account the three periods (low-high-low) and the general shape of our observed distribution. Table V shows regressions similar to table IV but using various hazard models.

[Table V about here]

The coefficients are positives and highly significant for success dummy and for goal, as expected in accordance with our previous findings. Projects with high capital needs are more likely to reenter a second campaigns and hazard rates indicates that successful entrepreneurs have 68% more chance to reenter a second campaign than entrepreneurs with a first failure. These results are stable across models.

About the characteristics of the second campaign

The table VI shows us the strategic changes made by an entrepreneur when he decides to launch a second campaign. These decisions are here analyzed through the adjustment of the goal, of the funding model and of the disclosures (text and photos). Models 1, 2 and 3 present the goal's adjustments. The dependent variable is a dummy equal to one if the goal of the second campaign is higher than the first. As shown, the outcome of the first campaign and the time between both campaigns have a high impact on the goal. If the first campaign was successful, the entrepreneur will more likely increase the goal and will more likely decrease in case of a first failure. These conclusions are not in line with our second hypothesis. By the way, this result tends to confirm self-efficacy theory (i.e. the “winners” will gain more self-confidence and feel able to reach higher levels) and to invalidate prospect theory (i.e. the “losers” are willing to choose riskier options to

compensate their loss).

[Table VI about here]

The model 4 presents the adjustment of the funding model for the second campaigns. If globally, an entrepreneur will prefer the less risky option for the second campaign by opting more likely for the KIA funding model (see tables I & II). We can see that this is not linked to the outcome of the first campaign but, as presented in Cumming et al. (2015), linked to the intrinsic goal's level.

The third part of the table VI (models 5 & 6) shows the changes in disclosure for the second campaigns. By looking at the text length or at the number of pictures presented in the projects gallery, we can not observe any highly significant change in the quantity of information disclosed by the entrepreneurs. Nevertheless, even if the coefficients are not significant for text, results for pictures show a small positive link between a first failure and the number of pictures disclosed in the second campaign. By the way, the global adjustment made by entrepreneur with a failed first campaign are very small (no adjustment in text size and low adjustment in number of pictures). A limitations of our measure is that it assess only the quantity and not the quality of disclosures. Since we observe highly positive impact of information disclosure on success, we are unable to explain why an entrepreneur with a first failure will not adjust his disclosures to increase his chances of success, invalidating our third hypothesis.

About the outcome of the second campaign

The table VII shows the impact of intrinsic characteristics of projects, of strategical choices made for the second campaigns and of first campaigns' outcome on the outcome of the second campaigns.

[Table VII about here]

Models 1 and 2 shows results including all projects. The dependent variable is a success dummy. The model 1 confirms results observed in previous researches: the high goal and the flexible funding model have negative impact on outcome. Non-profit, team size and number of rewards offered to backers are positively affecting the success, ditto for disclosures (text length and gallery items). In model 2, we add two variables to distinguish the second projects and the second projects after a success. We can see that

if second campaigns have globally less success, it's not the case for second campaigns after a first success, where the coefficient is positive and highly significant. Based on model 2, we can assume that a first success will increase by 22% the chance of success of the second campaign. In models 3 and 4, we keep only the second campaigns and we find similar results for the impact of a first success on the outcome of the second campaign. Results in model 4 shows that reputation (result of the first campaign) is much more important on the second campaign's success than any of other adjustment made by the entrepreneur. Neither the project characteristics changes (goal level or category) nor the disclosures (more text or more pictures) will have any significant impact on the second campaign's success. This highlight one very important result: in literature about serial entrepreneurs, past experiences will most likely have a positive effect on future ventures outcome, through reputation or through experience. In the case of crowdfunding, the effect of reputation is so important that, if the reputation is bad (first failure), it will be much more difficult for entrepreneur to convince the crowd to participate, and thus much more difficult to succeed.

Our models 5 and 6 highlight one additional result. Here, the dependent variables are dummies equal to one if the second campaign raised more money or if the second campaign convinced more backers than the first. The coefficients for our "First was successful" variable are negative and highly significant, indicating that a first success will lower the absolute amount raised during the second campaign. The second success, if more probable, is less brilliant.

5. Discussion

If serial entrepreneurship is usually seen as a good thing, this paper shows that the crowdfunding can not, in this case, be compared with the classical financing methods. We show that the two main benefits of serial ventures, experience and network, are unable to overcome the negative effects of a bad public reputation. The behavior of uninitiated crowd cannot be compared to the financing decisions of professional investors.

Our findings show that even if entrepreneurs with a first failed crowdfunding experience try to reenter a new campaign, and despite the fact that their second attempt seems similar on key points with entrepreneurs with a first success (they mimic goal, funding

model, disclosures), they get a lower outcome. Their probability of success is lower than for successful serial entrepreneurs, and even lower than for first-timers.

Nevertheless, there are still some key questions which this paper doesn't address yet. To be able to learn from business failure, the entrepreneur needs feedbacks (Shepherd, 2003). For the entrepreneurs with a first failed experience, maybe the formal feedbacks are insufficient (did they get enough comments during their first campaign to be able to adjust?) and thus we should expect some results by looking at the impact of this parameter on the adjustment and on the outcome of the second campaign.

Moreover, there are many cultural differences across countries, and these differences are fundamental on the way we look at failure (Landier, 2005). These effects are not observed in our study for the moment.

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Tables

Table I: Summary Statistics

*This table shows summary statistics for our final sample and then separately for firsts and for seconds campaigns. The last column reports a mean difference test between firsts and seconds campaigns and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

Variables	Full Sample				First Campaigns				2 nd Campaigns				Mean. Diff. Test
	Obs.	Mean	S.D.	Median	Obs.	Mean	S.D.	Median	Obs.	Mean	S.D.	Median	
Success dummy	22,739	0.180	0.380	0	22,052	0.180	0.380	0	687	0.200	0.400	0	-0.025*
Completion Ratio	22,739	0.440	1.200	0.220	22,052	0.430	1.200	0.220	687	0.510	1.110	0.240	-0.082*
ln(Goal)	22,739	21,068	26,606	10,000	22,052	21,128	26,699	10,000	687	19,144	23,387	10,000	1,983.709*
Keep-It-All Dummy	22,739	0.950	0.220	1	22,052	0.950	0.220	1	687	0.970	0.170	1	-0.024***
Verified Non-profit	22,739	0.100	0.300	0	22,052	0.100	0.300	0	687	0.190	0.390	0	-0.094***
Team Size	22,739	2.400	2.030	2	22,052	2.400	2.020	2	687	2.420	2.170	1	-0.0250
Reward's Levels	22,739	7.440	3.940	8	22,052	7.440	3.930	8	687	7.420	4.340	7	0.0150
Full Text Length	22,739	4,659	3,439	3,808	22,052	4,657	3,434	3,814	687	4,721	3,625	3,733	-64.27
Gallery's items	22,739	6.810	10.53	3	22,052	6.840	10.58	3	687	5.850	8.980	3	0.991**

Table II: Seconds Campaigns Summary Statistics

*This table shows a summary statistics comparison between seconds campaigns launched by entrepreneurs with a successful or unsuccessful first crowdfunding campaign. The last column reports a mean difference test between firsts and seconds campaigns and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

Variables	2 nd Campaigns				2 nd Campaigns after Success				2 nd Campaign after Failure				Mean Diff. Test
	Obs.	Mean	S.D.	Median	Obs.	Mean	S.D.	Median	Obs.	Mean	S.D.	Median	
Success dummy	687	0.200	0.400	0	167	0.430	0.500	0	520	0.130	0.340	0	-0.296***
Completion Ratio	687	0.510	1.110	0.240	167	1.000	2.030	0.610	520	0.360	0.440	0.190	-0.640***
ln(Goal)	687	19,144	23,387	10,000	167	21,458	25,750	11,325	520	18,401	22,552	10,000	-3,100
Keep-It-All Dummy	687	0.970	0.170	1	167	0.960	0.190	1	520	0.970	0.160	1	0.009
Verified Non-profit	687	0.190	0.390	0	167	0.250	0.430	0	520	0.170	0.380	0	-0.071**
Team Size	687	2.420	2.170	1	167	2.650	2.330	2	520	2.350	2.110	1	-0.303
Reward's Levels	687	7.420	4.340	7	167	7.680	4.710	8	520	7.340	4.220	7	-0.334
Full Text Length	687	4,721	3,625	3,733	167	5,025	3,706	4,367	520	4,623	3,596	3,613	-401.2
Gallery's items	687	5.850	8.980	3	167	6.880	11.07	3	520	5.520	8.190	3	-1.365*
First was Successful	687	0.240	0.430	0	167	1	0	1	520	0	0	0	-1
Time Between Project 1 & 2	687	202.8	150.5	173	167	209.0	138.8	185	520	200.8	154.1	168	-8.194
New Category	687	0.250	0.430	0	167	0.180	0.390	0	520	0.270	0.440	0	0.088**
2 nd have Higher Goal	687	0.360	0.480	0	167	0.570	0.500	1	520	0.300	0.460	0	-0.271***
2 nd changes Funding Model	687	0.050	0.210	0	167	0.040	0.200	0	520	0.050	0.220	0	0.008
2 nd shows More Text	687	0.520	0.500	1	167	0.600	0.490	1	520	0.490	0.500	0	-0.110**
2 nd shows More Pics	687	0.330	0.470	0	167	0.280	0.450	0	520	0.340	0.470	0	0.0670
Raise More Money	687	0.410	0.490	0	167	0.290	0.460	0	520	0.450	0.500	0	0.153***
Attract More Backers	687	0.400	0.490	0	167	0.290	0.450	0	520	0.430	0.500	0	0.143***

Table III: Correlation Table for Main Variables

Panel A: For First Campaigns

The star reports a 10% significance level

	1.	2.	3.	4.	5.	6.	7.	8.
1. Success dummy	1							
2. ln(Goal)	-0.1339*	1						
3. Keep-It-All Dummy	-0.1031*	-0.0929*	1					
4. Verified Non-profit	0.0375*	0	0.0781*	1				
5. Reward's Levels	0.0635*	0.1257*	-0.0792*	0.00800	1			
6. Team Size	0.0743*	0.0960*	0.000300	0.0982*	0.1941*	1		
7. Full Text Length	0.0418*	0.1783*	-0.0992*	-0.0132*	0.3155*	0.1827*	1	
8. Gallery's items	0.0794*	0.0738*	-0.0219*	0.000600	0.1868*	0.2217*	0.2332*	1
9. Completion Ratio	0.3681*	-0.0827*	-0.0406*	0.0117*	0.00980	0.0273*	0.0374*	0.0594*

Panel B: For Second Campaigns

The star reports a 10% significance level

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Success dummy	1								
2. ln(Goal)	-0.0711*	1							
3. Keep-It-All Dummy	-0.0861*	-0.0693*	1						
4. Verified Non-profit	0.0137	0.0321	0.0844*	1					
5. Reward's Levels	0.1093*	0.1861*	-0.0310	-0.0255	1				
6. Team Size	0.1418*	-0.0186	-0.0141	0.0428	0.2011*	1			
7. Full Text Length	0.0836*	0.1650*	-0.0608	-0.00120	0.2821*	0.1537*	1		
8. Gallery's items	0.1340*	0.0137	-0.0193	-0.0522	0.2020*	0.2279*	0.2296*	1	
9. Completion Ratio	0.4956*	-0.0843*	-0.0495	-0.0160	0.0777*	0.1849*	0.1033*	0.1707*	1
10. First was Successful	0.3172*	0.0561	-0.0230	0.0768*	0.0331	0.0599	0.0475	0.0652*	0.2486*
11. Time Between Project 1 & 2	0.0509	-0.0776*	0.0102	0.1309*	0.1257*	0.1023*	-0.00490	-0.0186	-0.0107
12. New Category	-0.0502	0.0940*	-0.1222*	0.0303	-0.0760*	0.0194	-0.0288	-0.0490	-0.0566
13. 2 nd have Higher Goal	-0.0470	0.3367*	-0.0670*	0.0842*	0.0335	0.0364	0.00140	0.0328	-0.0160
14. 2 nd changes Funding Model	0.1422*	0.0383	-0.4470*	-0.0577	0.0848*	-0.0156	0.1112*	0.0387	0.0597
15. 2 nd shows More Text	0.0137	0.1094*	-0.0640*	0.0294	0.1075*	0.0901*	0.3280*	0.1168*	0.0605
16. 2 nd shows More Pics	0.0233	0.0612	-0.0273	-0.0476	0.0244	0.0718*	0.0276	0.4127*	0.0527
17. Raise More Money	0.3218*	0.0314	-0.0144	0.000100	0.0948*	0.1393*	0.0369	0.0890*	0.2278*
18. Attract More Backers	0.2256*	0.0486	-0.0546	-0.0246	0.1035*	0.1508*	0.0776*	0.1325*	0.1672*

	10.	11.	12.	13.	14.	15.	16.	17.
10. First was Successful	1							
11. Time Between Project 1 & 2	0.0234	1						
12. New Category	-0.0873*	0.0442	1					
13. 2 nd have Higher Goal	0.2414*	0.1423*	0.1019*	1				
14. 2 nd changes Funding Model	-0.0162	-0.0353	0.0930*	0.0282	1			
15. 2 nd shows More Text	0.0947*	-0.00810	-0.00730	0.0979*	-0.0137	1		
16. 2 nd shows More Pics	-0.0612	-0.0610	0.0209	0.0806*	0.0616	0.1216*	1	
17. Raise More Money	-0.1333*	0.0917*	0.0748*	0.0784*	0.1039*	0.0664*	0.1224*	1
18. Attract More Backers	-0.1257*	0.1193*	0.0905*	0.1486*	0.1104*	0.0824*	0.1925*	0.6099*

Table IV: Determinants of Second Campaign's Launch

*This table shows the impact of the outcome and the characteristics of a first crowdfunding campaign on the launch of a second campaign by the same entrepreneur. The dependent variable is a dummy equal to 1 if the same entrepreneur launched a second campaign (ie is a serial entrepreneur) and 0 otherwise. We use a probit regression model and the table reports the marginal effects. Model 1 shows impact of the outcome, model 2 includes variables for project characteristics, model 3 includes variables for soft information (proxying for effort) and the model 4 includes country, semester and category fixed effects. All models use category-clustered standard errors and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

	(1)	(2)	(3)	(4)
<hr/>				
First Campaign Outcome				
Success Dummy	0.0131***	0.0161***	0.0155***	0.0177***
<hr/>				
Project Characteristics				
ln(Goal)		0.0050**	0.0051**	0.0083***
Keep-It-All Dummy		0.0101	0.0095	0.0020
Verified Non-profit		0.0033	0.0032	0.0086**
Reward's Levels		-0.0010**	-0.0010**	-0.0005
<hr/>				
Soft Information (proxy for effort)				
Full Text Length			-0.0000007	-0.0000005
Gallery's items			0.0003***	0.0002**
<hr/>				
Country/Category/ Semester F.E.	No	No	No	Yes
Observations	22,052	22,052	22,052	21,186
Pseudo R-squared	0.003	0.007	0.009	0.104

Figure 1: Second Campaign Delay Distribution

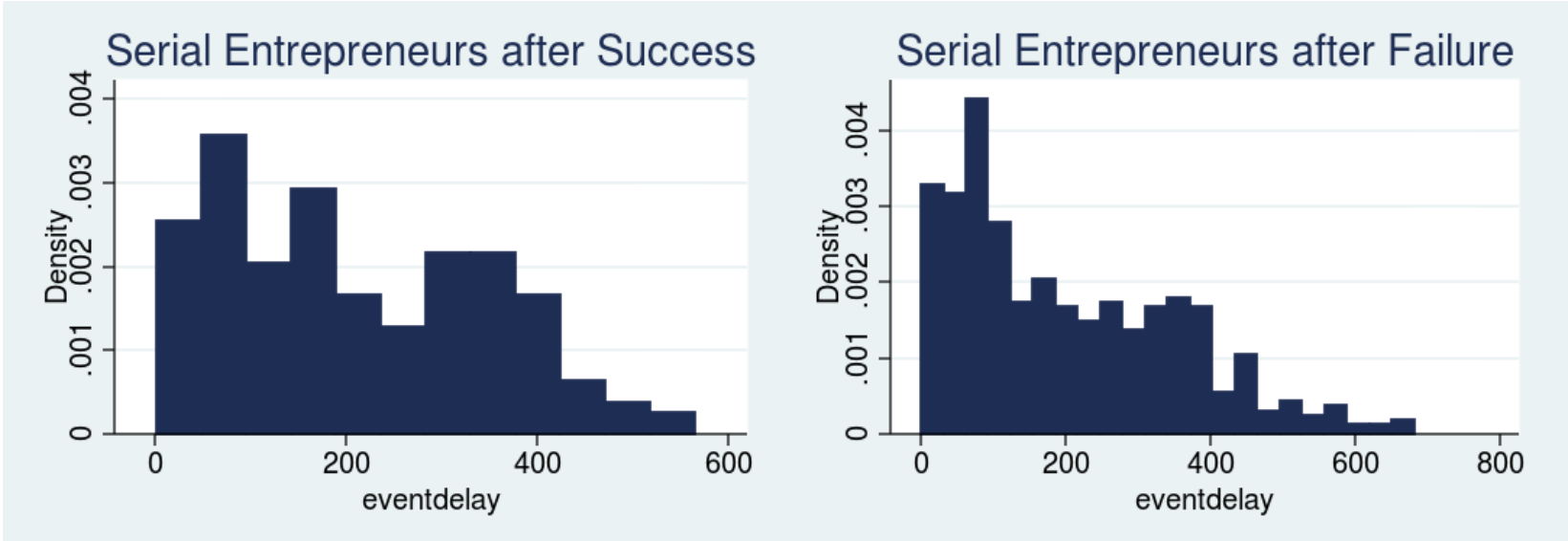
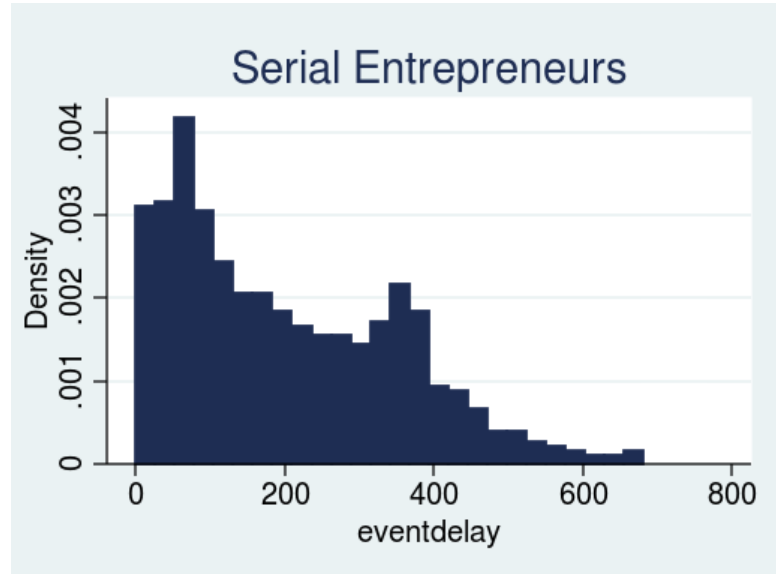


Figure 2: Cumulative Hazard Function

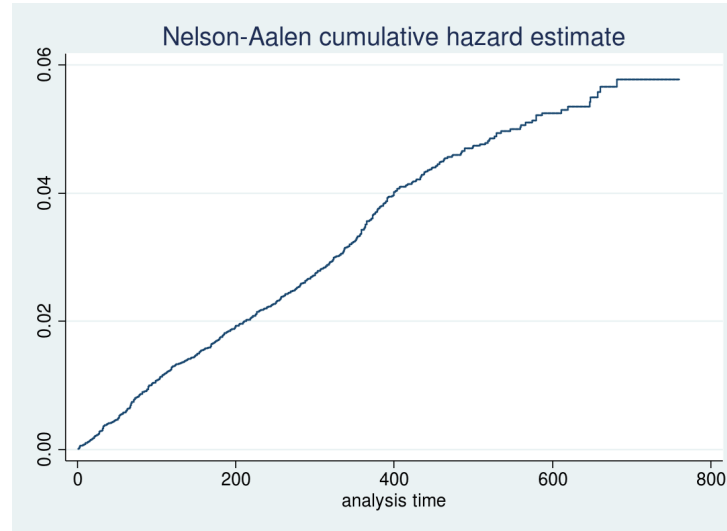


Figure 3: Estimated Hazard Functions

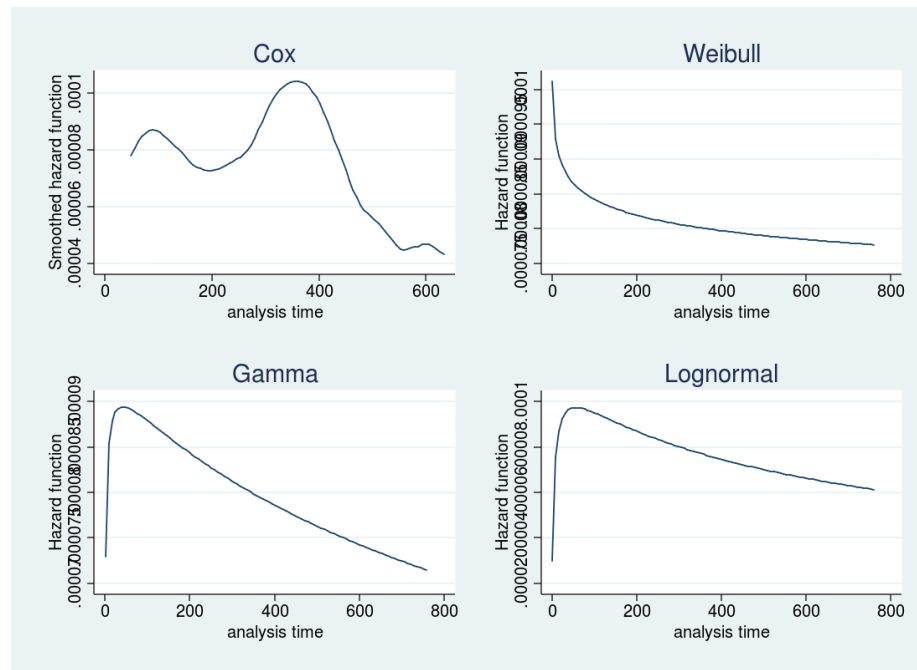


Table V: Survival Analysis – Hazard Models

*As for table IV, this table shows the impact of the outcome and the characteristics of a first crowdfunding campaign on the launch of a second campaign by the same entrepreneur, taking into account that since the sample is extracted at a defined date, the future behavior of entrepreneurs is not observable. We use various survival models to estimate the coefficients and/or the hazard rates. Models 1 and 2 use Cox model and the models 3, 4 and 5 respectively use Weibull, Gamma and Log-normal distributions. All models use category-clustered standard errors and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

	(1) Cox (Coef.)	(2) Cox (H.R.)	(3) Weibull (H.R.)	(4) Gamma (Coef.)	(5) Lognormal (Coef.)
Keep-It-All Dummy	0.2057	1.2284	1.2132	0.8188	0.8267
Success Dummy	0.5202***	1.6824***	1.6819***	0.5784***	0.5830***
ln(Goal)	0.2164***	1.2416***	1.2480***	0.7838***	0.7704***
Verified Non-profit	0.241	1.2725	1.2667	0.7933	0.8092
Total Backers	0	1	1	1	1
Completion Ratio	0.0355	1.0361	1.0363	0.958	0.9462
Sub-Category F.E.	Yes	Yes	Yes	Yes	Yes
Observations	22,048	22,048	22,048	22,048	22,048

Table VI: Changes in Goal, Funding Model and Disclosure for Second Campaigns

*This table shows the impact of the outcome of a first campaign and of the characteristics of a second campaign on the strategy used by the entrepreneur in terms of risk (goal and funding model) and of disclosures for his second campaign. Models 1 to 3 show the impact on 2nd campaign goal, model 4 on funding model and models 5 and 6 shows show results for disclosure (text or pictures). All models use category-clustered standard errors and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

	(1)	(2)	(3)	(4)	(5)	(6)
	2 nd have Higher Goal	2 nd have Higher Goal	2 nd have Higher Goal	2 nd changes Funding Model	2 nd shows More Text	2 nd shows More Pics
First was Successful	0.2518***	0.2478***	0.2924***	-0.0183	0.0725	-0.0844*
Time Between Project 1 & 2		0.0004***	0.0004***	0	-0.0001	-0.0003**
New Category			0.1249*	0.052	-0.0236	-0.0051
2nd have Higher Goal				-0.0286	0.0315	0.0960**
Keep-It-All Dummy			-0.1037		-0.0887	-0.1801
Team Size			-0.0017	-0.0089	0.0173***	0.0121*
ln(Goal)				0.0278**	0.0816***	0.0436*
Category/ Country F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	687	687	625	432	637	638
Pseudo R-squared	0.043	0.058	0.123	0.288	0.064	0.052

Table VII: Outcome of Serial Crowdfunding Campaigns

*This table shows the impact of the outcome of a first campaign and of the strategic adaptations made by the serial entrepreneur on the outcome of his second campaign. Model 1 shows the projects characteristics that impact all campaigns, the second model include a dummy for second campaign and a dummy for second campaign after a first success. Models 3 & 4 show results only for second campaigns and model 5 & 6 shows result on the amount raised during the campaign (independently from the success of the campaign) and on the number of backers. All models use category-clustered standard deviations and significance levels are as * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

	(1) Success Dummy (All projects)	(2) Success Dummy (All projects)	(3) Success Dummy (2 nd projects)	(4) Success Dummy (2 nd projects)	(5) Raise More Money	(6) Attract More Backers
ln(Goal)	-0.1147***	-0.1147***	-0.0879***	-0.0819***	-0.0426*	-0.0205
Keep-It-All Dummy	-0.1702***	-0.1703***	-0.1606	-0.0635	0.3931***	0.1541
Verified Non-profit	0.0520***	0.0502***	0.0363	0.0362	0.0171	-0.0254
Team Size	0.0137***	0.0136***	0.0157***	0.0170***	0.0297***	0.0254***
Reward's Levels	0.0076***	0.0076***	0.0083***	0.0072***	0.0108**	0.0055
Full Text Length	0.0000***	0.0000***	0	0	0	0
Gallery's items	0.0023***	0.0023***	0.0024**	0.0017	0.0011	0.0016
2nd Project Dummy		-0.0509***				
2nd Proj. After Success		0.2203***				
First was Successful			0.2258***	0.2399***	-0.2105***	-0.2066***
Time Between Project 1 & 2				0.0001	0.0003**	0.0002
New Category				-0.0223	0.0073	0.0368
2 nd have Higher Goal				-0.0424	0.1044***	0.1782***
2 nd changes Funding Model				0.2380**	0.2918***	0.2450**
2 nd shows More Text				0.0024	0.0489	0.0432
2 nd shows More Pics				0.0323	0.0709	0.1181***
Country/Category F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	22,506	22,506	586	586	636	645
Pseudo R-squared	0.094	0.097	0.202	0.222	0.109	0.117

APPENDIX Table A1: Description of variables

Variable	Description
Success dummy	Dummy variable equal to one if the amount raised during the crowdfunding campaign is at least equal to the goal sets by the entrepreneur. The campaign is thus considered as successful.
Goal	The crowdfunding campaign goal in USD set by the entrepreneur. For campaigns based on a currency other than USD, we converted the amount into USD at the annual average exchange rate.
Keep-It-All Dummy	Dummy variable equal to one if the entrepreneur chooses a "keep-it-all" funding model and zero for the "all-or-nothing" funding model.
Verified Non-profit	Dummy variable indicating if the entrepreneur is a US registered non-profit organization.
Reward's Levels	Number of reward levels offered by the entrepreneur for his campaign.
Team Size	Number of members in the team leading the project.
Full Text Length	Length (in characters) of the full text of the project description on the project's main page.
Gallery's items	Number of pictures or videos presented in the media gallery.
Completion Ratio	Ratio between the total amount pledged by backers during the campaign and the campaign goal. Successful campaigns have a ratio higher or equal to 1.
First was Successful	For second campaigns, dummy variable equal to one if the first campaign of the serial entrepreneur was successful.
Time Between Project 1 & 2	Time between the start of the first and the start of the second crowdfunding campaign for serial entrepreneurs.
New Category	For second campaigns, dummy variable equal to one if the category of the second project is different than the category of the first campaign led by the serial entrepreneur.
2 nd have Higher Goal	For second campaigns, dummy variable equal to one if the goal of the second campaign is higher than the goal of the first campaign.

2 nd changes Funding Model	For second campaigns, dummy variable equal to one if the entrepreneur changes the funding model for the second campaign (for instance the first campaign was KIA and the second is AON).
2 nd shows More Text	For second campaigns, dummy variable equal to one if the text that describes the second campaign his longer than the text of the first campaign.
2 nd shows More Pics	For second campaigns, dummy variable equal to one if the entrepreneur provides more pictures for the second campaign than for the first.
Raise More Money	For second campaigns, dummy variable equal to one if total amount pledged by backers is higher for the second campaign than for the first
Attract More Backers	For second campaigns, dummy variable equal to one if more backers have participated to the second campaign compared to the first.
