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Research on the Current State of Crowdfunding: The Effect of Crowdfunding Performance and Outside Capital

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Research on crowdfunding has traditionally focused on startups during a crowdfunding campaign, leaving fairly little information on what happens to them afterward. This dearth of information is important as policymakers aim to understand the effectiveness of this alternative financing mechanism and entrepreneurs want to know how it can best help small businesses. This report uses data on entrepreneurs who launched crowdfunding campaigns to fund their startups to determine how crowdfunding affects startups after their campaigns are completed. In particular, this report examines the relationship between crowdfunding and the ability to raise external capital to sustain a business as it develops.

Overall Findings

Crowdfunding is sometimes viewed in the academic literature as a “proof-of-concept,” or way to show investors that a business idea is feasible and marketable. In other words, investors will inject more capital into early-stage startups if there is evidence that the startup’s products and services have a strong market. Crowdfunding demonstrates this proof-of-concept as investors believe that if individuals invest in a startup before it provides goods or services, then more people will buy a startup’s products when they hit the market. The purpose of this study is to investigate the relationship between crowdfunding campaign performance and several post-campaign

benefits that seed-stage startups value, most notably, access to additional external capital. More specifically, this study aims to determine whether crowdfunding campaign success translates into greater access to capital through more conventional sources of venture funding. To address this broader concept more directly, the report examines the following three research questions.

1. What is the nature of the relationship between crowdfunding success and attracting additional capital?

Generally, the report finds that successful crowdfunding campaigns positively influence the ability to attract additional capital, likely by providing proof of concept to potential external investors. However this relationship is more nuanced. More precisely, crowdfunding as proof of concept benefits entrepreneurs with smaller campaigns (\$75,000 or less). For larger campaigns of greater than \$75,000, additional funds do not appear to offer the same degree of proof-of-concept benefits in attracting additional capital. Figures 1 and 2 illustrate this relationship between crowdfunding campaign performance (in increments of \$1,000) and the raw probability of raising external capital contributions.

2. Which project attributes moderate the relationship between crowdfunding success and attracting additional capital?

The report analyzes models and attempts to identify whether the effect of crowdfunding performance on the probability of external financing depends on several characteristics of the project, the entrepreneur, or both. These include the objective of the crowdfunding campaign, the gender of the entrepreneur, and whether the entrepreneur made prior attempts to obtain external capital. Only the project objective and prior attempts to secure outside capital were found to influence the effect of crowdfunding campaign success on external financing at a statistically significant level.

3. What other non-financial outcomes are positively affected by crowdfunding success?

This report finds that stronger crowdfunding campaign performance increases the probability of business partnerships, greater publicity, a stronger customer base, and ease of finding employees. Also, crowdfunding campaign performance has the strongest effects on building a customer base and generating publicity for the new product (compared to the other benefits), but only when the amount raised was less than \$100,000.

Policy Recommendations

This study provides robust evidence that crowdfunding success does, in fact, increase individual ability to obtain outside financing. The study interprets this finding as evidence of a causal relationship rather than just correlation between these two constructs. This causal relationship can serve as a predictor of success for funding institutions when they are assessing entrepreneurs' ability to successfully run their businesses and effectively use capital.

Crowdfunding may improve market efficiency if it allows some entrepreneurs who would otherwise have been denied funding to demonstrate their value in the market. If this demonstrated value results in additional funding, positive market impacts should

Figure 1.
Startups that raise more money crowdfunding are more likely to receive external financing

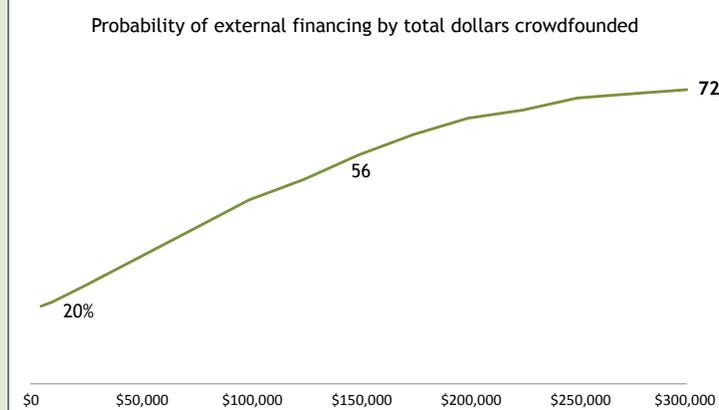
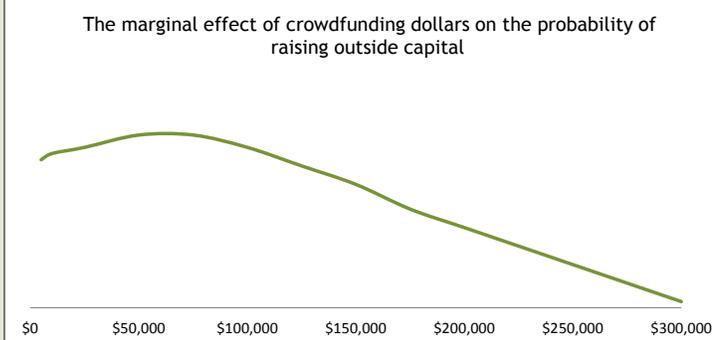


Figure 2.
Crowdfunding's impact starts to diminish at the margins



Source: *Research on the Current State of Crowdfunding: The Effect of Crowdfunding Performance and Outside Capital*, by Venkat Kuppaswamy and Kathy Roth. U.S. Small Business Administration, Office of Advocacy, 2016, www.sba.gov/advocacy/research-current-state-crowdfunding.

be realized leading to increases in innovation—a critical element of the economy. Therefore, policies that encourage and embrace entrepreneurial crowdfunding should be an option considered by policymakers as they work towards encouraging economic growth. As this study reflects, greater crowdfunding campaign performance potentially increases the probability of business partnerships, a stronger customer base, and the ability to attract and keep employees—all attributes of a successful small business. It then stands to reason that successful crowdfunding entrepreneurs will evolve into successful small business owners. However, as described in

the following section these findings may not apply to every entrepreneur.

This study demonstrates the proof-of-concept effect that entrepreneurs can derive from successful crowdfunding campaigns, such as in attracting external capital. The findings provide policymakers and researchers with the ability to identify and more fully understand crowdfunding's economic and societal impacts. This study focuses solely on reward or gift-based crowdfunding, and future research may further explore the extent to which this relationship is mirrored in other types of alternative finance (such as equity-based crowdfunding where investors gain a stake the company).

Data Scope and Limitations

This report is subject to a variety of limitations in both the data collected and the interpretations supporting its findings and policy implications. An important limitation of this study is that it relies on self-reported assessments of how much crowdfunding helped in obtaining additional financing as well as nonfinancial benefits. The researchers hope that future work on this topic can generate independent figures on post-campaign financing to model the relationship between crowdfunding performance and the dollar amount of the additional financing.

Another limitation of the study is its focus on the technology, games, and design categories, since these are more likely to be associated with actual products that may need future venture financing. It is possible that the results do not apply to crowdfunding experiences in other categories such as publishing, fashion, and food. Similarly this report only looks at rewards-based crowdfunding on the Kickstarter platform; consequently it may not be valid to extrapolate these results to other types of crowdfunding campaigns or their respective platforms.

In addition, the study relies on a relatively small sample of responses from failed crowdfunding entrepreneurs. While univariate tests indicated no respondent bias with this limited sample, it would be helpful if future researchers could obtain data on a larger set of failed projects. Finally, the gender of the entrepreneur was indeterminate. The survey recorded the gender of the respondent, but it is possible that the project was actually launched by a team comprised of both genders. The authors assumed that projects where the survey respondent is male were less likely to have women on the team, compared to projects where the respondent was female.

Data Sources and Methodology

This study models the probability that an entrepreneur reports some benefit in securing external financing after the completion of the campaign. To estimate whether crowdfunding performance affects the level of post-campaign benefits attained by entrepreneurs, this study separately modeled each benefit (External Funding, Business Partnerships, Publicity, Customer Base, and Employees) as a function of Dollars Raised using a logit estimator, with robust standard errors

In order to explore the relationship between crowdfunding success and the ex-post benefits realized by entrepreneurs, this report surveyed a sample of creators behind product-based Kickstarter projects. Kickstarter is the most successful crowdfunding platform on the Internet (in the United States and internationally), raising over \$1 billion for creators since its launch, far exceeding other popular platforms. The survey included questions that measured the extent to which the campaign helped facilitate several beneficial outcomes to entrepreneurs. For the survey, this study chose a sample frame of Kickstarter projects that were most similar to those of traditional venture-backed entrepreneurial firms. Specifically, this study looked at successful projects between 2009 and 2012 in the technology, design, and games categories with goals of at least \$5,000 that had committed to delivering products to customers.

This report was peer reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research by email at advocacy@sba.gov or by phone at (202) 205-6533.

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